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Xene Materials and Biomedical Applications of Nanostructures

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Message from the Guest Editors

Xene materials are two-dimensional materials that emerged recently with great popularity. Xene materials also address new discoveries in fundamental science. The quantum mechanical approach in Xene materials and 3D nanostructures has made them unique from classical concepts, natural phenomena and applications. The thermal stability and electrical properties of these materials make them capable of producing 2D and 3D superconductors. The response of these materials to light and their light-matter interactions are exploited in order to use them in optoelectronic and photonic devices. The transformation of technological scales from mega to nano is all based on Xene and 3D nanostructured materials. One of the most important areas of their applications is the biomedical and healthcare industry. Xenes and 3D nanostructured materials have been regarded promising agents for biosensors, bioimaging, therapeutic delivery, and theranostics, as well as in other new bioapplications. Due to the high demands of the new methods, techniques and devices in diagnostic and therapeutic applications, Xene and 3D nanostructured materials are continuously receiving attention from researchers











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Message from the Editor-in-Chief

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