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1	Savadogo, O.	Will the future of electric vehicles be powered by accumulators or fuel cells		23, 4, 221-224	https://doi.org/10.14447/jnmes.v23i4.a01	Savadogo, O. (2020). Will the future of electric vehicles be powered by accumulators or fuel cells? <i>Journal of New Materials for Electrochemical Systems</i> , Vol. 23, No. 4, pp. 221-224. https://doi.org/10.14447/jnmes.v23i4.a01
2	Kahia, H., Aicha, S., Herbadji, D., Herbadji, A., Bekka, S.	Neural network based diagnostic of PEM fuel cell	PEMFC, neural network, EIS	23, 4, 225-234	https://doi.org/10.14447/jnmes.v23i4.a02	Kahia, H., Aicha, S., Herbadji, D., Herbadji, A., Bekka, S. (2020). Neural network based diagnostic of PEM fuel cell. <i>Journal of New Materials for Electrochemical Systems</i> , Vol. 23, No. 4, pp. 225-234. https://doi.org/10.14447/jnmes.v23i4.a02
3	Sathish, T.	Performance improvement of base fluid heat transfer medium using nano fluid particles	heat transfer coefficient, CFX simulation, ansys simulation, nano fluid and base fluid	23, 4, 235-243	https://doi.org/10.14447/jnmes.v23i4.a03	Sathish, T. (2020). Performance improvement of base fluid heat transfer medium using nano fluid particles. <i>Journal of New Materials for Electrochemical Systems</i> , Vol. 23, No. 4, pp. 235-243. https://doi.org/10.14447/jnmes.v23i4.a03
4	Wang, G.W., Chen, H.Z., Wu, Y.H.	Influence of heat disturbance on the performance of YSZ based CO2 sensor with compound of Li2CO3-BaCO3-Ni2O3 as auxiliary sensing electrode	heat disturbance, YSZ, CO2 sensor, water vapor	23, 4, 244-251	https://doi.org/10.14447/jnmes.v23i4.a04	Wang, G.W., Chen, H.Z., Wu, Y.H. (2020). Influence of heat disturbance on the performance of YSZ based CO2 sensor with compound of Li2CO3-BaCO3-Ni2O3 as auxiliary sensing electrode. <i>Journal of New Materials for Electrochemical Systems</i> , Vol. 23, No. 4, pp. 244-251. https://doi.org/10.14447/jnmes.v23i4.a04
5	Sankar, L.P., Kamalakannan, R., Aruna, G., Meera, M.R., Vijayan, V., Sivananthan, S.	Mechanical behavior and microstructure evolution of Al-5%Cu/TiC metal matrix composite	metal matrix composite, build-up edge, machinability, hardness, SEM analysis	23, 4, 252-255	https://doi.org/10.14447/jnmes.v23i4.a05	Sankar, L.P., Kamalakannan, R., Aruna, G., Meera, M.R., Vijayan, V., Sivananthan, S. (2020). Mechanical behavior and microstructure evolution of Al-5%Cu/TiC metal matrix composite. <i>Journal of New Materials for Electrochemical Systems</i> , Vol. 23, No. 4, pp. 252-255. https://doi.org/10.14447/jnmes.v23i4.a05
6	He, Y., Wang, K., Ji, Y.H., Wu, G.Y., Zhao, M.J.	Evaluation of cumulative damage of sandstone under cyclic wetting and drying through acoustic wave parameters and resistivity testing	sandstone, cyclic wetting and drying, P-wave velocity, acoustic wave parameters and resistivity (AWPR) testing, cumulative damage	23, 4, 256-261	https://doi.org/10.14447/jnmes.v23i4.a06	He, Y., Wang, K., Ji, Y.H., Wu, G.Y., Zhao, M.J. (2020). Evaluation of cumulative damage of sandstone under cyclic wetting and drying through acoustic wave parameters and resistivity testing. <i>Journal of New Materials for Electrochemical Systems</i> , Vol. 23, No. 4, pp. 256-261. https://doi.org/10.14447/jnmes.v23i4.a06
7	Lian, Y.T., Xie, Q.Z., Zheng, M.G.	Investigation on the optimal angle of a flow-field design based on the leaf-vein structure for PEMFC	PEMFC, bio-inspired flow field, angle, fuel cell performance, mass transfer	23, 4, 262-268	https://doi.org/10.14447/jnmes.v23i4.a07	Lian, Y.T., Xie, Q.Z., Zheng, M.G. (2020). Investigation on the optimal angle of a flow-field design based on the leaf-vein structure for PEMFC. <i>Journal of New Materials for Electrochemical Systems</i> , Vol. 23, No. 4, pp. 262-268. https://doi.org/10.14447/jnmes.v23i4.a07
8	Yokeswaran, R., Vijayan, V., Karthikeyan, T., Loganathan, M., Antony, A.G.	Microstructure analysis of IS2062 plates clad with SS2594 by TIG welding process	cladding, IS2062 steel, super duplex stainless steel, SS2594, gas metal arc welding, microstructural characteristics, mechanical behaviour	23, 4, 269-273	https://doi.org/10.14447/jnmes.v23i4.a08	Yokeswaran, R., Vijayan, V., Karthikeyan, T., Loganathan, M., Antony, A.G. (2020). Microstructure analysis of IS2062 plates clad with SS2594 by TIG welding process. <i>Journal of New Materials for Electrochemical Systems</i> , Vol. 23, No. 4, pp. 269-273. https://doi.org/10.14447/jnmes.v23i4.a08
9	Si, X.R., Ding, D., Zhou, J.H., Cao, Z.W.	Inhibitory effect of vanillin on biofilm formation by multi-species wastewater culture	vanillin, biofilms, multi-species, inhibition rate	23, 4, 274-279	https://doi.org/10.14447/jnmes.v23i4.a09	Si, X.R., Ding, D., Zhou, J.H., Cao, Z.W. (2020). Inhibitory effect of vanillin on biofilm formation by multi-species wastewater culture. <i>Journal of New Materials for Electrochemical Systems</i> , Vol. 23, No. 4, pp. 274-279. https://doi.org/10.14447/jnmes.v23i4.a09
10	Zou, J., Wu, G., Jiang, W., Bao, C.W., Zou, J.Y.	Effects of TiO2 nanotube size on the performance of Li-ion Battery with TiO2 nanotube as anode material	TiO2 nanotube, size, Li-ion battery, anode material	23, 4, 280-284	https://doi.org/10.14447/jnmes.v23i4.a10	Zou, J., Wu, G., Jiang, W., Bao, C.W., Zou, J.Y. (2020). Effects of TiO2 nanotube size on the performance of Li-ion Battery with TiO2 nanotube as anode material. <i>Journal of New Materials for Electrochemical Systems</i> , Vol. 23, No. 4, pp. 280-284. https://doi.org/10.14447/jnmes.v23i4.a10
11	Amna, R., Ali, K., Malik, M.I., Shamsah, S.I.	A brief review of electrospinning of polymer nanofibers: History and main applications	electrospinning, Taylor cone, electrical jet trajectory, ultrafine fibers, electrostatic force, fiber assembly, sub-micron fibers	23, 3, 151-163	https://doi.org/10.14447/jnmes.v23i3.a01	Amna, R., Ali, K., Malik, M.I., Shamsah, S.I. (2020). A brief review of electrospinning of polymer nanofibers: History and main applications. <i>Journal of New Materials for Electrochemical Systems</i> , Vol. 23, No. 3, pp. 151-163. https://doi.org/10.14447/jnmes.v23i3.a01
12	Narayana, V.L., Gopi, A.P.	Enterotoxigenic Escherichia coli detection using the design of a biosensor	Food Industry, biological environment, enterotoxigenic, microelectrode array, vapor deposition	23, 3, 164-166	https://doi.org/10.14447/jnmes.v23i3.a02	Narayana, V.L., Gopi, A.P. (2020). Enterotoxigenic Escherichia coli detection using the design of a biosensor. <i>Journal of New Materials for Electrochemical Systems</i> , Vol. 23, No. 3, pp. 164-166. https://doi.org/10.14447/jnmes.v23i3.a02
13	Zhu, J., Zheng, W.Z., Xie, L.L., Ren, N., Zhang, Y.X., Zhang, Y.X.	Alkali-activated slag cement: Alternative adhesives for CFRP sheets bonded to concrete at elevated temperatures	Alkali-activated slag, CFRP, high temperature, mechanical properties, microstructure	23, 3, 167-176	https://doi.org/10.14447/jnmes.v23i3.a03	Zhu, J., Zheng, W.Z., Xie, L.L., Ren, N., Zhang, Y.X., Zhang, Y.X. (2020). Alkali-activated slag cement: Alternative adhesives for CFRP sheets bonded to concrete at elevated temperatures. <i>Journal of New Materials for Electrochemical Systems</i> , Vol. 23, No. 3, pp. 167-176. https://doi.org/10.14447/jnmes.v23i3.a03
14	Natarajan, P., Jegan, A., Mohanraj, M.	Wear behavior of Ni-TiO2 nano-composite coating on AISI 1022 CS by pulse electrodeposition	AISI 1022 CS, Ni-TiO2 nano composite coating, wear rate, RSM, SEM, ANOVA	23, 3, 177-181	https://doi.org/10.14447/jnmes.v23i3.a04	Natarajan, P., Jegan, A., Mohanraj, M. (2020). Wear behavior of Ni-TiO2 nano-composite coating on AISI 1022 CS by pulse electrodeposition. <i>Journal of New Materials for Electrochemical Systems</i> , Vol. 23, No. 3, pp. 177-181. https://doi.org/10.14447/jnmes.v23i3.a04
15	Dhinakaran, C.K., Senthilkumar, N., Badri, M.A., Anbuchozhayan, G.	Vibration and damping behavior of Si3N4 reinforced magnesium alloy composite for structural applications	magnesium composite, damping factor, microstructure, density, vibration	23, 3, 182-189	https://doi.org/10.14447/jnmes.v23i3.a05	Dhinakaran, C.K., Senthilkumar, N., Badri, M.A., Anbuchozhayan, G. (2020). Vibration and damping behavior of Si3N4 reinforced magnesium alloy composite for structural applications. <i>Journal of New Materials for Electrochemical Systems</i> , Vol. 23, No. 3, pp. 182-189. https://doi.org/10.14447/jnmes.v23i3.a05
16	Assam, B., Sabir, M., Abdelghani, H.	Modeling and control of power system containing PV system and SMES using sliding mode and field control strategy	Grid-PV-SMES, power integration, sliding Mode	23, 3, 190-197	https://doi.org/10.14447/jnmes.v23i3.a06	Assam, B., Sabir, M., Abdelghani, H. (2020). Modeling and control of power system containing PV system and SMES using sliding mode and field control strategy. <i>Journal of New Materials for Electrochemical Systems</i> , Vol. 23, No. 3, pp. 190-197. https://doi.org/10.14447/jnmes.v23i3.a06
17	Tian, W., Qian, Y.M., Wang, R.Z., Wang, Y.M.	Tensile performance of a novel glue-laminated cornstark scriber	cornstarks, scriber, glulam, tensile strength, mechanical performance	23, 3, 198-203	https://doi.org/10.14447/jnmes.v23i3.a07	Tian, W., Qian, Y.M., Wang, R.Z., Wang, Y.M. (2020). Tensile performance of a novel glue-laminated cornstark scriber. <i>Journal of New Materials for Electrochemical Systems</i> , Vol. 23, No. 3, pp. 198-203. https://doi.org/10.14447/jnmes.v23i3.a07
18	Chang, H., Jin, L.H.	Preparation and heat transfer performance of steel ball phase change concrete	energy pile, phase change concrete, steel ball, butyl stearate, numerical simulation	23, 3, 204-212	https://doi.org/10.14447/jnmes.v23i3.a08	Chang, H., Jin, L.H. (2020). Preparation and heat transfer performance of steel ball phase change concrete. <i>Journal of New Materials for Electrochemical Systems</i> , Vol. 23, No. 3, pp. 204-212. https://doi.org/10.14447/jnmes.v23i3.a08
19	Prakash, R., Meenakshipriya, B., Vijayan, S., Kumaravelan, R.	Performance evaluation of a solar PV/T water heater integrated with inorganic salt based energy storage medium	PV/T hybrid module, phase change materials, salt mixture, differential scanning calorimetry	23, 3, 213-220	https://doi.org/10.14447/jnmes.v23i3.a09	Prakash, R., Meenakshipriya, B., Vijayan, S., Kumaravelan, R. (2020). Performance evaluation of a solar PV/T water heater integrated with inorganic salt based energy storage medium. <i>Journal of New Materials for Electrochemical Systems</i> , Vol. 23, No. 3, pp. 213-220. https://doi.org/10.14447/jnmes.v23i3.a09
20	Ghorbanzadeh, M., Allahyari, E., Riahiifar, R., Hadavi, S.M.M.	Influence of calcination temperature on the electrochemical performance of Li1.2[Ni0.13Co0.13Mn0.54]0.985Zr0.015O2 as Li-rich cathode material for Li-ion batteries	combustion synthesis, Li-rich cathode material, calcination temperature, Li-batteries	23, 2, 61-65	https://doi.org/10.14447/jnmes.v23i2.a01	Ghorbanzadeh, M., Allahyari, E., Riahiifar, R., Hadavi, S.M.M. (2020). Influence of calcination temperature on the electrochemical performance of Li1.2[Ni0.13Co0.13Mn0.54]0.985Zr0.015O2 as Li-rich cathode material for Li-ion batteries. <i>Journal of New Materials for Electrochemical Systems</i> , Vol. 23, No. 2, pp. 61-65. https://doi.org/10.14447/jnmes.v23i2.a01
21	Yao, X.L., Chen, C.D., Chen, L., Wei, X., Cui, H.F., Xu, H.L., Fan, H.	A novel PCB77 electrochemical sensor based on nano-functionalized electrode and selected aptamer	electrochemical, aptasensor, nano-functionalized, 3,3',4,4'-tetrachlorobiphenyl	23, 2, 66-70	https://doi.org/10.14447/jnmes.v23i2.a02	Yao, X.L., Chen, C.D., Chen, L., Wei, X., Cui, H.F., Xu, H.L., Fan, H. (2020). A novel PCB77 electrochemical sensor based on nano-functionalized electrode and selected aptamer. <i>Journal of New Materials for Electrochemical Systems</i> , Vol. 23, No. 2, pp. 66-70. https://doi.org/10.14447/jnmes.v23i2.a02
22	Deepa, H.A., Madhu, G.M., Kumara Swamy, B.E., Koteswararao, J.	Estimation of photovoltaic properties of ZnO nanoparticles and CeO2-ZnO composite and electrochemical determination of adrenaline employing voltammetry studies	Adrenaline (AD), CeO2-ZnO composite, dye sensitized solar cells, photoanode, ZnO nano particles	23, 2, 71-77	https://doi.org/10.14447/jnmes.v23i2.a03	Deepa, H.A., Madhu, G.M., Kumara Swamy, B.E., Koteswararao, J. (2020). Estimation of photovoltaic properties of ZnO nanoparticles and CeO2-ZnO composite and electrochemical determination of adrenaline employing voltammetry studies. <i>Journal of New Materials for Electrochemical Systems</i> , Vol. 23, No. 2, pp. 71-77. https://doi.org/10.14447/jnmes.v23i2.a03

23	Yadav, M.K., Gangwar, C., Singh, N.K.	Low temperature synthesis and characterization of NiFe ₃ -xO ₄ (0 ≤ x ≤ 1.5) electrodes for oxygen evolution reaction in alkaline medium	Co-precipitation, nickel ferrites, SEM, XRD, electrocatalysis, activation energy	23, 2, 78-86	https://doi.org/10.14447/jnmes.v23i2.a04	Yadav, M.K., Gangwar, C., Singh, N.K. (2020). Low temperature synthesis and characterization of NiFe ₃ -xO ₄ (0 ≤ x ≤ 1.5) electrodes for oxygen evolution reaction in alkaline medium. <i>Journal of New Materials for Electrochemical Systems</i> , Vol. 23, No. 2, pp. 78-86. https://doi.org/10.14447/jnmes.v23i2.a04
24	Singh, K.N., Yadav, M.K., Parihar, R., Gangwar, C.	Egg-white mediated sol-gel synthesis of cobalt ferrites and their electrocatalytic activity towards alkaline water electrolysis	spinel ferrites, egg white, sol-gel, electrocatalysis, oxygen evolution, thermodynamic parameters	23, 2, 87-93	https://doi.org/10.14447/jnmes.v23i2.a05	Singh, K.N., Yadav, M.K., Parihar, R., Gangwar, C. (2020). Egg-white mediated sol-gel synthesis of cobalt ferrites and their electrocatalytic activity towards alkaline water electrolysis. <i>Journal of New Materials for Electrochemical Systems</i> , Vol. 23, No. 2, pp. 87-93. https://doi.org/10.14447/jnmes.v23i2.a05
25	Babu, B., Sabarinathan, C., Dharmalingam, S.	Production of aluminum 6063 metal matrix composite with 12% magnesium oxide and 5% graphite and its machinability studies using micro electrochemical machining	Metal Matrix Composites, Mechanical properties, micro ECM, ANOVA, Material removal rate, overcut	23, 2, 94-100	https://doi.org/10.14447/jnmes.v23i2.a06	Babu, B., Sabarinathan, C., Dharmalingam, S. (2020). Production of aluminum 6063 metal matrix composite with 12% magnesium oxide and 5% graphite and its machinability studies using micro electrochemical machining. <i>Journal of New Materials for Electrochemical Systems</i> , Vol. 23, No. 2, pp. 94-100. https://doi.org/10.14447/jnmes.v23i2.a06
26	Senthil, M.S., Noorul, H.A., Sathya, P.	Eco-friendly frictional joining of AA6063 and AISI304L dissimilar metals and characterisation of bimetal joints	friction, dissimilar joint, weld interface, aluminium 6063, austenitic stainless steel 304L, solid-state joining	23, 2, 101-111	https://doi.org/10.14447/jnmes.v23i2.a07	Senthil, M.S., Noorul, H.A., Sathya, P. (2020). Eco-friendly frictional joining of AA6063 and AISI304L dissimilar metals and characterisation of bimetal joints. <i>Journal of New Materials for Electrochemical Systems</i> , Vol. 23, No. 2, pp. 101-111. https://doi.org/10.14447/jnmes.v23i2.a07
27	Gunasekvi, S., Satheshkumar, P., Jeganathan, M.	Surface modification of steel by nickel coating in electrochemical process	electroless deposition, nickel coating, corrosion resistance, potential time studies, impressed voltage test	23, 2, 112-122	https://doi.org/10.14447/jnmes.v23i2.a08	Gunasekvi, S., Satheshkumar, P., Jeganathan, M. (2020). Surface modification of steel by nickel coating in electrochemical process. <i>Journal of New Materials for Electrochemical Systems</i> , Vol. 23, No. 2, pp. 112-122. https://doi.org/10.14447/jnmes.v23i2.a08
28	Rajkumar, T., Raja, K., Lingadurai, K., Vetrivel, S.D., Antony, A.G.	Interfacial microstructure analysis of AA2024 welded joints by friction stir welding	friction stir welding, AA2024 aluminium alloy, Response surface method, mechanical properties, microstructural characteristics	23, 2, 123-132	https://doi.org/10.14447/jnmes.v23i2.a09	Rajkumar, T., Raja, K., Lingadurai, K., Vetrivel, S.D., Antony, A.G. (2020). Interfacial microstructure analysis of AA2024 welded joints by friction stir welding. <i>Journal of New Materials for Electrochemical Systems</i> , Vol. 23, No. 2, pp. 123-132. https://doi.org/10.14447/jnmes.v23i2.a09
29	Al Owais, A.A., El-Hallag, I.S.	Investigation of the nucleation process of electrodeposited nanostructured cobalt films using Brj 76 lyotropic liquid crystal	nanostructured, mesoporous, electrodeposition, Brj76, cyclic voltammetry, nucleation	23, 2, 133-138	https://doi.org/10.14447/jnmes.v23i2.a10	Al Owais, A.A., El-Hallag, I.S. (2020). Investigation of the nucleation process of electrodeposited nanostructured cobalt films using Brj 76 lyotropic liquid crystal. <i>Journal of New Materials for Electrochemical Systems</i> , Vol. 23, No. 2, pp. 133-138. https://doi.org/10.14447/jnmes.v23i2.a10
30	Katuri, R., Gorantla, S.	Optimal performance of lithium-ion battery and ultra-capacitor with a novel control technique used in E-Vehicles	CBC, PI controller, PID controller, fuzzy logic controller, ANN controller DC-DC converters	23, 2, 139-150	https://doi.org/10.14447/jnmes.v23i2.a11	Katuri, R., Gorantla, S. (2020). Optimal performance of lithium-ion battery and ultra-capacitor with a novel control technique used in E-Vehicles. <i>Journal of New Materials for Electrochemical Systems</i> , Vol. 23, No. 2, pp. 139-150. https://doi.org/10.14447/jnmes.v23i2.a11
31	Ali, K., Raza, H.A., Malik, M.I., Shamsah, S.I., Amma, R., Sarfraz, A.	To study the effect of LiMn ₂ O ₄ , nanofibers of LiMn ₂ O ₄ , and graphene/polyaniline/carbon nanotube as electrode materials in the fuel cell	perovskite LiMn ₂ O ₄ , graphene/polyaniline/carbon nanotube, Fuel cell, Solid oxide fuel cell (SOFC), oxygen reduction reactions (ORR)	23, 1, 1-6	https://doi.org/10.14447/jnmes.v23i1.a01	Ali, K., Raza, H.A., Malik, M.I., Shamsah, S.I., Amma, R., Sarfraz, A. (2020). To study the effect of LiMn ₂ O ₄ , nanofibers of LiMn ₂ O ₄ , and graphene/polyaniline/carbon nanotube as electrode materials in the fuel cell. <i>Journal of New Materials for Electrochemical Systems</i> , Vol. 23, No. 1, pp. 1-6. https://doi.org/10.14447/jnmes.v23i1.a01
32	Liu, S., Liu, L., Du, Q.Z., Ma, Z.Y., Fu, Y.H., Zhao, Y.J., Li, X.W., Zhao, X.H.	Preparation of PbS/NiO composite photocathode and their applications in quantum dot sensitized solar cells	oxides, electrochemical measurements, chemical synthesis, electrochemical properties	23, 1, 7-12	https://doi.org/10.14447/jnmes.v23i1.a02	Liu, S., Liu, L., Du, Q.Z., Ma, Z.Y., Fu, Y.H., Zhao, Y.J., Li, X.W., Zhao, X.H. (2020). Preparation of PbS/NiO composite photocathode and their applications in quantum dot sensitized solar cells. <i>Journal of New Materials for Electrochemical Systems</i> , Vol. 23, No. 1, pp. 7-12. https://doi.org/10.14447/jnmes.v23i1.a02
33	Zhou, Y., Zhang, F., Wang, S.L.	Structural protection of ancient masonry pagodas based on modified epoxy resin infiltration	oxides, electrochemical measurements, chemical synthesis, electrochemical properties	23, 1, 13-19	https://doi.org/10.14447/jnmes.v23i1.a03	Zhou, Y., Zhang, F., Wang, S.L. (2020). Structural protection of ancient masonry pagodas based on modified epoxy resin infiltration. <i>Journal of New Materials for Electrochemical Systems</i> , Vol. 23, No. 1, pp. 13-19. https://doi.org/10.14447/jnmes.v23i1.a03
34	Xie, Y.H., Wang, P.Y., Deng, W.Y., Duan, Y.L., Chen, Y., Huang, Y.X.	Corrosion resistance of TiN/Al ₂ O ₃ multilayer films deposited on NiFeB surface by magnetron sputtering	NiFeB, TiN/Al ₂ O ₃ multilayer film, corrosion protection	23, 1, 20-24	https://doi.org/10.14447/jnmes.v23i1.a04	Xie, Y.H., Wang, P.Y., Deng, W.Y., Duan, Y.L., Chen, Y., Huang, Y.X. (2020). Corrosion resistance of TiN/Al ₂ O ₃ multilayer films deposited on NiFeB surface by magnetron sputtering. <i>Journal of New Materials for Electrochemical Systems</i> , Vol. 23, No. 1, pp. 20-24. https://doi.org/10.14447/jnmes.v23i1.a04
35	Kesavalu, R., Ramamoorthy, S.	Experimental studies and finite element modeling on incrementally formed AZ91A magnesium alloy	incremental forming, CNC, Finite element, ABAQUS	23, 1, 25-30	https://doi.org/10.14447/jnmes.v23i1.a05	Kesavalu, R., Ramamoorthy, S. (2020). Experimental studies and finite element modeling on incrementally formed AZ91A magnesium alloy. <i>Journal of New Materials for Electrochemical Systems</i> , Vol. 23, No. 1, pp. 25-30. https://doi.org/10.14447/jnmes.v23i1.a05
36	Manikandan, K., Kumar, P.R., Muthukumar, S., Kumar, B.S.	Effect of WEDM process parameters on surface roughness and waviness of Inconel 603 X	WEDM, Inconel 603 XL, surface roughness, waviness, DFA	23, 1, 31-35	https://doi.org/10.14447/jnmes.v23i1.a06	Manikandan, K., Kumar, P.R., Muthukumar, S., Kumar, B.S. (2020). Effect of WEDM process parameters on surface roughness and waviness of Inconel 603 XL. <i>Journal of New Materials for Electrochemical Systems</i> , Vol. 23, No. 1, pp. 31-35. https://doi.org/10.14447/jnmes.v23i1.a06
37	Loganathan, M., Dinesh, S., Vijayan, V., Karuppusamy, T., Rajkumar, S.	Investigation of mechanical behaviour on composites of Al6063 alloy with silicon, graphite and fly ash	Al6063, silicon, graphite, fly ash, mechanical properties	23, 1, 36-39	https://doi.org/10.14447/jnmes.v23i1.a07	Loganathan, M., Dinesh, S., Vijayan, V., Karuppusamy, T., Rajkumar, S. (2020). Investigation of mechanical behaviour on composites of Al6063 alloy with silicon, graphite and fly ash. <i>Journal of New Materials for Electrochemical Systems</i> , Vol. 23, No. 1, pp. 36-39. https://doi.org/10.14447/jnmes.v23i1.a07
38	Loganathan, M., Dinesh, S., Vijayan, V., Rajithkumar, M., Rajkumar, S.	Experimental investigation of tensile strength of fiber reinforced polyester by using chicken feather fiber	chicken feather fiber, pure jute, fiber composite, tensile strength, yield strength	23, 1, 40-44	https://doi.org/10.14447/jnmes.v23i1.a08	Loganathan, M., Dinesh, S., Vijayan, V., Rajithkumar, M., Rajkumar, S. (2020). Experimental investigation of tensile strength of fiber reinforced polyester by using chicken feather fiber. <i>Journal of New Materials for Electrochemical Systems</i> , Vol. 23, No. 1, pp. 40-44. https://doi.org/10.14447/jnmes.v23i1.a08
39	Thiyagarajan, K., Jayaraman, M., Vijayan, V., Ramkumar, R.	Cluster analysis of lost foam casted Al-Zn-Mg-Cu alloy with K-Mean algorithm	AA7075, foam casting, ANSYS, SEM, tensile strength.	23, 1, 45-51	https://doi.org/10.14447/jnmes.v23i1.a09	Thiyagarajan, K., Jayaraman, M., Vijayan, V., Ramkumar, R. (2020). Cluster analysis of lost foam casted Al-Zn-Mg-Cu alloy with K-Mean algorithm. <i>Journal of New Materials for Electrochemical Systems</i> , Vol. 23, No. 1, pp. 45-51. https://doi.org/10.14447/jnmes.v23i1.a09
40	Wang, F., Zheng, Q.Q., Zhang, G.Q., Wang, C.L., Cheng, F., Lin, G.	Preparation and hydration mechanism of mine cemented paste backfill material for secondary smelting water-granulated nickel slag	secondary smelting water-granulated nickel slag, cemented paste backfill material, cementing agents, composite activator, ettringite	23, 1, 52-59	https://doi.org/10.14447/jnmes.v23i1.a10	Wang, F., Zheng, Q.Q., Zhang, G.Q., Wang, C.L., Cheng, F., Lin, G. (2020). Preparation and hydration mechanism of mine cemented paste backfill material for secondary smelting water-granulated nickel slag. <i>Journal of New Materials for Electrochemical Systems</i> , Vol. 23, No. 1, pp. 52-59. https://doi.org/10.14447/jnmes.v23i1.a10
41	Xie, L., Kirk, D.W.	An improved hydroxide conversion process of anionic exchange membranes for Alka-line fuel cells		22, 4, 173-178	https://doi.org/10.14447/jnmes.v22i4.a01	Xie, L., Kirk, D.W. (2019). An improved hydroxide conversion process of anionic exchange membranes for Alka-line fuel cells. <i>Journal of New Materials for Electrochemical Systems</i> , Vol. 22, No. 4, pp. 173-178. https://doi.org/10.14447/jnmes.v22i4.a01
42	Almutairi, G., Alenazey, F., Alyousef, Y.	Impact of changing mode on the execution of 100 W solid oxide fuel cells (SOFCs)	solid oxide fuel cell, electrolysis, co-electrolysis, hydrogen produced, carbon deposition	22, 4, 179-184	https://doi.org/10.14447/jnmes.v22i4.a02	Almutairi, G., Alenazey, F., Alyousef, Y. (2019). Impact of changing mode on the execution of 100 W solid oxide fuel cells (SOFCs). <i>Journal of New Materials for Electrochemical Systems</i> , Vol. 22, No. 4, pp. 179-184. https://doi.org/10.14447/jnmes.v22i4.a02
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44	Lee, S.J., Kim, S.J., Hong, T.W.	Evaluations of discharge capacity and cycle stability on graphene-added Li _{1.9} Ni _{0.35} Mn _{0.65} O ₂ cathode by carbonate co-precipitation	Mn-rich cathode, Carbonate co-precipitation, Graphene	22, 4, 191-194	https://doi.org/10.14447/jnmes.v22i4.a04	Lee, S.J., Kim, S.J., Hong, T.W. (2019). Evaluations of discharge capacity and cycle stability on graphene-added Li _{1.9} Ni _{0.35} Mn _{0.65} O ₂ cathode by carbonate co-precipitation. <i>Journal of New Materials for Electrochemical Systems</i> , Vol. 22, No. 4, pp. 191-194. https://doi.org/10.14447/jnmes.v22i4.a04

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48	Liang, X.Y., Wang, C.L., Zhan, J.Y., Cui, X.W., Ren, Z.Z.	Study on preparation of eco-friendly autoclaved aerated concrete from low silicon and high iron ore tailings	iron ore tailings, autoclaved aerated concrete, fineness, content, tobermorite	22, 4, 224-230	https://doi.org/10.14447/jnmes.v22i4.a08	Liang, X.Y., Wang, C.L., Zhan, J.Y., Cui, X.W., Ren, Z.Z. (2019). Study on preparation of eco-friendly autoclaved aerated concrete from low silicon and high iron ore tailings. <i>Journal of New Materials for Electrochemical Systems</i> , Vol. 22, No. 4, pp. 224-230. https://doi.org/10.14447/jnmes.v22i4.a08
49	Li, J., Wang, Z.J., Zhang, K.F., Wang, C.L., Cui, X.W.	Properties and hydration mechanism of autoclaved aerated concrete containing coal gangue and fly ash	coal gangue, fly ash, autoclaved aerated concrete, tobermorite, structure of pore wall	22, 4, 231-238	https://doi.org/10.14447/jnmes.v22i4.a09	Li, J., Wang, Z.J., Zhang, K.F., Wang, C.L., Cui, X.W. (2019). Properties and hydration mechanism of autoclaved aerated concrete containing coal gangue and fly ash. <i>Journal of New Materials for Electrochemical Systems</i> , Vol. 22, No. 4, pp. 231-238. https://doi.org/10.14447/jnmes.v22i4.a09
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52	Sulaiman, M., Che Su, N., Mohamed, N.S.	Sol-gel Synthesis and Characterization of MgSO ₄ .Mg(NO ₃) ₂ – Al ₂ O ₃ Composite Solid Electrolytes	magnesium sulphate, magnesium nitrate, composite solid electrolyte, XRD, DSC	22, 3, 132-138	https://doi.org/10.14447/jnmes.v22i3.a03	Sulaiman, M., Che Su, N., Mohamed, N.S. (2019). Sol-gel synthesis and characterization of MgSO ₄ .Mg(NO ₃) ₂ – Al ₂ O ₃ composite solid electrolytes. <i>Journal of New Materials for Electrochemical Systems</i> , Vol. 22, No. 3, pp. 132-138. https://doi.org/10.14447/jnmes.v22i3.a03
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54	Tian, X.P., Zhan, J.Y., Wang, C.L., Cui, X.W.	Preparation of Gold Tailings-incorporated Composite Cementitious Materials and the Mechanism of Chlorine Solidification	gold tailings, composite cementitious materials, chloride ions, Friedel salt, ettringite	22, 3, 143-148	https://doi.org/10.14447/jnmes.v22i3.a05	Tian, X.P., Zhan, J.Y., Wang, C.L., Cui, X.W. (2019). Preparation of gold tailings-incorporated composite cementitious materials and the mechanism of chlorine solidification. <i>Journal of New Materials for Electrochemical Systems</i> , Vol. 22, No. 3, pp. 143-148. https://doi.org/10.14447/jnmes.v22i3.a05
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56	Srinivasan, V.P., Palani, P.K.	Experimental Investigation on Wire-Electro Discharge Machining of Tungsten Carbide (WC) using Response Surface Methodology (RSM)	WEDM, Tungsten Carbide, Material Removal Rate, surface roughness, RSM, DOE	22, 3, 155-158	https://doi.org/10.14447/jnmes.v22i3.a07	Srinivasan, V.P., Palani, P.K. (2019). Experimental investigation on Wire-Electro Discharge Machining of Tungsten Carbide (WC) using Response Surface Methodology (RSM). <i>Journal of New Materials for Electrochemical Systems</i> , Vol. 22, No. 3, pp. 155-158. https://doi.org/10.14447/jnmes.v22i3.a07
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59	Zain, N.F., Dzulkuarnain, N.A., Ahmad, A., Salleh, F., Mohamed, N.S.	Polymer Electrolytes Based on Novel Poly(Ethyl Methacrylate-co-Deproteinized Natural Rubber) for dye Sensitized Solar Cell Application	PEMA-co-DPNR, copolymer, magnesium iodide, DSSC	22, 2, 65-69	https://doi.org/10.14447/jnmes.v22i2.a01	Zain, N.F., Dzulkuarnain, N.A., Ahmad, A., Salleh, F., Mohamed, N.S. (2019). Polymer electrolytes based on novel poly(ethyl methacrylate-co-deproteinized natural rubber) for dye sensitized solar cell application. <i>Journal of New Materials for Electrochemical Systems</i> , Vol. 22, No. 2, pp. 65-69. https://doi.org/10.14447/jnmes.v22i2.a01
60	Wang, C.L., Ren, Z.Z., Zheng, Y.C., Ye, P.F., Zhang, K.F., Cui, X.W.	Effects of Heat Treatment System on Mechanical Strength and Crystallinity of CaO-MgO-Al ₂ O ₃ -SiO ₂ Glass-Ceramics Containing Coal Gangue and Iron Ore Tailings	coal gangue, iron ore tailings, glass-ceramics, mechanical strength, crystallinity	22, 2, 70-78	https://doi.org/10.14447/jnmes.v22i2.a02	Wang, C.L., Ren, Z.Z., Zheng, Y.C., Ye, P.F., Zhang, K.F., Cui, X.W. (2019). Effects of heat treatment system on mechanical strength and crystallinity of CaO-MgO-Al ₂ O ₃ -SiO ₂ glass-ceramics containing coal gangue and iron ore tailings. <i>Journal of New Materials for Electrochemical Systems</i> , Vol. 22, No. 2, pp. 70-78. https://doi.org/10.14447/jnmes.v22i2.a02
61	Zhang, X.P., Chen, L.X., Zheng, Y.F., Tang, H.D., Liu, Z.J.	Electrocatalytic Reduction and Detection of 4-Nitrophenol in Water at Free-Standing Cu Nanowire Electrode	Cu nanowires, Electrochemical sensor, Free-standing electrode, 4-Nitrophenol	22, 2, 79-84	https://doi.org/10.14447/jnmes.v22i2.a03	Zhang, X.P., Chen, L.X., Zheng, Y.F., Tang, H.D., Liu, Z.J. (2019). Electrocatalytic reduction and detection of 4-nitrophenol in water at free-standing Cu nanowire electrode. <i>Journal of New Materials for Electrochemical Systems</i> , Vol. 22, No. 2, pp. 79-84. https://doi.org/10.14447/jnmes.v22i2.a03
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63	Salama, F.M., Attia, K.A.M., El-Shal, M.A., Said, R.A.M., El-Olemy, A., Abdel-Raouf, A.M.	Anodic Stripping Voltammetric Methods for Determination of Breviprazole and its Electrochemical Oxidation Behavior in Pure Form and Pharmaceutical Preparations	Anodic stripping, Differential Pulse Voltammetry, Square Wave Voltammetry, Breviprazole	22, 2, 91-97	https://doi.org/10.14447/jnmes.v22i2.a05	Salama, F.M., Attia, K.A.M., El-Shal, M.A., Said, R.A.M., El-Olemy, A., Abdel-Raouf, A.M. (2019). Anodic stripping voltammetric methods for determination of breviprazole and its electrochemical oxidation behavior in pure form and pharmaceutical preparations. <i>Journal of New Materials for Electrochemical Systems</i> , Vol. 22, No. 2, pp. 91-97. https://doi.org/10.14447/jnmes.v22i2.a05
64	Deng, J.W., Cao, L.	Research on Human Motion Test Based on Biomechanical Sensors Using Electromyography and Pressure Detection Systems	PVDF biomechanical sensor, motion test	22, 2, 98-101	https://doi.org/10.14447/jnmes.v22i2.a06	Deng, J.W., Cao, L. (2019). Research on human motion test based on biomechanical sensors using electromyography and pressure detection systems. <i>Journal of New Materials for Electrochemical Systems</i> , Vol. 22, No. 2, pp. 98-101. https://doi.org/10.14447/jnmes.v22i2.a06
65	Ly, Y., Zhang, Z., Hou, Q.K., Li, X.C., Zhang, X.Y., Sun, J.L., Zhang, X., Tao, X.H.	Optimization of Sensor Arrays for the Identification of Abalone Flavoring Liquids	abalone flavoring liquid, one-way ANOVA, principal component analysis, optimization of sensor arrays	22, 2, 102-106	https://doi.org/10.14447/jnmes.v22i2.a07	Ly, Y., Zhang, Z., Hou, Q.K., Li, X.C., Zhang, X.Y., Sun, J.L., Zhang, X., Tao, X.H. (2019). Optimization of sensor arrays for the identification of abalone flavoring liquids. <i>Journal of New Materials for Electrochemical Systems</i> , Vol. 22, No. 2, pp. 102-106. https://doi.org/10.14447/jnmes.v22i2.a07
66	Kashina, S., Balleza, M., Jacobo-Azuara, A., Galindo, R.	Production of Carbonaceous Materials with High Capacitance by Electrochemical Technique	electrochemical synthesis, carbon material, electrochemical supercapacitor	22, 2, 107-111	https://doi.org/10.14447/jnmes.v22i2.a08	Kashina, S., Balleza, M., Jacobo-Azuara, A., Galindo, R. (2019). Production of carbonaceous materials with high capacitance by electrochemical technique. <i>Journal of New Materials for Electrochemical Systems</i> , Vol. 22, No. 2, pp. 107-111. https://doi.org/10.14447/jnmes.v22i2.a08

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68	Harikiran, G., Moorthi, N.S.V., Karthikeyan, D., Thanikaikarasan, S.	Influence of Annealing Temperature on the Characteristics of Chemical Bath Deposited Zinc Sulphide Thin Films for Solar Cell Applications	Zinc Sulphide thin films, Solution Concentration, Annealing Temperature, Transmittance	22, 1, 1-4	https://doi.org/10.14447/jnmes.v22i1.a01	Harikiran, G., Moorthi, N.S.V., Karthikeyan, D., Thanikaikarasan, S. (2019). Influence of annealing temperature on the characteristics of chemical bath deposited zinc sulphide thin films for solar cell applications. <i>Journal of New Materials for Electrochemical Systems</i> , Vol. 22, No. 1, pp. 1-4. https://doi.org/10.14447/jnmes.v22i1.a01
69	Sathish, T., Chandramohan, D., Vijayan, V., Sebastian, P.J.	Investigation on Microstructural and Mechanical Properties of Cu Reinforced with SiC Composites Prepared by Microwave Sintering Process	Copper, silicon carbide, graphite, hardness test, compressive test, microstructure test	22, 1, 5-9	https://doi.org/10.14447/jnmes.v22i1.a02	Sathish, T., Chandramohan, D., Vijayan, V., Sebastian, P.J. (2019). Investigation on microstructural and mechanical properties of Cu reinforced with SiC composites prepared by microwave sintering process. <i>Journal of New Materials for Electrochemical Systems</i> , Vol. 22, No. 1, pp. 5-9. https://doi.org/10.14447/jnmes.v22i1.a02
70	Dinesh, S., Parameswaran, P., Vijayan, V., Thanikaikarasan, S., Rajaguru, K.	Study on Microstructure and Properties of Al-Cu-Li Alloys for Electrochemical Applications	Aluminium alloy, stir casting, microstructure, scanning electron microscope, intermetallics, structural applications	22, 1, 11-14	https://doi.org/10.14447/jnmes.v22i1.a03	Dinesh, S., Parameswaran, P., Vijayan, V., Thanikaikarasan, S., Rajaguru, K. (2019). Study on microstructure and properties of Al-Cu-Li alloys for electrochemical applications. <i>Journal of New Materials for Electrochemical Systems</i> , Vol. 22, No. 1, pp. 11-14. https://doi.org/10.14447/jnmes.v22i1.a03
71	Sundaraj, M., Subramani, V.	Corrosion Investigation on Magnesium AZ91D alloy coated with EN-Phosphate and Nano additives (ZnO) and its Feasibility in Engine Applications	magnesium AZ91D, electroless nickel coating, neutral salt spray test, corrosion, engines	22, 1, 15-19	https://doi.org/10.14447/jnmes.v22i1.a04	Sundaraj, M., Subramani, V. (2019). Corrosion investigation on magnesium AZ91D alloy coated with EN-Phosphate and nano additives (ZnO) and its feasibility in engine applications. <i>Journal of New Materials for Electrochemical Systems</i> , Vol. 22, No. 1, pp. 15-19. https://doi.org/10.14447/jnmes.v22i1.a04
72	Roseline, S., Paramasivam, V., Parameswaran, P., Antony, A.G.	Evaluation of Mechanical Properties and Stability of Al 6061 with Addition of ZnO and Al ₂ O ₃	Al6061, ZnO & Al ₂ O ₃ , mechanical behavior, fracture toughness, thermal stability	22, 1, 21-23	https://doi.org/10.14447/jnmes.v22i1.a05	Roseline, S., Paramasivam, V., Parameswaran, P., Antony, A.G. (2019). Evaluation of mechanical properties and stability of Al 6061 with addition of ZnO and Al ₂ O ₃ . <i>Journal of New Materials for Electrochemical Systems</i> , Vol. 22, No. 1, pp. 21-23. https://doi.org/10.14447/jnmes.v22i1.a05
73	Vasanthkumar, P., Senthilkumar, N., Palanikumar, K., Rathinam, N.	Influence of Seashell Addition on Thermo-Mechanical Properties of Nylon 66 Polymer Matrix Composite	sea shell particulate, reinforcement, nylon 66, differential scanning calorimetry (DSC), dynamic mechanical analysis (DMA) and thermal gravimetric analysis (TGA)	22, 1, 25-31	https://doi.org/10.14447/jnmes.v22i1.a06	Vasanthkumar, P., Senthilkumar, N., Palanikumar, K., Rathinam, N. (2019). Influence of seashell addition on thermo-mechanical properties of nylon 66 polymer matrix composite. <i>Journal of New Materials for Electrochemical Systems</i> , Vol. 22, No. 1, pp. 25-31. https://doi.org/10.14447/jnmes.v22i1.a06
74	Dinesh, S., Vijayan, V., Thanikaikarasan, S., Sebastian, P.J.	Productivity and Quality Enhancement in Powder Mixed Electrical Discharge Machining for OHNS Die Steel by Utilization of ANN and RSM Modeling	powder mixed electrical discharge machining (PMEDM), material removal rate (MRR), surface roughness (SR), re-sponse surface methodology (RSM), artificial neural network (ANN), powder concentration	22, 1, 33-43	https://doi.org/10.14447/jnmes.v22i1.a07	Dinesh, S., Vijayan, V., Thanikaikarasan, S., Sebastian, P.J. (2019). Productivity and quality enhancement in powder mixed electrical discharge machining for OHNS die steel by utilization of ANN and RSM modeling. <i>Journal of New Materials for Electrochemical Systems</i> , Vol. 22, No. 1, pp. 33-43. https://doi.org/10.14447/jnmes.v22i1.a07
75	Yokeswaran, R., Vijayan, V., Karthikeyan, T., Kumar, B.S., Kumar, G.S.	Comprehensive Analysis of Surface Modification Process Parameters by Using Tungsten Inert Gas Welding Process	duplex stainless steel, rockwell C hardness tester, scanning electron microscope, microstructure	22, 1, 45-49	https://doi.org/10.14447/jnmes.v22i1.a08	Yokeswaran, R., Vijayan, V., Karthikeyan, T., Kumar, B.S., Kumar, G.S. (2019). Comprehensive analysis of surface modification process parameters by using tungsten inert gas welding process. <i>Journal of New Materials for Electrochemical Systems</i> , Vol. 22, No. 1, pp. 45-49. https://doi.org/10.14447/jnmes.v22i1.a08
76	Velmurugan, V., Paramasivam, V., Thanikaikarasan, S., Vaikundraj, T.P.	Experimental Investigation on Material Characteristics of NR Mount and Fluorocarbon Blended NRMounts for Diesel Engine On-Road Vehicle	Diesel engine, rubber mount, fluorocarbon, vibration, noise	22, 1, 51-57	https://doi.org/10.14447/jnmes.v22i1.a09	Velmurugan, V., Paramasivam, V., Thanikaikarasan, S., Vaikundraj, T.P. (2019). Experimental investigation on material characteristics of NR mount and fluorocarbon blended NRMounts for diesel engine on-road vehicle. <i>Journal of New Materials for Electrochemical Systems</i> , Vol. 22, No. 1, pp. 51-57. https://doi.org/10.14447/jnmes.v22i1.a09
77	Meza, A.F., Campos, J., López, N.R., Romero, L.C., Sebastian, P.J., Thanikaikarasan, S.	Characterization of Graphene Powder / Wireglue / Silver Paint Electrodes for Application in Microbial Fuel Cells	microbial fuel cell, graphene, wireglue, electrodes	22, 1, 59-63	https://doi.org/10.14447/jnmes.v22i1.a10	Meza, A.F., Campos, J., López, N.R., Romero, L.C., Sebastian, P.J., Thanikaikarasan, S. (2019). Characterization of graphene powder / wireglue / silver paint electrodes for application in microbial fuel cells. <i>Journal of New Materials for Electrochemical Systems</i> , Vol. 22, No. 1, pp. 59-63. https://doi.org/10.14447/jnmes.v22i1.a10
78	Liu, M.X., Huang, H.	Ionic Conduction Characteristics of C8minX Ionic Liquids and Their Hybrids Towards Application to Charge and Lithium-Ion Storage	ionic liquids, conduction, hybrids, molar composition, activation energy, energy storage	21, 4, 199-203	https://doi.org/10.14447/jnmes.v21i4.a01	Liu, M.X., Huang, H. (2018). Ionic conduction characteristics of C8minX ionic liquids and their hybrids towards application to charge and lithium-ion storage. <i>Journal of New Materials for Electrochemical Systems</i> , Vol. 21, No. 4, pp. 199-203. https://doi.org/10.14447/jnmes.v21i4.a01
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81	Yan, X.Y., Wang, Y.S., Ma, Z.L.	Preparation and Electrochemical Performance of Cobalt Oxides	cobalt oxides, calcination temperature, electrochemical properties, preparation	21, 4, 217-220	https://doi.org/10.14447/jnmes.v21i4.a04	Yan, X.Y., Wang, Y.S., Ma, Z.L. (2018). Preparation and electrochemical performance of cobalt oxides. <i>Journal of New Materials for Electrochemical Systems</i> , Vol. 21, No. 4, pp. 217-220. https://doi.org/10.14447/jnmes.v21i4.a04
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83	Ozel, K., Koslay, I., Atilgan, A., Atli, A., Yildiz, Z.K., Yildiz, A.	Performance Improvement of Dye-Sensitized Solar Cells with AZO and BZO Blocking Layers	blocking layer, dopant, natural dye, dye-sensitized solar cell	21, 4, 227-331	https://doi.org/10.14447/jnmes.v21i4.a06	Ozel, K., Koslay, I., Atilgan, A., Atli, A., Yildiz, Z.K., Yildiz, A. (2018). Performance improvement of Dye-Sensitized solar cells with AZO and BZO blocking layers. <i>Journal of New Materials for Electrochemical Systems</i> , Vol. 21, No. 4, pp. 227-231. https://doi.org/10.14447/jnmes.v21i4.a06
84	Rahman, M.Y.A., Samsuri, S.A.M., Umar, A.A.	Dye-sensitized Solar Cell Utilizing TiO ₂ -sulphur Composite Photoanode: Influence of Sulphur Content	Dye-sensitized solar cells, photoanode, TiO ₂ -sulphur composite	21, 4, 233-237	https://doi.org/10.14447/jnmes.v21i4.a07	Rahman, M.Y.A., Samsuri, S.A.M., Umar, A.A. (2018). Dye-sensitized solar cell utilizing TiO ₂ -sulphur composite photoanode: influence of sulphur content. <i>Journal of New Materials for Electrochemical Systems</i> , Vol. 21, No. 4, pp. 233-237. https://doi.org/10.14447/jnmes.v21i4.a07
85	Rajan, N., Thanigaivelan R.R., Muthurajan, K.G.	Effect of Electrochemical Machining Process Parameters on Anisotropic Property of Metal Matrix Composites Al7075	electrochemical machining, acidified electrolyte, anisotropic, metal matrix composites, blind holes	21, 4, 239-242	https://doi.org/10.14447/jnmes.v21i4.a08	Rajan, N., Thanigaivelan R.R., Muthurajan, K.G. (2018). Effect of electrochemical machining process parameters on anisotropic property of metal matrix composites Al7075. <i>Journal of New Materials for Electrochemical Systems</i> , Vol. 21, No. 4, pp. 239-242. https://doi.org/10.14447/jnmes.v21i4.a08
86	Kharal, H.S., Kamran, M., Qureshi, S.A., Ahmad, W.	Dichlorodifluoromethane (R12)/CO ₂ /Air Gas Mixtures as a Competent Gaseous Insulator as Surrogate of SF ₆	R12/CO ₂ mixtures, insulating material, dielectric properties, environment friendly	21, 4, 243-248	https://doi.org/10.14447/jnmes.v21i4.a09	Kharal, H.S., Kamran, M., Qureshi, S.A., Ahmad, W. (2018). Dichlorodifluoromethane (R12)/CO ₂ /Air Gas mixtures as a competent gaseous insulator as surrogate of SF ₆ . <i>Journal of New Materials for Electrochemical Systems</i> , Vol. 21, No. 4, pp. 243-248. https://doi.org/10.14447/jnmes.v21i4.a09
87	Palisoc, S., Canquin, C., Natividad, M.	Heavy Metals in Philippine Rice (Oryza Sativa) using Nafion-[Ru(bpy) ₃] ²⁺ -Gold Nanoparticles Modified Glassy Carbon Electrodes	differential pulse voltammetry, heavy metals, nafion, ruthenium bipyridyl, gold nanoparticles	21, 3, 133-139	https://doi.org/10.14447/jnmes.v21i3.543	Palisoc, S., Canquin, C., Natividad, M. (2018). Heavy metals in philippine rice (oryza sativa) using nafion-[Ru(bpy) ₃] ²⁺ -gold nanoparticles modified glassy carbon electrodes. <i>Journal of New Materials for Electrochemical Systems</i> , Vol. 21, No. 3, pp. 133-139. https://doi.org/10.14447/jnmes.v21i3.543
88	Navaneethkrishnan, B., Nithyanandan, N., Adalarasan, R., Santhakumar, M., Kumar, P.S.M.	Optimal Performance Evaluation of Energy Efficient Residential Air Conditioning System with Nanofluid-based Intercooler using Taguchi-based Response Surface Methodology	optimal performance, nanofluid, intercooler, air conditioner, coefficient of performance, energy conservation	21, 3, 141-150	https://doi.org/10.14447/jnmes.v21i3.455	Navaneethkrishnan, B., Nithyanandan, N., Adalarasan, R., Santhakumar, M., Kumar, P.S.M. (2018). Optimal performance evaluation of energy efficient residential air conditioning system with nanofluid-based intercooler using taguchi-based response surface methodology. <i>Journal of New Materials for Electrochemical Systems</i> , Vol. 21, No. 3, pp. 141-150. https://doi.org/10.14447/jnmes.v21i3.455

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90	Palisoc, S., Canquin, C., Natividad, M.	PVF-PPy Composite as Support Material for Facile Synthesis of Pt@PVP-PPy Catalyst and Its Electro-catalytic Activity Towards Formic Acid Oxidation	Pt particles, Poly(vinylferrocenium), Poly(pyrrrole), formic acid electrooxidation, supported catalyst	21, 3, 157-162	https://doi.org/10.14447/jnmes.v21i3.502	Palisoc, S., Canquin, C., Natividad, M. (2018). PVF-PPy composite as support material for facile synthesis of Pt@PVP-PPy catalyst and its electrocatalytic activity towards formic acid oxidation. <i>Journal of New Materials for Electrochemical Systems</i> , Vol. 21, No. 3, pp. 157-162. https://doi.org/10.14447/jnmes.v21i3.502
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92	Thangadurai, V.	Meta Heuristic Based Simulated Annealing Approach for Design of U-shaped Manufacturing Assembly Line Balancing	u-shaped assembly line, line balancing, sharing, multi-objective, simulated annealing algorithm	21, 3, 171-178	https://doi.org/10.14447/jnmes.v21i3.a07	Thangadurai, V. (2018). Meta heuristic based simulated annealing approach for design of u-shaped manufacturing assembly line balancing. <i>Journal of New Materials for Electrochemical Systems</i> , Vol. 21, No. 3, pp. 171-178. https://doi.org/10.14447/jnmes.v21i3.a07
93	Sathish, T.	Performance Measurement On Diesel and Cerium Oxide In Diesel On CI Engine	brake thermal efficiency, nanoparticles, cerium oxide, diesel blends, gases, reduced emission	21, 3, 179-185	https://doi.org/10.14447/jnmes.v21i3.a08	Sathish, T. (2018). Performance measurement on diesel and cerium oxide in diesel on CI engine. <i>Journal of New Materials for Electrochemical Systems</i> , Vol. 21, No. 3, pp. 179-185. https://doi.org/10.14447/jnmes.v21i3.a08
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99	Shin, J.W., Son, J.T.	Improvement of Electrochemical Performance and Thermal Stability by Reducing Residual Lithium Hydroxide on LiNi0.8Co0.1Mn0.1O2 Active Material using Amorphous Carbon Coating	lithium secondary battery, cathode material, carbon coating, C12H2O11	21, 2, 71-75	https://doi.org/10.14447/jnmes.v21i2.412	Shin, J.W., Son, J.T. (2018). Improvement of electrochemical performance and thermal stability by reducing residual lithium hydroxide on LiNi0.8Co0.1Mn0.1O2 active material using amorphous carbon coating. <i>Journal of New Materials for Electrochemical Systems</i> , Vol. 21, No. 2, pp. 71-75. https://doi.org/10.14447/jnmes.v21i2.412
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101	Pang, S., Chen, W., Yang, Z., Liu, Z., Fan, X., Xu, X.	Nanocomposite Sheets Composed of Polyaniline Nanoparticles and Graphene Oxide as Electrode Materials for High-performance Supercapacitor	nanocomposite, polyaniline, graphene oxide sheets, electrode materials, high-performance	21, 2, 97-102	https://doi.org/10.14447/jnmes.v21i2.469	Pang, S., Chen, W., Yang, Z., Liu, Z., Fan, X., Xu, X. (2018). Nanocomposite sheets composed of polyaniline nanoparticles and graphene oxide as electrode materials for high-performance supercapacitor. <i>Journal of New Materials for Electrochemical Systems</i> , Vol. 21, No. 2, pp. 97-102. https://doi.org/10.14447/jnmes.v21i2.469
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104	Özlitok, F., Yakar, E.	Optical and Electrochemical Properties of PB-ZnO and PB-ZnO/MWCNT Nanocomposite Films Deposited by Chemical Bath	Prussian blue films, ZnO structure, multi-walled carbon nanotubes, optical properties, electrochemical properties, chemical bath deposition	21, 2, 119-126	https://doi.org/10.14447/jnmes.v21i2.462	Özlitok, F., Yakar, E. (2018). Optical and electrochemical properties of PB-ZnO and PB-ZnO/MWCNT nanocomposite films deposited by chemical bath. <i>Journal of New Materials for Electrochemical Systems</i> , Vol. 21, No. 2, pp. 119-126. https://doi.org/10.14447/jnmes.v21i2.462
105	Kadem, S., Etefagh, R., Arabi, H.	Synthesis and Characterization of Zn doped Li(Li0.21Mn0.54Ni0.125Co0.125)O2 as the Layer Materials For Battery Applications	lithium-ion battery, Li(Li0.21Mn0.54Ni0.125Co0.125)O2, cathode, sol gel, nanopowders	21, 2, 127-131	https://doi.org/10.14447/jnmes.v21i2.489	Kadem, S., Etefagh, R., Arabi, H. (2018). Synthesis and characterization of Zn doped Li(Li0.21Mn0.54Ni0.125Co0.125)O2 as the layer materials for battery applications. <i>Journal of New Materials for Electrochemical Systems</i> , Vol. 21, No. 2, pp. 127-131. https://doi.org/10.14447/jnmes.v21i2.489
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108	Jeyakumar, P., Thanikaikarasan, S., Natarajan, B., Mahalingam, T., Ixtilco, L.	Growth of Copper Telluride Thin Films using Electrodeposition	copper telluride, cyclic voltammetry, SnO2, optical absorption analysis	21, 1, 15-19	https://doi.org/10.14447/jnmes.v21i1.516	Jeyakumar, P., Thanikaikarasan, S., Natarajan, B., Mahalingam, T., Ixtilco, L. (2018). Growth of copper telluride thin films using electrodeposition. <i>Journal of New Materials for Electrochemical Systems</i> , Vol. 21, No. 1, pp. 15-19. https://doi.org/10.14447/jnmes.v21i1.516
109	Sandoval-González, A., Gombou, S.A.	Analysis of Redox Reactions on P-Sn based Nano-catalysts for Direct Methanol Fuel Cell Applications	catalysts, methanol oxidation, oxygen reduction, P-SnO2/C, Pt/Sn1/C, direct methanol fuel cell	21, 1, 21-28	https://doi.org/10.14447/jnmes.v21i1.517	Sandoval-González, A., Gombou, S.A. (2018). Analysis of redox reactions on P-Sn based nano-catalysts for direct methanol fuel cell applications. <i>Journal of New Materials for Electrochemical Systems</i> , Vol. 21, No. 1, pp. 21-28. https://doi.org/10.14447/jnmes.v21i1.517
110	Nagajothi, A.J., Karman, R., Thanikaikarasan, S., Sebastian, P.J.	Electrochemical and Thermal Properties of PEO-LITFSI based Gel Polymer Electrolytes with the Effect of Plasticizer and Filler for Lithium-sulfur Batteries	PEO, composite gel polymer electrolyte, ceramic filler, interfacial stability, transport properties	21, 1, 29-32	https://doi.org/10.14447/jnmes.v21i1.518	Nagajothi, A.J., Karman, R., Thanikaikarasan, S., Sebastian, P.J. (2018). Electrochemical and thermal properties of PEO-LITFSI based gel polymer electrolytes with the effect of plasticizer and filler for lithium-sulfur batteries. <i>Journal of New Materials for Electrochemical Systems</i> , Vol. 21, No. 1, pp. 29-32. https://doi.org/10.14447/jnmes.v21i1.518

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112	Priva, D.C., Daniel, T., Henry, J., Mohanraj, K., Sivakumar, G., Thanikaikarasan, S., Sebastian, P.J.	Thermally Deposited Sb2S3: Bi Thin Films for Solar Cell Absorber	antimony sulfide, bismuth, thin film, dielectric	21, 1, 37-42	https://doi.org/10.14447/jmes.v21i1.520	Priva, D.C., Daniel, T., Henry, J., Mohanraj, K., Sivakumar, G., Thanikaikarasan, S., Sebastian, P.J. (2018). Thermally deposited Sb2S3: Bi thin films for solar cell absorber. <i>Journal of New Materials for Electrochemical Systems</i> , Vol. 21, No. 1, pp. 37-42. https://doi.org/10.14447/jmes.v21i1.520
113	Carbajal, F.G., García, M.A., Gamboa, S.A.	Study of Ethanol Electrooxidation Reaction at Room Temperature on Nanometric Pt-Ru, Pt-Sn and Pt-Ru-Sn in Direct Alcohol Fuel Cells	nanostructured electrocatalyst, Pt-Ru-Sn/C, ethanol electrooxidation, direct ethanol fuel cell	21, 1, 43-49	https://doi.org/10.14447/jmes.v21i1.522	Carbajal, F.G., García, M.A., Gamboa, S.A. (2018). Study of Ethanol electrooxidation reaction at room temperature on nanometric Pt-Ru, Pt-Sn and Pt-Ru-Sn in direct alcohol fuel cells. <i>Journal of New Materials for Electrochemical Systems</i> , Vol. 21, No. 1, pp. 43-49. https://doi.org/10.14447/jmes.v21i1.522
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