Special Issue

Laser-Assisted Coating Deposition

Message from the Guest Editors

Lasers have become a universal tool for material and device processing, and new laser processing techniques are constantly being developed for these applications. As a new type of laser processing technology, laser-assisted deposition utilizes the plasma or thermal effect generated by a laser to generate multi-state interactions in air, vacuum, confined spaces, interfaces, and different materials. During the pulse gap, these interaction products are deposited on the surface of the device, forming new compositions and substances. This technology brings new possibilities for material generation, micro-device processing, and laser micro-/nano-processing methods. The scope of this Special Issue includes, but is not limited to, the following:

- Laser texture deposition technology;
- Laser-induced plasma-assisted deposition technology;
- Pulsed laser-assisted deposition and pulsed laser deposition;
- Other new technologies.

Guest Editors

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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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