

Stacey F Bent

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.

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|--------------------|--------------------------|----------------|----------------|
| 280 papers | 15,361 citations | 63 h-index | 114 g-index |
| 310 ext. papers | 17,332 ext. citations | 8.7 avg, IF | 7 L-index |

| # | Paper | IF | Citations |
|-----|---|------|-----------|
| 280 | Rational solvent molecule tuning for high-performance lithium metal battery electrolytes. <i>Nature Energy</i> , 2022 , 7, 94-106 | 62.3 | 49 |
| 279 | The Importance of Decarbonylation Mechanisms in the Atomic Layer Deposition of High-Quality Ru Films by Zero-Oxidation State Ru(DMBD)(CO).. <i>Small</i> , 2022 , e2105513 | 11 | 0 |
| 278 | Methyl-methacrylate based aluminum hybrid film grown via three-precursor molecular layer deposition. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 2022 , 40, 023405 | 2.9 | 1 |
| 277 | Steering CO hydrogenation toward C-C coupling to hydrocarbons using porous organic polymer/metal interfaces.. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2022 , 119, | 11.5 | 6 |
| 276 | Modulating the optoelectronic properties of hybrid Mo-thiolate thin films. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 2022 , 40, 012402 | 2.9 | 1 |
| 275 | Characterizing Self-Assembled Monolayer Breakdown in Area-Selective Atomic Layer Deposition. <i>Langmuir</i> , 2021 , 37, 11637-11645 | 4 | 6 |
| 274 | Next generation nanopatterning using small molecule inhibitors for area-selective atomic layer deposition. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 2021 , 39, 021002 | 2.9 | 14 |
| 273 | Role of Precursor Choice on Area-Selective Atomic Layer Deposition. <i>Chemistry of Materials</i> , 2021 , 33, 3926-3935 | 9.6 | 10 |
| 272 | Bridging Thermal Catalysis and Electrocatalysis: Catalyzing CO Conversion with Carbon-Based Materials. <i>Angewandte Chemie - International Edition</i> , 2021 , 60, 17472-17480 | 16.4 | 5 |
| 271 | Bridging Thermal Catalysis and Electrocatalysis: Catalyzing CO ₂ Conversion with Carbon-Based Materials. <i>Angewandte Chemie</i> , 2021 , 133, 17613-17621 | 3.6 | 1 |
| 270 | Identification of highly active surface iron sites on Ni(OOH) for the oxygen evolution reaction by atomic layer deposition. <i>Journal of Catalysis</i> , 2021 , 394, 476-485 | 7.3 | 1 |
| 269 | Impurity Control in Catalyst Design: The Role of Sodium in Promoting and Stabilizing Co and Co ₂ C for Syngas Conversion. <i>ChemCatChem</i> , 2021 , 13, 1186-1194 | 5.2 | 4 |
| 268 | Understanding Support Effects of ZnO-Promoted Co Catalysts for Syngas Conversion to Alcohols Using Atomic Layer Deposition. <i>ChemCatChem</i> , 2021 , 13, 770-781 | 5.2 | 2 |
| 267 | Area-Selective Atomic Layer Deposition on Chemically Similar Materials: Achieving Selectivity on Oxide/Oxide Patterns. <i>Chemistry of Materials</i> , 2021 , 33, 513-523 | 9.6 | 16 |
| 266 | Increased selectivity in area-selective ALD by combining nucleation enhancement and SAM-based inhibition. <i>Journal of Materials Research</i> , 2021 , 36, 582-591 | 2.5 | 2 |
| 265 | Multi-metal coordination polymers grown through hybrid molecular layer deposition. <i>Dalton Transactions</i> , 2021 , 50, 4577-4582 | 4.3 | 3 |
| 264 | Bridging the Synthesis Gap: Ionic Liquids Enable Solvent-Mediated Reaction in Vapor-Phase Deposition. <i>ACS Nano</i> , 2021 , 15, 3004-3014 | 16.7 | 1 |

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| 263 | Area-Selective Molecular Layer Deposition of a Silicon Oxycarbide Low-k Dielectric. <i>Chemistry of Materials</i> , 2021 , 33, 902-909 | 9.6 | 9 |
| 262 | Tailoring the Surface of Metal Halide Perovskites to Enable the Atomic Layer Deposition of Metal Oxide Contacts. <i>ACS Applied Energy Materials</i> , 2021 , 4, 9871-9880 | 6.1 | 0 |
| 261 | Identifying Higher Oxygenate Synthesis Sites in Cu Catalysts Promoted and Stabilized by Atomic Layer Deposited Fe ₂ O ₃ . <i>Journal of Catalysis</i> , 2021 , 404, 210-210 | 7.3 | 0 |
| 260 | Monolayer Support Control and Precise Colloidal Nanocrystals Demonstrate Metal-Support Interactions in Heterogeneous Catalysts. <i>Advanced Materials</i> , 2021 , 33, e2104533 | 24 | 4 |
| 259 | Understanding Selectivity in CO ₂ Hydrogenation to Methanol for MoP Nanoparticle Catalysts Using In Situ Techniques. <i>Catalysts</i> , 2021 , 11, 143 | 4 | 5 |
| 258 | Atomic Layer Deposition of Pt on the Surface Deactivated by Fluorocarbon Implantation: Investigation of the Growth Mechanism. <i>Chemistry of Materials</i> , 2020 , 32, 9696-9703 | 9.6 | 7 |
| 257 | Applications of atomic layer deposition and chemical vapor deposition for perovskite solar cells. <i>Energy and Environmental Science</i> , 2020 , 13, 1997-2023 | 35.4 | 50 |
| 256 | The Molybdenum Oxide Interface Limits the High-Temperature Operational Stability of Unencapsulated Perovskite Solar Cells. <i>ACS Energy Letters</i> , 2020 , 5, 2349-2360 | 20.1 | 31 |
| 255 | Overcoming Redox Reactions at Perovskite-Nickel Oxide Interfaces to Boost Voltages in Perovskite Solar Cells. <i>Joule</i> , 2020 , 4, 1759-1775 | 27.8 | 121 |
| 254 | Nucleation Effects in the Atomic Layer Deposition of Nickel/Aluminum Oxide Thin Films. <i>Chemistry of Materials</i> , 2020 , 32, 1925-1936 | 9.6 | 11 |
| 253 | Understanding chemical and physical mechanisms in atomic layer deposition. <i>Journal of Chemical Physics</i> , 2020 , 152, 040902 | 3.9 | 70 |
| 252 | Synthesis of a Hybrid Nanostructure of ZnO-Decorated MoS ₂ by Atomic Layer Deposition. <i>ACS Nano</i> , 2020 , 14, 1757-1769 | 16.7 | 16 |
| 251 | The Influence of Ozone: Superstoichiometric Oxygen in Atomic Layer Deposition of Fe ₂ O ₃ Using tert-Butylferrocene and O ₃ . <i>Advanced Materials Interfaces</i> , 2020 , 7, 2000318 | 4.6 | 6 |
| 250 | Surface Energy Change of Atomic-Scale Metal Oxide Thin Films by Phase Transformation. <i>ACS Nano</i> , 2020 , 14, 676-687 | 16.7 | 5 |
| 249 | Mechanistic Study of Nucleation Enhancement in Atomic Layer Deposition by Pretreatment with Small Organometallic Molecules. <i>Chemistry of Materials</i> , 2020 , 32, 315-325 | 9.6 | 15 |
| 248 | Enhanced alcohol production over binary Mo/Co carbide catalysts in syngas conversion. <i>Journal of Catalysis</i> , 2020 , 391, 446-458 | 7.3 | 7 |
| 247 | Substrate-Dependent Study of Chain Orientation and Order in Alkylphosphonic Acid Self-Assembled Monolayers for ALD Blocking. <i>Langmuir</i> , 2020 , 36, 12849-12857 | 4 | 5 |
| 246 | Revealing and Elucidating ALD-Derived Control of Lithium Plating Microstructure. <i>Advanced Energy Materials</i> , 2020 , 10, 2002736 | 21.8 | 12 |

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| 245 | Thermally Activated Reactions of Phenol at the Ge(100)-2 × 1 Surface. <i>Journal of Physical Chemistry C</i> , 2020 , 124, 23657-23660 | 3.8 | 2 |
| 244 | Modified atomic layer deposition of MoS ₂ thin films. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 2020 , 38, 060403 | 2.9 | 4 |
| 243 | Effect of Multilayer versus Monolayer Dodecanethiol on Selectivity and Pattern Integrity in Area-Selective Atomic Layer Deposition. <i>ACS Applied Materials & Interfaces</i> , 2020 , 12, 42226-42235 | 9.5 | 12 |
| 242 | Effect of Heteroaromaticity on Adsorption of Pyrazine on the Ge(100)-2 × 1 Surface. <i>Journal of Physical Chemistry C</i> , 2020 , 124, 22055-22068 | 3.8 | 1 |
| 241 | A rigorous electrochemical ammonia synthesis protocol with quantitative isotope measurements. <i>Nature</i> , 2019 , 570, 504-508 | 50.4 | 617 |
| 240 | Growth of a Surface-Tethered, All-Carbon Backboned Fluoropolymer by Photoactivated Molecular Layer Deposition. <i>ACS Applied Materials & Interfaces</i> , 2019 , 11, 21988-21997 | 9.5 | 6 |
| 239 | A Versatile Method for Ammonia Detection in a Range of Relevant Electrolytes via Direct Nuclear Magnetic Resonance Techniques. <i>ACS Catalysis</i> , 2019 , 9, 5797-5802 | 13.1 | 54 |
| 238 | Opportunities for Atomic Layer Deposition in Emerging Energy Technologies. <i>ACS Energy Letters</i> , 2019 , 4, 908-925 | 20.1 | 52 |
| 237 | The Role of Aluminum in Promoting NiFe ₂ O ₄ /OH Electrocatalysts for the Oxygen Evolution Reaction. <i>ACS Applied Energy Materials</i> , 2019 , 2, 3488-3499 | 6.1 | 15 |
| 236 | Atomic layer deposition of vanadium oxide to reduce parasitic absorption and improve stability in n-i-p perovskite solar cells for tandems. <i>Sustainable Energy and Fuels</i> , 2019 , 3, 1517-1525 | 5.8 | 52 |
| 235 | Area-Selective Atomic Layer Deposition Assisted by Self-Assembled Monolayers: A Comparison of Cu, Co, W, and Ru. <i>Chemistry of Materials</i> , 2019 , 31, 1635-1645 | 9.6 | 73 |
| 234 | Structurally Stable Manganese Alkoxide Films Grown by Hybrid Molecular Layer Deposition for Electrochemical Applications. <i>Advanced Functional Materials</i> , 2019 , 29, 1904129 | 15.6 | 11 |
| 233 | Understanding Structure-Property Relationships of MoO ₃ -Promoted Rh Catalysts for Syngas Conversion to Alcohols. <i>Journal of the American Chemical Society</i> , 2019 , 141, 19655-19668 | 16.4 | 16 |
| 232 | Enhanced Nucleation of Atomic Layer Deposited Contacts Improves Operational Stability of Perovskite Solar Cells in Air. <i>Advanced Energy Materials</i> , 2019 , 9, 1902353 | 21.8 | 28 |
| 231 | Area-selective atomic layer deposition of dielectric-on-dielectric for Cu/low-k dielectric patterns 2019 , | | 3 |
| 230 | Design of low bandgap tin/lead halide perovskite solar cells to achieve thermal, atmospheric and operational stability. <i>Nature Energy</i> , 2019 , 4, 939-947 | 62.3 | 152 |
| 229 | Nanostructuring Strategies To Increase the Photoelectrochemical Water Splitting Activity of Silicon Photocathodes. <i>ACS Applied Nano Materials</i> , 2019 , 2, 6-11 | 5.6 | 14 |
| 228 | Synthesis of Doped, Ternary, and Quaternary Materials by Atomic Layer Deposition: A Review. <i>Chemistry of Materials</i> , 2019 , 31, 1142-1183 | 9.6 | 117 |

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|-----|---|------|-----|
| 227 | Role of Co ₂ C in ZnO-promoted Co Catalysts for Alcohol Synthesis from Syngas. <i>ChemCatChem</i> , 2019 , 11, 799-809 | 5.2 | 19 |
| 226 | Atomic and Molecular Layer Deposition of Hybrid MoS ₂ /Thiolate Thin Films with Enhanced Catalytic Activity. <i>Advanced Functional Materials</i> , 2018 , 28, 1800852 | 15.6 | 28 |
| 225 | Understanding the Active Sites of CO Hydrogenation on Pt/Cu Catalysts Prepared Using Atomic Layer Deposition. <i>Journal of Physical Chemistry C</i> , 2018 , 122, 2184-2194 | 3.8 | 21 |
| 224 | The Role of Sodium in Tuning Product Distribution in Syngas Conversion by Rh Catalysts. <i>Catalysis Letters</i> , 2018 , 148, 289-297 | 2.8 | 10 |
| 223 | Photoelectrochemical Water Oxidation by GaAs Nanowire Arrays Protected with Atomic Layer Deposited NiO x Electrocatalysts. <i>Journal of Electronic Materials</i> , 2018 , 47, 932-937 | 1.9 | 6 |
| 222 | Formation and Ripening of Self-Assembled Multilayers from the Vapor-Phase Deposition of Dodecanethiol on Copper Oxide. <i>Chemistry of Materials</i> , 2018 , 30, 5694-5703 | 9.6 | 20 |
| 221 | Tin/Lead halide perovskites with improved thermal and air stability for efficient all-perovskite tandem solar cells. <i>Sustainable Energy and Fuels</i> , 2018 , 2, 2450-2459 | 5.8 | 127 |
| 220 | Mechanistic Studies of Chain Termination and Monomer Absorption in Molecular Layer Deposition. <i>Chemistry of Materials</i> , 2018 , 30, 5087-5097 | 9.6 | 13 |
| 219 | Molecular Layer Deposition of a Highly Stable Silicon Oxycarbide Thin Film Using an Organic Chlorosilane and Water. <i>ACS Applied Materials & Interfaces</i> , 2018 , 10, 24266-24274 | 9.5 | 19 |
| 218 | Minimizing Current and Voltage Losses to Reach 25% Efficient Monolithic Two-Terminal Perovskite/Silicon Tandem Solar Cells. <i>ACS Energy Letters</i> , 2018 , 3, 2173-2180 | 20.1 | 143 |
| 217 | A Highly Active Molybdenum Phosphide Catalyst for Methanol Synthesis from CO and CO ₂ . <i>Angewandte Chemie - International Edition</i> , 2018 , 57, 15045-15050 | 16.4 | 46 |
| 216 | Copper interstitial recombination centers in Cu ₃ N. <i>Physical Review B</i> , 2018 , 97, | 3.3 | 11 |
| 215 | Optical modeling of wide-bandgap perovskite and perovskite/silicon tandem solar cells using complex refractive indices for arbitrary-bandgap perovskite absorbers. <i>Optics Express</i> , 2018 , 26, 27441-27460 | 3.3 | 56 |
| 214 | Area-Selective Atomic Layer Deposition of Metal Oxides on Noble Metals through Catalytic Oxygen Activation. <i>Chemistry of Materials</i> , 2018 , 30, 663-670 | 9.6 | 72 |
| 213 | Thermal adsorption-enhanced atomic layer etching of Si ₃ N ₄ . <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 2018 , 36, 01B104 | 2.9 | 17 |
| 212 | In situ observation of phase changes of a silica-supported cobalt catalyst for the Fischer-Tropsch process by the development of a synchrotron-compatible in situ/operando powder X-ray diffraction cell. <i>Journal of Synchrotron Radiation</i> , 2018 , 25, 1673-1682 | 2.4 | 28 |
| 211 | Theoretical and Experimental Studies of CoGa Catalysts for the Hydrogenation of CO ₂ to Methanol. <i>Catalysis Letters</i> , 2018 , 148, 3583-3591 | 2.8 | 9 |
| 210 | Interfacial Effects of Tin Oxide Atomic Layer Deposition in Metal Halide Perovskite Photovoltaics. <i>Advanced Energy Materials</i> , 2018 , 8, 1800591 | 21.8 | 44 |

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|-----|--|------|-----|
| 209 | Encapsulating perovskite solar cells to withstand damp heat and thermal cycling. <i>Sustainable Energy and Fuels</i> , 2018 , 2, 2398-2406 | 5.8 | 157 |
| 208 | 23.6%-efficient monolithic perovskite/silicon tandem solar cells with improved stability. <i>Nature Energy</i> , 2017 , 2, | 62.3 | 965 |
| 207 | Nanoengineering Heterogeneous Catalysts by Atomic Layer Deposition. <i>Annual Review of Chemical and Biomolecular Engineering</i> , 2017 , 8, 41-62 | 8.9 | 68 |
| 206 | Investigation of inherent differences between oxide supports in heterogeneous catalysis in the absence of structural variations. <i>Journal of Catalysis</i> , 2017 , 351, 49-58 | 7.3 | 18 |
| 205 | Correcting defects in area selective molecular layer deposition. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 2017 , 35, 031509 | 2.9 | 20 |
| 204 | Formation of Germa-ketenimine on the Ge(100) Surface by Adsorption of tert-Butyl Isocyanide. <i>Journal of the American Chemical Society</i> , 2017 , 139, 8758-8765 | 16.4 | 5 |
| 203 | Adsorption of Homotrifunctional 1,2,3-Benzenetriol on a Ge(100)-2 × 8 Surface. <i>Langmuir</i> , 2017 , 33, 8716-8723 | 4.7 | 6 |
| 202 | Effect of Backbone Chemistry on the Structure of Polyurea Films Deposited by Molecular Layer Deposition. <i>Chemistry of Materials</i> , 2017 , 29, 1192-1203 | 9.6 | 46 |
| 201 | Buffer Layer Point Contacts for CIGS Solar Cells Using Nanosphere Lithography and Atomic Layer Deposition. <i>IEEE Journal of Photovoltaics</i> , 2017 , 7, 322-328 | 3.7 | 10 |
| 200 | Incomplete elimination of precursor ligands during atomic layer deposition of zinc-oxide, tin-oxide, and zinc-tin-oxide. <i>Journal of Chemical Physics</i> , 2017 , 146, 052802 | 3.9 | 49 |
| 199 | Autocatalytic Dissociative Adsorption of Imidazole on the Ge(100)-2 × 8 Surface. <i>Journal of Physical Chemistry C</i> , 2017 , 121, 20905-20910 | 3.8 | 1 |
| 198 | Photoactivated Molecular Layer Deposition through Iodoalkene Coupling Chemistry. <i>Chemistry of Materials</i> , 2017 , 29, 9897-9906 | 9.6 | 8 |
| 197 | Chemisorption of Organic Triols on Ge(100)-2 × 8 Surface: Effect of Backbone Structure on Adsorption of Trifunctional Molecules. <i>Journal of Physical Chemistry C</i> , 2017 , 121, 25978-25985 | 3.8 | 3 |
| 196 | Rh-MnO Interface Sites Formed by Atomic Layer Deposition Promote Syngas Conversion to Higher Oxygenates. <i>ACS Catalysis</i> , 2017 , 7, 5746-5757 | 13.1 | 49 |
| 195 | Improved light management in planar silicon and perovskite solar cells using PDMS scattering layer. <i>Solar Energy Materials and Solar Cells</i> , 2017 , 173, 59-65 | 6.4 | 56 |
| 194 | Adsorption of heterobifunctional 4-nitrophenol on the Ge(100)-2 × 8 surface. <i>Surface Science</i> , 2016 , 650, 279-284 | 1.8 | 1 |
| 193 | Molecular Ligands Control Superlattice Structure and Crystallite Orientation in Colloidal Quantum Dot Solids. <i>Chemistry of Materials</i> , 2016 , 28, 7072-7081 | 9.6 | 13 |
| 192 | Impact of Conformality and Crystallinity for Ultrathin 4 nm Compact TiO ₂ Layers in Perovskite Solar Cells. <i>Advanced Materials Interfaces</i> , 2016 , 3, 1600580 | 4.6 | 18 |

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|-----|---|------|-----|
| 191 | Tandem Core-Shell Si-TaN Photoanodes for Photoelectrochemical Water Splitting. <i>Nano Letters</i> , 2016 , 16, 7565-7572 | 11.5 | 86 |
| 190 | Selective Deposition of Dielectrics: Limits and Advantages of Alkanethiol Blocking Agents on Metal-Dielectric Patterns. <i>ACS Applied Materials & Interfaces</i> , 2016 , 8, 33264-33272 | 9.5 | 62 |
| 189 | Perovskite-perovskite tandem photovoltaics with optimized band gaps. <i>Science</i> , 2016 , 354, 861-865 | 33.3 | 865 |
| 188 | Strong Coupling of Plasmon and Nanocavity Modes for Dual-Band, Near-Perfect Absorbers and Ultrathin Photovoltaics. <i>ACS Photonics</i> , 2016 , 3, 456-463 | 6.3 | 47 |
| 187 | Intrinsic Selectivity and Structure Sensitivity of Rhodium Catalysts for C(2+) Oxygenate Production. <i>Journal of the American Chemical Society</i> , 2016 , 138, 3705-14 | 16.4 | 137 |
| 186 | A Process for Topographically Selective Deposition on 3D Nanostructures by Ion Implantation. <i>ACS Nano</i> , 2016 , 10, 4451-8 | 16.7 | 67 |
| 185 | Growth, intermixing, and surface phase formation for zinc tin oxide nanolaminates produced by atomic layer deposition. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 2016 , 34, 021516 | 2.9 | 17 |
| 184 | Tailoring Mixed-Halide, Wide-Gap Perovskites via Multistep Conversion Process. <i>ACS Applied Materials & Interfaces</i> , 2016 , 8, 14301-6 | 9.5 | 23 |
| 183 | Sequential Regeneration of Self-Assembled Monolayers for Highly Selective Atomic Layer Deposition. <i>Advanced Materials Interfaces</i> , 2016 , 3, 1600464 | 4.6 | 56 |
| 182 | Improving Performance in Colloidal Quantum Dot Solar Cells by Tuning Band Alignment through Surface Dipole Moments. <i>Journal of Physical Chemistry C</i> , 2015 , 119, 2996-3005 | 3.8 | 50 |
| 181 | Increased Quantum Dot Loading by pH Control Reduces Interfacial Recombination in Quantum-Dot-Sensitized Solar Cells. <i>ACS Nano</i> , 2015 , 9, 8321-34 | 16.7 | 23 |
| 180 | Atomic layer deposition in nanostructured photovoltaics: tuning optical, electronic and surface properties. <i>Nanoscale</i> , 2015 , 7, 12266-83 | 7.7 | 59 |
| 179 | Self-Correcting Process for High Quality Patterning by Atomic Layer Deposition. <i>ACS Nano</i> , 2015 , 9, 8710-7 | 16.7 | 94 |
| 178 | Unidirectional Adsorption of Bifunctional 1,4-Phenylene Diisocyanide on the Ge(100)-2 × 1 Surface. <i>Journal of Physical Chemistry Letters</i> , 2015 , 6, 1037-41 | 6.4 | 12 |
| 177 | Applications of ALD MnO to electrochemical water splitting. <i>Physical Chemistry Chemical Physics</i> , 2015 , 17, 14003-11 | 3.6 | 40 |
| 176 | Formation of Continuous Pt Films on the Graphite Surface by Atomic Layer Deposition with Reactive O ₃ . <i>Chemistry of Materials</i> , 2015 , 27, 6802-6809 | 9.6 | 24 |
| 175 | Deep recombination centers in Cu ₂ ZnSnSe ₄ revealed by screened-exchange hybrid density functional theory. <i>Physical Review B</i> , 2015 , 92, | 3.3 | 28 |
| 174 | Reducing interface recombination for Cu(In,Ga)Se ₂ by atomic layer deposited buffer layers. <i>Applied Physics Letters</i> , 2015 , 107, 033906 | 3.4 | 19 |

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|-----|---|------|-----|
| 173 | Polysulfide ligand exchange on zinc sulfide nanocrystal surfaces for improved film formation. <i>Applied Surface Science</i> , 2015 , 359, 106-113 | 6.7 | 13 |
| 172 | Creating Highly Active Atomic Layer Deposited NiO Electrocatalysts for the Oxygen Evolution Reaction. <i>Advanced Energy Materials</i> , 2015 , 5, 1500412 | 21.8 | 168 |
| 171 | Fabrication of Organic Interfacial Layers by Molecular Layer Deposition: Present Status and Future Opportunities 2015 , 133-170 | | |
| 170 | Quantifying Geometric Strain at the PbS QD-TiO ₂ Anode Interface and Its Effect on Electronic Structures. <i>Nano Letters</i> , 2015 , 15, 7829-36 | 11.5 | 24 |
| 169 | ALD of Ultrathin Ternary Oxide Electrocatalysts for Water Splitting. <i>ACS Catalysis</i> , 2015 , 5, 1609-1616 | 13.1 | 37 |
| 168 | Thin film characterization of zinc tin oxide deposited by thermal atomic layer deposition. <i>Thin Solid Films</i> , 2014 , 556, 186-194 | 2.2 | 42 |
| 167 | A New Resist for Area Selective Atomic and Molecular Layer Deposition on Metal Dielectric Patterns. <i>Journal of Physical Chemistry C</i> , 2014 , 118, 10957-10962 | 3.8 | 75 |
| 166 | Interface Engineering in Inorganic-Absorber Nanostructured Solar Cells. <i>Journal of Physical Chemistry Letters</i> , 2014 , 5, 348-60 | 6.4 | 45 |
| 165 | Improving area-selective molecular layer deposition by selective SAM removal. <i>ACS Applied Materials & Interfaces</i> , 2014 , 6, 17831-6 | 9.5 | 46 |
| 164 | Strong carbon-surface dative bond formation by tert-butyl isocyanide on the Ge(100)-2 × 8 surface. <i>Journal of the American Chemical Society</i> , 2014 , 136, 5848-51 | 16.4 | 10 |
| 163 | Selective metal deposition at graphene line defects by atomic layer deposition. <i>Nature Communications</i> , 2014 , 5, 4781 | 17.4 | 196 |
| 162 | Coverage-Dependent Adsorption of Bifunctional Molecules: Detailed Insights into Interactions between Adsorbates. <i>Journal of Physical Chemistry C</i> , 2014 , 118, 23811-23820 | 3.8 | 19 |
| 161 | Effect of O ₃ on Growth of Pt by Atomic Layer Deposition. <i>Journal of Physical Chemistry C</i> , 2014 , 118, 12325-12332 | 3.8 | 36 |
| 160 | Nanoscale limitations in metal oxide electrocatalysts for oxygen evolution. <i>Nano Letters</i> , 2014 , 14, 5853-7 | 11.5 | 62 |
| 159 | Correlating Growth Characteristics in Atomic Layer Deposition with Precursor Molecular Structure: The Case of Zinc Tin Oxide. <i>Chemistry of Materials</i> , 2014 , 26, 2795-2802 | 9.6 | 37 |
| 158 | Nanostructuring Materials for Solar-to-Hydrogen Conversion. <i>Journal of Physical Chemistry C</i> , 2014 , 118, 21301-21315 | 3.8 | 37 |
| 157 | A brief review of atomic layer deposition: from fundamentals to applications. <i>Materials Today</i> , 2014 , 17, 236-246 | 21.8 | 981 |
| 156 | An atomic layer deposition chamber for in situ x-ray diffraction and scattering analysis. <i>Review of Scientific Instruments</i> , 2014 , 85, 055116 | 1.7 | 9 |

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|-----|---|------|-----|
| 155 | Thermally Activated Reactions of Nitrobenzene at the Ge(100)-2 × Surface. <i>Journal of Physical Chemistry C</i> , 2014 , 118, 29224-29233 | 3.8 | 5 |
| 154 | Bifacial solar cell with SnS absorber by vapor transport deposition. <i>Applied Physics Letters</i> , 2014 , 105, 173904 | 3.4 | 25 |
| 153 | Structural evolution of platinum thin films grown by atomic layer deposition. <i>Journal of Applied Physics</i> , 2014 , 116, 064905 | 2.5 | 25 |
| 152 | Highly Textured Tin(II) Sulfide Thin Films Formed from Sheetlike Nanocrystal Inks. <i>Chemistry of Materials</i> , 2014 , 26, 7106-7113 | 9.6 | 31 |
| 151 | Vapor transport deposition and epitaxy of orthorhombic SnS on glass and NaCl substrates. <i>Applied Physics Letters</i> , 2013 , 103, 052105 | 3.4 | 40 |
| 150 | Self-assembly based plasmonic arrays tuned by atomic layer deposition for extreme visible light absorption. <i>Nano Letters</i> , 2013 , 13, 3352-7 | 11.5 | 104 |
| 149 | Competing geometric and electronic effects in adsorption of phenylenediamine structural isomers on the Ge(100)-2 × surface. <i>Surface Science</i> , 2013 , 615, 72-79 | 1.8 | 13 |
| 148 | Atomic layer deposition of CdO and CdxZn1-xO films. <i>Materials Chemistry and Physics</i> , 2013 , 140, 465-471 | 4.4 | 14 |
| 147 | In Vacuo Photoemission Studies of Platinum Atomic Layer Deposition Using Synchrotron Radiation. <i>Journal of Physical Chemistry Letters</i> , 2013 , 4, 176-9 | 6.4 | 25 |
| 146 | Semiconductor surface functionalization for advances in electronics, energy conversion, and dynamic systems. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 2013 , 31, 050810 | 2.9 | 51 |
| 145 | One-Dimensional Pattern Formation of Adsorbed Molecules on the Ge(100)-2 × Surface Driven by Nearest-Neighbor Effects. <i>Journal of Physical Chemistry C</i> , 2013 , 117, 949-955 | 3.8 | 8 |
| 144 | Insights into the Surface Chemistry of Tin Oxide Atomic Layer Deposition from Quantum Chemical Calculations. <i>Journal of Physical Chemistry C</i> , 2013 , 117, 19056-19062 | 3.8 | 13 |
| 143 | Tin oxide atomic layer deposition from tetrakis(dimethylamino)tin and water. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 2013 , 31, 061503 | 2.9 | 71 |
| 142 | Effects of QD surface coverage in solid-state PbS quantum dot-sensitized solar cells 2013 , | | 1 |
| 141 | Effect of Al2O3 Recombination Barrier Layers Deposited by Atomic Layer Deposition in Solid-State CdS Quantum Dot-Sensitized Solar Cells. <i>Journal of Physical Chemistry C</i> , 2013 , 117, 5584-5592 | 3.8 | 100 |
| 140 | Growth of Pt nanowires by atomic layer deposition on highly ordered pyrolytic graphite. <i>Nano Letters</i> , 2013 , 13, 457-63 | 11.5 | 78 |
| 139 | Efficiency enhancement of solid-state PbS quantum dot-sensitized solar cells with Al2O3 barrier layer. <i>Journal of Materials Chemistry A</i> , 2013 , 1, 7566 | 13 | 54 |
| 138 | Size Dependent Effects in Nucleation of Ru and Ru Oxide Thin Films by Atomic Layer Deposition Measured by Synchrotron Radiation X-ray Diffraction. <i>Chemistry of Materials</i> , 2013 , 25, 3458-3463 | 9.6 | 23 |

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| 137 | Fabrication of organic interfacial layers by molecular layer deposition: Present status and future opportunities. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 2013 , 31, 040801-9 | 2.9 | 99 |
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