

# W M M Erwin Kessels

## List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

434  
papers

17,445  
citations

66  
h-index

113  
g-index

469  
ext. papers

19,439  
ext. citations

4.1  
avg, IF

7  
L-index

#	Paper	IF	Citations
434	Surface Chemistry during Atomic Layer Deposition of Pt Studied with Vibrational Sum-Frequency Generation.. <i>Journal of Physical Chemistry C</i> , <b>2022</b> , 126, 2463-2474	3.8	3
433	Relation between Reactive Surface Sites and Precursor Choice for Area-Selective Atomic Layer Deposition Using Small Molecule Inhibitors.. <i>Journal of Physical Chemistry C</i> , <b>2022</b> , 126, 4845-4853	3.8	5
432	Controlling transition metal atomic ordering in two-dimensional Mo <sub>1</sub> W <sub>x</sub> S <sub>2</sub> alloys. <i>2D Materials</i> , <b>2022</b> , 9, 025016	5.9	0
431	Thickness and Morphology Dependent Electrical Properties of ALD-Synthesized MoS <sub>2</sub> FETs. <i>Advanced Electronic Materials</i> , <b>2022</b> , 8, 2100781	6.4	0
430	Extracting surface recombination parameters of germanium/dielectric interfaces by corona-lifetime experiments. <i>Journal of Applied Physics</i> , <b>2022</b> , 131, 195301	2.5	0
429	Atmospheric-Pressure Plasma-Enhanced Spatial ALD of SiO <sub>2</sub> Studied by Gas-Phase Infrared and Optical Emission Spectroscopy. <i>Journal of Physical Chemistry C</i> , <b>2021</b> , 125, 24945-24957	3.8	2
428	PO <sub>2</sub> /AlO <sub>3</sub> Stacks for c-Si Surface Passivation: Material and Interface Properties. <i>ACS Applied Electronic Materials</i> , <b>2021</b> , 3, 4337-4347	4	0
427	Excellent surface passivation of germanium by a-Si:H/Al <sub>2</sub> O <sub>3</sub> stacks. <i>Journal of Applied Physics</i> , <b>2021</b> , 130, 135303	2.5	4
426	Passivation Enhancement of Poly-Si Carrier-Selective Contacts by Applying ALD Al <sub>2</sub> O <sub>3</sub> Capping Layers. <i>IEEE Journal of Photovoltaics</i> , <b>2021</b> , 1-8	3.7	2
425	Oxygen Recombination Probability Data for Plasma-Assisted Atomic Layer Deposition of SiO <sub>2</sub> and TiO <sub>2</sub> . <i>Journal of Physical Chemistry C</i> , <b>2021</b> , 125, 8244-8252	3.8	2
424	Impact of Ions on Film Conformality and Crystallinity during Plasma-Assisted Atomic Layer Deposition of TiO <sub>2</sub> . <i>Chemistry of Materials</i> , <b>2021</b> , 33, 5002-5009	9.6	5
423	Preface for the AVS Peter Mark award 40th anniversary collection. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , <b>2021</b> , 39, 031601	2.9	0
422	Atomic layer deposition and selective etching of ruthenium for area-selective deposition: Temperature dependence and supercycle design. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , <b>2021</b> , 39, 032412	2.9	2
421	Influence of the spatial extent of the space-charge region in c-Si on the electric-field-induced second-harmonic-generation effect. <i>Journal of the Optical Society of America B: Optical Physics</i> , <b>2021</b> , 38, 1840	1.7	1
420	On the Contact Optimization of ALD-Based MoS <sub>2</sub> FETs: Correlation of Processing Conditions and Interface Chemistry with Device Electrical Performance. <i>ACS Applied Electronic Materials</i> , <b>2021</b> , 3, 3185-3199	4.199	2
419	Excellent Passivation of n-Type Silicon Surfaces Enabled by Pulsed-Flow Plasma-Enhanced Chemical Vapor Deposition of Phosphorus Oxide Capped by Aluminum Oxide. <i>Physica Status Solidi - Rapid Research Letters</i> , <b>2021</b> , 15, 2000399	2.5	4
418	Insight into the removal and reapplication of small inhibitor molecules during area-selective atomic layer deposition of SiO <sub>2</sub> . <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , <b>2021</b> , 39, 012402	2.9	8

4 <sup>17</sup>	Dependence of inherent selective atomic layer deposition of FeOx on Pt nanoparticles on the coreactant and temperature. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , <b>2021</b> , 39, 012404	2.9	2
4 <sup>16</sup>	Atomic insights into the oxygen incorporation in atomic layer deposited conductive nitrides and its mitigation by energetic ions. <i>Nanoscale</i> , <b>2021</b> , 13, 10092-10099	7.7	0
4 <sup>15</sup>	Atomic layer deposition of LiF using LiN(SiMe) and SF plasma. <i>Physical Chemistry Chemical Physics</i> , <b>2021</b> , 23, 9304-9314	3.6	2
4 <sup>14</sup>	Surface passivation of germanium by atomic layer deposited Al <sub>2</sub> O <sub>3</sub> nanolayers. <i>Journal of Materials Research</i> , <b>2021</b> , 36, 571-581	2.5	8
4 <sup>13</sup>	Reaction Mechanisms during Atomic Layer Deposition of AlF Using Al(CH) and SF Plasma. <i>Journal of Physical Chemistry C</i> , <b>2021</b> , 125, 3913-3923	3.8	3
4 <sup>12</sup>	Electrochemical Activation of Atomic Layer-Deposited Cobalt Phosphate Electrocatalysts for Water Oxidation. <i>ACS Catalysis</i> , <b>2021</b> , 11, 2774-2785	13.1	13
4 <sup>11</sup>	Innovative remote plasma source for atomic layer deposition for GaN devices. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , <b>2021</b> , 39, 062403	2.9	2
4 <sup>10</sup>	Atomic-layer-deposited Al-doped zinc oxide as a passivating conductive contacting layer for n+-doped surfaces in silicon solar cells. <i>Solar Energy Materials and Solar Cells</i> , <b>2021</b> , 233, 111386	6.4	10
4 <sup>09</sup>	Conformal Growth of Nanometer-Thick Transition Metal Dichalcogenide TiS-NbS Heterostructures over 3D Substrates by Atomic Layer Deposition: Implications for Device Fabrication. <i>ACS Applied Nano Materials</i> , <b>2021</b> , 4, 514-521	5.6	3
4 <sup>08</sup>	Improved Passivation of n-Type Poly-Si Based Passivating Contacts by the Application of Hydrogen-Rich Transparent Conductive Oxides. <i>IEEE Journal of Photovoltaics</i> , <b>2020</b> , 10, 986-991	3.7	9
4 <sup>07</sup>	Atomic layer deposition of cobalt phosphate from cobaltocene, trimethylphosphate, and O <sub>2</sub> plasma. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , <b>2020</b> , 38, 022416	2.9	4
4 <sup>06</sup>	Mechanism of Precursor Blocking by Acetylacetone Inhibitor Molecules during Area-Selective Atomic Layer Deposition of SiO <sub>2</sub> . <i>Chemistry of Materials</i> , <b>2020</b> , 32, 3335-3345	9.6	24
4 <sup>05</sup>	Atomic Layer Deposition of Aluminum Phosphate Using AlMe <sub>3</sub> , PO(OMe) <sub>3</sub> , and O <sub>2</sub> Plasma: Film Growth and Surface Reactions. <i>Journal of Physical Chemistry C</i> , <b>2020</b> , 124, 5495-5505	3.8	6
4 <sup>04</sup>	Large area, patterned growth of 2D MoS and lateral MoS-WS heterostructures for nano- and opto-electronic applications. <i>Nanotechnology</i> , <b>2020</b> , 31, 255603	3.4	28
4 <sup>03</sup>	Atomic layer deposition of Nb-doped TiO <sub>2</sub> : Dopant incorporation and effect of annealing. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , <b>2020</b> , 38, 022408	2.9	5
4 <sup>02</sup>	Metastable Refractive Index Manipulation in Hydrogenated Amorphous Silicon for Reconfigurable Photonics. <i>Advanced Optical Materials</i> , <b>2020</b> , 8, 1901680	8.1	6
4 <sup>01</sup>	Area-Selective Atomic Layer Deposition of Two-Dimensional WS Nanolayers <b>2020</b> , 2, 511-518		24
4 <sup>00</sup>	On the hydrogenation of Poly-Si passivating contacts by Al <sub>2</sub> O <sub>3</sub> and SiN thin films. <i>Solar Energy Materials and Solar Cells</i> , <b>2020</b> , 215, 110592	6.4	36

399	Precise ion energy control with tailored waveform biasing for atomic scale processing. <i>Journal of Applied Physics</i> , <b>2020</b> , 128, 213301	2.5	5
398	Effect of an electric field during the deposition of silicon dioxide thin films by plasma enhanced atomic layer deposition: an experimental and computational study. <i>Nanoscale</i> , <b>2020</b> , 12, 2089-2102	7.7	12
397	Probing the Origin and Suppression of Vertically Oriented Nanostructures of 2D WS Layers. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2020</b> , 12, 3873-3885	9.5	14
396	Atomic layer deposition of ruthenium using an ABC-type process: Role of oxygen exposure during nucleation. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , <b>2020</b> , 38, 062402	2.9	6
395	The chemistry and energetics of the interface between metal halide perovskite and atomic layer deposited metal oxides. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , <b>2020</b> , 38, 063206	2.9	3
394	Corrigendum #2 to Expanding Thermal Plasma Chemical Vapour Deposition of ZnO:Al Layers for CIGS Solar Cells <i>International Journal of Photoenergy</i> , <b>2020</b> , 2020, 1-1	2.1	
393	Plasma-Enhanced Atomic Layer Deposition of Cobalt and Cobalt Nitride: What Controls the Incorporation of Nitrogen?. <i>Journal of Physical Chemistry C</i> , <b>2020</b> , 124, 22046-22054	3.8	3
392	Nanoscale Encapsulation of Perovskite Nanocrystal Luminescent Films via Plasma-Enhanced SiO Atomic Layer Deposition. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2020</b> , 12, 53519-53527	9.5	12
391	Evidence for low-energy ions influencing plasma-assisted atomic layer deposition of SiO <sub>2</sub> : Impact on the growth per cycle and wet etch rate. <i>Applied Physics Letters</i> , <b>2020</b> , 117, 031602	3.4	7
390	Enhancing the Electrocatalytic Activity of Redox Stable Perovskite Fuel Electrodes in Solid Oxide Cells by Atomic Layer-Deposited Pt Nanoparticles. <i>ACS Sustainable Chemistry and Engineering</i> , <b>2020</b> , 8, 12646-12654	8.3	8
389	Area-Selective Atomic Layer Deposition of TiN Using Aromatic Inhibitor Molecules for Metal/Dielectric Selectivity. <i>Chemistry of Materials</i> , <b>2020</b> , 32, 7788-7795	9.6	21
388	Isotropic plasma atomic layer etching of Al <sub>2</sub> O <sub>3</sub> using a fluorine containing plasma and Al(CH <sub>3</sub> ) <sub>3</sub> . <i>Applied Physics Letters</i> , <b>2020</b> , 117, 162107	3.4	5
387	Synthesis of edge-enriched WS <sub>2</sub> on high surface area WS <sub>2</sub> framework by atomic layer deposition for electrocatalytic hydrogen evolution reaction. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , <b>2020</b> , 38, 062201	2.9	2
386	Atomic Layer Deposition of Al-Doped MoS <sub>2</sub> : Synthesizing a p-type 2D Semiconductor with Tunable Carrier Density. <i>ACS Applied Nano Materials</i> , <b>2020</b> , 3, 10200-10208	5.6	7
385	Self-aligned local contact opening and n+ diffusion by single-step laser doping from POx/Al <sub>2</sub> O <sub>3</sub> passivation stacks. <i>Solar Energy Materials and Solar Cells</i> , <b>2020</b> , 217, 110717	6.4	4
384	Plasma-Assisted ALD of Highly Conductive HfN <sub>x</sub> : On the Effect of Energetic Ions on Film Microstructure. <i>Plasma Chemistry and Plasma Processing</i> , <b>2020</b> , 40, 697-712	3.6	6
383	Infrared and optical emission spectroscopy study of atmospheric pressure plasma-enhanced spatial ALD of Al <sub>2</sub> O <sub>3</sub> . <i>Applied Physics Letters</i> , <b>2019</b> , 115, 083101	3.4	6
382	Performance and Thermal Stability of an a-Si:H/TiO <sub>x</sub> /Yb Stack as an Electron-Selective Contact in Silicon Heterojunction Solar Cells. <i>ACS Applied Energy Materials</i> , <b>2019</b> , 2, 1393-1404	6.1	16

381	Mass Spectrometry Study of Li <sub>2</sub> CO <sub>3</sub> Film Growth by Thermal and Plasma-Assisted Atomic Layer Deposition. <i>Journal of Physical Chemistry C</i> , <b>2019</b> , 123, 4109-4115	3.8	5
380	Rear-emitter silicon heterojunction solar cells with atomic layer deposited ZnO:Al serving as an alternative transparent conducting oxide to In <sub>2</sub> O <sub>3</sub> :Sn. <i>Solar Energy Materials and Solar Cells</i> , <b>2019</b> , 200, 109953	6.4	16
379	Area-Selective Deposition of Ruthenium by Combining Atomic Layer Deposition and Selective Etching. <i>Chemistry of Materials</i> , <b>2019</b> , 31, 3878-3882	9.6	46
378	Edge-Site Nanoengineering of WS by Low-Temperature Plasma-Enhanced Atomic Layer Deposition for Electrocatalytic Hydrogen Evolution. <i>Chemistry of Materials</i> , <b>2019</b> , 31, 5104-5115	9.6	35
377	Sticking probabilities of H <sub>2</sub> O and Al(CH <sub>3</sub> ) <sub>3</sub> during atomic layer deposition of Al <sub>2</sub> O <sub>3</sub> extracted from their impact on film conformality. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , <b>2019</b> , 37, 030908	2.9	19
376	Status and prospects of plasma-assisted atomic layer deposition. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , <b>2019</b> , 37, 030902	2.9	84
375	Silicon surface passivation by transparent conductive zinc oxide. <i>Journal of Applied Physics</i> , <b>2019</b> , 125, 105305	2.5	17
374	On the role of micro-porosity in affecting the environmental stability of atomic/molecular layer deposited (ZnO)(Zn-O-CH-O) films. <i>Dalton Transactions</i> , <b>2019</b> , 48, 3496-3505	4.3	17
373	Initial Growth Study of Atomic-Layer Deposition of AlO by Vibrational Sum-Frequency Generation. <i>Langmuir</i> , <b>2019</b> , 35, 10374-10382	4	10
372	Transition in layer structure of atomic/molecular layer deposited ZnO-zinc oxide multilayers. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , <b>2019</b> , 37, 040602	2.9	9
371	Film Conformality and Extracted Recombination Probabilities of O Atoms during Plasma-Assisted Atomic Layer Deposition of SiO <sub>2</sub> , TiO <sub>2</sub> , Al <sub>2</sub> O <sub>3</sub> , and HfO <sub>2</sub> . <i>Journal of Physical Chemistry C</i> , <b>2019</b> , 123, 27030-27033	3.8	33
370	Dependence of coil sensitivity on sample thickness in inductively coupled photoconductance measurements <b>2019</b> ,		3
369	Low-Temperature Phase-Controlled Synthesis of Titanium Di- and Tri-sulfide by Atomic Layer Deposition. <i>Chemistry of Materials</i> , <b>2019</b> , 31, 9354-9362	9.6	15
368	TiO <sub>2</sub> thin film patterns prepared by chemical vapor deposition and atomic layer deposition using an atmospheric pressure microplasma printer. <i>Plasma Processes and Polymers</i> , <b>2019</b> , 16, 1900127	3.4	10
367	On the effect of atomic layer deposited Al <sub>2</sub> O <sub>3</sub> on the environmental degradation of hybrid perovskite probed by positron annihilation spectroscopy. <i>Journal of Materials Chemistry C</i> , <b>2019</b> , 7, 5275-5284	7.1	8
366	Plasma-assisted atomic layer deposition of nickel oxide as hole transport layer for hybrid perovskite solar cells. <i>Journal of Materials Chemistry C</i> , <b>2019</b> , 7, 12532-12543	7.1	40
365	From the Bottom-Up: Toward Area-Selective Atomic Layer Deposition with High Selectivity. <i>Chemistry of Materials</i> , <b>2019</b> , 31, 2-12	9.6	149
364	Enhancement of the photocurrent and efficiency of CdTe solar cells suppressing the front contact reflection using a highly-resistive ZnO buffer layer. <i>Solar Energy Materials and Solar Cells</i> , <b>2019</b> , 191, 78-82	6.4	35

363	Energetic ions during plasma-enhanced atomic layer deposition and their role in tailoring material properties. <i>Plasma Sources Science and Technology</i> , <b>2019</b> , 28, 024002	3.5	43
362	Chemical Analysis of the Interface between Hybrid Organic-Inorganic Perovskite and Atomic Layer Deposited AlO. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2019</b> , 11, 5526-5535	9.5	28
361	Data on dopant characteristics and band alignment of CdTe cells with and without a ZnO highly-resistive-transparent buffer layer. <i>Data in Brief</i> , <b>2019</b> , 22, 218-221	1.2	2
360	Atomic layer deposition of cobalt phosphate thin films for the oxygen evolution reaction. <i>Electrochemistry Communications</i> , <b>2019</b> , 98, 73-77	5.1	18
359	Light-Induced Reversible Optical Properties of Hydrogenated Amorphous Silicon: A Promising Optically Programmable Photonic Material. <i>Physica Status Solidi (A) Applications and Materials Science</i> , <b>2018</b> , 215, 1700754	1.6	3
358	Low-temperature plasma-enhanced atomic layer deposition of 2-D MoS: large area, thickness control and tuneable morphology. <i>Nanoscale</i> , <b>2018</b> , 10, 8615-8627	7.7	63
357	Low resistivity HfNx grown by plasma-assisted ALD with external rf substrate biasing. <i>Journal of Materials Chemistry C</i> , <b>2018</b> , 6, 3917-3926	7.1	25
356	Passivating Contacts for Crystalline Silicon Solar Cells: From Concepts and Materials to Prospects. <i>IEEE Journal of Photovoltaics</i> , <b>2018</b> , 8, 373-388	3.7	192
355	Dopant Distribution in Atomic Layer Deposited ZnO:Al Films Visualized by Transmission Electron Microscopy and Atom Probe Tomography. <i>Chemistry of Materials</i> , <b>2018</b> , 30, 1209-1217	9.6	18
354	Surface Fluorination of ALD TiO <sub>2</sub> Electron Transport Layer for Efficient Planar Perovskite Solar Cells. <i>Advanced Materials Interfaces</i> , <b>2018</b> , 5, 1701456	4.6	20
353	Tuning Material Properties of Oxides and Nitrides by Substrate Biasing during Plasma-Enhanced Atomic Layer Deposition on Planar and 3D Substrate Topographies. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2018</b> , 10, 13158-13180	9.5	59
352	Plasma-enhanced atomic layer deposition of tungsten oxide thin films using (tBuN) <sub>2</sub> (Me <sub>2</sub> N) <sub>2</sub> W and O <sub>2</sub> plasma. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , <b>2018</b> , 36, 01B103	2.9	21
351	Low-Temperature Plasma-Assisted Atomic-Layer-Deposited SnO as an Electron Transport Layer in Planar Perovskite Solar Cells. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2018</b> , 10, 30367-30378	9.5	59
350	Effective passivation of silicon surfaces by ultrathin atomic-layer deposited niobium oxide. <i>Applied Physics Letters</i> , <b>2018</b> , 112, 242105	3.4	17
349	Area-Selective Atomic Layer Deposition of Metal Oxides on Noble Metals through Catalytic Oxygen Activation. <i>Chemistry of Materials</i> , <b>2018</b> , 30, 663-670	9.6	72
348	Strategies to facilitate the formation of free standing MoS <sub>2</sub> nanolayers on SiO <sub>2</sub> surface by atomic layer deposition: A DFT study. <i>APL Materials</i> , <b>2018</b> , 6, 111107	5.7	8
347	Pt Graphene Contacts Fabricated by Plasma Functionalization and Atomic Layer Deposition. <i>Advanced Materials Interfaces</i> , <b>2018</b> , 5, 1800268	4.6	7
346	Isotropic Atomic Layer Etching of ZnO Using Acetylacetone and O Plasma. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2018</b> , 10, 38588-38595	9.5	21

345	Atomic Layer Deposition of Cobalt Using H-, N-, and NH-Based Plasmas: On the Role of the Co-reactant. <i>Journal of Physical Chemistry C</i> , <b>2018</b> , 122, 22519-22529	3.8	23
344	Explorative studies of novel silicon surface passivation materials: Considerations and lessons learned. <i>Solar Energy Materials and Solar Cells</i> , <b>2018</b> , 188, 182-189	6.4	36
343	Atomic-layer deposited Nb2O5 as transparent passivating electron contact for c-Si solar cells. <i>Solar Energy Materials and Solar Cells</i> , <b>2018</b> , 184, 98-104	6.4	41
342	Characterization of nano-porosity in molecular layer deposited films. <i>Dalton Transactions</i> , <b>2018</b> , 47, 7649-7655	4.5	10
341	Hydrogen passivation of poly-Si/SiOx contacts for Si solar cells using Al2O3 studied with deuterium. <i>Applied Physics Letters</i> , <b>2018</b> , 112, 203901	3.4	63
340	Initial stage of atomic layer deposition of 2D-MoS on a SiO surface: a DFT study. <i>Physical Chemistry Chemical Physics</i> , <b>2018</b> , 20, 16861-16875	3.6	12
339	POx/Al2O3 stacks: Highly effective surface passivation of crystalline silicon with a large positive fixed charge. <i>Applied Physics Letters</i> , <b>2018</b> , 112, 201603	3.4	12
338	Passivating electron-selective contacts for silicon solar cells based on an a-Si:H/TiOx stack and a low work function metal. <i>Progress in Photovoltaics: Research and Applications</i> , <b>2018</b> , 26, 835-845	6.8	26
337	Optical and electrical properties of H2 plasma-treated ZnO films prepared by atomic layer deposition using supercycles. <i>Materials Science in Semiconductor Processing</i> , <b>2018</b> , 84, 91-100	4.3	10
336	Investigation of crystalline silicon surface passivation by positively charged POx/Al2O3 stacks. <i>Solar Energy Materials and Solar Cells</i> , <b>2018</b> , 185, 385-391	6.4	12
335	Comparison of thermal and plasma-enhanced atomic layer deposition of niobium oxide thin films. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , <b>2018</b> , 36, 041503	2.9	21
334	Area-Selective Atomic Layer Deposition of InO:H Using a Plasma Printer for Local Area Activation. <i>Chemistry of Materials</i> , <b>2017</b> , 29, 921-925	9.6	48
333	Effect of reactor pressure on the conformal coating inside porous substrates by atomic layer deposition. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , <b>2017</b> , 35, 021502	2.9	21
332	Resist-free fabricated carbon nanotube field-effect transistors with high-quality atomic-layer-deposited platinum contacts. <i>Applied Physics Letters</i> , <b>2017</b> , 110, 013101	3.4	9
331	Towards the implementation of atomic layer deposited In2O3:H in silicon heterojunction solar cells. <i>Solar Energy Materials and Solar Cells</i> , <b>2017</b> , 163, 43-50	6.4	22
330	Plasma-assisted atomic layer deposition of conformal Pt films in high aspect ratio trenches. <i>Journal of Chemical Physics</i> , <b>2017</b> , 146, 052818	3.9	15
329	Atomic layer deposition of HfO2 using HfCp(NMe2)3 and O2 plasma. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , <b>2017</b> , 35, 01B130	2.9	19
328	Uniform Atomic Layer Deposition of AlO on Graphene by Reversible Hydrogen Plasma Functionalization. <i>Chemistry of Materials</i> , <b>2017</b> , 29, 2090-2100	9.6	42

327	Plasma-assisted atomic layer deposition of HfNx: Tailoring the film properties by the plasma gas composition. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , <b>2017</b> , 35, 01B129	2.9	8
326	Graphene devices with bottom-up contacts by area-selective atomic layer deposition. <i>2D Materials</i> , <b>2017</b> , 4, 025046	5.9	14
325	Atomic layer deposition for perovskite solar cells: research status, opportunities and challenges. <i>Sustainable Energy and Fuels</i> , <b>2017</b> , 1, 30-55	5.8	114
324	Atomic Layer Deposition of InO:H from InCp and HO/O: Microstructure and Isotope Labeling Studies. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2017</b> , 9, 592-601	9.5	12
323	Plasma-assisted atomic layer deposition of TiO2 compact layers for flexible mesostructured perovskite solar cells. <i>Solar Energy</i> , <b>2017</b> , 150, 447-453	6.8	34
322	Synthesis of single-walled carbon nanotubes from atomic-layer-deposited Co3O4 and Co3O4/Fe2O3 catalyst films. <i>Carbon</i> , <b>2017</b> , 121, 389-398	10.4	12
321	Atomic Layer Deposition for Graphene Device Integration. <i>Advanced Materials Interfaces</i> , <b>2017</b> , 4, 1700226	11.2	63
320	Atomic layer deposition of high-mobility hydrogen-doped zinc oxide. <i>Solar Energy Materials and Solar Cells</i> , <b>2017</b> , 173, 111-119	6.4	34
319	Progress and prospects in nanoscale dry processes: How can we control atomic layer reactions?. <i>Japanese Journal of Applied Physics</i> , <b>2017</b> , 56, 06HA02	1.4	21
318	Ultralow Surface Recombination Velocity in Passivated InGaAs/InP Nanopillars. <i>Nano Letters</i> , <b>2017</b> , 17, 2627-2633	11.5	39
317	Atomic Layer Deposition for High-Efficiency Crystalline Silicon Solar Cells <b>2017</b> , 41-99		7
316	Atomic Layer Deposition of Wet-Etch Resistant Silicon Nitride Using Di(sec-butylamino)silane and N Plasma on Planar and 3D Substrate Topographies. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2017</b> , 9, 1858-1869	9.5	35
315	Atomic layer deposition of highly dispersed Pt nanoparticles on a high surface area electrode backbone for electrochemical promotion of catalysis. <i>Electrochemistry Communications</i> , <b>2017</b> , 84, 40-44	5.1	14
314	Material properties of LPCVD processed n-type polysilicon passivating contacts and its application in PERPoly industrial bifacial solar cells. <i>Energy Procedia</i> , <b>2017</b> , 124, 635-642	2.3	48
313	(Invited) Area-Selective Atomic Layer Deposition: Role of Surface Chemistry. <i>ECS Transactions</i> , <b>2017</b> , 80, 39-48	1	9
312	Atomic-layer deposited passivation schemes for c-Si solar cells <b>2017</b> ,		2
311	Plasma-assisted and thermal atomic layer deposition of electrochemically active Li2CO3. <i>RSC Advances</i> , <b>2017</b> , 7, 41359-41368	3.7	22
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308	Effective Surface Passivation of InP Nanowires by Atomic-Layer-Deposited AlO with PO Interlayer. <i>Nano Letters</i> , <b>2017</b> , 17, 6287-6294	11.5	52
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301	Quantification of pn-Junction Recombination in Interdigitated Back-Contact Crystalline Silicon Solar Cells. <i>IEEE Journal of Photovoltaics</i> , <b>2017</b> , 7, 1176-1183	3.7	12
300	Atomic layer deposition of molybdenum oxide from (NtBu) <sub>2</sub> (NMe <sub>2</sub> ) <sub>2</sub> Mo and O <sub>2</sub> plasma. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , <b>2016</b> , 34, 01A103	2.9	78
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157	Amorphization of Si(100) by Ar <sup>+</sup> -ion bombardment studied with spectroscopic and time-resolved second-harmonic generation. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , <b>2010</b> , 28, 293-301	2.9	5
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149	3D negative electrode stacks for integrated all-solid-state lithium-ion microbatteries. <i>Journal of Materials Chemistry</i> , <b>2010</b> , 20, 3703		59
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