angle. Optik - International Journal for Light and Electron Optics 149: 359-371.

NOMENCLATURE

Ec	Eckert number,$\mu_f \alpha_f k/\left[\left(\rho c_p\right)_f q'' L^3\right]$
C_P	specific heat at constant pressure
Gr	Grashof number
NU_{lo}	local Nusselt number
NU_{ave}	average Nusselt number
Pr	Prandtl number,ϑ_f/α_f
T	fluid temperature
u,v,w	velocity component in the x-direction and y-direction and z-direction
X,Y,Z	dimensionless space coordinates
U,V,W	c
K	thermal conductivity
Ra	Rayleigh Number $\left(= g\beta_f q'' L^4/k\alpha_f \vartheta_f\right)$

Greek symbols

α	thermal diffusivity
ϑ	kinematic viscosity
$\emptyset$	volume fraction
μ	dynamic viscosity
θ	dimensionless temperature
ρ	fluid density
β	thermal expansion coefficient

Subscripts

c	cold
h	hot
nf	nanofluid
f	base fluid
n	nanoparticle
in	inlet
out	outlet