Special Issue

Hierarchical Architectures of Micro and Nanoparticles

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

Guest Editor

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Message from the Editor-in-Chief

As the world of science becomes ever more specialized, researchers may lose themselves in the deep forest of the ever increasing number of subfields being created. This open access journal Applied Sciences has been started to link these subfields, so researchers can cut through the forest and see the surrounding, or quite distant fields and subfields to help develop his/her own research even further with the aid of this multi-dimensional network.

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