Special Issue

Room above the Bottom: Materials between the Nano and Micro Scale

Message from the Guest Editor

Giant nanoparticles, multilevel fibers, and layered functional films are a few examples of materials organized just outside the strictly defined nanoscale. Artificial counterparts are comparatively primitive: their size makes them small for top-down preparation, large for bottom-up synthesis, and very challenging for characterization techniques such as NMR or XRD. Still, the development of such structures—also called "nanoarchitectonics"—is producing brilliant practical results (e.g., metamaterials), as well as deep insight into transport and guided synthesis phenomena.

This Special Issue is focused on artificial and synthetic materials in the 20–500 nm scale, including:

- Synthesis of novel structures, from scratch or by the modification of natural systems;
- Specific properties due to their size or architecture;
- Application of a characterization technique to investigate them;
- Approaches to modelling or simulation at this scale;
- Insight on basic phenomena garnered from the study of such systems.

Dr. Michele Mauri

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 multidimensional network.

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