

Special Issue

Liquid-Solid Interfacial Phenomena on Complex Surfaces

Message from the Guest Editors

Liquid–solid interfacial phenomena play a paramount role in numerous applications within various fields, from industrial cooling to biomedical applications. Liquid cooling processes, particularly those relying on liquid phase change, strongly depend on the surface properties. Within this scope, great effort has been put toward the development of complex surfaces with custom-made topographic and wetting characteristics to enhance heat and mass transfer. Major applications address pool and flow boiling heat transfer enhancement at both the macro and micro scale, as well as biomedical applications in so-called labs-on-chips. While significant advances in micro- and nano-fabrication techniques have allowed the development of numerous strategies for the manufacturing of complex surfaces with custom-made wetting properties, the accurate description of the governing transport phenomena and of the appropriate wetting models has not yet been achieved, and still requires significant numerical and experimental work...

Guest Editors

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Symmetry is ultimately the most important concept in natural sciences. It is not surprising then that very basic and fundamental research achievements are related to symmetry. For instance, the Nobel Prize in Physics 1979 (Glashow, Salam, Weinberg) was received for a unified symmetry description of electromagnetic and weak interactions, while the Nobel Prize in Physics 2008 (Nambu, Kobayashi, Maskawa) was received for the discovery of the mechanism of spontaneous breaking of symmetry, including CP symmetry. Our journal is named *Symmetry* and it manifests its fundamental role in nature.

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