

Special Issue

Graphene-Metal Composite

Message from the Guest Editor

The use of graphene as a direct support for small metal particles or hybrid-architecture materials has gained significant interest in the last 10 years. The two-dimensional structure of graphene provides unique electronic structure properties, which can be tuned or leveraged via interaction with adsorbed metal atoms or metal atom clusters. Application areas where this has seen rapid acceleration of research interest include: tailored catalysts, novel electronics, novel spintronics, biosensors, etc. The main themes invited for discussion in this Special Issue include, but are not limited to, the following:

- Discoveries or challenges in the synthesis of metal-decorated-graphene composites
- Ability to modify adsorption and properties of metal-decorated-graphene via dopants
- Novel metal-decorated-graphene composite catalysts
- Novel metal-decorated-graphene electronic or spintronic device applications
- Theoretical screening of related materials (metal-decorated borophene)

Contributions from all disciplines and areas of expertise across industry, national research laboratories, and academia are encouraged and welcomed.

Dr. R.B. Rankin

Guest Editor

Dr. Rees B. Rankin

Department of Chemical Engineering, Villanova University, Villanova, PA, USA

Deadline for manuscript submissions

closed (15 September 2019)



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Metals
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
metals@mdpi.com

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About the Journal

Message from the Editorial Board

Metallic materials play a vital role in the economic life of modern societies; contributions are sought on fresh developments that enhance our understanding of the fundamental aspects related to the relationships between processing, properties and microstructure – disciplines in the metallurgical field ranging from processing, mechanical behavior, phase transitions and microstructural evolution, nanostructures, as well as unique metallic properties – inspire general and scholarly interest among the scientific community.

Editors-in-Chief

Prof. Dr. Hugo F. Lopez

Department of Materials Science and Engineering, College of Engineering & Applied Science, University of Wisconsin-Milwaukee, 3200 N. Cramer Street, Milwaukee, WI 53211, USA

Prof. Dr. Yong Zhang

Beijing Advanced Innovation Center of Materials Genome Engineering, State Key Laboratory for Advanced Metals and Materials, University of Science and Technology Beijing, 30 Xueyuan Road, Beijing 100083, China

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