

Atomic Layer Deposition for Energy Technologies

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Atomic layer deposition (ALD) is the method of choice for the deposition of ultrathin films with submonolayer growth control and with an excellent conformality on 3D substrate topologies. In the first decade of the 2000s, the method was mostly considered for applications in nanoelectronics however recently the interest in ALD for future energy technologies has grown tremendously. In this presentation I will discuss some recent research on (plasma-enhanced) ALD for applications in high-efficiency Si solar cells, Li-ion microbatteries and Pt-Pd core@shell nanoparticles.