

Jeffrey W Elam

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226
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232
ext. papers

16,222
ext. citations

8.4
avg, IF

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L-index

#	Paper	IF	Citations
226	ZnO nanotube based dye-sensitized solar cells. <i>Nano Letters</i> , 2007 , 7, 2183-7	11.5	682
225	Subnanometre platinum clusters as highly active and selective catalysts for the oxidative dehydrogenation of propane. <i>Nature Materials</i> , 2009 , 8, 213-6	27	631
224	Coking- and sintering-resistant palladium catalysts achieved through atomic layer deposition. <i>Science</i> , 2012 , 335, 1205-8	33.3	596
223	Catalyst Design with Atomic Layer Deposition. <i>ACS Catalysis</i> , 2015 , 5, 1804-1825	13.1	483
222	Ultrastable substrates for surface-enhanced Raman spectroscopy: Al ₂ O ₃ overlayers fabricated by atomic layer deposition yield improved anthrax biomarker detection. <i>Journal of the American Chemical Society</i> , 2006 , 128, 10304-9	16.4	370
221	Membrane materials for water purification: design, development, and application. <i>Environmental Science: Water Research and Technology</i> , 2016 , 2, 17-42	4.2	363
220	Structural and Electrochemical Study of Al ₂ O ₃ and TiO ₂ Coated Li _{1.2} Ni _{0.13} Mn _{0.54} Co _{0.13} O ₂ Cathode Material Using ALD. <i>Advanced Energy Materials</i> , 2013 , 3, 1299-1307	21.8	342
219	Localized surface plasmon resonance nanosensor: a high-resolution distance-dependence study using atomic layer deposition. <i>Journal of Physical Chemistry B</i> , 2005 , 109, 20522-8	3.4	282
218	Synthesis and stabilization of supported metal catalysts by atomic layer deposition. <i>Accounts of Chemical Research</i> , 2013 , 46, 1806-15	24.3	231
217	Nanosopic patterned materials with tunable dimensions via atomic layer deposition on block copolymers. <i>Advanced Materials</i> , 2010 , 22, 5129-33	24	227
216	Selective propene epoxidation on immobilized Au(6-10) clusters: the effect of hydrogen and water on activity and selectivity. <i>Angewandte Chemie - International Edition</i> , 2009 , 48, 1467-71	16.4	224
215	A route to nanoscopic materials via sequential infiltration synthesis on block copolymer templates. <i>ACS Nano</i> , 2011 , 5, 4600-6	16.7	209
214	Effectively suppressing dissolution of manganese from spinel lithium manganate via a nanoscale surface-doping approach. <i>Nature Communications</i> , 2014 , 5, 5693	17.4	202
213	Atomic layer deposition-Sequential self-limiting surface reactions for advanced catalyst Bottom-up synthesis. <i>Surface Science Reports</i> , 2016 , 71, 410-472	12.9	195
212	Supported Ru-Pt bimetallic nanoparticle catalysts prepared by atomic layer deposition. <i>Nano Letters</i> , 2010 , 10, 3047-51	11.5	193
211	Synthesis of porous carbon supported palladium nanoparticle catalysts by atomic layer deposition: application for rechargeable lithium-O ₂ battery. <i>Nano Letters</i> , 2013 , 13, 4182-9	11.5	170
210	Ultrathin Lithium-Ion Conducting Coatings for Increased Interfacial Stability in High Voltage Lithium-Ion Batteries. <i>Chemistry of Materials</i> , 2014 , 26, 3128-3134	9.6	164

209	Toward atomically-precise synthesis of supported bimetallic nanoparticles using atomic layer deposition. <i>Nature Communications</i> , 2014 , 5, 3264	17.4	156
208	Enhanced Block Copolymer Lithography Using Sequential Infiltration Synthesis. <i>Journal of Physical Chemistry C</i> , 2011 , 115, 17725-17729	3.8	152
207	Seeding atomic layer deposition of high-k dielectrics on epitaxial graphene with organic self-assembled monolayers. <i>ACS Nano</i> , 2011 , 5, 5223-32	16.7	149
206	Stabilization of copper catalysts for liquid-phase reactions by atomic layer deposition. <i>Angewandte Chemie - International Edition</i> , 2013 , 52, 13808-12	16.4	146
205	Atomic layer deposition of metal sulfide materials. <i>Accounts of Chemical Research</i> , 2015 , 48, 341-8	24.3	145
204	Controlled growth of platinum nanoparticles on strontium titanate nanocubes by atomic layer deposition. <i>Small</i> , 2009 , 5, 750-7	11	145
203	Alumina Over-coating on Pd Nanoparticle Catalysts by Atomic Layer Deposition: Enhanced Stability and Reactivity. <i>Catalysis Letters</i> , 2011 , 141, 512-517	2.8	144
202	Integrated ultramicroelectrode-nanopipet probe for concurrent scanning electrochemical microscopy and scanning ion conductance microscopy. <i>Analytical Chemistry</i> , 2010 , 82, 1270-6	7.8	141
201	Photoelectrochemical Behavior of n-type Si(100) Electrodes Coated with Thin Films of Manganese Oxide Grown by Atomic Layer Deposition. <i>Journal of Physical Chemistry C</i> , 2013 , 117, 4931-4936	3.8	133
200	Propane Oxidation over Pt/SrTiO ₃ Nanocuboids. <i>ACS Catalysis</i> , 2011 , 1, 629-635	13.1	133
199	Atomic layer deposited protective coatings for micro-electromechanical systems. <i>Sensors and Actuators A: Physical</i> , 2003 , 103, 100-108	3.9	130
198	Atomic layer deposition of tin oxide films using tetrakis(dimethylamino) tin. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 2008 , 26, 244-252	2.9	129
197	Radial electron collection in dye-sensitized solar cells. <i>Nano Letters</i> , 2008 , 8, 2862-6	11.5	124
196	Aerogel Templated ZnO Dye-Sensitized Solar Cells. <i>Advanced Materials</i> , 2008 , 20, 1560-1564	24	124
195	Palladium Catalysts Synthesized by Atomic Layer Deposition for Methanol Decomposition. <i>Chemistry of Materials</i> , 2010 , 22, 3133-3142	9.6	122
194	Atomic layer deposition for nanomaterial synthesis and functionalization in energy technology. <i>Materials Horizons</i> , 2017 , 4, 133-154	14.4	119
193	Lithium metal protected by atomic layer deposition metal oxide for high performance anodes. <i>Journal of Materials Chemistry A</i> , 2017 , 5, 12297-12309	13	112
192	Atomic Layer Deposition of TiO ₂ on Aerogel Templates: New Photoanodes for Dye-Sensitized Solar Cells. <i>Journal of Physical Chemistry C</i> , 2008 , 112, 10303-10307	3.8	112

191	Synthesis of Highly Ordered Hydrothermally Stable Mesoporous Niobia Catalysts by Atomic Layer Deposition. <i>ACS Catalysis</i> , 2011 , 1, 1234-1245	13.1	110
190	Atomic Layer Deposition of Fe ₂ O ₃ Using Ferrocene and Ozone. <i>Journal of Physical Chemistry C</i> , 2011 , 115, 4333-4339	3.8	108
189	Genesis and Evolution of Surface Species during Pt Atomic Layer Deposition on Oxide Supports Characterized by in Situ XAFS Analysis and Water Gas Shift Reaction. <i>Journal of Physical Chemistry C</i> , 2010 , 114, 9758-9771	3.8	106
188	Shape-selective sieving layers on an oxide catalyst surface. <i>Nature Chemistry</i> , 2012 , 4, 1030-6	17.6	105
187	Atomic Layer Deposition of In ₂ O ₃ Using Cyclopentadienyl Indium: A New Synthetic Route to Transparent Conducting Oxide Films. <i>Chemistry of Materials</i> , 2006 , 18, 3571-3578	9.6	103
186	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. <i>Catalysis Today</i> , 2011 , 160, 116-130	5.3	102
185	Porous Alumina Protective Coatings on Palladium Nanoparticles by Self-Poisoned Atomic Layer Deposition. <i>Chemistry of Materials</i> , 2012 , 24, 2047-2055	9.6	100
184	ALD for clean energy conversion, utilization, and storage. <i>MRS Bulletin</i> , 2011 , 36, 899-906	3.2	100
183	Crude-Oil-Repellent Membranes by Atomic Layer Deposition: Oxide Interface Engineering. <i>ACS Nano</i> , 2018 , 12, 8678-8685	16.7	99
182	Vapor-phase atomic-controllable growth of amorphous Li ₂ S for high-performance lithium-sulfur batteries. <i>ACS Nano</i> , 2014 , 8, 10963-72	16.7	96
181	Synthesis of PtPd CoreShell Nanostructures by Atomic Layer Deposition: Application in Propane Oxidative Dehydrogenation to Propylene. <i>Chemistry of Materials</i> , 2012 , 24, 3525-3533	9.6	96
180	Effect of atomic layer deposition coatings on the surface structure of anodic aluminum oxide membranes. <i>Journal of Physical Chemistry B</i> , 2005 , 109, 14059-63	3.4	96
179	Atomic Layer Deposition of Indium Tin Oxide Thin Films Using Nonhalogenated Precursors. <i>Journal of Physical Chemistry C</i> , 2008 , 112, 1938-1945	3.8	94
178	Toward a Thermally Robust Operando Surface-Enhanced Raman Spectroscopy Substrate. <i>Journal of Physical Chemistry C</i> , 2007 , 111, 16827-16832	3.8	90
177	Advanced oil sorbents using sequential infiltration synthesis. <i>Journal of Materials Chemistry A</i> , 2017 , 5, 2929-2935	13	87
176	Subnanometer Palladium Particles Synthesized by Atomic Layer Deposition. <i>ACS Catalysis</i> , 2011 , 1, 665-673	13.1	87
175	Characterizing the Three-Dimensional Structure of Block Copolymers via Sequential Infiltration Synthesis and Scanning Transmission Electron Tomography. <i>ACS Nano</i> , 2015 , 9, 5333-47	16.7	84
174	Amorphous Metal Fluoride Passivation Coatings Prepared by Atomic Layer Deposition on LiCoO ₂ for Li-Ion Batteries. <i>Chemistry of Materials</i> , 2015 , 27, 1917-1920	9.6	83

173	Atomic Layer Deposition of ZnO in Quantum Dot Thin Films. <i>Advanced Materials</i> , 2009 , 21, 232-235	24	83
172	Atomic Layer Deposition of Li _x Al _y S Solid-State Electrolytes for Stabilizing Lithium-Metal Anodes. <i>ChemElectroChem</i> , 2016 , 3, 858-863	4.3	82
171	Structural, optical, and electronic stability of copper sulfide thin films grown by atomic layer deposition. <i>Energy and Environmental Science</i> , 2013 , 6, 1868	35.4	81
170	New Insight into the Mechanism of Sequential Infiltration Synthesis from Infrared Spectroscopy. <i>Chemistry of Materials</i> , 2014 , 26, 6135-6141	9.6	79
169	Gallium Sulfide/Single-Walled Carbon Nanotube Composites: High-Performance Anodes for Lithium-Ion Batteries. <i>Advanced Functional Materials</i> , 2014 , 24, 5435-5442	15.6	78
168	Enhanced nucleation, smoothness and conformality of ultrananocrystalline diamond (UNCD) ultrathin films via tungsten interlayers. <i>Chemical Physics Letters</i> , 2006 , 430, 345-350	2.5	78
167	Atomic Layer Deposition of Ga ₂ O ₃ Films Using Trimethylgallium and Ozone. <i>Chemistry of Materials</i> , 2012 , 24, 4011-4018	9.6	76
166	Effect of interface modifications on voltage fade in 0.5Li ₂ MnO ₃ /0.5LiNi _{0.375} Mn _{0.375} Co _{0.25} O ₂ cathode materials. <i>Journal of Power Sources</i> , 2014 , 249, 509-514	8.9	74
165	Chinese Ink: A Powerful Photothermal Material for Solar Steam Generation. <i>Advanced Materials Interfaces</i> , 2019 , 6, 1801252	4.6	74
164	Atomic layer deposition of Cu ₂ S for future application in photovoltaics. <i>Applied Physics Letters</i> , 2009 , 94, 123107	3.4	72
163	Energy Levels, Electronic Properties, and Rectification in Ultrathin p-NiO Films Synthesized by Atomic Layer Deposition. <i>Journal of Physical Chemistry C</i> , 2012 , 116, 16830-16840	3.8	71
162	Indium Oxide Atomic Layer Deposition Facilitated by the Synergy between Oxygen and Water. <i>Chemistry of Materials</i> , 2011 , 23, 2150-2158	9.6	71
161	Reactivity of supported platinum nanoclusters studied by in situ GISAXS: clusters stability under hydrogen. <i>Topics in Catalysis</i> , 2006 , 39, 145-149	2.3	70
160	Towards ALD thin film stabilized single-atom Pd ¹ catalysts. <i>Nanoscale</i> , 2016 , 8, 15348-56	7.7	70
159	Atomic Layer Deposition of Ir/Pt Alloy Films. <i>Chemistry of Materials</i> , 2010 , 22, 2517-2525	9.6	69
158	Atomic Layer Deposition of Gallium Sulfide Films Using Hexakis(dimethylamido)digallium and Hydrogen Sulfide. <i>Chemistry of Materials</i> , 2014 , 26, 1029-1039	9.6	68
157	Iron(III)-oxo Centers on TiO ₂ for Visible-Light Photocatalysis. <i>Chemistry of Materials</i> , 2010 , 22, 409-413	9.6	68
156	Oxidative Decomposition of Methanol on Subnanometer Palladium Clusters: The Effect of Catalyst Size and Support Composition. <i>Journal of Physical Chemistry C</i> , 2010 , 114, 10342-10348	3.8	67

155	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. <i>Topics in Catalysis</i> , 2006 , 39, 161-166	2.3	67
154	Novel ALD Chemistry Enabled Low-Temperature Synthesis of Lithium Fluoride Coatings for Durable Lithium Anodes. <i>ACS Applied Materials & Interfaces</i> , 2018 , 10, 26972-26981	9.5	66
153	Enhanced lithographic imaging layer meets semiconductor manufacturing specification a decade early. <i>Advanced Materials</i> , 2012 , 24, 2608-13	24	66
152	Tailored PEDOT:PSS hole transport layer for higher performance in perovskite solar cells: Enhancement of electrical and optical properties with improved morphology. <i>Journal of Energy Chemistry</i> , 2020 , 44, 41-50	12	66
151	Atomic Layer Deposition of the Quaternary Chalcogenide Cu ₂ ZnSnS ₄ . <i>Chemistry of Materials</i> , 2012 , 24, 3188-3196	9.6	65
150	Enhanced polymeric lithography resists via sequential infiltration synthesis. <i>Journal of Materials Chemistry</i> , 2011 , 21, 11722		65
149	Mechanistic Study of Lithium Aluminum Oxide Atomic Layer Deposition. <i>Journal of Physical Chemistry C</i> , 2013 , 117, 1677-1683	3.8	62
148	Nanoscale Structure and Morphology of Atomic Layer Deposition Platinum on SrTiO ₃ (001). <i>Chemistry of Materials</i> , 2009 , 21, 516-521	9.6	62
147	Atomic Layer Deposition of Aluminum Oxide in Mesoporous Silica Gel. <i>Journal of Physical Chemistry C</i> , 2010 , 114, 17286-17292	3.8	60
146	Sequential Infiltration Synthesis for the Design of Low Refractive Index Surface Coatings with Controllable Thickness. <i>ACS Nano</i> , 2017 , 11, 2521-2530	16.7	59
145	Adsorbate-induced structural changes in 1-3 nm platinum nanoparticles. <i>Journal of the American Chemical Society</i> , 2014 , 136, 9320-6	16.4	59
144	Kinetics for the Sequential Infiltration Synthesis of Alumina in Poly(methyl methacrylate): An Infrared Spectroscopic Study. <i>Journal of Physical Chemistry C</i> , 2015 , 119, 14585-14592	3.8	59
143	Surface Loss in Ozone-Based Atomic Layer Deposition Processes. <i>Chemistry of Materials</i> , 2011 , 23, 2381-2387	9.387	58
142	Atom-probe analyses of nanodiamonds from Allende. <i>Meteoritics and Planetary Science</i> , 2014 , 49, 453-467	67.8	57
141	First-Principles Predictions and in Situ Experimental Validation of Alumina Atomic Layer Deposition on Metal Surfaces. <i>Chemistry of Materials</i> , 2014 , 26, 6752-6761	9.6	56
140	Pore Structure and Bifunctional Catalyst Activity of Overlayers Applied by Atomic Layer Deposition on Copper Nanoparticles. <i>ACS Catalysis</i> , 2014 , 4, 1554-1557	13.1	55
139	Understanding the Effect of Interlayers at the Thiophosphate Solid Electrolyte/Lithium Interface for All-Solid-State Li Batteries. <i>Chemistry of Materials</i> , 2018 , 30, 8747-8756	9.6	53
138	Directly Formed Alucone on Lithium Metal for High-Performance Li Batteries and Li-S Batteries with High Sulfur Mass Loading. <i>ACS Applied Materials & Interfaces</i> , 2018 , 10, 7043-7051	9.5	52

137	Enhancing the stability of copper chromite catalysts for the selective hydrogenation of furfural using ALD overcoating. <i>Journal of Catalysis</i> , 2014 , 317, 284-292	7.3	52
136	Tuning the Composition and Nanostructure of Pt/Ir Films via Anodized Aluminum Oxide Templated Atomic Layer Deposition. <i>Advanced Functional Materials</i> , 2010 , 20, 3099-3105	15.6	51
135	The chemical physics of sequential infiltration synthesis-A thermodynamic and kinetic perspective. <i>Journal of Chemical Physics</i> , 2019 , 151, 190901	3.9	51
134	Nanoscale Investigation of Solid Electrolyte Interphase Inhibition on Li-Ion Battery MnO Electrodes via Atomic Layer Deposition of Al ₂ O ₃ . <i>Chemistry of Materials</i> , 2014 , 26, 935-940	9.6	50
133	Atomic Layer Deposition of MnS: Phase Control and Electrochemical Applications. <i>ACS Applied Materials & Interfaces</i> , 2016 , 8, 2774-80	9.5	47
132	Tunable core-shell single-walled carbon nanotube-Cu ₂ S networked nanocomposites as high-performance cathodes for lithium-ion batteries. <i>Journal of Power Sources</i> , 2015 , 280, 621-629	8.9	47
131	Conformal Nitrogen-Doped TiO ₂ Photocatalytic Coatings for Sunlight-Activated Membranes. <i>Advanced Sustainable Systems</i> , 2017 , 1, 1600041	5.9	46
130	Janus Membranes via Diffusion-Controlled Atomic Layer Deposition. <i>Advanced Materials Interfaces</i> , 2018 , 5, 1800658	4.6	46
129	Ion Exchange in Ultrathin Films of Cu ₂ S and ZnS under Atomic Layer Deposition Conditions. <i>Chemistry of Materials</i> , 2011 , 23, 4411-4413	9.6	45
128	Introducing Nonstructural Ligands to Zirconia-like Metal-Organic Framework Nodes To Tune the Activity of Node-Supported Nickel Catalysts for Ethylene Hydrogenation. <i>ACS Catalysis</i> , 2019 , 9, 3198-3207	13.1	45
127	Polyphenol-Sensitized Atomic Layer Deposition for Membrane Interface Hydrophilization. <i>Advanced Functional Materials</i> , 2020 , 30, 1910062	15.6	44
126	Visible-Light-Activated Photocatalytic Films toward Self-Cleaning Membranes. <i>Advanced Functional Materials</i> , 2020 , 30, 2002847	15.6	43
125	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. <i>Journal of Chemical Physics</i> , 2009 , 131, 121104	3.9	41
124	Consistency and reproducibility in atomic layer deposition. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 2020 , 38, 020804	2.9	40
123	Self-Limited Reaction-Diffusion in Nanostructured Substrates: Surface Coverage Dynamics and Analytic Approximations to ALD Saturation Times. <i>Chemical Vapor Deposition</i> , 2012 , 18, 46-52		40
122	Stabilization of Copper Catalysts for Liquid-Phase Reactions by Atomic Layer Deposition. <i>Angewandte Chemie</i> , 2013 , 125, 14053-14057	3.6	39
121	Atomic Layer Deposition of Uniform Metal Coatings on Highly Porous Aerogel Substrates. <i>Chemistry of Materials</i> , 2006 , 18, 6106-6108	9.6	38
120	Palladium nanoparticle formation on TiO ₂ (110) by thermal decomposition of palladium(II) hexafluoroacetylacetonate. <i>ACS Applied Materials & Interfaces</i> , 2014 , 6, 14702-11	9.5	37

119	Controlled Dopant Distribution and Higher Doping Efficiencies by Surface-Functionalized Atomic Layer Deposition. <i>Chemistry of Materials</i> , 2011 , 23, 4295-4297	9.6	37
118	Combining Electronic and Geometric Effects of ZnO-Promoted Pt Nanocatalysts for Aqueous Phase Reforming of 1-Propanol. <i>ACS Catalysis</i> , 2016 , 6, 3457-3460	13.1	37
117	Lithium Self-Discharge and Its Prevention: Direct Visualization through In Situ Electrochemical Scanning Transmission Electron Microscopy. <i>ACS Nano</i> , 2017 , 11, 11194-11205	16.7	36
116	Templating sub-10 nm atomic layer deposited oxide nanostructures on graphene via one-dimensional organic self-assembled monolayers. <i>Nano Letters</i> , 2013 , 13, 5763-70	11.5	36
115	Laser Ablation of Trp-Gly. <i>Journal of Physical Chemistry B</i> , 1998 , 102, 8113-8120	3.4	36
114	Atomic Layer Deposition of Aluminum Sulfide: Growth Mechanism and Electrochemical Evaluation in Lithium-Ion Batteries. <i>Chemistry of Materials</i> , 2017 , 29, 9043-9052	9.6	35
113	Low temperature atomic layer deposition of highly photoactive hematite using iron(III) chloride and water. <i>Journal of Materials Chemistry A</i> , 2013 , 1, 11607	13	35
112	Indium Oxide Thin Films by Atomic Layer Deposition Using Trimethylindium and Ozone. <i>Journal of Physical Chemistry C</i> , 2016 , 120, 9874-9883	3.8	34
111	In situ diffraction of highly dispersed supported platinum nanoparticles. <i>Catalysis Science and Technology</i> , 2014 , 4, 3053-3063	5.5	34
110	Atomic layer deposition of TiO ₂ thin films on nanoporous alumina templates: Medical applications. <i>Jom</i> , 2009 , 61, 12-16	2.1	34
109	Stability of Silver Nanoparticles Fabricated by Nanosphere Lithography and Atomic Layer Deposition to Femtosecond Laser Excitation. <i>Journal of Physical Chemistry C</i> , 2008 , 112, 5707-5714	3.8	34
108	Volatile Hexavalent Oxo-amidinate Complexes: Molybdenum and Tungsten Precursors for Atomic Layer Deposition. <i>Chemistry of Materials</i> , 2016 , 28, 1907-1919	9.6	33
107	Interfaces and Composition Profiles in Metal Sulfide Nanolayers Synthesized by Atomic Layer Deposition. <i>Chemistry of Materials</i> , 2013 , 25, 313-319	9.6	33
106	Mechanism for Al ₂ O ₃ Atomic Layer Deposition on LiMn ₂ O ₄ from In Situ Measurements and Ab Initio Calculations. <i>CheM</i> , 2018 , 4, 2418-2435	16.2	32
105	Mitigating oil spills in the water column. <i>Environmental Science: Water Research and Technology</i> , 2018 , 4, 40-47	4.2	31
104	Modulation of the Growth Per Cycle in Atomic Layer Deposition Using Reversible Surface Functionalization. <i>Chemistry of Materials</i> , 2013 , 25, 4849-4860	9.6	31
103	Conductive atomic force microscope nanopatterning of epitaxial graphene on SiC(0001) in ambient conditions. <i>Advanced Materials</i> , 2011 , 23, 2181-4	24	31
102	Simple model for atomic layer deposition precursor reaction and transport in a viscous-flow tubular reactor. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 2012 , 30, 01A159	2.9	31

101	Effect of Nanostructured Domains in Self-Assembled Block Copolymer Films on Sequential Infiltration Synthesis. <i>Langmuir</i> , 2017 , 33, 13214-13223	4	30
100	Atomic Layer Deposition of Amorphous Niobium Carbide-Based Thin Film Superconductors. <i>Journal of Physical Chemistry C</i> , 2011 , 115, 25063-25071	3.8	28
99	New Insights into Sequential Infiltration Synthesis. <i>ECS Transactions</i> , 2015 , 69, 147-157	1	27
98	Resolving Precursor Deligation, Surface Species Evolution, and Nanoparticle Nucleation during Palladium Atomic Layer Deposition. <i>Journal of Physical Chemistry C</i> , 2013 , 117, 11141-11148	3.8	27
97	Low Temperature ABC-Type Ru Atomic Layer Deposition through Consecutive Dissociative Chemisorption, Combustion, and Reduction Steps. <i>Chemistry of Materials</i> , 2015 , 27, 4950-4956	9.6	26
96	Fabrication of transparent-conducting-oxide-coated inverse opals as mesostructured architectures for electrocatalysis applications: a case study with NiO. <i>ACS Applied Materials & Interfaces</i> , 2014 , 6, 12290-4	9.5	26
95	Atomic Layer Deposition of Al-W-Fluoride on LiCoO Cathodes: Comparison of Particle- and Electrode-Level Coatings. <i>ACS Omega</i> , 2017 , 2, 3724-3729	3.9	25
94	Understanding the Chemistry of H ₂ Production for 1-Propanol Reforming: Pathway and Support Modification Effects. <i>ACS Catalysis</i> , 2012 , 2, 2316-2326	13.1	24
93	Atomic Layer Deposition of W:Al ₂ O ₃ Nanocomposite Films with Tunable Resistivity. <i>Chemical Vapor Deposition</i> , 2013 , 19, 186-193		24
92	Cleavage of the C-D bond on size-selected subnanometer cobalt catalysts and on ALD-cobalt coated nanoporous membranes. <i>Applied Catalysis A: General</i> , 2011 , 393, 29-35	5.1	24
91	Imaging of atomic layer deposited (ALD) tungsten monolayers on alpha-TiO ₂ (110) by X-ray standing wave Fourier inversion. <i>Journal of Physical Chemistry B</i> , 2006 , 110, 12616-20	3.4	24
90	Structural Evolution of Molybdenum Disulfide Prepared by Atomic Layer Deposition for Realization of Large Scale Films in Microelectronic Applications. <i>ACS Applied Nano Materials</i> , 2018 , 1, 4028-4037	5.6	21
89	Effects of Chlorine in Titanium Oxide on Palladium Atomic Layer Deposition. <i>Journal of Physical Chemistry C</i> , 2014 , 118, 22611-22619	3.8	21
88	CO Hydrogenation: Exploring Iridium as a Promoter for Supported Cobalt Catalysts by TPR-EXAFS/XANES and Reaction Testing. <i>Catalysis Letters</i> , 2011 , 141, 968-976	2.8	21
87	Direct atomic-scale observation of redox-induced cation dynamics in an oxide-supported monolayer catalyst: WO(x)/alpha-Fe(2)O(3)(0001). <i>Journal of the American Chemical Society</i> , 2009 , 131, 18200-1	16.4	21
86	Electrochemical characterization of voltage fade of Li _{1.2} Ni _{0.2} Mn _{0.6} O ₂ cathode. <i>Solid State Ionics</i> , 2014 , 268, 231-235	3.3	20
85	Atomic-Scale Study of Ambient-Pressure Redox-Induced Changes for an Oxide-Supported Submonolayer Catalyst: VO _x /TiO ₂ (110). <i>Journal of Physical Chemistry Letters</i> , 2012 , 3, 2845-2850	6.4	20
84	High-Performance High-Loading Lithium-Sulfur Batteries by Low Temperature Atomic Layer Deposition of Aluminum Oxide on Nanophase S Cathodes. <i>Advanced Materials Interfaces</i> , 2017 , 4, 1700096	4.6	19

83	Atomic layer deposition of molybdenum disulfide films using MoF6 and H2S. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 2018 , 36, 01A125	2.9	19
82	Mechanistic understanding of tungsten oxide in-plane nanostructure growth via sequential infiltration synthesis. <i>Nanoscale</i> , 2018 , 10, 3469-3479	7.7	18
81	Catalysts Transform While Molecules React: An Atomic-Scale View. <i>Journal of Physical Chemistry Letters</i> , 2013 , 4, 285-91	6.4	18
80	Descriptor-Based Analysis of Atomic Layer Deposition Mechanisms on Spinel LiMn2O4 Lithium-Ion Battery Cathodes. <i>Chemistry of Materials</i> , 2020 , 32, 1794-1806	9.6	17
79	High aspect ratio nanoneedle probes with an integrated electrode at the tip apex. <i>Review of Scientific Instruments</i> , 2012 , 83, 113704	1.7	17
78	Synthesis of nanoporous activated iridium oxide films by anodized aluminum oxide templated atomic layer deposition. <i>Electrochemistry Communications</i> , 2010 , 12, 1543-1546	5.1	17
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