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Heat carrier nanofluids in solar still – A review

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ABSTRACT

This review discusses heat transfer enhancement of various nanoparticles in solar stills. The thermal conductivities of various nanoparticles, that is, Al_2O_3, CuO, Cu_2O, ZnO, SnO_2, TiO_2, SiO_2, Cu, Fe_2O_3, SiC, and multiwalled carbon nanotubes suspended in water with different volume fractions are analyzed. The factors involved in the thermal conductivity and distillation enhancement of nanofluids are discussed. This review is crucial because thermal conductivity enhancement augments the fresh water yield.

Keywords: Solar still; Desalination; Nanofluids; Heat transfer

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