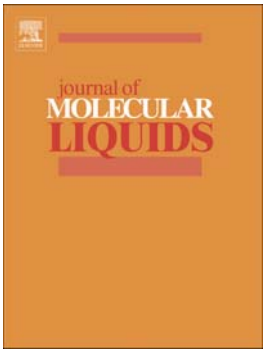

Thermally radiative stagnation point flow of Maxwell nanofluid due to unsteady convectively heated stretched surface

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Thermally radiative stagnation point flow of Maxwell nanofluid due to unsteady convectively heated stretched surface

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Abstract: Human society is greatly dependent on solar energy. Electricity, water and heat can be achieved from solar power. Sustainable energy formation now a days is a serious issue in the development of human society. Solar energy is deliberated one of the greatest source of renewable energy. This energy is 2000 times larger than the utilization of human society. Thus the intention of present analysis is to construct a model for nonlinear radiation effects in the two-dimensional flow of nanomaterial. Here radiative flow of Maxwell nanoliquid by an unsteady stretched sheet is considered. Nonlinear version of thermal radiation is considered. Recently suggested condition employing volume fraction of nanoparticle at the surface to be controlled passively rather than actively is utilized. Dimensional nonlinear system is solved for convergent series solutions. Features of different emerging parameters are analyzed and argued. Numerical values of local Nusselt number are also calculated and discussed.

Keywords: Thermal radiation; Stagnation point flow; Maxwell liquid; Solar energy; Non

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