Ralph G Nuzzo

List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/8287059/publications.pdf

Version: 2024-02-01

314 papers 48,153 citations

85 h-index 215 g-index

321 all docs

321 docs citations

times ranked

321

42158 citing authors

| # | Article | IF | CITATIONS |
|----|---|------|-----------|
| 1 | Biomimetic and Biologically Compliant Soft Architectures via 3D and 4D Assembly Methods: A Perspective. Advanced Materials, 2022, 34, e2108391. | 11.1 | 34 |
| 2 | Role of Atomic Structure on Exciton Dynamics and Photoluminescence in NIR Emissive InAs/InP/ZnSe Quantum Dots. Journal of Physical Chemistry C, 2022, 126, 7576-7587. | 1.5 | 7 |
| 3 | Biocompliant Composite Au/pHEMA Plasmonic Scaffolds for 3D Cell Culture and Noninvasive Sensing of Cellular Metabolites. Advanced Healthcare Materials, 2021, 10, e2001040. | 3.9 | 11 |
| 4 | 3D Particleâ€Free Printing of Biocompatible Conductive Hydrogel Platforms for Neuron Growth and Electrophysiological Recording. Advanced Functional Materials, 2021, 31, 2010246. | 7.8 | 38 |
| 5 | Bioâ€Compliant Composites: Biocompliant Composite Au/pHEMA Plasmonic Scaffolds for 3D Cell Culture and Noninvasive Sensing of Cellular Metabolites (Adv. Healthcare Mater. 4/2021). Advanced Healthcare Materials, 2021, 10, 2170016. | 3.9 | О |
| 6 | Dynamic structure of active sites in ceria-supported Pt catalysts for the water gas shift reaction. Nature Communications, 2021, 12, 914. | 5.8 | 103 |
| 7 | High Energy Density and Stable Threeâ€Dimensionally Structured Seâ€Loaded Bicontinuous Porous Carbon Battery Electrodes. Energy Technology, 2021, 9, 2100175. | 1.8 | 4 |
| 8 | Outdoor performance of a tandem InGaP/Si photovoltaic luminescent solar concentrator. Solar Energy Materials and Solar Cells, 2021, 223, 110945. | 3.0 | 13 |
| 9 | Fabrication techniques for high-performance Si heterojunction (SHJ) microcells., 2021,,. | | O |
| 10 | Single Atom Catalysts: A Review of Characterization Methods. Chemistry Methods, 2021, 1, 278-294. | 1.8 | 49 |
| 11 | Silicon Heterojunction Microcells. ACS Applied Materials & Interfaces, 2021, 13, 45600-45608. | 4.0 | 1 |
| 12 | Aliovalent Doping of CeO ₂ Improves the Stability of Atomically Dispersed Pt. ACS Applied Materials & Dispersed Pt. ACS Applied Pt. ACS Ap | 4.0 | 11 |
| 13 | Autonomous Light Management in Flexible Photoelectrochromic Films Integrating High Performance Silicon Solar Microcells. ACS Applied Energy Materials, 2020, 3, 1540-1551. | 2.5 | 13 |
| 14 | Energy Storage Mechanisms in High-Capacity Graphitic C ₃ N ₄ Cathodes for Al-lon Batteries. Journal of Physical Chemistry C, 2020, 124, 10288-10297. | 1.5 | 16 |
| 15 | Local Structure and Electronic State of Atomically Dispersed Pt Supported on Nanosized CeO ₂ . ACS Catalysis, 2019, 9, 8738-8748. | 5.5 | 70 |
| 16 | Designing and transforming yield-stress fluids. Current Opinion in Solid State and Materials Science, 2019, 23, 100758. | 5.6 | 66 |
| 17 | Ionic Hydrogels with Biomimetic 4Dâ€Printed Mechanical Gradients: Models for Softâ€Bodied Aquatic Organisms. Advanced Functional Materials, 2019, 29, 1806723. | 7.8 | 37 |
| 18 | CoS2 as a Sulfur Redox-Active Cathode Material for High-Capacity Nonaqueous Zn Batteries. Journal of Physical Chemistry C, 2019, 123, 8740-8745. | 1.5 | 30 |

| # | Article | IF | Citations |
|----|--|--------------|-----------|
| 19 | High capacity 3D structured tin-based electroplated Li-ion battery anodes. Energy Storage Materials, 2019, 17, 151-156. | 9.5 | 36 |
| 20 | 3Dâ€Printed Hydrogel Composites for Predictive Temporal (4D) Cellular Organizations and Patterned Biogenic Mineralization. Advanced Healthcare Materials, 2019, 8, e1800788. | 3.9 | 21 |
| 21 | Controlling Interfacial Properties of Lithium″on Battery Cathodes with Alkylphosphonate Selfâ€Assembled Monolayers. Advanced Materials Interfaces, 2018, 5, 1701292. | 1.9 | 22 |
| 22 | A compact spectrum splitting concentrator for high concentration photovoltaics based on the dispersion of a lens. Journal of Optics (United Kingdom), 2018, 20, 06LT01. | 1.0 | 0 |
| 23 | Particleâ€Free Emulsions for 3D Printing Elastomers. Advanced Functional Materials, 2018, 28, 1707032. | 7.8 | 37 |
| 24 | A Printingâ€Centric Approach to the Electrostatic Modification of Polymer/Clay Composites for Use in 3D Directâ€Ink Writing. Advanced Materials Interfaces, 2018, 5, 1701579. | 1.9 | 8 |
| 25 | Identifying Dynamic Structural Changes of Active Sites in Pt–Ni Bimetallic Catalysts Using Multimodal Approaches. ACS Catalysis, 2018, 8, 4120-4131. | 5.5 | 54 |
| 26 | Toward a Fourâ€Electron Redox Quinone Polymer for High Capacity Lithium Ion Storage. Advanced Energy Materials, 2018, 8, 1700960. | 10.2 | 60 |
| 27 | In situ surface stress measurement and computational analysis examining the oxygen reduction reaction on Pt and Pd. Electrochimica Acta, 2018, 260, 400-406. | 2.6 | 14 |
| 28 | Understanding the Effect of Interlayers at the Thiophosphate Solid Electrolyte/Lithium Interface for All-Solid-State Li Batteries. Chemistry of Materials, 2018, 30, 8747-8756. | 3.2 | 75 |
| 29 | High Energy Density CNT/Nal Composite Cathodes for Sodiumâ€lon Batteries. Advanced Materials Interfaces, 2018, 5, 1801342. | 1.9 | 9 |
| 30 | Solution processes for ultrabroadband and omnidirectional graded-index glass lenses with near-zero reflectivity in high concentration photovoltaics. Scientific Reports, 2018, 8, 14907. | 1.6 | 4 |
| 31 | ZnNi <i>>_{x}</i> b>Mn <i>_{x}</i> Co _{2–2} <i>_{x}Spinel as a Highâ€Voltage and Highâ€Capacity Cathode Material for Nonaqueous Znâ€lon Batteries. Advanced Energy Materials, 2018, 8, 1800589.</i> | b>0< 10.2 | sub>4 |
| 32 | Semiconductor Nanomembrane Materials for High-Performance Soft Electronic Devices. Journal of the American Chemical Society, 2018, 140, 9001-9019. | 6.6 | 34 |
| 33 | Design Criteria for Micro-Optical Tandem Luminescent Solar Concentrators. IEEE Journal of Photovoltaics, 2018, 8, 1560-1567. | 1.5 | 35 |
| 34 | Solid–Liquid Lithium Electrolyte Nanocomposites Derived from Porous Molecular Cages. Journal of the American Chemical Society, 2018, 140, 7504-7509. | 6.6 | 41 |
| 35 | Emulsions: Particle-Free Emulsions for 3D Printing Elastomers (Adv. Funct. Mater. 21/2018). Advanced Functional Materials, 2018, 28, 1870141. | 7.8 | 1 |
| 36 | Anisotropic Mg Electrodeposition and Alloying with Ag-based Anodes from Non-Coordinating Mixed-Metal Borohydride Electrolytes for Mg Hybrid Batteries. Electrochimica Acta, 2017, 229, 112-120. | 2.6 | 6 |

| # | Article | IF | Citations |
|----|--|------|-----------|
| 37 | Quantitative Reflection Imaging for the Morphology and Dynamics of LiveAplysia californicaPedal Ganglion Neurons Cultured on Nanostructured Plasmonic Crystals. Langmuir, 2017, 33, 8640-8650. | 1.6 | 3 |
| 38 | Porous Nanomaterials: Porous Nanomaterials for Ultrabroadband Omnidirectional Antiâ€Reflection Surfaces with Applications in High Concentration Photovoltaics (Adv. Energy Mater. 7/2017). Advanced Energy Materials, 2017, 7, . | 10.2 | 2 |
| 39 | Evolution at the Solid Electrolyte/Gold Electrode Interface during Lithium Deposition and Stripping. Chemistry of Materials, 2017, 29, 3029-3037. | 3.2 | 117 |
| 40 | Porous Nanomaterials for Ultrabroadband Omnidirectional Antiâ€Reflection Surfaces with Applications in High Concentration Photovoltaics. Advanced Energy Materials, 2017, 7, 1601992. | 10.2 | 27 |
| 41 | Three-dimensional mesostructures as high-temperature growth templates, electronic cellular scaffolds, and self-propelled microrobots. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, E9455-E9464. | 3.3 | 129 |
| 42 | Optimization of Photon and Electron Collection Efficiencies in Silicon Solar Microcells for Use in Concentrationâ€Based Photovoltaic Systems. Advanced Materials Technologies, 2017, 2, 1700169. | 3.0 | 6 |
| 43 | A programmable soft chemo-mechanical actuator exploiting a catalyzed photochemical water-oxidation reaction. Soft Matter, 2017, 13, 7312-7317. | 1.2 | 18 |
| 44 | ZnAl _{<i>x</i>} Co _{2–<i>x</i>} O ₄ Spinels as Cathode Materials for Non-Aqueous Zn Batteries with an Open Circuit Voltage of â‰2 V. Chemistry of Materials, 2017, 29, 9351-9359. | 3.2 | 83 |
| 45 | High-concentration planar microtracking photovoltaic system exceeding 30% efficiency. Nature Energy, 2017, 2, . | 19.8 | 56 |
| 46 | Deterministic Integration of Biological and Soft Materials onto 3D Microscale Cellular Frameworks. Advanced Biology, 2017, 1, 1700068. | 3.0 | 18 |
| 47 | 3D-Printed pHEMA Materials for Topographical and Biochemical Modulation of Dorsal Root Ganglion Cell Response. ACS Applied Materials & Samp; Interfaces, 2017, 9, 30318-30328. | 4.0 | 32 |
| 48 | Multimodal Study of the Speciations and Activities of Supported Pd Catalysts During the Hydrogenation of Ethylene. Journal of Physical Chemistry C, 2017, 121, 18962-18972. | 1.5 | 24 |
| 49 | Anomalous Structural Disorder in Supported Pt Nanoparticles. Journal of Physical Chemistry Letters, 2017, 8, 3284-3288. | 2.1 | 18 |
| 50 | Micro-optical Tandem Luminescent Solar Concentrator., 2017,,. | | 6 |
| 51 | Quantum dot emission modulation using piezoelectric photonic crystal MEMS resonators. Optics Express, 2017, 25, 25831. | 1.7 | 1 |
| 52 | Refractive index sensing and surface-enhanced Raman spectroscopy using silver–gold layered bimetallic plasmonic crystals. Beilstein Journal of Nanotechnology, 2017, 8, 2492-2503. | 1.5 | 4 |
| 53 | Concentrator photovoltaic module architectures with capabilities for capture and conversion of full global solar radiation. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, E8210-E8218. | 3.3 | 48 |
| 54 | Dynamic Surface Stress Response during Reversible Mg Electrodeposition and Stripping. Journal of the Electrochemical Society, 2016, 163, A2679-A2684. | 1.3 | 9 |

| # | Article | IF | CITATIONS |
|----|---|------|-----------|
| 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. | 3.9 | 4 |
| 56 | Programming Mechanical and Physicochemical Properties of 3D Hydrogel Cellular Microcultures via Direct Ink Writing. Advanced Healthcare Materials, 2016, 5, 1025-1039. | 3.9 | 32 |
| 57 | 3D Scaffolded Nickel–Tin Liâ€lon Anodes with Enhanced Cyclability. Advanced Materials, 2016, 28, 742-747. | 11.1 | 90 |
| 58 | Biomimetic 4D printing. Nature Materials, 2016, 15, 413-418. | 13.3 | 2,268 |
| 59 | Design, fabrication, and characterization of a proposed microchannel water electrolyzer. Journal of Power Sources, 2016, 307, 122-128. | 4.0 | 13 |
| 60 | Enhanced Photon Collection in Luminescent Solar Concentrators with Distributed Bragg Reflectors. ACS Photonics, 2016, 3, 278-285. | 3.2 | 58 |
| 61 | Comprehensive energy analysis of a photovoltaic thermal water electrolyzer. Applied Energy, 2016, 164, 294-302. | 5.1 | 36 |
| 62 | Characterizing Working Catalysts with Correlated Electron and Photon Probes. Microscopy and Microanalysis, 2015, 21, 563-564. | 0.2 | 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. | 4.0 | 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. | 1.8 | 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. | 1.5 | 71 |
| 67 | Complex structural dynamics of nanocatalysts revealed in Operando conditions by correlated imaging and spectroscopy probes. Nature Communications, 2015, 6, 7583. | 5.8 | 118 |
| 68 | Quantum Dot Luminescent Concentrator Cavity Exhibiting 30-fold Concentration. ACS Photonics, 2015, 2, 1576-1583. | 3.2 | 126 |
| 69 | Assembly of micro/nanomaterials into complex, three-dimensional architectures by compressive buckling. Science, 2015, 347, 154-159. | 6.0 | 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. | 5.5 | 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 & Samp; Interfaces, 2015, 7, 2494-2502. | 4.0 | 46 |
| 72 | Programming matter through strain. Extreme Mechanics Letters, 2015, 3, 8-16. | 2.0 | 25 |

| # | Article | IF | Citations |
|----|---|------|-----------|
| 73 | Intracluster Atomic and Electronic Structural Heterogeneities in Supported Nanoscale Metal Catalysts. Journal of Physical Chemistry C, 2015, 119, 25615-25627. | 1.5 | 9 |
| 74 | Improving Electrodeposition of Mg through an Open Circuit Potential Hold. Journal of Physical Chemistry C, 2015, 119, 23366-23372. | 1.5 | 19 |
| 75 | Oxygen reduction reaction induced pH-responsive chemo-mechanical hydrogel actuators. Soft Matter, 2015, 11, 7953-7959. | 1.2 | 31 |
| 76 | Influence of Oxides on the Stress Evolution and Reversibility during SnO _x Conversion and Liâ€Sn Alloying Reactions. Advanced Energy Materials, 2015, 5, 1400317. | 10.2 | 24 |
| 77 | Effects of Adsorbate Coverage and Bondâ€Length Disorder on the dâ€Band Center of Carbonâ€Supported Pt Catalysts. ChemPhysChem, 2014, 15, 1569-1572. | 1.0 | 17 |
| 78 | Electrolytic Conditioning of a Magnesium Aluminum Chloride Complex for Reversible Magnesium Deposition. Journal of Physical Chemistry C, 2014, 118, 27623-27630. | 1.5 | 167 |
| 79 | Printing-based assembly of quadruple-junction four-terminal microscale solar cells and their use in high-efficiency modules. Nature Materials, 2014, 13, 593-598. | 13.3 | 143 |
| 80 | Luminescent Solar Concentration with Semiconductor Nanorods and Transfer-Printed Micro-Silicon Solar Cells. ACS Nano, 2014, 8, 44-53. | 7.3 | 153 |
| 81 | Knowing when small is better. Nature Nanotechnology, 2014, 9, 962-963. | 15.6 | 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. Analytical Chemistry, 2014, 86, 8368-8375. | 3.2 | 12 |
| 84 | Black silicon solar thin-film microcells integrating top nanocone structures for broadband and omnidirectional light-trapping. Nanotechnology, 2014, 25, 305301. | 1.3 | 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. Journal of the American Chemical Society, 2013, 135, 13062-13072. | 6.6 | 71 |
| 87 | Model Ge microstructures as anodes for Li-ion batteries. Journal of Solid State Electrochemistry, 2013, 17, 3015-3020. | 1.2 | 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. Journal of Physical Chemistry C, 2013, 117, 23286-23294. | 1.5 | 47 |
| 89 | Light Trapping in Ultrathin Monocrystalline Silicon Solar Cells. Advanced Energy Materials, 2013, 3, 1401-1406. | 10.2 | 61 |
| 90 | Fabrication and assembly of ultrathin high-efficiency silicon solar microcells integrating electrical passivation and anti-reflection coatings. Energy and Environmental Science, 2013, 6, 3071. | 15.6 | 34 |

| # | Article | IF | Citations |
|-----|--|-------------------|---------------------------|
| 91 | Enhanced ultraviolet responses in thin-film InGaP solar cells by down-shifting. Physical Chemistry Chemical Physics, 2013, 15, 20434. | 1.3 | 26 |
| 92 | Metastability and Structural Polymorphism in Noble Metals: The Role of Composition and Metal Atom Coordination in Mono- and Bimetallic Nanoclusters. ACS Nano, 2013, 7, 1542-1557. | 7.3 | 37 |
| 93 | UV patternable thin film chemistry for shape and functionally versatile self-oscillating gels. Soft Matter, 2013, 9, 1231-1243. | 1.2 | 52 |
| 94 | Electronically Programmable, Reversible Shape Change in Two- and Three-Dimensional Hydrogel Structures (Adv. Mater. 11/2013). Advanced Materials, 2013, 25, 1540-1540. | 11.1 | 0 |
| 95 | Electronically Programmable, Reversible Shape Change in Two―and Threeâ€Dimensional Hydrogel Structures. Advanced Materials, 2013, 25, 1541-1546. | 11.1 | 169 |
| 96 | Doubling the Power Output of Bifacial Thinâ€Film GaAs Solar Cells by Embedding Them in Luminescent Waveguides. Advanced Energy Materials, 2013, 3, 991-996. | 10.2 | 47 |
| 97 | Quantitative Reflection Imaging of Fixed Aplysia californica Pedal Ganglion Neurons on Nanostructured Plasmonic Crystals. Journal of Physical Chemistry B, 2013, 117, 13069-13081. | 1.2 | 10 |
| 98 | Mechanisms of Enhanced Optical Absorption for Ultrathin Silicon Solar Microcells with an Integrated Nanostructured Backside Reflector. ACS Applied Materials & Interfaces, 2013, 5, 4239-4246. | 4.0 | 12 |
| 99 | X-ray diffraction microscopy of lithiated silicon microstructures. Applied Physics Letters, 2013, 102, . | 1.5 | 8 |
| 100 | A Finite-Deformation Mechanics Theory for Kinetically Controlled Transfer Printing. Journal of Applied Mechanics, Transactions ASME, 2013, 80, . | 1.1 | 29 |
| 101 | Light Trapping: Light Trapping in Ultrathin Monocrystalline Silicon Solar Cells (Adv. Energy Mater.) Tj ETQq $1\ 1\ 0.7$ | '84314 rg 10:2 | BT ₄ /Overlock |
| 102 | Directed Transport as a Route to Improved Performance in Micropore-Modified Encapsulated Multilayer Silicon Electrodes. Journal of the Electrochemical Society, 2013, 160, A1746-A1752. | 1.3 | 1 |
| 103 | A thermal analysis of the operation of microscale, inorganic light-emitting diodes. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2012, 468, 3215-3223. | 1.0 | 29 |
| 104 | In Situ Electrochemical X-ray Absorption Spectroscopy of Oxygen Reduction Electrocatalysis with High Oxygen Flux. Journal of the American Chemical Society, 2012, 134, 197-200. | 6.6 | 79 |
| 105 | Transfer Printing Techniques for Materials Assembly and Micro/Nanodevice Fabrication. Advanced Materials, 2012, 24, 5284-5318. | 11.1 | 727 |
| 106 | Influence of Adsorbates on the Electronic Structure, Bond Strain, and Thermal Properties of an Alumina-Supported Pt Catalyst. ACS Nano, 2012, 6, 5583-5595. | 7. 3 | 53 |
| 107 | Functional Protein Microarrays by Electrohydrodynamic Jet Printing. Analytical Chemistry, 2012, 84, 10012-10018. | 3.2 | 64 |
| 108 | Recent developments and applications of electron microscopy to heterogeneous catalysis. Chemical Society Reviews, 2012, 41, 8179. | 18.7 | 107 |

| # | Article | IF | CITATIONS |
|-----|---|---------------------|--------------------------|
| 109 | Triangular Elastomeric Stamps for Optical Applications: Nearâ€Field Phase Shift Photolithography, 3D Proximity Field Patterning, Embossed Antireflective Coatings, and SERS Sensing. Advanced Functional Materials, 2012, 22, 2927-2938. | 7.8 | 47 |
| 110 | Soft Embossing of Nanoscale Optical and Plasmonic Structures in Glass. ACS Nano, 2011, 5, 5763-5774. | 7.3 | 30 |
| 111 | Synthesis, assembly and applications of semiconductor nanomembranes. Nature, 2011, 477, 45-53. | 13.7 | 615 |
| 112 | Industrial Ziegler-Type Hydrogenation Catalysts Made from Co(neodecanoate) < sub>2 < /sub> or Ni(2-ethylhexanoate) < sub>2 < /sub> and AlEt < sub>3 < /sub>: Evidence for Nanoclusters and Sub-Nanocluster or Larger Ziegler-Nanocluster Based Catalysis. Langmuir, 2011, 27, 6279-6294. | 1.6 | 25 |
| 113 | The Atomic Structural Dynamics of î³-Al ₂ O ₃ Supported Irâ°'Pt Nanocluster Catalysts Prepared from a Bimetallic Molecular Precursor: A Study Using Aberration-Corrected Electron Microscopy and X-ray Absorption Spectroscopy. Journal of the American Chemical Society, 2011. 133. 3582-3591. | 6.6 | 45 |
| 114 | Programmable Chemical Gradient Patterns by Soft Grayscale Lithography. Small, 2011, 7, 3350-3362. | 5.2 | 9 |
| 115 | 3D Microperiodic Hydrogel Scaffolds for Robust Neuronal Cultures. Advanced Functional Materials, 2011, 21, 47-54. | 7.8 | 205 |
| 116 | Strain Anisotropies and Selfâ€Limiting Capacities in Singleâ€Crystalline 3D Silicon Microstructures: Models for High Energy Density Lithiumâ€Ion Battery Anodes. Advanced Functional Materials, 2011, 21, 2412-2422. | 7.8 | 176 |
| 117 | 3D Microperiodic Hydrogel Scaffolds for Robust Neuronal Cultures. Advanced Functional Materials, 2011, 21, 46-46. | 7.8 | 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 (Adv. Funct. Mater.) Tj ETQqO 0 0 rg | gB 7./ Øverl | oc l o 10 Tf 50 3 |
| 119 | Conformal Printing of Electrically Small Antennas on Threeâ€Dimensional Surfaces. Advanced Materials, 2011, 23, 1335-1340. | 11.1 | 499 |
| 120 | Optimization of a permeationâ€based microfluidic direct formic acid fuel cell (DFAFC). Electrophoresis, 2011, 32, 947-956. | 1.3 | 4 |
| 121 | Genotyping by Alkaline Dehybridization Using Graphically Encoded Particles. Chemistry - A European Journal, 2011, 17, 2867-2873. | 1.7 | 6 |
| 122 | Unusual strategies for using indium gallium nitride grown on silicon (111) for solid-state lighting. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 10072-10077. | 3.3 | 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. Advanced Materials, 2010, 22, 1072-1077. | 11.1 | 50 |
| 125 | Functional Nanostructured Plasmonic Materials. Advanced Materials, 2010, 22, 1102-1110. | 11.1 | 109 |
| 126 | Capillary induced self-assembly of thin foils into 3Dstructures. Journal of the Mechanics and Physics of Solids, 2010, 58, 2033-2042. | 2.3 | 33 |

| # | Article | IF | Citations |
|-----|--|------|-----------|
| 127 | Waterproof AlinGaP optoelectronics on stretchable substrates with applications in biomedicine andÂrobotics. Nature Materials, 2010, 9, 929-937. | 13.3 | 557 |
| 128 | Visualizing Materials Chemistry at Atomic Resolution. Analytical Chemistry, 2010, 82, 2599-2607. | 3.2 | 31 |
| 129 | Bifunctional polyacrylamide based polymers for the specific binding of hexahistidine tagged proteins on gold surfaces. Physical Chemistry Chemical Physics, 2010, 12, 4301-4308. | 1.3 | 14 |
| 130 | Guiding neuron development with planar surface gradients of substrate cues deposited using microfluidic devices. Lab on A Chip, 2010, 10, 1525. | 3.1 | 144 |
| 131 | Iridium Ziegler-Type Hydrogenation Catalysts Made from [(1,5-COD) r(μ-O ₂ 38H ₁₅)] ₂ and AlEt ₃ : Spectroscopic and Kinetic Evidence for the Ir _{<i>nNanoparticles as the Fastest Catalyst, Inorganic Chemistry, 2010, 49, 8131-8147.</i>} | 1.9 | 26 |
| 132 | Compact monocrystalline silicon solar modules with high voltage outputs and mechanically flexible designs. Energy and Environmental Science, 2010, 3, 208. | 15.6 | 65 |
| 133 | Microfluidic contact printing: a versatile printing platform for patterning biomolecules on hydrogel substrates. Soft Matter, 2010, 6, 2238. | 1.2 | 18 |
| 134 | Structural characterization of bimetallic nanomaterials with overlapping x-ray absorption edges. Physical Review B, 2009, 80, . | 1.1 | 25 |
| 135 | Molded plasmonic crystals for detecting and spatially imaging surface bound species by surface-enhanced Raman scattering. Applied Physics Letters, 2009, 94, 243109. | 1.5 | 36 |
| 136 | Two- and three-dimensional folding of thin film single-crystalline silicon for photovoltaic power applications. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 20149-20154. | 3.3 | 198 |
| 137 | Nanopost plasmonic crystals. Nanotechnology, 2009, 20, 434011. | 1.3 | 28 |
| 138 | Fabrication of Flexible Binary Amplitude Masks for Patterning on Highly Curved Surfaces. Advanced Functional Materials, 2009, 19, 3243-3253. | 7.8 | 22 |
| 139 | Directâ€Write Assembly of 3D Hydrogel Scaffolds for Guided Cell Growth. Advanced Materials, 2009, 21, 2407-2410. | 11.1 | 266 |
| 140 | Visualizing the Effect of Microenvironment on the Spatiotemporal RhoA and Src Activities in Living Cells by FRET. Small, 2009, 5, 1453-1459. | 5.2 | 5 |
| 141 | Structural Characterization of Ptâ^'Pd and Pdâ^'Pt Coreâ^'Shell Nanoclusters at Atomic Resolution. Journal of the American Chemical Society, 2009, 131, 8683-8689. | 6.6 | 103 |
| 142 | Multispectral Thin Film Biosensing and Quantitative Imaging Using 3D Plasmonic Crystals. Analytical Chemistry, 2009, 81, 5980-5989. | 3.2 | 39 |
| 143 | Optimization of 3D Plasmonic Crystal Structures for Refractive Index Sensing. Journal of Physical Chemistry C, 2009, 113, 10493-10499. | 1.5 | 34 |
| 144 | Omnidirectional Printing of Flexible, Stretchable, and Spanning Silver Microelectrodes. Science, 2009, 323, 1590-1593. | 6.0 | 1,072 |

| # | Article | IF | CITATIONS |
|-----|---|------|-----------|
| 145 | Textural guidance cues for controlling process outgrowth of mammalian neurons. Lab on A Chip, 2009, 9, 122-131. | 3.1 | 76 |
| 146 | The Emergence of Nonbulk Properties in Supported Metal Clusters: Negative Thermal Expansion and Atomic Disorder in Pt Nanoclusters Supported on \hat{I}^3 -Al ₂ O ₃ . Journal of the American Chemical Society, 2009, 131, 7040-7054. | 6.6 | 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. | 7.2 | 62 |
| 148 | Coordination-dependent surface atomic contraction in nanocrystals revealed by coherent diffraction. Nature Materials, 2008, 7, 308-313. | 13.3 | 331 |
| 149 | Nanostructured Plasmonic Sensors. Chemical Reviews, 2008, 108, 494-521. | 23.0 | 2,245 |
| 150 | Dynamic structure in supported Pt nanoclusters: Real-time density functional theory and x-ray spectroscopy simulations. Physical Review B, 2008, 78, . | 1.1 | 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. | 2.2 | 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. | 1.2 | 12 |
| 153 | Spatially resolved biosensing with a molded plasmonic crystal. Applied Physics Letters, 2007, 90, 203113. | 1.5 | 24 |
| 154 | Bendable integrated circuits on plastic substrates by use of printed ribbons of single-crystalline silicon. Applied Physics Letters, 2007, 90, 213501. | 1.5 | 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. | 1.6 | 301 |
| 157 | Mass spectrometric imaging of peptide release from neuronal cells within microfluidic devices. Lab on A Chip, 2007, 7, 1454. | 3.1 | 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. | 3.2 | 10 |
| 159 | Tangential Ligand-Induced Strain in Icosahedral Au13. Journal of the American Chemical Society, 2007, 129, 10978-10979. | 6.6 | 32 |
| 160 | Variably Elastic Hydrogel Patterned via Capillary Action in Microchannels. Langmuir, 2007, 23, 1483-1488. | 1.6 | 13 |
| 161 | Optical Transduction of Chemical Forces. Nano Letters, 2007, 7, 733-737. | 4.5 | 50 |
| 162 | Microfluidic devices for culturing primary mammalian neurons at low densities. Lab on A Chip, 2007, 7, 987. | 3.1 | 179 |

| # | Article | IF | Citations |
|-----|--|------|-----------|
| 163 | Quantitative Imaging of Protein Adsorption on Patterned Organic Thin-Film Arrays Using Secondary Electron Emission. Journal of the American Chemical Society, 2006, 128, 7871-7881. | 6.6 | 30 |
| 164 | Heterogeneous Three-Dimensional Electronics by Use of Printed Semiconductor Nanomaterials. Science, 2006, 314, 1754-1757. | 6.0 | 632 |
| 165 | Origin of Bulklike Structure and Bond Length Disorder of Pt37and Pt6Ru31Clusters on Carbon:Â Comparison of Theory and Experiment. Journal of the American Chemical Society, 2006, 128, 131-142. | 6.6 | 55 |
| 166 | A passive microfluidic hydrogen–air fuel cell with exceptional stability and high performance. Lab on A Chip, 2006, 6, 353. | 3.1 | 57 |
| 167 | Sub-Nanometer Au Monolayer-Protected Clusters Exhibiting Molecule-like Electronic Behavior:Â Quantitative High-Angle Annular Dark-Field Scanning Transmission Electron Microscopy and Electrochemical Characterization of Clusters with Precise Atomic Stoichiometry. Journal of Physical Chemistry B. 2006, 110, 12874-12883. | 1.2 | 107 |
| 168 | Bendable GaN high electron mobility transistors on plastic substrates. Journal of Applied Physics, 2006, 100, 124507. | 1.1 | 157 |
| 169 | Quantitative multispectral biosensing and 1D imaging using quasi-3D plasmonic crystals. Proceedings of the National Academy of Sciences of the United States of America, 2006, 103, 17143-17148. | 3.3 | 321 |
| 170 | Unusual Non-Bulk Properties in Nanoscale Materials: Thermal Metalâ^'Metal Bond Contraction of γ-Alumina-Supported Pt Catalysts. Journal of the American Chemical Society, 2006, 128, 12068-12069. | 6.6 | 131 |
| 171 | Effects of Temperature on the Alignment and Electrooptical Responses of a Nematic Nanoscale Liquid Crystalline Film. Journal of Physical Chemistry B, 2006, 110, 15782-15790. | 1.2 | 5 |
| 172 | Metal Core Bonding Motifs of Monodisperse Icosahedral Au13and Larger Au Monolayer-Protected Clusters As Revealed by X-ray Absorption Spectroscopy and Transmission Electron Microscopy. Journal of Physical Chemistry B, 2006, 110, 14564-14573. | 1.2 | 81 |
| 173 | Transfer printing by kinetic control of adhesion to an elastomeric stamp. Nature Materials, 2006, 5, 33-38. | 13.3 | 1,348 |
| 174 | Preparation of TiO2-supported Au nanoparticle catalysts from a Au13 cluster precursor: Ligand removal using ozone exposure versus a rapid thermal treatment. Journal of Catalysis, 2006, 243, 64-73. | 3.1 | 129 |
| 175 | Unconventional methods for forming nanopatterns. Proceedings of the Institution of Mechanical Engineers, Part N: Journal of Nanoengineering and Nanosystems, 2006, 220, 81-138. | 0.1 | 10 |
| 176 | Self-Assembled Monolayers of Thiolates on Metals as a Form of Nanotechnology. Chemical Reviews, 2005, 105, 1103-1170. | 23.0 | 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. Advanced Functional Materials, 2005, 15, 557-566. | 7.8 | 91 |
| 178 | Photolithographic Route to the Fabrication of Micro/Nanowires of III-V Semiconductors. Advanced Functional Materials, 2005, 15, 30-40. | 7.8 | 107 |
| 179 | Large-Area, Selective Transfer of Microstructured Silicon: A Printing-Based Approach to High-Performance Thin-Film Transistors Supported on Flexible Substrates. Advanced Materials, 2005, 17, 2332-2336. | 11.1 | 128 |
| 180 | A Printable Form of Single-Crystalline Gallium Nitride for Flexible Optoelectronic Systems. Small, 2005, 1, 1164-1168. | 5.2 | 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. | 3.1 | 38 |
| 183 | Bendable single crystal silicon thin film transistors formed by printing on plastic substrates. Applied Physics Letters, 2005, 86, 093507. | 1.5 | 195 |
| 184 | Large-Area Patterning of Coinage-Metal Thin Films Using Decal Transfer Lithography. Langmuir, 2005, 21, 195-202. | 1.6 | 48 |
| 185 | Masterless Soft Lithography:  Patterning UV/Ozoneâ^Induced Adhesion on Poly(dimethylsiloxane) Surfaces. Langmuir, 2005, 21, 10096-10105. | 1.6 | 65 |
| 186 | Additive Soft-Lithographic Patterning of Submicrometer- and Nanometer-Scale Large-Area Resists on Electronic Materials. Nano Letters, 2005, 5, 2533-2537. | 4.5 | 17 |
| 187 | High performance plasmonic crystal sensor formed by soft nanoimprint lithography. Optics Express, 2005, 13, 5669. | 1.7 | 107 |
| 188 | Spin on dopants for high-performance single-crystal silicon transistors on flexible plastic substrates. Applied Physics Letters, 2005, 86, 133507. | 1.5 | 145 |
| 189 | Near-IR Luminescence of Monolayer-Protected Metal Clusters. Journal of the American Chemical Society, 2005, 127, 812-813. | 6.6 | 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. | 1.5 | 340 |
| 192 | Engineering the morphology and electrophysiological parameters of cultured neurons by microfluidic surface patterning. FASEB Journal, 2004, 18, 1267-1269. | 0.2 | 42 |
| 193 | Microfluidic Devices for Energy Conversion:Â Planar Integration and Performance of a Passive, Fully Immersed H2â^'O2Fuel Cell. Langmuir, 2004, 20, 6974-6976. | 1.6 | 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. | 1.6 | 23 |
| 195 | Electrosynthesis of ReS4. XAS Analysis of ReS2, Re2S7, and ReS4. Chemistry of Materials, 2004, 16, 151-158. | 3.2 | 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. | 1.6 | 25 |
| 197 | 3-Dimensional Structural Characterization Approaches of Carbon-Supported Au13 Nano-Clusters. Microscopy and Microanalysis, 2004, 10, 454-455. | 0.2 | 0 |
| 198 | Outlook of Application of Aberration Corrected-Electron Microscopy in the Ligandprotected Metal Clusters. Microscopy and Microanalysis, 2004, 10, 62-63. | 0.2 | 1 |

| # | Article | IF | Citations |
|-----|--|------|-----------|
| 199 | Macromolecules at surfaces: Research challenges and opportunities from tribology to biology. Journal of Polymer Science, Part B: Polymer Physics, 2003, 41, 2755-2793. | 2.4 | 151 |
| 200 | Stable antifouling surfaces. Nature Materials, 2003, 2, 207-208. | 13.3 | 40 |
| 201 | Molecular Recognition at Model Organic Interfaces:  Electrochemical Discrimination Using Self-Assembled Monolayers (SAMs) Modified via the Fusion of Phospholipid Vesicles. Langmuir, 2003, 19, 9781-9791. | 1.6 | 46 |
| 202 | Fabrication of Patterned Multicomponent Protein Gradients and Gradient Arrays Using Microfluidic Depletion. Analytical Chemistry, 2003, 75, 5775-5782. | 3.2 | 73 |
| 203 | Catalytic Amplification of Patterning via Surface-Confined Ring-Opening Metathesis Polymerization on Mixed Primer Layers Formed by Contact Printing. Langmuir, 2003, 19, 5104-5114. | 1.6 | 64 |
| 204 | Formation and Structure of Self-Assembled Monolayers of Alkanethiolates on Palladium. Journal of the American Chemical Society, 2003, 125, 2597-2609. | 6.6 | 306 |
| 205 | The Size-Dependent Structural Phase Behaviors of Supported Bimetallic (Ptâ^Ru) Nanoparticles. Journal of Physical Chemistry B, 2003, 107, 2626-2636. | 1.2 | 104 |
| 206 | The origin of soft vibrational modes of alkanes adsorbed on Cu: An experimental and theoretical investigation. Journal of Chemical Physics, 2003, 118, 5115-5131. | 1.2 | 37 |
| 207 | Effects of Surface Morphology on the Anchoring and Electrooptical Dynamics of Confined Nanoscale Liquid Crystalline Films. Journal of the American Chemical Society, 2002, 124, 15020-15029. | 6.6 | 11 |
| 208 | Chemically Mediated Grain Growth in Nanotextured Au, Au/Cu Thin Films:  Novel Substrates for the Formation of Self-Assembled Monolayers. Langmuir, 2002, 18, 5529-5538. | 1.6 | 44 |
| 209 | Decal Transfer Microlithography:Â A New Soft-Lithographic Patterning Method. Journal of the American Chemical Society, 2002, 124, 13583-13596. | 6.6 | 159 |
| 210 | A split microchannel design and analytical model to compensate for electroosmotic instabilities in micro-separations. Lab on A Chip, 2002, 2, 81. | 3.1 | 13 |
| 211 | The Adsorption of Cyclopropane and Cyclohexane on Cu(111): An Experimental and Theoretical Investigation on the Nature of the CHâ^'Metal Interaction. Angewandte Chemie - International Edition, 2002, 41, 1735-1737. | 7.2 | 32 |
| 212 | Indirect fluorescence detection of simple sugars via high-pH electrophoresis in poly(dimethylsiloxane) microfluidic chips. Electrophoresis, 2002, 23, 2347. | 1.3 | 27 |
| 213 | A Method for Filling Complex Polymeric Microfluidic Devices and Arrays. Analytical Chemistry, 2001, 73, 3193-3197. | 3.2 | 130 |
| 214 | Catalytic Amplification of the Soft Lithographic Patterning of Si. Nonelectrochemical Orthogonal Fabrication of Photoluminescent Porous Si Pixel Arrays. Journal of the American Chemical Society, 2001, 123, 8709-8717. | 6.6 | 88 |
| 215 | Driven Pattern Formation in Organic Thin Film Materials:  Complex Mesoscopic Organization in Microcontact Printing on Si/SiO2 via the Spontaneous Dewetting of a Functionalized Perfluoropolyether Ink. Journal of Physical Chemistry B, 2001, 105, 8776-8784. | 1.2 | 7 |
| 216 | Collision-Induced Desorption and Reaction on Hydrogen-Covered Al(111) Single Crystals:Â HydrogeninAluminum?. Journal of Physical Chemistry B, 2001, 105, 3052-3061. | 1.2 | 14 |

| # | Article | IF | Citations |
|-----|---|-----|-----------|
| 217 | Kinetic and Mechanistic Studies of the Chemical Vapor Deposition of Tungsten Nitride from Bis(Tertbutylimido)Bis(Tertbutylamido)Tungsten. Journal of Physical Chemistry B, 2001, 105, 3549-3556. | 1.2 | 20 |
| 218 | Assembly and Characterization of SAMs Formed by the Adsorption of Alkanethiols on Zinc Selenide Substrates. Langmuir, 2001, 17, 3937-3944. | 1.6 | 51 |
| 219 | The Phase Behavior of Multicomponent Self-Assembled Monolayers Directs the Nanoscale Texturing of Si(100) by Wet Etching. Langmuir, 2001, 17, 1250-1254. | 1.6 | 12 |
| 220 | A View from the Inside:  Complexity in the Atomic Scale Ordering of Supported Metal Nanoparticles. Journal of Physical Chemistry B, 2001, 105, 12689-12703. | 1.2 | 601 |
| 221 | The future of electronics manufacturing is revealed in the fine print. Proceedings of the National Academy of Sciences of the United States of America, 2001, 98, 4827-4829. | 3.3 | 22 |
| 222 | An infrared study of the effects of hydration on cation-loaded nafion thin films. Journal of Polymer Science, Part B: Polymer Physics, 2000, 38, 1512-1520. | 2.4 | 34 |
| 223 | Surface-Initiated Ring-Opening Metathesis Polymerization on Si/SiO2. Macromolecules, 2000, 33, 2793-2795. | 2.2 | 141 |
| 224 | Fabrication of an Interdigitated Array Electrode on ZnSe and Its Application to Electrooptical Measurements Using FT-IR Spectroscopy. Analytical Chemistry, 2000, 72, 1365-1372. | 3.2 | 15 |
| 225 | Mechanistic Studies of CVD Metallization Processes:  Reactions of Rhodium and Platinum β-Diketonate Complexes on Copper Surfaces. Journal of the American Chemical Society, 2000, 122, 3422-3435. | 6.6 | 29 |
| 226 | Surface Effects on the Dynamics of Liquid Crystalline Thin Films Confined in Nanoscale Cavities. Journal of the American Chemical Society, 2000, 122, 3917-3926. | 6.6 | 29 |
| 227 | Structural Models and Thermal Desorption Energetics for Multilayer Assemblies of the n-Alkanes on Pt(111). Journal of Physical Chemistry B, 2000, 104, 754-763. | 1.2 | 44 |
| 228 | Surface-Mediated Segregation and Transport Processes in Mixed Hydrocarbon Multilayer Assemblies. Journal of Physical Chemistry B, 2000, 104, 747-753. | 1.2 | 5 |
| 229 | Formation and Patterning of Self-Assembled Monolayers Derived from Long-Chain Organosilicon Amphiphiles and Their Use as Templates in Materials Microfabrication. Langmuir, 2000, 16, 6968-6976. | 1.6 | 60 |
| 230 | Low-Temperature Fabrication of Si Thin-Film Transistor Microstructures by Soft Lithographic Patterning on Curved and Planar Substrates. Chemistry of Materials, 2000, 12, 3306-3315. | 3.2 | 22 |
| 231 | Additive Fabrication and the Mechanisms of Nucleation and Growth in Chemical Vapor Deposition Processes. Accounts of Chemical Research, 2000, 33, 869-877. | 7.6 | 12 |
| 232 | Fabrication of Ptâ^'Si Schottky Diodes Using Soft Lithographic Patterning and Selective Chemical Vapor Deposition. Langmuir, 1999, 15, 2188-2193. | 1.6 | 20 |
| 233 | Carbon Support Effects on Bimetallic Ptâ^'Ru Nanoparticles Formed from Molecular Precursors. Langmuir, 1999, 15, 690-700. | 1.6 | 166 |
| 234 | Patterned polymer growth on silicon surfaces using microcontact printing and surface-initiated polymerization. Applied Physics Letters, 1999, 75, 4201-4203. | 1.5 | 152 |

| # | Article | IF | CITATIONS |
|-----|---|------|-----------|
| 235 | Structures and Reactivities of Cycloheptane, Cycloheptene, 1,3-Cycloheptadiene, and Cycloheptatriene on Pt(111). Journal of Physical Chemistry B, 1999, 103, 6752-6763. | 1.2 | 12 |
| 236 | Thermal Phase Evolution of Ptâ^'Si Intermetallic Thin Films Prepared by the Activated Adsorption of SiH4on Pt(100) and Comparison to Known Structural Models. Journal of the American Chemical Society, 1999, 121, 2498-2507. | 6.6 | 13 |
| 237 | Morphological and Compositional Evolution of Ptâ^'Si Intermetallic Thin Films Prepared by the Activated Adsorption of SiH4on Pt(111). Journal of Physical Chemistry B, 1999, 103, 3099-3109. | 1.2 | 6 |
| 238 | Fabrication of Silicon MOSFETs Using Soft Lithography. Advanced Materials, 1998, 10, 1466-1469. | 11.1 | 56 |
| 239 | Semipermeable, Chemisorbed Adlayers of Focally-Substituted Organothiol Dendrons on Gold. Langmuir, 1998, 14, 3312-3319. | 1.6 | 52 |
| 240 | The Câ^'HÂ-Â-Â-M Interaction and Reactivity Differences of n-Octane on the (1×1) and (5×20) Surfaces of Pt (100). Langmuir, 1998, 14, 1716-1724. | 1.6 | 18 |
| 241 | Melting of Rodlike Molecules on Pt(111). Infrared Spectroscopic Studies of Isotopically Labeledn-Alkanes. Journal of Physical Chemistry B, 1998, 102, 8816-8824. | 1.2 | 49 |
| 242 | Sequential Dehydrogenation of Unsaturated Cyclic C5and C6Hydrocarbons on Pt(111). Journal of Physical Chemistry B, 1998, 102, 10295-10306. | 1.2 | 45 |
| 243 | Chemisorption Properties and Structural Evolution of Ptâ^'Si Intermetallic Thin Films Prepared by the Activated Adsorption of SiH4 on Pt(111). Journal of Physical Chemistry B, 1998, 102, 6202-6211. | 1.2 | 17 |
| 244 | Carbonâ^'Hydrogen Bond Activation and Cyclodehydrogenation Reactions of Cyclic C8 Hydrocarbons on Pt(111). Journal of Physical Chemistry B, 1998, 102, 2391-2402. | 1.2 | 11 |
| 245 | Direct Organometallic Synthesis:Â The Metal-Etching Reactions of Isobutyl Iodide on Al(111)1. Langmuir, 1998, 14, 1328-1336. | 1.6 | 6 |
| 246 | Transport Dynamics in Ordered Bilayer Assemblies of then-Alkanes on Pt(111). Journal of the American Chemical Society, 1998, 120, 3305-3315. | 6.6 | 11 |
| 247 | Core Shell Inversion during Nucleation and Growth of Bimetallic Pt/Ru Nanoparticles. Journal of the American Chemical Society, 1998, 120, 8093-8101. | 6.6 | 215 |
| 248 | Collision-induced activation of the \hat{l}^2 -hydride elimination reaction of isobutyl iodide dissociatively chemisorbed on Al(111). Journal of Chemical Physics, 1998, 108, 8640-8650. | 1.2 | 8 |
| 249 | Copper Deposition in the Presence of Surfaceâ€Confined Additives. Journal of the Electrochemical Society, 1997, 144, 96-105. | 1.3 | 74 |
| 250 | Structure and Stability of Patterned Self-Assembled Films of Octadecyltrichlorosilane Formed by Contact Printing. Langmuir, 1997, 13, 3382-3391. | 1.6 | 208 |
| 251 | Selective Chemical Vapor Deposition of Platinum and Palladium Directed by Monolayers Patterned Using Microcontact Printing. Langmuir, 1997, 13, 3833-3838. | 1.6 | 69 |
| 252 | Structural Characterization of Carbon-Supported Platinumâ^'Ruthenium Nanoparticles from the Molecular Cluster Precursor PtRu5C(CO)16. Journal of the American Chemical Society, 1997, 119, 7760-7771. | 6.6 | 310 |

| # | Article | IF | Citations |
|-----|---|------|-----------|
| 253 | Monolayer-Mediated Deposition of Tantalum(V) Oxide Thin Film Structures from Solution Precursors. Journal of the American Ceramic Society, 1997, 80, 2821-2827. | 1.9 | 57 |
| 254 | Additive fabrication of integrated ferroelectric thin-film capacitors using self-assembled organic thin-film templates. Advanced Materials, 1997, 9, 891-895. | 11.1 | 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. Journal of the American Chemical Society, 1996, 118, 2634-2643. | 6.6 | 47 |
| 256 | A Monolayer-Based Lift-Off Process for Patterning Chemical Vapor Deposition Copper Thin Films. Langmuir, 1996, 12, 5350-5355. | 1.6 | 55 |
| 257 | Mechanistic Studies of Palladium Thin Film Growth from Palladium(II) \hat{I}^2 -Diketonates. 2. Kinetic Analysis of the Transmetalation Reaction of Bis(hexafluoroacetylacetonato)palladium(II) on Copper Surfaces. Journal of the American Chemical Society, 1996, 118, 5988-5996. | 6.6 | 43 |
| 258 | Bimetallic Catalyst Particle Nanostructure. Evolution from Molecular Cluster Precursors. Journal of the American Chemical Society, 1996, 118, 12964-12974. | 6.6 | 52 |
| 259 | Mechanistic Studies of Palladium Thin Film Growth from Palladium(II) \hat{l}^2 -Diketonates. 1. Spectroscopic Studies of the Reactions of Bis(hexafluoroacetylacetonato)palladium(II) on Copper Surfaces. Journal of the American Chemical Society, 1996, 118, 5977-5987. | 6.6 | 84 |
| 260 | Micron Scale Patterning of Solution-Derived Ceramic Thin Films Directed by Self-Assembled Monolayers. Materials Research Society Symposia Proceedings, 1996, 435, 521. | 0.1 | 4 |
| 261 | Self-assembled monolayers: Recent developments and applications. Current Opinion in Colloid and Interface Science, 1996, 1, 127-136. | 3.4 | 120 |
| 262 | From Flatland to Spaceland. Physics World, 1995, 8, 26-28. | 0.0 | 0 |
| 263 | Patterning of dielectric oxide thin layers by microcontact printing of self-assembled monolayers. Journal of Materials Research, 1995, 10, 2996-2999. | 1.2 | 103 |
| 264 | Reactions of Disilane on $Cu(111)$: Direct Observation of Competitive Dissociation, Disproportionation, and Thin Film Growth Processes. Langmuir, 1995, 11, 3902-3912. | 1.6 | 7 |
| 265 | Patterned self-assembled monolayers formed by microcontact printing direct selective metalization by chemical vapor deposition on planar and nonplanar substrates. Langmuir, 1995, 11, 3024-3026. | 1.6 | 136 |
| 266 | Norbornadiene on Pt(111) Is Not Bound as an .eta.2:.eta.2 Diene: Characterization of an Unexpected .eta.2:.eta.1 Bonding Mode Involving an Agostic Pt.cntdotcntdotcntdot.H-C Interaction. Organometallics, 1995, 14, 3377-3384. | 1.1 | 14 |
| 267 | Self-Assembled Monolayers on Gold Generated from Alkanethiols with the Structure RNHCOCH2SH. Langmuir, 1995, 11, 4371-4382. | 1.6 | 177 |
| 268 | Physical and Spectroscopic Studies of the Nucleation and Growth of Copper Thin Films on Polyimide Surfaces by Chemical Vapor Deposition. Langmuir, 1995, 11, 341-355. | 1.6 | 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. Journal of the American Chemical Society, 1995, 117, 1814-1827. | 6.6 | 16 |
| 270 | Self-Assembled Monolayers of Long-Chain Hydroxamic Acids on the Native Oxide of Metals. Langmuir, 1995, 11, 813-824. | 1.6 | 325 |

| # | Article | IF | Citations |
|-----|--|-----|-----------|
| 271 | Reactions of Primary Organosilanes on Transition Metal Surfaces. Identification of the First Surface-Bound Silylynes. Journal of the American Chemical Society, 1994, 116, 11608-11609. | 6.6 | 23 |
| 272 | Molecular ordering of organosulfur compounds on $Au(111)$ and $Au(100)$: Adsorption from solution and in ultrahigh vacuum. Journal of Chemical Physics, 1993, 98, 678-688. | 1.2 | 429 |
| 273 | Surface-selective deposition of palladium and silver films from metal-organic precursors: a novel metal-organic chemical vapor deposition redox transmetalation process. Journal of the American Chemical Society, 1993, 115, 11644-11645. | 6.6 | 101 |
| 274 | Ring contraction of cyclooctene, 1,3-cyclooctadiene, 1,5-cyclooctadiene, and cyclooctatetraene to benzene on platinum(111) surfaces. Journal of the American Chemical Society, 1993, 115, 2044-2046. | 6.6 | 14 |
| 275 | Synthesis, Structure, and Properties of Model Organic Surfaces. Annual Review of Physical Chemistry, 1992, 43, 437-463. | 4.8 | 1,705 |
| 276 | Aluminum thin film growth by the thermal decomposition of triethylamine alane. Surface Science, 1991, 244, 89-95. | 0.8 | 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. Journal of the American Chemical Society, 1991, 113, 1143-1148. | 6.6 | 39 |
| 278 | Adsorption of poly(2-vinylpyridine)-poly (styrene) block copolymers from toluene solutions. Macromolecules, 1991, 24, 1987-1995. | 2.2 | 131 |
| 279 | Surface reactions in the aluminum-catalyzed direct synthesis of alkylsilanes. Journal of the American Chemical Society, 1991, 113, 9112-9119. | 6.6 | 10 |
| 280 | Thermal decomposition of alkyl halides on aluminum. 1. Carbon-halogen bond cleavage and surface .betahydride elimination reactions. Journal of the American Chemical Society, 1991, 113, 1137-1142. | 6.6 | 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. Journal of the American Chemical Society, 1991, 113, 7152-7167. | 6.6 | 1,895 |
| 282 | Studies of the temperatureâ€dependent phase behavior of long chain nâ€alkyl thiol monolayers on gold. Journal of Chemical Physics, 1990, 93, 767-773. | 1.2 | 351 |
| 283 | Fundamental studies of microscopic wetting on organic surfaces. 2. Interaction of secondary adsorbates with chemically textured organic monolayers. Journal of the American Chemical Society, 1990, 112, 570-579. | 6.6 | 251 |
| 284 | Fundamental studies of microscopic wetting on organic surfaces. 1. Formation and structural characterization of a self-consistent series of polyfunctional organic monolayers. Journal of the American Chemical Society, 1990, 112, 558-569. | 6.6 | 1,519 |
| 285 | The adsorption and thermal decomposition of trimethylamine alane on aluminum and silicon single crystal surfaces: kinetic and mechanistic studies. Surface Science, 1990, 236, 77-84. | 0.8 | 66 |
| 286 | Core-level photoemission measurements of valence-band offsets in highly strained heterojunctions: Si-Ge system. Physical Review B, 1989, 39, 1235-1241. | 1.1 | 86 |
| 287 | Formation of monolayer films by the spontaneous assembly of organic thiols from solution onto gold. Journal of the American Chemical Society, 1989, 111, 321-335. | 6.6 | 3,344 |
| 288 | Surface organometallic chemistry in the chemical vapor deposition of aluminum films using triisobutylaluminum: .betahydride and .betaalkyl elimination reactions of surface alkyl intermediates. Journal of the American Chemical Society, 1989, 111, 1634-1644. | 6.6 | 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. Langmuir, 1988, 4, 365-385. | 1.6 | 570 |
| 290 | Fundamental studies of the chemisorption of organosulfur compounds on gold(111). Implications for molecular self-assembly on gold surfaces. Journal of the American Chemical Society, 1987, 109, 733-740. | 6.6 | 925 |
| 291 | Determination of the (100) InAs/GaSb heterojunction valenceâ€band discontinuity by xâ€ray photoemission core level spectroscopy. Journal of Applied Physics, 1987, 61, 5337-5341. | 1.1 | 55 |
| 292 | Spontaneously organized molecular assemblies. 3. Preparation and properties of solution adsorbed monolayers of organic disulfides on gold surfaces. Journal of the American Chemical Society, 1987, 109, 2358-2368. | 6.6 | 695 |
| 293 | Reconstruction of the interface of oxidatively functionalized polyethylene and derivatives on heating. Langmuir, 1987, 3, 799-815. | 1.6 | 110 |
| 294 | Chemical aspects of reactive metal and energetic ion interactions on polyimide. Langmuir, 1987, 3, 1136-1140. | 1.6 | 13 |
| 295 | Intrinsic reactivity of magnesium surfaces toward methyl bromide. Journal of the American Chemical Society, 1986, 108, 2881-2886. | 6.6 | 50 |
| 296 | Spontaneous organization of carboxylic acid monolayer films in ultrahigh vacuum. Kinetic constraints to assembly via gas-phase adsorption. Langmuir, 1986, 2, 412-417. | 1.6 | 72 |
| 297 | Xâ€ray photoemission core level determination of the GaSb/AlSb heterojunction valenceâ€band discontinuity. Applied Physics Letters, 1986, 49, 1037-1039. | 1.5 | 64 |
| 298 | An XPS study of the reaction of silane with oxidized copper, silver, and gold surfaces. Surface Science, 1985, 149, 119-132. | 0.8 | 17 |
| 299 | The decomposition of silane and germane on Ni(111): Implications for heterogeneous catalysis. Surface Science, 1985, 149, 133-145. | 0.8 | 34 |
| 300 | Influence of compositional heterogeneity on the chemisorption and reactivity of small molecules on copper/copper silicide surfaces. Langmuir, 1985, 1, 663-669. | 1.6 | 16 |
| 301 | Spontaneously organized molecular assemblies. 1. Formation, dynamics, and physical properties of n-alkanoic acids adsorbed from solution on an oxidized aluminum surface. Langmuir, 1985, 1, 45-52. | 1.6 | 634 |
| 302 | Preparation and characterization of functionalized polyethylene surfaces. Macromolecules, 1984, 17, 1013-1019. | 2.2 | 100 |
| 303 | Small-molecule chemisorption in nickel disilicide: implications for heterogeneous catalysts. Journal of the American Chemical Society, 1983, 105, 365-369. | 6.6 | 22 |
| 304 | Thermal decomposition of di(cycloalkyl)bis(triethylphosphine)platinum(II) complexes. Journal of the American Chemical Society, 1981, 103, 3404-3410. | 6.6 | 37 |
| 305 | Preparation of tertiary phosphine-olefin complexes of platinum(0): a convenient synthesis of ethylenebis(triethylphosphine)platinum(0). Inorganic Chemistry, 1981, 20, 1312-1314. | 1.9 | 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. Journal of Organic Chemistry, 1981, 46, 2861-2867. | 1.7 | 115 |

| # | Article | IF | CITATIONS |
|-----|---|-----|-----------|
| 307 | Mechanisms of thermal decomposition of diethylbis(triethylphosphine)platinum(II). Journal of the American Chemical Society, 1981, 103, 3396-3403. | 6.6 | 70 |
| 308 | Apparent fluxionality in diethyl(triethylphosphine)platinum(II), a coordinatively unsaturated intermediate in .betahydride elimination. Journal of the American Chemical Society, 1981, 103, 1676-1678. | 6.6 | 31 |
| 309 | Water-soluble complexes of tertiary phosphines and rhodium(I) as homogeneous catalysts. Journal of the American Chemical Society, 1979, 101, 3683-3685. | 6.6 | 60 |
| 310 | Bis(2-diphenylphosphinoethyl)amine. A flexible synthesis of functionalized chelating diphosphines. Journal of the American Chemical Society, 1978, 100, 2269-2270. | 6.6 | 67 |
| 311 | Selective reduction of sulfoxides. Journal of Organic Chemistry, 1977, 42, 568-569. | 1.7 | 25 |
| 312 | Substituent effects on the electronic nature of carbon-bonded fluorine. Journal of Organic Chemistry, 1976, 41, 392-394. | 1.7 | 3 |
| 313 | Application of lanthanide shift reagents to alkyl fluorides. Journal of the American Chemical Society, 1975, 97, 2546-2546. | 6.6 | 25 |
| 314 | 3D Printing Highâ€Resolution Conductive Elastomeric Structures with a Solid Particleâ€Free Emulsion Ink. Advanced Engineering Materials, 0, , 2100902. | 1.6 | 1 |