



an Open Access Journal by MDPI

## Atomic Layer Deposition and Atomic Layer Etching

Guest Editors:

**Prof. Dr. Jiyoung Kim**

Department of Materials Science  
and Engineering, The University  
of Texas at Dallas, 800 W.  
Campbell Road, Richardson, TX  
75080, USA

**Prof. Si Joon Kim**

Department of Electrical and  
Electronics Engineering,  
Kangwon National University,  
Chuncheon, Gangwon-do, Korea

Deadline for manuscript  
submissions:

**closed (20 November 2022)**

### Message from the Guest Editors

Dear Colleagues,

In recent years, there have been significant advances in atomic layer deposition (ALD) and atomic layer etching (ALE), which are very powerful and elegant tools in many industrial and research applications. As ALD/ALE technology matures and diversifies, it is believed to create various applications through innovation and optimization. This Special Issue of *Materials* on “Atomic Layer Deposition and Atomic Layer Etching” is intended to cover original research and critical review articles on recent advances in all aspects of ALD/ALE.

Potential topics include but are not limited to the following:

- ALD applications: memory, display, energy, and emerging applications, etc.;
- ALD fundamentals: precursors and chemistry, growth, and characterization;
- Area-selective ALD and epitaxial growth of ALD;
- In situ characterization of ALD processes and materials;
- Thermal and plasma atomic layer etching (ALE).

Prof. Dr. Jiyoung Kim

Prof. Dr. Si Joon Kim

*Guest Editors*



[mdpi.com/si/112467](https://mdpi.com/si/112467)

# Special Issue



an Open Access Journal by MDPI

## Editor-in-Chief

### Prof. Dr. Maryam Tabrizian

1. Department of Biomedical Engineering, Faculty of Medicine and Health Sciences, McGill University, Montreal, QC H3A 2B6, Canada

2. Faculty of Dentistry and Oral Health Sciences, McGill University, 3640 Rue University, Montreal, QC H3A 0C7, Canada

## Message from the Editor-in-Chief

*Materials* (ISSN 1996-1944) was launched in 2008. The journal covers twenty-five comprehensive topics: biomaterials, energy materials, advanced composites, advanced materials characterization, porous materials, manufacturing processes and systems, advanced nanomaterials and nanotechnology, smart materials, thin films and interfaces, catalytic materials, carbon materials, materials chemistry, materials physics, optics and photonics, corrosion, construction and building materials, materials simulation and design, electronic materials, advanced and functional ceramics and glasses, metals and alloys, soft matter, polymeric materials, quantum materials, mechanics of materials, green materials, general. *Materials* provides a unique opportunity to contribute high quality articles and to take advantage of its large readership.

## 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), PubMed, PMC, Ei Compendex, CaPlus / SciFinder, Inspec, Astrophysics Data System, and other databases.

**Journal Rank:** JCR - Q2 (Metallurgy and Metallurgical Engineering) / CiteScore - Q1 (Condensed Matter Physics)

## Contact Us

Materials Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland

Tel: +41 61 683 77 34  
[www.mdpi.com](http://www.mdpi.com)

[mdpi.com/journal/materials](http://mdpi.com/journal/materials)  
[materials@mdpi.com](mailto:materials@mdpi.com)  
[X@Materials\\_Mdpi](https://twitter.com/Materials_Mdpi)