Jeffrey W Elam

List of Publications by Year
in descending order

228	17,594	9756	73	15683	125
papers	citations		h-index		g-index

232	232	232	19445
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	ZnO Nanotube Based Dye-Sensitized Solar Cells. Nano Letters, 2007, 7, 2183-2187.	4.5	730
2	Subnanometre platinum clusters as highly activeÂand selective catalysts for the oxidative dehydrogenation of propane. Nature Materials, 2009, 8, 213-216.	13.3	725
3	Coking- and Sintering-Resistant Palladium Catalysts Achieved Through Atomic Layer Deposition. Science, 2012, 335, 1205-1208.	6.0	707
4	Catalyst Design with Atomic Layer Deposition. ACS Catalysis, 2015, 5, 1804-1825.	5.5	608
5	Membrane materials for water purification: design, development, and application. Environmental Science: Water Research and Technology, 2016, 2, 17-42.	1.2	494
6	Structural and Electrochemical Study of Al₂O₃ and TiO₂ Coated Li_{1.2}Ni_{0.13}Mn_{0.54}Co_{0.13}O₂ Cathode Material Using ALD. Advanced Energy Materials, 2013, 3, 1299-1307.	10.2	418
7	Ultrastable Substrates for Surface-Enhanced Raman Spectroscopy:Â Al2O3Overlayers Fabricated by Atomic Layer Deposition Yield Improved Anthrax Biomarker Detection. Journal of the American Chemical Society, 2006, 128, 10304-10309.	6.6	395
8	Localized Surface Plasmon Resonance Nanosensor:Â A High-Resolution Distance-Dependence Study Using Atomic Layer Deposition. Journal of Physical Chemistry B, 2005, 109, 20522-20528.	1.2	317
9	Synthesis and Stabilization of Supported Metal Catalysts by Atomic Layer Deposition. Accounts of Chemical Research, 2013, 46, 1806-1815.	7.6	271
10	Nanoscopic Patterned Materials with Tunable Dimensions via Atomic Layer Deposition on Block Copolymers. Advanced Materials, 2010, 22, 5129-5133.	11.1	255
11	Effectively suppressing dissolution of manganese from spinel lithium manganate via a nanoscale surface-doping approach. Nature Communications, 2014, 5, 5693.	5.8	255
12	Atomic layer depositionâ€"Sequential self-limiting surface reactions for advanced catalyst â€œbottom-upâ€• synthesis. Surface Science Reports, 2016, 71, 410-472.	3.8	252
13	Selective Propene Epoxidation on Immobilized Au_{6â€"10} Clusters: The Effect of Hydrogen and Water on Activity and Selectivity. Angewandte Chemie - International Edition, 2009, 48, 1467-1471.	7.2	246
14	A Route to Nanoscopic Materials via Sequential Infiltration Synthesis on Block Copolymer Templates. ACS Nano, 2011, 5, 4600-4606.	7.3	244
15	Supported Ruâ"Pt Bimetallic Nanoparticle Catalysts Prepared by Atomic Layer Deposition. Nano Letters, 2010, 10, 3047-3051.	4.5	205
16	Ultrathin Lithium-Ion Conducting Coatings for Increased Interfacial Stability in High Voltage Lithium-Ion Batteries. Chemistry of Materials, 2014, 26, 3128-3134.	3.2	192
17	Synthesis of Porous Carbon Supported Palladium Nanoparticle Catalysts by Atomic Layer Deposition: Application for Rechargeable Lithiumâ€"O₂ Battery. Nano Letters, 2013, 13, 4182-4189.	4.5	184
18	Toward atomically-precise synthesis of supported bimetallic nanoparticles using atomic layer deposition. Nature Communications, 2014, 5, 3264.	5.8	181

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19	Atomic Layer Deposition of Metal Sulfide Materials. Accounts of Chemical Research, 2015, 48, 341-348.	7.6	178
20	Enhanced Block Copolymer Lithography Using Sequential Infiltration Synthesis. Journal of Physical Chemistry C, 2011, 115, 17725-17729.	1.5	168
21	Seeding Atomic Layer Deposition of High-k Dielectrics on Epitaxial Graphene with Organic Self-Assembled Monolayers. ACS Nano, 2011, 5, 5223-5232.	7.3	167
22	Stabilization of Copper Catalysts for Liquidâ€Phase Reactions by Atomic Layer Deposition. Angewandte Chemie - International Edition, 2013, 52, 13808-13812.	7.2	162
23	Alumina Over-coating on Pd Nanoparticle Catalysts by Atomic Layer Deposition: Enhanced Stability and Reactivity. Catalysis Letters, 2011, 141, 512-517.	1.4	159
24	Controlled Growth of Platinum Nanoparticles on Strontium Titanate Nanocubes by Atomic Layer Deposition. Small, 2009, 5, 750-757.	5.2	158
25	Integrated Ultramicroelectrodeâ^'Nanopipet Probe for Concurrent Scanning Electrochemical Microscopy and Scanning Ion Conductance Microscopy. Analytical Chemistry, 2010, 82, 1270-1276.	3.2	157
26	Atomic layer deposition of tin oxide films using tetrakis(dimethylamino) tin. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2008, 26, 244-252.	0.9	153
27	Propane Oxidation over Pt/SrTiO₃ Nanocuboids. ACS Catalysis, 2011, 1, 629-635.	5.5	153
28	Lithium metal protected by atomic layer deposition metal oxide for high performance anodes. Journal of Materials Chemistry A, 2017, 5, 12297-12309.	5.2	150
29	Crude-Oil-Repellent Membranes by Atomic Layer Deposition: Oxide Interface Engineering. ACS Nano, 2018, 12, 8678-8685.	7.3	150
30	Atomic layer deposited protective coatings for micro-electromechanical systems. Sensors and Actuators A: Physical, 2003, 103, 100-108.	2.0	146
31	Atomic layer deposition for nanomaterial synthesis and functionalization in energy technology. Materials Horizons, 2017, 4, 133-154.	6.4	141
32	Aerogel Templated ZnO Dyeâ€Sensitized Solar Cells. Advanced Materials, 2008, 20, 1560-1564.	11.1	138
33	Photoelectrochemical Behavior of n-type Si(100) Electrodes Coated with Thin Films of Manganese Oxide Grown by Atomic Layer Deposition. Journal of Physical Chemistry C, 2013, 117, 4931-4936.	1.5	137
34	Palladium Catalysts Synthesized by Atomic Layer Deposition for Methanol Decomposition. Chemistry of Materials, 2010, 22, 3133-3142.	3.2	135
35	Synthesis of Highly Ordered Hydrothermally Stable Mesoporous Niobia Catalysts by Atomic Layer Deposition. ACS Catalysis, 2011, 1, 1234-1245.	5.5	132
36	Radial Electron Collection in Dye-Sensitized Solar Cells. Nano Letters, 2008, 8, 2862-2866.	4.5	130

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37	Genesis and Evolution of Surface Species during Pt Atomic Layer Deposition on Oxide Supports Characterized by in Situ XAFS Analysis and Waterâ˜Gas Shift Reaction. Journal of Physical Chemistry C, 2010, 114, 9758-9771.	1.5	124
38	Atomic Layer Deposition of TiO₂ on Aerogel Templates: New Photoanodes for Dye-Sensitized Solar Cells. Journal of Physical Chemistry C, 2008, 112, 10303-10307.	1.5	122
39	Atomic Layer Deposition of In2O3 Using Cyclopentadienyl Indium:â€‰ A New Synthetic Route to Transparent Conducting Oxide Films. Chemistry of Materials, 2006, 18, 3571-3578.	3.2	119
40	Atomic Layer Deposition of Fe₂O₃ Using Ferrocene and Ozone. Journal of Physical Chemistry C, 2011, 115, 4333-4339.	1.5	118
41	Size-dependent selectivity and activity of silver nanoclusters in the partial oxidation of propylene to propylene oxide and acrolein: A joint experimental and theoretical study. Catalysis Today, 2011, 160, 116-130.	2.2	115
42	Vapor-Phase Atomic-Controllable Growth of Amorphous Li₂S for High-Performance Lithiumâ€“Sulfur Batteries. ACS Nano, 2014, 8, 10963-10972.	7.3	114
43	Advanced oil sorbents using sequential infiltration synthesis. Journal of Materials Chemistry A, 2017, 5, 2929-2935.	5.2	114
44	Porous Alumina Protective Coatings on Palladium Nanoparticles by Self-Poisoned Atomic Layer Deposition. Chemistry of Materials, 2012, 24, 2047-2055.	3.2	110
45	Shape-selective sieving layers on an oxide catalyst surface. Nature Chemistry, 2012, 4, 1030-1036.	6.6	110
46	ALD for clean energy conversion, utilization, and storage. MRS Bulletin, 2011, 36, 899-906.	1.7	109
47	Atomic Layer Deposition of Ga₂O₃ Films Using Trimethylgallium and Ozone. Chemistry of Materials, 2012, 24, 4011-4018.	3.2	107
48	Amorphous Metal Fluoride Passivation Coatings Prepared by Atomic Layer Deposition on LiCoO₂ for Li-Ion Batteries. Chemistry of Materials, 2015, 27, 1917-1920.	3.2	105
49	Tailored PEDOT:PSS hole transport layer for higher performance in perovskite solar cells: Enhancement of electrical and optical properties with improved morphology. Journal of Energy Chemistry, 2020, 44, 41-50.	7.1	105
50	Synthesis of Ptâ€“Pd Coreâ€“Shell Nanostructures by Atomic Layer Deposition: Application in Propane Oxidative Dehydrogenation to Propylene. Chemistry of Materials, 2012, 24, 3525-3533.	3.2	104
51	Atomic Layer Deposition of Li_xAl_yS Solidâ€State Electrolytes for Stabilizing Lithiumâ€Metal Anodes. ChemElectroChem, 2016, 3, 858-863.	1.7	104
52	Effect of Atomic Layer Deposition Coatings on the Surface Structure of Anodic Aluminum Oxide Membranes. Journal of Physical Chemistry B, 2005, 109, 14059-14063.	1.2	102
53	Gallium Sulfideâ€“Singleâ€Walled Carbon Nanotube Composites: Highâ€Performance Anodes for Lithiumâ€Ion Batteries. Advanced Functional Materials, 2014, 24, 5435-5442.	7.8	102
54	New Insight into the Mechanism of Sequential Infiltration Synthesis from Infrared Spectroscopy. Chemistry of Materials, 2014, 26, 6135-6141.	3.2	102

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55	Atomic Layer Deposition of Indium Tin Oxide Thin Films Using Nonhalogenated Precursors. Journal of Physical Chemistry C, 2008, 112, 1938-1945.	1.5	101
56	Chinese Ink: A Powerful Photothermal Material for Solar Steam Generation. Advanced Materials Interfaces, 2019, 6, 1801252.	1.9	100
57	Novel ALD Chemistry Enabled Low-Temperature Synthesis of Lithium Fluoride Coatings for Durable Lithium Anodes. ACS Applied Materials & Interfaces, 2018, 10, 26972-26981.	4.0	99
58	Characterizing the Three-Dimensional Structure of Block Copolymers via Sequential Infiltration Synthesis and Scanning Transmission Electron Tomography. ACS Nano, 2015, 9, 5333-5347.	7.3	98
59	Towards ALD thin film stabilized single-atom Pd₁catalysts. Nanoscale, 2016, 8, 15348-15356.	2.8	98
60	Toward a Thermally Robust Operando Surface-Enhanced Raman Spectroscopy Substrate. Journal of Physical Chemistry C, 2007, 111, 16827-16832.	1.5	94
61	Subnanometer Palladium Particles Synthesized by Atomic Layer Deposition. ACS Catalysis, 2011, 1, 665-673.	5.5	93
62	Atomic Layer Deposition of ZnO in Quantum Dot Thin Films. Advanced Materials, 2009, 21, 232-235.	11.1	91
63	Structural, optical, and electronic stability of copper sulfide thin films grown by atomic layer deposition. Energy and Environmental Science, 2013, 6, 1868.	15.6	91
64	Effect of interface modifications on voltage fade in 0.5Li2MnO3Â·0.5LiNi0.375Mn0.375Co0.25O2 cathode materials. Journal of Power Sources, 2014, 249, 509-514.	4.0	89
65	Energy Levels, Electronic Properties, and Rectification in Ultrathin p-NiO Films Synthesized by Atomic Layer Deposition. Journal of Physical Chemistry C, 2012, 116, 16830-16840.	1.5	88
66	Enhanced nucleation, smoothness and conformality of ultrananocrystalline diamond (UNCD) ultrathin films via tungsten interlayers. Chemical Physics Letters, 2006, 430, 345-350.	1.2	85
67	Sequential Infiltration Synthesis for the Design of Low Refractive Index Surface Coatings with Controllable Thickness. ACS Nano, 2017, 11, 2521-2530.	7.3	84
68	Indium Oxide Atomic Layer Deposition Facilitated by the Synergy between Oxygen and Water. Chemistry of Materials, 2011, 23, 2150-2158.	3.2	80
69	Atomic Layer Deposition of Gallium Sulfide Films Using Hexakis(dimethylamido)digallium and Hydrogen Sulfide. Chemistry of Materials, 2014, 26, 1029-1039.	3.2	79
70	Atomic layer deposition of Cu2S for future application in photovoltaics. Applied Physics Letters, 2009, 94, .	1.5	77
71	Oxidative Decomposition of Methanol on Subnanometer Palladium Clusters: The Effect of Catalyst Size and Support Composition. Journal of Physical Chemistry C, 2010, 114, 10342-10348.	1.5	76
72	Atomic Layer Deposition of Irâ”Pt Alloy Films. Chemistry of Materials, 2010, 22, 2517-2525.	3.2	76

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73	The chemical physics of sequential infiltration synthesisâ€"A thermodynamic and kinetic perspective. Journal of Chemical Physics, 2019, 151, 190901.	1.2	76
74	Atomic Layer Deposition of the Quaternary Chalcogenide Cu₂ZnSnS₄. Chemistry of Materials, 2012, 24, 3188-3196.	3.2	75
75	Understanding the Effect of Interlayers at the Thiophosphate Solid Electrolyte/Lithium Interface for All-Solid-State Li Batteries. Chemistry of Materials, 2018, 30, 8747-8756.	3.2	75
76	Visibleâ€Lightâ€Activated Photocatalytic Films toward Selfâ€Cleaning Membranes. Advanced Functional Materials, 2020, 30, 2002847.	7.8	74
77	Reactivity of supported platinum nanoclusters studied by in situ GISAXS: clusters stability under hydrogen. Topics in Catalysis, 2006, 39, 145-149.	1.3	73
78	Iron(III)-oxo Centers on TiO₂ for Visible-Light Photocatalysis. Chemistry of Materials, 2010, 22, 409-413.	3.2	73
79	Enhanced polymeric lithography resists via sequential infiltration synthesis. Journal of Materials Chemistry, 2011, 21, 11722.	6.7	73
80	Consistency and reproducibility in atomic layer deposition. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2020, 38, .	0.9	72
81	Supported gold clusters and cluster-based nanomaterials: characterization, stability and growth studies by in situ GISAXS under vacuum conditions and in the presence of hydrogen. Topics in Catalysis, 2006, 39, 161-166.	1.3	70
82	Polyphenolâ€Sensitized Atomic Layer Deposition for Membrane Interface Hydrophilization. Advanced Functional Materials, 2020, 30, 1910062.	7.8	70
83	Adsorbate-Induced Structural Changes in 1â€"3 nm Platinum Nanoparticles. Journal of the American Chemical Society, 2014, 136, 9320-9326.	6.6	69
84	First-Principles Predictions and in Situ Experimental Validation of Alumina Atomic Layer Deposition on Metal Surfaces. Chemistry of Materials, 2014, 26, 6752-6761.	3.2	68
85	Kinetics for the Sequential Infiltration Synthesis of Alumina in Poly(methyl methacrylate): An Infrared Spectroscopic Study. Journal of Physical Chemistry C, 2015, 119, 14585-14592.	1.5	68
86	Introducing Nonstructural Ligands to Zirconia-like Metalâ€"Organic Framework Nodes To Tune the Activity of Node-Supported Nickel Catalysts for Ethylene Hydrogenation. ACS Catalysis, 2019, 9, 3198-3207.	5.5	68
87	Enhanced Lithographic Imaging Layer Meets Semiconductor Manufacturing Specification a Decade Early. Advanced Materials, 2012, 24, 2608-2613.	11.1	67
88	Mechanistic Study of Lithium Aluminum Oxide Atomic Layer Deposition. Journal of Physical Chemistry C, 2013, 117, 1677-1683.	1.5	67
89	Directly Formed Alucone on Lithium Metal for High-Performance Li Batteries and Liâ€"S Batteries with High Sulfur Mass Loading. ACS Applied Materials & Interfaces, 2018, 10, 7043-7051.	4.0	66
90	Water treatment based on atomically engineered materials: Atomic layer deposition and beyond. Matter, 2021, 4, 3515-3548.	5.0	66

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91	Enhancing the stability of copper chromite catalysts for the selective hydrogenation of furfural using ALD overcoating. Journal of Catalysis, 2014, 317, 284-292.	3.1	65
92	Nanoscale Structure and Morphology of Atomic Layer Deposition Platinum on SrTiO₃ (001). Chemistry of Materials, 2009, 21, 516-521.	3.2	63
93	Atomic Layer Deposition of Aluminum Oxide in Mesoporous Silica Gel. Journal of Physical Chemistry C, 2010, 114, 17286-17292.	1.5	63
94	Conformal Nitrogenâ€Doped TiO₂ Photocatalytic Coatings for Sunlightâ€Activated Membranes. Advanced Sustainable Systems, 2017, 1, 1600041.	2.7	63
95	Atomâ€probe analyses of nanodiamonds from Allende. Meteoritics and Planetary Science, 2014, 49, 453-467.	0.7	62
96	Nanoscale Investigation of Solid Electrolyte Interphase Inhibition on Li-Ion Battery MnO Electrodes via Atomic Layer Deposition of Al₂O₃. Chemistry of Materials, 2014, 26, 935-940.	3.2	60
97	Advanced strategies for the development of porous carbon as a Li host/current collector for lithium metal batteries. Energy Storage Materials, 2021, 41, 448-465.	9.5	60
98	Janus Membranes via Diffusionâ€Controlled Atomic Layer Deposition. Advanced Materials Interfaces, 2018, 5, 1800658.	1.9	59
99	Tuning the Composition and Nanostructure of Pt/Ir Films via Anodized Aluminum Oxide Templated Atomic Layer Deposition. Advanced Functional Materials, 2010, 20, 3099-3105.	7.8	58
100	Surface Loss in Ozone-Based Atomic Layer Deposition Processes. Chemistry of Materials, 2011, 23, 2381-2387.	3.2	58
101	Pore Structure and Bifunctional Catalyst Activity of Overlayers Applied by Atomic Layer Deposition on Copper Nanoparticles. ACS Catalysis, 2014, 4, 1554-1557.	5.5	58
102	Indium Oxide Thin Films by Atomic Layer Deposition Using Trimethylindium and Ozone. Journal of Physical Chemistry C, 2016, 120, 9874-9883.	1.5	58
103	Atomic Layer Deposition of MnS: Phase Control and Electrochemical Applications. ACS Applied Materials & Interfaces, 2016, 8, 2774-2780.	4.0	57
104	Tunable core-shell single-walled carbon nanotube-Cu2S networked nanocomposites as high-performance cathodes for lithium-ion batteries. Journal of Power Sources, 2015, 280, 621-629.	4.0	56
105	Selfâ€Limited Reactionâ€Diffusion in Nanostructured Substrates: Surface Coverage Dynamics and Analytic Approximations to ALD Saturation Times. Chemical Vapor Deposition, 2012, 18, 46-52.	1.4	54
106	Lithium Self-Discharge and Its Prevention: Direct Visualization through In Situ Electrochemical Scanning Transmission Electron Microscopy. ACS Nano, 2017, 11, 11194-11205.	7.3	53
107	Ion Exchange in Ultrathin Films of Cu₂S and ZnS under Atomic Layer Deposition Conditions. Chemistry of Materials, 2011, 23, 4411-4413.	3.2	49
108	Mechanism for Al2O3 Atomic Layer Deposition on LiMn2O4 from In Situ Measurements and Ab Initio Calculations. CheM, 2018, 4, 2418-2435.	5.8	47

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109	Volatile Hexavalent Oxo-amidinate Complexes: Molybdenum and Tungsten Precursors for Atomic Layer Deposition. Chemistry of Materials, 2016, 28, 1907-1919.	3.2	45
110	Atomic Layer Deposition of Uniform Metal Coatings on Highly Porous Aerogel Substrates. Chemistry of Materials, 2006, 18, 6106-6108.	3.2	44
111	Combining Electronic and Geometric Effects of ZnO-Promoted Pt Nanocatalysts for Aqueous Phase Reforming of 1-Propanol. ACS Catalysis, 2016, 6, 3457-3460.	5.5	43
112	Atomic Layer Deposition of Aluminum Sulfide: Growth Mechanism and Electrochemical Evaluation in Lithium-Ion Batteries. Chemistry of Materials, 2017, 29, 9043-9052.	3.2	43
113	Advanced Materials for Energy-Water Systems: The Central Role of Water/Solid Interfaces in Adsorption, Reactivity, and Transport. Chemical Reviews, 2021, 121, 9450-9501.	23.0	43
114	In situ diffraction of highly dispersed supported platinum nanoparticles. Catalysis Science and Technology, 2014, 4, 3053-3063.	2.1	42
115	Palladium Nanoparticle Formation on TiO₂(110) by Thermal Decomposition of Palladium(II) Hexafluoroacetylacetonate. ACS Applied Materials & Interfaces, 2014, 6, 14702-14711.	4.0	42
116	Effect of Nanostructured Domains in Self-Assembled Block Copolymer Films on Sequential Infiltration Synthesis. Langmuir, 2017, 33, 13214-13223.	1.6	42
117	Combined temperature-programmed reaction and in situ x-ray scattering studies of size-selected silver clusters under realistic reaction conditions in the epoxidation of propene. Journal of Chemical Physics, 2009, 131, 121104.	1.2	41
118	Laser Ablation of Trp-Gly. Journal of Physical Chemistry B, 1998, 102, 8113-8120.	1.2	40
119	Controlled Dopant Distribution and Higher Doping Efficiencies by Surface-Functionalized Atomic Layer Deposition. Chemistry of Materials, 2011, 23, 4295-4297.	3.2	39
120	Modulation of the Growth Per Cycle in Atomic Layer Deposition Using Reversible Surface Functionalization. Chemistry of Materials, 2013, 25, 4849-4860.	3.2	39
121	Atomic layer deposition of TiO2 thin films on nanoporous alumina templates: Medical applications. Jom, 2009, 61, 12-16.	0.9	38
122	Low temperature atomic layer deposition of highly photoactive hematite using iron(iii) chloride and water. Journal of Materials Chemistry A, 2013, 1, 11607.	5.2	38
123	Simple model for atomic layer deposition precursor reaction and transport in a viscous-flow tubular reactor. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2012, 30, .	0.9	37
124	Interfaces and Composition Profiles in Metalâ€“Sulfide Nanolayers Synthesized by Atomic Layer Deposition. Chemistry of Materials, 2013, 25, 313-319.	3.2	37
125	Templating Sub-10 nm Atomic Layer Deposited Oxide Nanostructures on Graphene via One-Dimensional Organic Self-Assembled Monolayers. Nano Letters, 2013, 13, 5763-5770.	4.5	37
126	Mitigating oil spills in the water column. Environmental Science: Water Research and Technology, 2018, 4, 40-47.	1.2	36

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127	Selfâ€Cleaning Membranes: Visibleâ€Lightâ€Activated Photocatalytic Films toward Selfâ€Cleaning Membranes (Adv. Funct. Mater. 34/2020). Advanced Functional Materials, 2020, 30, 2070230.	7.8	36
128	Stability of Silver Nanoparticles Fabricated by Nanosphere Lithography and Atomic Layer Deposition to Femtosecond Laser Excitation. Journal of Physical Chemistry C, 2008, 112, 5707-5714.	1.5	35
129	Atomic Layer Deposition of Amorphous Niobium Carbide-Based Thin Film Superconductors. Journal of Physical Chemistry C, 2011, 115, 25063-25071.	1.5	35
130	New Insights into Sequential Infiltration Synthesis. ECS Transactions, 2015, 69, 147-157.	0.3	35
131	Conductive Atomic Force Microscope Nanopatterning of Epitaxial Graphene on SiC(0001) in Ambient Conditions. Advanced Materials, 2011, 23, 2181-2184.	11.1	34
132	Atomic Layer Deposition of W:Al₂O₃ Nanocomposite Films with Tunable Resistivity. Chemical Vapor Deposition, 2013, 19, 186-193.	1.4	32
133	Low Temperature ABC-Type Ru Atomic Layer Deposition through Consecutive Dissociative Chemisorption, Combustion, and Reduction Steps. Chemistry of Materials, 2015, 27, 4950-4956.	3.2	32
134	Atomic Layer Deposition of Alâ€“Wâ€“Fluoride on LiCoO₂ Cathodes: Comparison of Particle- and Electrode-Level Coatings. ACS Omega, 2017, 2, 3724-3729.	1.6	32
135	Resolving Precursor Deligation, Surface Species Evolution, and Nanoparticle Nucleation during Palladium Atomic Layer Deposition. Journal of Physical Chemistry C, 2013, 117, 11141-11148.	1.5	30
136	Understanding the Chemistry of H₂ Production for 1-Propanol Reforming: Pathway and Support Modification Effects. ACS Catalysis, 2012, 2, 2316-2326.	5.5	29
137	Atomic layer deposition of molybdenum disulfide films using MoF6 and H2S. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2018, 36, .	0.9	29
138	Descriptor-Based Analysis of Atomic Layer Deposition Mechanisms on Spinel LiMn₂O₄ Lithium-Ion Battery Cathodes. Chemistry of Materials, 2020, 32, 1794-1806.	3.2	29
139	Fabrication of Transparent-Conducting-Oxide-Coated Inverse Opals as Mesostructured Architectures for Electrocatalysis Applications: A Case Study with NiO. ACS Applied Materials & Interfaces, 2014, 6, 12290-12294.	4.0	28
140	Structural Evolution of Molybdenum Disulfide Prepared by Atomic Layer Deposition for Realization of Large Scale Films in Microelectronic Applications. ACS Applied Nano Materials, 2018, 1, 4028-4037.	2.4	28
141	Electrochemical characterization of voltage fade of Li1.2Ni0.2Mn0.6O2 cathode. Solid State Ionics, 2014, 268, 231-235.	1.3	27
142	Imaging of Atomic Layer Deposited (ALD) Tungsten Monolayers on Î±-TiO2(110) by X-ray Standing Wave Fourier Inversion. Journal of Physical Chemistry B, 2006, 110, 12616-12620.	1.2	26
143	Mechanistic understanding of tungsten oxide in-plane nanostructure growth via sequential infiltration synthesis. Nanoscale, 2018, 10, 3469-3479.	2.8	25
144	Sequential Infiltration Synthesis of Al2O3 in Polyethersulfone Membranes. Jom, 2019, 71, 212-223.	0.9	25

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145	Cleavage of the Câ€“Oâ€“C bond on size-selected subnanometer cobalt catalysts and on ALD-cobalt coated nanoporous membranes. Applied Catalysis A: General, 2011, 393, 29-35.	2.2	24
146	Effects of Chlorine in Titanium Oxide on Palladium Atomic Layer Deposition. Journal of Physical Chemistry C, 2014, 118, 22611-22619.	1.5	24
147	Probing the Atomic-Scale Structure of Amorphous Aluminum Oxide Grown by Atomic Layer Deposition. ACS Applied Materials & Interfaces, 2020, 12, 22804-22814.	4.0	23
148	Direct Atomic-Scale Observation of Redox-Induced Cation Dynamics in an Oxide-Supported Monolayer Catalyst: WO_x/Î±-Fe₂O₃(0001). Journal of the American Chemical Society, 2009, 131, 18200-18201.	6.6	22
149	Synthesis of nanoporous activated iridium oxide films by anodized aluminum oxide templated atomic layer deposition. Electrochemistry Communications, 2010, 12, 1543-1546.	2.3	22
150	CO Hydrogenation: Exploring Iridium as a Promoter for Supported Cobalt Catalysts by TPR-EXAFS/XANES and Reaction Testing. Catalysis Letters, 2011, 141, 968-976.	1.4	22
151	A Markov chain approach to simulate Atomic Layer Deposition chemistry and transport inside nanostructured substrates. Theoretical Chemistry Accounts, 2014, 133, 1.	0.5	22
152	Highâ€Performance Highâ€Loading Lithiumâ€“Sulfur Batteries by Low Temperature Atomic Layer Deposition of Aluminum Oxide on Nanophase S Cathodes. Advanced Materials Interfaces, 2017, 4, 1700096.	1.9	22
153	High-Rate Spinel LiMn₂O₄ (LMO) Following Carbonate Removal and Formation of Li-Rich Interface by ALD Treatment. Journal of Physical Chemistry C, 2019, 123, 23783-23790.	1.5	22
154	Ultraviolet laser desorption of indole. Journal of Chemical Physics, 1997, 106, 10368-10378.	1.2	21
155	Exploring Pore Formation of Atomic Layer-Deposited Overlayers by in Situ Small- and Wide-Angle X-ray Scattering. Chemistry of Materials, 2016, 28, 7082-7087.	3.2	21
156	Indium Oxide ALD Using Cyclopentadienyl Indium and Mixtures of H₂O and O₂. ECS Transactions, 2011, 41, 147-155.	0.3	20
157	High aspect ratio nanoneedle probes with an integrated electrode at the tip apex. Review of Scientific Instruments, 2012, 83, 113704.	0.6	20
158	Atomic-Scale Study of Ambient-Pressure Redox-Induced Changes for an Oxide-Supported Submonolayer Catalyst: VO_x/Î±-TiO₂(110). Journal of Physical Chemistry Letters, 2012, 3, 2845-2850.	2.1	20
159	Epitaxial Stabilization of Face Selective Catalysts. Topics in Catalysis, 2013, 56, 1829-1834.	1.3	20
160	Titania Supported Ru Nanoclusters as Catalysts for Hydrodeoxygenation of Pyrolysis Oils. Catalysis Letters, 2016, 146, 525-539.	1.4	20
161	Catalysts Transform While Molecules React: An Atomic-Scale View. Journal of Physical Chemistry Letters, 2013, 4, 285-291.	2.1	19
162	Low fluence laser sputtering of gold at 532 nm. Journal of Applied Physics, 1997, 81, 539-541.	1.1	18

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163	Analytic expressions for atomic layer deposition: Coverage, throughput, and materials utilization in cross-flow, particle coating, and spatial atomic layer deposition. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2014, 32, .	0.9	18
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