

Special Issue

Multifunctional Coatings, Their Derivative Methodologies and Multidisciplinary Applications

Message from the Guest Editor

Coatings in the form of films on the surface of any material significantly improve the functional properties and form a protective layer against corrosion, water proofing, anti-icing and deicing, friction, antibacterial, antifouling, radiation/thermal resistance, self-cleaning and thermal management properties. This Special Issue shall focus on the current trends, theories, challenges, production, and fabrication cost–benefit analysis, novel methodologies utilized in improving uniform coating thickness, mechanism of adhesion on the material surface, composition, rheology, and several more. 1. Synthesis and characterization of multifunctional specialty coatings; 2. Nano/micro material-based coatings; 3. Deposition, functionalization, growth process, and mechanism; 4. Current research, patent trends, applications of thin-film-based synthesis and their techniques; 5. 2D/3D film assembly material synthesis and applications; 6. Surface, interface modification by high energy deposition processes, including plasmas; 7. Multifunctional material properties and their effects; 8. Novel Janus particle-based multilayered composite films.

Guest Editor

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About the Journal

Message from the Editorial Board

Now more than ever, research is asked to deliver knowledge and technologies to solve the major challenges faced by our society. The development of new materials and devices for (without the ambition to be exhaustive) energy, health and food technology, together with the need for establishing processes that reduce the impact on critical resources and the environment, is indeed in the spotlight of most contemporary research. Surface science and engineering play a key role in this regard, with an incredible potential in delivering new and deep scientific understanding and technical solutions essential to solve most of the major societal challenges.

Coatings is a well-established, peerreviewed, online journal dedicated to the vibrant field of surface science and engineering. Coatings publishes original research articles that report cutting-edge results and review papers that make the point on the hottest research topics.

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