

Ralph G Nuzzo

List of Publications by Year in descending order

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314
papers

48,153
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4658

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42158
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|-----------|
| 1 | Biomimetic and Biologically Compliant Soft Architectures via 3D and 4D Assembly Methods: A Perspective. <i>Advanced Materials</i> , 2022, 34, e2108391. | 21.0 | 34 |
| 2 | Role of Atomic Structure on Exciton Dynamics and Photoluminescence in NIR Emissive InAs/InP/ZnSe Quantum Dots. <i>Journal of Physical Chemistry C</i> , 2022, 126, 7576-7587. | 3.1 | 7 |
| 3 | Biocompliant Composite Au/pHEMA Plasmonic Scaffolds for 3D Cell Culture and Noninvasive Sensing of Cellular Metabolites. <i>Advanced Healthcare Materials</i> , 2021, 10, e2001040. | 7.6 | 11 |
| 4 | 3D Particle-Free Printing of Biocompatible Conductive Hydrogel Platforms for Neuron Growth and Electrophysiological Recording. <i>Advanced Functional Materials</i> , 2021, 31, 2010246. | 14.9 | 38 |
| 5 | Bio-Compliant Composites: Biocompliant Composite Au/pHEMA Plasmonic Scaffolds for 3D Cell Culture and Noninvasive Sensing of Cellular Metabolites (<i>Adv. Healthcare Mater.</i> 4/2021). <i>Advanced Healthcare Materials</i> , 2021, 10, 2170016. | 7.6 | 0 |
| 6 | Dynamic structure of active sites in ceria-supported Pt catalysts for the water gas shift reaction. <i>Nature Communications</i> , 2021, 12, 914. | 12.8 | 103 |
| 7 | High Energy Density and Stable Three-Dimensionally Structured Se-Loaded Bicontinuous Porous Carbon Battery Electrodes. <i>Energy Technology</i> , 2021, 9, 2100175. | 3.8 | 4 |
| 8 | Outdoor performance of a tandem InGaP/Si photovoltaic luminescent solar concentrator. <i>Solar Energy Materials and Solar Cells</i> , 2021, 223, 110945. | 6.2 | 13 |
| 9 | Fabrication techniques for high-performance Si heterojunction (SHJ) microcells. , 2021, , . | | 0 |
| 10 | Single Atom Catalysts: A Review of Characterization Methods. <i>Chemistry Methods</i> , 2021, 1, 278-294. | 3.8 | 49 |
| 11 | Silicon Heterojunction Microcells. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 45600-45608. | 8.0 | 1 |
| 12 | Aliovalent Doping of CeO ₂ Improves the Stability of Atomically Dispersed Pt. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 52736-52742. | 8.0 | 11 |
| 13 | Autonomous Light Management in Flexible Photoelectrochromic Films Integrating High Performance Silicon Solar Microcells. <i>ACS Applied Energy Materials</i> , 2020, 3, 1540-1551. | 5.1 | 13 |
| 14 | Energy Storage Mechanisms in High-Capacity Graphitic C ₃ N ₄ Cathodes for Al-Ion Batteries. <i>Journal of Physical Chemistry C</i> , 2020, 124, 10288-10297. | 3.1 | 16 |
| 15 | Local Structure and Electronic State of Atomically Dispersed Pt Supported on Nanosized CeO ₂ . <i>ACS Catalysis</i> , 2019, 9, 8738-8748. | 11.2 | 70 |
| 16 | Designing and transforming yield-stress fluids. <i>Current Opinion in Solid State and Materials Science</i> , 2019, 23, 100758. | 11.5 | 66 |
| 17 | Ionic Hydrogels with Biomimetic 4D-Printed Mechanical Gradients: Models for Soft-bodied Aquatic Organisms. <i>Advanced Functional Materials</i> , 2019, 29, 1806723. | 14.9 | 37 |
| 18 | CoS ₂ as a Sulfur Redox-Active Cathode Material for High-Capacity Nonaqueous Zn Batteries. <i>Journal of Physical Chemistry C</i> , 2019, 123, 8740-8745. | 3.1 | 30 |

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|----|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|-----------|
| 19 | High capacity 3D structured tin-based electroplated Li-ion battery anodes. <i>Energy Storage Materials</i> , 2019, 17, 151-156. | 18.0 | 36 |
| 20 | 3D-Printed Hydrogel Composites for Predictive Temporal (4D) Cellular Organizations and Patterned Biogenic Mineralization. <i>Advanced Healthcare Materials</i> , 2019, 8, e1800788. | 7.6 | 21 |
| 21 | Controlling Interfacial Properties of Lithium-Ion Battery Cathodes with Alkylphosphonate Self-Assembled Monolayers. <i>Advanced Materials Interfaces</i> , 2018, 5, 1701292. | 3.7 | 22 |
| 22 | A compact spectrum splitting concentrator for high concentration photovoltaics based on the dispersion of a lens. <i>Journal of Optics (United Kingdom)</i> , 2018, 20, 06LT01. | 2.2 | 0 |
| 23 | Particle-Free Emulsions for 3D Printing Elastomers. <i>Advanced Functional Materials</i> , 2018, 28, 1707032. | 14.9 | 37 |
| 24 | A Printing-Centric Approach to the Electrostatic Modification of Polymer/Clay Composites for Use in 3D Direct Ink Writing. <i>Advanced Materials Interfaces</i> , 2018, 5, 1701579. | 3.7 | 8 |
| 25 | Identifying Dynamic Structural Changes of Active Sites in Pt-Ni Bimetallic Catalysts Using Multimodal Approaches. <i>ACS Catalysis</i> , 2018, 8, 4120-4131. | 11.2 | 54 |
| 26 | Toward a Four-Electron Redox Quinone Polymer for High Capacity Lithium Ion Storage. <i>Advanced Energy Materials</i> , 2018, 8, 1700960. | 19.5 | 60 |
| 27 | In situ surface stress measurement and computational analysis examining the oxygen reduction reaction on Pt and Pd. <i>Electrochimica Acta</i> , 2018, 260, 400-406. | 5.2 | 14 |
| 28 | 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. | 6.7 | 75 |
| 29 | High Energy Density CNT/NaI Composite Cathodes for Sodium-Ion Batteries. <i>Advanced Materials Interfaces</i> , 2018, 5, 1801342. | 3.7 | 9 |
| 30 | Solution processes for ultrabroadband and omnidirectional graded-index glass lenses with near-zero reflectivity in high concentration photovoltaics. <i>Scientific Reports</i> , 2018, 8, 14907. | 3.3 | 4 |
| 31 | ZnNi ₂ MnCo ₂ O ₄ Spinel as a High-Voltage and High-Capacity Cathode Material for Nonaqueous Zn-Ion Batteries. <i>Advanced Energy Materials</i> , 2018, 8, 1800589. | 19.5 | 105 |
| 32 | Semiconductor Nanomembrane Materials for High-Performance Soft Electronic Devices. <i>Journal of the American Chemical Society</i> , 2018, 140, 9001-9019. | 13.7 | 34 |
| 33 | Design Criteria for Micro-Optical Tandem Luminescent Solar Concentrators. <i>IEEE Journal of Photovoltaics</i> , 2018, 8, 1560-1567. | 2.5 | 35 |
| 34 | Solid-Liquid Lithium Electrolyte Nanocomposites Derived from Porous Molecular Cages. <i>Journal of the American Chemical Society</i> , 2018, 140, 7504-7509. | 13.7 | 41 |
| 35 | Emulsions: Particle-Free Emulsions for 3D Printing Elastomers (<i>Adv. Funct. Mater.</i> 21/2018). <i>Advanced Functional Materials</i> , 2018, 28, 1870141. | 14.9 | 1 |
| 36 | Anisotropic Mg Electrodeposition and Alloying with Ag-based Anodes from Non-Coordinating Mixed-Metal Borohydride Electrolytes for Mg Hybrid Batteries. <i>Electrochimica Acta</i> , 2017, 229, 112-120. | 5.2 | 6 |

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|----|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|-----------|
| 37 | Quantitative Reflection Imaging for the Morphology and Dynamics of Live <i>Aplysia californica</i> Pedal Ganglion Neurons Cultured on Nanostructured Plasmonic Crystals. <i>Langmuir</i> , 2017, 33, 8640-8650. | 3.5 | 3 |
| 38 | Porous Nanomaterials: Porous Nanomaterials for Ultrabroadband Omnidirectional Anti-Reflection Surfaces with Applications in High Concentration Photovoltaics (<i>Adv. Energy Mater.</i> 7/2017). <i>Advanced Energy Materials</i> , 2017, 7, . | 19.5 | 2 |
| 39 | Evolution at the Solid Electrolyte/Gold Electrode Interface during Lithium Deposition and Stripping. <i>Chemistry of Materials</i> , 2017, 29, 3029-3037. | 6.7 | 117 |
| 40 | Porous Nanomaterials for Ultrabroadband Omnidirectional Anti-Reflection Surfaces with Applications in High Concentration Photovoltaics. <i>Advanced Energy Materials</i> , 2017, 7, 1601992. | 19.5 | 27 |
| 41 | Three-dimensional mesostructures as high-temperature growth templates, electronic cellular scaffolds, and self-propelled microrobots. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2017, 114, E9455-E9464. | 7.1 | 129 |
| 42 | Optimization of Photon and Electron Collection Efficiencies in Silicon Solar Microcells for Use in Concentration-Based Photovoltaic Systems. <i>Advanced Materials Technologies</i> , 2017, 2, 1700169. | 5.8 | 6 |
| 43 | A programmable soft chemo-mechanical actuator exploiting a catalyzed photochemical water-oxidation reaction. <i>Soft Matter</i> , 2017, 13, 7312-7317. | 2.7 | 18 |
| 44 | ZnAl ₂ Co ₂ O ₄ Spinel as Cathode Materials for Non-Aqueous Zn Batteries with an Open Circuit Voltage of ~2 V. <i>Chemistry of Materials</i> , 2017, 29, 9351-9359. | 6.7 | 83 |
| 45 | High-concentration planar microtracking photovoltaic system exceeding 30% efficiency. <i>Nature Energy</i> , 2017, 2, . | 39.5 | 56 |
| 46 | Deterministic Integration of Biological and Soft Materials onto 3D Microscale Cellular Frameworks. <i>Advanced Biology</i> , 2017, 1, 1700068. | 3.0 | 18 |
| 47 | 3D-Printed pHEMA Materials for Topographical and Biochemical Modulation of Dorsal Root Ganglion Cell Response. <i>ACS Applied Materials & Interfaces</i> , 2017, 9, 30318-30328. | 8.0 | 32 |
| 48 | Multimodal Study of the Speciations and Activities of Supported Pd Catalysts During the Hydrogenation of Ethylene. <i>Journal of Physical Chemistry C</i> , 2017, 121, 18962-18972. | 3.1 | 24 |
| 49 | Anomalous Structural Disorder in Supported Pt Nanoparticles. <i>Journal of Physical Chemistry Letters</i> , 2017, 8, 3284-3288. | 4.6 | 18 |
| 50 | Micro-optical Tandem Luminescent Solar Concentrator. , 2017, , . | | 6 |
| 51 | Quantum dot emission modulation using piezoelectric photonic crystal MEMS resonators. <i>Optics Express</i> , 2017, 25, 25831. | 3.4 | 1 |
| 52 | Refractive index sensing and surface-enhanced Raman spectroscopy using silver-gold layered bimetallic plasmonic crystals. <i>Beilstein Journal of Nanotechnology</i> , 2017, 8, 2492-2503. | 2.8 | 4 |
| 53 | Concentrator photovoltaic module architectures with capabilities for capture and conversion of full global solar radiation. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2016, 113, E8210-E8218. | 7.1 | 48 |
| 54 | Dynamic Surface Stress Response during Reversible Mg Electrodeposition and Stripping. <i>Journal of the Electrochemical Society</i> , 2016, 163, A2679-A2684. | 2.9 | 9 |

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|----|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|-----------|
| 55 | Cellular Microcultures: Programming Mechanical and Physicochemical Properties of 3D Hydrogel Cellular Microcultures via Direct Ink Writing (Adv. Healthcare Mater. 9/2016). Advanced Healthcare Materials, 2016, 5, 990-990. | 7.6 | 4 |
| 56 | Programming Mechanical and Physicochemical Properties of 3D Hydrogel Cellular Microcultures via Direct Ink Writing. Advanced Healthcare Materials, 2016, 5, 1025-1039. | 7.6 | 32 |
| 57 | 3D Scaffolded Nickel-Tin Alloy Anodes with Enhanced Cyclability. Advanced Materials, 2016, 28, 742-747. | 21.0 | 90 |
| 58 | Biomimetic 4D printing. Nature Materials, 2016, 15, 413-418. | 27.5 | 2,268 |
| 59 | Design, fabrication, and characterization of a proposed microchannel water electrolyzer. Journal of Power Sources, 2016, 307, 122-128. | 7.8 | 13 |
| 60 | Enhanced Photon Collection in Luminescent Solar Concentrators with Distributed Bragg Reflectors. ACS Photonics, 2016, 3, 278-285. | 6.6 | 58 |
| 61 | Comprehensive energy analysis of a photovoltaic thermal water electrolyzer. Applied Energy, 2016, 164, 294-302. | 10.1 | 36 |
| 62 | Characterizing Working Catalysts with Correlated Electron and Photon Probes. Microscopy and Microanalysis, 2015, 21, 563-564. | 0.4 | 2 |
| 63 | Passivation Dynamics in the Anisotropic Deposition and Stripping of Bulk Magnesium Electrodes During Electrochemical Cycling. ACS Applied Materials & Interfaces, 2015, 7, 18406-18414. | 8.0 | 39 |
| 64 | Polarization controlled output of electrohydrodynamic jet printed quantum dot embedded photonic crystals for display applications. , 2015, , . | | 0 |
| 65 | Operando Characterization of Catalysts through use of a Portable Microreactor. ChemCatChem, 2015, 7, 3683-3691. | 3.7 | 29 |
| 66 | Exploring Salt and Solvent Effects in Chloride-Based Electrolytes for Magnesium Electrodeposition and Dissolution. Journal of Physical Chemistry C, 2015, 119, 13524-13534. | 3.1 | 71 |
| 67 | Complex structural dynamics of nanocatalysts revealed in Operando conditions by correlated imaging and spectroscopy probes. Nature Communications, 2015, 6, 7583. | 12.8 | 118 |
| 68 | Quantum Dot Luminescent Concentrator Cavity Exhibiting 30-fold Concentration. ACS Photonics, 2015, 2, 1576-1583. | 6.6 | 126 |
| 69 | Assembly of micro/nanomaterials into complex, three-dimensional architectures by compressive buckling. Science, 2015, 347, 154-159. | 12.6 | 745 |
| 70 | Comparative in Operando Studies in Heterogeneous Catalysis: Atomic and Electronic Structural Features in the Hydrogenation of Ethylene over Supported Pd and Pt Catalysts. ACS Catalysis, 2015, 5, 1539-1551. | 11.2 | 46 |
| 71 | Synergetic Role of Li ⁺ during Mg Electrodeposition/Dissolution in Borohydride Diglyme Electrolyte Solution: Voltammetric Stripping Behaviors on a Pt Microelectrode Indicative of Mg-Li Alloying and Facilitated Dissolution. ACS Applied Materials & Interfaces, 2015, 7, 2494-2502. | 8.0 | 46 |
| 72 | Programming matter through strain. Extreme Mechanics Letters, 2015, 3, 8-16. | 4.1 | 25 |

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|----|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|-----------|
| 73 | Intracluster Atomic and Electronic Structural Heterogeneities in Supported Nanoscale Metal Catalysts. <i>Journal of Physical Chemistry C</i> , 2015, 119, 25615-25627. | 3.1 | 9 |
| 74 | Improving Electrodeposition of Mg through an Open Circuit Potential Hold. <i>Journal of Physical Chemistry C</i> , 2015, 119, 23366-23372. | 3.1 | 19 |
| 75 | Oxygen reduction reaction induced pH-responsive chemo-mechanical hydrogel actuators. <i>Soft Matter</i> , 2015, 11, 7953-7959. | 2.7 | 31 |
| 76 | Influence of Oxides on the Stress Evolution and Reversibility during SnO _x Conversion and Li ₂ Sn Alloying Reactions. <i>Advanced Energy Materials</i> , 2015, 5, 1400317. | 19.5 | 24 |
| 77 | Effects of Adsorbate Coverage and Bond Length Disorder on the d-Band Center of Carbon-Supported Pt Catalysts. <i>ChemPhysChem</i> , 2014, 15, 1569-1572. | 2.1 | 17 |
| 78 | Electrolytic Conditioning of a Magnesium Aluminum Chloride Complex for Reversible Magnesium Deposition. <i>Journal of Physical Chemistry C</i> , 2014, 118, 27623-27630. | 3.1 | 167 |
| 79 | Printing-based assembly of quadruple-junction four-terminal microscale solar cells and their use in high-efficiency modules. <i>Nature Materials</i> , 2014, 13, 593-598. | 27.5 | 143 |
| 80 | Luminescent Solar Concentration with Semiconductor Nanorods and Transfer-Printed Micro-Silicon Solar Cells. <i>ACS Nano</i> , 2014, 8, 44-53. | 14.6 | 153 |
| 81 | Knowing when small is better. <i>Nature Nanotechnology</i> , 2014, 9, 962-963. | 31.5 | 13 |
| 82 | High efficiency quadruple junction, four-terminal solar cells and modules by transfer printing. , 2014, , . | | 0 |
| 83 | A Comparison of Atomistic and Continuum Approaches to the Study of Bonding Dynamics in Electrocatalysis: Microcantilever Stress and in Situ EXAFS Observations of Platinum Bond Expansion Due to Oxygen Adsorption during the Oxygen Reduction Reaction. <i>Analytical Chemistry</i> , 2014, 86, 8368-8375. | 6.5 | 12 |
| 84 | Black silicon solar thin-film microcells integrating top nanocone structures for broadband and omnidirectional light-trapping. <i>Nanotechnology</i> , 2014, 25, 305301. | 2.6 | 18 |
| 85 | Printed high-efficiency quadruple-junction, four-terminal solar cells and modules for full spectrum utilization. , 2014, , . | | 0 |
| 86 | Noncrystalline-to-Crystalline Transformations in Pt Nanoparticles. <i>Journal of the American Chemical Society</i> , 2013, 135, 13062-13072. | 13.7 | 71 |
| 87 | Model Ge microstructures as anodes for Li-ion batteries. <i>Journal of Solid State Electrochemistry</i> , 2013, 17, 3015-3020. | 2.5 | 8 |
| 88 | An <i>in Situ</i> Study of Bond Strains in 1 nm Pt Catalysts and Their Sensitivities to Cluster-Support and Cluster-Adsorbate Interactions. <i>Journal of Physical Chemistry C</i> , 2013, 117, 23286-23294. | 3.1 | 47 |
| 89 | Light Trapping in Ultrathin Monocrystalline Silicon Solar Cells. <i>Advanced Energy Materials</i> , 2013, 3, 1401-1406. | 19.5 | 61 |
| 90 | Fabrication and assembly of ultrathin high-efficiency silicon solar microcells integrating electrical passivation and anti-reflection coatings. <i>Energy and Environmental Science</i> , 2013, 6, 3071. | 30.8 | 34 |

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|-----|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|-----------|
| 91 | Enhanced ultraviolet responses in thin-film InGaP solar cells by down-shifting. <i>Physical Chemistry Chemical Physics</i> , 2013, 15, 20434. | 2.8 | 26 |
| 92 | Metastability and Structural Polymorphism in Noble Metals: The Role of Composition and Metal Atom Coordination in Mono- and Bimetallic Nanoclusters. <i>ACS Nano</i> , 2013, 7, 1542-1557. | 14.6 | 37 |
| 93 | UV patternable thin film chemistry for shape and functionally versatile self-oscillating gels. <i>Soft Matter</i> , 2013, 9, 1231-1243. | 2.7 | 52 |
| 94 | Electronically Programmable, Reversible Shape Change in Two- and Three-Dimensional Hydrogel Structures (<i>Adv. Mater.</i> 11/2013). <i>Advanced Materials</i> , 2013, 25, 1540-1540. | 21.0 | 0 |
| 95 | Electronically Programmable, Reversible Shape Change in Two- and Three-Dimensional Hydrogel Structures. <i>Advanced Materials</i> , 2013, 25, 1541-1546. | 21.0 | 169 |
| 96 | Doubling the Power Output of Bifacial Thin-Film GaAs Solar Cells by Embedding Them in Luminescent Waveguides. <i>Advanced Energy Materials</i> , 2013, 3, 991-996. | 19.5 | 47 |
| 97 | Quantitative Reflection Imaging of Fixed <i>Aplysia californica</i> Pedal Ganglion Neurons on Nanostructured Plasmonic Crystals. <i>Journal of Physical Chemistry B</i> , 2013, 117, 13069-13081. | 2.6 | 10 |
| 98 | Mechanisms of Enhanced Optical Absorption for Ultrathin Silicon Solar Microcells with an Integrated Nanostructured Backside Reflector. <i>ACS Applied Materials & Interfaces</i> , 2013, 5, 4239-4246. | 8.0 | 12 |
| 99 | X-ray diffraction microscopy of lithiated silicon microstructures. <i>Applied Physics Letters</i> , 2013, 102, . | 3.3 | 8 |
| 100 | A Finite-Deformation Mechanics Theory for Kinetically Controlled Transfer Printing. <i>Journal of Applied Mechanics, Transactions ASME</i> , 2013, 80, . | 2.2 | 29 |
| 101 | Light Trapping: Light Trapping in Ultrathin Monocrystalline Silicon Solar Cells (<i>Adv. Energy Mater.</i>) Tj ETQq1 1 0.784314 rgBT/Overlo | 19.5 | 47 |
| 102 | Directed Transport as a Route to Improved Performance in Micropore-Modified Encapsulated Multilayer Silicon Electrodes. <i>Journal of the Electrochemical Society</i> , 2013, 160, A1746-A1752. | 2.9 | 1 |
| 103 | A thermal analysis of the operation of microscale, inorganic light-emitting diodes. <i>Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences</i> , 2012, 468, 3215-3223. | 2.1 | 29 |
| 104 | In Situ Electrochemical X-ray Absorption Spectroscopy of Oxygen Reduction Electrocatalysis with High Oxygen Flux. <i>Journal of the American Chemical Society</i> , 2012, 134, 197-200. | 13.7 | 79 |
| 105 | Transfer Printing Techniques for Materials Assembly and Micro/Nanodevice Fabrication. <i>Advanced Materials</i> , 2012, 24, 5284-5318. | 21.0 | 727 |
| 106 | Influence of Adsorbates on the Electronic Structure, Bond Strain, and Thermal Properties of an Alumina-Supported Pt Catalyst. <i>ACS Nano</i> , 2012, 6, 5583-5595. | 14.6 | 53 |
| 107 | Functional Protein Microarrays by Electrohydrodynamic Jet Printing. <i>Analytical Chemistry</i> , 2012, 84, 10012-10018. | 6.5 | 64 |
| 108 | Recent developments and applications of electron microscopy to heterogeneous catalysis. <i>Chemical Society Reviews</i> , 2012, 41, 8179. | 38.1 | 107 |

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|-----|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|-----------|
| 109 | Triangular Elastomeric Stamps for Optical Applications: Near-Field Phase Shift Photolithography, 3D Proximity Field Patterning, Embossed Antireflective Coatings, and SERS Sensing. <i>Advanced Functional Materials</i> , 2012, 22, 2927-2938. | 14.9 | 47 |
| 110 | Soft Embossing of Nanoscale Optical and Plasmonic Structures in Glass. <i>ACS Nano</i> , 2011, 5, 5763-5774. | 14.6 | 30 |
| 111 | Synthesis, assembly and applications of semiconductor nanomembranes. <i>Nature</i> , 2011, 477, 45-53. | 27.8 | 615 |
| 112 | Industrial Ziegler-Type Hydrogenation Catalysts Made from $\text{Co}(\text{neodecanoate})_2$ or $\text{Ni}(\text{2-ethylhexanoate})_2$ and AlEt_3 : Evidence for Nanoclusters and Sub-Nanocluster or Larger Ziegler-Nanocluster Based Catalysis. <i>Langmuir</i> , 2011, 27, 6279-6294. | 3.5 | 25 |
| 113 | The Atomic Structural Dynamics of $\text{Ir}^3\text{-Al}_2\text{O}_3$ Supported $\text{Ir}^0\text{-Pt}$ Nanocluster Catalysts Prepared from a Bimetallic Molecular Precursor: A Study Using Aberration-Corrected Electron Microscopy and X-ray Absorption Spectroscopy. <i>Journal of the American Chemical Society</i> , 2011, 133, 3582-3591. | 13.7 | 45 |
| 114 | Programmable Chemical Gradient Patterns by Soft Grayscale Lithography. <i>Small</i> , 2011, 7, 3350-3362. | 10.0 | 9 |
| 115 | 3D Microperiodic Hydrogel Scaffolds for Robust Neuronal Cultures. <i>Advanced Functional Materials</i> , 2011, 21, 47-54. | 14.9 | 205 |
| 116 | Strain Anisotropies and Self-Limiting Capacities in Single-Crystalline 3D Silicon Microstructures: Models for High Energy Density Lithium-Ion Battery Anodes. <i>Advanced Functional Materials</i> , 2011, 21, 2412-2422. | 14.9 | 176 |
| 117 | 3D Microperiodic Hydrogel Scaffolds for Robust Neuronal Cultures. <i>Advanced Functional Materials</i> , 2011, 21, 46-46. | 14.9 | 1 |
| 118 | LITHIUM-ION BATTERIES: Strain Anisotropies and Self-Limiting Capacities in Single-Crystalline 3D Silicon Microstructures: Models for High Energy Density Lithium-Ion Battery Anodes (<i>Adv. Funct. Mater.</i>) | 14.9 | 176 |
| 119 | Conformal Printing of Electrically Small Antennas on Three-Dimensional Surfaces. <i>Advanced Materials</i> , 2011, 23, 1335-1340. | 21.0 | 499 |
| 120 | Optimization of a permeation-based microfluidic direct formic acid fuel cell (DFAFC). <i>Electrophoresis</i> , 2011, 32, 947-956. | 2.4 | 4 |
| 121 | Genotyping by Alkaline Dehybridization Using Graphically Encoded Particles. <i>Chemistry - A European Journal</i> , 2011, 17, 2867-2873. | 3.3 | 6 |
| 122 | Unusual strategies for using indium gallium nitride grown on silicon (111) for solid-state lighting. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2011, 108, 10072-10077. | 7.1 | 228 |
| 123 | Ultrathin silicon solar microcells for semitransparent, mechanically flexible and microconcentrator module designs. , 2010, , 38-46. | | 2 |
| 124 | Conjugated Carbon Monolayer Membranes: Methods for Synthesis and Integration. <i>Advanced Materials</i> , 2010, 22, 1072-1077. | 21.0 | 50 |
| 125 | Functional Nanostructured Plasmonic Materials. <i>Advanced Materials</i> , 2010, 22, 1102-1110. | 21.0 | 109 |
| 126 | Capillary induced self-assembly of thin foils into 3D structures. <i>Journal of the Mechanics and Physics of Solids</i> , 2010, 58, 2033-2042. | 4.8 | 33 |

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|-----|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|-----------|
| 127 | Waterproof AlInGaP optoelectronics on stretchable substrates with applications in biomedicine and Robotics. <i>Nature Materials</i> , 2010, 9, 929-937. | 27.5 | 557 |
| 128 | Visualizing Materials Chemistry at Atomic Resolution. <i>Analytical Chemistry</i> , 2010, 82, 2599-2607. | 6.5 | 31 |
| 129 | Bifunctional polyacrylamide based polymers for the specific binding of hexahistidine tagged proteins on gold surfaces. <i>Physical Chemistry Chemical Physics</i> , 2010, 12, 4301-4308. | 2.8 | 14 |
| 130 | Guiding neuron development with planar surface gradients of substrate cues deposited using microfluidic devices. <i>Lab on A Chip</i> , 2010, 10, 1525. | 6.0 | 144 |
| 131 | Iridium Ziegler-Type Hydrogenation Catalysts Made from [(1,5-COD)Ir(η^4 -O ₂ C ₈ H ₁₅) ₂] and AlEt ₃ : Spectroscopic and Kinetic Evidence for the Ir ^{III} Species Present and for Nanoparticles as the Fastest Catalyst. <i>Inorganic Chemistry</i> , 2010, 49, 8131-8147. | 4.0 | 26 |
| 132 | Compact monocrystalline silicon solar modules with high voltage outputs and mechanically flexible designs. <i>Energy and Environmental Science</i> , 2010, 3, 208. | 30.8 | 65 |
| 133 | Microfluidic contact printing: a versatile printing platform for patterning biomolecules on hydrogel substrates. <i>Soft Matter</i> , 2010, 6, 2238. | 2.7 | 18 |
| 134 | Structural characterization of bimetallic nanomaterials with overlapping x-ray absorption edges. <i>Physical Review B</i> , 2009, 80, . | 3.2 | 25 |
| 135 | Molded plasmonic crystals for detecting and spatially imaging surface bound species by surface-enhanced Raman scattering. <i>Applied Physics Letters</i> , 2009, 94, 243109. | 3.3 | 36 |
| 136 | Two- and three-dimensional folding of thin film single-crystalline silicon for photovoltaic power applications. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2009, 106, 20149-20154. | 7.1 | 198 |
| 137 | Nanopost plasmonic crystals. <i>Nanotechnology</i> , 2009, 20, 434011. | 2.6 | 28 |
| 138 | Fabrication of Flexible Binary Amplitude Masks for Patterning on Highly Curved Surfaces. <i>Advanced Functional Materials</i> , 2009, 19, 3243-3253. | 14.9 | 22 |
| 139 | Direct Write Assembly of 3D Hydrogel Scaffolds for Guided Cell Growth. <i>Advanced Materials</i> , 2009, 21, 2407-2410. | 21.0 | 266 |
| 140 | Visualizing the Effect of Microenvironment on the Spatiotemporal RhoA and Src Activities in Living Cells by FRET. <i>Small</i> , 2009, 5, 1453-1459. | 10.0 | 5 |
| 141 | Structural Characterization of Pt ⁰ /Pd and Pd ⁰ /Pt Core-Shell Nanoclusters at Atomic Resolution. <i>Journal of the American Chemical Society</i> , 2009, 131, 8683-8689. | 13.7 | 103 |
| 142 | Multispectral Thin Film Biosensing and Quantitative Imaging Using 3D Plasmonic Crystals. <i>Analytical Chemistry</i> , 2009, 81, 5980-5989. | 6.5 | 39 |
| 143 | Optimization of 3D Plasmonic Crystal Structures for Refractive Index Sensing. <i>Journal of Physical Chemistry C</i> , 2009, 113, 10493-10499. | 3.1 | 34 |
| 144 | Omnidirectional Printing of Flexible, Stretchable, and Spanning Silver Microelectrodes. <i>Science</i> , 2009, 323, 1590-1593. | 12.6 | 1,072 |

| # | ARTICLE | IF | CITATIONS |
|-----|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|-----------|
| 145 | Textural guidance cues for controlling process outgrowth of mammalian neurons. Lab on A Chip, 2009, 9, 122-131. | 6.0 | 76 |
| 146 | The Emergence of Nonbulk Properties in Supported Metal Clusters: Negative Thermal Expansion and Atomic Disorder in Pt Nanoclusters Supported on $\text{I}^3\text{-Al}_2\text{O}_3$. Journal of the American Chemical Society, 2009, 131, 7040-7054. | 13.7 | 145 |
| 147 | Seeing Molecules by Eye: Surface Plasmon Resonance Imaging at Visible Wavelengths with High Spatial Resolution and Submonolayer Sensitivity. Angewandte Chemie - International Edition, 2008, 47, 5013-5017. | 13.8 | 62 |
| 148 | Coordination-dependent surface atomic contraction in nanocrystals revealed by coherent diffraction. Nature Materials, 2008, 7, 308-313. | 27.5 | 331 |
| 149 | Nanostructured Plasmonic Sensors. Chemical Reviews, 2008, 108, 494-521. | 47.7 | 2,245 |
| 150 | Dynamic structure in supported Pt nanoclusters: Real-time density functional theory and x-ray spectroscopy simulations. Physical Review B, 2008, 78, . | 3.2 | 77 |
| 151 | Complementary Logic Gates and Ring Oscillators on Plastic Substrates by Use of Printed Ribbons of Single-Crystalline Silicon. IEEE Electron Device Letters, 2008, 29, 73-76. | 3.9 | 85 |
| 152 | Adsorption of linear alkanes on Cu(111): Temperature and chain-length dependence of the softened vibrational mode. Journal of Chemical Physics, 2007, 126, 194707. | 3.0 | 12 |
| 153 | Spatially resolved biosensing with a molded plasmonic crystal. Applied Physics Letters, 2007, 90, 203113. | 3.3 | 24 |
| 154 | Bendable integrated circuits on plastic substrates by use of printed ribbons of single-crystalline silicon. Applied Physics Letters, 2007, 90, 213501. | 3.3 | 78 |
| 155 | Quantitative STEM and HRTEM Studies on Au Metallic Nano-Catalysts. Materials Research Society Symposia Proceedings, 2007, 1026, 1. | 0.1 | 0 |
| 156 | Competing Fracture in Kinetically Controlled Transfer Printing. Langmuir, 2007, 23, 12555-12560. | 3.5 | 301 |
| 157 | Mass spectrometric imaging of peptide release from neuronal cells within microfluidic devices. Lab on A Chip, 2007, 7, 1454. | 6.0 | 61 |
| 158 | Microfluidic Device for the Discrimination of Single-Nucleotide Polymorphisms in DNA Oligomers Using Electrochemically Actuated Alkaline Dehybridization. Analytical Chemistry, 2007, 79, 9014-9021. | 6.5 | 10 |
| 159 | Tangential Ligand-Induced Strain in Icosahedral Au ₁₃ . Journal of the American Chemical Society, 2007, 129, 10978-10979. | 13.7 | 32 |
| 160 | Variably Elastic Hydrogel Patterned via Capillary Action in Microchannels. Langmuir, 2007, 23, 1483-1488. | 3.5 | 13 |
| 161 | Optical Transduction of Chemical Forces. Nano Letters, 2007, 7, 733-737. | 9.1 | 50 |
| 162 | Microfluidic devices for culturing primary mammalian neurons at low densities. Lab on A Chip, 2007, 7, 987. | 6.0 | 179 |

| # | ARTICLE | IF | CITATIONS |
|-----|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|-----------|
| 163 | Quantitative Imaging of Protein Adsorption on Patterned Organic Thin-Film Arrays Using Secondary Electron Emission. <i>Journal of the American Chemical Society</i> , 2006, 128, 7871-7881. | 13.7 | 30 |
| 164 | Heterogeneous Three-Dimensional Electronics by Use of Printed Semiconductor Nanomaterials. <i>Science</i> , 2006, 314, 1754-1757. | 12.6 | 632 |
| 165 | Origin of Bulklike Structure and Bond Length Disorder of Pt ₃ and Pt ₆ Ru ₃ Clusters on Carbon: A Comparison of Theory and Experiment. <i>Journal of the American Chemical Society</i> , 2006, 128, 131-142. | 13.7 | 55 |
| 166 | A passive microfluidic hydrogen-air fuel cell with exceptional stability and high performance. <i>Lab on a Chip</i> , 2006, 6, 353. | 6.0 | 57 |
| 167 | Sub-Nanometer Au Monolayer-Protected Clusters Exhibiting Molecule-like Electronic Behavior: A Quantitative High-Angle Annular Dark-Field Scanning Transmission Electron Microscopy and Electrochemical Characterization of Clusters with Precise Atomic Stoichiometry. <i>Journal of Physical Chemistry B</i> , 2006, 110, 12874-12883. | 2.6 | 107 |
| 168 | Bendable GaN high electron mobility transistors on plastic substrates. <i>Journal of Applied Physics</i> , 2006, 100, 124507. | 2.5 | 157 |
| 169 | Quantitative multispectral biosensing and 1D imaging using quasi-3D plasmonic crystals. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2006, 103, 17143-17148. | 7.1 | 321 |
| 170 | Unusual Non-Bulk Properties in Nanoscale Materials: A Thermal Metal-Metal Bond Contraction of γ -Alumina-Supported Pt Catalysts. <i>Journal of the American Chemical Society</i> , 2006, 128, 12068-12069. | 13.7 | 131 |
| 171 | Effects of Temperature on the Alignment and Electrooptical Responses of a Nematic Nanoscale Liquid Crystalline Film. <i>Journal of Physical Chemistry B</i> , 2006, 110, 15782-15790. | 2.6 | 5 |
| 172 | Metal Core Bonding Motifs of Monodisperse Icosahedral Au ₁₃ and Larger Au Monolayer-Protected Clusters As Revealed by X-ray Absorption Spectroscopy and Transmission Electron Microscopy. <i>Journal of Physical Chemistry B</i> , 2006, 110, 14564-14573. | 2.6 | 81 |
| 173 | Transfer printing by kinetic control of adhesion to an elastomeric stamp. <i>Nature Materials</i> , 2006, 5, 33-38. | 27.5 | 1,348 |
| 174 | Preparation of TiO ₂ -supported Au nanoparticle catalysts from a Au ₁₃ cluster precursor: Ligand removal using ozone exposure versus a rapid thermal treatment. <i>Journal of Catalysis</i> , 2006, 243, 64-73. | 6.2 | 129 |
| 175 | Unconventional methods for forming nanopatterns. <i>Proceedings of the Institution of Mechanical Engineers, Part N: Journal of Nanoengineering and Nanosystems</i> , 2006, 220, 81-138. | 0.1 | 10 |
| 176 | Self-Assembled Monolayers of Thiolates on Metals as a Form of Nanotechnology. <i>Chemical Reviews</i> , 2005, 105, 1103-1170. | 47.7 | 7,419 |
| 177 | Fabrication of Stable Metallic Patterns Embedded in Poly(dimethylsiloxane) and Model Applications in Non-Planar Electronic and Lab-on-a-Chip Device Patterning. <i>Advanced Functional Materials</i> , 2005, 15, 557-566. | 14.9 | 91 |
| 178 | Photolithographic Route to the Fabrication of Micro/Nanowires of III-V Semiconductors. <i>Advanced Functional Materials</i> , 2005, 15, 30-40. | 14.9 | 107 |
| 179 | Large-Area, Selective Transfer of Microstructured Silicon: A Printing-Based Approach to High-Performance Thin-Film Transistors Supported on Flexible Substrates. <i>Advanced Materials</i> , 2005, 17, 2332-2336. | 21.0 | 128 |
| 180 | A Printable Form of Single-Crystalline Gallium Nitride for Flexible Optoelectronic Systems. <i>Small</i> , 2005, 1, 1164-1168. | 10.0 | 109 |

| # | ARTICLE | IF | CITATIONS |
|-----|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|-----------|
| 181 | The Effect of Substrates / Ligands on Metal Nanocatalysts Investigated By Quantitative Z-Contrast Imaging and High Resolution Electron Microscopy. Materials Research Society Symposia Proceedings, 2005, 876, 1. | 0.1 | 1 |
| 182 | An electrochemically driven poly(dimethylsiloxane) microfluidic actuator: oxygen sensing and programmable flows and pH gradients. Lab on A Chip, 2005, 5, 634-45. | 6.0 | 38 |
| 183 | Bendable single crystal silicon thin film transistors formed by printing on plastic substrates. Applied Physics Letters, 2005, 86, 093507. | 3.3 | 195 |
| 184 | Large-Area Patterning of Coinage-Metal Thin Films Using Decal Transfer Lithography. Langmuir, 2005, 21, 195-202. | 3.5 | 48 |
| 185 | Masterless Soft Lithography: Patterning UV/Ozone-Induced Adhesion on Poly(dimethylsiloxane) Surfaces. Langmuir, 2005, 21, 10096-10105. | 3.5 | 65 |
| 186 | Additive Soft-Lithographic Patterning of Submicrometer- and Nanometer-Scale Large-Area Resists on Electronic Materials. Nano Letters, 2005, 5, 2533-2537. | 9.1 | 17 |
| 187 | High performance plasmonic crystal sensor formed by soft nanoimprint lithography. Optics Express, 2005, 13, 5669. | 3.4 | 107 |
| 188 | Spin on dopants for high-performance single-crystal silicon transistors on flexible plastic substrates. Applied Physics Letters, 2005, 86, 133507. | 3.3 | 145 |
| 189 | Near-IR Luminescence of Monolayer-Protected Metal Clusters. Journal of the American Chemical Society, 2005, 127, 812-813. | 13.7 | 322 |
| 190 | Soft lithographic fabrication of an image sensor array on a curved substrate. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 2004, 22, 2548. | 1.6 | 72 |
| 191 | A printable form of silicon for high performance thin film transistors on plastic substrates. Applied Physics Letters, 2004, 84, 5398-5400. | 3.3 | 340 |
| 192 | Engineering the morphology and electrophysiological parameters of cultured neurons by microfluidic surface patterning. FASEB Journal, 2004, 18, 1267-1269. | 0.5 | 42 |
| 193 | Microfluidic Devices for Energy Conversion: Planar Integration and Performance of a Passive, Fully Immersed H ₂ /O ₂ Fuel Cell. Langmuir, 2004, 20, 6974-6976. | 3.5 | 91 |
| 194 | Phase Dependent Electrochemical Properties of Polar Self-Assembled Monolayers (SAMs) Modified via the Fusion of Mixed Phospholipid Vesicles. Langmuir, 2004, 20, 175-180. | 3.5 | 23 |
| 195 | Electrosynthesis of ReS ₄ . XAS Analysis of ReS ₂ , Re ₂ S ₇ , and ReS ₄ . Chemistry of Materials, 2004, 16, 151-158. | 6.7 | 25 |
| 196 | Growth Kinetics and Morphology of Self-Assembled Monolayers Formed by Contact Printing 7-Octenyltrichlorosilane and Octadecyltrichlorosilane on Si(100) Wafers. Langmuir, 2004, 20, 10878-10888. | 3.5 | 25 |
| 197 | 3-Dimensional Structural Characterization Approaches of Carbon-Supported Au ₁₃ Nano-Clusters. Microscopy and Microanalysis, 2004, 10, 454-455. | 0.4 | 0 |
| 198 | Outlook of Application of Aberration Corrected-Electron Microscopy in the Ligandprotected Metal Clusters. Microscopy and Microanalysis, 2004, 10, 62-63. | 0.4 | 1 |

| # | ARTICLE | IF | CITATIONS |
|-----|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|-----------|
| 199 | Macromolecules at surfaces: Research challenges and opportunities from tribology to biology. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , 2003, 41, 2755-2793. | 2.1 | 151 |
| 200 | Stable antifouling surfaces. <i>Nature Materials</i> , 2003, 2, 207-208. | 27.5 | 40 |
| 201 | Molecular Recognition at Model Organic Interfaces: Electrochemical Discrimination Using Self-Assembled Monolayers (SAMs) Modified via the Fusion of Phospholipid Vesicles. <i>Langmuir</i> , 2003, 19, 9781-9791. | 3.5 | 46 |
| 202 | Fabrication of Patterned Multicomponent Protein Gradients and Gradient Arrays Using Microfluidic Depletion. <i>Analytical Chemistry</i> , 2003, 75, 5775-5782. | 6.5 | 73 |
| 203 | Catalytic Amplification of Patterning via Surface-Confined Ring-Opening Metathesis Polymerization on Mixed Primer Layers Formed by Contact Printing. <i>Langmuir</i> , 2003, 19, 5104-5114. | 3.5 | 64 |
| 204 | Formation and Structure of Self-Assembled Monolayers of Alkanethiolates on Palladium. <i>Journal of the American Chemical Society</i> , 2003, 125, 2597-2609. | 13.7 | 306 |
| 205 | The Size-Dependent Structural Phase Behaviors of Supported Bimetallic (Pt ⁺ Ru) Nanoparticles. <i>Journal of Physical Chemistry B</i> , 2003, 107, 2626-2636. | 2.6 | 104 |
| 206 | The origin of soft vibrational modes of alkanes adsorbed on Cu: An experimental and theoretical investigation. <i>Journal of Chemical Physics</i> , 2003, 118, 5115-5131. | 3.0 | 37 |
| 207 | Effects of Surface Morphology on the Anchoring and Electrooptical Dynamics of Confined Nanoscale Liquid Crystalline Films. <i>Journal of the American Chemical Society</i> , 2002, 124, 15020-15029. | 13.7 | 11 |
| 208 | Chemically Mediated Grain Growth in Nanotextured Au, Au/Cu Thin Films: Novel Substrates for the Formation of Self-Assembled Monolayers. <i>Langmuir</i> , 2002, 18, 5529-5538. | 3.5 | 44 |
| 209 | Decal Transfer Microlithography: A New Soft-Lithographic Patterning Method. <i>Journal of the American Chemical Society</i> , 2002, 124, 13583-13596. | 13.7 | 159 |
| 210 | A split microchannel design and analytical model to compensate for electroosmotic instabilities in micro-separations. <i>Lab on A Chip</i> , 2002, 2, 81. | 6.0 | 13 |
| 211 | The Adsorption of Cyclopropane and Cyclohexane on Cu(111): An Experimental and Theoretical Investigation on the Nature of the CH ⁺ Metal Interaction. <i>Angewandte Chemie - International Edition</i> , 2002, 41, 1735-1737. | 13.8 | 32 |
| 212 | Indirect fluorescence detection of simple sugars via high-pH electrophoresis in poly(dimethylsiloxane) microfluidic chips. <i>Electrophoresis</i> , 2002, 23, 2347. | 2.4 | 27 |
| 213 | A Method for Filling Complex Polymeric Microfluidic Devices and Arrays. <i>Analytical Chemistry</i> , 2001, 73, 3193-3197. | 6.5 | 130 |
| 214 | Catalytic Amplification of the Soft Lithographic Patterning of Si. Nonelectrochemical Orthogonal Fabrication of Photoluminescent Porous Si Pixel Arrays. <i>Journal of the American Chemical Society</i> , 2001, 123, 8709-8717. | 13.7 | 88 |
| 215 | Driven Pattern Formation in Organic Thin Film Materials: Complex Mesoscopic Organization in Microcontact Printing on Si/SiO ₂ via the Spontaneous Dewetting of a Functionalized Perfluoropolyether Ink. <i>Journal of Physical Chemistry B</i> , 2001, 105, 8776-8784. | 2.6 | 7 |
| 216 | Collision-Induced Desorption and Reaction on Hydrogen-Covered Al(111) Single Crystals: Hydrogen in Aluminum?. <i>Journal of Physical Chemistry B</i> , 2001, 105, 3052-3061. | 2.6 | 14 |

| # | ARTICLE | IF | CITATIONS |
|-----|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|-----------|
| 217 | Kinetic and Mechanistic Studies of the Chemical Vapor Deposition of Tungsten Nitride from Bis(Tertbutylimido)Bis(Tertbutylamido)Tungsten. <i>Journal of Physical Chemistry B</i> , 2001, 105, 3549-3556. | 2.6 | 20 |
| 218 | Assembly and Characterization of SAMs Formed by the Adsorption of Alkanethiols on Zinc Selenide Substrates. <i>Langmuir</i> , 2001, 17, 3937-3944. | 3.5 | 51 |
| 219 | The Phase Behavior of Multicomponent Self-Assembled Monolayers Directs the Nanoscale Texturing of Si(100) by Wet Etching. <i>Langmuir</i> , 2001, 17, 1250-1254. | 3.5 | 12 |
| 220 | A View from the Inside: Complexity in the Atomic Scale Ordering of Supported Metal Nanoparticles. <i>Journal of Physical Chemistry B</i> , 2001, 105, 12689-12703. | 2.6 | 601 |
| 221 | The future of electronics manufacturing is revealed in the fine print. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2001, 98, 4827-4829. | 7.1 | 22 |
| 222 | An infrared study of the effects of hydration on cation-loaded nafion thin films. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , 2000, 38, 1512-1520. | 2.1 | 34 |
| 223 | Surface-Initiated Ring-Opening Metathesis Polymerization on Si/SiO ₂ . <i>Macromolecules</i> , 2000, 33, 2793-2795. | 4.8 | 141 |
| 224 | Fabrication of an Interdigitated Array Electrode on ZnSe and Its Application to Electrooptical Measurements Using FT-IR Spectroscopy. <i>Analytical Chemistry</i> , 2000, 72, 1365-1372. | 6.5 | 15 |
| 225 | Mechanistic Studies of CVD Metallization Processes: Reactions of Rhodium and Platinum η^2 -Diketonate Complexes on Copper Surfaces. <i>Journal of the American Chemical Society</i> , 2000, 122, 3422-3435. | 13.7 | 29 |
| 226 | Surface Effects on the Dynamics of Liquid Crystalline Thin Films Confined in Nanoscale Cavities. <i>Journal of the American Chemical Society</i> , 2000, 122, 3917-3926. | 13.7 | 29 |
| 227 | Structural Models and Thermal Desorption Energetics for Multilayer Assemblies of the n-Alkanes on Pt(111). <i>Journal of Physical Chemistry B</i> , 2000, 104, 754-763. | 2.6 | 44 |
| 228 | Surface-Mediated Segregation and Transport Processes in Mixed Hydrocarbon Multilayer Assemblies. <i>Journal of Physical Chemistry B</i> , 2000, 104, 747-753. | 2.6 | 5 |
| 229 | Formation and Patterning of Self-Assembled Monolayers Derived from Long-Chain Organosilicon Amphiphiles and Their Use as Templates in Materials Microfabrication. <i>Langmuir</i> , 2000, 16, 6968-6976. | 3.5 | 60 |
| 230 | Low-Temperature Fabrication of Si Thin-Film Transistor Microstructures by Soft Lithographic Patterning on Curved and Planar Substrates. <i>Chemistry of Materials</i> , 2000, 12, 3306-3315. | 6.7 | 22 |
| 231 | Additive Fabrication and the Mechanisms of Nucleation and Growth in Chemical Vapor Deposition Processes. <i>Accounts of Chemical Research</i> , 2000, 33, 869-877. | 15.6 | 12 |
| 232 | Fabrication of Pt \sim Si Schottky Diodes Using Soft Lithographic Patterning and Selective Chemical Vapor Deposition. <i>Langmuir</i> , 1999, 15, 2188-2193. | 3.5 | 20 |
| 233 | Carbon Support Effects on Bimetallic Pt \sim Ru Nanoparticles Formed from Molecular Precursors. <i>Langmuir</i> , 1999, 15, 690-700. | 3.5 | 166 |
| 234 | Patterned polymer growth on silicon surfaces using microcontact printing and surface-initiated polymerization. <i>Applied Physics Letters</i> , 1999, 75, 4201-4203. | 3.3 | 152 |

| # | ARTICLE | IF | CITATIONS |
|-----|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|-----------|
| 235 | Structures and Reactivities of Cycloheptane, Cycloheptene, 1,3-Cycloheptadiene, and Cycloheptatriene on Pt(111). <i>Journal of Physical Chemistry B</i> , 1999, 103, 6752-6763. | 2.6 | 12 |
| 236 | Thermal Phase Evolution of Pt ^δ Si Intermetallic Thin Films Prepared by the Activated Adsorption of SiH ₄ on Pt(100) and Comparison to Known Structural Models. <i>Journal of the American Chemical Society</i> , 1999, 121, 2498-2507. | 13.7 | 13 |
| 237 | Morphological and Compositional Evolution of Pt ^δ Si Intermetallic Thin Films Prepared by the Activated Adsorption of SiH ₄ on Pt(111). <i>Journal of Physical Chemistry B</i> , 1999, 103, 3099-3109. | 2.6 | 6 |
| 238 | Fabrication of Silicon MOSFETs Using Soft Lithography. <i>Advanced Materials</i> , 1998, 10, 1466-1469. | 21.0 | 56 |
| 239 | Semipermeable, Chemisorbed Adlayers of Focally-Substituted Organothiol Dendrons on Gold. <i>Langmuir</i> , 1998, 14, 3312-3319. | 3.5 | 52 |
| 240 | The C ^δ H ^δ · ^δ M Interaction and Reactivity Differences of n-Octane on the (1 ^δ -1) and (5 ^δ -20) Surfaces of Pt(100). <i>Langmuir</i> , 1998, 14, 1716-1724. | 3.5 | 18 |
| 241 | Melting of Rodlike Molecules on Pt(111). Infrared Spectroscopic Studies of Isotopically Labeled n-Alkanes. <i>Journal of Physical Chemistry B</i> , 1998, 102, 8816-8824. | 2.6 | 49 |
| 242 | Sequential Dehydrogenation of Unsaturated Cyclic C ₅ and C ₆ Hydrocarbons on Pt(111). <i>Journal of Physical Chemistry B</i> , 1998, 102, 10295-10306. | 2.6 | 45 |
| 243 | Chemisorption Properties and Structural Evolution of Pt ^δ Si Intermetallic Thin Films Prepared by the Activated Adsorption of SiH ₄ on Pt(111). <i>Journal of Physical Chemistry B</i> , 1998, 102, 6202-6211. | 2.6 | 17 |
| 244 | Carbon ^δ Hydrogen Bond Activation and Cyclodehydrogenation Reactions of Cyclic C ₈ Hydrocarbons on Pt(111). <i>Journal of Physical Chemistry B</i> , 1998, 102, 2391-2402. | 2.6 | 11 |
| 245 | Direct Organometallic Synthesis: The Metal-Etching Reactions of Isobutyl Iodide on Al(111). <i>Langmuir</i> , 1998, 14, 1328-1336. | 3.5 | 6 |
| 246 | Transport Dynamics in Ordered Bilayer Assemblies of n-Alkanes on Pt(111). <i>Journal of the American Chemical Society</i> , 1998, 120, 3305-3315. | 13.7 | 11 |
| 247 | Core Shell Inversion during Nucleation and Growth of Bimetallic Pt/Ru Nanoparticles. <i>Journal of the American Chemical Society</i> , 1998, 120, 8093-8101. | 13.7 | 215 |
| 248 | Collision-induced activation of the ^δ 2-hydride elimination reaction of isobutyl iodide dissociatively chemisorbed on Al(111). <i>Journal of Chemical Physics</i> , 1998, 108, 8640-8650. | 3.0 | 8 |
| 249 | Copper Deposition in the Presence of Surface-Confined Additives. <i>Journal of the Electrochemical Society</i> , 1997, 144, 96-105. | 2.9 | 74 |
| 250 | Structure and Stability of Patterned Self-Assembled Films of Octadecyltrichlorosilane Formed by Contact Printing. <i>Langmuir</i> , 1997, 13, 3382-3391. | 3.5 | 208 |
| 251 | Selective Chemical Vapor Deposition of Platinum and Palladium Directed by Monolayers Patterned Using Microcontact Printing. <i>Langmuir</i> , 1997, 13, 3833-3838. | 3.5 | 69 |
| 252 | Structural Characterization of Carbon-Supported Platinum ^δ Ruthenium Nanoparticles from the Molecular Cluster Precursor PtRu ₅ C(CO) ₁₆ . <i>Journal of the American Chemical Society</i> , 1997, 119, 7760-7771. | 13.7 | 310 |

| # | ARTICLE | IF | CITATIONS |
|-----|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|-----------|
| 253 | Monolayer-Mediated Deposition of Tantalum(V) Oxide Thin Film Structures from Solution Precursors. <i>Journal of the American Ceramic Society</i> , 1997, 80, 2821-2827. | 3.8 | 57 |
| 254 | Additive fabrication of integrated ferroelectric thin-film capacitors using self-assembled organic thin-film templates. <i>Advanced Materials</i> , 1997, 9, 891-895. | 21.0 | 55 |
| 255 | Synthesis of a Novel Volatile Platinum Complex for Use in CVD and a Study of the Mechanism of Its Thermal Decomposition in Solution. <i>Journal of the American Chemical Society</i> , 1996, 118, 2634-2643. | 13.7 | 47 |
| 256 | A Monolayer-Based Lift-Off Process for Patterning Chemical Vapor Deposition Copper Thin Films. <i>Langmuir</i> , 1996, 12, 5350-5355. | 3.5 | 55 |
| 257 | Mechanistic Studies of Palladium Thin Film Growth from Palladium(II) β -Diketonates. 2. Kinetic Analysis of the Transmetalation Reaction of Bis(hexafluoroacetylacetonato)palladium(II) on Copper Surfaces. <i>Journal of the American Chemical Society</i> , 1996, 118, 5988-5996. | 13.7 | 43 |
| 258 | Bimetallic Catalyst Particle Nanostructure. Evolution from Molecular Cluster Precursors. <i>Journal of the American Chemical Society</i> , 1996, 118, 12964-12974. | 13.7 | 52 |
| 259 | Mechanistic Studies of Palladium Thin Film Growth from Palladium(II) β -Diketonates. 1. Spectroscopic Studies of the Reactions of Bis(hexafluoroacetylacetonato)palladium(II) on Copper Surfaces. <i>Journal of the American Chemical Society</i> , 1996, 118, 5977-5987. | 13.7 | 84 |
| 260 | Micron Scale Patterning of Solution-Derived Ceramic Thin Films Directed by Self-Assembled Monolayers. <i>Materials Research Society Symposia Proceedings</i> , 1996, 435, 521. | 0.1 | 4 |
| 261 | Self-assembled monolayers: Recent developments and applications. <i>Current Opinion in Colloid and Interface Science</i> , 1996, 1, 127-136. | 7.4 | 120 |
| 262 | From Flatland to Spaceland. <i>Physics World</i> , 1995, 8, 26-28. | 0.0 | 0 |
| 263 | Patterning of dielectric oxide thin layers by microcontact printing of self-assembled monolayers. <i>Journal of Materials Research</i> , 1995, 10, 2996-2999. | 2.6 | 103 |
| 264 | Reactions of Disilane on Cu(111): Direct Observation of Competitive Dissociation, Disproportionation, and Thin Film Growth Processes. <i>Langmuir</i> , 1995, 11, 3902-3912. | 3.5 | 7 |
| 265 | Patterned self-assembled monolayers formed by microcontact printing direct selective metalization by chemical vapor deposition on planar and nonplanar substrates. <i>Langmuir</i> , 1995, 11, 3024-3026. | 3.5 | 136 |
| 266 | Norbornadiene on Pt(111) Is Not Bound as an η^2 -Diene: Characterization of an Unexpected η^2 -Bonding Mode Involving an Agostic Pt...H-C Interaction. <i>Organometallics</i> , 1995, 14, 3377-3384. | 2.3 | 14 |
| 267 | Self-Assembled Monolayers on Gold Generated from Alkanethiols with the Structure $RNHCOCH_2SH$. <i>Langmuir</i> , 1995, 11, 4371-4382. | 3.5 | 177 |
| 268 | Physical and Spectroscopic Studies of the Nucleation and Growth of Copper Thin Films on Polyimide Surfaces by Chemical Vapor Deposition. <i>Langmuir</i> , 1995, 11, 341-355. | 3.5 | 17 |
| 269 | Structure-Reactivity Correlations in the Reactions of Hydrocarbons on Transition Metal Surfaces. 2. Hydrogenation of Norbornene and Bicyclo[2.2.2]octene on Platinum(111) Surfaces. <i>Journal of the American Chemical Society</i> , 1995, 117, 1814-1827. | 13.7 | 16 |
| 270 | Self-Assembled Monolayers of Long-Chain Hydroxamic Acids on the Native Oxide of Metals. <i>Langmuir</i> , 1995, 11, 813-824. | 3.5 | 325 |

| # | ARTICLE | IF | CITATIONS |
|-----|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|-----------|
| 271 | Reactions of Primary Organosilanes on Transition Metal Surfaces. Identification of the First Surface-Bound Silylynes. <i>Journal of the American Chemical Society</i> , 1994, 116, 11608-11609. | 13.7 | 23 |
| 272 | Molecular ordering of organosulfur compounds on Au(111) and Au(100): Adsorption from solution and in ultrahigh vacuum. <i>Journal of Chemical Physics</i> , 1993, 98, 678-688. | 3.0 | 429 |
| 273 | Surface-selective deposition of palladium and silver films from metal-organic precursors: a novel metal-organic chemical vapor deposition redox transmetalation process. <i>Journal of the American Chemical Society</i> , 1993, 115, 11644-11645. | 13.7 | 101 |
| 274 | Ring contraction of cyclooctene, 1,3-cyclooctadiene, 1,5-cyclooctadiene, and cyclooctatetraene to benzene on platinum(111) surfaces. <i>Journal of the American Chemical Society</i> , 1993, 115, 2044-2046. | 13.7 | 14 |
| 275 | Synthesis, Structure, and Properties of Model Organic Surfaces. <i>Annual Review of Physical Chemistry</i> , 1992, 43, 437-463. | 10.8 | 1,705 |
| 276 | Aluminum thin film growth by the thermal decomposition of triethylamine alane. <i>Surface Science</i> , 1991, 244, 89-95. | 1.9 | 53 |
| 277 | Thermal decomposition of alkyl halides on aluminum. 2. The formation and thermal decomposition of surface metallacycles derived from the dissociative chemisorption of dihaloalkanes. <i>Journal of the American Chemical Society</i> , 1991, 113, 1143-1148. | 13.7 | 39 |
| 278 | Adsorption of poly(2-vinylpyridine)-poly (styrene) block copolymers from toluene solutions. <i>Macromolecules</i> , 1991, 24, 1987-1995. | 4.8 | 131 |
| 279 | Surface reactions in the aluminum-catalyzed direct synthesis of alkylsilanes. <i>Journal of the American Chemical Society</i> , 1991, 113, 9112-9119. | 13.7 | 10 |
| 280 | Thermal decomposition of alkyl halides on aluminum. 1. Carbon-halogen bond cleavage and surface .beta.-hydride elimination reactions. <i>Journal of the American Chemical Society</i> , 1991, 113, 1137-1142. | 13.7 | 74 |
| 281 | Comparison of the structures and wetting properties of self-assembled monolayers of n-alkanethiols on the coinage metal surfaces, copper, silver, and gold. <i>Journal of the American Chemical Society</i> , 1991, 113, 7152-7167. | 13.7 | 1,895 |
| 282 | Studies of the temperature-dependent phase behavior of long chain n-alkyl thiol monolayers on gold. <i>Journal of Chemical Physics</i> , 1990, 93, 767-773. | 3.0 | 351 |
| 283 | Fundamental studies of microscopic wetting on organic surfaces. 2. Interaction of secondary adsorbates with chemically textured organic monolayers. <i>Journal of the American Chemical Society</i> , 1990, 112, 570-579. | 13.7 | 251 |
| 284 | Fundamental studies of microscopic wetting on organic surfaces. 1. Formation and structural characterization of a self-consistent series of polyfunctional organic monolayers. <i>Journal of the American Chemical Society</i> , 1990, 112, 558-569. | 13.7 | 1,519 |
| 285 | The adsorption and thermal decomposition of trimethylamine alane on aluminum and silicon single crystal surfaces: kinetic and mechanistic studies. <i>Surface Science</i> , 1990, 236, 77-84. | 1.9 | 66 |
| 286 | Core-level photoemission measurements of valence-band offsets in highly strained heterojunctions: Si-Ge system. <i>Physical Review B</i> , 1989, 39, 1235-1241. | 3.2 | 86 |
| 287 | Formation of monolayer films by the spontaneous assembly of organic thiols from solution onto gold. <i>Journal of the American Chemical Society</i> , 1989, 111, 321-335. | 13.7 | 3,344 |
| 288 | Surface organometallic chemistry in the chemical vapor deposition of aluminum films using triisobutylaluminum: .beta.-hydride and .beta.-alkyl elimination reactions of surface alkyl intermediates. <i>Journal of the American Chemical Society</i> , 1989, 111, 1634-1644. | 13.7 | 185 |

| # | ARTICLE | IF | CITATIONS |
|-----|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|-----------|
| 289 | Monolayer films prepared by the spontaneous self-assembly of symmetrical and unsymmetrical dialkyl sulfides from solution onto gold substrates: structure, properties, and reactivity of constituent functional groups. <i>Langmuir</i> , 1988, 4, 365-385. | 3.5 | 570 |
| 290 | Fundamental studies of the chemisorption of organosulfur compounds on gold(111). Implications for molecular self-assembly on gold surfaces. <i>Journal of the American Chemical Society</i> , 1987, 109, 733-740. | 13.7 | 925 |
| 291 | Determination of the (100) InAs/GaSb heterojunction valence band discontinuity by x-ray photoemission core level spectroscopy. <i>Journal of Applied Physics</i> , 1987, 61, 5337-5341. | 2.5 | 55 |
| 292 | Spontaneously organized molecular assemblies. 3. Preparation and properties of solution adsorbed monolayers of organic disulfides on gold surfaces. <i>Journal of the American Chemical Society</i> , 1987, 109, 2358-2368. | 13.7 | 695 |
| 293 | Reconstruction of the interface of oxidatively functionalized polyethylene and derivatives on heating. <i>Langmuir</i> , 1987, 3, 799-815. | 3.5 | 110 |
| 294 | Chemical aspects of reactive metal and energetic ion interactions on polyimide. <i>Langmuir</i> , 1987, 3, 1136-1140. | 3.5 | 13 |
| 295 | Intrinsic reactivity of magnesium surfaces toward methyl bromide. <i>Journal of the American Chemical Society</i> , 1986, 108, 2881-2886. | 13.7 | 50 |
| 296 | Spontaneous organization of carboxylic acid monolayer films in ultrahigh vacuum. Kinetic constraints to assembly via gas-phase adsorption. <i>Langmuir</i> , 1986, 2, 412-417. | 3.5 | 72 |
| 297 | X-ray photoemission core level determination of the GaSb/AlSb heterojunction valence band discontinuity. <i>Applied Physics Letters</i> , 1986, 49, 1037-1039. | 3.3 | 64 |
| 298 | An XPS study of the reaction of silane with oxidized copper, silver, and gold surfaces. <i>Surface Science</i> , 1985, 149, 119-132. | 1.9 | 17 |
| 299 | The decomposition of silane and germane on Ni(111): Implications for heterogeneous catalysis. <i>Surface Science</i> , 1985, 149, 133-145. | 1.9 | 34 |
| 300 | Influence of compositional heterogeneity on the chemisorption and reactivity of small molecules on copper/copper silicide surfaces. <i>Langmuir</i> , 1985, 1, 663-669. | 3.5 | 16 |
| 301 | Spontaneously organized molecular assemblies. 1. Formation, dynamics, and physical properties of n-alkanoic acids adsorbed from solution on an oxidized aluminum surface. <i>Langmuir</i> , 1985, 1, 45-52. | 3.5 | 634 |
| 302 | Preparation and characterization of functionalized polyethylene surfaces. <i>Macromolecules</i> , 1984, 17, 1013-1019. | 4.8 | 100 |
| 303 | Small-molecule chemisorption in nickel disilicide: implications for heterogeneous catalysts. <i>Journal of the American Chemical Society</i> , 1983, 105, 365-369. | 13.7 | 22 |
| 304 | Thermal decomposition of di(cycloalkyl)bis(triethylphosphine)platinum(II) complexes. <i>Journal of the American Chemical Society</i> , 1981, 103, 3404-3410. | 13.7 | 37 |
| 305 | Preparation of tertiary phosphine-olefin complexes of platinum(0): a convenient synthesis of ethylenebis(triethylphosphine)platinum(0). <i>Inorganic Chemistry</i> , 1981, 20, 1312-1314. | 4.0 | 25 |
| 306 | Synthesis of functional chelating diphosphines containing the bis[2-(diphenylphosphino)ethyl]amino moiety and the use of these materials in the preparation of water-soluble diphosphine complexes of transition metals. <i>Journal of Organic Chemistry</i> , 1981, 46, 2861-2867. | 3.2 | 115 |

| # | ARTICLE | IF | CITATIONS |
|-----|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|-----------|
| 307 | Mechanisms of thermal decomposition of diethylbis(triethylphosphine)platinum(II). Journal of the American Chemical Society, 1981, 103, 3396-3403. | 13.7 | 70 |
| 308 | Apparent fluxionality in diethyl(triethylphosphine)platinum(II), a coordinatively unsaturated intermediate in β -hydride elimination. Journal of the American Chemical Society, 1981, 103, 1676-1678. | 13.7 | 31 |
| 309 | Water-soluble complexes of tertiary phosphines and rhodium(I) as homogeneous catalysts. Journal of the American Chemical Society, 1979, 101, 3683-3685. | 13.7 | 60 |
| 310 | Bis(2-diphenylphosphinoethyl)amine. A flexible synthesis of functionalized chelating diphosphines. Journal of the American Chemical Society, 1978, 100, 2269-2270. | 13.7 | 67 |
| 311 | Selective reduction of sulfoxides. Journal of Organic Chemistry, 1977, 42, 568-569. | 3.2 | 25 |
| 312 | Substituent effects on the electronic nature of carbon-bonded fluorine. Journal of Organic Chemistry, 1976, 41, 392-394. | 3.2 | 3 |
| 313 | Application of lanthanide shift reagents to alkyl fluorides. Journal of the American Chemical Society, 1975, 97, 2546-2546. | 13.7 | 25 |
| 314 | 3D Printing High-Resolution Conductive Elastomeric Structures with a Solid Particle-Free Emulsion Ink. Advanced Engineering Materials, 0, , 2100902. | 3.5 | 1 |