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NOMENCLATURE

u, v	Velocity components along the x and y directions respectively
M	Magnetic parameter
Kp	Porosity parameter
Pr	Prandtl number
R	Thermal radiation parameter
Q	heat generation/absorption parameter
Ec	Eckert number
S	Mass transfer parameter
Le	Lewis number
Nb	Brownian motion parameter
Nt	Thermophoresis parameter
γ	Chemical reaction parameter
Bi_t	Thermal Biot number
Bi_c	Concentration Biot number
ρ_f	Density of the fluid
μ_f	Dynamic viscosity
k_f	Thermal conductivity of the fluid
h_f	Convective heat transfer coefficient
h_m	Convective mass transfer coefficient
D_m	Molecular diffusivity
σ	Electrical conductivity
Kp^*	Permeability parameter
α_f	Thermal diffusivity
D_B	Brownian diffusion coefficient
D_T	Thermophoretic diffusion coefficient
T	Fluid temperature
T_∞	Ambient fluid temperature
C	Nanoparticle concentration
C_∞	Ambient nanoparticle concentration
C_p	Specific heat at constant pressure
Q_0	Heat generation/absorption parameter
K_n	Solutal concentration of order n
$\tau = \frac{(\rho C)_p}{(\rho C)_f}$	Ratio of effective heat capacity of nanoparticles and heat capacity of the fluid