Robert J Hamers

List of Publications by Year in Descending Order

351 papers	24,702 citations	82 h-index	144 g-index
371 ext. papers	26,495 ext. citations	8.3 avg, IF	6.99 L-index

#	Paper	IF	Citations
351	Reactivity passivation of red phosphorus with thin plasma-deposited carbon coating. *Applied Surface Science*, **2022**, 587, 152791	6.7	1
350	Improving Climate and Outcomes for Underrepresented Chemistry Graduate Students at a Major Research University: A Case Study. *Journal of Chemical Education*, **2022**, 99, 452-460	2.4	0
349	Energy Starvation in from Exposure to a Lithium Cobalt Oxide Nanomaterial. *Chemical Research in Toxicology*, **2021**, 34, 2287-2297	4	1
348	Influence of Surface Ligand Molecular Structure on Phospholipid Membrane Disruption by Cationic Nanoparticles. *Langmuir*, **2021**, 37, 7600-7610	4	2
347	Biomolecular corona formation on CuO nanoparticles in plant xylem fluid. *Environmental Science: Nano*, **2021**, 8, 1067-1080	7.1	9
346	Dynamic aqueous transformations of lithium cobalt oxide nanoparticle induce distinct oxidative stress responses of B. subtilis. *Environmental Science: Nano*, **2021**, 8, 1614-1627	7.1	1
345	Influence of Sensor Coating and Topography on Protein and Nanoparticle Interaction with Supported Lipid Bilayers. *Langmuir*, **2021**, 37, 2256-2267	4	1
344	High-Density Covalent Grafting of Spin-Active Molecular Moieties to Diamond Surfaces. *Langmuir*, **2021**, 37, 9222-9231	4	2
343	Reciprocal redox interactions of lithium cobalt oxide nanoparticles with nicotinamide adenine dinucleotide (NADH) and glutathione (GSH): toward a mechanistic understanding of nanoparticle-biological interactions. *Environmental Science: Nano*, **2021**, 8, 1749-1760	7.1	0
342	Adjoint-optimized nanoscale light extractor for enhanced luminescence from color centers in diamond **2020**,		1
341	Influence of the Spatial Distribution of Cationic Functional Groups at Nanoparticle Surfaces on Bacterial Viability and Membrane Interactions. *Journal of the American Chemical Society*, **2020**, 142, 10814-10823	16.4	24
340	Emerging investigator series: first-principles and thermodynamics comparison of compositionally-tuned delafossites: cation release from the (001) surface of complex metal oxides. *Environmental Science: Nano*, **2020**, 7, 1642-1651	7.1	4
339	High Temperature Treatment of Diamond Particles Toward Enhancement of Their Quantum Properties. *Frontiers in Physics*, **2020**, 8,	3.9	4
338	Surface properties and interactions of transition metal oxide nanoparticles: A perspective on sustainability. *Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films*, **2020**, 38, 031001	2.9	3
337	DFT and thermodynamics calculations of surface cation release in LiCoO2. *Applied Surface Science*, **2020**, 515, 145865	6.7	18
336	Cobalt Release from a Nanoscale Multiphase Lithiated Cobalt Phosphate Dominates Interaction with MR-1 and SB491. *Chemical Research in Toxicology*, **2020**, 33, 806-816	4	7
335	Adjoint-optimized nanoscale light extractor for nitrogen-vacancy centers in diamond. *Nanophotonics*, **2020**, 10, 393-401	6.3	3

334	Preferential interactions of primary amine-terminated quantum dots with membrane domain boundaries and lipid rafts revealed with nanometer resolution. *Environmental Science: Nano*, **2020**, 7, 149-161	7.1	7
333	Nickel enrichment of next-generation NMC nanomaterials alters material stability, causing unexpected dissolution behavior and observed toxicity to S. oneidensis MR-1 and D. magna. *Environmental Science: Nano*, **2020**, 7, 571-587	7.1	13
332	Selective imaging of diamond nanoparticles within complex matrices using magnetically induced fluorescence contrast. *Environmental Science: Nano*, **2020**, 7, 525-534	7.1	5
331	Nanoscale battery cathode materials induce DNA damage in bacteria. *Chemical Science*, **2020**, 11, 11244-11258	9.4	1
330	Advanced material modulation of nutritional and phytohormone status alleviates damage from soybean sudden death syndrome. *Nature Nanotechnology*, **2020**, 15, 1033-1042	28.7	42
329	Subtoxic dose of lithium cobalt oxide nanosheets impacts critical molecular pathways in trout gill epithelial cells. *Environmental Science: Nano*, **2020**, 7, 3419-3430	7.1	1
328	Protein Fe-S Centers as a Molecular Target of Toxicity of a Complex Transition Metal Oxide Nanomaterial with Downstream Impacts on Metabolism and Growth. *Environmental Science & Technology*, **2020**, 54, 15257-15266	10.3	1
327	Anionic nanoparticle-induced perturbation to phospholipid membranes affects ion channel function. *Proceedings of the National Academy of Sciences of the United States of America*, **2020**, 117, 27854-27861	11.5	8
326	Copper Nanomaterial Morphology and Composition Control Foliar Transfer through the Cuticle and Mediate Resistance to Root Fungal Disease in Tomato (). *Journal of Agricultural and Food Chemistry*, **2020**, 68, 11327-11338	5.7	17
325	Interfacial water and ion distribution determine potential and binding affinity of nanoparticles to biomolecules. *Nanoscale*, **2020**, 12, 18106-18123	7.7	6
324	Energy Storage Materials as Emerging Nano-contaminants. *Chemical Research in Toxicology*, **2020**, 33, 1074-1081	4	3
323	Multicolor polymeric carbon dots: synthesis, separation and polyamide-supported molecular fluorescence. *Chemical Science*, **2020**, 12, 2441-2455	9.4	29
322	Chronic exposure to complex metal oxide nanoparticles elicits rapid resistance in MR-1. *Chemical Science*, **2019**, 10, 9768-9781	9.4	14
321	Biological impact of nanoscale lithium intercalating complex metal oxides to model bacterium. *Environmental Science: Nano*, **2019**, 6, 305-314	7.1	5
320	Two-Phase Synthesis of Gold–Copper Bimetallic Nanoparticles of Tunable Composition: Toward Optimized Catalytic CO2 Reduction. *ACS Applied Nano Materials*, **2019**, 2, 3989-3998	5.6	16
319	Time-Dependent Transcriptional Response of Tomato (Solanum lycopersicum L.) to Cu Nanoparticle Exposure upon Infection with Fusarium oxysporum f. sp. lycopersici. *ACS Sustainable Chemistry and Engineering*, **2019**, 7, 10064-10074	8.3	41
318	Molecular Surface Functionalization of Carbon Materials via Radical-Induced Grafting of Terminal Alkenes. *Journal of the American Chemical Society*, **2019**, 141, 8277-8288	16.4	24
317	Discovery and Elucidation of Counteranion Dependence in Photoredox Catalysis. *Journal of the American Chemical Society*, **2019**, 141, 6385-6391	16.4	49

316	Next-Generation Complex Metal Oxide Nanomaterials Negatively Impact Growth and Development in the Benthic Invertebrate Chironomus riparius upon Settling. *Environmental Science & Technology*, **2019**, 53, 3860-3870	10.3	17
315	Quantitative Mapping of Oxidative Stress Response to Lithium Cobalt Oxide Nanoparticles in Single Cells Using Multiplexed in Situ Gene Expression Analysis. *Nano Letters*, **2019**, 19, 1990-1997	11.5	18
314	Facile benchtop reactor design using dendrimer-templating technology for the fabrication of polyethyleneimine-coated CuO nanoparticles on the gram scale. *Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films*, **2019**, 37, 041402	2.9	1
313	UV‐Vis and Photoluminescence Spectroscopy to Understand the Coordination of Cu Cations in the Zeolite SSZ-13. *Chemistry of Materials*, **2019**, 31, 9582-9592	9.6	10
312	Solution NMR Analysis of Ligand Environment in Quaternary Ammonium-Terminated Self-Assembled Monolayers on Gold Nanoparticles: The Effect of Surface Curvature and Ligand Structure. *Journal of the American Chemical Society*, **2019**, 141, 4316-4327	16.4	44
311	Interaction of Phosphate with Lithium Cobalt Oxide Nanoparticles: A Combined Spectroscopic and Calorimetric Study. *Langmuir*, **2019**, 35, 16640-16649	4	9
310	Enhancing Electrochemical Efficiency of Hydroxyl Radical Formation on Diamond Electrodes by Functionalization with Hydrophobic Monolayers. *Langmuir*, **2019**, 35, 2153-2163	4	19
309	Removing Defects in WSe2 via Surface Oxidation and Etching to Improve Solar Conversion Performance. *ACS Energy Letters*, **2019**, 4, 102-109	20.1	15
308	Nanoscale Surface Photovoltage Mapping of 2D Materials and Heterostructures by Illuminated Kelvin Probe Force Microscopy. *Journal of Physical Chemistry C*, **2018**, 122, 13564-13571	3.8	23
307	Dissolution of Complex Metal Oxides from First-Principles and Thermodynamics: Cation Removal from the (001) Surface of Li(NiMnCo)O. *Environmental Science & Technology*, **2018**, 52, 5792-5802	10.3	34
306	Highly Active Trimetallic NiFeCr Layered Double Hydroxide Electrocatalysts for Oxygen Evolution Reaction. *Advanced Energy Materials*, **2018**, 8, 1703189	21.8	342
305	Enhanced Photocatalytic Activity of Diamond Thin Films Using Embedded Ag Nanoparticles. *ACS Applied Materials & Interfaces*, **2018**, 10, 5395-5403	9.5	14
304	Crystallographic Facet Dependence of the Hydrogen Evolution Reaction on CoPS: Theory and Experiments. *ACS Catalysis*, **2018**, 8, 1143-1152	13.1	49
303	Influence of Nanoparticle Morphology on Ion Release and Biological Impact of Nickel Manganese Cobalt Oxide (NMC) Complex Oxide Nanomaterials. *ACS Applied Nano Materials*, **2018**, 1, 1721-1730	5.6	17
302	Impact of Phosphate Adsorption on Complex Cobalt Oxide Nanoparticle Dispersibility in Aqueous Media. *Environmental Science & Technology*, **2018**, 52, 10186-10195	10.3	16
301	Chemically Derived Kirigami of WSe. *Journal of the American Chemical Society*, **2018**, 140, 10980-10987	16.4	23
300	Size dependent oxidative stress response of the gut of Daphnia magna to functionalized nanodiamond particles. *Environmental Research*, **2018**, 167, 267-275	7.9	16
299	Investigation of phosphorous doping effects on polymeric carbon dots: Fluorescence, photostability, and environmental impact. *Carbon*, **2018**, 129, 438-449	10.4	81

298	Malic Acid Carbon Dots: From Super-resolution Live-Cell Imaging to Highly Efficient Separation. *ACS Nano*, **2018**, 12, 5741-5752	16.7	98
297	Analysis of the conformational properties of amine ligands at the gold/water interface with QM, MM and QM/MM simulations. *Physical Chemistry Chemical Physics*, **2018**, 20, 3349-3362	3.6	12
296	Optically Detected Magnetic Resonance for Selective Imaging of Diamond Nanoparticles. *Analytical Chemistry*, **2018**, 90, 769-776	7.8	8
295	Anode-originated SEI migration contributes to formation of cathode-electrolyte interphase layer. *Journal of Power Sources*, **2018**, 373, 184-192	8.9	42
294	Impact of lithiated cobalt oxide and phosphate nanoparticles on rainbow trout gill epithelial cells. *Nanotoxicology*, **2018**, 12, 1166-1181	5.3	15
293	Density, Structure, and Stability of Citrate3 and H2citrate on Bare and Coated Gold Nanoparticles. *Journal of Physical Chemistry C*, **2018**, 122, 28393-28404	3.8	12
292	Quantification of Lipid Corona Formation on Colloidal Nanoparticles from Lipid Vesicles. *Analytical Chemistry*, **2018**, 90, 14387-14394	7.8	23
291	Copper Based Nanomaterials Suppress Root Fungal Disease in Watermelon (Citrullus lanatus): Role of Particle Morphology, Composition and Dissolution Behavior. *ACS Sustainable Chemistry and Engineering*, **2018**, 6, 14847-14856	8.3	75
290	First-Principles and Thermodynamics Study of Compositionally Tuned Complex Metal Oxides: Cation Release from the (001) Surface of Mn-Rich Lithium Nickel Manganese Cobalt Oxide. *Inorganic Chemistry*, **2018**, 57, 13300-13311	5.1	20
289	Lipid Corona Formation from Nanoparticle Interactions with Bilayers. *CheM*, **2018**, 4, 2709-2723	16.2	28
288	Quaternary Amine-Terminated Quantum Dots Induce Structural Changes to Supported Lipid Bilayers. *Langmuir*, **2018**, 34, 12369-12378	4	12
287	Tunable coloration of diamond films by encapsulation of plasmonic Ag nanoparticles. *Diamond and Related Materials*, **2018**, 89, 190-196	3.5	1
286	Growth-Based Bacterial Viability Assay for Interference-Free and High-Throughput Toxicity Screening of Nanomaterials. *Analytical Chemistry*, **2017**, 89, 2057-2064	7.8	30
285	Ab Initio Atomistic Thermodynamics Study of the (001) Surface of LiCoO2 in a Water Environment and Implications for Reactivity under Ambient Conditions. *Journal of Physical Chemistry C*, **2017**, 121, 5069-5080	3.8	26
284	Core chemistry influences the toxicity of multicomponent metal oxide nanomaterials, lithium nickel manganese cobalt oxide, and lithium cobalt oxide to Daphnia magna. *Environmental Toxicology and Chemistry*, **2017**, 36, 2493-2502	3.8	35
283	A Hybrid Molecular Dynamics/Multiconformer Continuum Electrostatics (MD/MCCE) Approach for the Determination of Surface Charge of Nanomaterials. *Journal of Physical Chemistry C*, **2017**, 121, 3584-3596	3.8	12
282	Influence of nickel manganese cobalt oxide nanoparticle composition on toxicity toward Shewanella oneidensis MR-1: redesigning for reduced biological impact. *Environmental Science: Nano*, **2017**, 4, 636-646	7.1	25
281	Atomic Layer Deposited MgO: A Lower Overpotential Coating for Li[NiMnCo]O Cathode. *ACS Applied Materials & Interfaces*, **2017**, 9, 11231-11239	9.5	82

280	Complex and Noncentrosymmetric Stacking of Layered Metal Dichalcogenide Materials Created by Screw Dislocations. *Journal of the American Chemical Society*, **2017**, 139, 3496-3504	16.4	60
279	Unoccupied surface state induced by ozone and ammonia on H-terminated diamond electrodes for photocatalytic ammonia synthesis. *Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films*, **2017**, 35, 04D102	2.9	3
278	Cascading Effects of Nanoparticle Coatings: Surface Functionalization Dictates the Assemblage of Complexed Proteins and Subsequent Interaction with Model Cell Membranes. *ACS Nano*, **2017**, 11, 5489-5499	16.7	41
277	Carbon Dots: A Modular Activity To Teach Fluorescence and Nanotechnology at Multiple Levels. *Journal of Chemical Education*, **2017**, 94, 1143-1149	2.4	23
276	Ab Initio Modeling of Electrolyte Molecule Ethylene Carbonate Decomposition Reaction on Li(Ni,Mn,Co)O Cathode Surface. *ACS Applied Materials & Interfaces*, **2017**, 9, 20545-20553	9.5	47
275	Stabilization of the Metastable Lead Iodide Perovskite Phase via Surface Functionalization. *Nano Letters*, **2017**, 17, 4405-4414	11.5	151
274	Basal-Plane Ligand Functionalization on Semiconducting 2H-MoS Monolayers. *ACS Applied Materials & Interfaces*, **2017**, 9, 12734-12742	9.5	86
273	Cell design and image analysis for in situ Raman mapping of inhomogeneous state-of-charge profiles in lithium-ion batteries. *Journal of Power Sources*, **2017**, 352, 18-25	8.9	18
272	Nanomaterials and Global Sustainability. *Accounts of Chemical Research*, **2017**, 50, 633-637	24.3	48
271	Quantification of Free Polyelectrolytes Present in Colloidal Suspension, Revealing a Source of Toxic Responses for Polyelectrolyte-Wrapped Gold Nanoparticles. *Analytical Chemistry*, **2017**, 89, 1823-1830	7.8	23
270	Dynamics and Morphology of Nanoparticle-Linked Polymers Elucidated by Nuclear Magnetic Resonance. *Analytical Chemistry*, **2017**, 89, 12399-12407	7.8	22
269	Photocatalytic reduction of CO2 to CO by diamond nanoparticles. *Diamond and Related Materials*, **2017**, 78, 24-30	3.5	20
268	Natural Organic Matter Concentration Impacts the Interaction of Functionalized Diamond Nanoparticles with Model and Actual Bacterial Membranes. *Environmental Science & Technology*, **2017**, 51, 11075-11084	10.3	44
267	Evidence for Considerable Metal Cation Concentrations from Lithium Intercalation Compounds in the Nano-Bio Interface Gap. *Journal of Physical Chemistry C*, **2017**, 121, 27473-27482	3.8	12
266	Thermal and Hydrolytic Decomposition Mechanisms of Organosilicon Electrolytes with Enhanced Thermal Stability for Lithium-Ion Batteries. *Journal of the Electrochemical Society*, **2017**, 164, A1907-A1917	3.9	16
265	Formation of supported lipid bilayers containing phase-segregated domains and their interaction with gold nanoparticles. *Environmental Science: Nano*, **2016**, 3, 45-55	7.1	54
264	Orientation Control of Selected Organic Semiconductor Crystals Achieved by Monolayer Graphene Templates. *Advanced Materials Interfaces*, **2016**, 3, 1600621	4.6	14
263	Color-Pure Violet-Light-Emitting Diodes Based on Layered Lead Halide Perovskite Nanoplates. *ACS Nano*, **2016**, 10, 6897-904	16.7	321

262	On Electronic and Charge Interference in Second Harmonic Generation Responses from Gold Metal Nanoparticles at Supported Lipid Bilayers. *Journal of Physical Chemistry C*, **2016**, 120, 20659-20667	3.8	24
261	Atmospheric-pressure photoelectron emission from H-terminated and amino-terminated diamond. *Physica Status Solidi (A) Applications and Materials Science*, **2016**, 213, 2069-2074	1.6	2
260	Impact of Nanoscale Lithium Nickel Manganese Cobalt Oxide (NMC) on the BacteriumShewanella oneidensisMR-1. *Chemistry of Materials*, **2016**, 28, 1092-1100	9.6	49
259	Amino-terminated diamond surfaces: Photoelectron emission and photocatalytic properties. *Surface Science*, **2016**, 650, 295-301	1.8	22
258	Photocatalytic reduction of nitrogen to ammonia on diamond thin films grown on metallic substrates. *Diamond and Related Materials*, **2016**, 64, 34-41	3.5	16
257	Optimizing AlF3 atomic layer deposition using trimethylaluminum and TaF5: Application to high voltage Li-ion battery cathodes. *Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films*, **2016**, 34, 031503	2.9	25
256	Atmospheric-pressure photoelectron emission from H-terminated and amino-terminated diamond (Phys. Status Solidi A 8□2016). *Physica Status Solidi (A) Applications and Materials Science*, **2016**, 213, 2268-2268	1.6	
255	Atomic Layer Deposition of Al2O3-Ga2O3 Alloy Coatings for Li[Ni0.5Mn0.3Co0.2]O2 Cathode to Improve Rate Performance in Li-Ion Battery. *ACS Applied Materials & Interfaces*, **2016**, 8, 10572-80	9.5	45
254	Chemical Transformations of Metal, Metal Oxide, and Metal Chalcogenide Nanoparticles in the Environment **2016**, 261-291		5
253	Observing electron extraction by monolayer graphene using time-resolved surface photoresponse measurements. *ACS Nano*, **2015**, 9, 2510-7	16.7	9
252	Impacts of gold nanoparticle charge and ligand type on surface binding and toxicity to Gram-negative and Gram-positive bacteria. *Chemical Science*, **2015**, 6, 5186-5196	9.4	162
251	Solution growth of single crystal methylammonium lead halide perovskite nanostructures for optoelectronic and photovoltaic applications. *Journal of the American Chemical Society*, **2015**, 137, 5810-8	16.4	323
250	Effects of charge and surface ligand properties of nanoparticles on oxidative stress and gene expression within the gut of Daphnia magna. *Aquatic Toxicology*, **2015**, 162, 1-9	5.1	66
249	Direct Chemical Vapor Deposition Synthesis of Phase-Pure Iron Pyrite (FeS2) Thin Films. *Chemistry of Materials*, **2015**, 27, 3108-3114	9.6	62
248	Alteration of Membrane Compositional Asymmetry by LiCoO2 Nanosheets. *ACS Nano*, **2015**, 9, 8755-65	16.7	32
247	Measurement of Ultrafast Excitonic Dynamics of Few-Layer MoS2 Using State-Selective Coherent Multidimensional Spectroscopy. *ACS Nano*, **2015**, 9, 12146-57	16.7	29
246	Molecular Electronic Effects on the Thermal Grafting of Aryl Iodides to TiO2 Surfaces. *Journal of Physical Chemistry C*, **2015**, 119, 27972-27981	3.8	
245	Quantitative determination of ligand densities on nanomaterials by X-ray photoelectron spectroscopy. *ACS Applied Materials & Interfaces*, **2015**, 7, 1720-5	9.5	65

244	Direct Probes of 4 nm Diameter Gold Nanoparticles Interacting with Supported Lipid Bilayers. *Journal of Physical Chemistry C*, **2015**, 119, 534-546	3.8	68
243	Designing Efficient Solar-Driven Hydrogen Evolution Photocathodes Using Semitransparent MoQxCly (Q = S, Se) Catalysts on Si Micropyramids. *Advanced Materials*, **2015**, 27, 6511-8	24	80
242	Biological Responses to Engineered Nanomaterials: Needs for the Next Decade. *ACS Central Science*, **2015**, 1, 117-23	16.8	93
241	Amorphous MoSxCly electrocatalyst supported by vertical graphene for efficient electrochemical and photoelectrochemical hydrogen generation. *Energy and Environmental Science*, **2015**, 8, 862-868	35.4	162
240	Electrolyte Dependence of CO2 Electroreduction: Tetraalkylammonium Ions Are Not Electrocatalysts. *ACS Catalysis*, **2015**, 5, 703-707	13.1	29
239	Molecular Orientation-Dependent Interfacial Energetics and Built-in Voltage Tuned by a Template Graphene Monolayer. *Journal of Physical Chemistry C*, **2015**, 119, 45-54	3.8	24
238	Efficient photoelectrochemical hydrogen generation using heterostructures of Si and chemically exfoliated metallic MoS2. *Journal of the American Chemical Society*, **2014**, 136, 8504-7	16.4	334
237	Boron Doped diamond films as electron donors in photovoltaics: An X-ray absorption and hard X-ray photoemission study. *Journal of Applied Physics*, **2014**, 116, 143702	2.5	7
236	Surface chemistry, charge and ligand type impact the toxicity of gold nanoparticles to Daphnia magna. *Environmental Science: Nano*, **2014**, 1, 260-270	7.1	124
235	Ionization of high-density deep donor defect states explains the low photovoltage of iron pyrite single crystals. *Journal of the American Chemical Society*, **2014**, 136, 17163-79	16.4	77
234	Facile method to stain the bacterial cell surface for super-resolution fluorescence microscopy. *Analyst, The*, **2014**, 139, 3174-8	5	18
233	Selective Photoelectrochemical Reduction of Aqueous CO2 to CO by Solvated Electrons. *Angewandte Chemie*, **2014**, 126, 9904-9908	3.6	16
232	Using citrate-functionalized TiO2 nanoparticles to study the effect of particle size on zebrafish embryo toxicity. *Analyst, The*, **2014**, 139, 964-72	5	51
231	Surface functionalization and biological applications of CVD diamond. *MRS Bulletin*, **2014**, 39, 517-524	3.2	40
230	Enhancing Graduate Student Communication to General Audiences through Blogging about Nanotechnology and Sustainability. *Journal of Chemical Education*, **2014**, 91, 1600-1605	2.4	14
229	Highly active hydrogen evolution catalysis from metallic WS2 nanosheets. *Energy and Environmental Science*, **2014**, 7, 2608-2613	35.4	579
228	Photoemission from diamond films and substrates into water: dynamics of solvated electrons and implications for diamond photoelectrochemistry. *Faraday Discussions*, **2014**, 172, 397-411	3.6	21
227	Integrated Hamiltonian sampling: a simple and versatile method for free energy simulations and conformational sampling. *Journal of Physical Chemistry B*, **2014**, 118, 8210-20	3.4	13

226	Mechanism of N2 reduction to NH3 by aqueous solvated electrons. *Journal of Physical Chemistry B*, **2014**, 118, 195-203	3.4	45
225	Versatile Approach to Formation of Light-Harvesting Complexes on Nanostructured Metal Oxide Surfaces via "On-Surface" Assembly. *Chemistry of Materials*, **2014**, 26, 3651-3659	9.6	3
224	Role of surface contaminants, functionalities, defects and electronic structure: general discussion. *Faraday Discussions*, **2014**, 172, 365-95	3.6	1
223	Correction to An Explicit Consideration of Desolvation is Critical to Binding Free Energy Calculations of Charged Molecules at Ionic Surfaces. *Journal of Chemical Theory and Computation*, **2014**, 10, 5738	6.4	
222	Selective photoelectrochemical reduction of aqueous CO2 to CO by solvated electrons. *Angewandte Chemie - International Edition*, **2014**, 53, 9746-50	16.4	72
221	The Legacy of Heini Rohrer. *E-Journal of Surface Science and Nanotechnology*, **2014**, 12, 151-153	0.7	
220	Conformational disorder enhances electron transfer through alkyl monolayers: ferrocene on conductive diamond. *Journal of the American Chemical Society*, **2013**, 135, 5751-61	16.4	52
219	An Explicit Consideration of Desolvation is Critical to Binding Free Energy Calculations of Charged Molecules at Ionic Surfaces. *Journal of Chemical Theory and Computation*, **2013**, 9, 5059-69	6.4	28
218	Photostability of CdSe quantum dots functionalized with aromatic dithiocarbamate ligands. *ACS Applied Materials & Interfaces*, **2013**, 5, 12975-83	9.5	33
217	Face-Selective Etching of ZnO during Attachment of Dyes. *Journal of Physical Chemistry C*, **2013**, 117, 18414-18422	3.8	7
216	Influence of Hole-Sequestering Ligands on the Photostability of CdSe Quantum Dots. *Journal of Physical Chemistry C*, **2013**, 117, 313-320	3.8	27
215	Design of solar cell materials via soft X-ray spectroscopy. *Journal of Electron Spectroscopy and Related Phenomena*, **2013**, 190, 2-11	1.7	13
214	Thermal and electrochemical stability of organosilicon electrolytes for lithium-ion batteries. *Journal of Power Sources*, **2013**, 241, 311-319	8.9	17
213	Influence of humic acid on titanium dioxide nanoparticle toxicity to developing zebrafish. *Environmental Science & Technology*, **2013**, 47, 4718-25	10.3	118
212	TiO2 nanoparticle exposure and illumination during zebrafish development: mortality at parts per billion concentrations. *Environmental Science & Technology*, **2013**, 47, 4726-33	10.3	73
211	Modular synthesis of alkyne-substituted ruthenium polypyridyl complexes suitable for "click" coupling. *Inorganic Chemistry*, **2013**, 52, 2796-8	5.1	17
210	Facile post-growth doping of nanostructured hematite photoanodes for enhanced photoelectrochemical water oxidation. *Energy and Environmental Science*, **2013**, 6, 500-512	35.4	198
209	Photo-illuminated diamond as a solid-state source of solvated electrons in water for nitrogen reduction. *Nature Materials*, **2013**, 12, 836-41	27	645

208	Toxicity of oxidatively degraded quantum dots to developing zebrafish (Danio rerio). *Environmental Science & Technology*, **2013**, 47, 9132-9	10.3	49
207	Electronic structure of Fe- vs. Ru-based dye molecules. *Journal of Chemical Physics*, **2013**, 138, 044709	3.9	12
206	A quantitative study of detection mechanism of a label-free impedance biosensor using ultrananocrystalline diamond microelectrode array. *Biosensors and Bioelectronics*, **2012**, 35, 284-290	11.8	42
205	Nanotextured gold coatings on carbon nanofiber scaffolds as ultrahigh surface-area electrodes. *Journal of Power Sources*, **2012**, 198, 393-401	8.9	20
204	A citric acid-derived ligand for modular functionalization of metal oxide surfaces via "click" chemistry. *Langmuir*, **2012**, 28, 1322-9	4	60
203	Synthesis and properties of semiconducting iron pyrite (FeS2) nanowires. *Nano Letters*, **2012**, 12, 1977-82	11.5	145
202	Preparation and measurement methods for studying nanoparticle aggregate surface chemistry. *Journal of Environmental Monitoring*, **2012**, 14, 1914-25		11
201	Electronic Structure of Diamond Surfaces Functionalized by Ru(tpy)2. *Journal of Physical Chemistry C*, **2012**, 116, 13877-13883	3.8	21
200	Molecular adsorption on ZnO(1010) single-crystal surfaces: morphology and charge transfer. *Langmuir*, **2012**, 28, 10437-45	4	44
199	Photochemical grafting of organic alkenes to single-crystal TiO2 surfaces: a mechanistic study. *Langmuir*, **2012**, 28, 12085-93	4	12
198	Covalent attachment of catalyst molecules to conductive diamond: CO2 reduction using "smart" electrodes. *Journal of the American Chemical Society*, **2012**, 134, 15632-5	16.4	155
197	Chemically directed assembly of photoactive metal oxide nanoparticle heterojunctions via the copper-catalyzed azide-alkyne cycloaddition "click" reaction. *ACS Nano*, **2012**, 6, 310-8	16.7	37
196	Facile solution synthesis of FeF3 3H2O nanowires and their conversion to Fe2O3 nanowires for photoelectrochemical application. *Nano Letters*, **2012**, 12, 724-31	11.5	190
195	Formation of self-assembled monolayers of conjugated molecules on TiO2 surfaces by thermal grafting of aryl and benzyl halides. *Langmuir*, **2012**, 28, 6866-76	4	12
194	Chemically assembled heterojunctions of SnO2 nanorods with TiO2 nanoparticles via click chemistry. *Journal of Materials Chemistry*, **2012**, 22, 11561		12
193	Titanium dioxide nanoparticles produce phototoxicity in the developing zebrafish. *Nanotoxicology*, **2012**, 6, 670-9	5.3	111
192	Modular "click" chemistry for electrochemically and photoelectrochemically active molecular interfaces to tin oxide surfaces. *ACS Applied Materials & Interfaces*, **2011**, 3, 3110-9	9.5	35
191	Characterization of molecular and biomolecular layers on diamond thin films by infrared reflection absorption spectroscopy. *Diamond and Related Materials*, **2011**, 20, 733-742	3.5	5

190	Infrared spectroscopy for characterization of biomolecular interfaces **2011**, 57-82		2
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