

Editor's Letter

Dear Authors, Readers,

Materials science is an interdisciplinary field concerned with the understanding and application of the properties of matter. Materials scientists study the connections between the underlying structure of a material, its properties, its processing methods, and its performance in various applications.

In the coming years, material research is playing an important role as a key technology for cutting-edge industries that take the initiative in building a sustainable society. It is expected that the whole world will enter an age of grand economic competition. Economic globalization is promoting rapid industrialization and economic growth. This factor will force various countries to develop and maintain their social and economic infrastructures and stimulate demand for the material industries that supply steel, cement, petrochemical products, etc. Furthermore, these materials industries are a key technology for the transportation equipment industries, such as the automotive industry. It is expected to develop new structural materials necessary for the development of next-generation transportation equipment that is lighter, stronger, tougher, and more durable while consuming less energy. Those high-tech materials industries need to conduct fundamental research in the field of materials and develop new materials that bring industrial innovation. There is fierce competition in the highly industrialized countries in the semiconductor/electronics, information communication, energy, and life-science industries, etc., which are regarded as the key industries in the 21st century. In those key industries as well, the most advanced manufacturing process technologies that employ nanotechnology and new materials that offer innovative new functionality are key to technological innovation.

Reducing the emission of CO₂ and other greenhouse gases has long been called for. On the other hand, various global environmental problems have been reported in recent years—the depletion of natural resources due to mass production and mass consumption, disruption of the natural environment, and environmental pollution from metal production processes, etc. In the development of materials in the future, it is necessary to pay more attention than ever before to their effects on the environment.

Material science, engineering, and applications journal will provide a platform for academicians, researchers, and material scientists to publish their original research work in the fields of nanomaterials and nanotechnology, smart materials & structures, advanced energy materials & energy harvesting materials, solar materials, and other advance materials.

Editor in Chief
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