Special Issue

Enzymes in Materials Science

Message from the Guest Editor

In recent decades, the utilization of enzymes for special synthetic purposes has become more and more popular in numerous fields of applied sciences. The examples of technical applications for enzymes are ever increasing, especially in food processing, medical applications and chemical syntheses, such as the production of biopolymers from natural resources. In the wake of these developments, the research on bioinspired and biomimetic materials has also had an enormous trajectory, and especially the value of enzymes in materials science has been widely acknowledged in this context. With this Special Issue, we aim to bring together all relevant fields of research to give additional momentum and visibility to the manifold approaches of enzyme application in cutting-edge materials science. This includes the application of inherent enzymatic activity, e.g., at surfaces or in coatings, as well as bioinspired materials buildup, guided by enzymes. Additional important aspects are basic research challenges, like the availability of enzymes at acceptable costs, the examination of enzymatic reaction pathways and the understanding of natural archetypes.

Guest Editor

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