Abstract

Miniaturized and highly efficient thermal systems represent the current requirements of the automobile, industrial as well as residential cooling and heating systems. But the performance of the modern thermal systems is primarily limited by the lower conductivity of the fluids being used in these systems. As a result of research and technology advancements, the concept of Nanofluids was introduced. The term Nanofluids broadly refers to the fluids with particles of average size less than 100 nm dispersed in it. The presence of these particles drastically alters
the thermal and transport properties of the base fluid due to which there is a wide scope of their applications. This paper provides a summarized review of the current research in this field with main focus on preparation, stability and thermal properties of the Nanofluids.

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Index Terms

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