



materials



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Nanophotonics Materials and Devices

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Message from the Guest Editor

Nanophotonics materials and devices have become an extremely active research field, encompassing novel nanomaterials, physical phenomena and design concepts. In these areas, design scenarios typically attempt to confine optoelectronic functionality into the smallest possible volume to meet specifications in terms of integration density and device performance unparalleled by the state-of-the-art technologies. This approach is based on the fundamental assumption that proper functionality is viable at the nanoscale and accessible from an environment whose scale is larger by several orders of magnitude. Nanophotonics scientists are actually faced with devices that are operated at their physical limit and therefore have to rely on holistic designs when exploiting new material properties to bypass restrictions posed by conventional optical designs and interfacing problems. The objective of this Special Issue is to address these conceptual challenges while highlighting novel trends in nanophotonics materials and devices, including recent progress in modeling and component development.



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Special Issue



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Message from the Editor-in-Chief

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