

No.	Co-authors	Article title	Keywords	Vol., No., pp.	DOI	Citation
1	Abdulhussein, S.S., Johari, I.B., Fawzi, N.M.	Mechanical Properties of Aerated-Polystyrene Concrete Reinforced by Polymer Fibers	high performance lightweight concrete, chopped carbon fibers, polypropylene fibers, mechanical properties	48, 4, 435-445	https://doi.org/10.18280/acsm.480401	Abdulhussein, S.S., Johari, I.B., Fawzi, N.M. (2024). Mechanical properties of aerated-polystyrene concrete reinforced by polymer fibers. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 48, No. 4, pp. 435-445. https://doi.org/10.18280/acsm.480401
2	Mohanty, A.P., Das, P., Choudhury, S., Sahu, S.K.	Free Vibration Behaviour of Laminated Composite Beam Under Crack Effects: A Combined Numerical and Experimental Approach	numerical simulation, frequency analysis, crack effect, composite beam, FFT analyzer	48, 4, 447-455	https://doi.org/10.18280/acsm.480402	Mohanty, A.P., Das, P., Choudhury, S., Sahu, S.K. (2024). Free vibration behaviour of laminated composite beam under crack effects: A combined numerical and experimental approach. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 48, No. 4, pp. 447-455. https://doi.org/10.18280/acsm.480402
3	Alfurajji, A.F.K., Khudhair, J.A.	Experimental Study of Self-Compacting Reinforced Concrete Hollow Beams Using Recycled Aggregate under Torsion	self-compacting concrete (SCC), beams, recycled aggregate concrete (RCA), torsion, crack, reinforcement, angles of twist, ultimate load	48, 4, 457-466	https://doi.org/10.18280/acsm.480403	Alfurajji, A.F.K., Khudhair, J.A. (2024). Experimental study of self-compacting reinforced concrete hollow beams using recycled aggregate under torsion. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 48, No. 4, pp. 457-466. https://doi.org/10.18280/acsm.480403
4	Nindhita, K.W., Zaki, A., Nugroho, G.	Mapping Publications of Cracks Monitoring in Concrete Structures: Bibliometric and Scientometric Review in 2013-2023	bibliometric, concrete, crack, monitoring, scientometric, VOS Viewer	48, 4, 467-479	https://doi.org/10.18280/acsm.480404	Nindhita, K.W., Zaki, A., Nugroho, G. (2024). Mapping publications of cracks monitoring in concrete structures: Bibliometric and scientometric review in 2013-2023. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 48, No. 4, pp. 467-479. https://doi.org/10.18280/acsm.480404
5	Alfahdawi, I.H., Armoosh, S.R., Mohammed, A.M., Jehad, A.E.	Utilizing Local Waste Materials to Produce Eco-friendly, Thermally Resistant Concrete	concrete, sustainable, silica fume, STS, high temperature, rubber waste, fly ash	48, 4, 481-490	https://doi.org/10.18280/acsm.480405	Alfahdawi, I.H., Armoosh, S.R., Mohammed, A.M., Jehad, A.E. (2024). Utilizing local waste materials to produce eco-friendly, thermally resistant concrete. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 48, No. 4, pp. 481-490. https://doi.org/10.18280/acsm.480405
6	Mesbah, H., Lotfi, H., Tafkirte, M., Banouni, H., Ettahiri, M., Faiz, B.	Characterization of Cementitious Materials Through Analysis of Dispersion Curves Using Singular Value Decomposition	cement, ultrasonic, characterization, dispersion curves, singular value decomposition (SVD)	48, 4, 491-497	https://doi.org/10.18280/acsm.480406	Mesbah, H., Lotfi, H., Tafkirte, M., Banouni, H., Ettahiri, M., Faiz, B. (2024). Characterization of cementitious materials through analysis of dispersion curves using singular value decomposition. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 48, No. 4, pp. 491-497. https://doi.org/10.18280/acsm.480406
7	Abbas, S.R., Salih, M.M., Mohammed, A.Q., Abd, H.J.	Assessing the Impact of Using (FRP) Material for Strengthening the Holes in (RC) Beams	cracking, openings, reinforced concrete (RC) beams, composite panels, numerical analysis, strengthening, tensile strength	48, 4, 499-507	https://doi.org/10.18280/acsm.480407	Abbas, S.R., Salih, M.M., Mohammed, A.Q., Abd, H.J. (2024). Assessing the impact of using (FRP) material for strengthening the holes in (RC) beams. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 48, No. 4, pp. 499-507. https://doi.org/10.18280/acsm.480407
8	Saleh, A.M., Mahdi, H.H., Alias, A.B., Ali, O.M., Ghani, W.A.W.A.K., Shihab, T.A., Hasan, S.S.A.S., Ahmed, O.K., Saleh, N.M.	Application of Response Surface Methodology (RSM) for Optimization of Hydrogen Sulphide Adsorption Using Coconut Shell Activated Carbon Xerogel: Effect of Adsorption Pressure and Hydrogen Sulphide Flowrate	xerogel, response surface methodology, coconut shell, biomass, H2S adsorption	48, 4, 509-518	https://doi.org/10.18280/acsm.480408	Saleh, A.M., Mahdi, H.H., Alias, A.B., Ali, O.M., Ghani, W.A.W.A.K., Shihab, T.A., Hasan, S.S.A.S., Ahmed, O.K., Saleh, N.M. (2024). Application of response surface methodology (RSM) for optimization of hydrogen sulphide adsorption using coconut shell activated carbon xerogel: Effect of adsorption pressure and hydrogen sulphide flowrate. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 48, No. 4, pp. 509-518. https://doi.org/10.18280/acsm.480408
9	Ammar, S.I., Mahmoud, A.S.	Performance of Steel Spliced Reinforced Concrete Beams Having Construction Joints	construction joints, flexural test, reinforcements, R.C beam, steel bars, splice	48, 4, 519-527	https://doi.org/10.18280/acsm.480409	Ammar, S.I., Mahmoud, A.S. (2024). Performance of steel spliced reinforced concrete beams having construction joints. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 48, No. 4, pp. 519-527. https://doi.org/10.18280/acsm.480409
10	Marrok, S., Belachia, M., Kherraf, L., Salhi, M., Khaldi, N.	Investigating the Impact of Stainless Steel Shavings Fibers 316L on Enhancing the Properties of High-Flow Sand Concrete in the Long-Term	HFSC, SSF-316L, physical properties, mechanical properties, acid attack, sulfate attack, SEM	48, 4, 529-537	https://doi.org/10.18280/acsm.480410	Marrok, S., Belachia, M., Kherraf, L., Salhi, M., Khaldi, N. (2024). Investigating the impact of stainless steel shavings fibers 316L on enhancing the properties of high-flow sand concrete in the long-term. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 48, No. 4, pp. 529-537. https://doi.org/10.18280/acsm.480410
11	Jilabi, A.S.J., Oleiwi, A.A.	Influence of WC Content on Microstructure of WC-Ni Coatings on AISI 18-2Mn Austenitic Stainless Steel Using TIG Cladding	tungsten inert gas (TIG) cladding, Ni/WC composite coatings, AISI 18-2Mn austenitic stainless steel	48, 4, 539-549	https://doi.org/10.18280/acsm.480411	Jilabi, A.S.J., Oleiwi, A.A. (2024). Influence of WC content on microstructure of WC-Ni coatings on AISI 18-2Mn austenitic stainless steel using TIG cladding. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 48, No. 4, pp. 539-549. https://doi.org/10.18280/acsm.480411
12	Haissam, A., Benarrache, S., Rahmani, R.K., Mansouri, T., Benhorma, M.E.	Effect of Heat Treatments on the Mechanical and Microstructure Properties of Welded API X70 Steel	X70 API, weld joints, heat treatments, fusion zone (FZ), X-ray diffraction, grain growth, hardness, scanning electron microscope (SEM)	48, 4, 551-557	https://doi.org/10.18280/acsm.480412	Haissam, A., Benarrache, S., Rahmani, R.K., Mansouri, T., Benhorma, M.E. (2024). Effect of heat treatments on the mechanical and microstructure properties of welded API X70 steel. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 48, No. 4, pp. 551-557. https://doi.org/10.18280/acsm.480412
13	Mansi, A.S., Aadi, A.S., Ali, T.K.M., Abdulhameed, H.A., Hilal, N.N.	The Impact Resistance of Fire Shooting for Self-Compacted Concrete Slabs Containing Ceramic Powder and Reinforced by Novel Waste Nylon Fiber	impact resistance, slabs, self-compacting concrete, compressive strength, ultrasonic pulse velocity (UPV), fresh properties	48, 4, 559-570	https://doi.org/10.18280/acsm.480413	Mansi, A.S., Aadi, A.S., Ali, T.K.M., Abdulhameed, H.A., Hilal, N.N. (2024). The impact resistance of fire shooting for self-compacted concrete slabs containing ceramic powder and reinforced by novel waste nylon fiber. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 48, No. 4, pp. 559-570. https://doi.org/10.18280/acsm.480413
14	Munandar, M., Siswanto, E., Winarto, Wardana, I.N.G.	Batteries with Liquid Electrolyte Using Bamboo, Limestone and Turmeric	bamboo, battery, electrolyte, storage energy	48, 4, 571-584	https://doi.org/10.18280/acsm.480414	Munandar, M., Siswanto, E., Winarto, Wardana, I.N.G. (2024). Batteries with liquid electrolyte using bamboo, limestone and turmeric. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 48, No. 4, pp. 571-584. https://doi.org/10.18280/acsm.480414
15	Kareem, H., Alobad, Z.K.M.	Effect of Adding Redispersible Polymer Powder to Cementitious Tile Adhesive: A Literature Review	cementitious material, tile adhesive, building material, redispersible polymer, ceramic tiles	48, 4, 585-594	https://doi.org/10.18280/acsm.480415	Kareem, H., Alobad, Z.K.M. (2024). Effect of adding redispersible polymer powder to cementitious tile adhesive: A literature review. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 48, No. 4, pp. 585-594. https://doi.org/10.18280/acsm.480415
16	Nie, B.L., Zhang, J., Zhang, Q.Y.	Propagation and Damping of Stress Waves in Heterogeneous Materials	stress waves, viscoelasticity, heterogeneous material, propagation, damping, concrete	48, 3, 303-311	https://doi.org/10.18280/acsm.480301	Nie, B.L., Zhang, J., Zhang, Q.Y. (2024). Propagation and damping of stress waves in heterogeneous materials. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 48, No. 3, pp. 303-311. https://doi.org/10.18280/acsm.480301

17	Siswanto, Sukarman, Mulyadi, D., Khoirudin, Nanda, R.A., Abdulah, A., Shieddieque, A.D., Prasetyo, S.D.	Box-Behnken Response Surface Methodology: An Analysis of the Effect of Variations in TIG Welding Parameters on Tensile Strength and Hardness Using SUS 304 Material	Box-Behnken, response surface methodology, SUS 304, TIG welding, tensile load strength	48, 3, 313-322	https://doi.org/10.18280/acsm.480302	Siswanto, Sukarman, Mulyadi, D., Khoirudin, Nanda, R.A., Abdulah, A., Shieddieque, A.D., Prasetyo, S.D. (2024). Box-Behnken response surface methodology: An analysis of the effect of variations in TIG welding parameters on tensile strength and hardness using SUS 304 material. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 48, No. 3, pp. 313-322. https://doi.org/10.18280/acsm.480302
18	Tallah, N., Geuttouche, A.	Characterization Study of the Earth Bricks Used in the Old Constructions of the Boussaâ da Area	adobe, Boussaâda, compression strength, earth bricks, shear strength, thermal insulation	48, 3, 323-329	https://doi.org/10.18280/acsm.480303	Tallah, N., Geuttouche, A. (2024). Characterization study of the earth bricks used in the old constructions of the Boussaâ da area. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 48, No. 3, pp. 323-329. https://doi.org/10.18280/acsm.480303
19	Mohamad, B.A., Mohana, K.N.	Corrosion Mechanism of A333 and API 5L in 0.02 M Acidic Crude Oil Using Sodium Sulfite - Ginger Extract as Inhibitor at Different Temperature and Fluid Velocity of the Medium	acid corrosion, potentiostatic, acid inhibition, alloy, weight loss	48, 3, 331-339	https://doi.org/10.18280/acsm.480304	Mohamad, B.A., Mohana, K.N. (2024). Corrosion mechanism of A333 and API 5L in 0.02 M acidic crude oil using sodium sulfite - ginger extract as inhibitor at different temperature and fluid velocity of the medium. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 48, No. 3, pp. 331-339. https://doi.org/10.18280/acsm.480304
20	Nurfajriani.	Preparation and Characterization of Water Hyacinth Stems (Eichhornia Crassipes) Impregnated with Modified Polystyrene	water hyacinth stems, impregnation, polystyrene	48, 3, 341-347	https://doi.org/10.18280/acsm.480305	Nurfajriani. (2024). Preparation and characterization of water hyacinth stems (Eichhornia crassipes) impregnated with modified polystyrene. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 48, No. 3, pp. 341-347. https://doi.org/10.18280/acsm.480305
21	Abdullatef, M.S.	Study of Surface Hydrogenation Effect on Fatigue Crack Initiation in ASTM 904L Austenitic Stainless Steel Under Cyclic Loading (Bending-Torsion)	austenitic stainless steel, ASTM 904L, combined loading, fatigue crack growth, fatigue initiation, fracture mechanics, hydrogen, short crack	48, 3, 349-357	https://doi.org/10.18280/acsm.480306	Abdullatef, M.S. (2024). Study of surface hydrogenation effect on fatigue crack initiation in ASTM 904L austenitic stainless steel under cyclic loading (bending-torsion). <i>Annales de Chimie - Science des Matériaux</i> , Vol. 48, No. 3, pp. 349-357. https://doi.org/10.18280/acsm.480306
22	Irudhayam, S.J., Venkatesan, H.	Investigation on Effects of Geometric Design Variable and Biomaterial Analysis on Stress Distribution for One-Piece Dental Implant — A 3D Finite Element Analysis	finite element analysis, implant, stress distribution, CFR PEEK, dental biomaterials, implant design	48, 3, 359-367	https://doi.org/10.18280/acsm.480307	Irudhayam, S.J., Venkatesan, H. (2024). Investigation on effects of geometric design variable and biomaterial analysis on stress distribution for one-piece dental implant — A 3D finite element analysis. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 48, No. 3, pp. 359-367. https://doi.org/10.18280/acsm.480307
23	Lo.Dayekh, M., Ghadi, A., Hussain, S.A.	Synthesis and Characterization of Co2O3 Thin Films by Pulsed Laser Deposition Method and Investigation Zscan and Gas Sensing Applications	Co2O3 thin films, pulse laser deposition, optical properties, gas sensor	48, 3, 369-375	https://doi.org/10.18280/acsm.480308	Lo.Dayekh, M., Ghadi, A., Hussain, S.A. (2024). Synthesis and characterization of Co2O3 thin films by pulsed laser deposition method and investigation Zscan and gas sensing applications. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 48, No. 3, pp. 369-375. https://doi.org/10.18280/acsm.480308
24	Pratomo, H., Sulisty, Setiono, A., Widiyatmoko, B., Rahman, R.A.	Mechanical and Vibrational Characterization of Reinforced Composite Rubber/Calcium Carbonate for Compressive Optical Sensor Housing	calcium carbonate, deflection, response time, tensile strength, response time	48, 3, 377-384	https://doi.org/10.18280/acsm.480309	Pratomo, H., Sulisty, Setiono, A., Widiyatmoko, B., Rahman, R.A. (2024). Mechanical and vibrational characterization of reinforced composite rubber/calcium carbonate for compressive optical sensor housing. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 48, No. 3, pp. 377-384. https://doi.org/10.18280/acsm.480309
25	Sajet, F., Ali, R.	Prediction of the Superparamagnetic Limit for Magnetic Storage Medium Using Artificial Neural Networks	superparamagnetism, Néel relaxation, magnetic storage, artificial neural networks	48, 3, 385-391	https://doi.org/10.18280/acsm.480310	Sajet, F., Ali, R. (2024). Prediction of the superparamagnetic limit for magnetic storage medium using artificial neural networks. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 48, No. 3, pp. 385-391. https://doi.org/10.18280/acsm.480310
26	Ouari, K., Ameer, K., Mazari, H., Nakrela, A.	Lead Sulfide Thin Films (PbS): Synthesis, Characterization and Theoretical Investigation via Biosensors Applications	FP-LAPW method, spray pyrolysis technique, EDS, lead sulfide	48, 3, 393-399	https://doi.org/10.18280/acsm.480311	Ouari, K., Ameer, K., Mazari, H., Nakrela, A. (2024). Lead sulfide thin films (PbS): Synthesis, characterization and theoretical investigation via biosensors applications. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 48, No. 3, pp. 393-399. https://doi.org/10.18280/acsm.480311
27	Yellapragada, N.V.S., Reddy, S.P., Chand, V.T., Mangalagiri, S.K., Babu, B.S., Devarakonda, S.K.	The Potentiality of LHA Nanoparticle Reinforced AA2024 Composites: A Focus on Microstructure, Mechanical Properties	AA2024, LHA, mechanical behavior	48, 3, 401-408	https://doi.org/10.18280/acsm.480312	Yellapragada, N.V.S., Reddy, S.P., Chand, V.T., Mangalagiri, S.K., Babu, B.S., Devarakonda, S.K. (2024). The potentiality of LHA nanoparticle reinforced AA2024 composites: A focus on microstructure, mechanical properties. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 48, No. 3, pp. 401-408. https://doi.org/10.18280/acsm.480312
28	Al Hasan, N.H.J.	Mechanical Behavior of Composite Girders with Corrugated Steel Webs Based on ABAQUS	ABAQUS, buckling, corrugated, steel webs, girders, ultimate load, deflections	48, 3, 409-415	https://doi.org/10.18280/acsm.480313	Al Hasan, N.H.J. (2024). Mechanical behavior of composite girders with corrugated steel webs based on ABAQUS. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 48, No. 3, pp. 409-415. https://doi.org/10.18280/acsm.480313
29	Al-Slaty, F., Amjad, M., Al-Dabsheh, I., Mahmoud, E.N.	Characterization and Utilization of Wood Ash in Geopolymers Production and Pb+2 Removal from an Aqueous Solution	alkali activation, geopolymers, wood ash, clay materials, kaolin, Pb+2 removal, adsorption	48, 3, 417-425	https://doi.org/10.18280/acsm.480314	Al-Slaty, F., Amjad, M., Al-Dabsheh, I., Mahmoud, E.N. (2024). Characterization and utilization of wood ash in geopolymers production and Pb+2 removal from an aqueous solution. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 48, No. 3, pp. 417-425. https://doi.org/10.18280/acsm.480314
30	Naji, Z.H., Mubarak, H.M., Ibrahim, A.M.	Thermal Properties of Light Weight Self - Compacting Concrete Incorporate Nano Silica	nano materials, thermal conductivity, specific heat	48, 3, 427-434	https://doi.org/10.18280/acsm.480315	Naji, Z.H., Mubarak, H.M., Ibrahim, A.M. (2024). Thermal properties of light weight self - compacting concrete incorporate nano silica. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 48, No. 3, pp. 427-434. https://doi.org/10.18280/acsm.480315
31	Hammed, M., Abbood, M., Majeed, S.	Enhancing Dental Ceramic Prostheses with Zirconia Nanocomposites: An In-Vitro Study on Hard Tissue Rehabilitation	biomaterial, nano composites, nanostructures, zinc oxide NPs, silica nanoparticles, dental prostheses	48, 2, 137-151	https://doi.org/10.18280/acsm.480201	Hammed, M., Abbood, M., Majeed, S. (2024). Enhancing dental ceramic prostheses with zirconia nanocomposites: An in-vitro study on hard tissue rehabilitation. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 48, No. 2, pp. 137-151. https://doi.org/10.18280/acsm.480201
32	Boulkenafet, B., Abdelouahed, A., Hebhouh, H., Hamid, A., Messaoudi, K.	Preliminary Study on the Use of Recycled Glass, Ceramics, and Granite as Fillers in Ultra-High Performance Fiber Concrete	UHPFC, recycled glass fillers, recycled ceramic fillers, recycled granite fillers, thermal treatment, formulation, mechanical performance, sustainability	48, 2, 153-161	https://doi.org/10.18280/acsm.480202	Boulkenafet, B., Abdelouahed, A., Hebhouh, H., Hamid, A., Messaoudi, K. (2024). Preliminary study on the use of recycled glass, ceramics, and granite as fillers in ultra-high performance fiber concrete. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 48, No. 2, pp. 153-161. https://doi.org/10.18280/acsm.480202

33	Kassim, M.T.E., Karash, E.T., Mahmood, A.M., Sultan, J.N.	Mechanical Property Enhancement of Stainless Steel 12X18H10T Through nc-TiN Coating: A Simulation Study	stainless steel 12X18H10T, nc-TiN coating, finite element modeling, tensile test, bending test, impact test, mechanical properties	48, 2, 163-176	https://doi.org/10.18280/acsm.480203	Kassim, M.T.E., Karash, E.T., Mahmood, A.M., Sultan, J.N. (2024). Mechanical property enhancement of stainless steel 12X18H10T through nc-TiN coating: A simulation study. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 48, No. 2, pp. 163-176. https://doi.org/10.18280/acsm.480203
34	Ali, R., Al-Zubaidy, B.	Investigation of the Effect of Aluminium Addition on the Additively Manufactured SS309L Alloy	additive manufacturing, aluminium alloy, cold feeding, metal inert gas, stainless steel 309L	48, 2, 177-186	https://doi.org/10.18280/acsm.480204	Ali, R., Al-Zubaidy, B. (2024). Investigation of the effect of aluminium addition on the additively manufactured SS309L alloy. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 48, No. 2, pp. 177-186. https://doi.org/10.18280/acsm.480204
35	Jilabi, A.S.J.	Comparative Analysis of Electrode Type on Microstructure and Mechanical Properties in AISI 5155 Low Alloy Steel Welds	electrode type, low alloy steels, shielded metal arc welding	48, 2, 187-195	https://doi.org/10.18280/acsm.480205	Jilabi, A.S.J. (2024). Comparative analysis of electrode type on microstructure and mechanical properties in AISI 5155 low alloy steel welds. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 48, No. 2, pp. 187-195. https://doi.org/10.18280/acsm.480205
36	Aljumaili, M.W., Beddu, S.B., Itam, Z., Their, J.M.	Investigating the Influence of Recycled Coarse Aggregate and Steel Fiber on the Rheological and Mechanical Properties of Self-Compacting Geopolymer Concrete	metakaolin, recycled aggregates, self-compacting geopolymer concrete, steel fiber, sustainability	48, 2, 197-206	https://doi.org/10.18280/acsm.480206	Aljumaili, M.W., Beddu, S.B., Itam, Z., Their, J.M. (2024). Investigating the influence of recycled coarse aggregate and steel fiber on the rheological and mechanical properties of self-compacting geopolymer concrete. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 48, No. 2, pp. 197-206. https://doi.org/10.18280/acsm.480206
37	Mohammed, A.M., Hammadi, A.A., Alfahdawi, I.H., Aadi, A.S., Al-Hadithi, A.I.	Production of Groundwater Resistance Mortar Using Glass Sand and Polypropylene Fibres	sustainable mortar, polypropylene fibers, glass sand, waste recycle, water absorption	48, 2, 207-214	https://doi.org/10.18280/acsm.480207	Mohammed, A.M., Hammadi, A.A., Alfahdawi, I.H., Aadi, A.S., Al-Hadithi, A.I. (2024). Production of groundwater resistance mortar using glass sand and polypropylene fibres. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 48, No. 2, pp. 207-214. https://doi.org/10.18280/acsm.480207
38	Indrayanti, L., Siska, G., Santosa, M.	Evaluating the Physical and Mechanical Properties of Particleboards Fabricated from Vernonia Arborea Buch. -Ham and Eleocharis sp. Fibers with PVAc Adhesive	decorative, Eleocharis sp., interior, particleboard, PVAc, Vernonia arborea Buch.-Ham, sustainability	48, 2, 215-222	https://doi.org/10.18280/acsm.480208	Indrayanti, L., Siska, G., Santosa, M. (2024). Evaluating the physical and mechanical properties of particleboards fabricated from Vernonia arborea Buch. -Ham and Eleocharis sp. fibers with PVAc adhesive. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 48, No. 2, pp. 215-222. https://doi.org/10.18280/acsm.480208
39	Ismaeel, M.M., Al-Dergazly, A.A., Al-Jaburi, K., Abdulkareem, S.K.	Evaluation of Selective Laser Melted Ti6Al4V/ST316L Composite and Selective Laser Sintered Polyamide 12 Implants for Orthopedic Applications: Finite Element Analysis, Physical and Mechanical Characterization, in Vitro and in Vivo Biocompatibility	Selective Laser Melting (SLM), Polyamide 12, Selective Laser Sintering (SLS), Ti6Al4V, ST316L	48, 2, 223-231	https://doi.org/10.18280/acsm.480209	Ismaeel, M.M., Al-Dergazly, A.A., Al-Jaburi, K., Abdulkareem, S.K. (2024). Evaluation of selective laser melted Ti6Al4V/ST316L composite and selective laser sintered polyamide 12 implants for orthopedic applications: Finite element analysis, physical and mechanical characterization, in vitro and in vivo biocompatibility. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 48, No. 2, pp. 223-231. https://doi.org/10.18280/acsm.480209
40	AL-Bayati, H.K.A., Oyeyi, A.G., Tighe, S.L.	Framework for the Innovative Use of Recycled Materials in Pavement Structures: A Canadian Case Study	recycled pavement materials, management framework, life cycle assessment, microstructure of pavement materials, pavement mixtures	48, 2, 233-250	https://doi.org/10.18280/acsm.480210	AL-Bayati, H.K.A., Oyeyi, A.G., Tighe, S.L. (2024). Framework for the innovative use of recycled materials in pavement structures: A Canadian case study. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 48, No. 2, pp. 233-250. https://doi.org/10.18280/acsm.480210
41	Amira, S., Belkacem, Z., Terchi, S., Benaiche, G.	Enhancement of Polystyrene Nanocomposites with THDACL-Modified Montmorillonite via Melt Compounding	PS nanocomposites, clay modification, surfactant intercalation, THDACL-MMT, interlayer distance, d-spacing, dispersion enhancement, mechanical properties, thermal stability, TEM	48, 2, 251-258	https://doi.org/10.18280/acsm.480211	Amira, S., Belkacem, Z., Terchi, S., Benaiche, G. (2024). Enhancement of polystyrene nanocomposites with THDACL-modified montmorillonite via melt compounding. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 48, No. 2, pp. 251-258. https://doi.org/10.18280/acsm.480211
42	Kizar, S.S., Sabree, I.K.	Enhancing Porous Alumina Ceramics for Bioapplications Through Targeted Surface Modification Techniques	inert ceramic porous alumina, alkaline treatment, amino acid treatment, UV treatment	48, 2, 259-267	https://doi.org/10.18280/acsm.480212	Kizar, S.S., Sabree, I.K. (2024). Enhancing porous alumina ceramics for bioapplications through targeted surface modification techniques. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 48, No. 2, pp. 259-267. https://doi.org/10.18280/acsm.480212
43	Kota, S., Dumpala, P., Sajja, R., Anantha, R.	Advancements in Wound Care: A Review of Electrospun Nanofibrous Dressings Enriched with Phytoconstituents	electrospinning, nanofibers, phytoconstituents, wound dressing	48, 2, 269-279	https://doi.org/10.18280/acsm.480213	Kota, S., Dumpala, P., Sajja, R., Anantha, R. (2024). Advancements in wound care: A review of electrospun nanofibrous dressings enriched with phytoconstituents. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 48, No. 2, pp. 269-279. https://doi.org/10.18280/acsm.480213
44	Hameed, A.M., Hardan, S.A., Khatab, H.R.	Comparative Analysis of RC Beams Torsional Performance: FRP Wrapping Versus NSM-FRP Bar Strengthening	ABAQUS, torsional performance, fiber reinforced polymer (FRP) wrapping, nonlinear behavior, crack patterns, near-surface mounted NSM	48, 2, 281-289	https://doi.org/10.18280/acsm.480214	Hameed, A.M., Hardan, S.A., Khatab, H.R. (2024). Comparative analysis of RC beams torsional performance: FRP wrapping versus NSM-FRP bar strengthening. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 48, No. 2, pp. 281-289. https://doi.org/10.18280/acsm.480214
45	Maulana, F., Ubaidillah, Dewi, A.L., Lenggana, B.W., Santosa, S.P., Alashwal, Y.A.A.	Simulation-Based Evaluation of Alumina and Weldox Steel Panels Against National Institute of Justice Type IV Ballistic Threats	ballistic performance, impact resistance, alumina and weldox 460 E steel, NIJ type IV standard, panel configurations, finite element simulation, ballistic testing simulation	48, 2, 291-301	https://doi.org/10.18280/acsm.480215	Maulana, F., Ubaidillah, Dewi, A.L., Lenggana, B.W., Santosa, S.P., Alashwal, Y.A.A. (2024). Simulation-based evaluation of Alumina and Weldox steel panels against National Institute of Justice type IV ballistic threats. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 48, No. 2, pp. 291-301. https://doi.org/10.18280/acsm.480215
46	Dimia, M.S., Baghdadi, M., Belakhdar, A.R., Rabehi, R., Alaoui, N.	A Numerical Investigation into the Effectiveness of Composite Jacket Strengthening (CJS) on Fire-Damaged Concrete Beams	fire exposure, damaged beam, material deterioration, post-fire strengthening, numerical simulation	48, 1, 1-10	https://doi.org/10.18280/acsm.480101	Dimia, M.S., Baghdadi, M., Belakhdar, A.R., Rabehi, R., Alaoui, N. (2024). A numerical investigation into the effectiveness of Composite Jacket Strengthening (CJS) on fire-damaged concrete beams. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 48, No. 1, pp. 1-10. https://doi.org/10.18280/acsm.480101
47	Wathook, B., Hassan, D.A.	Modified Sol-Gel Method of Synthesising a Mn4+-Doped Mg2TiO4: A Red Phosphor for Improved LED Performance	LEDs, perovskite, photoluminescence, SEM, sol-gel, titanium (IV) isopropoxide, Mn4+	48, 1, 11-16	https://doi.org/10.18280/acsm.480102	Wathook, B., Hassan, D.A. (2024). Modified sol-gel method of synthesising a Mn4+-doped Mg2TiO4: A red phosphor for improved LED performance. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 48, No. 1, pp. 11-16. https://doi.org/10.18280/acsm.480102
48	Dakhil, A.J., Shuber, M.A.	Flexural Performance of Reinforced Concrete Beams with Openings Strengthened by Varying Thickness Steel Tubes	square opening, flexural performance, strengthening, steel tube, reinforced concrete, varying thickness, DIC	48, 1, 17-25	https://doi.org/10.18280/acsm.480103	Dakhil, A.J., Shuber, M.A. (2024). Flexural performance of reinforced concrete beams with openings strengthened by varying thickness steel tubes. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 48, No. 1, pp. 17-25. https://doi.org/10.18280/acsm.480103

49	Semache, S., Bouteldja, F., Belachia, M., Amziane, S.	Local Materials in Geopolymer Mortar: A Case Study on Metakaolin and Blast-Furnace Slag	blast-furnace slag, durability, geopolymer, metakaolin, mechanical behaviour, alkaline activation	48, 1, 27-36	https://doi.org/10.18280/acsm.480104	Semache, S., Bouteldja, F., Belachia, M., Amziane, S. (2024). Local materials in geopolymer mortar: A case study on metakaolin and blast-furnace slag. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 48, No. 1, pp. 27-36. https://doi.org/10.18280/acsm.480104
50	Hidayat, A., Rahmalina, D., Rahman, R.A.	Impact of Top Mold Slope on Defect Formation in Gravity Casting of Aluminum Alloy	aluminum alloy, gravity casting, porosity, top mold slop, wheel rim	48, 1, 37-42	https://doi.org/10.18280/acsm.480105	Hidayat, A., Rahmalina, D., Rahman, R.A. (2024). Impact of top mold slope on defect formation in gravity casting of aluminum alloy. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 48, No. 1, pp. 37-42. https://doi.org/10.18280/acsm.480105
51	Al-Mohammedawi, N.A., Zaidan, S.A., Kashan, J.S.	Preparation and Characterization of TiO ₂ -CaO-ZrO ₂ /HDPE Hybrid Bio-Nanocomposites for Use in Orthopedic Applications	bone substitute materials, hot-pressing technique, HDPE, TiO ₂ , CaO-PSZ, FTIR, AFM, DSC	48, 1, 43-55	https://doi.org/10.18280/acsm.480106	Al-Mohammedawi, N.A., Zaidan, S.A., Kashan, J.S. (2024). Preparation and characterization of TiO ₂ -CaO-ZrO ₂ /HDPE hybrid bio-nanocomposites for use in orthopedic applications. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 48, No. 1, pp. 43-55. https://doi.org/10.18280/acsm.480106
52	Habeeb, A.M., Salih, N.A.A.	Synthesis of Hydroxyapatite from Egg Shell Bio-Waste for Use in Functionally Graded NiTi/HA Bone Implants	nanoscale hydroxyapatite, eggshells, calcination, biomedical, calcium, natural, phosphoric acid, bio-waste	48, 1, 57-62	https://doi.org/10.18280/acsm.480107	Habeeb, A.M., Salih, N.A.A. (2024). Synthesis of hydroxyapatite from egg shell bio-waste for use in functionally graded NiTi/HA bone implants. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 48, No. 1, pp. 57-62. https://doi.org/10.18280/acsm.480107
53	Yerubandi, V.R.M., Kambagowni, V.S., Ayyagari, J.K.P., Hirisave Sathyanarayana, Y., Devarahatti, C.	Comparative Study on Dry and Wet Wear Characteristics of Ultra-High Molecular Weight Polyethylene Composites Reinforced with Direct Precipitated Nano Zinc Oxide	UHMWPE, nano ZnO, sol-gel method, ducom's TR201LE POD tester, wet wear test, zinc acetate, sodium hydroxide, zinc hydroxide, deionized water (DM water), transfer film	48, 1, 63-72	https://doi.org/10.18280/acsm.480108	Yerubandi, V.R.M., Kambagowni, V.S., Ayyagari, J.K.P., Hirisave Sathyanarayana, Y., Devarahatti, C. (2024). Comparative study on dry and wet wear characteristics of ultra-high molecular weight polyethylene composites reinforced with direct precipitated nano zinc oxide. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 48, No. 1, pp. 63-72. https://doi.org/10.18280/acsm.480108
54	Ali, Z.H., Hasan, A.S., Braihi, A.J.	Synthesis, Characterization, and Infrared Blocking Efficiency of Polyvinyl Alcohol Composites Filled with Cadmium Sulfide and Zinc Sulfide NPs	nano composite, semiconductors sustainability applications, infrared blocking, PVA-ZnS, PVA-CdS, sol-gel method, heat transfer	48, 1, 73-83	https://doi.org/10.18280/acsm.480109	Ali, Z.H., Hasan, A.S., Braihi, A.J. (2024). Synthesis, characterization, and infrared blocking efficiency of polyvinyl alcohol composites filled with cadmium sulfide and zinc sulfide NPs. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 48, No. 1, pp. 73-83. https://doi.org/10.18280/acsm.480109
55	Benouadah, A., Merbouh, M., Nabil, B., Benammar, A.	Effect of Self-Curing Admixture and Sand Type on the Mechanical and Microstructural Properties of Concrete in Hot Climate Conditions	hot weather, nature sand, consistence, compressive strength, microstructure properties	48, 1, 85-93	https://doi.org/10.18280/acsm.480110	Benouadah, A., Merbouh, M., Nabil, B., Benammar, A. (2024). Effect of self-curing admixture and sand type on the mechanical and microstructural properties of concrete in hot climate conditions. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 48, No. 1, pp. 85-93. https://doi.org/10.18280/acsm.480110
56	Ali, S.I., Ahmed, A.M., Ibrahim, A.E., Ali, M.I.	Effect of Utilization Waste Strapping Plastic Belts on Flexural Behaviour of Concrete	plastic straps, strengthening, internally reinforced, externally reinforced, NSM, concrete recycling, polyethylene terephthalate (PET), tensile strength	48, 1, 95-100	https://doi.org/10.18280/acsm.480111	Ali, S.I., Ahmed, A.M., Ibrahim, A.E., Ali, M.I. (2024). Effect of utilization waste strapping plastic belts on flexural behaviour of concrete. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 48, No. 1, pp. 95-100. https://doi.org/10.18280/acsm.480111
57	Rahmah, N.M.	Comparing the Effects of ZnO and ZrO ₂ Nanomaterials on the Mechanical, Chemical, and Crystalline Properties of Epoxy Resin (DGEBA)	nanomaterials, epoxy resin, zinc oxide, zirconium dioxide, mechanical properties, chemical properties, crystalline properties, nanocomposites	48, 1, 101-107	https://doi.org/10.18280/acsm.480112	Rahmah, N.M. (2024). Comparing the effects of ZnO and ZrO ₂ nanomaterials on the mechanical, chemical, and crystalline properties of epoxy resin (DGEBA). <i>Annales de Chimie - Science des Matériaux</i> , Vol. 48, No. 1, pp. 101-107. https://doi.org/10.18280/acsm.480112
58	Waliitagi, A., Rathanasalam, V., Chinnadurai, M., Pitchaimuthu, E.	Strength and Microstructural Behavior of Sustainable Concrete with Varied Proportions of Recycled Fine Aggregate from Construction and Demolition Waste	C&D waste, Recycled fine aggregates (RFA), sustainable concrete compressive strength, SEM and split tensile strength	48, 1, 109-113	https://doi.org/10.18280/acsm.480113	Waliitagi, A., Rathanasalam, V., Chinnadurai, M., Pitchaimuthu, E. (2024). Strength and microstructural behavior of sustainable concrete with varied proportions of recycled fine aggregate from construction and demolition waste. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 48, No. 1, pp. 109-113. https://doi.org/10.18280/acsm.480113
59	Fahad, D.K., Owaid, H.M.	Enhancing Mechanical Properties of Self-Compacting Concrete Through the Utilization of Pozzolanic Materials and Waste Products	self-compacting concrete, waste materials marble powder, calcined kaolin clay, binary blend, ternary blend	48, 1, 115-124	https://doi.org/10.18280/acsm.480114	Fahad, D.K., Owaid, H.M. (2024). Enhancing mechanical properties of self-compacting concrete through the utilization of pozzolanic materials and waste products. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 48, No. 1, pp. 115-124. https://doi.org/10.18280/acsm.480114
60	Al-Ubaidy, S.K., Bouraoui, C.	High-Entropy Alloys: Advantages and Applications in Challenging Environments	high-entropy alloys, strength, corrosion resistance, challenging operating conditions, material innovation, thermal stability, structure-property relationships	48, 1, 125-136	https://doi.org/10.18280/acsm.480115	Al-Ubaidy, S.K., Bouraoui, C. (2024). High-entropy alloys: Advantages and applications in challenging environments. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 48, No. 1, pp. 125-136. https://doi.org/10.18280/acsm.480115
61	Louetri, L., Nouaouria, A., Nouaouria, M.S.	Mechanical Characterization of Granular Materials for Silos Design Using Geotechnical Experiments	Oedometric test, ring shear test, triaxial test, elastic modulus, dilatancy angle, internal friction angle, Poisson ratio, particle-to-steel wall friction coefficient	47, 6, 351-361	https://doi.org/10.18280/acsm.470601	Louetri, L., Nouaouria, A., Nouaouria, M.S. (2023). Mechanical characterization of granular materials for silos design using geotechnical experiments. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 47, No. 6, pp. 351-361. https://doi.org/10.18280/acsm.470601
62	Ahmed, A.M., Ali, S.I., Ali, M.I., Jamel, A.A.J.	Analyzing Self-Compacted Mortar Improved by Carbon Fiber Using Artificial Neural Networks	artificial neural networks, self-compact mortar, ANN, carbon fiber, fresh properties, SCM, mini funnel, diameter of flow	47, 6, 363-369	https://doi.org/10.18280/acsm.470602	Ahmed, A.M., Ali, S.I., Ali, M.I., Jamel, A.A.J. (2023). Analyzing self-compacted mortar improved by carbon fiber using artificial neural networks. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 47, No. 6, pp. 363-369. https://doi.org/10.18280/acsm.470602
63	Zemri, C., Bachir Bouiadjra, M.	Thermal Impact on the Physical and Transfer Properties of Slag Cement and Portland Cement Concretes	high temperature, concrete durability, slag cement, Portland cement, diffusivity, porosity, permeability	47, 6, 371-381	https://doi.org/10.18280/acsm.470603	Zemri, C., Bachir Bouiadjra, M. (2023). Thermal impact on the physical and transfer properties of slag cement and Portland cement concretes. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 47, No. 6, pp. 371-381. https://doi.org/10.18280/acsm.470603
64	Gharaibeh, M.A.	Numerical Characterization of the Mechanical Performance of SAC105 Tin-Silver-Copper Solder Interconnections After Aging	SAC solders, isothermal aging, finite element method, solder creep	47, 6, 383-391	https://doi.org/10.18280/acsm.470604	Gharaibeh, M.A. (2023). Numerical characterization of the mechanical performance of SAC105 tin-silver-copper solder interconnections after aging. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 47, No. 6, pp. 383-391. https://doi.org/10.18280/acsm.470604

65	Bijjam, R.R., Chandanam, S., Nakka, V.V.S.S., Dhoria, S.H.	Stress Analysis in a Multiscale Composite Laminated Plate with Cutout at the Centre Using Finite Element Method	carbon nanotubes (CNTs), multiscale composites, stress concentration, finite element method	47, 6, 393-398	https://doi.org/10.18280/acsm.470605	Bijjam, R.R., Chandanam, S., Nakka, V.V.S.S., Dhoria, S.H. (2023). Stress analysis in a multiscale composite laminated plate with cutout at the centre using finite element method. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 47, No. 6, pp. 393-398. https://doi.org/10.18280/acsm.470605
66	Tababouchet, M.Y., Sakri, A., Bouremel, C., Boutarfaia, A.	Synthesis of Polyaniline-Zinc Oxide Composites: Assessment of Structural, Morphological, and Electrical Properties	conductivity, FT-IR, in-situ oxidative polymerization, polyaniline, Scanning Electron Microscopy (SEM), X-ray diffraction, zinc-oxide	47, 6, 399-404	https://doi.org/10.18280/acsm.470606	Tababouchet, M.Y., Sakri, A., Bouremel, C., Boutarfaia, A. (2023). Synthesis of polyaniline-zinc oxide composites: Assessment of structural, morphological, and electrical properties. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 47, No. 6, pp. 399-404. https://doi.org/10.18280/acsm.470606
67	Nikolaychuk, P.A., Zhermakova, A.O., Enova, Y.A.	Sustainable Corrosion Inhibition of Mild Steel in Hydrochloric Acid Using Extracts of <i>Phaseolus Vulgaris</i> and <i>Vicia Faba</i>	<i>Phaseolus vulgaris</i> , <i>Vicia faba</i> , plant-derived inhibitor, corrosion inhibition, stainless steel, electrochemical study, electrochemical impedance spectroscopy, Langmuir adsorption isotherm	47, 6, 405-410	https://doi.org/10.18280/acsm.470607	Nikolaychuk, P.A., Zhermakova, A.O., Enova, Y.A. (2023). Sustainable corrosion inhibition of mild steel in hydrochloric acid using extracts of <i>Phaseolus Vulgaris</i> and <i>Vicia Faba</i> . <i>Annales de Chimie - Science des Matériaux</i> , Vol. 47, No. 6, pp. 405-410. https://doi.org/10.18280/acsm.470607
68	Al-Kinani, M.A.	Optimizing Tensile Strength and Hardness in FSW of AA 6061 and AA 7075 via RSM and Desirability Function	friction stir welding, 6061 and 7075 Al alloys, ultimate tensile strength, welding zone hardness and response surface methodology RSM	47, 6, 411-416	https://doi.org/10.18280/acsm.470608	Al-Kinani, M.A. (2023). Optimizing tensile strength and hardness in FSW of AA 6061 and AA 7075 via RSM and desirability function. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 47, No. 6, pp. 411-416. https://doi.org/10.18280/acsm.470608
69	Maza, M., Tebbal, N., Rahmouni, Z.E.A., Zitouni, S.	Predicting Mechanical Properties of Concrete Using Equivalent Mortar: A Comparative Study	equivalent mortar, equivalent concrete, mechanical properties, dune sand, crushed sand, granular skeleton, concrete properties	47, 5, 265-271	https://doi.org/10.18280/acsm.470501	Maza, M., Tebbal, N., Rahmouni, Z.E.A., Zitouni, S. (2023). Predicting mechanical properties of concrete using equivalent mortar: A comparative study. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 47, No. 5, pp. 265-271. https://doi.org/10.18280/acsm.470501
70	Hasan, Z.A., Jasim, M.H., Shaker, A.A., Nasr, M.S., Abdulridha, S.Q., Hashim, T.M.	Experimental Investigation on Using Electrical Cable Waste as Fine Aggregate and Reinforcing Fiber in Sustainable Mortar	Electrical Cable Waste, sustainable mortar, mechanical properties, waste reuse	47, 5, 273-279	https://doi.org/10.18280/acsm.470502	Hasan, Z.A., Jasim, M.H., Shaker, A.A., Nasr, M.S., Abdulridha, S.Q., Hashim, T.M. (2023). Experimental investigation on using electrical cable waste as fine aggregate and reinforcing fiber in sustainable mortar. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 47, No. 5, pp. 273-279. https://doi.org/10.18280/acsm.470502
71	Guerroui, R., Benouis, A.	Adhesion of Masonry Coating: Effect of Mortar Consistency and Type of Substrate	Guerroui, R., Benouis, A. (2023). Adhesion of masonry coating: Effect of mortar consistency and type of substrate. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 47, No. 5, pp. 281-286. https://doi.org/10.18280/acsm.470503	47, 5, 281-286	https://doi.org/10.18280/acsm.470503	Guerroui, R., Benouis, A. (2023). Adhesion of masonry coating: Effect of mortar consistency and type of substrate. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 47, No. 5, pp. 281-286. https://doi.org/10.18280/acsm.470503
72	Ismael, M.A., Abd, H.J., Abbas, S.R.	Structural Performance of Reinforced Concrete Columns with Bracing Reinforcement	bracing, column concrete, finite-element reinforcement, structural	47, 5, 287-296	https://doi.org/10.18280/acsm.470504	Ismael, M.A., Abd, H.J., Abbas, S.R. (2023). Structural performance of reinforced concrete columns with bracing reinforcement. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 47, No. 5, pp. 287-296. https://doi.org/10.18280/acsm.470504
73	Abdulkareem, M.A.	Mechanical and Thermal Characteristics of Concrete Reinforced with Crushed Glass and Glass Fiber: An Experimental Study	crushed glass, glass fiber, compressive strength, splitting tensile strength, thermal conductivity, flexural strength	47, 5, 297-303	https://doi.org/10.18280/acsm.470505	Abdulkareem, M.A. (2023). Mechanical and thermal characteristics of concrete reinforced with crushed glass and glass fiber: An experimental study. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 47, No. 5, pp. 297-303. https://doi.org/10.18280/acsm.470505
74	Okokpujie, I.P., Kelechi, S.E., Tartibu, L.K.	A Review of Self-Compacting Concrete Incorporating Waste Materials	self-compacting rubber-concrete, calcium carbide waste (CCW), fly ash, flexural strength, comprehensive strength (GPC)	47, 5, 305-323	https://doi.org/10.18280/acsm.470506	Okokpujie, I.P., Kelechi, S.E., Tartibu, L.K. (2023). A review of self-compacting concrete incorporating waste materials. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 47, No. 5, pp. 305-323. https://doi.org/10.18280/acsm.470506
75	Turkey, F.A., Beddu, S.B.T., Al-Hubboubi, S.K., Fawzi, N.M.	Elevated Temperature Effects on Geo-Polymer Concrete: An Experimental and Numerical-Review Study	Geo-Polymer concrete, high temperature, experimental test, numerical models	47, 5, 325-340	https://doi.org/10.18280/acsm.470507	Turkey, F.A., Beddu, S.B.T., Al-Hubboubi, S.K., Fawzi, N.M. (2023). Elevated temperature effects on Geo-Polymer concrete: An experimental and numerical-review study. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 47, No. 5, pp. 325-340. https://doi.org/10.18280/acsm.470507
76	Jassam, Z.A., Usman, F., Hayder, G., Al-Ani, Y.	Investigating the Mechanical and Thermal Properties of Concrete with Recycled Nanoplastics for Enhanced Sustainability	concrete, thermal properties, mechanical properties, nano plastics, recycled plastic waste, environmental influence, sustainability, green concrete, energy efficiency	47, 5, 341-350	https://doi.org/10.18280/acsm.470508	Jassam, Z.A., Usman, F., Hayder, G., Al-Ani, Y. (2023). Investigating the mechanical and thermal properties of concrete with recycled nanoplastics for enhanced sustainability. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 47, No. 5, pp. 341-350. https://doi.org/10.18280/acsm.470508
77	Touil, I., Khochmane, H., Khounfais, K., Khelifa, M.	Development and Mechanical Assessment of Corn Flour and Olive Pomace Reinforced Bioplastics	Touil, I., Khochmane, H., Khounfais, K., Khelifa, M. (2023). Development and mechanical assessment of corn flour and olive pomace reinforced bioplastics. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 47, No. 4, pp. 193-199. https://doi.org/10.18280/acsm.470401	47, 4, 193-199	https://doi.org/10.18280/acsm.470401	Touil, I., Khochmane, H., Khounfais, K., Khelifa, M. (2023). Development and mechanical assessment of corn flour and olive pomace reinforced bioplastics. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 47, No. 4, pp. 193-199. https://doi.org/10.18280/acsm.470401
78	Ahmed, M.A., Ibrahim, A.K., Hilal, N., Aadi, A.S., Hamah Sor, N.	Effects of Coal Ash and Walnut Shell on the Impact Resistance and Mechanical Properties of Eco-Efficient Self-Compacting Concrete	coal ash, walnut shell, self-compacting concrete, mechanical properties, compressive strength, flexural strength, impact energy	47, 4, 201-208	https://doi.org/10.18280/acsm.470402	Ahmed, M.A., Ibrahim, A.K., Hilal, N., Aadi, A.S., Hamah Sor, N. (2023). Effects of coal ash and walnut shell on the impact resistance and mechanical properties of eco-efficient self-compacting concrete. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 47, No. 4, pp. 201-208. https://doi.org/10.18280/acsm.470402
79	Fnides, M., Bensana, T., Fnides, B., Mihoub, M.	Experimental Analysis of the Mechanical Characteristics of Aluminum Alloys (AlSi8Cu3)	mechanical behavior, torsion, strength coefficient, strain hardening exponent, hardness, microstructure	47, 4, 209-218	https://doi.org/10.18280/acsm.470403	Fnides, M., Bensana, T., Fnides, B., Mihoub, M. (2023). Experimental analysis of the mechanical characteristics of aluminum alloys (AlSi8Cu3). <i>Annales de Chimie - Science des Matériaux</i> , Vol. 47, No. 4, pp. 209-218. https://doi.org/10.18280/acsm.470403
80	AL-DULAIMI, M.A.M., Seyedi, M.	Numerical Analysis of Geogrids and Recycled Concrete Aggregate for Stabilizing Road Embankments	road embankment, recycled concrete aggregate, soil stabilization, geogrid, PLAXIS2D, numerical analysis	47, 4, 219-223	https://doi.org/10.18280/acsm.470404	AL-DULAIMI, M.A.M., Seyedi, M. (2023). Numerical analysis of geogrids and recycled concrete aggregate for stabilizing road embankments. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 47, No. 4, pp. 219-223. https://doi.org/10.18280/acsm.470404

81	Hameed, O.M., Usman, F., Hayder, G., Al-Ani, Y.	Investigation of Mechanical and Thermal Performance of Nanoclay Modified Concrete for Energy Efficiency	Nanoclay, sustainability, mechanical performance, mechanical characteristics, energy consumption, thermal properties	47, 4, 225-235	https://doi.org/10.18280/acsm.470405	Hameed, O.M., Usman, F., Hayder, G., Al-Ani, Y. (2023). Investigation of mechanical and thermal performance of Nanoclay modified concrete for energy efficiency. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 47, No. 4, pp. 225-236. https://doi.org/10.18280/acsm.470405
82	Abbas, A.M., Alwash, J.J.	Comparative Performance of SF, PPF and Hybrid Fiber-Reinforced Self-Compacting Lightweight Concrete under Fire Exposure	self-compacting lightweight concrete, (SF) steel fiber, (PPF) polypropylene fiber, fire resistance, mechanical properties, spalling resistance, expanded clay aggregate, ISO-834	47, 4, 237-245	https://doi.org/10.18280/acsm.470406	Abbas, A.M., Alwash, J.J. (2023). Comparative performance of SF, PPF and hybrid fiber-reinforced self-compacting lightweight concrete under fire exposure. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 47, No. 4, pp. 237-246. https://doi.org/10.18280/acsm.470406
83	Belakhdar, A.R., Dimia, M.S., Baghdadi, M., Bouderradji, M., Gherabli, S., Alaoui, N.	Post-Fire Behavior and Repair of Fire-Damaged RC Columns Using Composite Jackets	reinforced concrete column, fire damage, post-fire strengthening, composite jacket, numerical investigation, SAFIR	47, 4, 247-257	https://doi.org/10.18280/acsm.470407	Belakhdar, A.R., Dimia, M.S., Baghdadi, M., Bouderradji, M., Gherabli, S., Alaoui, N. (2023). Post-fire behavior and repair of fire-damaged RC columns using composite jackets. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 47, No. 4, pp. 247-257. https://doi.org/10.18280/acsm.470407
84	Boughamsa, O., Abdelouahed, A., Hebhouh, H., Kherraf, L., Boukhatem, G.	Optimizing Sand Concrete Properties Through Partial Substitution of Natural Sand with Cement Kiln Dust	sand concrete, cement kiln dust (CKD), substitution, compression, absorption, waste, optimizing, sulfuric attack	47, 4, 259-264	https://doi.org/10.18280/acsm.470408	Boughamsa, O., Abdelouahed, A., Hebhouh, H., Kherraf, L., Boukhatem, G. (2023). Optimizing sand concrete properties through partial substitution of natural sand with cement kiln dust. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 47, No. 4, pp. 259-264. https://doi.org/10.18280/acsm.470408
85	Papabathina, M.R., Chinka, S.S.B., Putta, N.R., Vijaya, M., Dhoria, S.H., Chilakala, D.R., Jarubula, R.R.C., Kancharla, P.K.	Effect of Graphite on Mechanical and Tribological Properties of Al6061/SiC Hybrid Composites	Al6061 composite, SiC particles, Graphite flake, mechanical properties, wear rate, coefficient of friction	47, 3, 125-132	https://doi.org/10.18280/acsm.470301	Papabathina, M.R., Chinka, S.S.B., Putta, N.R., Vijaya, M., Dhoria, S.H., Chilakala, D.R., Jarubula, R.R.C., Kancharla, P.K. (2023). Effect of graphite on mechanical and tribological properties of Al6061/SiC hybrid composites. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 47, No. 3, pp. 125-132. https://doi.org/10.18280/acsm.470301
86	Irianto, Tumpu, M., Mabui, D.S.S., Rochmawati, R., Sila, A.A.	Potential of Pyrolyzing Mixed Polyethylene Terephthalate and Polypropylene Plastic Wastes for Utilization in Asphalt Binders	pyrolysis, plastic waste recycling, asphalt binders, polyethylene terephthalate, polypropylene	47, 3, 133-140	https://doi.org/10.18280/acsm.470302	Irianto, Tumpu, M., Mabui, D.S.S., Rochmawati, R., Sila, A.A. (2023). Potential of pyrolyzing mixed polyethylene terephthalate and polypropylene plastic wastes for utilization in asphalt binders. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 47, No. 3, pp. 133-140. https://doi.org/10.18280/acsm.470302
87	Haddad, M.A., Khedaywi, T.S.	Moisture Resistance of Olive Husk Ash Modified Asphalt Mixtures	moisture resistance, olive husk ash (OHA), asphalt mixture, Marshall Stability test, retained stability and stiffness	47, 3, 141-149	https://doi.org/10.18280/acsm.470303	Haddad, M.A., Khedaywi, T.S. (2023). Moisture resistance of olive husk ash modified asphalt mixtures. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 47, No. 3, pp. 141-149. https://doi.org/10.18280/acsm.470303
88	Benala, I., Zouambi, L., Bouafia, F., Serier, B., Hayat, S.S.	Effect of Porosity Shape, Size and Distribution on Stress Intensity Factors in Spot Welded Joints: A Finite Element Study	spot welds, stress concentration, fracture mechanics, porosity, finite element analysis, mixed mode fracture	47, 3, 151-157	https://doi.org/10.18280/acsm.470304	Benala, I., Zouambi, L., Bouafia, F., Serier, B., Hayat, S.S. (2023). Effect of porosity shape, size and distribution on stress intensity factors in spot welded joints: A finite element study. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 47, No. 3, pp. 151-157. https://doi.org/10.18280/acsm.470304
89	Ali, M.I., Khatab, H.R., Salim, I.H.	Effect of Fly Ash and Fine-Sand Addition on the Mechanical and Thermal Properties of Modified Adhesive	adhesive, fly ash, sand, thermal, high adhesive, Sikadur®-330	47, 3, 159-163	https://doi.org/10.18280/acsm.470305	Ali, M.I., Khatab, H.R., Salim, I.H. (2023). Effect of fly ash and fine-sand addition on the mechanical and thermal properties of modified adhesive. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 47, No. 3, pp. 159-163. https://doi.org/10.18280/acsm.470305
90	Salih, F.A., Usman, F., Hayder, G., Al-Ani, Y.	Evaluation of Some Beneficial Environmental Impacts and Enhanced Thermal Properties Resulting from Waste Plastic Integration into Concrete	plastic wastes, harmful environmental effects, pollution, concrete, thermal properties, recycling, sustainable concrete production, thermal conductivity	47, 3, 165-178	https://doi.org/10.18280/acsm.470306	Salih, F.A., Usman, F., Hayder, G., Al-Ani, Y. (2023). Evaluation of some beneficial environmental impacts and enhanced thermal properties resulting from waste plastic integration into concrete. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 47, No. 3, pp. 165-178. https://doi.org/10.18280/acsm.470306
91	Boubakour, S., Kherraf, L., Hebhouh, H., Messaoudi, K., Boukhatem, G.	Characterization of Lightweight Mortars with Cork and Olive Stone Waste for Old Building Rehabilitation	building rehabilitation, cork waste, lightweight aggregates, mortar properties, olive stone waste, sustainable materials	47, 3, 179-185	https://doi.org/10.18280/acsm.470307	Boubakour, S., Kherraf, L., Hebhouh, H., Messaoudi, K., Boukhatem, G. (2023). Characterization of lightweight mortars with cork and olive stone waste for old building rehabilitation. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 47, No. 3, pp. 179-185. https://doi.org/10.18280/acsm.470307
92	Doan, T.T., Nguyen, M.H.T., Nguyen, T.T.P., Lam, H.H., Ngo, T.H.D., Nguyen, V.D., Nguyen, Q.L.	Synthesis and Characterization of Zeolite-Geopolymer Composites for Water Treatment	geopolymerization, heavy metal adsorption, Cu ²⁺ adsorption, Fe ³⁺ adsorption, adsorption isotherm, adsorption kinetics, zeolite-geopolymer composite	47, 3, 187-191	https://doi.org/10.18280/acsm.470308	Doan, T.T., Nguyen, M.H.T., Nguyen, T.T.P., Lam, H.H., Ngo, T.H.D., Nguyen, V.D., Nguyen, Q.L. (2023). Synthesis and characterization of zeolite-geopolymer composites for water treatment. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 47, No. 3, pp. 187-191. https://doi.org/10.18280/acsm.470308
93	Guettoche, A., Merdas, A., Berrabah, F., Guechi, L.	Valorization of Cement Kiln Dust (CKD) from the Ain-Al-Kebira Cement Plant (Algeria) in Building Materials	Cement Kiln Dust, cement, substitution, concrete, setting time, mortars	47, 2, 57-66	https://doi.org/10.18280/acsm.470201	Guettoche, A., Merdas, A., Berrabah, F., Guechi, L. (2023). Valorization of Cement Kiln Dust (CKD) from the Ain-Al-Kebira cement plant (Algeria) in building materials. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 47, No. 2, pp. 57-66. https://doi.org/10.18280/acsm.470201
94	Ahmed, A.D., Hammadi, A.A., Mohammed, A.M., Jalal, A.D.	Response of Fly Ash Based Quarry Dust Cement Mortar to Magnesium Sulphate Attack	cement mortar, compressive strength, fly ash, magnesium sulphate attack, splitting tensile strength, elastic modulus	47, 2, 67-73	https://doi.org/10.18280/acsm.470202	Ahmed, A.D., Hammadi, A.A., Mohammed, A.M., Jalal, A.D. (2023). Response of fly ash based quarry dust cement mortar to magnesium sulphate attack. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 47, No. 2, pp. 67-73. https://doi.org/10.18280/acsm.470202
95	Manukonda, S., Bijjam, R.R.	Wear Resistance of Stellite-6/TiC Coating on Stainless Steel 316L Produced by Laser Cladding Process	SS316L, stellite-6/TiC, laser cladding, wear resistance	47, 2, 75-80	https://doi.org/10.18280/acsm.470203	Manukonda, S., Bijjam, R.R. (2023). Wear resistance of stellite-6/TiC coating on stainless steel 316L produced by laser cladding process. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 47, No. 2, pp. 75-80. https://doi.org/10.18280/acsm.470203
96	Guerfi, R., Boudchicha, M.R., Hebhouh, H., Boukhatem, G.	Enhancing Self-Compacting Concrete Performance by Substituting Fine Limestone with Wood Ash	substitution, fine limestone, wood ash, mechanical performance, SCC	47, 2, 81-89	https://doi.org/10.18280/acsm.470204	Guerfi, R., Boudchicha, M.R., Hebhouh, H., Boukhatem, G. (2023). Enhancing self-compacting concrete performance by substituting fine limestone with wood ash. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 47, No. 2, pp. 81-89. https://doi.org/10.18280/acsm.470204

97	Mahmood, Z.N., Al-Khazraji, H., Mahdi, S.M.	PID-Based Enhanced Flower Pollination Algorithm Controller for Drilling Process in a Composite Material	drilling process, composite material, delamination, enhanced flower pollination algorithm	47, 2, 91-96	https://doi.org/10.18280/acsm.470205	Mahmood, Z.N., Al-Khazraji, H., Mahdi, S.M. (2023). PID-based enhanced flower pollination algorithm controller for drilling process in a composite material. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 47, No. 2, pp. 91-96. https://doi.org/10.18280/acsm.470205
98	Ourrad, S., Houmadi, Y., Aissa Mamoune, S.M., Ziadi, A.	Effect of Tempering Temperature on Hydrogen Desorption of AISI4140: Neural Networks Analysis	hydrogen concentration, neural networks, prediction, 42CrMo4 steel	47, 2, 97-104	https://doi.org/10.18280/acsm.470206	Ourrad, S., Houmadi, Y., Aissa Mamoune, S.M., Ziadi, A. (2023). Effect of tempering temperature on hydrogen desorption of AISI4140: Neural networks analysis. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 47, No. 2, pp. 97-104. https://doi.org/10.18280/acsm.470206
99	Al-Kabi, S.H.A., Al-Ghazawi, B.A.H.K., Ahmed, I.H., Al-Mutoki, S.M.M., Al-Kaneyni, H.	The Effect of Quenching in Different Concentrations of Alumina Nano Fluids on Overall Properties of Al-6061	nano fluids, Al-6061, quenching in nano fluids, TEM of quenched Al	47, 2, 105-110	https://doi.org/10.18280/acsm.470207	Al-Kabi, S.H.A., Al-Ghazawi, B.A.H.K., Ahmed, I.H., Al-Mutoki, S.M.M., Al-Kaneyni, H. (2023). The effect of quenching in different concentrations of alumina nano fluids on overall properties of Al-6061. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 47, No. 2, pp. 105-110. https://doi.org/10.18280/acsm.470207
100	Ismacel, A.M., Usman, F., Hayder, G., Al-Ani, Y.	Analysis of Mechanical and Environmental Effects of Utilizing Waste Glass for the Creation of Sustainable Ultra-High Performance Concrete	waste glass, Ultra-High Performance Concrete, mechanical properties, environmental impact, pollution, construction	47, 2, 111-123	https://doi.org/10.18280/acsm.470208	Ismacel, A.M., Usman, F., Hayder, G., Al-Ani, Y. (2023). Analysis of mechanical and environmental effects of utilizing waste glass for the creation of sustainable Ultra-High Performance Concrete. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 47, No. 2, pp. 111-123. https://doi.org/10.18280/acsm.470208
101	Siska, G., Indrayanti, L., Muhlisin, C., Junaedi, A., Herianto.	Possibility of Acacia Mangium Tree Branches as Particleboard Material	branches, acacia, polyvinyl acetate, particleboard, physical properties, mechanical properties	47, 1, 1-8	https://doi.org/10.18280/acsm.470101	Siska, G., Indrayanti, L., Muhlisin, C., Junaedi, A., Herianto. (2023). Possibility of acacia mangium tree branches as particleboard material. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 47, No. 1, pp. 1-8. https://doi.org/10.18280/acsm.470101
102	Qasem, I., Hussien, A.A., Alrawashdeh, K.A., Kataraki, P.S., Janvekar, A.A.	Performance Analysis of Cutting Parameters on 304 Stainless Steels Using Abrasive Water Jet Technique	abrasive water jet, ANOVA, surface roughness, kerf taper, X5CrNi18-10 steel	47, 1, 9-16	https://doi.org/10.18280/acsm.470102	Qasem, I., Hussien, A.A., Alrawashdeh, K.A., Kataraki, P.S., Janvekar, A.A. (2023). Performance analysis of cutting parameters on 304 stainless steels using abrasive water jet technique. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 47, No. 1, pp. 9-16. https://doi.org/10.18280/acsm.470102
103	Asnan, M.N., Arha, A.A., Yatnikasari, S., Agustina, F., Vebrian.	The Analysis Study of Strength on Concrete Formwork Wood Construction	wooden construction, formwork, cast concrete, reinforced concrete, load groove	47, 1, 17-23	https://doi.org/10.18280/acsm.470103	Asnan, M.N., Arha, A.A., Yatnikasari, S., Agustina, F., Vebrian. (2023). The analysis study of strength on concrete formwork wood construction. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 47, No. 1, pp. 17-23. https://doi.org/10.18280/acsm.470103
104	Belhadj, A.H.M., Tenza-Abril, A.J., Mahi, A.	Assessment of the Durability Against a Chemical Attack of Fiber-Reinforced Lightweight Pozzolanic Concrete under the Effect of Temperature	lightweight concrete, pozzolanic aggregates, fibers, high temperature, acid media	47, 1, 25-33	https://doi.org/10.18280/acsm.470104	Belhadj, A.H.M., Tenza-Abril, A.J., Mahi, A. (2023). Assessment of the durability against a chemical attack of Fiber-Reinforced Lightweight Pozzolanic Concrete under the effect of temperature. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 47, No. 1, pp. 25-33. https://doi.org/10.18280/acsm.470104
105	Parung, H., Tumpu, M., Tjaronge, M.W., Amiruddin, A.A., Walenna, M.A., Mansyur.	Crack Pattern of Lightweight Concrete under Compression and Tensile Test	lightweight concrete, crack pattern, compressive load, tensile load	47, 1, 35-41	https://doi.org/10.18280/acsm.470105	Parung, H., Tumpu, M., Tjaronge, M.W., Amiruddin, A.A., Walenna, M.A., Mansyur. (2023). Crack pattern of lightweight concrete under compression and tensile test. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 47, No. 1, pp. 35-41. https://doi.org/10.18280/acsm.470105
106	Srividya, K., Reddy, S.P., Prasad, K.H., Thati, N.S.R.K., Snehta, K., Pranay, U.S., Yellapragada, N.V.S.	Optimization of Process Parameters for Preparation of Lanthanum Hexa-Aluminate Powders Using Combinatorial Approach of Taguchi-GRA and ACO Methods	Taguchi method, grey relational analysis, regression analysis, XRD, FESEM	47, 1, 43-50	https://doi.org/10.18280/acsm.470106	Srividya, K., Reddy, S.P., Prasad, K.H., Thati, N.S.R.K., Snehta, K., Pranay, U.S., Yellapragada, N.V.S. (2023). Optimization of process parameters for preparation of Lanthanum Hexa-Aluminate powders using combinatorial approach of Taguchi-GRA and ACO methods. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 47, No. 1, pp. 43-50. https://doi.org/10.18280/acsm.470106
107	Rangan, P.R., Tumpu, M., Mansyur.	Marshall Characteristics of Quicklime and Portland Composite Cement (PCC) as Fillers in Asphalt Concrete Binder Course (AC-BC) Mixture	Marshall characteristics, quicklime, PCC, filler, AC-BC mixture	47, 1, 51-55	https://doi.org/10.18280/acsm.470107	Rangan, P.R., Tumpu, M., Mansyur. (2023). Marshall characteristics of quicklime and Portland Composite Cement (PCC) as fillers in Asphalt Concrete Binder Course (AC-BC) mixture. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 47, No. 1, pp. 51-55. https://doi.org/10.18280/acsm.470107
108	Bedra, A., Soltani, M.T.	Effect of Bi2O3 on Physical and Luminescence Properties of Unconventional Bi/Er Co-Doped Sb2O3-WO3-Li2O Glasses	antimony glass, optical band gap, elastic modulus, Poisson's ratio, laser	46, 6, 287-293	https://doi.org/10.18280/acsm.460601	Bedra, A., Soltani, M.T. (2022). Effect of Bi2O3 on physical and luminescence properties of unconventional Bi/Er co-doped Sb2O3-WO3-Li2O glasses. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 46, No. 6, pp. 287-293. https://doi.org/10.18280/acsm.460601
109	Kalkoul, N., Boussouf, N., Mahjoub, S., Sahrroui, H., Mosbah, M.F., Altintas, S.P., Koc, N.S.	Addition Effects of MgO on Structure and Physical Properties in Bi-2212 Ceramics	MgO addition, Bi-2212 superconductor; superconductivity, X-ray diffraction, critical temperature	46, 6, 295-299	https://doi.org/10.18280/acsm.460602	Kalkoul, N., Boussouf, N., Mahjoub, S., Sahrroui, H., Mosbah, M.F., Altintas, S.P., Koc, N.S. (2022). Addition effects of MgO on structure and physical properties in Bi-2212 ceramics. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 46, No. 6, pp. 295-299. https://doi.org/10.18280/acsm.460602
110	Djebri, N., Rahmouni, Z.E.A., Djiab, N.E., Haffaf, F.	The Effect of the Use of Residues (Metallic Shavings) in the Formulation of Self-Compacting Concrete in Fresh and Hardened State	self-compacting concrete, waste recovery, metallic shavings, rheological properties, mechanical properties	46, 6, 301-306	https://doi.org/10.18280/acsm.460603	Djebri, N., Rahmouni, Z.E.A., Djiab, N.E., Haffaf, F. (2022). The effect of the use of residues (metallic shavings) in the formulation of self-compacting concrete in fresh and hardened state. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 46, No. 6, pp. 301-306. https://doi.org/10.18280/acsm.460603
111	Banouni, H., Khatib, N., Ouacha, E.H., Faiz, B., Aboudaoud, I., Mesbah, H.	Ultrasound Non-Destructive Characterization of Early Hydration of Cement Pastes: The Effects of Water-Cement Ratio and Curing Temperature	Portland cement, ultrasound, curing temperature, water-to-cement ratio, wave velocity, young modulus	46, 6, 307-312	https://doi.org/10.18280/acsm.460604	Banouni, H., Khatib, N., Ouacha, E.H., Faiz, B., Aboudaoud, I., Mesbah, H. (2022). Ultrasound non-destructive characterization of early hydration of cement pastes: The effects of water-cement ratio and curing temperature. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 46, No. 6, pp. 307-312. https://doi.org/10.18280/acsm.460604
112	Aadi, A.S., Mohammed, A.A., Mohammed Ali, T.K., Hilal, N.N.	Ultra-Fine Treated and Untreated Walnut Shell Ash Incorporated Cement Mortar: Properties and Environmental Impact Assessments	untreated walnut shell, ultra-fine treated walnut shell ash, cement mortar, fresh properties, hardened properties	46, 6, 313-321	https://doi.org/10.18280/acsm.460605	Aadi, A.S., Mohammed, A.A., Mohammed Ali, T.K., Hilal, N.N. (2022). Ultra-fine treated and untreated walnut shell ash incorporated cement mortar: Properties and environmental impact assessments. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 46, No. 6, pp. 313-321. https://doi.org/10.18280/acsm.460605

113	Al-Qutaifi, S., Ethaib, S., Awei Y.R.	Evaluating the Impact of Inclusion Metakaolin and Silica Fume on the Green and Mechanical Properties of Low Calcium Fly Ash Concrete	geopolymer, fly ash, metakaolin, silica fume, concrete compressive strength	46, 6, 323-331	https://doi.org/10.18280/acsm.460606	Al-Qutaifi, S., Ethaib, S., Awei Y.R. (2022). Evaluating the impact of inclusion metakaolin and silica fume on the green and mechanical properties of low calcium fly ash concrete. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 46, No. 6, pp. 323-331. https://doi.org/10.18280/acsm.460606
114	Thayumanavan, M., Kumar, K.R.V.	Fabrication and Mechanical Behaviour Investigation on Aluminium 7075 Boron Carbide and Inconel Alloy 625 Metal Matrix Composite Using Ultra Sonic Stir Casting Method	aluminium metal matrix composite, ultrasonic stir casting, uniform dispersion, particle distribution, reinforcement	46, 6, 333-338	https://doi.org/10.18280/acsm.460607	Thayumanavan, M., Kumar, K.R.V. (2022). Fabrication and mechanical behaviour investigation on aluminium 7075 boron carbide and inconel alloy 625 metal matrix composite using ultra sonic stir casting method. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 46, No. 6, pp. 333-338. https://doi.org/10.18280/acsm.460607
115	Olewi, S.M., Abbas, J.L., Hameed, Y.M., Mohammed, A.H., Hussein, A.K.	Effect of Different Proportions of Fly Ash and GGBFS on the Compressive Strength of Geopolymer Mortar	GGBFS, fly ash, compressive strength, geopolymer, mortar	46, 5, 229-233	https://doi.org/10.18280/acsm.460501	Olewi, S.M., Abbas, J.L., Hameed, Y.M., Mohammed, A.H., Hussein, A.K. (2022). Effect of different proportions of fly ash and GGBFS on the compressive strength of geopolymer mortar. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 46, No. 5, pp. 229-233. https://doi.org/10.18280/acsm.460501
116	Boukour, S., Bouteldja, F., Bensaifi, E.	Development of Eco-Friendly Mortars Produced with Blast Furnace Slag, Calcined Eggshell and Brick Waste: Mechanical Behavior and Microstructure Assessment	mortar, blast furnace slag, calcined eggshell, brick waste, mechanical strength, microstructure	46, 5, 235-245	https://doi.org/10.18280/acsm.460502	Boukour, S., Bouteldja, F., Bensaifi, E. (2022). Development of eco-friendly mortars produced with blast furnace slag, calcined eggshell and brick waste: Mechanical behavior and microstructure assessment. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 46, No. 5, pp. 235-245. https://doi.org/10.18280/acsm.460502
117	Mahmood, N.J., Hussein, A.A., Hasan, A.S., Ali, O.M.	Comparative Study on the Elongation of Low-Carbon Steel and Stainless Steel at Different Creep Temperatures	creep, stainless steel, low carbon steel, deformation, hardness	46, 5, 247-250	https://doi.org/10.18280/acsm.460503	Mahmood, N.J., Hussein, A.A., Hasan, A.S., Ali, O.M. (2022). Comparative study on the elongation of low-carbon steel and stainless steel at different creep temperatures. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 46, No. 5, pp. 247-250. https://doi.org/10.18280/acsm.460503
118	Khalidi, N., Kherraf, L., Aidoud, A., Bencheikh, M., Belachia, M., Benhamida, S., Dokhane, R.	Effect of the Incorporation of Recycled Rubber Aggregates on the Behavior of Self-Compacting Concrete	mechanical behavior, plastic aggregates, self-compacting concrete, used tires	46, 5, 251-258	https://doi.org/10.18280/acsm.460504	Khalidi, N., Kherraf, L., Aidoud, A., Bencheikh, M., Belachia, M., Benhamida, S., Dokhane, R. (2022). Effect of the incorporation of recycled rubber aggregates on the behavior of self-compacting concrete. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 46, No. 5, pp. 251-258. https://doi.org/10.18280/acsm.460504
119	Rao, D.R., Srinivas, C.	Empirical Modelling and Multi-Objective Optimisation of Laser Micro Machining on Magnesium Alloy AS21-SiC Metal Matrix Composite	genetic algorithm (NSGA-II), laser machining parameters, optimisation, and magnesium alloy AS21-SiC, design expert	46, 5, 259-271	https://doi.org/10.18280/acsm.460505	Rao, D.R., Srinivas, C. (2022). Empirical modelling and multi-objective optimisation of laser micro machining on magnesium alloy AS21-SiC metal matrix composite. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 46, No. 5, pp. 259-271. https://doi.org/10.18280/acsm.460505
120	Romadhon, E.S., Antonius, Sumirin.	Mechanical Properties of Geopolymer Concrete Containing Low-Alkaline Activator	geopolymer, alkaline activator, mechanical properties, ratio of alkali activator to fly ash (AA/FA), treatment temperature	46, 5, 273-279	https://doi.org/10.18280/acsm.460506	Romadhon, E.S., Antonius, Sumirin. (2022). Mechanical properties of geopolymer concrete containing low-alkaline activator. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 46, No. 5, pp. 273-279. https://doi.org/10.18280/acsm.460506
121	Keltoum, K.O., Zenkhri, L., Boutarfaia, A.	The Formation of Doped PZT Solid Solution and Its Structural Characterization	materials, sintering, calcination, compositions, ceramics, X-rays diffraction	46, 5, 281-285	https://doi.org/10.18280/acsm.460507	Keltoum, K.O., Zenkhri, L., Boutarfaia, A. (2022). The formation of doped PZT solid solution and its structural characterization. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 46, No. 5, pp. 281-285. https://doi.org/10.18280/acsm.460507
122	Livi, M., Trifirò, F.	Pyrogasification to Produce Biogas and Biomethane from Wood Wastes	pyrogasification, biomass, hydrogenation, Goteboing, Alkmaar, Casaccia	46, 4, 169-172	https://doi.org/10.18280/acsm.460401	Livi, M., Trifirò, F. (2022). Pyrogasification to produce biogas and biomethane from wood wastes. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 46, No. 4, pp. 169-172. https://doi.org/10.18280/acsm.460401
123	Meterfi, Y., Trouzine, H., Houmadi, Y.	Corroded RC Beam Behavior Subjected to Random Loading in Various Pore Saturation Levels: Coupled Numerical Analysis	concrete, corrosion, infrastructures, modeling, coupling techniques, pore saturation	46, 4, 173-183	https://doi.org/10.18280/acsm.460402	Meterfi, Y., Trouzine, H., Houmadi, Y. (2022). Corroded RC beam behavior subjected to random loading in various pore saturation levels: Coupled numerical analysis. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 46, No. 4, pp. 173-183. https://doi.org/10.18280/acsm.460402
124	Borra, N.V.S., Davuluri, V.V.K.P.	Experimental Investigations of Al-Cr3C2 Composite Preform Densification and Deformation	glass/hemp/bamboo fibers reinforced polymer hybrid composites, drilling parameters, Taguchi method: ANOVA, surface roughness, delamination factor, grey relational analysis	46, 4, 185-192	https://doi.org/10.18280/acsm.460403	Borra, N.V.S., Davuluri, V.V.K.P. (2022). Experimental investigations of Al-Cr3C2 composite preform densification and deformation. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 46, No. 4, pp. 185-192. https://doi.org/10.18280/acsm.460403
125	Hamma, A., Bezza, A., Bouhelal, S.	Assessment of Polyethylene Geomembrane Properties after Accelerated Thermal Ageing	recycled rubber powder, hydration, temperature profile, rubber-cement compatibility, setting time, inhibitory index	46, 4, 193-200	https://doi.org/10.18280/acsm.460404	Hamma, A., Bezza, A., Bouhelal, S. (2022). Assessment of polyethylene geomembrane properties after accelerated thermal ageing. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 46, No. 4, pp. 193-200. https://doi.org/10.18280/acsm.460404
126	Bahloul, Q., Ziani, H., Benmoussa, S.	Impact of Calcium Chloride on the Microstructure of a Collapsible Soil	Nanosilica, storage modulus, carbon, Kevlar, epoxy, loss modulus, nanocomposite, damping factor	46, 4, 201-206	https://doi.org/10.18280/acsm.460405	Bahloul, Q., Ziani, H., Benmoussa, S. (2022). Impact of calcium chloride on the microstructure of a collapsible soil. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 46, No. 4, pp. 201-206. https://doi.org/10.18280/acsm.460405
127	Hammadi, A.A., Mohammed, A.M., Ramal, M.M.	Enhancing of Concrete Properties by Using Aluminium and Iron Residues as a Partial Replacement of Fine Aggregate	residues, replacements, enhancement, compression, fracture, concrete	46, 4, 207-211	https://doi.org/10.18280/acsm.460406	Hammadi, A.A., Mohammed, A.M., Ramal, M.M. (2022). Enhancing of concrete properties by using aluminium and iron residues as a partial replacement of fine aggregate. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 46, No. 4, pp. 207-211. https://doi.org/10.18280/acsm.460406
128	Ouazzou, H.A., Nedjar, M., Hocine, S., Belhocine, R., Belabbas, F.	Investigation of Hydrothermal Aging on Polyvinyl Chloride (PVC) Used in Medium Voltage Cables	polyvinyl chloride, hydrothermal aging, electrical properties, mechanical properties, degradation	46, 4, 213-221	https://doi.org/10.18280/acsm.460407	Ouazzou, H.A., Nedjar, M., Hocine, S., Belhocine, R., Belabbas, F. (2022). Investigation of hydrothermal aging on polyvinyl chloride (PVC) used in medium voltage cables. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 46, No. 4, pp. 213-221. https://doi.org/10.18280/acsm.460407

129	Azeez, T.M., Mudashiru, L.O., Asafa, T.B., Akande, S., Ikumapayi, O.M., Yusuf, A.S., Kayode, J.F.	Assessment of Mechanical Properties of Aluminium Metal Matrix Composite Reinforced with Carbonized Eggshell Ash (CESA)	eggshell ash, aluminium metal matrix, composite, mechanical characterizations, reinforcement	46, 4, 223-228	https://doi.org/10.18280/acsm.460408	Azeez, T.M., Mudashiru, L.O., Asafa, T.B., Akande, S., Ikumapayi, O.M., Yusuf, A.S., Kayode, J.F. (2022). Assessment of mechanical properties of aluminium metal matrix composite reinforced with carbonized eggshell ash (CESA). <i>Annales de Chimie - Science des Matériaux</i> , Vol. 46, No. 4, pp. 223-228. https://doi.org/10.18280/acsm.460408
130	Mebarki, H., Kebir, T., Benguediab, M., Fekirini, H., Bouchouicha, B., Lebon, F.	Experimental and Numerical Study of Fracture Behavior under Mixed-Mode of Al-Alloy AA3003 Not Welded and Welded by FSW Process	Hichem Mebarki, Tayeb Kebir, Mohamed Benguediab, Hamida Fekirini, Benattou Bouchouicha, Frédéric Lebon	46, 3, 109-115	https://doi.org/10.18280/acsm.460301	Mebarki, H., Kebir, T., Benguediab, M., Fekirini, H., Bouchouicha, B., Lebon, F. (2022). Experimental and numerical study of fracture behavior under mixed-mode of Al-alloy AA3003 not welded and welded by FSW process. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 46, No. 3, pp. 109-115. https://doi.org/10.18280/acsm.460301
131	Omri, I.Y., Rahmouni, Z.E.A., Tebbal, N.	Studying the Effect of High Temperature on the Content of Glass and Brick Waste Binders after Alkaline Activation	Imen Y. Omri, Zine El Abidine Rahmouni, Nadia Tebbal	46, 3, 117-125	https://doi.org/10.18280/acsm.460302	Omri, I.Y., Rahmouni, Z.E.A., Tebbal, N. (2022). Studying the effect of high temperature on the content of glass and brick waste binders after alkaline activation. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 46, No. 3, pp. 117-125. https://doi.org/10.18280/acsm.460302
132	Bijjam, R.R., Chandanam, S., Nandipati, G., Dhoria, S.H.	Optimization of Machining Parameters in Drilling of Glass/Hemp/Bamboo Fibres Based Hybrid Polymer Composites	Ramgopal Reddy Bijjam, Srinivas Chandanam, Govind Nandipati, Sneha H. Dhoria	46, 3, 127-133	https://doi.org/10.18280/acsm.460303	Bijjam, R.R., Chandanam, S., Nandipati, G., Dhoria, S.H. (2022). Optimization of machining parameters in drilling of glass/hemp/bamboo fibres based hybrid polymer composites. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 46, No. 3, pp. 127-133. https://doi.org/10.18280/acsm.460303
133	Guelmine, L., Sadek, D., Hadjab, H., Benazzouk, A.	Effect of Recycled Rubber Powder on the Compatibility of Rubber-Cement Paste	Layachi Guelmine, Deboucha Sadek, Hadda Hadjab, Amar Benazzouk	46, 3, 135-139	https://doi.org/10.18280/acsm.460304	Guelmine, L., Sadek, D., Hadjab, H., Benazzouk, A. (2022). Effect of recycled rubber powder on the compatibility of rubber-cement paste. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 46, No. 3, pp. 135-139. https://doi.org/10.18280/acsm.460304
134	Gopalakrishnamurthy, P.K., Sandur, C.	Investigation of Dynamic Mechanical Behavior of Nanosilica Filled Carbon-Kevlar-Epoxy Polymer Hybrid Nanocomposite	Pranesh K Gopalakrishnamurthy, Channabasavaraj Sandur	46, 3, 141-146	https://doi.org/10.18280/acsm.460305	Gopalakrishnamurthy, P.K., Sandur, C. (2022). Investigation of dynamic mechanical behavior of nanosilica filled carbon-kevlar-epoxy polymer hybrid nanocomposite. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 46, No. 3, pp. 141-146. https://doi.org/10.18280/acsm.460305
135	Boulaiche, K., Boudeghdegh, K., Haddad, S., Roula, A., Alioui, H.	Valorisation of Industrial Soda-Lime Glass Waste and Its Effect on the Rheological Behavior, Physical-Mechanical and Structural Properties of Sanitary Ceramic Vitreous Bodies	Khaled Boulaiche, Kamel Boudeghdegh, Sofiane Haddad, Abdelmalek Roula, Hichem Alioui	46, 3, 147-154	https://doi.org/10.18280/acsm.460306	Boulaiche, K., Boudeghdegh, K., Haddad, S., Roula, A., Alioui, H. (2022). Valorisation of industrial soda-lime glass waste and its effect on the rheological behavior, physical-mechanical and structural properties of sanitary ceramic vitreous bodies. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 46, No. 3, pp. 147-154. https://doi.org/10.18280/acsm.460306
136	Zergot, S., Moussaoui, M., Hachi, B.E.	Evolution of Crack Propagation Rate in Notched Specimens Using XFEM Method under Bending Load Condition	Souad Zergot, Mustafa Moussaoui, Brahim Elkhali Hachi	46, 3, 155-162	https://doi.org/10.18280/acsm.460307	Zergot, S., Moussaoui, M., Hachi, B.E. (2022). Evolution of crack propagation rate in notched specimens using XFEM method under bending load condition. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 46, No. 3, pp. 155-162. https://doi.org/10.18280/acsm.460307
137	Mohammed, N.	Breakdown Behaviour of Polyesterimide Enamelled Wire Subjected to Thermal Aging	Nedjar Mohammed	46, 3, 163-168	https://doi.org/10.18280/acsm.460308	Mohammed, N. (2022). Breakdown behaviour of polyesterimide enamelled wire subjected to thermal aging. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 46, No. 3, pp. 163-168. https://doi.org/10.18280/acsm.460308
138	Ziani, H., Deboucha, S., Amriou, A., Touati, H., Kebaili, I.	Influence of Recycled Plastic Waste and Cement on Pavement Sub-Base Stabilization	Hocine Ziani, Sadek Deboucha, Abderrachid Amriou, Hayat Touati, Inès Kebaili	46, 2, 61-67	https://doi.org/10.18280/acsm.460201	Ziani, H., Deboucha, S., Amriou, A., Touati, H., Kebaili, I. (2022). Influence of recycled plastic waste and cement on pavement sub-base stabilization. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 46, No. 2, pp. 61-67. https://doi.org/10.18280/acsm.460201
139	Makhloufi, R., Hachani, S.E., Fettah, A., Messai, B.	Wet Chemical Synthesis of Sb4O5Cl2 Used as an Effective Photocatalyst for Methylene Blue and Crystal Violet Degradation under Visible Light Irradiation	Rachid Makhloufi, Salah Eddine Hachani, Asma Fettah, Bahia Messai	46, 2, 69-74	https://doi.org/10.18280/acsm.460202	Makhloufi, R., Hachani, S.E., Fettah, A., Messai, B. (2022). Wet chemical synthesis of Sb4O5Cl2 used as an effective photocatalyst for methylene blue and crystal violet degradation under visible light irradiation. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 46, No. 2, pp. 69-74. https://doi.org/10.18280/acsm.460202
140	Agarwal, A., Mthembu, L.	Investigation of Dynamic Factors in Different Sections of HVC by Static and Free Vibration Modal Analysis	Abhishek Agarwal, Linda Mthembu	46, 2, 75-84	https://doi.org/10.18280/acsm.460203	Agarwal, A., Mthembu, L. (2022). Investigation of dynamic factors in different sections of HVC by static and free vibration modal analysis. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 46, No. 2, pp. 75-84. https://doi.org/10.18280/acsm.460203
141	Allali, I., Belagraa, L., Beddar, M., Kessal, O.	Characterization and Modeling Using Non-Destructive Test (NDT) and Experimental Design Methods of a Self Compacting Concrete (SCC) Based on Mineral Additions	Ibtissem Allali, Larbi Belagraa, Miloud Beddar, Oussama Kessal	46, 2, 85-94	https://doi.org/10.18280/acsm.460204	Allali, I., Belagraa, L., Beddar, M., Kessal, O. (2022). Characterization and modeling using non-destructive test (NDT) and experimental design methods of a self compacting concrete (SCC) based on mineral additions. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 46, No. 2, pp. 85-94. https://doi.org/10.18280/acsm.460204
142	Saidj, I.B., Nedjar, M., Hocine, S., Belabbas, F.	Effects of Hydrothermal Aging on the Breakdown Voltage of Polyesterimide	Idir Ben Saidj, Mohammed Nedjar, Smain Hocine, Ferhat Belabbas	46, 2, 95-102	https://doi.org/10.18280/acsm.460205	Saidj, I.B., Nedjar, M., Hocine, S., Belabbas, F. (2022). Effects of hydrothermal aging on the breakdown voltage of polyesterimide. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 46, No. 2, pp. 95-102. https://doi.org/10.18280/acsm.460205
143	Kerdoud, D., Benkafada, F., Boussouf, N., Benhamideche, C.	Nitride Materials: Synthesis, Crystal Structures, and Optical Properties	Djahida Kerdoud, Faouzia Benkafada, Nora Boussouf, Chahrazed Benhamideche	46, 2, 103-108	https://doi.org/10.18280/acsm.460206	Kerdoud, D., Benkafada, F., Boussouf, N., Benhamideche, C. (2022). Nitride materials: Synthesis, crystal structures, and optical properties. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 46, No. 2, pp. 103-108. https://doi.org/10.18280/acsm.460206
144	Laoucine, A., Bachene, M., Rechak, S., Lorenzini, G., Kaid, N., Menni, Y.	Perforation Analysis by Punching of Metal Sheets	punch, perforation, numerical simulation, thermo-viscoplastic, punching	46, 1, 1-8	https://doi.org/10.18280/acsm.460101	Laoucine, A., Bachene, M., Rechak, S., Lorenzini, G., Kaid, N., Menni, Y. (2022). Perforation analysis by punching of metal sheets. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 46, No. 1, pp. 1-8. https://doi.org/10.18280/acsm.460101

145	Yellapragada, N.V.S., Devarakonda, S.K., Dasari, K.R., Thati, N.S.R.K., Alapati, J.S.A.V.V.P.	Effectiveness of Shannon Entropy Weight Method on Wear Behaviour of Polyester/Carbon Fibre Composites Using GRA	Taguchi method, GRA, entropy weight method, polyester composites	46, 1, 9-17	https://doi.org/10.18280/acsm.460102	Yellapragada, N.V.S., Devarakonda, S.K., Dasari, K.R., Thati, N.S.R.K., Alapati, J.S.A.V.V.P. (2022). Effectiveness of Shannon entropy weight method on wear behaviour of polyester/carbon fibre composites using GRA. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 46, No. 1, pp. 9-17. https://doi.org/10.18280/acsm.460102
146	Amriou, A., Ziani, H., Deboucha, S., Bencheikh, M.	Effect of Gravel Content on Mechanical Performance and Porous Structure of Concrete	concrete, porosity, permeability, ultrasonic speed	46, 1, 19-25	https://doi.org/10.18280/acsm.460103	Amriou, A., Ziani, H., Deboucha, S., Bencheikh, M. (2021). Effect of gravel content on mechanical performance and porous structure of concrete. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 46, No. 1, pp. 19-25. https://doi.org/10.18280/acsm.460103
147	Tallah, N., Boulaouad, A., Bouaicha, A.	Limit Analyses of the Active Earth Pressure on Rigid Retaining Walls under Strip Loading on Backfills	active earth pressure, failure mechanism, limit analysis, retaining wall, strip load	46, 1, 27-35	https://doi.org/10.18280/acsm.460104	Tallah, N., Boulaouad, A., Bouaicha, A. (2022). Limit analyses of the active earth pressure on rigid retaining walls under strip loading on backfills. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 46, No. 1, pp. 27-35. https://doi.org/10.18280/acsm.460104
148	Doronio, J.P., Salazar, J.R., Monserate, J.J., Arevalo, B.J.A., Eugenio, P.J.G., Sarong, M.M.	Nanoencapsulation of Anthocyanin Extract from Fermented Black Garlic (FBG) Based on Biocompatible Polymeric Materials	anthocyanin, fermented black garlic, nanoencapsulation, encapsulation efficiency, total phenolic, DPPH radical scavenging activity	46, 1, 37-43	https://doi.org/10.18280/acsm.460105	Doronio, J.P., Salazar, J.R., Monserate, J.J., Arevalo, B.J.A., Eugenio, P.J.G., Sarong, M.M. (2022). Nanoencapsulation of anthocyanin extract from fermented black garlic (FBG) based on biocompatible polymeric materials. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 46, No. 1, pp. 37-43. https://doi.org/10.18280/acsm.460105
149	Zitouni, S., Maza, M., Tebbal, N., Rahmouni, Z.E.A.	Impact of Rolled and Crushed Aggregate with Natural Pozzolan on the Behavior of HPC	coarse aggregate, rolled gravel, pozzolan, compressive strength, high performance concrete	46, 1, 45-52	https://doi.org/10.18280/acsm.460106	Zitouni, S., Maza, M., Tebbal, N., Rahmouni, Z.E.A. (2022). Impact of rolled and crushed aggregate with natural pozzolan on the behavior of HPC. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 46, No. 1, pp. 45-52. https://doi.org/10.18280/acsm.460106
150	Medkour, M., Kaid, N., Ameer, H., Tearnbucha, C., Sudsutad, W., Lorenzini, G., Ahmad, H., Menni, Y.	Study of the Effect of ACL Anode Catalytic Layer Porosity on the Efficiency of a Direct Methanol Fuel Cell	DMFC, COMSOL, numerical simulation, catalytic layer, diffusion layer	46, 1, 53-60	https://doi.org/10.18280/acsm.460107	Medkour, M., Kaid, N., Ameer, H., Tearnbucha, C., Sudsutad, W., Lorenzini, G., Ahmad, H., Menni, Y. (2022). Study of the effect of ACL anode catalytic layer porosity on the efficiency of a direct methanol fuel cell. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 46, No. 1, pp. 53-60. https://doi.org/10.18280/acsm.460107
151	Latrous, A.R., Mahamdi, R., Touafek, N., Pasquinelli, M.	Conduction Band Offset Effect on the Cu ₂ ZnSnS ₄ Solar Cells Performance	absorber layer, buffer layer, CBO, Cd(1-x)Zn _x S, CZTS, interface, SCAPS-1D, solar cell	45, 6, 431-437	https://doi.org/10.18280/acsm.450601	Latrous, A.R., Mahamdi, R., Touafek, N., Pasquinelli, M. (2021). Conduction band offset effect on the Cu ₂ ZnSnS ₄ solar cells performance. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 45, No. 6, pp. 431-437. https://doi.org/10.18280/acsm.450601
152	Bougharouat, A., Touka, N., Talbi, D., Baddari, K.	Hydrophobic Properties of CuO Thin Films Obtained by Sol-Gel Spin Coating Technique-Annealing Temperature Effect	CuO thin films, sol-gel spin coating method, surface energy, wettability, adhesive properties	45, 6, 439-445	https://doi.org/10.18280/acsm.450602	Bougharouat, A., Touka, N., Talbi, D., Baddari, K. (2021). Hydrophobic properties of CuO thin films obtained by sol-gel spin coating technique-annealing temperature effect. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 45, No. 6, pp. 439-445. https://doi.org/10.18280/acsm.450602
153	Aidoud, A., Bencheikh, M., Khaldi, N., Herga I.M.A.	Mortar Based on Dune Sand and Substitute Wood Sawdust: Physico-Mechanical Characterization and Relationship Between Properties in Young Age	sawdust, mortar, absorption, porosity, resistance	45, 6, 447-453	https://doi.org/10.18280/acsm.450603	Aidoud, A., Bencheikh, M., Khaldi, N., Herga I.M.A. (2021). Mortar based on dune sand and substitute wood sawdust: Physico-mechanical characterization and relationship between properties in young age. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 45, No. 6, pp. 447-453. https://doi.org/10.18280/acsm.450603
154	Ali Halassa, R., Bibi, M., Chikouche, M.	Behavior of Cementitious Materials under the Effect of an Eco-Cement Based on Dredged Sludge	cementitious materials, dam, dredging sludge, hybrid binder, siltation, treatment	45, 6, 455-465	https://doi.org/10.18280/acsm.450604	Ali Halassa, R., Bibi, M., Chikouche, M. (2021). Behavior of cementitious materials under the effect of an eco-cement based on dredged sludge. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 45, No. 6, pp. 455-465. https://doi.org/10.18280/acsm.450604
155	Maza, M., Tebbal, N., Zitouni, S., Rahmouni, Z.E.A.	Combined Effect of Marble Waste as Powder and Aggregate Form on the Properties of the Mortar	recycling, environment, marble waste, sand, mechanical strengths, mortar	45, 6, 467-476	https://doi.org/10.18280/acsm.450605	Maza, M., Tebbal, N., Zitouni, S., Rahmouni, Z.E.A. (2021). Combined effect of marble waste as powder and aggregate form on the properties of the mortar. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 45, No. 6, pp. 467-476. https://doi.org/10.18280/acsm.450605
156	Hasan, M.F., Nyakuma, B.B., Rahman, M.R.A., Othman, N., Ahmad, N., Said, M.F.M.	Torrefaction of Palm Kernel Shell and Petcoke Blends for Various Mixing Ratios and Temperatures	torrefaction, co-torrefaction, palm kernel shell, petcoke, petroleum coke	45, 6, 477-484	https://doi.org/10.18280/acsm.450606	Hasan, M.F., Nyakuma, B.B., Rahman, M.R.A., Othman, N., Ahmad, N., Said, M.F.M. (2021). Torrefaction of palm kernel shell and petcoke blends for various mixing ratios and temperatures. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 45, No. 6, pp. 477-484. https://doi.org/10.18280/acsm.450606
157	Belouadah, M., Rahmouni, Z.E., Tebbal, N., El Hassen Hicham, M.	Evaluation of Concretes Made with Marble Waste Using Destructive and Non-Destructive Testing	concrete, marble powder, mechanical strength, destructive testing, durability, non-destructive testing, super plasticizer	45, 5, 361-368	https://doi.org/10.18280/acsm.450501	Belouadah, M., Rahmouni, Z.E., Tebbal, N., El Hassen Hicham, M. (2021). Evaluation of concretes made with marble waste using destructive and non-destructive testing. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 45, No. 5, pp. 361-368. https://doi.org/10.18280/acsm.450501
158	Sugito, E., Hadiguna, R.A., Hasibuan, R.P.	Identification Material Distribution Process to Improve Material Handling Performance Using Risk Matrix Analysis (Case Study at Paper Manufacturing)	lean manufacturing, value stream mapping, root cause, and risk matrix	45, 5, 369-378	https://doi.org/10.18280/acsm.450502	Sugito, E., Hadiguna, R.A., Hasibuan, R.P. (2021). Identification material distribution process to improve material handling performance using risk matrix analysis (case study at paper manufacturing). <i>Annales de Chimie - Science des Matériaux</i> , Vol. 45, No. 5, pp. 369-378. https://doi.org/10.18280/acsm.450502
159	Li, H.L., Zhang, Z.Q., Yang, W.	Stability Analysis of Slope Based on Limit Equilibrium Method and Strength Reduction Method	open-pit mine slope, limit equilibrium method, strength reduction method, stability analysis, finite-element method	45, 5, 379-384	https://doi.org/10.18280/acsm.450503	Li, H.L., Zhang, Z.Q., Yang, W. (2021). Stability analysis of slope based on limit equilibrium method and strength reduction method. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 45, No. 5, pp. 379-384. https://doi.org/10.18280/acsm.450503
160	Khelladi, F.Z., Alliche, M., Rebhi, R., Lorenzini, G., Ahmad, H., Menni, Y.	The Effect of Bluff Body Shape on Flame Stability in a Non-Premixed Hydrogen-Methan-Air Mixture Combustion	CH ₄ -H ₂ -Air mixture, CO ₂ concentrations, non-premixed combustion, finite rate combustion, stabilization, flame stability, bluff body	45, 5, 385-392	https://doi.org/10.18280/acsm.450504	Khelladi, F.Z., Alliche, M., Rebhi, R., Lorenzini, G., Ahmad, H., Menni, Y. (2021). The effect of bluff body shape on flame stability in a non-premixed hydrogen-methan-air mixture combustion. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 45, No. 5, pp. 385-392. https://doi.org/10.18280/acsm.450504

161	Jin, X.H., Zheng, J.Y.	Acoustic Emission Features of Anthracite under the Influence of Loading Rate	anthracite, loading rate, deformation and failure, acoustic emission (AE)	45, 5, 393-397	https://doi.org/10.18280/acsm.450505	Jin, X.H., Zheng, J.Y. (2021). Acoustic emission features of anthracite under the influence of loading rate. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 45, No. 5, pp. 393-397. https://doi.org/10.18280/acsm.450505
162	Sultan, J.N., Abbas, M.K., Ibrahim, M.A.K., Karash, E.T., Ali, A.M., Ibrahim, H.A.	Corrosion Behavior of Thermal Seamless Carbon Steel Boiler Pipes	boiler, steel, carbon, pipes, metal, corrosion, boiler, seamless carbon	45, 5, 399-405	https://doi.org/10.18280/acsm.450506	Sultan, J.N., Abbas, M.K., Ibrahim, M.A.K., Karash, E.T., Ali, A.M., Ibrahim, H.A. (2021). Corrosion behavior of thermal seamless carbon steel boiler pipes. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 45, No. 5, pp. 399-405. https://doi.org/10.18280/acsm.450506
163	Huang, J.	Preparation of Zinc Oxide Nanomaterial and Research and Development of Antibacterial Property	zinc oxide (ZnO) nanomaterial, preparation, antibacterial property, children's furniture	45, 5, 407-415	https://doi.org/10.18280/acsm.450507	Huang, J. (2021). Preparation of zinc oxide nanomaterial and research and development of antibacterial property. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 45, No. 5, pp. 407-415. https://doi.org/10.18280/acsm.450507
164	Baali, L., Belagraa, L., Chikouche, M.A., Zeghichi, L.	Study of the Effect of Plastic Waste Fibers Incorporation on the Behavior of Self Compacting Concrete	waste, plastic fibers, SCC, cracking, rheology, mechanical properties	45, 5, 417-421	https://doi.org/10.18280/acsm.450508	Baali, L., Belagraa, L., Chikouche, M.A., Zeghichi, L. (2021). Study of the effect of plastic waste fibers incorporation on the behavior of self compacting concrete. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 45, No. 5, pp. 417-421. https://doi.org/10.18280/acsm.450508
165	Liang, J.	Environmental Function Evaluation and Preparation of Green Decorative Materials in Indoor Design	green decorative materials, indoor design, environmental function evaluation, preparation of wood product coating	45, 5, 423-430	https://doi.org/10.18280/acsm.450509	Liang, J. (2021). Environmental function evaluation and preparation of green decorative materials in indoor design. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 45, No. 5, pp. 423-430. https://doi.org/10.18280/acsm.450509
166	Cheriet, R., Bensaad, B., Bouhadjela, F., Belhenini, S., Belharizi, M.	Contribution to the Study of Solid-Solid Thermal Contact Resistances--A Comparative Study	thermal contact resistance, hardness, semi-empirical models, actual contact rate, contact pressure, finite elements	45, 4, 267-272	https://doi.org/10.18280/acsm.450401	Cheriet, R., Bensaad, B., Bouhadjela, F., Belhenini, S., Belharizi, M. (2021). Contribution to the study of solid-solid thermal contact resistances--A comparative study. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 45, No. 4, pp. 267-272. https://doi.org/10.18280/acsm.450401
167	Kalakuntala, R., Surnani, S.	Kinetic Modelling and Optimizing of Butyl Propionate over a Synthesised Material (Tungstan Phosphoric Acid) Heteropoly Catalyst Using Response Surface Technique	butyl propionate, optimization, kinetic model, Tungstan phosphoric acid	45, 4, 273-280	https://doi.org/10.18280/acsm.450402	Kalakuntala, R., Surnani, S. (2021). Kinetic modelling and optimizing of butyl propionate over a synthesised material (tungstan phosphoric acid) heteropoly catalyst using response surface technique. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 45, No. 4, pp. 273-280. https://doi.org/10.18280/acsm.450402
168	Tian, P., Peng, K.X., Dong, H.N., Li, Y., Dong, W.Z.	The Effect of Mineral Powder on the Surface/Interface of Aggregates and Asphalt	asphalt mixture, surface and interface effect, adhesion, mineral powder, microscopic image	45, 4, 281-290	https://doi.org/10.18280/acsm.450403	Tian, P., Peng, K.X., Dong, H.N., Li, Y., Dong, W.Z. (2021). The effect of mineral powder on the surface/interface of aggregates and asphalt. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 45, No. 4, pp. 281-290. https://doi.org/10.18280/acsm.450403
169	Bensalah, B., Omar, A., Elamine, D.M.	Microstructure and Mechanical Properties of the 55CrMoV4 Steel Exposed to Boriding and Nitriding Treatments	nitriding, boriding, microhardness, low alloys steels, corrosion	45, 4, 291-295	https://doi.org/10.18280/acsm.450404	Bensalah, B., Omar, A., Elamine, D.M. (2021). Microstructure and mechanical properties of the 55CrMoV4 steel exposed to boriding and nitriding treatments. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 45, No. 4, pp. 291-295. https://doi.org/10.18280/acsm.450404
170	Wang, Y., Liu, J.L.	Optimal Mix Ratios of Green Building Materials and Construction Cost Control	building materials, mix ratio, construction cost, production cost, use benefit	45, 4, 297-306	https://doi.org/10.18280/acsm.450405	Wang, Y., Liu, J.L. (2021). Optimal mix ratios of green building materials and construction cost control. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 45, No. 4, pp. 297-306. https://doi.org/10.18280/acsm.450405
171	Thiagarajan, T.B., Ponnusamy, S.	Process Variable Optimization of Cold Metal Transfer Technique in Cladding of Stellite-6 on AISI 316 L Alloy Using Grey Relational Analysis (GRA)	CMT Cladding, AISI 316 L, Stellite filler wire, GRA, ANOVA	45, 4, 307-315	https://doi.org/10.18280/acsm.450406	Thiagarajan, T.B., Ponnusamy, S. (2021). Process variable optimization of cold metal transfer technique in cladding of Stellite-6 on AISI 316 L alloy using Grey Relational Analysis (GRA). <i>Annales de Chimie - Science des Matériaux</i> , Vol. 45, No. 4, pp. 307-315. https://doi.org/10.18280/acsm.450406
172	Jin, Y.F., Yan, L., Liu, Y., Li, C.S.	Research on the Damping Performance of Mining Highly Efficient Water-Retaining Colloidal Material Against the Spontaneous Combustion of Coal	fire protection materials, sodium alginate, high hydrocolloid, coal spontaneous combustion	45, 4, 317-327	https://doi.org/10.18280/acsm.450407	Jin, Y.F., Yan, L., Liu, Y., Li, C.S. (2021). Research on the damping performance of mining highly efficient water-retaining colloidal material against the spontaneous combustion of coal. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 45, No. 4, pp. 317-327. https://doi.org/10.18280/acsm.450407
173	Markja, I., Dhoska, K., Elezi, D., Moezzi, R., Petru, M.	Effect of the Grain Sizes on the Ultrasonic Propagation and Attenuation on Different Types of Steels Microstructure During Non-Destructive Testing	non-destructive testing/NDT, microstructure, grain size, steel, UT, ultrasonic NDT propagation and attenuation, micro-hardness HV	45, 4, 329-334	https://doi.org/10.18280/acsm.450408	Markja, I., Dhoska, K., Elezi, D., Moezzi, R., Petru, M. (2021). Effect of the grain sizes on the ultrasonic propagation and attenuation on different types of steels microstructure during non-destructive testing. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 45, No. 4, pp. 329-334. https://doi.org/10.18280/acsm.450408
174	Ghoumazi, M., Hameurlain, M.	Study and Simulation of a Sensor Based on 2D Photonic Crystals for the Detection of Aromatic Compounds: C6H5I, C6H5F and C6H5Cl	photonic crystals, FEM, sensor, organic compounds	45, 4, 335-339	https://doi.org/10.18280/acsm.450409	Ghoumazi, M., Hameurlain, M. (2021). Study and simulation of a sensor based on 2D photonic crystals for the detection of aromatic compounds: C6H5I, C6H5F and C6H5Cl. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 45, No. 4, pp. 335-339. https://doi.org/10.18280/acsm.450409
175	Li, H., Gong, G., Lv, T.	Hydrothermal Aging and Bonding Properties of a New Room Temperature Cured Structural Adhesive in Building Components	structural adhesives, hydrothermal aging, dynamic mechanical analysis, concrete repair, bonding rebars to concrete	45, 4, 341-350	https://doi.org/10.18280/acsm.450410	Li, H., Gong, G., Lv, T. (2021). Hydrothermal aging and bonding properties of a new room temperature cured structural adhesive in building components. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 45, No. 4, pp. 341-350. https://doi.org/10.18280/acsm.450410
176	Aljabbri, N.A.S., Hussein, M.N., Khamees, A.A.	Performance of Ultra High Strength Concrete Expose to High Rise Temperature	UHPCs, fibers, temperature effect, mechanical properties	45, 4, 351-359	https://doi.org/10.18280/acsm.450411	Aljabbri, N.A.S., Hussein, M.N., Khamees, A.A. (2021). Performance of ultra high strength concrete expose to high rise temperature. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 45, No. 4, pp. 351-359. https://doi.org/10.18280/acsm.450411

177	Chabane, M., Melkaoui, C., Dahmani, B., Boudjenane, Z.	Influence of Sodium Maghnite Nanoclay on the Polyvinylidene Fluoride Crystal Transition in Composite Membranes and Its Effect on Bovine Serum Albumin Protein Extraction	crystal, PVDF, composite, membrane, PVP, Maghnite, piezoelectric	45, 3, 191-200	https://doi.org/10.18280/acsm.450301	Chabane, M., Melkaoui, C., Dahmani, B., Boudjenane, Z. (2021). Influence of sodium Maghnite nanoclay on the polyvinylidene fluoride crystal transition in composite membranes and its effect on bovine serum albumin protein extraction. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 45, No. 3, pp. 191-200. https://doi.org/10.18280/acsm.450301
178	Salins, S.S., Mohan, M., Stephen, C.	Finite Element Investigation on the Performance of Pressure Vessel Subjected to Structural Load	pressure vessel, finite element analysis, ANSYS workbench, stress analysis, factor of safety	45, 3, 201-205	https://doi.org/10.18280/acsm.450302	Salins, S.S., Mohan, M., Stephen, C. (2021). Finite element investigation on the performance of pressure vessel subjected to structural load. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 45, No. 3, pp. 201-205. https://doi.org/10.18280/acsm.450302
179	Sun, Z.D., Hou, D.B., Li, W.	Effect of Carburizing and Nitriding on Fatigue Properties of 18Cr2Ni4WA Steel in Very High Cycle Fatigue Regime	very high cycle fatigue, carburizing, nitriding, inclusion, defect, life prediction	45, 3, 207-215	https://doi.org/10.18280/acsm.450303	Sun, Z.D., Hou, D.B., Li, W. (2021). Effect of carburizing and nitriding on fatigue properties of 18Cr2Ni4WA steel in very high cycle fatigue regime. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 45, No. 3, pp. 207-215. https://doi.org/10.18280/acsm.450303
180	Naima, K., Menni, Y., Alliche, M., Lorenzini, G., Ahmad, H., Liqid, A.	Effect of EGR on Performances and Emissions of DI Diesel Engine Fueled with Waste Plastic Oil: CDF Approach	waste plastic oil, fuel, diesel, EGR, injection timing	45, 3, 217-223	https://doi.org/10.18280/acsm.450304	Naima, K., Menni, Y., Alliche, M., Lorenzini, G., Ahmad, H., Liqid, A. (2021). Effect of EGR on performances and emissions of DI diesel engine fueled with waste plastic oil: CDF approach. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 45, No. 3, pp. 217-223. https://doi.org/10.18280/acsm.450304
181	Chouia, F., Chala, A., Lakel, A., Sahraoui, T.	Morphology and Corrosion Behavior of Zn-Ni Layers Electrodeposited on Low Alloy Carbon Steel Substrate	corrosion, Zn-Ni layers, morphology, electroplating, low alloy steel	45, 3, 225-230	https://doi.org/10.18280/acsm.450305	Chouia, F., Chala, A., Lakel, A., Sahraoui, T. (2021). Morphology and corrosion behavior of Zn-Ni layers electrodeposited on low alloy carbon steel substrate. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 45, No. 3, pp. 225-230. https://doi.org/10.18280/acsm.450305
182	Tao, X.J., Li, Y.L., Li, Y.C., Sun, D.Y., Xie, A.	Electroluminescent Polymer Materials and Their Applications	electroluminescence, high polymer materials, panel display	45, 3, 231-238	https://doi.org/10.18280/acsm.450306	Tao, X.J., Li, Y.L., Li, Y.C., Sun, D.Y., Xie, A. (2021). Electroluminescent polymer materials and their applications. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 45, No. 3, pp. 231-238. https://doi.org/10.18280/acsm.450306
183	Khedaywi, T.S., Haddad, M.A., Al Qadi, A.N.S., Al-Rababa'ah, O.A.	Investigating the Effect of Addition of Olive Husk Ash on Asphalt Binder Properties	olive husk ash, asphalt binder, penetration, ductility, flash and fire point, ring and ball test	45, 3, 239-243	https://doi.org/10.18280/acsm.450307	Khedaywi, T.S., Haddad, M.A., Al Qadi, A.N.S., Al-Rababa'ah, O.A. (2021). Investigating the effect of addition of olive husk ash on asphalt binder properties. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 45, No. 3, pp. 239-243. https://doi.org/10.18280/acsm.450307
184	Rabouhi, H., Khelfaoui, Y., Khireddine, A.	Characterization and Microstructural Evolution of WC-Co Cemented Carbides	sintering, hot isostatic pressing, WC-Co cemented carbide, hardness, microstructure, density	45, 3, 245-249	https://doi.org/10.18280/acsm.450308	Rabouhi, H., Khelfaoui, Y., Khireddine, A. (2021). Characterization and microstructural evolution of WC-Co cemented carbides. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 45, No. 3, pp. 245-249. https://doi.org/10.18280/acsm.450308
185	Chikouche, M.A.	Valorization of Heat Treated Dredged Sludge in the Cement Matrix of Ordinary Concrete	cement, concrete, mechanical test, physical measurement, sludge, thermogravimetric analysis	45, 3, 251-257	https://doi.org/10.18280/acsm.450309	Chikouche, M.A. (2021). Valorization of heat treated dredged sludge in the cement matrix of ordinary concrete. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 45, No. 3, pp. 251-257. https://doi.org/10.18280/acsm.450309
186	Zhang, G.F., Jiang, H.D.	Development of Impregnated Diamond Bit with Primary and Secondary Abrasives Based on Matrix Weakening Theory	primary and secondary abrasives, impregnated diamond bit, matrix weakening theory, drilling efficiency, service life	45, 3, 259-265	https://doi.org/10.18280/acsm.450310	Zhang, G.F., Jiang, H.D. (2021). Development of impregnated diamond bit with primary and secondary abrasives based on matrix weakening theory. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 45, No. 3, pp. 259-265. https://doi.org/10.18280/acsm.450310
187	Boursas, A., Salmi, M., Lorenzini, G., Ahmad, H., Menni, Y., Fridja, D.	Enhanced Heat Transfer by Oil/Multi-Walled Carbon Nano-Tubes Nanofluid	nanofluid, oil, multi-walled carbon nano-tubes, mechanical properties, thermodynamic properties	5, 2, 93-103	https://doi.org/10.18280/acsm.450201	Boursas, A., Salmi, M., Lorenzini, G., Ahmad, H., Menni, Y., Fridja, D. (2021). Enhanced heat transfer by oil/multi-walled carbon nano-tubes nanofluid. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 45, No. 2, pp. 93-103. https://doi.org/10.18280/acsm.450201
188	Chebbi, R., Fadel, A., Aidi, A.	The Elimination by Natural Algerian Clay of Chromium Ions from Salt Water	adsorption, brackish water, bentonite, chromium removal, kinetic	5, 2, 105-112	https://doi.org/10.18280/acsm.450202	Chebbi, R., Fadel, A., Aidi, A. (2021). The elimination by natural Algerian clay of chromium ions from salt water. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 45, No. 2, pp. 105-112. https://doi.org/10.18280/acsm.450202
189	Sahdev, S., Kumar, H., Butola, R., Singari, R.M.	Evaluating the Effect of Process Parameters on FSP of Al5083 Alloy Using ANSYS	friction stir processing, process parameters, aluminium 5083, numerical modelling	5, 2, 113-120	https://doi.org/10.18280/acsm.450203	Sahdev, S., Kumar, H., Butola, R., Singari, R.M. (2021). Evaluating the effect of process parameters on FSP of Al5083 alloy using ANSYS. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 45, No. 2, pp. 113-120. https://doi.org/10.18280/acsm.450203
190	Boualleg, S.	The Study of Slag Cement's Microstructural Properties	hydration, bound water, degrees of hydration, slag, strength, thermogravimetric analysis, portlandite, non-evaporable water	5, 2, 121-133	https://doi.org/10.18280/acsm.450204	Boualleg, S. (2021). The study of slag cement's microstructural properties. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 45, No. 2, pp. 121-133. https://doi.org/10.18280/acsm.450204
191	Qiao, T.B.	Application of Conductive Polymer-Based Hydrogel in Multi-robot Balance Control	hydrogel, conductive polymer, flexible electronic device, central pattern generator (CPG)	5, 2, 135-140	https://doi.org/10.18280/acsm.450205	Qiao, T.B. (2021). Application of conductive polymer-based hydrogel in multi-robot balance control. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 45, No. 2, pp. 135-140. https://doi.org/10.18280/acsm.450205
192	Boulaktout, N., Mezaache, E.H., Laouer, A.	Study of Thermal Behavior of a Horizontal Two Fins Annular Tube Heat Exchanger with Melting Phase Change Material: Fins Orientation Effects	pcm melting, heat transfer enhancement, thermal storage, heat exchanger, natural convection, fins, annular tube	5, 2, 141-151	https://doi.org/10.18280/acsm.450206	Boulaktout, N., Mezaache, E.H., Laouer, A. (2021). Study of thermal behavior of a horizontal two fins annular tube heat exchanger with melting phase change material: Fins orientation effects. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 45, No. 2, pp. 141-151. https://doi.org/10.18280/acsm.450206

193	Chandrasekaran, V.	Characteristics Investigations of Dry Bamboo Ash Fractional Replaced Cement with in M25 Grade Concrete	dry bamboos ash, 53 grade of cement, M-sands (fine aggregate), coarse aggregate	5, 2, 153-159	https://doi.org/10.18280/acsm.450207	Chandrasekaran, V. (2021). Characteristics investigations of dry bamboo ash fractional replaced cement with in M25 grade concrete. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 45, No. 2, pp. 153-159. https://doi.org/10.18280/acsm.450207
194	Wang, J.R., Zhang, Z.C., Guo, Y., Zhang, L.Y., Liu, J.L.	Experimental Study on the Treatment of Rural Domestic Wastewater Using the Multi-Soil-Layering System Filled with Sludge-Based Biochar	sludge-based biochar, rural domestic wastewater, multi-media soil layering system (MSL), hydraulic loading rate (HLRs), zeolite	5, 2, 161-165	https://doi.org/10.18280/acsm.450208	Wang, J.R., Zhang, Z.C., Guo, Y., Zhang, L.Y., Liu, J.L. (2021). Experimental study on the treatment of rural domestic wastewater using the multi-soil-layering system filled with sludge-based biochar. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 45, No. 2, pp. 161-165. https://doi.org/10.18280/acsm.450208
195	Khier, L., Abdelghani, L., Maouche, D.	X-Ray Peak Profile Analysis of Materials M1 and M2 by Williamson-Hall and Size-Strain Plot Methods	Kaolin M1, Kaolin M2, microstrains, method of stokes, distribution of the sizes	5, 2, 167-173	https://doi.org/10.18280/acsm.450209	Khier, L., Abdelghani, L., Maouche, D. (2021). X-Ray peak profile analysis of materials M1 and M2 by Williamson-Hall and size-strain plot methods. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 45, No. 2, pp. 167-173. https://doi.org/10.18280/acsm.450209
196	Herbirowo, S., Imaduddin, A., Hendrik, Pramono, A.W., Sunardi, Saefuloh, I.	In-Situ Manufacturing of SiC-Doped MgB2 Used for Superconducting Wire	MgB2, silicon carbide, superconductor, heat treatment, SS304, critical temperature	5, 2, 175-179	https://doi.org/10.18280/acsm.450210	Herbirowo, S., Imaduddin, A., Hendrik, Pramono, A.W., Sunardi, Saefuloh, I. (2021). In-Situ manufacturing of SiC-Doped MgB2 used for superconducting wire. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 45, No. 2, pp. 175-179. https://doi.org/10.18280/acsm.450210
197	Ma, C.L.	Physical Properties and Durability of Green Fiber-Reinforced Concrete for Road Bridges	green fiber, road bridges, concrete, physical-mechanical properties, durability	5, 2, 181-189	https://doi.org/10.18280/acsm.450211	Ma, C.L. (2021). Physical properties and durability of green fiber-reinforced concrete for road bridges. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 45, No. 2, pp. 181-189. https://doi.org/10.18280/acsm.450211
198	Mauduit, A., Gransac, H., Pillot, S.	Influence of the Manufacturing Parameters in Selective Laser Melting on Properties of Aluminum Alloy AlSi7Mg0.6 (A357)	selective laser melting, AlSi7Mg0.6 alloy (A357), manufacturing parameters	5, 1, 1-10	https://doi.org/10.18280/acsm.450101	Mauduit, A., Gransac, H., Pillot, S. (2021). Influence of the manufacturing parameters in selective laser melting on properties of aluminum alloy AlSi7Mg0.6 (A357). <i>Annales de Chimie - Science des Matériaux</i> , Vol. 45, No. 1, pp. 1-10. https://doi.org/10.18280/acsm.450101
199	Al Qadi, A.N.S., Khedaywi, T.S., Haddad, M.A., Al-Rababa'ah, O.A.	Investigating the Effect of Olive Husk Ash on the Properties of Asphalt Concrete Mixture	olive husk ash, asphalt concrete, Marshall test, stability, flow, Retained stability	5, 1, 11-15	https://doi.org/10.18280/acsm.450102	Al Qadi, A.N.S., Khedaywi, T.S., Haddad, M.A., Al-Rababa'ah, O.A. (2021). Investigating the effect of olive husk ash on the properties of asphalt concrete mixture. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 45, No. 1, pp. 11-15. https://doi.org/10.18280/acsm.450102
200	Wang, Y., Wang, H.X., Yang, L.W., Qian, L.	Hydration Features of Composite Binding Material with High-Dose Copper Tailings	high-dose copper tailings, composite binding material, hydration kinetics, hydration rate, hydration heat	5, 1, 17-24	https://doi.org/10.18280/acsm.450103	Wang, Y., Wang, H.X., Yang, L.W., Qian, L. (2021). Hydration features of composite binding material with high-dose copper tailings. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 45, No. 1, pp. 17-24. https://doi.org/10.18280/acsm.450103
201	Salih, E.M.S., Al-Roubaiy, A.O., Salih, Y.L.A.	Analysis of the Influence of Hot Impacts on the Transformation of White Cast Iron	mechanical heat treatment, white cast iron, hot impact, cementite, graphite flakes, gray cast iron, cast iron, hot deformation	5, 1, 25-31	https://doi.org/10.18280/acsm.450104	Salih, E.M.S., Al-Roubaiy, A.O., Salih, Y.L.A. (2021). Analysis of the influence of hot impacts on the transformation of white cast iron. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 45, No. 1, pp. 25-31. https://doi.org/10.18280/acsm.450104
202	Ren, Z.B., Li, M., Hui, Y.Z., Ma, Z.W., Gu, J.C.	Remediation Effect of Biomass Amendment on the Physical-Chemical Performance and Sustainable Utilization of Sandy Soil	biomass amendment, sandy soil, Huangyangtan, soil remediation, physical-chemical performance, sustainable utilization	5, 1, 33-42	https://doi.org/10.18280/acsm.450105	Ren, Z.B., Li, M., Hui, Y.Z., Ma, Z.W., Gu, J.C. (2021). Remediation effect of biomass amendment on the physical-chemical performance and sustainable utilization of sandy soil. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 45, No. 1, pp. 33-42. https://doi.org/10.18280/acsm.450105
203	Harkat, M., Alleg, S., Chemam, R., Azzaza, S., Mokhtari, M., Dhahri, E.	Synthesis and Characterization of Thermally Stable Hydroxyapatite	hydroxyapatite, wet chemical route, XRD, Rietveld refinement, SEM	5, 1, 43-50	https://doi.org/10.18280/acsm.450106	Harkat, M., Alleg, S., Chemam, R., Azzaza, S., Mokhtari, M., Dhahri, E. (2021). Synthesis and characterization of thermally stable hydroxyapatite. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 45, No. 1, pp. 43-50. https://doi.org/10.18280/acsm.450106
204	Islam, A., Dwivedi, V.K., Dwivedi, S.P.	Effect of Friction Stir Process Parameters on Mechanical Properties of Al/Eggshell/SiC Composite Material	composite, MMC, FSP, Box-Behnken Design, mechanical properties, hardness, tensile strength, ball-milling	5, 1, 51-57	https://doi.org/10.18280/acsm.450107	Islam, A., Dwivedi, V.K., Dwivedi, S.P. (2021). Effect of friction stir process parameters on mechanical properties of Al/Eggshell/SiC composite material. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 45, No. 1, pp. 51-57. https://doi.org/10.18280/acsm.450107
205	Peng, Z.M.	Performance Prediction and Mix Ratio Optimization for Multielement Green High-Performance Fiber-Reinforced Cement Matrix Composite	green high-performance fiber-reinforced cement (GHPFRC), mix ratio optimization, performance analysis, test	5, 1, 59-67	https://doi.org/10.18280/acsm.450108	Peng, Z.M. (2021). Performance prediction and mix ratio optimization for multielement green high-performance fiber-reinforced cement matrix composite. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 45, No. 1, pp. 59-67. https://doi.org/10.18280/acsm.450108
206	Hocine, T., Sami, Z., Omar, A.	Effect of Martensite Morphologies on Corrosion in 5% H2SO4 Solution of Borided X70 Dual Phase Steel	dual phase steel, intercritical annealing, boronizing, corrosion properties	5, 1, 69-74	https://doi.org/10.18280/acsm.450109	Hocine, T., Sami, Z., Omar, A. (2021). Effect of martensite morphologies on corrosion in 5% H2SO4 solution of borided X70 dual phase steel. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 45, No. 1, pp. 69-74. https://doi.org/10.18280/acsm.450109
207	Abdelmoula, F., Refassi, K., Bouamama, M., Elmeiche, A.	Modal Analysis of FSW Plate Considering the Residual Stresses Effect	modal analysis, FSW, plate, residual stresses, fundamental frequencies, deformations	5, 1, 75-82	https://doi.org/10.18280/acsm.450110	Abdelmoula, F., Refassi, K., Bouamama, M., Elmeiche, A. (2021). Modal analysis of FSW plate considering the residual stresses effect. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 45, No. 1, pp. 75-82. https://doi.org/10.18280/acsm.450110
208	Zhao, F.F.	Modeling and Thermal-Mechanical Coupling Analysis of Piston in Car Engines	diesel engine piston, aluminum-based material, finite-element analysis (FEA), stress distribution, temperature distribution	5, 1, 83-92	https://doi.org/10.18280/acsm.450111	Zhao, F.F. (2021). Modeling and thermal-mechanical coupling analysis of piston in car engines. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 45, No. 1, pp. 83-92. https://doi.org/10.18280/acsm.450111

209	Ugochukwu, N.C., Sunday, A.V., Sani, A.M., Chinonso, O.E.	Explicit study of epoxy/ momordica angustisejala fiber and rice husk ash nanoparticle composites for roofing sheet application	stress analysis, momordica angustisejala fiber, rice husk ash nanoparticle, roofing sheets	44, 6, 375-380	https://doi.org/10.18280/acsm.440601	Ugochukwu, N.C., Sunday, A.V., Sani, A.M., Chinonso, O.E. (2020). Explicit study of epoxy/ momordica angustisejala fiber and rice husk ash nanoparticle composites for roofing sheet application. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 44, No. 6, pp. 375-380. https://doi.org/10.18280/acsm.440601
210	Laroui, W., Chegroune, R., Talaş, Ş., Keddami, M., Badji, R.	Microstructural and mechanical characterization of shielded metal arc welded dual phase steel joints	dual-phase steel, fractography, heat affected zone, heat treatment, welding	44, 6, 381-386	https://doi.org/10.18280/acsm.440602	Laroui, W., Chegroune, R., Talaş, Ş., Keddami, M., Badji, R. (2020). Microstructural and mechanical characterization of shielded metal arc welded dual phase steel joints. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 44, No. 6, pp. 381-386. https://doi.org/10.18280/acsm.440602
211	Sequeira, A., Ahmed, A.R., George, R., Sachidananda, K.H.	Empirical study of solar absorber metamaterial characterization in GHz and THz regime	materials chemistry, numerical analysis, solar absorber, smart material, wavelength	44, 6, 387-392	https://doi.org/10.18280/acsm.440603	Sequeira, A., Ahmed, A.R., George, R., Sachidananda, K.H. (2020). Empirical study of solar absorber metamaterial characterization in GHz and THz regime. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 44, No. 6, pp. 387-392. https://doi.org/10.18280/acsm.440603
212	Yuan, J., Zhao, B.X., Wang, Z.Q., Liu, Y.	Carbonization law of fly ash concrete under freeze-thaw cycles based on image-pro plus	IPP, freeze-thaw cycles, ratio of carbonized area (RCA), fly ash concrete, carbonization depth	44, 6, 393-398	https://doi.org/10.18280/acsm.440604	Yuan, J., Zhao, B.X., Wang, Z.Q., Liu, Y. (2020). Carbonization law of fly ash concrete under freeze-thaw cycles based on image-pro plus. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 44, No. 6, pp. 393-398. https://doi.org/10.18280/acsm.440604
213	Uppalapati, G., Gunji, S., Malkapuram, R.	Morphological characterization of chicken feather rachis, neem sawdust, and high density polyethylene (HDPE) reinforced composite material	FESEM, XRD, HDPE(H) Granules, Chicken Feather (CF), Saw Dust (SD)	44, 6, 399-406	https://doi.org/10.18280/acsm.440605	Uppalapati, G., Gunji, S., Malkapuram, R. (2020). Morphological characterization of chicken feather rachis, neem sawdust, and high density polyethylene (HDPE) reinforced composite material. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 44, No. 6, pp. 399-406. https://doi.org/10.18280/acsm.440605
214	Ennaciri, Y., Bettach, M., El Alaoui-Belghiti, H.	Phosphogypsum conversion into calcium fluoride and sodium sulfate	phosphogypsum, sodium fluoride, calcium fluoride, sodium sulfate, wet conversion	44, 6, 407-412	https://doi.org/10.18280/acsm.440606	Ennaciri, Y., Bettach, M., El Alaoui-Belghiti, H. (2020). Phosphogypsum conversion into calcium fluoride and sodium sulfate. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 44, No. 6, pp. 407-412. https://doi.org/10.18280/acsm.440606
215	Badaoui, A., Belhadji, M., Ameer, H., Kaid, N.	Theoretical investigation of structural and optoelectronic properties of ternary acetylides A ₂ MC ₂ (A = Li, Na, K) and (M = Te, Pb, Pt)	theoretical study, density functional theory, optoelectronic properties, material engineering, material characterization, ternary acetylides	44, 6, 413-419	https://doi.org/10.18280/acsm.440607	Badaoui, A., Belhadji, M., Ameer, H., Kaid, N. (2020). Theoretical investigation of structural and optoelectronic properties of ternary acetylides A ₂ MC ₂ (A = Li, Na, K) and (M = Te, Pb, Pt). <i>Annales de Chimie - Science des Matériaux</i> , Vol. 44, No. 6, pp. 413-419. https://doi.org/10.18280/acsm.440607
216	Srivastava, A.K., Maurya, N.K., Maurya, M., Dwivedi, S.P., Saxena, A.	Effect of multiple passes on microstructural and mechanical properties of surface composite Al 2024/SiC produced by friction stir processing	Al2024 alloy, friction stir processing, Rockwell hardness test, tensile strength, nano indentation	44, 6, 421-426	https://doi.org/10.18280/acsm.440608	Srivastava, A.K., Maurya, N.K., Maurya, M., Dwivedi, S.P., Saxena, A. (2020). Effect of multiple passes on microstructural and mechanical properties of surface composite Al 2024/SiC produced by friction stir processing. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 44, No. 6, pp. 421-426. https://doi.org/10.18280/acsm.440608
217	Yao, Y.H., Wang, Y.H., Xu, J., Hu, Y.J.	Influence of basalt fiber on the physical and mechanical properties of aerated ceramsite concrete	Aerated Ceramsite Concrete (ACC), lightweight wallboards, Basalt Fiber (BF), physical and mechanical properties	44, 6, 427-432	https://doi.org/10.18280/acsm.440609	Yao, Y.H., Wang, Y.H., Xu, J., Hu, Y.J. (2020). Influence of basalt fiber on the physical and mechanical properties of aerated ceramsite concrete. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 44, No. 6, pp. 427-432. https://doi.org/10.18280/acsm.440609
218	Rathanasalam, V., Perumalsami, J., Jayakumar, K.	Characteristics of blended geopolymer concrete using ultrafine ground granulated blast furnace slag and copper slag	geopolymer concrete, copper slag, fly ash, ultrafine ground granulated blast furnace slag	44, 6, 433-439	https://doi.org/10.18280/acsm.440610	Rathanasalam, V., Perumalsami, J., Jayakumar, K. (2020). Characteristics of blended geopolymer concrete using ultrafine ground granulated blast furnace slag and copper slag. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 44, No. 6, pp. 433-439. https://doi.org/10.18280/acsm.440610
219	Gopi, V., Swamy, K.K., Gopi, A.P., Narayana, V.L.	Experimental study on shear behavior of reinforced concrete sandwich deep beam	deep beam, shear reinforcement, insulation pad, crack pattern, diagonal crack	44, 5, 301-309	https://doi.org/10.18280/acsm.440501	Gopi, V., Swamy, K.K., Gopi, A.P., Narayana, V.L. (2020). Experimental study on shear behavior of reinforced concrete sandwich deep beam. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 44, No. 5, pp. 301-309. https://doi.org/10.18280/acsm.440501
220	Chabane, M., Melkaoui, C., Dahmani, B., Belalia, S.Z.	Preparation and characterization of matrix hybrid membranes polyvinylidene fluoride/polyvinylpyrrolidone/silica gel/zinc oxide for Cr(VI) removal from water	chromium, hybrid, membrane, PVDF, silica gel, ZnO	44, 5, 311-318	https://doi.org/10.18280/acsm.440502	Chabane, M., Melkaoui, C., Dahmani, B., Belalia, S.Z. (2020). Preparation and characterization of matrix hybrid membranes polyvinylidene fluoride/polyvinylpyrrolidone/silica gel/zinc oxide for Cr(VI) removal from water. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 44, No. 5, pp. 311-318. https://doi.org/10.18280/acsm.440502
221	Zhao, Y.G.B., Dong, Y.D.	Seismic response of reinforced concrete frame-shear wall structure with metal rubber-based damper in coupling beam	metal rubber, constitutive model, damper, coupling beam, seismic response	44, 5, 319-326	https://doi.org/10.18280/acsm.440503	Zhao, Y.G.B., Dong, Y.D. (2020). Seismic response of reinforced concrete frame-shear wall structure with metal rubber-based damper in coupling beam. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 44, No. 5, pp. 319-326. https://doi.org/10.18280/acsm.440503
222	Abid, A., El Bouhtoury, F.C., Gabsi, S.	Recovery of residues from olive industry: Characterization of simple and acetylated lignin	lignin organosolv, polyol, acetylation, characterization physico-chemical analyzes, sugar	44, 5, 327-332	https://doi.org/10.18280/acsm.440504	Abid, A., El Bouhtoury, F.C., Gabsi, S. (2020). Recovery of residues from olive industry: Characterization of simple and acetylated lignin. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 44, No. 5, pp. 327-332. https://doi.org/10.18280/acsm.440504
223	Munivenkatappan, M.S.B., Shanmugam, S., Veeramani, A.	Synthesis and characterization of in-situ AA8011-TiB ₂ composites produced by flux assisted synthesis	aluminium matrix composite, flux assisted synthesis, in-situ stir casting technique, titanium diboride reinforcement, metallurgical studies, mechanical behaviour	44, 5, 333-338	https://doi.org/10.18280/acsm.440505	Munivenkatappan, M.S.B., Shanmugam, S., Veeramani, A. (2020). Synthesis and characterization of in-situ AA8011-TiB ₂ composites produced by flux assisted synthesis. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 44, No. 5, pp. 333-338. https://doi.org/10.18280/acsm.440505
224	Mahadevappa, N., Shankar, V.K., Sehgal, S., Upadhyay, R.	Study the impact of drilling process parameters on natural fiber reinforced herringbone epoxy composites	sisal fabric, drilling of composite, epoxy, grey regression analysis	44, 5, 339-345	https://doi.org/10.18280/acsm.440506	Mahadevappa, N., Shankar, V.K., Sehgal, S., Upadhyay, R. (2020). Study the impact of drilling process parameters on natural fiber reinforced herringbone epoxy composites. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 44, No. 5, pp. 339-345. https://doi.org/10.18280/acsm.440506

225	Guermat, N., Daranfed, W., Mirouh, K.	Extended wide band gap amorphous ZnO thin films deposited by spray pyrolysis	thin film, zinc oxide, substrate temperature, band gap, spray pyrolysis, XRD, contact angle, electrical conductivity	44, 5, 347-352	https://doi.org/10.18280/acsm.440507	Guermat, N., Daranfed, W., Mirouh, K. (2020). Extended wide band gap amorphous ZnO thin films deposited by spray pyrolysis. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 44, No. 5, pp. 347-352. https://doi.org/10.18280/acsm.440507
226	Kavyateja, B.V., Reddy, P.N.	Effect of industrial waste on strength properties of concrete	metakaolin, illuminate sludge, glass bottle, eco-friendly concrete, cement replacement	44, 5, 353-358	https://doi.org/10.18280/acsm.440508	Kavyateja, B.V., Reddy, P.N. (2020). Effect of industrial waste on strength properties of concrete. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 44, No. 5, pp. 353-358. https://doi.org/10.18280/acsm.440508
227	Mahadikar, A., Mamatha, E., Murthy, S., Doddapattar, N.B.	Variation in composition of aluminium alloy Al6463 on wear characteristics and compressive strength	aluminium alloy, magnesium, silicon, wear, compressive strength, material composition (MC)	44, 5, 359-364	https://doi.org/10.18280/acsm.440509	Mahadikar, A., Mamatha, E., Murthy, S., Doddapattar, N.B. (2020). Variation in composition of aluminium alloy Al6463 on wear characteristics and compressive strength. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 44, No. 5, pp. 359-364. https://doi.org/10.18280/acsm.440509
228	Zhang, F., Wang, K., Dang, Y.R., Wu, G.Y.	Influence of meso-structure parameters on wave propagation in soil-rock mixture	soil-rock mixture, particle flow code (PFC), meso-structure features, wave parameters	44, 5, 365-373	https://doi.org/10.18280/acsm.440510	Zhang, F., Wang, K., Dang, Y.R., Wu, G.Y. (2020). Influence of meso-structure parameters on wave propagation in soil-rock mixture. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 44, No. 5, pp. 365-373. https://doi.org/10.18280/acsm.440510
229	Zidani, C., Maouedj, R., Salmi, M.	Numerical simulation of water as base fluid dispersed by Al ₂ O ₃ aluminum oxide nano-sized solid particles with various concentrations	characterization of nanofluids, physical properties, mechanical properties, fluid dynamics, turbulent viscosity, aluminum oxide, numerical simulation	44, 4, 231-238	https://doi.org/10.18280/acsm.440401	Zidani, C., Maouedj, R., Salmi, M. (2020). Numerical simulation of water as base fluid dispersed by Al ₂ O ₃ aluminum oxide nano-sized solid particles with various concentrations. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 44, No. 4, pp. 231-238. https://doi.org/10.18280/acsm.440401
230	Pawar, P., Kumar, A., Ballav, R.	Grey relational analysis optimization of input parameters for electrochemical discharge drilling of silicon carbide by gunmetal tool electrode	ECDM, hole diameter, machined depth, Silicon carbide, gunmetal, grey relational analysis	44, 4, 239-249	https://doi.org/10.18280/acsm.440402	Pawar, P., Kumar, A., Ballav, R. (2020). Grey relational analysis optimization of input parameters for electrochemical discharge drilling of silicon carbide by gunmetal tool electrode. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 44, No. 4, pp. 239-249. https://doi.org/10.18280/acsm.440402
231	Abed, M.M., Al-maammori, M.H.	Optimization of novel sphere sandwich structure for impact requirements	carving wax, Sphere Sandwich Structure, lightweight materials, RSM- optimization	44, 4, 251-256	https://doi.org/10.18280/acsm.440403	Abed, M.M., Al-maammori, M.H. (2020). Optimization of novel sphere sandwich structure for impact requirements. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 44, No. 4, pp. 251-256. https://doi.org/10.18280/acsm.440403
232	Chen, C.B., Tang, P.C., Zhuang, J.J.	Influence of waste slurry as mixing water on the properties of C80 concrete with different mineral admixtures	waste slurry, mixing station, high-performance concrete, mineral admixture	44, 4, 257-262	https://doi.org/10.18280/acsm.440404	Chen, C.B., Tang, P.C., Zhuang, J.J. (2020). Influence of waste slurry as mixing water on the properties of C80 concrete with different mineral admixtures. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 44, No. 4, pp. 257-262. https://doi.org/10.18280/acsm.440404
233	Rabouhi, H., Khelfaoui, Y., Khireddine, A.	Comparative study by image analysis of WC-Co alloys elaborated by liquid phase sintering and hot isostatic pressing	sintering, hot isostatic pressing-cemented carbide, hardness, microstructure, image analysis	44, 4, 263-269	https://doi.org/10.18280/acsm.440405	Rabouhi, H., Khelfaoui, Y., Khireddine, A. (2020). Comparative study by image analysis of WC-Co alloys elaborated by liquid phase sintering and hot isostatic pressing. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 44, No. 4, pp. 263-269. https://doi.org/10.18280/acsm.440405
234	Senapati, P.N., Bhoi, R.K.	Characterization of friction-stir welded joints of AA1100 by factorial design based hierarchical regression model	friction stir welding, full factorial design, design of experiments, hierarchical regression analysis, tensile strength, average grain size	44, 4, 271-280	https://doi.org/10.18280/acsm.440406	Senapati, P.N., Bhoi, R.K. (2020). Characterization of friction-stir welded joints of AA1100 by factorial design based hierarchical regression model. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 44, No. 4, pp. 271-280. https://doi.org/10.18280/acsm.440406
235	Dwivedi, S.P., Sharma, S., Singh, T., Kumar, N.	Mechanical and metallurgical characterization of copper-based welded joint using brass as filler metal developed by microwave technique	copper, brass based powder, microwave technique, corrosion, specific strength	44, 4, 281-286	https://doi.org/10.18280/acsm.440407	Dwivedi, S.P., Sharma, S., Singh, T., Kumar, N. (2020). Mechanical and metallurgical characterization of copper-based welded joint using brass as filler metal developed by microwave technique. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 44, No. 4, pp. 281-286. https://doi.org/10.18280/acsm.440407
236	Huang, S.T., Zhang, Y.M., Jiao, X.D., Zhou, C.F.	Effects of welding parameters of pulsed gas metal arc welding on microstructure and mechanical performance of joints welded in hyperbaric environment	pulsed gas metal arc welding (GMAW), hyperbaric environment, arc voltage, pulse frequency, microstructure, mechanical performance	44, 4, 287-294	https://doi.org/10.18280/acsm.440408	Huang, S.T., Zhang, Y.M., Jiao, X.D., Zhou, C.F. (2020). Effects of welding parameters of pulsed gas metal arc welding on microstructure and mechanical performance of joints welded in hyperbaric environment. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 44, No. 4, pp. 287-294. https://doi.org/10.18280/acsm.440408
237	Kumar, S., Srivastava, A.K., Singh, R.K.	Fabrication of AA7075 hybrid green metal matrix composites by friction stir processing technique	friction stir processing (FSP), hybrid green metal matrix composites (MMCs), aluminium alloys, waste management, environmentally friendly	44, 4, 295-300	https://doi.org/10.18280/acsm.440409	Kumar, S., Srivastava, A.K., Singh, R.K. (2020). Fabrication of AA7075 hybrid green metal matrix composites by friction stir processing technique. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 44, No. 4, pp. 295-300. https://doi.org/10.18280/acsm.440409
238	Mauduit, A., Gransac, H.	Study of the precipitation kinetics and mechanisms in 6000 series aluminium alloys through the measurement of electrical conductivity	electrical conductivity, precipitation kinetics, 6000 series aluminium alloys	44, 3, 141-149	https://doi.org/10.18280/acsm.440301	Mauduit, A., Gransac, H. (2020). Study of the precipitation kinetics and mechanisms in 6000 series aluminium alloys through the measurement of electrical conductivity. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 44, No. 3, pp. 141-149. https://doi.org/10.18280/acsm.440301
239	Houari, T., Benguediab, M., Belaziz, A., Kebir, T.	Numerical modeling of high density polyethylene (HDPE) behavior using different fracture mechanics approaches	HDPE, fracture mechanics, EWF, J integral, GTN, global approach, local approach, Abaqus	44, 3, 151-160	https://doi.org/10.18280/acsm.440302	Houari, T., Benguediab, M., Belaziz, A., Kebir, T. (2020). Numerical modeling of high density polyethylene (HDPE) behavior using different fracture mechanics approaches. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 44, No. 3, pp. 151-160. https://doi.org/10.18280/acsm.440302
240	Luo, E.H., Zhang, W., Zhang, R.X., Liu, Y., Liu, X.M., Wang, C.L.	A novel energy saving operation strategy of multiparameter coupling coordinated speed regulation for crushing	sustainable, energy saving, crushing station, multiparameter	44, 3, 161-178	https://doi.org/10.18280/acsm.440303	Luo, E.H., Zhang, W., Zhang, R.X., Liu, Y., Liu, X.M., Wang, C.L. (2020). A novel energy saving operation strategy of multiparameter coupling coordinated speed regulation for crushing. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 44, No. 3, pp. 161-178. https://doi.org/10.18280/acsm.440303

241	Mekky, A.H.	Electrical and optical simulation of hybrid perovskite-based solar cell at various electron transport materials and light intensity	perovskite, electron transport layer, light intensity, GPVDM model, solar cells, performance parameters	44, 3, 179-184	https://doi.org/10.18280/acsm.440304	Mekky, A.H. (2020). Electrical and optical simulation of hybrid perovskite-based solar cell at various electron transport materials and light intensity. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 44, No. 3, pp. 179-184. https://doi.org/10.18280/acsm.440304
242	Shahmir, N.G., Bhat, M.	Structural and luminance properties of light transmitting concrete	energy efficient, greenhouse gas, light transmitting concrete, plastic optical fiber	44, 3, 185-190	https://doi.org/10.18280/acsm.440305	Shahmir, N.G., Bhat, M. (2020). Structural and luminance properties of light transmitting concrete. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 44, No. 3, pp. 185-190. https://doi.org/10.18280/acsm.440305
243	Belguendouz, O., Mebarek, B., Keddam, M., El Guerri, Y.	Diffusion model for simulating the kinetics of boronizing process in the case of FeB/Fe2B bilayer configuration	boronizing, simulation, iron borides, diffusion model, fick's law	44, 3, 191-197	https://doi.org/10.18280/acsm.440306	Belguendouz, O., Mebarek, B., Keddam, M., El Guerri, Y. (2020). Diffusion model for simulating the kinetics of boronizing process in the case of FeB/Fe2B bilayer configuration. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 44, No. 3, pp. 191-197. https://doi.org/10.18280/acsm.440306
244	Luo, B.	Flexural behaviour of precast steel fibres reinforces concrete composite slabs with different shapes	precast, concrete composite slab (CCS), failure mode, ultimate bearing capacity, calculation method	44, 3, 199-209	https://doi.org/10.18280/acsm.440307	Luo, B. (2020). Flexural behaviour of precast steel fibres reinforces concrete composite slabs with different shapes. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 44, No. 3, pp. 199-209. https://doi.org/10.18280/acsm.440307
245	Manjunath, R., Kumar, D.	Effects of aging temperature, time during transition from brittle to ductile on fracture behavior of zinc coated AA7075	age hardening, coating, fracture toughness, scanning electron, microscope, brittle to ductile transition temperature	44, 3, 211-216	https://doi.org/10.18280/acsm.440308	Manjunath, R., Kumar, D. (2020). Effects of aging temperature, time during transition from brittle to ductile on fracture behavior of zinc coated AA7075. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 44, No. 3, pp. 211-216. https://doi.org/10.18280/acsm.440308
246	Abdelghani, L.	Determination of the diffusion coefficient and the activation energy of fluoroplastics	DSC, expanded graphite, nanotube, transition, heating rate, dispersion	44, 3, 217-222	https://doi.org/10.18280/acsm.440309	Abdelghani, L. (2020). Determination of the diffusion coefficient and the activation energy of fluoroplastics. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 44, No. 3, pp. 217-222. https://doi.org/10.18280/acsm.440309
247	Zhang, F., Zhou, L.X., Sun, X., Yuan, P.	A microscale shear wave velocity model of earth-rock aggregate	earth-rock aggregate (SAR), microscale, equivalent shear modulus, shear wave velocity	44, 3, 223-229	https://doi.org/10.18280/acsm.440310	Zhang, F., Zhou, L.X., Sun, X., Yuan, P. (2020). A microscale shear wave velocity model of earth-rock aggregate. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 44, No. 3, pp. 223-229. https://doi.org/10.18280/acsm.440310
248	Kosmatskiy, Y.I., Lysov, D., Fokin, N., Nikolenko, V.	Improving of manufacturing of hot-extruded pipes from Ni-based alloys	hot extrusion, Ni-based alloys, deformation resistance, pliability, temperature-speed modes, quality of surface	44, 2, 79-84	https://doi.org/10.18280/acsm.440201	Kosmatskiy, Y.I., Lysov, D., Fokin, N., Nikolenko, V. (2020). Improving of manufacturing of hot-extruded pipes from Ni-based alloys. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 44, No. 2, pp. 79-84. https://doi.org/10.18280/acsm.440201
249	Boumechraz, M/A., Mellas, M., Goudjil, K., Boucetta, F.	Study of the aging of a concrete reinforced by alkali resistant glass fiber in the wet environment	aging, sulfate resistant cement (SRC), ARHP glass fiber, durability, concrete	44, 2, 85-90	https://doi.org/10.18280/acsm.440202	Boumechraz, M/A., Mellas, M., Goudjil, K., Boucetta, F. (2020). Study of the aging of a concrete reinforced by alkali resistant glass fiber in the wet environment. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 44, No. 2, pp. 85-90. https://doi.org/10.18280/acsm.440202
250	Subanndi, Agustina, F., Vebrian, Azzahra, R.	Waste paper ash as additives for high strength concrete mix 45 MPa	admixture, additive, rice husk ash, chemical, chemical content of cement	44, 2, 91-96	https://doi.org/10.18280/acsm.440203	Subanndi, Agustina, F., Vebrian, Azzahra, R. (2020). Waste paper ash as additives for high strength concrete mix 45 MPa. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 44, No. 2, pp. 91-96. https://doi.org/10.18280/acsm.440203
251	Luo, H., Ma, F.R., Yang, Q.	Experimental analysis on mechanical performance of recycled concrete made from polypropylene fiber and artificial sand	polypropylene fiber, artificial sand, recycled concrete, compressive strength	44, 2, 97-102	https://doi.org/10.18280/acsm.440204	Luo, H., Ma, F.R., Yang, Q. (2020). Experimental analysis on mechanical performance of recycled concrete made from polypropylene fiber and artificial sand. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 44, No. 2, pp. 97-102. https://doi.org/10.18280/acsm.440204
252	Malhotra, P., Singh, N.K., Tyagi, R.K., Sikarwar, B.S.	Comparative micro structural investigation of Al-SiC-Mg and Al-B4C-Mg particulate metal matrix composite	hybrid composite, stir casting, reinforcement, boron carbide, silicon carbide, magnesium	44, 2, 103-108	https://doi.org/10.18280/acsm.440205	Malhotra, P., Singh, N.K., Tyagi, R.K., Sikarwar, B.S. (2020). Comparative micro structural investigation of Al-SiC-Mg and Al-B4C-Mg particulate metal matrix composite. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 44, No. 2, pp. 103-108. https://doi.org/10.18280/acsm.440205
253	Sahoo, D.K., Mohanty, B.S., Maalika Veetil, A.P.	Evaluation of bond strength and flash mass on friction surfaced deposition of aluminium 6063 over IS 2062 low carbon steel using different mechtrode face	friction surfacing, mechtrode face, micro hardness, ram tensile, bending, FE-SEM, XRD	44, 2, 109-119	https://doi.org/10.18280/acsm.440206	Sahoo, D.K., Mohanty, B.S., Maalika Veetil, A.P. (2020). Evaluation of bond strength and flash mass on friction surfaced deposition of aluminium 6063 over IS 2062 low carbon steel using different mechtrode face. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 44, No. 2, pp. 109-119. https://doi.org/10.18280/acsm.440206
254	Daranfed, W., Guemat, N., Mirouh, K.	Experimental study of precursor concentration the Co3O4 thin films used as solar absorbers	thin film, Co3O4, precursor concentration, spray pyrolysis, XRD, transmittance	44, 2, 121-126	https://doi.org/10.18280/acsm.440207	Daranfed, W., Guemat, N., Mirouh, K. (2020). Experimental study of precursor concentration the Co3O4 thin films used as solar absorbers. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 44, No. 2, pp. 121-126. https://doi.org/10.18280/acsm.440207
255	Sharma, P., Dwivedi, S.P., Dwivedi, V.K.	Physical, mechanical and thermal behaviour of high entropy materials	corrosion behaviour, grain structure, hardness, high entropy alloy, tensile strength	44, 2, 127-132	https://doi.org/10.18280/acsm.440208	Sharma, P., Dwivedi, S.P., Dwivedi, V.K. (2020). Physical, mechanical and thermal behaviour of high entropy materials. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 44, No. 2, pp. 127-132. https://doi.org/10.18280/acsm.440208
256	Meng, F.L., Gao, D.Y., Chen, F.Q., Huang, C.S.	Fatigue performance test and life calculation of fiber-reinforced asphalt concrete	fiber-reinforced asphalt concrete (FRAC), fatigue performance, splitting fatigue test, characteristic parameter of fiber content (FCCP)	44, 2, 133-139	https://doi.org/10.18280/acsm.440209	Meng, F.L., Gao, D.Y., Chen, F.Q., Huang, C.S. (2020). Fatigue performance test and life calculation of fiber-reinforced asphalt concrete. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 44, No. 2, pp. 133-139. https://doi.org/10.18280/acsm.440209

257	Solomon, D.G., Greco, A., Masselli, C., Gundabattini, E., Rassiah, R.S., Kuppan, R.	A review on methods to reduce weight and to increase efficiency of electric motors using lightweight materials, novel manufacturing processes, magnetic materials and cooling methods	electric motor, lightweight, magnetic materials, efficiency, cooling	44, 1, 1-14	https://doi.org/10.18280/acsm.440101	Solomon, D.G., Greco, A., Masselli, C., Gundabattini, E., Rassiah, R.S., Kuppan, R. (2020). A review on methods to reduce weight and to increase efficiency of electric motors using lightweight materials, novel manufacturing processes, magnetic materials and cooling methods. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 44, No. 1, pp. 1-14. https://doi.org/10.18280/acsm.440101
258	Rahman, N.A., Hasan, M.F., Nyakuma, B.B., Rahman, M.R.A., Rahman, M.M., Osman, S.A., Bosiran, M.A., Abdullah, T.A.T.	Characteristics of densified oil palm empty fruit bunches blended with carbon nanotube particles	EFB, palm biomass, densification, empty fruit bunch, CNT, briquettes, palm oil	44, 1, 15-22	https://doi.org/10.18280/acsm.440102	Rahman, N.A., Hasan, M.F., Nyakuma, B.B., Rahman, M.R.A., Rahman, M.M., Osman, S.A., Bosiran, M.A., Abdullah, T.A.T. (2020). Characteristics of densified oil palm empty fruit bunches blended with carbon nanotube particles. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 44, No. 1, pp. 15-22. https://doi.org/10.18280/acsm.440102
259	Zouzou, C., Keddou, M., Bouarour, B., Piasecki, A., Miklaszewski, A., Kulka, M.	Characterization and boronizing kinetics of EN-GJL-250 lamellar gray cast iron	pack-boriding, kinetics, activation energy, design of experiments, integral diffusion model	44, 1, 23-28	https://doi.org/10.18280/acsm.440103	Zouzou, C., Keddou, M., Bouarour, B., Piasecki, A., Miklaszewski, A., Kulka, M. (2020). Characterization and boronizing kinetics of EN-GJL-250 lamellar gray cast iron. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 44, No. 1, pp. 23-28. https://doi.org/10.18280/acsm.440103
260	Wu, Z.Y., Wen, G., Han, Y.	Grain growth and oxidation resistance of Fe-Cr-Al electrothermal alloy doped with yttrium	grain growth, oxidation resistance, electrothermal alloy, yttrium (Y)	44, 1, 29-36	https://doi.org/10.18280/acsm.440104	Wu, Z.Y., Wen, G., Han, Y. (2020). Grain growth and oxidation resistance of Fe-Cr-Al electrothermal alloy doped with yttrium. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 44, No. 1, pp. 29-36. https://doi.org/10.18280/acsm.440104
261	Bouhadjela, F., Bensaad, B., Cheriet, R., Belharizi, M., Belhenini, S.	Contribution to the study of plastic mechanics models of solid-solid contacts	vickers hardness, contact pressure, plastic deformation, elastic deformation, three-dimensional modeling	44, 1, 37-42	https://doi.org/10.18280/acsm.440105	Bouhadjela, F., Bensaad, B., Cheriet, R., Belharizi, M., Belhenini, S. (2020). Contribution to the study of plastic mechanics models of solid-solid contacts. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 44, No. 1, pp. 37-42. https://doi.org/10.18280/acsm.440105
262	Eftekhari, N., Kargar, M., Zamin, F.R., Rastakhiz, N., Manafi, Z.	A review on various aspects of jarosite and its utilization potentials	jarosite, iron, A. ferrooxidans, biooxidation, bioleaching	44, 1, 43-52	https://doi.org/10.18280/acsm.440106	Eftekhari, N., Kargar, M., Zamin, F.R., Rastakhiz, N., Manafi, Z. (2020). A review on various aspects of jarosite and its utilization potentials. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 44, No. 1, pp. 43-52. https://doi.org/10.18280/acsm.440106
263	Zhu, F.P., Chen, L.Y., Yao, Y.H., Zhao, Q.W., Li, J.H.	Experimental study on direct shear mechanical characteristics of warm frozen silty clay	warm frozen soil, stress-strain, direct shear, Qinghai-Tibet plateau	44, 1, 53-58	https://doi.org/10.18280/acsm.440107	Zhu, F.P., Chen, L.Y., Yao, Y.H., Zhao, Q.W., Li, J.H. (2020). Experimental study on direct shear mechanical characteristics of warm frozen silty clay. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 44, No. 1, pp. 53-58. https://doi.org/10.18280/acsm.440107
264	Kebir, T., Benguediab, M., Bouamama, M., Harchouche, Z.E.A.	Residual stress generation at crack tip under thermomechanical effects of aluminum alloy 2024-T3: Numerical modelisation	residual stress, numerical modelisation, plastic strain, thermomechanical, crack tip	44, 1, 59-65	https://doi.org/10.18280/acsm.440108	Kebir, T., Benguediab, M., Bouamama, M., Harchouche, Z.E.A. (2020). Residual stress generation at crack tip under thermomechanical effects of aluminum alloy 2024-T3: Numerical modelisation. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 44, No. 1, pp. 59-65. https://doi.org/10.18280/acsm.440108
265	Wang, C., Wang, Y.X., Meng, Z.L.	Resistance to chloride ion permeability of concrete mixed with fly ash, slag powder, and silica fume	silica fume, air content, resistance to chloride ion penetration	44, 1, 67-72	https://doi.org/10.18280/acsm.440109	Wang, C., Wang, Y.X., Meng, Z.L. (2020). Resistance to chloride ion permeability of concrete mixed with fly ash, slag powder, and silica fume. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 44, No. 1, pp. 67-72. https://doi.org/10.18280/acsm.440109
266	Supriyono, Saputro, Y., Ngafwan, Wijianto, Siswanto, W.A., Mustapa, M.S.	Particle characterization of bamboo leaves charcoal resulted by ball milling	charcoal, bamboo leaves charcoal, ball milling, particle characterization, particle size analyzer, particle morphology	44, 1, 73-77	https://doi.org/10.18280/acsm.440110	Supriyono, Saputro, Y., Ngafwan, Wijianto, Siswanto, W.A., Mustapa, M.S. (2020). Particle characterization of bamboo leaves charcoal resulted by ball milling. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 44, No. 1, pp. 73-77. https://doi.org/10.18280/acsm.440110
267	Poudeu, R.C., Ekani, C.J., Djangang, C.N., Blanchart, P.	Role of heat-treated laterite on the strengthening of geopolymer designed with laterite as solid precursor	laterite, geopolymer, heat-treatment, strengthening, network structure, construction material	43, 6, 359-367	https://doi.org/10.18280/acsm.430601	Poudeu, R.C., Ekani, C.J., Djangang, C.N., Blanchart, P. (2019). Role of heat-treated laterite on the strengthening of geopolymer designed with laterite as solid precursor. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 43, No. 6, pp. 359-367. https://doi.org/10.18280/acsm.430601
268	Hadi, M.S., Saud, S.N., Hamzah, E., Mamat, M.F.	Hydrogen embrittlement of 316L stainless steels exposed in 1.0M hydrochloric acid solution	hydrogen embrittlement, immersion test, electrochemical test, fracture behavior	43, 6, 369-375	https://doi.org/10.18280/acsm.430602	Hadi, M.S., Saud, S.N., Hamzah, E., Mamat, M.F. (2019). Hydrogen embrittlement of 316L stainless steels exposed in 1.0M hydrochloric acid solution. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 43, No. 6, pp. 369-375. https://doi.org/10.18280/acsm.430602
269	Rathanasalam, V., Perumalsami, J., Jayakumar, K.	Effect of ultrafine ground granulated blast-furnace slag (UFGGBFS) and copper slag on ambient cured geopolymer concrete	copper slag, fly ash, geopolymer concrete, rapid chloride penetration test, ultrafine ground granulated blast furnace slag	43, 6, 377-382	https://doi.org/10.18280/acsm.430603	Rathanasalam, V., Perumalsami, J., Jayakumar, K. (2019). Effect of ultrafine ground granulated blast-furnace slag (UFGGBFS) and copper slag on ambient cured geopolymer concrete. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 43, No. 6, pp. 377-382. https://doi.org/10.18280/acsm.430603
270	Zhao, G.Y., Wang, Z.G., Liu, T.C., Zhang, X.P.	Recycling of used hydrogenated nitrile butadiene rubber through powder modification by Trans-Polyoctylene rubber	hydrogenated nitrile butadiene rubber (HNBR), oil-resistant rubber hose, trans-polyoctylene rubber (TOR), rubber powder, modification, recycling	43, 6, 383-388	https://doi.org/10.18280/acsm.430604	Zhao, G.Y., Wang, Z.G., Liu, T.C., Zhang, X.P. (2019). Recycling of used hydrogenated nitrile butadiene rubber through powder modification by Trans-Polyoctylene rubber. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 43, No. 6, pp. 383-388. https://doi.org/10.18280/acsm.430604
271	Abdulmunem, A.R., Abed, A.H., Hussien, H.A., Samin, P.M., Rahman, H.A.	Improving the performance of solar air heater using high thermal storage materials	solar air heater, storage heat, phase change materials, thermal storage efficiency	43, 6, 389-394	https://doi.org/10.18280/acsm.430605	Abdulmunem, A.R., Abed, A.H., Hussien, H.A., Samin, P.M., Rahman, H.A. (2019). Improving the performance of solar air heater using high thermal storage materials. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 43, No. 6, pp. 389-394. https://doi.org/10.18280/acsm.430605
272	Durga, C.S.S., Ruben, N., Chand, M.S.R., Venkatesh, C.	Evaluation of mechanical parameters of bacterial concrete	biological agents, cracks, healing, impervious, mechanical properties	43, 6, 395-399	https://doi.org/10.18280/acsm.430606	Durga, C.S.S., Ruben, N., Chand, M.S.R., Venkatesh, C. (2019). Evaluation of mechanical parameters of bacterial concrete. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 43, No. 6, pp. 395-399. https://doi.org/10.18280/acsm.430606

273	Ali, K., Amna, R., Malik, M.I., Shamsah, S.I., Kim, K.	Impacts of different parameters on spray cooling of copper alloy B14	1D model, surface roughness, spray nozzle, full jet nozzle, water effect	43, 5, 281-286	https://doi.org/10.18280/acsm.430501	Ali, K., Amna, R., Malik, M.I., Shamsah, S.I., Kim, K. (2019). Impacts of different parameters on spray cooling of copper alloy B14. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 43, No. 5, pp. 281-286. https://doi.org/10.18280/acsm.430501
274	Subandi, Yatnikasari, S., Damaiyanti, M., Azzahra, R., Vebrian.	Effect of additional fiberglass fiber on concrete performance	fiberglass concrete, fibrous, fiber, chopped strand mat, material	43, 5, 287-292	https://doi.org/10.18280/acsm.430502	Subandi, Yatnikasari, S., Damaiyanti, M., Azzahra, R., Vebrian. (2019). Effect of additional fiberglass fiber on concrete performance. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 43, No. 5, pp. 287-292. https://doi.org/10.18280/acsm.430502
275	Lu, Y.Q., Li, M.	Solidification of heavy metals in waste incineration fly ashes with silica-alumina composite	composite, heavy metal, compressive strength, hydration products	43, 5, 293-298	https://doi.org/10.18280/acsm.430503	Lu, Y.Q., Li, M. (2019). Solidification of heavy metals in waste incineration fly ashes with silica-alumina composite. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 43, No. 5, pp. 293-298. https://doi.org/10.18280/acsm.430503
276	Hakkoum, A., Ameer, N., Bachir, R., Bedrane, S., Choukchou-Braham, A.	Activity of bimetallic gold-iron catalysts in adipic acid production by direct oxidation of cyclohexene with molecular oxygen	oxidation, cyclohexene, gold, iron, doped material, catalysts	43, 5, 299-304	https://doi.org/10.18280/acsm.430504	Hakkoum, A., Ameer, N., Bachir, R., Bedrane, S., Choukchou-Braham, A. (2019). Activity of bimetallic gold-iron catalysts in adipic acid production by direct oxidation of cyclohexene with molecular oxygen. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 43, No. 5, pp. 299-304. https://doi.org/10.18280/acsm.430504
277	Reddy, P.N., Kavyateja, B.V.	Experimental study on strength parameters of self repairing concrete	durability of structures, bacillus subtilis, calcium lactate, calcium carbonate, microbial concrete, self healing cracks, rehabilitation, modulus of rupture, urea	43, 5, 305-310	https://doi.org/10.18280/acsm.430505	Reddy, P.N., Kavyateja, B.V. (2019). Experimental study on strength parameters of self repairing concrete. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 43, No. 5, pp. 305-310. https://doi.org/10.18280/acsm.430505
278	Sun, D.L., Zhao, L.L., Liang, G.H., Zhou, H.W.	Prediction of bolted joint dynamics based on the thin-layer element of nonlinear material	bolted joint, Thin-Layer Element (TLE), stiffness, finite-element model	43, 5, 311-315	https://doi.org/10.18280/acsm.430506	Sun, D.L., Zhao, L.L., Liang, G.H., Zhou, H.W. (2019). Prediction of bolted joint dynamics based on the thin-layer element of nonlinear material. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 43, No. 5, pp. 311-315. https://doi.org/10.18280/acsm.430506
279	Dyaneshwar, S.S., Manoj, S.A., Gangadhar, D.A., Balinge, K.R., Mana, A.P., Bhagat, P.R.	Comparing the tribological properties of chloride-based and tetra fluoroborate-based ionic liquids	tribological properties, friction, lubricant, ionic liquids, surface characterization	43, 5, 314-327	https://doi.org/10.18280/acsm.430507	Dyaneshwar, S.S., Manoj, S.A., Gangadhar, D.A., Balinge, K.R., Mana, A.P., Bhagat, P.R. (2019). Comparing the tribological properties of chloride-based and tetra fluoroborate-based ionic liquids. <i>Annales de Chimie: Science des Matériaux</i> , Vol. 43, No. 5, pp. 317-327. https://doi.org/10.18280/acsm.430507
280	Kebir, T., Harchouche, Z.E.A., Elmeiche, A., Benguediab, M.	Dissipated strain energy of aluminum alloy 6061-T6 induced by low cycle fatigue	dissipated strain energy, low cycle fatigue, imposed plastic strain, hysteresis loop, Alloy 6061-66	43, 5, 329-334	https://doi.org/10.18280/acsm.430508	Kebir, T., Harchouche, Z.E.A., Elmeiche, A., Benguediab, M. (2019). Dissipated strain energy of aluminum alloy 6061-T6 induced by low cycle fatigue. <i>Annales de Chimie: Science des Matériaux</i> , Vol. 43, No. 5, pp. 329-334. https://doi.org/10.18280/acsm.430508
281	Li, Y., Zhang, Y.X., Xue, W., Zhou, Y.J., Li, B., Ding, Y.P., Zhang, R.Z.	Electroreduction of p-nitrophenol by surfactant modified electrodes	p-nitrophenol, linear sweep voltammetry, surfactant, modified electrode	43, 5, 335-340	https://doi.org/10.18280/acsm.430509	Li, Y., Zhang, Y.X., Xue, W., Zhou, Y.J., Li, B., Ding, Y.P., Zhang, R.Z. (2019). Electroreduction of p-nitrophenol by surfactant modified electrodes. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 43, No. 5, pp. 335-340. https://doi.org/10.18280/acsm.430509
282	Dwivedi, S.P., Srivastava, A.K., Maurya, N.K., Maurya, M.	Microstructure and mechanical properties of Al 6061/Al ₂ O ₃ /fly-ash composite fabricated through stir casting	hybrid composite, Al ₂ O ₃ , fly-ash, tensile strength, hardness, ductility	43, 5, 341-346	https://doi.org/10.18280/acsm.430510	Dwivedi, S.P., Srivastava, A.K., Maurya, N.K., Maurya, M. (2019). Microstructure and mechanical properties of Al 6061/Al ₂ O ₃ /fly-ash composite fabricated through stir casting. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 43, No. 5, pp. 341-346. https://doi.org/10.18280/acsm.430510
283	Karthik, D.E., Mrudunayani, P., Babu, S.V.V.K.	Influence of magnetic water on self-compacting concrete using sulphate resisting cement	magnetic water, micro steel fibers, metakaolin, compressive strength, tensile strength, self-compacting concrete, sulphate resisting cement	43, 5, 347-352	https://doi.org/10.18280/acsm.430511	Karthik, D.E., Mrudunayani, P., Babu, S.V.V.K. (2019). Influence of magnetic water on self-compacting concrete using sulphate resisting cement. <i>Annales de Chimie: Science des Matériaux</i> , Vol. 43, No. 5, pp. 347-352. https://doi.org/10.18280/acsm.430511
284	Wang, Y.H., Wu, Y.P., Zheng, C.C., Luo, Z.H.Z., Zhou, M.	Influence of foaming agent on technical performance of ceramsite aerated concrete blocks	ceramsite aerated concrete (CAC) blocks, foaming agent, mix ratio, technical performance	43, 5, 353-357	https://doi.org/10.18280/acsm.430512	Wang, Y.H., Wu, Y.P., Zheng, C.C., Luo, Z.H.Z., Zhou, M. (2019). Influence of foaming agent on technical performance of ceramsite aerated concrete blocks. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 43, No. 5, pp. 353-357. https://doi.org/10.18280/acsm.430512
285	Pouliat, A., Mathiou, C., Karantzalis, A.	Electrochemical study of MoTaNbVTi high entropy alloy in aqueous environments	electrochemistry, hank solution, high entropy alloys, sea water solution	43, 4, 199-205	https://doi.org/10.18280/acsm.430401	Pouliat, A., Mathiou, C., Karantzalis, A. (2019). Electrochemical study of MoTaNbVTi high entropy alloy in aqueous environments. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 43, No. 4, pp. 199-205. https://doi.org/10.18280/acsm.430401
286	Wang, Q.H.	Influence of mud content in sand and gravel on water reducer in concrete	mud content, water reducer, concrete, compressive strength, porosity	43, 4, 207-211	https://doi.org/10.18280/acsm.430402	Wang, Q.H. (2019). Influence of mud content in sand and gravel on water reducer in concrete. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 43, No. 4, pp. 207-211. https://doi.org/10.18280/acsm.430402
287	Subandi, Cahyono, R.H., Kusuma, C., Asnan, M.N.	Artificial aggregate lightweight structural	artificial ingredients 1, ironwood 2, lightweight 2, concrete 4, material 5	43, 4, 213-216	https://doi.org/10.18280/acsm.430403	Subandi, Cahyono, R.H., Kusuma, C., Asnan, M.N. (2019). Artificial aggregate lightweight structural. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 43, No. 4, pp. 213-216. https://doi.org/10.18280/acsm.430403
288	Ren, C., Li, K.Q., Ni, W., Zhang, S.Q.	Preparation of mine filling material from steel slag mud	Steel Slag Mud, Mine Filling Material, X-Ray diffraction (XRD), Fourier-Transform Infrared Spectroscopy (FT-IR), Nuclear Magnetic Resonance (NMR)	43, 4, 217-224	https://doi.org/10.18280/acsm.430404	Ren, C., Li, K.Q., Ni, W., Zhang, S.Q. (2019). Preparation of mine filling material from steel slag mud. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 43, No. 4, pp. 217-224. https://doi.org/10.18280/acsm.430404

289	Agarwal, M., Dixit, A., Dwivedi, S.P., Mishra, R.K.	Utilization of waste saw dust from wood industry in development of glass fiber epoxy resin hybrid green composite material	waste sawdust, green glass fibre composite, water absorption, soil degradation, acid corrosion test	43, 4, 225-234	https://doi.org/10.18280/acsm.430405	Agarwal, M., Dixit, A., Dwivedi, S.P., Mishra, R.K. (2019). Utilization of waste saw dust from wood industry in development of glass fiber epoxy resin hybrid green composite material. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 43, No. 4, pp. 225-234. https://doi.org/10.18280/acsm.430405
290	Chen, C.Y., Wang, J., Gao, Y.C.	Broad-spectrum tuning of surface plasmon resonance using palladium nanorods	palladium nanorods, absorption spectra, Surface Plasmon Resonance (SPR), Finite-Difference Time-Domain (FDTD) method	43, 4, 235-240	https://doi.org/10.18280/acsm.430406	Chen, C.Y., Wang, J., Gao, Y.C. (2019). Broad-spectrum tuning of surface plasmon resonance using palladium nanorods. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 43, No. 4, pp. 235-240. https://doi.org/10.18280/acsm.430406
291	Ourrad, S., Houmadi, Y., Ziadi, A., Mamoune, S.M.A., Lousdad, A.	Probabilistic analysis for estimating the hydrogen desorption time from steel wire rods using monte Carlo simulation	Ductility, Hydrogen Embrittlement, Spatial Variability, Stochastic Method, Karhunen-Loève	43, 4, 241-248	https://doi.org/10.18280/acsm.430407	Ourrad, S., Houmadi, Y., Ziadi, A., Mamoune, S.M.A., Lousdad, A. (2019). Probabilistic analysis for estimating the hydrogen desorption time from steel wire rods using monte Carlo simulation. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 43, No. 4, pp. 241-248. https://doi.org/10.18280/acsm.430407
292	Zhu, J., Zheng, W.Z., Sneed, L.H., Huang, Y., Xu, C.H.	Mechanical properties of plant fibers reinforced alkali-activated slag cementitious material at high temperature	Alkali-Activated Slag Cementitious Material (AASCM), Ground-Granulated Blast-Furnace Slag (GGBFS), high temperature, mechanical properties, plant fiber	43, 4, 249-255	https://doi.org/10.18280/acsm.430408	Zhu, J., Zheng, W.Z., Sneed, L.H., Huang, Y., Xu, C.H. (2019). Mechanical properties of plant fibers reinforced alkali-activated slag cementitious material at high temperature. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 43, No. 4, pp. 249-255. https://doi.org/10.18280/acsm.430408
293	Rao, T.E., Krishna, G.R., Kumar, M.V.	Investigation of microstructure and mechanical properties of MIG welded mild steel plates	metal inert gas welding, heat affected zone, steel plates is 2062, microstructure analysis, impact test	43, 4, 257-263	https://doi.org/10.18280/acsm.430409	Rao, T.E., Krishna, G.R., Kumar, M.V. (2019). Investigation of microstructure and mechanical properties of MIG welded mild steel plates. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 43, No. 4, pp. 257-263. https://doi.org/10.18280/acsm.430409
294	Rachid, C., Lebon, F., Rosu, I., Mohammed, M.	Numerical study of the surface roughness, thermal conductivity of the contact materials and interstitial fluid convection coefficient effect on the thermal contact conductance	thermal contact conductance, thermal conductivity, convection coefficient, roughness, interstitial fluid	43, 4, 265-271	https://doi.org/10.18280/acsm.430410	Rachid, C., Lebon, F., Rosu, I., Mohammed, M. (2019). Numerical study of the surface roughness, thermal conductivity of the contact materials and interstitial fluid convection coefficient effect on the thermal contact conductance. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 43, No. 4, pp. 265-271. https://doi.org/10.18280/acsm.430410
295	Chaudhury, P., Samantaray, S.	Electro thermal modelling of electrical discharge machining of Be-Cu alloy by varying fraction of energy	finite element simulation, electrical discharge machining, material removal rate, plasma flushing efficiency	43, 4, 273-279	https://doi.org/10.18280/acsm.430411	Chaudhury, P., Samantaray, S. (2019). Electro thermal modelling of electrical discharge machining of Be-Cu alloy by varying fraction of energy. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 43, No. 4, pp. 273-279. https://doi.org/10.18280/acsm.430411
296	Elhadi, B.M., Abdechafik, H., Bachir, G., Aissa, B.H.	Influence of plastic deformation of copper on the behavior of electromagnetic shielding	plastic deformation, electric field, dislocation, shielding, TEM cell, electrical conductivity	43, 3, 135-140	https://doi.org/10.18280/acsm.430301	Elhadi, B.M., Abdechafik, H., Bachir, G., Aissa, B.H. (2019). Influence of plastic deformation of copper on the behavior of electromagnetic shielding. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 43, No. 3, pp. 135-140. https://doi.org/10.18280/acsm.430301
297	Catizzzone, E., Bonura, G., Migliori, M., Braccio, G., Frusteri, F., Giordano, G.	Direct CO ₂ -to-dimethyl ether hydrogenation over CuZnZr/zeolite hybrid catalyst: new evidences on the interaction between acid and metal sites	CO ₂ recycling, dimethyl ether, heterogeneous catalysis, zeolites, nanostructured catalysts, Lewis/Bronsted acid sites, industrial chemistry processes	43, 3, 141-149	https://doi.org/10.18280/acsm.430302	Catizzzone, E., Bonura, G., Migliori, M., Braccio, G., Frusteri, F., Giordano, G. (2019). Direct CO ₂ -to-dimethyl ether hydrogenation over CuZnZr/zeolite hybrid catalyst: new evidences on the interaction between acid and metal sites. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 43, No. 3, pp. 141-149. https://doi.org/10.18280/acsm.430302
298	Zheng, M.L., Gao, S.Y., Chen, J.G., Zhang, W., Li, J.N., Chen, B.L.	Impacts of element diffusion on bond breakage of cemented carbide cutter	cemented carbide, 2.25Cr1Mo0.25V, Molecular Dynamics (MD), element diffusion, bond breakage, bonding energy	43, 3, 151-158	https://doi.org/10.18280/acsm.430303	Zheng, M.L., Gao, S.Y., Chen, J.G., Zhang, W., Li, J.N., Chen, B.L. (2019). Impacts of element diffusion on bond breakage of cemented carbide cutter. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 43, No. 3, pp. 151-158. https://doi.org/10.18280/acsm.430303
299	Zouzou, C., Keddou, M.	Boriding kinetics of FeB and Fe ₂ B layers on AISI M2 steel by the integral diffusion model	boronizing, borides, incubation times, fick's laws, integral diffusion model	43, 3, 159-164	https://doi.org/10.18280/acsm.430304	Zouzou, C., Keddou, M. (2019). Boriding kinetics of FeB and Fe ₂ B layers on AISI M2 steel by the integral diffusion model. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 43, No. 3, pp. 159-164. https://doi.org/10.18280/acsm.430304
300	Ma, Y.H., Ding, S.L., Xin, D.S., Ma, F., Xia, R.T.	Optimization of hot-pressing technique for genuine full-grain leather made of natural rubber latex	natural rubber latex, genuine full-grain leather (GFGL), hot-pressing technique, physical-mechanical properties	43, 3, 165-172	https://doi.org/10.18280/acsm.430305	Ma, Y.H., Ding, S.L., Xin, D.S., Ma, F., Xia, R.T. (2019). Optimization of hot-pressing technique for genuine full-grain leather made of natural rubber latex. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 43, No. 3, pp. 165-172. https://doi.org/10.18280/acsm.430305
301	Mohapatra, S., Sarangi, H., Mohanty, U.K., Rath, P.	Certain aspects of particle distribution in castings formed in rotating moulds	dispersal of particles, centrifugal force, viscosity profile, temperature profile, particle-rich-zone, graded properties, analytical findings	43, 3, 173-181	https://doi.org/10.18280/acsm.430306	Mohapatra, S., Sarangi, H., Mohanty, U.K., Rath, P. (2019). Certain aspects of particle distribution in castings formed in rotating moulds. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 43, No. 3, pp. 173-181. https://doi.org/10.18280/acsm.430306
302	Zhong, R.C., Peng, Z.B., Jiang, H.D.	Design of diamond drill bits with primary and secondary abrasives	primary and secondary abrasives, impregnated diamond drill bit, micron diamond powder, drilling efficiency, service life	43, 3, 183-188	https://doi.org/10.18280/acsm.430307	Zhong, R.C., Peng, Z.B., Jiang, H.D. (2019). Design of diamond drill bits with primary and secondary abrasives. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 43, No. 3, pp. 183-188. https://doi.org/10.18280/acsm.430307
303	Reddy Bellum, R., Muniraj, K., Madduru, S.R.C.	Empirical relationships on mechanical properties of class-f fly ash and GGBS based geopolymer concrete	fly ash, GGBS, modulus of elasticity, geopolymer concrete, ambient curing	43, 3, 189-197	https://doi.org/10.18280/acsm.430308	Reddy Bellum, R., Muniraj, K., Madduru, S.R.C. (2019). Empirical relationships on mechanical properties of class-f fly ash and GGBS based geopolymer concrete. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 43, No. 3, pp. 189-197. https://doi.org/10.18280/acsm.430308
304	Hadjadj, S., Boutarfaia, A., Zenkhri, L.	Structural and dielectric study of a PLNZNt ceramic material doped with chromium	perovskites, doped PZT, dielectric, XRD, dielectric response	43, 2, 69-74	https://doi.org/10.18280/acsm.430201	Hadjadj, S., Boutarfaia, A., Zenkhri, L. (2019). Structural and dielectric study of a PLNZNt ceramic material doped with chromium. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 43, No. 2, pp. 69-74. https://doi.org/10.18280/acsm.430201

305	Sonali Sri Durga, C., Ruben, N.	Assessment of various self healing materials to enhance the durability of concrete structures	bio-concrete, concrete properties, cracking, eco-friendly, mechanisms, self healing	43, 2, 75-79	https://doi.org/10.18280/acsm.430202	Sonali Sri Durga, C., Ruben, N. (2019). Assessment of various self healing materials to enhance the durability of concrete structures. <i>Annales de Chimie: Science des Materiaux</i> , Vol. 43, No. 2, pp. 75-79. https://doi.org/10.18280/acsm.430202
306	Chen, F.Q., Huang, C.S., Wang, J., Gao, D.Y.	Experimental analysis on flexural-tensile performance of polyester fiber asphalt concrete	polyester fiber asphalt concrete, flexural-tensile strength, fiber aspect ratio, fiber volume ratio, fiber content feature parameter (FCFP)	43, 2, 81-88	https://doi.org/10.18280/acsm.430203	Chen, F.Q., Huang, C.S., Wang, J., Gao, D.Y. (2019). Experimental analysis on flexural-tensile performance of polyester fiber asphalt concrete. <i>Annales de Chimie: Science des Materiaux</i> , Vol. 43, No. 2, pp. 81-88. https://doi.org/10.18280/acsm.430203
307	Zheng, B., Sui, J.L., Tan, Y.H., Zhang, L.L.	Thermal performance analysis of exterior wall materials of huizhou residential buildings adapted to local climate	climatic environment, adaptability, huizhou residential buildings, structure of exterior wall material, thermal performance	43, 2, 89-94	https://doi.org/10.18280/acsm.430204	Zheng, B., Sui, J.L., Tan, Y.H., Zhang, L.L. (2019). Thermal performance analysis of exterior wall materials of huizhou residential buildings adapted to local climate. <i>Annales de Chimie: Science des Materiaux</i> , Vol. 43, No. 2, pp. 89-94. https://doi.org/10.18280/acsm.430204
308	Aday, A.J.	Analysis of springback behavior in steel and aluminum sheets using FEM	finite element analysis, sheet metal, springback, die profile radius	43, 2, 95-98	https://doi.org/10.18280/acsm.430205	Aday, A.J. (2019). Analysis of springback behavior in steel and aluminum sheets using FEM. <i>Annales de Chimie: Science des Materiaux</i> , Vol. 43, No. 2, pp. 95-98. https://doi.org/10.18280/acsm.430205
309	Venkatesh, C., Chand, M.S.R., Nerella, R.	A state of the art on red mud as a substitutional cementitious material	substitutional cementitious material, red mud, bayer process, microstructure characterization, chloride ions diffusion, compressive strength	43, 2, 99-106	https://doi.org/10.18280/acsm.430206	Venkatesh, C., Chand, M.S.R., Nerella, R. (2019). A state of the art on red mud as a substitutional cementitious material. <i>Annales de Chimie: Science des Materiaux</i> , Vol. 43, No. 2, pp. 99-106. https://doi.org/10.18280/acsm.430206
310	Zhang, J.H., Wang, S.Q., Liu, L.Y., Zhang, X., Bi, B., Fu, D., Li, Z.Y.	Combined treatment of coking wastewater with N-Ce-TiO ₂ and modified inferior coal char	N-Ce-TiO ₂ , nanomaterials, coking wastewater, photocatalysis, modified char, biomass	43, 2, 107-114	https://doi.org/10.18280/acsm.430207	Zhang, J.H., Wang, S.Q., Liu, L.Y., Zhang, X., Bi, B., Fu, D., Li, Z.Y. (2019). Combined treatment of coking wastewater with N-Ce-TiO ₂ and modified inferior coal char. <i>Annales de Chimie: Science des Materiaux</i> , Vol. 43, No. 2, pp. 107-114. https://doi.org/10.18280/acsm.430207
311	Singh, A., Yadav, H.L., Kumar, S.	Effect of temperature on fracture parameters of aluminum alloy Al 6061: A numerical study	crack mouth opening displacement, crack tip opening displacement, stress intensity factor, ANSYS, side edge notch bend specimen	43, 2, 115-118	https://doi.org/10.18280/acsm.430208	Singh, A., Yadav, H.L., Kumar, S. (2019). Effect of temperature on fracture parameters of aluminum alloy Al 6061: A numerical study. <i>Annales de Chimie: Science des Materiaux</i> , Vol. 43, No. 2, pp. 115-118. https://doi.org/10.18280/acsm.430208
312	Peng, X.L., Sun, C., Cao, Y.B.	Tensile properties of remolded loess and undisturbed loess	remolded loess, undisturbed loess, water content, tensile strength	43, 2, 119-123	https://doi.org/10.18280/acsm.430209	Peng, X.L., Sun, C., Cao, Y.B. (2019). Tensile properties of remolded loess and undisturbed loess. <i>Annales de Chimie: Science des Materiaux</i> , Vol. 43, No. 2, pp. 119-123. https://doi.org/10.18280/acsm.430209
313	Nurulla, S., Mustafa, S., Reddy, Y.B.S.	Investigation on mechanical properties of lightweight concrete partially replacing sawdust to fine aggregate	environment, mechanical properties, saw-dust, lightweight concrete, eco-friendly	43, 2, 125-128	https://doi.org/10.18280/acsm.430210	Nurulla, S., Mustafa, S., Reddy, Y.B.S. (2019). Investigation on mechanical properties of lightweight concrete partially replacing sawdust to fine aggregate. <i>Annales de Chimie: Science des Materiaux</i> , Vol. 43, No. 2, pp. 125-128. https://doi.org/10.18280/acsm.430210
314	Verma, R., Jaiswal, A., Avchar, A.	A numerical method approach for analyzing the effects of joint orientation on stability of open-stope in metalliferous mines	metal mining, stope, joint orientation, numerical modeling, finite difference, open stoping	43, 2, 129-134	https://doi.org/10.18280/acsm.430211	Verma, R., Jaiswal, A., Avchar, A. (2019). A numerical method approach for analyzing the effects of joint orientation on stability of open-stope in metalliferous mines. <i>Annales de Chimie: Science des Materiaux</i> , Vol. 43, No. 2, pp. 129-134. https://doi.org/10.18280/acsm.430211
315	Bouteldja, M., Mezaache, E.H., Laouer, A.	Numerical study of the solidification of phase change materials in a rectangular cavity: Effects of convection and aspect ratio	heat storage, phase change material, enthalpy method, heat exchanger, liquid solide interface	43, 1, 1-9	https://doi.org/10.18280/acsm.430101	Bouteldja, M., Mezaache, E.H., Laouer, A. (2019). Numerical study of the solidification of phase change materials in a rectangular cavity: Effects of convection and aspect ratio. <i>Annales de Chimie: Science des Materiaux</i> , Vol. 43, No. 1, pp. 1-9. https://doi.org/10.18280/acsm.430101
316	Benarrache, S., Benchatti, T., Benhorma, H.A.	Formation and dissolution of carbides and nitrides in the weld seam of X70 steel by the effects of heat treatments	HSLA steels, X70, seam, Weld Metal Zone WMZ, the heat affected zone HAZ, X-ray diffraction, carbide and nitride, diffusion, backscatter	43, 1, 11-16	https://doi.org/10.18280/acsm.430102	Benarrache, S., Benchatti, T., Benhorma, H.A. (2019). Formation and dissolution of carbides and nitrides in the weld seam of X70 steel by the effects of heat treatments. <i>Annales de Chimie: Science des Materiaux</i> , Vol. 43, No. 1, pp. 11-16. https://doi.org/10.18280/acsm.430102
317	Du, E.X., Wang, Y., Sun, J.H., Yang, S.Q.	Experimental analysis on ductility of polyvinyl alcohol fibre reinforced concrete frame joints	Polyvinyl Alcohol (PVA) fibre reinforced concrete, frame joint, ductility, energy dissipation, hysteresis loop	43, 1, 17-22	https://doi.org/10.18280/acsm.430103	Du, E.X., Wang, Y., Sun, J.H., Yang, S.Q. (2019). Experimental analysis on ductility of polyvinyl alcohol fibre reinforced concrete frame joints. <i>Annales de Chimie: Science des Materiaux</i> , Vol. 43, No. 1, pp. 17-22. https://doi.org/10.18280/acsm.430103
318	Kulkarni, H.B., Kulkarni, R.M., Nadakatti, M.M., Gokak, G.D., Deshpande, A.S.	Thermal conductivity enhancement by Al ₂ O ₃ @Cu, core@shell nanoparticle suspensions in nanofluid coolant	synthesis, alumina, hamilton crosser, heat dissipation, metal-cutting nanotechnology, machining	43, 1, 23-28	https://doi.org/10.18280/acsm.430104	Kulkarni, H.B., Kulkarni, R.M., Nadakatti, M.M., Gokak, G.D., Deshpande, A.S. (2019). Thermal conductivity enhancement by Al ₂ O ₃ @Cu, core@shell nanoparticle suspensions in nanofluid coolant. <i>Annales de Chimie: Science des Materiaux</i> , Vol. 43, No. 1, pp. 23-28. https://doi.org/10.18280/acsm.430104
319	Sharma, A., Mishra, A.K., Choudhary, B.S.	Impact of blast design parameters on blasted muckpile profile in building stone quarries	stone quarries, drill-blast design parameters, muck profile, throw, drop, lateral spread	43, 1, 29-36	https://doi.org/10.18280/acsm.430105	Sharma, A., Mishra, A.K., Choudhary, B.S. (2019). Impact of blast design parameters on blasted muckpile profile in building stone quarries. <i>Annales de Chimie: Science des Materiaux</i> , Vol. 43, No. 1, pp. 29-36. https://doi.org/10.18280/acsm.430105
320	Ji, J., Liu, X.S., Tan, S.Y., Wang, M.N., Ni, W.	Preparation and performance analysis of foam-concrete sound absorbing material prepared purely from solid wastes	foam-concrete, sound absorption performance, industrial solid waste, compressive strength	43, 1, 37-42	https://doi.org/10.18280/acsm.430106	Ji, J., Liu, X.S., Tan, S.Y., Wang, M.N., Ni, W. (2019). Preparation and performance analysis of foam-concrete sound absorbing material prepared purely from solid wastes. <i>Annales de Chimie: Science des Materiaux</i> , Vol. 43, No. 1, pp. 37-42. https://doi.org/10.18280/acsm.430106

321	Bayareh, M., Nourbakhsh, A., Rouzbahani, F., Tafreshi, M.K.	Simulation of sand particles flow using a weakly compressible smoothed particle hydrodynamics method (WCSPH)	Smoothed Particle Hydrodynamics (SPH), non-newtonian fluid, weakly compressibility, sandy beach, multi phase flow, interpolation particle	43, 1, 43-51	https://doi.org/10.18280/acsm.430107	Bayareh, M., Nourbakhsh, A., Rouzbahani, F., Tafreshi, M.K. (2019). Simulation of sand particles flow using a weakly compressible smoothed particle hydrodynamics method (WCSPH). <i>Annales de Chimie: Science des Matériaux</i> , Vol. 43, No. 1, pp. 43-51. https://doi.org/10.18280/acsm.430107
322	Yao, Y.H., Wang, Y.H., Liu, Z.W., Zhu, F.P.	Effects of replacing fly ash with cutting mud on the performance of ceramsite aerated concrete	Ceramsite Aerated Concrete (CAC), cutting mud, workability, compressive strength, dry density	43, 1, 53-57	https://doi.org/10.18280/acsm.430108	Yao, Y.H., Wang, Y.H., Liu, Z.W., Zhu, F.P. (2019). Effects of replacing fly ash with cutting mud on the performance of ceramsite aerated concrete. <i>Annales de Chimie: Science des Matériaux</i> , Vol. 43, No. 1, pp. 53-57. https://doi.org/10.18280/acsm.430108
323	Amar, Z.H., Chabira, S.F., Sebaa, M., Ahmed, B.	Structural changes undergone during thermal aging and/or processing of Unstabilized, dry-blend and rigid PVC, investigated by FTIR-ATR and curve fitting	PVC, aging, ATR-FTIR, curve fitting, mechanical properties	43, 1, 59-68	https://doi.org/10.18280/acsm.430109	Amar, Z.H., Chabira, S.F., Sebaa, M., Ahmed, B. (2019). Structural changes undergone during thermal aging and/or processing of Unstabilized, dry-blend and rigid PVC, investigated by FTIR-ATR and curve fitting. <i>Annales de Chimie: Science des Matériaux</i> , Vol. 43, No. 1, pp. 59-68. https://doi.org/10.18280/acsm.430109
324	Moraci, F., Fazio, C., Errigo, M.F.	Smart tools for energy resilient city	urban performance, smart resilient city, smart tools	42, 4, 473-484	https://doi.org/10.3166/ACSM.42.473-484	Moraci, F., Fazio, C., Errigo, M.F. (2018). Smart tools for energy resilient city. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 42, No. 4, pp. 473-484. https://doi.org/10.3166/ACSM.42.473-484
325	Costa, P., Dell'Omo, P.P., Froschia, S.L.	Multistage milling and classification for improving both pellet quality and biogas production from hazelnut and olive pruning	anaerobic digestion, biogas, EN ISO 17225-2, pellet, pruning	42, 4, 485-501	https://doi.org/10.3166/ACSM.42.485-501	Costa, P., Dell'Omo, P.P., Froschia, S.L. (2018). Multistage milling and classification for improving both pellet quality and biogas production from hazelnut and olive pruning. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 42, No. 4, pp. 485-501. https://doi.org/10.3166/ACSM.42.485-501
326	Liu, Y., Zhan, M., Weng, G.Y., Wang, S.L.	Semi-active optimization control of space grid model with self-reset piezoelectric friction damper	Genetic Algorithm (GA), optimal layout, Piezoelectric Friction Damper (PFD), semi-active control	42, 4, 503-515	https://doi.org/10.3166/ACSM.42.503-515	Liu, Y., Zhan, M., Weng, G.Y., Wang, S.L. (2018). Semi-active optimization control of space grid model with self-reset piezoelectric friction damper. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 42, No. 4, pp. 503-515. https://doi.org/10.3166/ACSM.42.503-515
327	Vizzari, D., Puntorieri, P., Praticò, F., Fiamma, V., Barbaro, G.	Energy harvesting from solar and permeable pavements: A feasibility study	solar pavement, drainability, rainfall	42, 4, 517-534	https://doi.org/10.3166/ACSM.42.517-534	Vizzari, D., Puntorieri, P., Praticò, F., Fiamma, V., Barbaro, G. (2018). Energy harvesting from solar and permeable pavements: A feasibility study. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 42, No. 4, pp. 517-534. https://doi.org/10.3166/ACSM.42.517-534
328	Peng, X.L., Fan, W., Sun, C., Hao, G., Zhang, Y.	Physical and mechanical properties of interface transition zone between loess and paleosol	interface transition zone, loess paleosol, large shear test, shear characteristics	42, 4, 535-545	https://doi.org/10.3166/ACSM.42.535-545	Peng, X.L., Fan, W., Sun, C., Hao, G., Zhang, Y. (2018). Physical and mechanical properties of interface transition zone between loess and paleosol. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 42, No. 4, pp. 535-545. https://doi.org/10.3166/ACSM.42.535-545
329	Dharmana, T., Kola, K.R., Bonnada, N.N.	Nano SiO ₂ catalyzed synthesis of Imidazo[1,2-a]pyridines	nano SiO ₂ , microwave irradiation, imidazo [1,2-A] pyridines, phenacyl bromide	42, 4, 547-553	https://doi.org/10.3166/ACSM.42.547-553	Dharmana, T., Kola, K.R., Bonnada, N.N. (2018). Nano SiO ₂ catalyzed synthesis of Imidazo[1,2-a]pyridines. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 42, No. 4, pp. 547-553. https://doi.org/10.3166/ACSM.42.547-553
330	Murugan, S.S.	Processing and characterisation of LM30 alloy + graphite reinforced composite through gravity and centrifugal casting	centrifugal casting, dendritic structure, FGCMs, gravity casting	42, 4, 555-564	https://doi.org/10.3166/ACSM.42.555-564	Murugan, S.S. (2018). Processing and characterisation of LM30 alloy + graphite reinforced composite through gravity and centrifugal casting. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 42, No. 4, pp. 555-564. https://doi.org/10.3166/ACSM.42.555-564
331	Lou, P.J., Liang, S.L., Feng, M.M., Bu, Y.S., Huang, X.Y.	Load relief rupture mechanism based on particle flow rocklike material	particle flow, unload, mesoscopic rupture mechanism	42, 4, 565-576	https://doi.org/10.3166/ACSM.42.565-576	Lou, P.J., Liang, S.L., Feng, M.M., Bu, Y.S., Huang, X.Y. (2018). Load relief rupture mechanism based on particle flow rocklike material. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 42, No. 4, pp. 565-576. https://doi.org/10.3166/ACSM.42.565-576
332	Jian, Q.P.	Improvement of radial basis function neural network with accelerated particle swarm optimization for corrosion rate prediction of 3C steel in seawater environment	Radial Basis Function Neural Network (RBFNN), Seawater Environment, Accelerated Particle Swarm Optimization (APSO), prediction model, corrosion rate	42, 4, 577-587	https://doi.org/10.3166/ACSM.42.577-587	Jian, Q.P. (2018). Improvement of radial basis function neural network with accelerated particle swarm optimization for corrosion rate prediction of 3C steel in seawater environment. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 42, No. 4, pp. 577-587. https://doi.org/10.3166/ACSM.42.577-587
333	Nithish Reddy, P., Murugesan, K., Koushik, V.	Numerical analysis of MHD double diffusive nano-fluid convection in a cavity using FEM	double diffusive convection, magnetic field, nano fluid, and cavity	42, 4, 589-612	https://doi.org/10.3166/ACSM.42.589-612	Nithish Reddy, P., Murugesan, K., Koushik, V. (2018). Numerical analysis of MHD double diffusive nano-fluid convection in a cavity using FEM. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 42, No. 4, pp. 589-612. https://doi.org/10.3166/ACSM.42.589-612
334	Shiriny, A., Bayareh, M.	Numerical study of heat transfer and pressure drop in a fuel cell with porous material	fuel cell, porous material, heat transfer, pressure drop	42, 3, 323-334	https://doi.org/10.3166/ACSM.42.323-334	Shiriny, A., Bayareh, M. (2018). Numerical study of heat transfer and pressure drop in a fuel cell with porous material. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 42, No. 3, pp. 323-334. https://doi.org/10.3166/ACSM.42.323-334
335	Ferrah, A., Bouaziz, M.N.	Modeling of double diffusion with MHD on an inclined flat plate solar captor with non-uniform boundary conditions. Bouyancy ratio, Prandtl, Schmidt and Eckert numbers effects	MHD, nombres de schmidt et d'eckert, reaction chimique, rayonnement, transferts de chaleur et de masse, conditions aux limites	42, 3, 335-346	https://doi.org/10.3166/ACSM.42.335-346	Ferrah, A., Bouaziz, M.N. (2018). Modeling of double diffusion with MHD on an inclined flat plate solar captor with non-uniform boundary conditions. Bouyancy ratio, Prandtl, Schmidt and Eckert numbers effects. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 42, No. 3, pp. 335-346. https://doi.org/10.3166/ACSM.42.335-346
336	Zhang, J.T., Cai, D., Wang, T.K., Hu, Q., Li, K.M.	Experimental analysis on the effects of artificial marble waste powder on concrete performance	artificial marble waste powder, concrete, water consumption, working performance, mechanical properties	42, 3, 347-362	https://doi.org/10.3166/ACSM.42.347-362	Zhang, J.T., Cai, D., Wang, T.K., Hu, Q., Li, K.M. (2018). Experimental analysis on the effects of artificial marble waste powder on concrete performance. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 42, No. 3, pp. 347-362. https://doi.org/10.3166/ACSM.42.347-362

337	Chauhan, P.R., Kumar, R.	A comprehensive review on heat transfer enhancement and pressure drop characteristics of nanofluid flow through micro-channels	nanofluid, micro-channel, heat transfer enhancement, pressure drop	42, 3, 363-385	https://doi.org/10.3166/ACSM.42.363-385	Chauhan, P.R., Kumar, R. (2018). A comprehensive review on heat transfer enhancement and pressure drop characteristics of nanofluid flow through micro-channels. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 42, No. 3, pp. 363-385. https://doi.org/10.3166/ACSM.42.363-385
338	Huang, C.S., Zhang, Z.F., Dao, D.Y.	Thermal stress restrained specimen test on fiber enhanced asphalt concrete and thermal stress calculation models	road engineering, fiber reinforced asphalt concrete, cracking resistance performance, thermal stress restrained specimen test, fiber content characteristic parameter	42, 3, 387-403	https://doi.org/10.3166/ACSM.42.387-403	Huang, C.S., Zhang, Z.F., Dao, D.Y. (2018). Thermal stress restrained specimen test on fiber enhanced asphalt concrete and thermal stress calculation models. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 42, No. 3, pp. 387-403. https://doi.org/10.3166/ACSM.42.387-403
339	Italiano, C., Pino, L., Laganà, M., Vita, A.	Ceramic monolith- and foam-structured catalysts via in-situ combustion deposition for energetic applications	monolith, open-cell foam, methanation, reforming, structured catalysts	42, 3, 405-418	https://doi.org/10.3166/ACSM.42.405-418	Italiano, C., Pino, L., Laganà, M., Vita, A. (2018). Ceramic monolith- and foam-structured catalysts via in-situ combustion deposition for energetic applications. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 42, No. 3, pp. 405-418. https://doi.org/10.3166/ACSM.42.405-418
340	Zheng, L., Zhou, X., Zhang, X.Y.	Effects of calcination temperature and curing time on bending strength and microstructure of hydrothermally treated mordenite products	mordenite, hydrothermal treatment, bending strength, microstructure, self-humidity control	42, 3, 419-427	https://doi.org/10.3166/ACSM.42.419-427	Zheng, L., Zhou, X., Zhang, X.Y. (2018). Effects of calcination temperature and curing time on bending strength and microstructure of hydrothermally treated mordenite products. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 42, No. 3, pp. 419-427. https://doi.org/10.3166/ACSM.42.419-427
341	Michele, B., Fortunato, C., Vincenzo, S.S.	Fatigue life investigation on wind blades	composite materials, wind blades damaging, fatigue failure	42, 3, 429-440	https://doi.org/10.3166/ACSM.42.429-440	Michele, B., Fortunato, C., Vincenzo, S.S. (2018). Fatigue life investigation on wind blades. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 42, No. 3, pp. 429-440. https://doi.org/10.3166/ACSM.42.429-440
342	Prestipino, M., Chiodo, V., Maisano, S., Brusca, S., Urbani, F., Galvagno, A.	Hydrogen production from residual biomass via air-steam gasification for a bioenergy-based economy in Sicily	bioenergy, hydrogen, biomass gasification, citrus peel	42, 3, 441-452	https://doi.org/10.3166/ACSM.42.441-452	Prestipino, M., Chiodo, V., Maisano, S., Brusca, S., Urbani, F., Galvagno, A. (2018). Hydrogen production from residual biomass via air-steam gasification for a bioenergy-based economy in Sicily. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 42, No. 3, pp. 441-452. https://doi.org/10.3166/ACSM.42.441-452
343	Wang, W., Ye, P.F., Zhou, X.L., Wang, C.L., Huo, Z.K., Zhang, K.F., Meng, X.Q.	Effects of reductant type on coal-based direct reduction of iron ore tailings	iron ore tailings, coal-based direct reduction, reductant type, roasting	42, 3, 453-466	https://doi.org/10.3166/ACSM.42.453-466	Wang, W., Ye, P.F., Zhou, X.L., Wang, C.L., Huo, Z.K., Zhang, K.F., Meng, X.Q. (2018). Effects of reductant type on coal-based direct reduction of iron ore tailings. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 42, No. 3, pp. 453-466. https://doi.org/10.3166/ACSM.42.453-466
344	Souad, T., Mounir, Z., Abdelwahab, B., Salah, H.	Numerical simulation EF/VOF to study the influence of the surface condition of the formation of the slats of a nickel deposit produced by plasma spraying	finite element, formation of splats, numerical simulation, plasma spraying, volume of fluid (VOF)	42, 2, 165-180	https://doi.org/10.3166/ACSM.42.165-180	Souad, T., Mounir, Z., Abdelwahab, B., Salah, H. (2018). Numerical simulation EF/VOF to study the influence of the surface condition of the formation of the slats of a nickel deposit produced by plasma spraying. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 42, No. 2, pp. 165-180. https://doi.org/10.3166/ACSM.42.165-180
345	Sarker, T., Arifuzzaman, S.M., Reza-E-Rabbi, S.K., Ahmed, R., Khan, M.S., Ahmed, S.F.	Unsteady magnetohydrodynamic cation nanofluid flow through a moving cylinder with brownian and thermophoresis effects	cation fluid, nano particles, EFD, MHD and moving cylinder	42, 2, 181-207	https://doi.org/10.3166/ACSM.42.181-207	Sarker, T., Arifuzzaman, S.M., Reza-E-Rabbi, S.K., Ahmed, R., Khan, M.S., Ahmed, S.F. (2018). Unsteady magnetohydrodynamic cation nanofluid flow through a moving cylinder with brownian and thermophoresis effects. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 42, No. 2, pp. 181-207. https://doi.org/10.3166/ACSM.42.181-207
346	Wang, J.L., Zhang, S.H., Peng, F.F.	Influence mechanism of hard brittle grits on the drilling performance of diamond bit	diamond bit, hard brittle grits, hard rock drilling, wear morphologies	42, 2, 209-220	https://doi.org/10.3166/ACSM.42.209-220	Wang, J.L., Zhang, S.H., Peng, F.F. (2018). Influence mechanism of hard brittle grits on the drilling performance of diamond bit. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 42, No. 2, pp. 209-220. https://doi.org/10.3166/ACSM.42.209-220
347	Saouli, F., Sriti, F.Z., Abba, M., Necira, Z., Menasra, H., Beddari, A.	Structural and dielectric properties of (Bi) modified PLSZT ceramics	ferroelectric, microstructure, piezoelectric ceramics, dielectric properties	42, 2, 221-231	https://doi.org/10.3166/ACSM.42.221-231	Saouli, F., Sriti, F.Z., Abba, M., Necira, Z., Menasra, H., Beddari, A. (2018). Structural and dielectric properties of (Bi) modified PLSZT ceramics. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 42, No. 2, pp. 221-231. https://doi.org/10.3166/ACSM.42.221-231
348	Zuo, H.L., Li, Y.S., Di, J., Guo, N.	Lateral performance of timber shear walls reinforced by prestressed diagonal cross bars	diagonal cross-bar, prestress, monotonic loading test, lateral performance, deformation behavior	42, 2, 233-243	https://doi.org/10.3166/ACSM.42.233-243	Zuo, H.L., Li, Y.S., Di, J., Guo, N. (2018). Lateral performance of timber shear walls reinforced by prestressed diagonal cross bars. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 42, No. 2, pp. 233-243. https://doi.org/10.3166/ACSM.42.233-243
349	Sotehi, N., Tabet, I., Chaker, A.	Combined experimental and numerical characterization of thermal properties of lightweight concretes used in construction	lightweight concrete, construction materials, thermal properties, heat and mass transfer	42, 2, 245-258	https://doi.org/10.3166/ACSM.42.245-258	Sotehi, N., Tabet, I., Chaker, A. (2018). Combined experimental and numerical characterization of thermal properties of lightweight concretes used in construction. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 42, No. 2, pp. 245-258. https://doi.org/10.3166/ACSM.42.245-258
350	Qin, H.Y., Ouyang, Z.H., Ti, Z.Y., Zhang, F.	Experimental analysis on the optimal proportion of paste filler for a coal mine in China	filler strength, orthogonal test, multivariate statistical analysis	42, 2, 259-268	https://doi.org/10.3166/ACSM.42.259-268	Qin, H.Y., Ouyang, Z.H., Ti, Z.Y., Zhang, F. (2018). Experimental analysis on the optimal proportion of paste filler for a coal mine in China. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 42, No. 2, pp. 259-268. https://doi.org/10.3166/ACSM.42.259-268
351	Saud, A.N., Majdi, H.S., Saud, S.N.	Optimization of ceramic thermal insulation behavior using the genetic algorithm	thermal insulation, semi-dry pressing, alumina, genetic algorithm	42, 2, 269-279	https://doi.org/10.3166/ACSM.42.269-279	Saud, A.N., Majdi, H.S., Saud, S.N. (2018). Optimization of ceramic thermal insulation behavior using the genetic algorithm. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 42, No. 2, pp. 269-279. https://doi.org/10.3166/ACSM.42.269-279
352	Golneshan, A.A., Nemati, H.	Evaluation of six gas turbine evaporative cooling for Fars-Iran	evaporative cooler, gas turbine, humidification, ideality coefficient	42, 2, 281-301	https://doi.org/10.3166/ACSM.42.281-301	Golneshan, A.A., Nemati, H. (2018). Evaluation of six gas turbine evaporative cooling for Fars-Iran. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 42, No. 2, pp. 281-301. https://doi.org/10.3166/ACSM.42.281-301

353	Li, J.L., Wang, S.L., Gao, L., Hao, Y.Z., Zhan, M.	Energy dissipation of the friction sliding isolation structure with MoS ₂ as the lubricating material	friction sliding isolation, energy dissipation, mos2, seismic response, shaking table test	42, 2, 303-316	https://doi.org/10.3166/ACSM.42.303-316	Li, J.L., Wang, S.L., Gao, L., Hao, Y.Z., Zhan, M. (2018). Energy dissipation of the friction sliding isolation structure with MoS ₂ as the lubricating material. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 42, No. 2, pp. 303-316. https://doi.org/10.3166/ACSM.42.303-316
354	Swain, K., Parida, S.K., Dash, G.C.	MHD flow of viscoelastic nanofluid over a stretching sheet in a porous medium with heat source and chemical reaction	MHD, viscoelastic, nanofluid, chemical reaction, heat source/sink	42, 1, 7-21	https://doi.org/10.3166/ACSM.42.7-21	Swain, K., Parida, S.K., Dash, G.C. (2018). MHD flow of viscoelastic nanofluid over a stretching sheet in a porous medium with heat source and chemical reaction. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 42, No. 1, pp. 7-21. https://doi.org/10.3166/ACSM.42.7-21
355	Komolafe, C.A., Waheed, M.A.	Design and fabrication of a forced convection solar dryer integrated with heat storage materials	drying, solar dryer, forced convection, cocoa beans, heat storage materials	42, 1, 23-39	https://doi.org/10.3166/ACSM.42.23-39	Komolafe, C.A., Waheed, M.A. (2018). Design and fabrication of a forced convection solar dryer integrated with heat storage materials. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 42, No. 1, pp. 23-39. https://doi.org/10.3166/ACSM.42.23-39
356	Qiu, C.J., Wang, S., Liu, H., Huang, J.	In-situ pull-out tests on soil-reinforcement interface properties of reinforced soil slopes	reinforced soil slope, geogrid, in-situ pull-out test, Soil-Reinforcement Interface (SRI), S-curve	42, 1, 41-56	https://doi.org/10.3166/ACSM.42.41-56	Qiu, C.J., Wang, S., Liu, H., Huang, J. (2018). In-situ pull-out tests on soil-reinforcement interface properties of reinforced soil slopes. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 42, No. 1, pp. 41-56. https://doi.org/10.3166/ACSM.42.41-56
357	Mamatha E., Reddy C.S., Sharma R.	Effects of viscosity variation and thermal effects in squeeze films	squeeze film, reynolds equation, journal bearing, parallel and circular plates	42, 1, 57-74	https://doi.org/10.3166/ACSM.42.57-74	Mamatha, E., Reddy, C.S., Sharma, R. (2018). Effects of viscosity variation and thermal effects in squeeze films. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 42, No. 1, pp. 57-74. https://doi.org/10.3166/ACSM.42.57-74
358	Yang, P.Y., Wu, X.E., Chen, J.H.	Effect of rock mass intactness on tunnel safety and stability in blasting excavation	hydropower plant, pressure diversion tunnel, numerical simulation, the intactness index, blasting vibration velocity, acoustic wave velocity	42, 1, 75-101	https://doi.org/10.3166/ACSM.42.75-101	Yang, P.Y., Wu, X.E., Chen, J.H. (2018). Effect of rock mass intactness on tunnel safety and stability in blasting excavation. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 42, No. 1, pp. 75-101. https://doi.org/10.3166/ACSM.42.75-101
359	Vandurangi, S.K., Emani, S., Sharma, K.V., Velidi, G.	Computational analysis to determine the heat transfer coefficients for SiO ₂ /60EGW and SiO ₂ /40EGW based nano-fluids	heat transfer coefficient, nanofluids, CFD, heat transfer enhancement	42, 1, 103-114	https://doi.org/10.3166/ACSM.42.103-114	Vandurangi, S.K., Emani, S., Sharma, K.V., Velidi, G. (2018). Computational analysis to determine the heat transfer coefficients for SiO ₂ /60EGW and SiO ₂ /40EGW based nano-fluids. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 42, No. 1, pp. 103-114. https://doi.org/10.3166/ACSM.42.103-114
360	Maati A., Ouakdi E.H., Tabourot L., Balland P., Demouche M.	Modelling of the thermomechanical behaviour of FCC metals under various conditions	dislocation density, dynamic recovery, strain hardening, subgrain size, thermomechanical behaviour	42, 1, 115-127	https://doi.org/10.3166/ACSM.42.115-127	Maati A., Ouakdi E.H., Tabourot L., Balland P., Demouche M. (2018). Modelling of the thermomechanical behaviour of FCC metals under various conditions. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 42, No. 1, pp. 115-127. https://doi.org/10.3166/ACSM.42.115-127
361	Ba, J.J., Su, C.T., Li, Y.Q.	A case study on heat source mechanism of high-temperature geothermal field	geothermal field, heat source, magma chamber, granite radioactivity, Ruidian, China	42, 1, 129-147	https://doi.org/10.3166/ACSM.42.129-147	Ba, J.J., Su, C.T., Li, Y.Q. (2018). A case study on heat source mechanism of high-temperature geothermal field. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 42, No. 1, pp. 129-147. https://doi.org/10.3166/ACSM.42.129-147
362	Xi, S., Zuo, S.S., Liu, Y., Zhu, Y.L., Yang, Y.T., Gou, B.L.	Preparation of silicon-based nanowires through high-temperature annealing	silicon-based nanowires, high-temperature annealing, morphology, microstructure	42, 1, 149-158	https://doi.org/10.3166/ACSM.42.149-158	Xi, S., Zuo, S.S., Liu, Y., Zhu, Y.L., Yang, Y.T., Gou, B.L. (2018). Preparation of silicon-based nanowires through high-temperature annealing. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 42, No. 1, pp. 149-158. https://doi.org/10.3166/ACSM.42.149-158
363	Agrawal, H., Mishra, A.K.	Evolution of digital detonators as an intelligent tool for control blasting in Indian mines	electronic detonators, digital detonators, delay time accuracy, blasting	41, 3-4, 157-171	https://doi.org/10.3166/ACSM.41.157-171	Agrawal, H., Mishra, A.K. (2017). Evolution of digital detonators as an intelligent tool for control blasting in Indian mines. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 41, No. 3-4, pp. 157-171. https://doi.org/10.3166/ACSM.41.157-171
364	Nawal, A., Redouane, B., Sumeya, B., Abderrahim, C.B.	Promotional effect of iron on the activity of TiO ₂ in the production of adipic acid	oxidation, cyclohexene, adipic acid, iron, titania	41, 3-4, 173-188	https://doi.org/10.3166/ACSM.41.173-188	Nawal, A., Redouane, B., Sumeya, B., Abderrahim, C.B. (2017). Promotional effect of iron on the activity of TiO ₂ in the production of adipic acid. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 41, No. 3-4, pp. 173-188. https://doi.org/10.3166/ACSM.41.173-188
365	Ou, X.D., Pan, X., Hou, K.W., Yin, X.T.	Experiment and mechanism study on microbial improvement of dredger fill	microbial improvement, hydraulic fill, triaxial shear test, osmotic coefficient	41, 3-4, 189-208	https://doi.org/10.3166/ACSM.41.189-208	Ou, X.D., Pan, X., Hou, K.W., Yin, X.T. (2017). Experiment and mechanism study on microbial improvement of dredger fill. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 41, No. 3-4, pp. 189-208. https://doi.org/10.3166/ACSM.41.189-208
366	Kumar, S., Mishra, A.K., Choudhary, B.S.	P and S wave velocity of rocks in Jharia coalfield region for assessment of its geotechnical properties in dry, semi-saturated and saturated conditions	p-wave velocity, s-wave velocity, rock properties, coal mines, rock samples	41, 3-4, 209-223	https://doi.org/10.3166/ACSM.41.209-223	Kumar, S., Mishra, A.K., Choudhary, B.S. (2017). P and S wave velocity of rocks in Jharia coalfield region for assessment of its geotechnical properties in dry, semi-saturated and saturated conditions. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 41, No. 3-4, pp. 209-223. https://doi.org/10.3166/ACSM.41.209-223
367	Yu, D.	Experimental study on anti-seismic property of inorganic polymer concrete short columns after high temperature	inorganic polymer concrete, short column, open fire test, anti-seismic property	41, 3-4, 225-237	https://doi.org/10.3166/ACSM.41.225-237	Yu, D. (2017). Experimental study on anti-seismic property of inorganic polymer concrete short columns after high temperature. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 41, No. 3-4, pp. 225-237. https://doi.org/10.3166/ACSM.41.225-237
368	Uddin, M.J., Halim, M.A., Mohiuddin, M., Shalauddin.	Copper oxide-water nanofluid flow within an annulus shaped cavity: A numerical study on natural convective heat transfer	finite element method, nanofluid, nanoparticles, solar collector, heat transfer	41, 3-4, 239-260	https://doi.org/10.3166/ACSM.41.239-260	Uddin, M.J., Halim, M.A., Mohiuddin, M., Shalauddin. (2017). Copper oxide-water nanofluid flow within an annulus shaped cavity: A numerical study on natural convective heat transfer. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 41, No. 3-4, pp. 239-260. https://doi.org/10.3166/ACSM.41.239-260

369	Abderrahmane, H., Brahim, N., Abdelfatah, B., Noureddine, A.M.	Laminar natural convection of power-law fluid in a differentially heated inclined square cavity	natural convection, square cavity, inclination angle, power-law fluid, prandtl number	41, 3-4, 261-281	https://doi.org/10.3166/ACSM.41.261-281	Abderrahmane, H., Brahim, N., Abdelfatah, B., Noureddine, A.M. (2017). Laminar natural convection of power-law fluid in a differentially heated inclined square cavity. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 41, No. 3-4, pp. 261-281. https://doi.org/10.3166/ACSM.41.261-281
370	Liu, C.Y., Zhang, X.P., Du, L.Z., Wang, Y., Chen, B.B., Wang, J.	Evaluation of rock brittleness based on the ratio of stress drop rate to strain drop rate and peak strength	rock brittleness, ratio of stress drop rate to strain drop rate (Drop Rate Ratio), peak strength	41, 3-4, 283-298	https://doi.org/10.3166/ACSM.41.283-298	Liu, C.Y., Zhang, X.P., Du, L.Z., Wang, Y., Chen, B.B., Wang, J. (2017). Evaluation of rock brittleness based on the ratio of stress drop rate to strain drop rate and peak strength. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 41, No. 3-4, pp. 283-298. https://doi.org/10.3166/ACSM.41.283-298
371	Li, M.Q., Yang, Z.Y., Li, J.W., Zhou, S.Z.	Simulation of rock-breaking process of polycrystalline diamond compact bit under circumferential impact torque	torsional impactor, polycrystalline diamond compact (PDC) bit, stick-slip vibration, rock-breaking simulation	41, 3-4, 299-311	https://doi.org/10.3166/ACSM.41.299-311	Li, M.Q., Yang, Z.Y., Li, J.W., Zhou, S.Z. (2017). Simulation of rock-breaking process of polycrystalline diamond compact bit under circumferential impact torque. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 41, No. 3-4, pp. 299-311. https://doi.org/10.3166/ACSM.41.299-311
372	Abdulkadhim, A., Hamzah, H. K., Abed, A.M., Hassan, A.F.	Numerical study of entropy generation and natural convection heat transfer in trapezoidal enclosure with a thin baffle attached to inner wall using liquid nanofluid	natural convection, baffle, nanofluid, enclosure	41, 1-2, 7-28	https://doi.org/10.3166/ACSM.41.7-28	Abdulkadhim, A., Hamzah, H. K., Abed, A.M., Hassan, A.F. (2017). Numerical study of entropy generation and natural convection heat transfer in trapezoidal enclosure with a thin baffle attached to inner wall using liquid nanofluid. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 41, No. 1-2, pp. 7-28. https://doi.org/10.3166/ACSM.41.7-28
373	Salloomi, K.N., Al-Sumaidae, S.	Numerical validation of temperature distribution in friction stir welded aluminum 7075-T651 plates using pseudo heat transfer model	Friction Stir Welding (FSW), finite element simulation, AL 7075-T651, thermal modeling	41, 1-2, 29-38	https://doi.org/10.3166/ACSM.41.29-38	Salloomi, K.N., Al-Sumaidae, S. (2017). Numerical validation of temperature distribution in friction stir welded aluminum 7075-T651 plates using pseudo heat transfer model. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 41, No. 1-2, pp. 29-38. https://doi.org/10.3166/ACSM.41.29-38
374	Zhang, Y.X.	Form simulation and influencing factors of cadmium ions in the Longjiang river, China	form simulation, influencing factors, cadmium, longjiang river	41, 1-2, 39-50	https://doi.org/10.3166/ACSM.41.39-50	Zhang, Y.X. (2017). Form simulation and influencing factors of cadmium ions in the Longjiang river, China. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 41, No. 1-2, pp. 39-50. https://doi.org/10.3166/ACSM.41.39-50
375	Kanojiya, N.C., Shahare, A.S., Sambare, R., Sengar, K.	Differentiate between two comparative Nano fluids for enhancing the heat transfer coefficient inside the heat exchanger using inserts	heat exchangers, titanium oxide & copper oxide nanoparticles, nanofluids, heat transfer enhancement, inserts	41, 1-2, 51-60	https://doi.org/10.3166/ACSM.41.51-60	Kanojiya, N.C., Shahare, A.S., Sambare, R., Sengar, K. (2017). Differentiate between two comparative Nano fluids for enhancing the heat transfer coefficient inside the heat exchanger using inserts. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 41, No. 1-2, pp. 51-60. https://doi.org/10.3166/ACSM.41.51-60
376	Zhang, X.G., Chen, Z.X., Yi, N.P.	Improvement of high-liquid limit soil in the subgrade of mine roadway	mine road, subgrade, high liquid limit soil, admixture, improvement test	41, 1-2, 61-74	https://doi.org/10.3166/ACSM.41.61-74	Zhang, X.G., Chen, Z.X., Yi, N.P. (2017). Improvement of high-liquid limit soil in the subgrade of mine roadway. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 41, No. 1-2, pp. 61-74. https://doi.org/10.3166/ACSM.41.61-74
377	Kumar, V., Prasad, L.	Experimental analysis of heat transfer and friction for three sides roughened solar air heater	concave dimple, relative dimple pitch, relative dimple height, relative dimple depth, nusselt number, friction factor	41, 1-2, 75-107	https://doi.org/10.3166/ACSM.41.75-107	Kumar, V., Prasad, L. (2017). Experimental analysis of heat transfer and friction for three sides roughened solar air heater. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 41, No. 1-2, pp. 75-107. https://doi.org/10.3166/ACSM.41.75-107
378	Kkaled, C., Ahmed, S., Sahli, S.	Immersed borders approach for fluid-structure interaction	generalized finite element method, mobile interfaces, incompressible flows	41, 1-2, 109-126	https://doi.org/10.3166/ACSM.41.109-126	Kkaled, C., Ahmed, S., Sahli, S. (2017). Immersed borders approach for fluid-structure interaction. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 41, No. 1-2, pp. 109-126. https://doi.org/10.3166/ACSM.41.109-126
379	Zhao, Y.S., Li, P., Yin, Q., Wang, T.	Analysis on structural design and experimental effect of two kinds of hollow-through DTH hammer reverse circulation bits	reverse circulation bit, hollow-through DTH hammer reverse circulation bit, slit-type inner nozzle structure, the double-row inner nozzle structure	41, 1-2, 127-137	https://doi.org/10.3166/ACSM.41.127-137	Zhao, Y.S., Li, P., Yin, Q., Wang, T. (2017). Analysis on structural design and experimental effect of two kinds of hollow-through DTH hammer reverse circulation bits. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 41, No. 1-2, pp. 127-137. https://doi.org/10.3166/ACSM.41.127-137
380	Kan, J.G., Sen, Y., Liang, D.X.	Experimental study on the law of roof caving of pillarless gob-side entry retaining	pillarless gob-side entry retaining, roof caving, deformation characteristic, physical simulation	41, 1-2, 139-150	https://doi.org/10.3166/ACSM.41.139-150	Kan, J.G., Sen, Y., Liang, D.X. (2017). Experimental study on the law of roof caving of pillarless gob-side entry retaining. <i>Annales de Chimie - Science des Matériaux</i> , Vol. 41, No. 1-2, pp. 139-150. https://doi.org/10.3166/ACSM.41.139-150