



Irradiation Modification: New Advances, Application and Challenges

Guest Editor:

Dr. Zhiya Dang

School of Materials, Sun Yat-sen
University, Guangzhou, China

Deadline for manuscript
submissions:

closed (30 April 2022)

Message from the Guest Editor

Dear Colleagues,

The irradiation modification of semiconductor and metal coatings embraces different application areas of material science and engineering, ranging from electronics, optics, and mechanics to biology, and to the other fields such as robotics. The irradiation modification of coatings can be accomplished by charged particles such as ion and electron of various energy (several eV–MeV), as well as photons of relatively short wavelength, such as X-ray. The main functions of irradiation are to create microstructural changes that alter the electronic, optical, electrical, and other properties of the coatings. This Special Issue focuses on the irradiation modification of films.

In particular, the topics of interest include but are not limited to

- Irradiation-based nanofabrication and nanopatterning of films;
- Irradiation-based modulation of optical, electronic, and other properties of films;
- Theoretical and experimental studies of ion, electron, and X-ray-induced physical processes;
- Applications of irradiation modification in various fields, like biology;
- Laser (Light) illumination/irradiation





an Open Access Journal by MDPI

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.

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.

Author Benefits

Open Access: free for readers, with article processing charges (APC) paid by authors or their institutions.

High Visibility: indexed within Scopus, SCIE (Web of Science), Inspec, CAPlus / SciFinder, and other databases.

Journal Rank: JCR - Q2 (*Physics, Applied*) / CiteScore - Q2 (*Surfaces, Coatings and Films*)

Contact Us

Coatings Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/coatings
coatings@mdpi.com
X@Coatings_MDPI