

## Special Issue

# Advanced Nanocomposites— Functional Ceramic/Graphene and Its Applications

### Message from the Guest Editors

It is well known that ceramics are widely used for biomedical, electronic, automotive and space applications due to their attractive properties such as high stiffness, strength, and stability at high temperatures. To further extend their applications, forming nanocomposites are increasingly of interest to tailor both the mechanical and functional properties of ceramics. Graphene, one of most studied materials in the last two decades, has extremely high electrical, mechanical, and thermal properties. The very high surface area is another advantage compared to other carbon-based materials. Therefore, incorporating graphene into ceramics to produce advanced ceramic nanocomposites has great potential for versatile applications. The topics of interest for this Special Issue include (but are not limited to):

- Advanced ceramic/graphene nanocomposites;
- Innovative synthesis and sintering process;
- Applications of ceramic/graphene nanocomposites, e.g., energy harvesting, water filtration, catalysis, functional coating, batteries, etc.;
- Novel characterization for ceramic nanocomposites;
- Structure and properties of ceramic nanocomposites;

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### Guest Editors

Dr. Zhongquan Liao

Dr. Csaba Balázs

Prof. Dr. Ján Dúszá

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### Deadline for manuscript submissions

closed (31 December 2022)



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*Coatings*  
Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland  
Tel: +41 61 683 77 34  
[coatings@mdpi.com](mailto:coatings@mdpi.com)

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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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### 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

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