Paul S Weiss

List of Publications by Year in Descending Order

284 papers	20,976 citations	71 h-index	135 g-index
514 ext. papers	23,794 ext. citations	12.3 avg, IF	6.84 L-index

#	Paper	IF	Citations
284	Wearable aptamer-field-effect transistor sensing system for noninvasive cortisol monitoring.. *Science Advances*, **2022**, 8, eabk0967	14.3	18
283	Extraction of Hidden Science from Nanoscale Images. *Journal of Physical Chemistry C*, **2022**, 126, 3-13	3.8	
282	Template-Enabled Biofabrication of Thick Three-Dimensional Tissues with Patterned Perfusable Macro-Channels.. *Advanced Healthcare Materials*, **2021**, e2102123	10.1	2
281	Implantable aptamer-field-effect transistor neuroprobes for in vivo neurotransmitter monitoring. *Science Advances*, **2021**, 7, eabj7422	14.3	9
280	Nanoengineered Antiviral Fibrous Arrays with Rose-Thorn-Inspired Architectures **2021**, 3, 1566-1571		2
279	X-ray-Based Techniques to Study the Nano-Bio Interface. *ACS Nano*, **2021**, 15, 3754-3807	16.7	18
278	Continuous chaotic bioprinting of skeletal muscle-like constructs. *Bioprinting*, **2021**, 21, e00125	7	16
277	Additively Manufactured Gradient Porous Ti-6Al-4V Hip Replacement Implants Embedded with Cell-Laden Gelatin Methacryloyl Hydrogels. *ACS Applied Materials & Interfaces*, **2021**, 13, 22110-22123	9.5	26
276	Single-Step Dual-Layer Photolithography for Tunable and Scalable Nanopatterning. *ACS Nano*, **2021** ,	16.7	11
275	Narrower Nanoribbon Biosensors Fabricated by Chemical Lift-off Lithography Show Higher Sensitivity. *ACS Nano*, **2021**, 15, 904-915	16.7	19
274	Seeded-Growth Experiment Demonstrating Size- and Shape-Dependence on Gold Nanoparticle-Light Interactions. *Journal of Chemical Education*, **2021**, 98, 546-552	2.4	5
273	Large-Scale Soft-Lithographic Patterning of Plasmonic Nanoparticles **2021**, 3, 282-289		2
272	Touting the Growing Contributions of Nanoscience and Nanotechnology. *ACS Nano*, **2021**, 15, 10737-10738	16.7	0
271	Whitlockite-Enabled Hydrogel for Craniofacial Bone Regeneration. *ACS Applied Materials & Interfaces*, **2021**, 13, 35342-35355	9.5	5
270	Stretchable and Bioadhesive Gelatin Methacryloyl-Based Hydrogels Enabled by Dopamine Polymerization. *ACS Applied Materials & Interfaces*, **2021**, 13, 40290-40301	9.5	12
269	From mouse to mouse-ear cress: Nanomaterials as vehicles in plant biotechnology. *Exploration*, **2021**, 1, 9-20		13
268	Fabrication of Multilayered Composite Nanofibers Using Continuous Chaotic Printing and Electrospinning: Chaotic Electrospinning. *ACS Applied Materials & Interfaces*, **2021**, 13, 37455-37465	9.5	2

267	Silver nanoparticles boost charge-extraction efficiency in microbial fuel cells. *Science*, **2021**, 373, 1336-1340	33.3	38
266	Towards High-Performance Semitransparent Organic Photovoltaics: Dual-Functional -Type Soft Interlayer.. *ACS Nano*, **2021**,	16.7	1
265	Flexible Multiplexed InO Nanoribbon Aptamer-Field-Effect Transistors for Biosensing. *IScience*, **2020**, 23, 101469	6.1	19
264	The Design and Science of Polyelemental Nanoparticles. *ACS Nano*, **2020**, 14, 6407-6413	16.7	29
263	Challenges and Opportunities in Designing Perovskite Nanocrystal Heterostructures. *ACS Energy Letters*, **2020**, 5, 2253-2255	20.1	24
262	Confronting Racism in Chemistry Journals. *Organometallics*, **2020**, 39, 2331-2333	3.8	
261	Influence of Terminal Carboxyl Groups on the Structure and Reactivity of Functionalized m-Carboranethiolate Self-Assembled Monolayers. *Chemistry of Materials*, **2020**, 32, 6800-6809	9.6	3
260	Scalable Fabrication of Quasi-One-Dimensional Gold Nanoribbons for Plasmonic Sensing. *Nano Letters*, **2020**, 20, 1747-1754	11.5	10
259	Lipid Bicelle Micropatterning Using Chemical Lift-Off Lithography. *ACS Applied Materials & Interfaces*, **2020**, 12, 13447-13455	9.5	9
258	Pillar[5]arene-based tunable luminescent materials via supramolecular assembly-induced Förster resonance energy transfer enhancement. *Materials Chemistry Frontiers*, **2020**, 4, 950-956	7.8	28
257	Differential Charging in Photoemission from Mercurated DNA Monolayers on Ferromagnetic Films. *Nano Letters*, **2020**, 20, 1218-1225	11.5	6
256	Acoustofluidic sonoporation for gene delivery to human hematopoietic stem and progenitor cells. *Proceedings of the National Academy of Sciences of the United States of America*, **2020**, 117, 10976-10982	11.5	35
255	Update to Our Reader, Reviewer, and Author Communities: April 2020. *Organometallics*, **2020**, 39, 1665-1666	3.8	
254	Electrode Degradation in Lithium-Ion Batteries. *ACS Nano*, **2020**, 14, 1243-1295	16.7	209
253	Chemical Lift-Off Lithography of Metal and Semiconductor Surfaces **2020**, 2, 76-83		10
252	Photothermal Intracellular Delivery Using Gold Nanodisk Arrays **2020**, 2, 1475-1483		6
251	Selective Promotion of Adhesion of on Mannose-Decorated Glycopolymer Surfaces. *ACS Applied Materials & Interfaces*, **2020**, 12, 35767-35781	9.5	6
250	Detecting DNA and RNA and Differentiating Single-Nucleotide Variations via Field-Effect Transistors. *Nano Letters*, **2020**, 20, 5982-5990	11.5	24

249	Cholesteryl Ester Liquid Crystal Nanofibers for Tissue Engineering Applications **2020**, 2, 1067-1073		16
248	Shape Control of Thermoplasmonic Gold Nanostars on Oxide Substrates for Hyperthermia-Mediated Cell Detachment. *ACS Central Science*, **2020**, 6, 2105-2116	16.8	7
247	Supramolecular nanosubstrate-mediated delivery system enables CRISPR-Cas9 knockin of hemoglobin beta gene for hemoglobinopathies. *Science Advances*, **2020**, 6,	14.3	14
246	Lipid-Bicelle-Coated Microfluidics for Intracellular Delivery with Reduced Fouling. *ACS Applied Materials & Interfaces*, **2020**, 12, 45744-45752	9.5	6
245	Cloaking Silica Nanoparticles with Functional Protein Coatings for Reduced Complement Activation and Cellular Uptake. *ACS Nano*, **2020**, 14, 11950-11961	16.7	13
244	Coupling Nanostructured Microchips with Covalent Chemistry Enables Purification of Sarcoma-Derived Extracellular Vesicles for Downstream Functional Studies. *Advanced Functional Materials*, **2020**, 30, 2003237	15.6	7
243	Dual Supramolecular Nanoparticle Vectors Enable CRISPR/Cas9-Mediated Knockin of Retinoschisin 1 Gene-A Potential Nonviral Therapeutic Solution for X-Linked Juvenile Retinoschisis. *Advanced Science*, **2020**, 7, 1903432	13.6	17
242	Intracellular Photothermal Delivery for Suspension Cells Using Sharp Nanoscale Tips in Microwells. *ACS Nano*, **2019**, 13, 10835-10844	16.7	22
241	A Discussion Forum for Science, Publishing, and Policy. *ACS Nano*, **2019**, 13, 9695	16.7	0
240	Nanotechnology Facets of the Periodic Table of Elements. *ACS Nano*, **2019**, 13, 10879-10886	16.7	15
239	The Future of Layer-by-Layer Assembly: A Tribute to ACS Nano Associate Editor Helmuth Möhwald. *ACS Nano*, **2019**, 13, 6151-6169	16.7	127
238	Nanoscience and Nanotechnology at UCLA. *ACS Nano*, **2019**, 13, 6127-6129	16.7	1
237	Emergence of Liquid Metals in Nanotechnology. *ACS Nano*, **2019**, 13, 7388-7395	16.7	169
236	Spin Selectivity in Photoinduced Charge-Transfer Mediated by Chiral Molecules. *ACS Nano*, **2019**, 13, 4928-4946	16.7	40
235	Photoinduced Charge Transfer in Single-Molecule p-n Junctions. *Journal of Physical Chemistry Letters*, **2019**, 10, 2175-2181	6.4	8
234	Bio-Inspired NanoVilli Chips for Enhanced Capture of Tumor-Derived Extracellular Vesicles: Toward Non-Invasive Detection of Gene Alterations in Non-Small Cell Lung Cancer. *ACS Applied Materials & Interfaces*, **2019**, 11, 13973-13983	9.5	36
233	Hierarchically Patterned Polydopamine-Containing Membranes for Periodontal Tissue Engineering. *ACS Nano*, **2019**, 13, 3830-3838	16.7	52
232	Steering Two-Dimensional Porous Networks with Hole Interactions of Br⋯S and Br⋯Br. *Chemistry of Materials*, **2019**, 31, 3041-3048	9.6	17

231	Announcing the 2019 ACS Nano Award Lectures. *ACS Nano*, **2019**, 13, 933-934	16.7	1
230	Micropatterned Viral Membrane Clusters for Antiviral Drug Evaluation. *ACS Applied Materials & Interfaces*, **2019**, 11, 13984-13990	9.5	4
229	Spin-Dependent Ionization of Chiral Molecular Films. *Journal of the American Chemical Society*, **2019** , 141, 3863-3874	16.4	32
228	Covalent chemistry on nanostructured substrates enables noninvasive quantification of gene rearrangements in circulating tumor cells. *Science Advances*, **2019**, 5, eaav9186	14.3	25
227	On the issue of transparency and reproducibility in nanomedicine. *Nature Nanotechnology*, **2019**, 14, 629-635	28.7	92
226	Conformal Ultrathin Film Metal-Organic Framework Analogues: Characterization of Growth, Porosity, and Electronic Transport. *Chemistry of Materials*, **2019**, 31, 8977-8986	9.6	5
225	Formation of Highly Ordered Terminal Alkyne Self-Assembled Monolayers on the Au{111} Surface through Substitution of 1-Decaboranethiolate. *Journal of Physical Chemistry C*, **2019**, 123, 1348-1353	3.8	3
224	Phenylalanine Monitoring via Aptamer-Field-Effect Transistor Sensors. *ACS Sensors*, **2019**, 4, 3308-3317	9.2	24
223	Photoinduced Carrier Generation and Distribution in Solution-Deposited Titanyl Phthalocyanine Monolayers. *Chemistry of Materials*, **2019**, 31, 10109-10116	9.6	7
222	An absence of lamin B1 in migrating neurons causes nuclear membrane ruptures and cell death. *Proceedings of the National Academy of Sciences of the United States of America*, **2019**, 116, 25870-25879	11.5	30
221	Principles of Inter-Amino-Acid Recognition Revealed by Binding Energies between Homogeneous Oligopeptides. *ACS Central Science*, **2019**, 5, 97-108	16.8	16
220	International Chemistry, Nanoscience, and Engagement. *ACS Nano*, **2018**, 12, 903	16.7	
219	Mechanobiological Mimicry of Helper T Lymphocytes to Evaluate Cell-Biomaterials Crosstalk. *Advanced Materials*, **2018**, 30, e1706780	24	16
218	Polyserotonin Nanoparticles as Multifunctional Materials for Biomedical Applications. *ACS Nano*, **2018**, 12, 4761-4774	16.7	33
217	Acid-Base Control of Valency within Carboranedithiol Self-Assembled Monolayers: Molecules Do the Can-Can. *ACS Nano*, **2018**, 12, 2211-2221	16.7	15
216	Announcing the 2018 ACS Nano Lectureship Awards. *ACS Nano*, **2018**, 12, 1-2	16.7	5
215	Nanoscience and Nanotechnology Research at Peking University. *ACS Nano*, **2018**, 12, 4075-4076	16.7	1
214	Precision-Guided Nanospears for Targeted and High-Throughput Intracellular Gene Delivery. *ACS Nano*, **2018**, 12, 4503-4511	16.7	76

213	Supramolecular Assemblies on Surfaces: Nanopatterning, Functionality, and Reactivity. *ACS Nano*, **2018**, 12, 7445-7481	16.7	146
212	Large-Area, Ultrathin Metal-Oxide Semiconductor Nanoribbon Arrays Fabricated by Chemical Lift-Off Lithography. *Nano Letters*, **2018**, 18, 5590-5595	11.5	15
211	Envisioning Scientific Innovation in Korea's Demilitarized Zone: A Step toward Economic Progress and Global Peace. *ACS Nano*, **2018**, 12, 5073-5077	16.7	0
210	Precision Medicine in Pediatric Neurooncology: A Review. *ACS Chemical Neuroscience*, **2018**, 9, 11-28	5.7	7
209	Aptamer-field-effect transistors overcome Debye length limitations for small-molecule sensing. *Science*, **2018**, 362, 319-324	33.3	287
208	Small-Molecule Patterning via Prefunctionalized Alkanethiols. *Chemistry of Materials*, **2018**, 30, 4017-4030	9.6	12
207	Aptamer Recognition of Multiplexed Small-Molecule-Functionalized Substrates. *ACS Applied Materials & Interfaces*, **2018**, 10, 23490-23500	9.5	19
206	Cross-Linked Fluorescent Supramolecular Nanoparticles for Intradermal Controlled Release of Antifungal Drug-A Therapeutic Approach for Onychomycosis. *ACS Nano*, **2018**, 12, 6851-6859	16.7	11
205	Two-Dimensional Compact Variational Mode Decomposition. *Journal of Mathematical Imaging and Vision*, **2017**, 58, 294-320	1.6	24
204	Nanoscience and Nanotechnology Cross Borders. *ACS Nano*, **2017**, 11, 1123-1126	16.7	3
203	Interplay between materials and microfluidics. *Nature Reviews Materials*, **2017**, 2,	73.3	179
202	Polymer-Pen Chemical Lift-Off Lithography. *Nano Letters*, **2017**, 17, 3302-3311	11.5	30
201	Accelerating Advances in Science, Engineering, and Medicine through Nanoscience and Nanotechnology. *ACS Nano*, **2017**, 11, 3423-3424	16.7	6
200	Emerging Trends in Micro- and Nanoscale Technologies in Medicine: From Basic Discoveries to Translation. *ACS Nano*, **2017**, 11, 5195-5214	16.7	78
199	Diverse Applications of Nanomedicine. *ACS Nano*, **2017**, 11, 2313-2381	16.7	714
198	Prof. Millie Dresselhaus (1930-2017), Carbon Nanomaterials Pioneer. *ACS Nano*, **2017**, 11, 2307-2308	16.7	1
197	NaTiO Nanoplatelets and Nanosheets Derived from a Modified Exfoliation Process for Use as a High-Capacity Sodium-Ion Negative Electrode. *ACS Applied Materials & Interfaces*, **2017**, 9, 1416-1423	9.5	54
196	Connecting Together Nanocenters around the World. *ACS Nano*, **2017**, 11, 8531-8532	16.7	3

195	Multiple-Patterning Nanosphere Lithography for Fabricating Periodic Three-Dimensional Hierarchical Nanostructures. *ACS Nano*, **2017**, 11, 10384-10391	16.7	63
194	Patterning of supported gold monolayers via chemical lift-off lithography. *Beilstein Journal of Nanotechnology*, **2017**, 8, 2648-2661	3	15
193	Image segmentation with dynamic artifacts detection and bias correction. *Inverse Problems and Imaging*, **2017**, 11, 577-600	2.1	16
192	Porous Multishelled Ni2P Hollow Microspheres as an Active Electrocatalyst for Hydrogen and Oxygen Evolution. *Chemistry of Materials*, **2017**, 29, 8539-8547	9.6	195
191	Work Function Control of Germanium through Carborane-Carboxylic Acid Surface Passivation. *ACS Applied Materials & Interfaces*, **2017**, 9, 34592-34596	9.5	28
190	Advancing Biocapture Substrates via Chemical Lift-Off Lithography. *Chemistry of Materials*, **2017**, 29, 6829-6839	9.6	19
189	Self-Collapse Lithography. *Nano Letters*, **2017**, 17, 5035-5042	11.5	16
188	Lithium-Ion Insertion Properties of Solution-Exfoliated Germanane. *ACS Nano*, **2017**, 11, 7995-8001	16.7	48
187	Understanding How Sterols Regulate Membrane Remodeling in Supported Lipid Bilayers. *Langmuir*, **2017**, 33, 14756-14765	4	19
186	Effects of Embedded Dipole Layers on Electrostatic Properties of Alkanethiolate Self-Assembled Monolayers. *Journal of Physical Chemistry C*, **2017**, 121, 15815-15830	3.8	35
185	Analyzing Spin Selectivity in DNA-Mediated Charge Transfer via Fluorescence Microscopy. *ACS Nano* , **2017**, 11, 7516-7526	16.7	57
184	Evolution of Cell Size Homeostasis and Growth Rate Diversity during Initial Surface Colonization of Shewanella oneidensis. *ACS Nano*, **2016**, 10, 9183-9192	16.7	13
183	Patients, Here Comes More Nanotechnology. *ACS Nano*, **2016**, 10, 8139-42	16.7	37
182	ChemRXiv: A Chemistry Preprint Server. *ACS Chemical Biology*, **2016**, 11, 2937	4.9	
181	Copper Ion Binding Site in ╫Amyloid Peptide. *Nano Letters*, **2016**, 16, 6282-6289	11.5	32
180	Nanoelectronic Investigation Reveals the Electrochemical Basis of Electrical Conductivity in Shewanella and Geobacter. *ACS Nano*, **2016**, 10, 9919-9926	16.7	34
179	Hexagons to Ribbons: Flipping Cyanide on Au{111}. *Journal of the American Chemical Society*, **2016**, 138, 15580-15586	16.4	7
178	Surface Structure and Electron Transfer Dynamics of the Self-Assembly of Cyanide on Au{111}. *Journal of Physical Chemistry C*, **2016**, 120, 26736-26746	3.8	15

177	Stealth Immune Properties of Graphene Oxide Enabled by Surface-Bound Complement Factor H. *ACS Nano*, **2016**, 10, 10161-10172	16.7	35
176	Nanotechnology Education for the Global World: Training the Leaders of Tomorrow. *ACS Nano*, **2016**, 10, 5595-9	16.7	23
175	Tools for the Microbiome: Nano and Beyond. *ACS Nano*, **2016**, 10, 6-37	16.7	99
174	Mapping Buried Hydrogen-Bonding Networks. *ACS Nano*, **2016**, 10, 5446-51	16.7	19
173	Surface Dipole Control of Liquid Crystal Alignment. *Journal of the American Chemical Society*, **2016**, 138, 5957-67	16.4	71
172	Nano on reflection. *Nature Nanotechnology*, **2016**, 11, 828-834	28.7	25
171	Nano Day: Celebrating the Next Decade of Nanoscience and Nanotechnology. *ACS Nano*, **2016**, 10, 9093-9103	16.7	56
170	Self-Assembled p-Carborane Analogue of p-Mercaptobenzoic Acid on Au{111}. *Chemistry of Materials*, **2015**, 27, 5425-5435	9.6	17
169	Controlling Motion at the Nanoscale: Rise of the Molecular Machines. *ACS Nano*, **2015**, 9, 7746-68	16.7	339
168	Reply to "Comment on "Bottom-up graphene-nanoribbon fabrication reveals chiral edges and enantioselectivity". *ACS Nano*, **2015**, 9, 3404-5	16.7	17
167	Defect-Tolerant Aligned Dipoles within Two-Dimensional Plastic Lattices. *ACS Nano*, **2015**, 9, 4734-42	16.7	26
166	A conversation with Prof. Zhong Lin Wang, energy harvester. *ACS Nano*, **2015**, 9, 2221-6	16.7	6
165	Fabrication of High-Performance Ultrathin In2O3 Film Field-Effect Transistors and Biosensors Using Chemical Lift-Off Lithography. *ACS Nano*, **2015**, 9, 4572-82	16.7	117
164	Holey Graphene as a Weed Barrier for Molecules. *ACS Nano*, **2015**, 9, 10909-15	16.7	28
163	Printable Ultrathin Metal Oxide Semiconductor-Based Conformal Biosensors. *ACS Nano*, **2015**, 9, 12174-81	16.7	105
162	Controlled DNA Patterning by Chemical Lift-Off Lithography: Matrix Matters. *ACS Nano*, **2015**, 9, 11439-54	16.7	36
161	Self-Assembly Strategy for Fabricating Connected Graphene Nanoribbons. *ACS Nano*, **2015**, 9, 12035-44	16.7	68
160	Exchange reactions between alkanethiolates and alkaneselenols on Au{111}. *Journal of the American Chemical Society*, **2014**, 136, 8110-21	16.4	35

159	Mastering the Art of Scientific Publication. *Journal of Physical Chemistry Letters*, **2014**, 5, 3519-21	6.4	4
158	Bottom-up graphene-nanoribbon fabrication reveals chiral edges and enantioselectivity. *ACS Nano*, **2014**, 8, 9181-7	16.7	169
157	Interface control in organic electronics using mixed monolayers of carboranethiol isomers. *Nano Letters*, **2014**, 14, 2946-51	11.5	75
156	Molecular flux dependence of chemical patterning by microcontact printing. *ACS Applied Materials & Interfaces*, **2013**, 5, 10310-6	9.5	8
155	Differentiating amino acid residues and side chain orientations in peptides using scanning tunneling microscopy. *Journal of the American Chemical Society*, **2013**, 135, 18528-35	16.4	33
154	Molecular switches and motors on surfaces. *Annual Review of Physical Chemistry*, **2013**, 64, 605-30	15.7	107
153	From the bottom up: dimensional control and characterization in molecular monolayers. *Chemical Society Reviews*, **2013**, 42, 2725-45	58.5	136
152	Nanotools for neuroscience and brain activity mapping. *ACS Nano*, **2013**, 7, 1850-66	16.7	248
151	Neuroscience. The brain activity map. *Science*, **2013**, 339, 1284-5	33.3	147
150	Viologen-mediated assembly of and sensing with carboxylatopillar[5]arene-modified gold nanoparticles. *Journal of the American Chemical Society*, **2013**, 135, 1570-6	16.4	402
149	Controlling the band gap energy of cluster-assembled materials. *Accounts of Chemical Research*, **2013**, 46, 2385-95	24.3	73
148	Small-Molecule Arrays for Sorting G-Protein-Coupled Receptors. *Journal of Physical Chemistry C*, **2013**, 117, 22362-22368	3.8	11
147	Photoreaction of matrix-isolated dihydroazulene-functionalized molecules on Au{111}. *Nano Letters*, **2013**, 13, 337-43	11.5	19
146	Photoresponsive molecules in well-defined nanoscale environments. *Advanced Materials*, **2013**, 25, 302-12	14	53
145	Electronic substrate-mediated interactions. *Surface Science Reports*, **2012**, 67, 19-81	12.9	65
144	Comparison of attitudes about polio, polio immunization, and barriers to polio eradication between primary health center physicians and private pediatricians in India. *International Journal of Infectious Diseases*, **2012**, 16, e417-23	10.5	3
143	On the stability of an unsupported mercury-mercury bond linking group 15 Zintl clusters. *Dalton Transactions*, **2012**, 41, 5454-7	4.3	13
142	Synthesis, structure and band gap energy of covalently linked cluster-assembled materials. *Dalton Transactions*, **2012**, 41, 12365-77	4.3	24

141	Effect of Tether Conductivity on the Efficiency of Photoisomerization of Azobenzene-Functionalized Molecules on Au{111}. *Journal of Physical Chemistry Letters*, **2012**, 3, 2388-94	6.4	22
140	Palladium in the Gap: Cluster Assemblies with Band Edges Localized on Linkers. *Journal of Physical Chemistry C*, **2012**, 116, 10207-10214	3.8	8
139	Subtractive patterning via chemical lift-off lithography. *Science*, **2012**, 337, 1517-21	33.3	115
138	Imaging physical phenomena with local probes: From electrons to photons. *Reviews of Modern Physics*, **2012**, 84, 1343-1381	40.5	70
137	The state of nanoparticle-based nanoscience and biotechnology: progress, promises, and challenges. *ACS Nano*, **2012**, 6, 8468-83	16.7	188
136	Surface-enhanced Raman spectroscopy to probe photoreaction pathways and kinetics of isolated reactants on surfaces: flat versus curved substrates. *Nano Letters*, **2012**, 12, 5362-8	11.5	38
135	Chemistry and physics of a single atomic layer: strategies and challenges for functionalization of graphene and graphene-based materials. *Chemical Society Reviews*, **2012**, 41, 97-114	58.5	432
134	Visibly transparent polymer solar cells produced by solution processing. *ACS Nano*, **2012**, 6, 7185-90	16.7	434
133	Molecular plasmonics for biology and nanomedicine. *Nanomedicine*, **2012**, 7, 751-70	5.6	96
132	Surface defects on plate-shaped silver nanoparticles contribute to its hazard potential in a fish gill cell line and zebrafish embryos. *ACS Nano*, **2012**, 6, 3745-59	16.7	279
131	Virtual issue on plasmonics. *ACS Nano*, **2011**, 5, 4245-8	16.7	13
130	Directing substrate morphology via self-assembly: ligand-mediated scission of gallium-indium microspheres to the nanoscale. *Nano Letters*, **2011**, 11, 5104-10	11.5	188
129	Electrons, photons, and force: quantitative single-molecule measurements from physics to biology. *ACS Nano*, **2011**, 5, 693-729	16.7	79
128	Comparison of Oligo(ethylene glycol)alkanethiols versus n-Alkanethiols: Self-Assembly, Insertion, and Functionalization. *Journal of Physical Chemistry C*, **2011**, 115, 24778-24787	3.8	15
127	Dynamic double lattice of 1-adamantaneselenolate self-assembled monolayers on Au{111}. *Journal of the American Chemical Society*, **2011**, 133, 19422-31	16.4	25
126	Fused silver nanowires with metal oxide nanoparticles and organic polymers for highly transparent conductors. *ACS Nano*, **2011**, 5, 9877-82	16.7	326
125	Surface-enhanced Raman spectroscopy to probe reversibly photoswitchable azobenzene in controlled nanoscale environments. *Nano Letters*, **2011**, 11, 3447-52	11.5	89
124	Incident-angle-modulated molecular plasmonic switches: a case of weak exciton-plasmon coupling. *Nano Letters*, **2011**, 11, 2061-5	11.5	96

123	Tuning stamp surface energy for soft lithography of polar molecules to fabricate bioactive small-molecule microarrays. *Small*, **2011**, 7, 1471-9	11	23
122	The Zintl ion [As7]2-: an example of an electron-deficient As(x) radical anion. *Chemical Communications*, **2011**, 47, 3126-8	5.8	17
121	Patterning small-molecule biocapture surfaces: microcontact insertion printing vs. photolithography. *Chemical Communications*, **2011**, 47, 10641-3	5.8	22
120	Simple, robust molecular self-assembly on germanium. *Chemical Science*, **2011**, 2, 1334	9.4	19
119	Soft-Landing Deposition of Al17□on a Hydroxyl-Terminated Self-Assembled Monolayer. *Journal of Physical Chemistry C*, **2011**, 115, 5373-5377	3.8	16
118	A conversation with Alan Alda: communicating science. Interview by Paul S Weiss. *ACS Nano*, **2011**, 5, 6092-5	16.7	2
117	Thin gold film-assisted fluorescence spectroscopy for biomolecule sensing. *Analytical Chemistry*, **2011**, 83, 7451-6	7.8	14
116	Continued Growth, Stronger Interactions. *ACS Nano*, **2011**, 5, 2415-2416	16.7	0
115	[As7M(CO)3]3□M = Cr, Mo, W: Bonding and Electronic Structure of Cluster Assemblies with Metal Carbonyls. *Journal of Physical Chemistry C*, **2011**, 115, 23704-23710	3.8	5
114	Applications: High-Performance Materials and Emerging Areas **2011**, 467-499		
113	Creating favorable geometries for directing organic photoreactions in alkanethiolate monolayers. *Science*, **2011**, 331, 1312-5	33.3	79
112	Enabling and Investigative Tools: Measuring Methods, Instruments, and Metrology **2011**, 71-107		1
111	Changing stations in single bistable rotaxane molecules under electrochemical control. *ACS Nano*, **2010**, 4, 3697-701	16.7	70
110	Hybrid strategies in nanolithography. *Reports on Progress in Physics*, **2010**, 73, 036501	14.4	144
109	Structural Manipulation of Hydrogen-Bonding Networks in Amide-Containing Alkanethiolate Monolayers via Electrochemical Processing. *Journal of Physical Chemistry C*, **2010**, 114, 19744-19751	3.8	22
108	Adsorbate-Promoted Tunneling-Electron-Induced Local Faceting of D/Pd{110}-(1□2). *Journal of Physical Chemistry Letters*, **2010**, 1, 2288-2294	6.4	3
107	Cluster-assembled materials: toward nanomaterials with precise control over properties. *ACS Nano*, **2010**, 4, 235-40	16.7	117
106	Manipulating double-decker molecules at the liquid-solid interface. *Journal of the American Chemical Society*, **2010**, 132, 16460-6	16.4	36

105	Native serotonin membrane receptors recognize 5-hydroxytryptophan-functionalized substrates: enabling small-molecule recognition. *ACS Chemical Neuroscience*, **2010**, 1, 495-504	5.7	34
104	Polarizabilities of adsorbed and assembled molecules: measuring the conductance through buried contacts. *ACS Nano*, **2010**, 4, 7630-6	16.7	34
103	Controlling band gap energies in cluster-assembled ionic solids through internal electric fields. *ACS Nano*, **2010**, 4, 5813-8	16.7	59
102	Cage molecules for self-assembly. *Materials Science and Engineering Reports*, **2010**, 70, 188-208	30.9	56
101	Temperature-dependent vesicle response to surface topography. *Journal of Physical Chemistry B*, **2009**, 113, 11490-5	3.4	
100	A conversation with Robert Langer: pioneering biomedical scientist and engineer. Interview by Paul S. Weiss. *ACS Nano*, **2009**, 3, 756-61	16.7	4
99	The big picture. *ACS Nano*, **2009**, 3, 1603-4	16.7	3
98	Active molecular plasmonics: controlling plasmon resonances with molecular switches. *Nano Letters* , **2009**, 9, 819-25	11.5	191
97	A mechanical actuator driven electrochemically by artificial molecular muscles. *ACS Nano*, **2009**, 3, 291-306	16.7	220
96	Identifying reactive intermediates in the Ullmann coupling reaction by scanning tunneling microscopy and spectroscopy. *Journal of Physical Chemistry A*, **2009**, 113, 13167-72	2.8	54
95	Self-assembly of carboranethiol isomers on Au111: intermolecular interactions determined by molecular dipole orientations. *ACS Nano*, **2009**, 3, 527-36	16.7	77
94	Cluster-assembled materials. *ACS Nano*, **2009**, 3, 244-55	16.7	528
93	Self-assembled monolayers of 2-Adamantanethiol on Au{111}: control of structure and displacement. *Journal of Physical Chemistry A*, **2009**, 113, 3895-903	2.8	42
92	Heads and tails: simultaneous exposed and buried interface imaging of monolayers. *ACS Nano*, **2009**, 3, 3115-21	16.7	47
91	Reversible lability by in situ reaction of self-assembled monolayers. *Journal of the American Chemical Society*, **2009**, 131, 2252-9	16.4	32
90	Molecular, Supramolecular, and Macromolecular Motors and Artificial Muscles. *MRS Bulletin*, **2009**, 34, 671-681	3.2	67
89	Vertical alignment of single-walled carbon nanotube films formed by electrophoretic deposition. *Langmuir*, **2008**, 24, 12936-42	4	27
88	Functional molecules and assemblies in controlled environments: formation and measurements. *Accounts of Chemical Research*, **2008**, 41, 1772-81	24.3	95

87	Reversible photo-switching of single azobenzene molecules in controlled nanoscale environments. *Nano Letters*, **2008**, 8, 1644-8	11.5	244
86	Approaches to uncertainty in nanomaterials. *ACS Nano*, **2008**, 2, 393	16.7	
85	Dimpled vesicles: the interplay between energetics and transient pores. *Journal of Physical Chemistry B*, **2008**, 112, 13629-34	3.4	6
84	Sub-30-nm patterning on quartz for imprint lithography templates. *Applied Physics Letters*, **2008**, 93, 083123	3.4	13
83	Combining electrochemical desorption and metal deposition on patterned self-assembled monolayers. *Journal of Electroanalytical Chemistry*, **2008**, 621, 229-237	4.1	16
82	Hybrid approaches to nanometer-scale patterning: Exploiting tailored intermolecular interactions. *Journal of Nanoparticle Research*, **2008**, 10, 1231-1240	2.3	17
81	Engineering motility as a phenotypic response to LuxI/R-dependent quorum sensing in Escherichia coli. *Biotechnology and Bioengineering*, **2008**, 100, 1251-5	4.9	22
80	Biospecific Recognition of Tethered Small Molecules Diluted in Self-Assembled Monolayers. *Advanced Materials*, **2008**, 20, 164-167	24	35
79	Functional and spectroscopic measurements with scanning tunneling microscopy. *Annual Review of Analytical Chemistry*, **2008**, 1, 857-82	12.5	48
78	Long-range electronic interactions at a high temperature: bromine adatom islands on Cu(111). *Physical Review Letters*, **2007**, 98, 206108	7.4	60
77	Real-time measurements of conductance switching and motion of single oligo(phenylene ethynylene) molecules. *Journal of the American Chemical Society*, **2007**, 129, 10352-3	16.4	62
76	Analyzing the Motion of Benzene on Au{111}: Single Molecule Statistics from Scanning Probe Images. *Journal of Physical Chemistry C*, **2007**, 111, 6167-6182	3.8	38
75	Dynamics of Solution Displacement in 1-Adamantanethiolate Self-Assembled Monolayers. *Journal of Physical Chemistry C*, **2007**, 111, 6740-6746	3.8	35
74	A conversation with Dr. Masakazu Aono: leader in atomic-scale control and nanomanipulation. *ACS Nano*, **2007**, 1, 379-83	16.7	22
73	Origins of Displacement in 1-Adamantanethiolate Self-Assembled Monolayers. *Journal of Physical Chemistry C*, **2007**, 111, 6747-6752	3.8	34
72	Nanostructures using self-assembled multilayers as molecular rulers and etch resists. *Journal of Vacuum Science & Technology B*, **2007**, 25, 1985		5
71	Insertion of 1,10-decanedithiol in decanethiolate self-assembled monolayers on Au{111}. *Nanotechnology*, **2007**, 18, 044021	3.4	23
70	Microcontact insertion printing. *Applied Physics Letters*, **2007**, 90, 063114	3.4	48

69	Arrays of Cu2+ -complexed organic clusters grown on gold nano dots. *Journal of Experimental Nanoscience*, **2007**, 2, 3-11	1.9	9
68	1-Adamantanethiolate monolayer displacement kinetics follow a universal form. *Journal of the American Chemical Society*, **2007**, 129, 10741-6	16.4	42
67	Scanning electron microscopy of nanoscale chemical patterns. *ACS Nano*, **2007**, 1, 191-201	16.7	68
66	Controlled Adsorption Orientation for Double-Decker Complexes. *Journal of Physical Chemistry C*, **2007**, 111, 2077-2080	3.8	33
65	Hybrid Approaches to Nanolithography: Photolithographic Structures with Precise, Controllable Nanometer-Scale Spacings Created by Molecular Rulers. *Advanced Materials*, **2006**, 18, 1020-1022	24	41
64	A method for the fabrication of sculptured thin films of periodic arrays of standing nanorods. *Journal of Nanoscience and Nanotechnology*, **2006**, 6, 3799-802	1.3	1
63	Extensions of molecular ruler technology for nanoscale patterning. *Journal of Vacuum Science & Technology B*, **2006**, 24, 3200		9
62	A physical model of axonal damage due to oxidative stress. *Proceedings of the National Academy of Sciences of the United States of America*, **2006**, 103, 5262-6	11.5	12
61	Influence of quantum size effects on Pb island growth and diffusion barrier oscillations. *Physical Review B*, **2006**, 74,	3.3	18
60	Tuning interactions between ligands in self-assembled double-decker phthalocyanine arrays. *Journal of the American Chemical Society*, **2006**, 128, 10984-5	16.4	75
59	Dynamics and spectroscopy of hydrogen atoms on Pd{111}. *Journal of Physical Chemistry B*, **2006**, 110, 7380-4	3.4	20
58	Double-ink dip-pen nanolithography studies elucidate molecular transport. *Journal of the American Chemical Society*, **2006**, 128, 1648-53	16.4	47
57	Molecular engineering and measurements to test hypothesized mechanisms in single molecule conductance switching. *Journal of the American Chemical Society*, **2006**, 128, 1959-67	16.4	125
56	Directed assembly and separation of self-assembled monolayers via electrochemical processing. *Journal of Physical Chemistry B*, **2006**, 110, 14410-7	3.4	24
55	Spectral diffusion in the tunneling spectra of ligand-stabilized undecagold clusters. *Journal of the American Chemical Society*, **2006**, 128, 9266-7	16.4	40
54	Two-dimensional crystal growth and stacking of bis(phthalocyaninato) rare earth sandwich complexes at the 1-phenyloctane/graphite interface. *Journal of Physical Chemistry B*, **2006**, 110, 1661-4	3.4	41
53	Electrically isolated nanostructures fabricated using self-assembled multilayers and a novel negative-tone bi-layer resist stack. *Microelectronic Engineering*, **2006**, 83, 1517-1520	2.5	7
52	Determinants of health plan membership among patients in routine U.S. psychiatric practice. *Community Mental Health Journal*, **2006**, 42, 197-204	2.1	2

51	Relative conductances of alkaneselenolate and alkanethiolate monolayers on Au{111}. *Journal of Physical Chemistry B*, **2005**, 109, 20343-9	3.4	78
50	Substrate-mediated intermolecular interactions: a quantitative single molecule analysis. *Journal of the American Chemical Society*, **2005**, 127, 7255-60	16.4	47
49	Heat-stabilized phospholipid films: film characterization and the production of protein-resistant surfaces. *Langmuir*, **2005**, 21, 11352-6	4	19
48	Molecular engineering of the polarity and interactions of molecular electronic switches. *Journal of the American Chemical Society*, **2005**, 127, 17421-6	16.4	119
47	Cross-step place-exchange of oligo(phenylene-ethynylene) molecules. *Nano Letters*, **2005**, 5, 2292-7	11.5	37
46	Transport rates vary with deposition time in dip-pen nanolithography. *Journal of Physical Chemistry B*, **2005**, 109, 23118-20	3.4	31
45	Structures and displacement of 1-adamantanethiol self-assembled monolayers on Au{111}. *Journal of the American Chemical Society*, **2005**, 127, 8697-704	16.4	105
44	Microdisplacement printing. *Nano Letters*, **2005**, 5, 1834-7	11.5	69
43	Interaction of CO molecules with surface state electrons on Ag(111). *Surface Science*, **2005**, 590, L253-L258	1.8	39
42	Utilizing self-assembled multilayers in lithographic processing for nanostructure fabrication: Initial evaluation of the electrical integrity of nanogaps. *Microelectronic Engineering*, **2005**, 78-79, 248-252	2.5	11
41	Observation and manipulation of subsurface hydride in Pd[111] and its effect on surface chemical, physical, and electronic properties. *Proceedings of the National Academy of Sciences of the United States of America*, **2005**, 102, 17907-11	11.5	59
40	Position-Selected Molecular Ruler. *Japanese Journal of Applied Physics*, **2004**, 43, L950-L953	1.4	25
39	Patterning self-assembled monolayers. *Progress in Surface Science*, **2004**, 75, 1-68	6.6	665
38	Mediating stochastic switching of single molecules using chemical functionality. *Journal of the American Chemical Society*, **2004**, 126, 12214-5	16.4	97
37	Effects of Hindered Internal Rotation on Packing and Conductance of Self-Assembled Monolayers. *Journal of Physical Chemistry B*, **2004**, 108, 16761-16767	3.4	39
36	Benzene on Au[111] at 4 K: monolayer growth and tip-induced molecular cascades. *Journal of the American Chemical Society*, **2004**, 126, 10787-93	16.4	63
35	Formation and manipulation of protopolymer chains. *Journal of the American Chemical Society*, **2004**, 126, 16772-6	16.4	71
34	Ordered Local Domain Structures of Decaneselenolate and Dodecaneselenolate Monolayers on Au{111}. *Journal of Physical Chemistry B*, **2004**, 108, 9834-9841	3.4	70

33	Advances in nanolithography using molecular rulers. *Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena*, **2003**, 21, 3116		30
32	Substrate-mediated interactions and intermolecular forces between molecules adsorbed on surfaces. *Accounts of Chemical Research*, **2003**, 36, 945-53	24.3	91
31	Molecule/Metal Surface Interactions Evidenced Quantum Mechanically via Tip-Induced CS2 Interaction with Friedel Oscillations on Au{111}. *Journal of Physical Chemistry B*, **2003**, 107, 5016-5021	3.4	16
30	A Comparative Scanning Tunneling Microscopy Study of Physisorbed Linear Quadrupolar Molecules: C2N2 and CS2 on Au{111} at 4 K *Journal of Physical Chemistry A*, **2003**, 107, 8124-8129	2.8	15
29	Control of alkanethiolate monolayer structure using vapor-phase annealing. *Journal of the American Chemical Society*, **2003**, 125, 11462-3	16.4	60
28	Controlling and Measuring the Interdependence of Local Properties in Biomembranes *Langmuir*, **2003**, 19, 1618-1623	4	22
27	Fabrication, assembly, and characterization of molecular electronic components. *Proceedings of the IEEE*, **2003**, 9, 1785-1802	14.3	144
26	A double lamellae dropoff etching procedure for tungsten tips attached to tuning fork atomic force microscopy/scanning tunneling microscopy sensors. *Review of Scientific Instruments*, **2003**, 74, 1027-1030	1.7	47
25	Cross-correlation image tracking for drift correction and adsorbate analysis. *Review of Scientific Instruments*, **2002**, 73, 313-317	1.7	48
24	Exploiting intermolecular interactions and self-assembly for ultrahigh resolution nanolithography. *Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena*, **2002**, 20, 2739		34
23	Matrix-Mediated Control of Stochastic Single Molecule Conductance Switching. *Japanese Journal of Applied Physics*, **2002**, 41, 4871-4877	1.4	68
22	Footprints of a Surface Chemical Reaction: Dissociative Chemisorption of p-Diiodobenzene on Cu{111} *Journal of Physical Chemistry B*, **2002**, 106, 8005-8008	3.4	31
21	Control and placement of molecules via self-assembly. *Nanotechnology*, **2001**, 12, 231-237	3.4	71
20	Adsorbate-substrate vibrational modes of benzene on Ag(110) resolved with scanning tunneling spectroscopy. *Physical Review Letters*, **2001**, 86, 1050-3	7.4	81
19	Phase Separation within a Binary Self-Assembled Monolayer on Au{111} Driven by an Amide-Containing Alkanethiol. *Journal of Physical Chemistry B*, **2001**, 105, 1119-1122	3.4	128
18	Conductance switching in single molecules through conformational changes. *Science*, **2001**, 292, 2303-7	33.3	1133
17	The Role of Buried Hydrogen Bonds in Self-Assembled Mixed Composition Thiols on Au{111}. *Journal of Physical Chemistry B*, **2001**, 105, 10630-10636	3.4	82
16	Probing Single Nanometer-scale Particles with Scanning Tunneling Microscopy and Spectroscopies. *Journal of Nanoparticle Research*, **1999**, 1, 459-466	2.3	8

15	Ring-Opening Metathesis Polymerization from Surfaces. *Journal of the American Chemical Society*, **1999**, 121, 4088-4089	16.4	237
14	Scanning Probe Studies of Single Nanostructures. *Chemical Reviews*, **1999**, 99, 1983-1990	68.1	62
13	Directed Self-Assembly to Create Molecular Terraces with Molecularly Sharp Boundaries in Organic Monolayers. *Journal of the American Chemical Society*, **1999**, 121, 8017-8021	16.4	137
12	Electron Transfer through Organic Molecules. *Journal of Physical Chemistry B*, **1999**, 103, 8122-8127	3.4	350
11	Probing Electronic Properties of Conjugated and Saturated Molecules in Self-Assembled Monolayers. *Annals of the New York Academy of Sciences*, **1998**, 852, 145-168	6.5	44
10	Evolution of Strategies for Self-Assembly and Hookup of Molecule-Based Devices. *Annals of the New York Academy of Sciences*, **1998**, 852, 349-370	6.5	60
9	Insertion, Conductivity, and Structures of Conjugated Organic Oligomers in Self-Assembled Alkanethiol Monolayers on Au{111}. *Journal of the American Chemical Society*, **1998**, 120, 2721-2732	16.4	313
8	Nanometer-scale phase separation in mixed composition self-assembled monolayers. *Nanotechnology*, **1996**, 7, 438-442	3.4	97
7	Are Single Molecular Wires Conducting?. *Science*, **1996**, 271, 1705-1707	33.3	1085
6	Imaging Substrate-Mediated Interactions. *Science*, **1996**, 274, 118-119	33.3	76
5	Interactions and dynamics of benzene on Cu{111} at low temperature. *Surface Science*, **1995**, 338, 41-59	1.8	113
4	Atomic-scale dynamics of a two-dimensional gas-solid interface. *Science*, **1994**, 266, 99-102	33.3	142
3	Site dependence of the apparent shape of a molecule in scanning tunneling micoscope images: Benzene on Pt{111}. *Physical Review Letters*, **1993**, 71, 3139-3142	7.4	227
2	Adsorption and accommodation of Xe on Pt{111}. *Physical Review Letters*, **1992**, 69, 2240-2243	7.4	115
1	Imaging Xe with a low-temperature scanning tunneling microscope. *Physical Review Letters*, **1991**, 66, 1189-1192	7.4	238