

Ralph G Nuzzo

List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

306
papers

42,098
citations

81
h-index

202
g-index

321
ext. papers

45,131
ext. citations

10.7
avg, IF

7.28
L-index

#	Paper	IF	Citations
306	Biomimetic and Biologically Compliant Soft Architectures via 3D and 4D Assembly Methods: A Perspective.. <i>Advanced Materials</i> , 2022 , e2108391	24	5
305	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	3.8	1
304	Aliovalent Doping of CeO Improves the Stability of Atomically Dispersed Pt. <i>ACS Applied Materials & Interfaces</i> , 2021 ,	9.5	6
303	High Energy Density and Stable Three-Dimensionally Structured Se-Loaded Bicontinuous Porous Carbon Battery Electrodes. <i>Energy Technology</i> , 2021 , 9, 2100175	3.5	4
302	Outdoor performance of a tandem InGaP/Si photovoltaic luminescent solar concentrator. <i>Solar Energy Materials and Solar Cells</i> , 2021 , 223, 110945	6.4	5
301	Single Atom Catalysts: A Review of Characterization Methods. <i>Chemistry Methods</i> , 2021 , 1, 278-294		13
300	Biocompliant Composite Au/pHEMA Plasmonic Scaffolds for 3D Cell Culture and Noninvasive Sensing of Cellular Metabolites. <i>Advanced Healthcare Materials</i> , 2021 , 10, e2001040	10.1	6
299	3D Particle Free Printing of Biocompatible Conductive Hydrogel Platforms for Neuron Growth and Electrophysiological Recording. <i>Advanced Functional Materials</i> , 2021 , 31, 2010246	15.6	17
298	Dynamic structure of active sites in ceria-supported Pt catalysts for the water gas shift reaction. <i>Nature Communications</i> , 2021 , 12, 914	17.4	31
297	Silicon Heterojunction Microcells. <i>ACS Applied Materials & Interfaces</i> , 2021 , 13, 45600-45608	9.5	1
296	Autonomous Light Management in Flexible Photoelectrochromic Films Integrating High Performance Silicon Solar Microcells. <i>ACS Applied Energy Materials</i> , 2020 , 3, 1540-1551	6.1	9
295	Energy Storage Mechanisms in High-Capacity Graphitic C3N4 Cathodes for Al-Ion Batteries. <i>Journal of Physical Chemistry C</i> , 2020 , 124, 10288-10297	3.8	11
294	Designing and transforming yield-stress fluids. <i>Current Opinion in Solid State and Materials Science</i> , 2019 , 23, 100758	12	32
293	Ionic Hydrogels with Biomimetic 4D-Printed Mechanical Gradients: Models for Soft-Bodied Aquatic Organisms. <i>Advanced Functional Materials</i> , 2019 , 29, 1806723	15.6	24
292	CoS2 as a Sulfur Redox-Active Cathode Material for High-Capacity Nonaqueous Zn Batteries. <i>Journal of Physical Chemistry C</i> , 2019 , 123, 8740-8745	3.8	21
291	Local Structure and Electronic State of Atomically Dispersed Pt Supported on Nanosized CeO2. <i>ACS Catalysis</i> , 2019 , 9, 8738-8748	13.1	40
290	High capacity 3D structured tin-based electroplated Li-ion battery anodes. <i>Energy Storage Materials</i> , 2019 , 17, 151-156	19.4	28

289	3D-Printed Hydrogel Composites for Predictive Temporal (4D) Cellular Organizations and Patterned Biogenic Mineralization. <i>Advanced Healthcare Materials</i> , 2019 , 8, e1800788	10.1	17
288	Controlling Interfacial Properties of Lithium-Ion Battery Cathodes with Alkylphosphonate Self-Assembled Monolayers. <i>Advanced Materials Interfaces</i> , 2018 , 5, 1701292	4.6	14
287	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	1.7	
286	Particle-Free Emulsions for 3D Printing Elastomers. <i>Advanced Functional Materials</i> , 2018 , 28, 1707032	15.6	26
285	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	4.6	7
284	Identifying Dynamic Structural Changes of Active Sites in PtNi Bimetallic Catalysts Using Multimodal Approaches. <i>ACS Catalysis</i> , 2018 , 8, 4120-4131	13.1	38
283	Toward a Four-Electron Redox Quinone Polymer for High Capacity Lithium Ion Storage. <i>Advanced Energy Materials</i> , 2018 , 8, 1700960	21.8	46
282	Design Criteria for Micro-Optical Tandem Luminescent Solar Concentrators. <i>IEEE Journal of Photovoltaics</i> , 2018 , 8, 1560-1567	3.7	23
281	Solid-Liquid Lithium Electrolyte Nanocomposites Derived from Porous Molecular Cages. <i>Journal of the American Chemical Society</i> , 2018 , 140, 7504-7509	16.4	28
280	Emulsions: Particle-Free Emulsions for 3D Printing Elastomers (Adv. Funct. Mater. 21/2018). <i>Advanced Functional Materials</i> , 2018 , 28, 1870141	15.6	1
279	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	6.7	9
278	Understanding the Effect of Interlayers at the Thiophosphate Solid Electrolyte/Lithium Interface for All-Solid-State Li Batteries. <i>Chemistry of Materials</i> , 2018 , 30, 8747-8756	9.6	53
277	High Energy Density CNT/NaI Composite Cathodes for Sodium-Ion Batteries. <i>Advanced Materials Interfaces</i> , 2018 , 5, 1801342	4.6	4
276	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	4.9	3
275	Zn _{NixMnxCo_{2-2x}O₄} Spinel as a High-Voltage and High-Capacity Cathode Material for Nonaqueous Zn-Ion Batteries. <i>Advanced Energy Materials</i> , 2018 , 8, 1800589	21.8	72
274	Semiconductor Nanomembrane Materials for High-Performance Soft Electronic Devices. <i>Journal of the American Chemical Society</i> , 2018 , 140, 9001-9019	16.4	22
273	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	6.7	5
272	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	4	3

271	Porous Nanomaterials: Porous Nanomaterials for Ultrabroadband Omnidirectional Anti-Reflection Surfaces with Applications in High Concentration Photovoltaics (Adv. Energy Mater. 7/2017). <i>Advanced Energy Materials</i> , 2017 , 7,	21.8	2
270	Evolution at the Solid Electrolyte/Gold Electrode Interface during Lithium Deposition and Stripping. <i>Chemistry of Materials</i> , 2017 , 29, 3029-3037	9.6	83
269	Porous Nanomaterials for Ultrabroadband Omnidirectional Anti-Reflection Surfaces with Applications in High Concentration Photovoltaics. <i>Advanced Energy Materials</i> , 2017 , 7, 1601992	21.8	19
268	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	11.5	104
267	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	6.8	5
266	A programmable soft chemo-mechanical actuator exploiting a catalyzed photochemical water-oxidation reaction. <i>Soft Matter</i> , 2017 , 13, 7312-7317	3.6	12
265	ZnAl _x Co _{2-2x} 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	9.6	67
264	Micro-optical Tandem Luminescent Solar Concentrator 2017 ,		3
263	Quantum dot emission modulation using piezoelectric photonic crystal MEMS resonators. <i>Optics Express</i> , 2017 , 25, 25831-25841	3.3	1
262	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	3	3
261	High-concentration planar microtracking photovoltaic system exceeding 30% efficiency. <i>Nature Energy</i> , 2017 , 2,	62.3	31
260	Deterministic Integration of Biological and Soft Materials onto 3D Microscale Cellular Frameworks. <i>Advanced Biology</i> , 2017 , 1, 1700068	3.5	12
259	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	9.5	24
258	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	3.8	18
257	Anomalous Structural Disorder in Supported Pt Nanoparticles. <i>Journal of Physical Chemistry Letters</i> , 2017 , 8, 3284-3288	6.4	15
256	Programming Mechanical and Physicochemical Properties of 3D Hydrogel Cellular Microcultures via Direct Ink Writing. <i>Advanced Healthcare Materials</i> , 2016 , 5, 1025-39	10.1	29
255	3D Scaffolded Nickel-Tin Li-Ion Anodes with Enhanced Cyclability. <i>Advanced Materials</i> , 2016 , 28, 742-7	24	80
254	Biomimetic 4D printing. <i>Nature Materials</i> , 2016 , 15, 413-8	27	1682

253	Design, fabrication, and characterization of a proposed microchannel water electrolyzer. <i>Journal of Power Sources</i> , 2016 , 307, 122-128	8.9	10
252	Enhanced Photon Collection in Luminescent Solar Concentrators with Distributed Bragg Reflectors. <i>ACS Photonics</i> , 2016 , 3, 278-285	6.3	46
251	Comprehensive energy analysis of a photovoltaic thermal water electrolyzer. <i>Applied Energy</i> , 2016 , 164, 294-302	10.7	30
250	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	11.5	33
249	Dynamic Surface Stress Response during Reversible Mg Electrodeposition and Stripping. <i>Journal of the Electrochemical Society</i> , 2016 , 163, A2679-A2684	3.9	7
248	Cellular Microcultures: Programming Mechanical and Physicochemical Properties of 3D Hydrogel Cellular Microcultures via Direct Ink Writing (Adv. Healthcare Mater. 9/2016). <i>Advanced Healthcare Materials</i> , 2016 , 5, 990-990	10.1	4
247	Programming matter through strain. <i>Extreme Mechanics Letters</i> , 2015 , 3, 8-16	3.9	21
246	Intracluster Atomic and Electronic Structural Heterogeneities in Supported Nanoscale Metal Catalysts. <i>Journal of Physical Chemistry C</i> , 2015 , 119, 25615-25627	3.8	9
245	Improving Electrodeposition of Mg through an Open Circuit Potential Hold. <i>Journal of Physical Chemistry C</i> , 2015 , 119, 23366-23372	3.8	15
244	Oxygen reduction reaction induced pH-responsive chemo-mechanical hydrogel actuators. <i>Soft Matter</i> , 2015 , 11, 7953-9	3.6	23
243	Influence of Oxides on the Stress Evolution and Reversibility during SnOx Conversion and Li-Sn Alloying Reactions. <i>Advanced Energy Materials</i> , 2015 , 5, 1400317	21.8	21
242	Characterizing Working Catalysts with Correlated Electron and Photon Probes. <i>Microscopy and Microanalysis</i> , 2015 , 21, 563-564	0.5	2
241	Passivation Dynamics in the Anisotropic Deposition and Stripping of Bulk Magnesium Electrodes During Electrochemical Cycling. <i>ACS Applied Materials & Interfaces</i> , 2015 , 7, 18406-14	9.5	29
240	Operando Characterization of Catalysts through use of a Portable Microreactor. <i>ChemCatChem</i> , 2015 , 7, 3683-3691	5.2	19
239	Exploring Salt and Solvent Effects in Chloride-Based Electrolytes for Magnesium Electrodeposition and Dissolution. <i>Journal of Physical Chemistry C</i> , 2015 , 119, 13524-13534	3.8	58
238	Complex structural dynamics of nanocatalysts revealed in Operando conditions by correlated imaging and spectroscopy probes. <i>Nature Communications</i> , 2015 , 6, 7583	17.4	94
237	Quantum Dot Luminescent Concentrator Cavity Exhibiting 30-fold Concentration. <i>ACS Photonics</i> , 2015 , 2, 1576-1583	6.3	99
236	Materials science. Assembly of micro/nanomaterials into complex, three-dimensional architectures by compressive buckling. <i>Science</i> , 2015 , 347, 154-9	33.3	587

235	Comparative in Operando Studies in Heterogeneous Catalysis: Atomic and Electronic Structural Features in the Hydrogenation of Ethylene over Supported Pd and Pt Catalysts. <i>ACS Catalysis</i> , 2015 , 5, 1539-1551	13.1	38
234	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. <i>ACS Applied Materials & Interfaces</i> , 2015 , 7, 2494-502	9.5	41
233	Printing-based assembly of quadruple-junction four-terminal microscale solar cells and their use in high-efficiency modules. <i>Nature Materials</i> , 2014 , 13, 593-8	27	103
232	Luminescent solar concentration with semiconductor nanorods and transfer-printed micro-silicon solar cells. <i>ACS Nano</i> , 2014 , 8, 44-53	16.7	128
231	Batteries: Knowing when small is better. <i>Nature Nanotechnology</i> , 2014 , 9, 962-3	28.7	13
230	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, 8368-75	7.8	12
229	Black silicon solar thin-film microcells integrating top nanocone structures for broadband and omnidirectional light-trapping. <i>Nanotechnology</i> , 2014 , 25, 305301	3.4	14
228	Effects of adsorbate coverage and bond-length disorder on the d-band center of carbon-supported Pt catalysts. <i>ChemPhysChem</i> , 2014 , 15, 1569-72	3.2	16
227	Electrolytic Conditioning of a Magnesium Aluminum Chloride Complex for Reversible Magnesium Deposition. <i>Journal of Physical Chemistry C</i> , 2014 , 118, 27623-27630	3.8	139
226	Noncrystalline-to-crystalline transformations in Pt nanoparticles. <i>Journal of the American Chemical Society</i> , 2013 , 135, 13062-72	16.4	56
225	Model Ge microstructures as anodes for Li-ion batteries. <i>Journal of Solid State Electrochemistry</i> , 2013 , 17, 3015-3020	2.6	7
224	An in Situ 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	3.8	43
223	Light Trapping in Ultrathin Monocrystalline Silicon Solar Cells. <i>Advanced Energy Materials</i> , 2013 , 3, 1401-1406	14.6	48
222	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	35.4	30
221	Enhanced ultraviolet responses in thin-film InGaP solar cells by down-shifting. <i>Physical Chemistry Chemical Physics</i> , 2013 , 15, 20434-7	3.6	21
220	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, 1542-57	16.7	32
219	UV patternable thin film chemistry for shape and functionally versatile self-oscillating gels. <i>Soft Matter</i> , 2013 , 9, 1231-1243	3.6	43
218	Electronically Programmable, Reversible Shape Change in Two- and Three-Dimensional Hydrogel Structures (Adv. Mater. 11/2013). <i>Advanced Materials</i> , 2013 , 25, 1540-1540	24	

217	Electronically programmable, reversible shape change in two- and three-dimensional hydrogel structures. <i>Advanced Materials</i> , 2013 , 25, 1541-6	24	140
216	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	21.8	44
215	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, 13069-81	3.4	9
214	Mechanisms of enhanced optical absorption for ultrathin silicon solar microcells with an integrated nanostructured backside reflector. <i>ACS Applied Materials & Interfaces</i> , 2013 , 5, 4239-46	9.5	12
213	X-ray diffraction microscopy of lithiated silicon microstructures. <i>Applied Physics Letters</i> , 2013 , 102, 131903	3.4	6
212	A Finite-Deformation Mechanics Theory for Kinetically Controlled Transfer Printing. <i>Journal of Applied Mechanics, Transactions ASME</i> , 2013 , 80,	2.7	19
211	Light Trapping: Light Trapping in Ultrathin Monocrystalline Silicon Solar Cells (Adv. Energy Mater. 11/2013). <i>Advanced Energy Materials</i> , 2013 , 3, 1528-1528	21.8	3
210	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	3.9	1
209	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	16.4	68
208	Transfer printing techniques for materials assembly and micro/nanodevice fabrication. <i>Advanced Materials</i> , 2012 , 24, 5284-318	24	572
207	Influence of adsorbates on the electronic structure, bond strain, and thermal properties of an alumina-supported Pt catalyst. <i>ACS Nano</i> , 2012 , 6, 5583-95	16.7	49
206	Functional protein microarrays by electrohydrodynamic jet printing. <i>Analytical Chemistry</i> , 2012 , 84, 10012-8	12.8	53
205	Recent developments and applications of electron microscopy to heterogeneous catalysis. <i>Chemical Society Reviews</i> , 2012 , 41, 8179-94	58.5	84
204	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	15.6	41
203	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	2.4	29
202	Synthesis, assembly and applications of semiconductor nanomembranes. <i>Nature</i> , 2011 , 477, 45-53	50.4	526
201	Industrial Ziegler-type hydrogenation catalysts made from Co(neodecanoate) ₂ or Ni(2-ethylhexanoate) ₂ and AlEt ₃ : evidence for nanoclusters and sub-nanocluster or larger Ziegler-nanocluster based catalysis. <i>Langmuir</i> , 2011 , 27, 6279-94	4	22
200	The atomic structural dynamics of Al ₂ O ₃ supported Ir-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, 3582-91	16.4	40

199	Programmable chemical gradient patterns by soft grayscale lithography. <i>Small</i> , 2011 , 7, 3350-62	11	7
198	3D Microperiodic Hydrogel Scaffolds for Robust Neuronal Cultures. <i>Advanced Functional Materials</i> , 2011 , 21, 47-54	15.6	188
197	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	15.6	164
196	3D Microperiodic Hydrogel Scaffolds for Robust Neuronal Cultures. <i>Advanced Functional Materials</i> , 2011 , 21, 46-46	15.6	1
195	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. 13/2011). <i>Advanced Functional Materials</i> , 2011 , 21, 2411-2411	15.6	
194	Conformal printing of electrically small antennas on three-dimensional surfaces. <i>Advanced Materials</i> , 2011 , 23, 1335-40	24	402
193	Optimization of a permeation-based microfluidic direct formic acid fuel cell (DFAFC). <i>Electrophoresis</i> , 2011 , 32, 947-56	3.6	4
192	Genotyping by alkaline dehybridization using graphically encoded particles. <i>Chemistry - A European Journal</i> , 2011 , 17, 2867-73	4.8	5
191	Soft embossing of nanoscale optical and plasmonic structures in glass. <i>ACS Nano</i> , 2011 , 5, 5763-74	16.7	26
190	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, 10072-7	11.5	189
189	Waterproof AlInGaP optoelectronics on stretchable substrates with applications in biomedicine and robotics. <i>Nature Materials</i> , 2010 , 9, 929-37	27	474
188	Visualizing materials chemistry at atomic resolution. <i>Analytical Chemistry</i> , 2010 , 82, 2599-607	7.8	28
187	Bifunctional polyacrylamide based polymers for the specific binding of hexahistidine tagged proteins on gold surfaces. <i>Physical Chemistry Chemical Physics</i> , 2010 , 12, 4301-8	3.6	14
186	Guiding neuron development with planar surface gradients of substrate cues deposited using microfluidic devices. <i>Lab on A Chip</i> , 2010 , 10, 1525-35	7.2	130
185	Iridium Ziegler-type hydrogenation catalysts made from [(1,5-COD)Ir(μ -O ₂ C ₈ H ₁₅)] ₂ and AlEt ₃ : spectroscopic and kinetic evidence for the Ir(n) species present and for nanoparticles as the fastest catalyst. <i>Inorganic Chemistry</i> , 2010 , 49, 8131-47	5.1	24
184	Compact monocrystalline silicon solar modules with high voltage outputs and mechanically flexible designs. <i>Energy and Environmental Science</i> , 2010 , 3, 208	35.4	56
183	Microfluidic contact printing: a versatile printing platform for patterning biomolecules on hydrogel substrates. <i>Soft Matter</i> , 2010 , 6, 2238	3.6	18
182	Ultrathin silicon solar microcells for semitransparent, mechanically flexible and microconcentrator module designs 2010 , 38-46		0

181	Functional nanostructured plasmonic materials. <i>Advanced Materials</i> , 2010 , 22, 1102-10	24	104
180	Capillary induced self-assembly of thin foils into 3D structures. <i>Journal of the Mechanics and Physics of Solids</i> , 2010 , 58, 2033-2042	5	28
179	Structural characterization of bimetallic nanomaterials with overlapping x-ray absorption edges. <i>Physical Review B</i> , 2009 , 80,	3.3	21
178	Molded plasmonic crystals for detecting and spatially imaging surface bound species by surface-enhanced Raman scattering. <i>Applied Physics Letters</i> , 2009 , 94, 243109	3.4	35
177	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, 20149-54	11.5	170
176	Nanopost plasmonic crystals. <i>Nanotechnology</i> , 2009 , 20, 434011	3.4	27
175	Fabrication of Flexible Binary Amplitude Masks for Patterning on Highly Curved Surfaces. <i>Advanced Functional Materials</i> , 2009 , 19, 3243-3253	15.6	22
174	Direct-Write Assembly of 3D Hydrogel Scaffolds for Guided Cell Growth. <i>Advanced Materials</i> , 2009 , 21, 2407-2410	24	237
173	Visualizing the effect of microenvironment on the spatiotemporal RhoA and Src activities in living cells by FRET. <i>Small</i> , 2009 , 5, 1453-9	11	5
172	Structural characterization of Pt-Pd and Pd-Pt core-shell nanoclusters at atomic resolution. <i>Journal of the American Chemical Society</i> , 2009 , 131, 8683-9	16.4	98
171	Multispectral thin film biosensing and quantitative imaging using 3D plasmonic crystals. <i>Analytical Chemistry</i> , 2009 , 81, 5980-9	7.8	35
170	Optimization of 3D Plasmonic Crystal Structures for Refractive Index Sensing. <i>Journal of Physical Chemistry C</i> , 2009 , 113, 10493-10499	3.8	34
169	Omnidirectional printing of flexible, stretchable, and spanning silver microelectrodes. <i>Science</i> , 2009 , 323, 1590-3	33.3	961
168	Textural guidance cues for controlling process outgrowth of mammalian neurons. <i>Lab on A Chip</i> , 2009 , 9, 122-31	7.2	66
167	The emergence of nonbulk properties in supported metal clusters: negative thermal expansion and atomic disorder in Pt nanoclusters supported on gamma-Al ₂ O ₃ . <i>Journal of the American Chemical Society</i> , 2009 , 131, 7040-54	16.4	129
166	Coordination-dependent surface atomic contraction in nanocrystals revealed by coherent diffraction. <i>Nature Materials</i> , 2008 , 7, 308-13	27	296
165	Nanostructured plasmonic sensors. <i>Chemical Reviews</i> , 2008 , 108, 494-521	68.1	1995
164	Dynamic structure in supported Pt nanoclusters: Real-time density functional theory and x-ray spectroscopy simulations. <i>Physical Review B</i> , 2008 , 78,	3.3	73

163	Complementary Logic Gates and Ring Oscillators on Plastic Substrates by Use of Printed Ribbons of Single-Crystalline Silicon. <i>IEEE Electron Device Letters</i> , 2008 , 29, 73-76	4.4	71
162	Seeing molecules by eye: surface plasmon resonance imaging at visible wavelengths with high spatial resolution and submonolayer sensitivity. <i>Angewandte Chemie - International Edition</i> , 2008 , 47, 5013-7	16.4	61
161	Mass spectrometric imaging of peptide release from neuronal cells within microfluidic devices. <i>Lab on A Chip</i> , 2007 , 7, 1454-60	7.2	54
160	Microfluidic device for the discrimination of single-nucleotide polymorphisms in DNA oligomers using electrochemically actuated alkaline dehybridization. <i>Analytical Chemistry</i> , 2007 , 79, 9014-21	7.8	9
159	Tangential ligand-induced strain in icosahedral Au ₁₃ . <i>Journal of the American Chemical Society</i> , 2007 , 129, 10978-9	16.4	28
158	Variably elastic hydrogel patterned via capillary action in microchannels. <i>Langmuir</i> , 2007 , 23, 1483-8	4	13
157	Optical transduction of chemical forces. <i>Nano Letters</i> , 2007 , 7, 733-7	11.5	44
156	Microfluidic devices for culturing primary mammalian neurons at low densities. <i>Lab on A Chip</i> , 2007 , 7, 987-94	7.2	153
155	Adsorption of linear alkanes on Cu(111): temperature and chain-length dependence of the softened vibrational mode. <i>Journal of Chemical Physics</i> , 2007 , 126, 194707	3.9	12
154	Spatially resolved biosensing with a molded plasmonic crystal. <i>Applied Physics Letters</i> , 2007 , 90, 203113	3.4	23
153	Bendable integrated circuits on plastic substrates by use of printed ribbons of single-crystalline silicon. <i>Applied Physics Letters</i> , 2007 , 90, 213501	3.4	66
152	Quantitative STEM and HRTEM Studies on Au Metallic Nano-Catalysts. <i>Materials Research Society Symposia Proceedings</i> , 2007 , 1026, 1		
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6	Water-soluble complexes of tertiary phosphines and rhodium(I) as homogeneous catalysts. <i>Journal of the American Chemical Society</i> , 1979 , 101, 3683-3685	16.4	46
5	Bis(2-diphenylphosphinoethyl)amine. A flexible synthesis of functionalized chelating diphosphines. <i>Journal of the American Chemical Society</i> , 1978 , 100, 2269-2270	16.4	54
4	Selective reduction of sulfoxides. <i>Journal of Organic Chemistry</i> , 1977 , 42, 568-569	4.2	18
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