



Hierarchical Architectures of Micro and Nanoparticles

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Message from the Guest Editor

The controlled interaction and aggregation of particles as well as their connection with biomolecules and synthetic macro- and supramolecules are important tasks towards the realizing of this vision. The fabrication of non-spherical nanoparticles with extraordinary high size and shape homogeneity, surface functionalization and controlled interaction between particles with each other and with molecules, the coupling of different materials, and the designing of nanosystems integrating stiff and movable elements are important challenges. It is expected that in future the border line between material on the one side and functional devices on the other side will disappear. Particles will become equipped with functions and act as partially autonomous devices, on the one hand. Devices will shrink their dimensions down to the nanoscale while retaining their specific functional features and operational autonomy. The construction of hierarchically organized particle assemblies is a crucial step in this direction and will be addressed by the Special Issue here announced.

- nanoparticles
- addressed bonding
- selective interaction
- hierarchical assembling





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Message from the Editor-in-Chief

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