



Advances in Optical Microcavities

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Message from the Guest Editors

Dear Colleagues,

Nowadays, advances in optical microcavities (MCs) are manifested in both fundamental and applied research, due to their high-quality factors and small mode volumes, which enable light-matter interactions to be significantly enhanced. Among the various recent developments in MCs, nonlinear photonics, quantum cavity electrodynamics, cavity optomechanics and microlasers stand out. However, MCs can be configured for a wide variety of chemical or biomolecular sensing applications. In addition, MCs can enhance light absorption in organic solar cells and significantly improve device performance. Moreover, the resonance effects of confined light in MCs can be used to increase the radiation pressure force of electromagnetic-wave-driven micromotors.

We are inviting researchers to contribute their latest research advances in microcavities and related phenomena, including newly emerging material systems with unique optical features, such as metallo-dielectric crystals, hybrid materials, high-index semiconducting materials, graphene membrane, etc.

