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Recent Advances in Halide Perovskite Nanomaterials

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Deadline for manuscript submissions:

23 May 2025

Message from the Guest Editors

Halide perovskites have been widely studied for their excellent electrical and optical properties, including tunable band gap, high charge carrier mobility and lowcost fabrication using low-temperature solution process. Specifically, halide perovskite nanomaterials, including 0D quantum dots, 1D nanowires, 2D nanoplatelets and their combinations with mixed dimensions, have the advantages of both halide perovskites and nanomaterials and are emerging materials for optoelectronic devices. During the past few years, significant progress has been made toward the controlled synthesis of halide perovskite nanomaterials and the fabrication of high-performance optoelectronic devices. However, several major issues remain to be solved for the practical application of halide perovskites, for example, the synthesis of phase pure nanomaterials, the defect passivation of perovskite nanomaterials and the design of lead-free perovskite materials and the large-scale synthesis for industrial applications. This Special Issue aims to cover the recent progress on the design, synthesis and applications of halide perovskite nanomaterials.









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Message from the Editor-in-Chief

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