





Special Issue Reprint

# Heat Transfer and Fluid Dynamics in Boiling Systems

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Boiling is one of the most effective heat removal regimes, and is thus widely used in various industries and technologies, including, but not limited to, heat and nuclear energies, thermal desalination, heat pipes, heat exchangers, etc. Moreover, boiling is generally recognized as the best method for the thermal management of high-heat-flux devices, such as high-power electronics. Efforts to understand pool and flow boiling mechanisms and discover and develop methods to improve boiling efficiency are ongoing. This Special Issue presents a collection of carefully selected papers that delve into heat transfer and fluid dynamics during boiling phenomena. The Special Issue comprises state-of-the-art experimental and numerical research contributions, with a specific emphasis on recent advancements in enhancing heat transfer during boiling under different conditions, especially through novel approaches for surface modification for heating purposes.





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