Special Issue

Metal Degradation: Synergism between Corrosion and Wear

Message from the Guest Editor

Corrosion and wear are everywhere in our life, and metal material failures due to their separate or synergistic action are common. Therefore, materials with high resistance to corrosion, wear, and tribocorrosion are desirable. First, research on the corrosive and tribological mechanism is of utmost importance for traditional metal materials. Second, developed advanced materials have been confirmed to have potentially superior tribo-corrosion resistance. Further, new processes and technologies have been applied in recent years, such as coating, composites, additive manufacturing, surface mechanical rolling treatment. Finally, the corrosion and wear of metal material in extreme environments have attracted more and more attention. In this Special Issue, we welcome articles that focus on the tribology in corrosive environments and corresponding synergism between corrosion and wear of metal materials. Work related to traditional metal materials, advanced metal materials, new technologies and means, and extreme environments are encouraged. Papers providing insight into engineering feasibility applications remain of particular interest.

Guest Editor

Dr. Jianzhang Wang

State Key Laboratory of Solid Lubrication, Lanzhou Institute of Chemical Physics, Chinese Academy of Sciences, Lanzhou 730000, China

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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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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.

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

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