



Laser Surface Engineering: Technologies and Applications

Guest Editors:

Dr. Xingsheng Wang

College of Engineering, Nanjing
Agricultural University, Nanjing
210031, China

Dr. Youqiang Xing

School of Mechanical
Engineering, Southeast
University, Nanjing 211189, China

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Message from the Guest Editors

Dear Colleagues,

We invite you to submit your technological contributions and manuscripts to this Special Issue, “Laser Surface Engineering: Technologies and Applications”.

Laser surface treatment can modify the surface composition and properties of materials in a highly controllable and flexible way, and their applications have begun to transition from the laboratory to the engineering. The unique feature of this technology is the ability to add extensive surface functionality by texturing, structuring, micro/nano machining, cleaning, polishing or the shock peening of diverse materials, accompanied by protective coatings. Accordingly, improving surface tribological, joining/adhesion properties and the creation of superhydrophobic, superhydrophilic, iceophobic, oleophobic, and colorful surfaces promote their applications for one-of-a-kind products.

This Special Issue will attract state-of-the-art contributions related to novel laser surface treatment technologies and coating techniques with characterization relevant to surface modification along with unique fabrication methodologies for evolving manufacturing fields.





Editors-in-Chief

Prof. Dr. Wei Pan

State Key Laboratory of New
Ceramics and Fine Processing,
School of Materials Science &
Engineering, Tsinghua University,
Beijing 100084, China

Dr. Emerson Coy

NanoBioMedical Centre, Adam
Mickiewicz University in Poznań,
ul. Wszechnicy Piastowskiej 3, 61-
614 Poznań, Poland

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.

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Coatings Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

Tel: +41 61 683 77 34
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