



Atomic Layer Materials and Processes

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Deadline for manuscript
submissions:

closed (31 May 2023)

Message from the Guest Editors

As device features become ever smaller, materials and fabrication with atomic precision are particularly of interest in the research community. Atomic layer materials such as graphene have demonstrated extraordinary electrical and optical properties for novel devices. Recent advances in the synthesis and processing of unconventional atomic layers, such as MXenes and 2D metal-organic frameworks (MOFs), offer exciting opportunities for next-generation circuits and systems. Equally exciting, disruptive advances in atomic layer deposition (ALD) and atomic layer etching (ALE) continue to provide new abilities for the additive and subtractive fabrication of 3D structures. For instance, isotropic thermal ALE shows advantages in building concave features and minimizing atomic defects in advanced IC circuits, micro-robotics, and micro electromechanical systems (MEMS).

Accordingly, this Special Issue seeks to showcase research papers and review articles that focus on novel advances in atomic layer materials/processes and their applications in electrical/optical devices, quantum circuits, MEMS, and robotics. We look forward to receiving your submissions!





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Message from the Editor-in-Chief

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