

NOMENCLATURE

B	Uniform magnetic field
x'	Co-ordinate along the wall
x	Dimensionless Co-ordinate along the walls
y'	Co-ordinate perpendicular of the walls
y	Dimensionless co-ordinate perpendicular to the walls
t'	Time
t	Dimensionless Time
u, v, w	Velocity components
T'	Temperature
θ	Dimensionless Temperature
C'	Concentration
C	Dimensionless Concentration
Re	Reynolds number
u_w	Velocity of the stretching surface
k_4	Thermal conductivity
C_p	Specific heat at constant pressure
κ	Permeability parameter
k_1	Permeability of porous medium
Ω	Constant rotation velocity
Kr	Rotation parameter
k'	Chemical reaction rate
R_γ	Chemical reaction Parameter
ωt	Phase angle
M	Magnetic field parameter
Pr	Prandtl number
ω	Frequency parameter
\emptyset	Dimensionless nano particles volume fraction
σ^*	Stefan–Boltzmann constant

k^*	mean absorption coefficient
β	Volumetric coefficient of thermal expansion
β_c	Volumetric coefficient of concentration expansion
η	similarity variable
f	dimensionless stream function
S	Squeeze number
Ec	Eckert number
δ	Dimensional less time dependent length
Nb	Brownian motion parameter
Nt	Thermophoresis parameter
N_u	Nusselt Number
C_f	Skin Friction
S_h	Sherwood Number
T_w	Temperature of the lower plate
T_L	Temperature of the upper plate
C_w	Concentration of the lower plate
C_L	Concentration of the upper plate
D	Diffusion coefficient
D_c	Mass diffusion coefficient
D_T	Thermal diffusion coefficient
Gr	Thermal Grashof number
Gm	Mass Grashof number
Sc	Schmidt number
H	Heat generation Parameter
q_r	Radiative heat flux
u_0	Uniform velocity of the plate
g	Acceleration due to gravity
L	Distance between two walls
φ	Porosity of the porous medium
μ	Dynamic viscosity

ν	Kinematic viscosity of the fluid
ρ	Fluid density
σ	Electrical conductivity
D_T	Thermal diffusion coefficient
Sr	Soret Number
γ	Casson fluid parameter
B	Magnetic induction vector
P	Pressure
J	Electric current density
E	Electric field
H_1	Magnetic field intensity
D	Co-efficient of chemical molecular diffusivity
Q	Heat source /Sink per unit mass
μ_e	Magnetic permeability
$J \times B$	Lorentz force per unit volume
Φ	Viscous dissipation per unit mass
$\frac{J^2}{\sigma}$	Joulean heat per unit mass
\vec{F}	External forces per unit mass
\vec{E}	Electrostatic field vector
$\vec{\tau}$	Viscous stress
e_{ij}	Rate of strain tensor
ρ_e	Charge density
ξ	Coefficient of bulk viscosity
L	Characteristic Length
h	Conductive thermal resistance
h_m	Conductive Concentration resistance

Subscripts

f	Fluid phase
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nf Nano-fluid

s Solid phase