Alexander Wei

List of Publications by Citations

129 papers	8,043 citations	42 h-index	88 g-index
139 ext. papers	8,614 ext. citations	7.2 avg, IF	5.93 L-index

#	Paper	IF	Citations
129	In vitro and in vivo two-photon luminescence imaging of single gold nanorods. *Proceedings of the National Academy of Sciences of the United States of America*, **2005**, 102, 15752-6	11.5	858
128	Gold Nanorods Mediate Tumor Cell Death by Compromising Membrane Integrity. *Advanced Materials*, **2007**, 19, 3136-3141	24	491
127	Gold nanorods as contrast agents for biological imaging: optical properties, surface conjugation and photothermal effects. *Photochemistry and Photobiology*, **2009**, 85, 21-32	3.6	450
126	Hyperthermic effects of gold nanorods on tumor cells. *Nanomedicine*, **2007**, 2, 125-32	5.6	449
125	Resonant Field Enhancements from Metal Nanoparticle Arrays. *Nano Letters*, **2004**, 4, 153-158	11.5	346
124	Toxicological studies on silver nanoparticles: challenges and opportunities in assessment, monitoring and imaging. *Nanomedicine*, **2011**, 6, 879-98	5.6	289
123	Self-assembly of cobalt nanoparticle rings. *Journal of the American Chemical Society*, **2002**, 124, 7914-5	16.4	283
122	Controlling the cellular uptake of gold nanorods. *Langmuir*, **2007**, 23, 1596-9	4	271
121	Dithiocarbamate assembly on gold. *Journal of the American Chemical Society*, **2005**, 127, 7328-9	16.4	237
120	Self-organization of large gold nanoparticle arrays. *Journal of the American Chemical Society*, **2001**, 123, 7955-6	16.4	234
119	Detoxification of gold nanorods by treatment with polystyrenesulfonate. *ACS Nano*, **2008**, 2, 2481-8	16.7	207
118	Calixarene-encapsulated nanoparticles: self-assembly into functional nanomaterials. *Chemical Communications*, **2006**, 1581-91	5.8	150
117	Flux closure in self-assembled cobalt nanoparticle rings. *Angewandte Chemie - International Edition*, **2003**, 42, 5591-3	16.4	146
116	Tunable surface-enhanced Raman scattering from large gold nanoparticle arrays. *ChemPhysChem*, **2001**, 2, 743-5	3.2	145
115	Plasmon-resonant gold nanorods as low backscattering albedo contrast agents for optical coherence tomography. *Optics Express*, **2006**, 14, 6724-38	3.3	143
114	Sulfide-Arrested Growth of Gold Nanorods. *Chemistry of Materials*, **2005**, 17, 4256-4261	9.6	129
113	Magnetomotive contrast for in vivo optical coherence tomography. *Optics Express*, **2005**, 13, 6597-614	3.3	128

112	Gold nanorod arrays as plasmonic cavity resonators. *ACS Nano*, **2008**, 2, 2569-76	16.7	122
111	Gyromagnetic imaging: dynamic optical contrast using gold nanostars with magnetic cores. *Journal of the American Chemical Society*, **2009**, 131, 9728-34	16.4	104
110	Dispersion and Stability Studies of Resorcinarene-Encapsulated Gold Nanoparticles. *Langmuir*, **2002**, 18, 3676-3681	4	104
109	Plasmon-resonant nanoparticles and nanostars with magnetic cores: synthesis and magnetomotive imaging. *ACS Nano*, **2010**, 4, 5163-73	16.7	97
108	Off-axis electron holography of magnetic nanowires and chains, rings, and planar arrays of magnetic nanoparticles. *Microscopy Research and Technique*, **2004**, 64, 390-402	2.8	94
107	In vivo photoacoustic mapping of lymphatic systems with plasmon-resonant nanostars. *Journal of Materials Chemistry*, **2011**, 21, 2841-2844		91
106	Citrate-stabilized gold nanorods. *Langmuir*, **2014**, 30, 13727-30	4	89
105	Pd- and Ni-catalyzed cross-coupling reactions in the synthesis of organic electronic materials. *Science and Technology of Advanced Materials*, **2014**, 15, 044201	7.1	87
104	Challenges and opportunities in the advancement of nanomedicines. *Journal of Controlled Release*, **2012**, 164, 236-46	11.7	87
103	Synthesis of gold nanoparticles inside polyelectrolyte brushes. *Journal of Materials Chemistry*, **2007**, 17, 3433		79
102	Imaging gold nanorods in excised human breast carcinoma by spectroscopic optical coherence tomography. *Journal of Materials Chemistry*, **2009**, 19, 6407		74
101	Spherical ensembles of gold nanoparticles on silica: electrostatic and size effects. *Chemical Communications*, **2002**, 1604-5	5.8	74
100	Simultaneous SERS detection of copper and cobalt at ultratrace levels. *Nanoscale*, **2013**, 5, 5841-6	7.7	73
99	Polymer-iron oxide composite nanoparticles for EPR-independent drug delivery. *Biomaterials*, **2016**, 101, 285-95	15.6	69
98	Biological Evaluation of Rationally Modified Analogs of the H-Type II Blood Group Trisaccharide. A Correlation between Solution Conformation and Binding Affinity. *Journal of the American Chemical Society*, **1995**, 117, 9432-9436	16.4	68
97	Uniform gold nanorod arrays from polyethylenimine-coated alumina templates. *Journal of Physical Chemistry B*, **2005**, 109, 23336-41	3.4	64
96	Dithiocarbamate-coated SERS substrates: sensitivity gain by partial surface passivation. *Langmuir*, **2009**, 25, 13833-9	4	61
95	Temperature-controlled regioselectivity in the reductive cleavage of p-methoxybenzylidene acetals. *Journal of Organic Chemistry*, **2004**, 69, 7206-11	4.2	57

94	Encapsulation of Neutral Gold Nanoclusters by Resorcinarenes. *Langmuir*, **1999**, 15, 8337-8339	4	57
93	Preferred Conformations of C-Glycosides. 14. Synthesis and Conformational Analysis of Carbon Analogs of the Blood Group Determinant H-Type II. *Journal of Organic Chemistry*, **1995**, 60, 2160-2169	4.2	56
92	Assembly of dithiocarbamate-anchored monolayers on gold surfaces in aqueous solutions. *Langmuir*, **2008**, 24, 8660-6	4	55
91	Preferred conformation of C-glycosides. 12. Synthesis and conformational analysis of .alpha.,.alpha.-, .alpha.,.beta.-, and .beta.,.beta.-C-trehaloses. *Journal of Organic Chemistry*, **1994**, 59, 88-96	4.2	53
90	Silver nanoparticle-specific mitotoxicity in Daphnia magna. *Nanotoxicology*, **2014**, 8, 833-42	5.3	47
89	Protein Corona Analysis of Silver Nanoparticles Exposed to Fish Plasma. *Environmental Science and Technology Letters*, **2017**, 4, 174-179	11	44
88	Synthesis of L-sugars from 4-deoxypentenosides. *Organic Letters*, **2002**, 4, 2281-3	6.2	42
87	Stereoelectronic factors in the stereoselective epoxidation of glycals and 4-deoxypentenosides. *Journal of Organic Chemistry*, **2011**, 76, 2532-47	4.2	39
86	Orthogonal sulfation strategy for synthetic heparan sulfate ligands. *Organic Letters*, **2005**, 7, 5095-8	6.2	39
85	Cluster size analysis of two-dimensional order in colloidal gold nanoparticle arrays. *Langmuir*, **2004**, 20, 9360-5	4	39
84	Synergistic effects of cisplatin chemotherapy and gold nanorod-mediated hyperthermia on ovarian cancer cells and tumors. *Nanomedicine*, **2014**, 9, 1939-55	5.6	35
83	Self-assembly and flux closure studies of magnetic nanoparticle rings. *Journal of Materials Chemistry*, **2011**, 21, 16686		35
82	Mirror-image carbohydrates: synthesis of the unnatural enantiomer of a blood group trisaccharide. *Journal of Organic Chemistry*, **2004**, 69, 3391-9	4.2	35
81	Lasing Action with Gold Nanorod Hyperbolic Metamaterials. *ACS Photonics*, **2017**, 4, 674-680	6.3	34
80	Reversal of Flux Closure States in Cobalt Nanoparticle Rings With Coaxial Magnetic Pulses. *Advanced Materials*, **2008**, 20, 4248-4252	24	32
79	Resorcinarene-Encapsulated Nanoparticles: Building Blocks for Self-Assembled Nanostructures. *Journal of Inclusion Phenomena and Macrocyclic Chemistry*, **2001**, 41, 83-86		32
78	Cys34-PEGylated Human Serum Albumin for Drug Binding and Delivery. *Bioconjugate Chemistry*, **2015**, 26, 941-9	6.3	31
77	Two-photon Luminescence Imaging of Bacillus Spores Using Peptide-functionalized Gold Nanorods. *Nano Research*, **2008**, 1, 450	10	31

76	Self-assembly of Resorcinarene-stabilized Gold Nanoparticles: Influence of the Macrocyclic Headgroup. *Supramolecular Chemistry*, **2005**, 17, 173-180	1.8	31
75	Trace detection of tetrabromobisphenol A by SERS with DMAP-modified magnetic gold nanoclusters. *Nanoscale*, **2015**, 7, 10931-5	7.7	29
74	Bishydrazide glycoconjugates for lectin recognition and capture of bacterial pathogens. *Bioconjugate Chemistry*, **2010**, 21, 2065-75	6.3	28
73	Encapsulation and Functionalization of Nanoparticles in Crosslinked Resorcinarene Shells. *Journal of Materials Chemistry*, **2007**, 17, 105-112		27
72	Optimized Synthesis of an Orthogonally Protected Glucosamine. *Synthesis*, **2002**, 2002, 487-490	2.9	26
71	Nanosilver-coated socks and their toxicity to zebrafish (Danio rerio) embryos. *Chemosphere*, **2015**, 119, 948-952	8.4	25
70	Optical imaging with dynamic contrast agents. *Chemistry - A European Journal*, **2011**, 17, 1080-91	4.8	25
69	Vascular toxicity of silver nanoparticles to developing zebrafish (Danio rerio). *Nanotoxicology*, **2016**, 10, 1363-72	5.3	23
68	Stereoselective synthesis of [13C]methyl 2-[15N]amino-2-deoxy-beta-D-glucopyranoside derivatives. *Carbohydrate Research*, **2001**, 334, 271-9	2.9	22
67	Encagement of Gold Nanoclusters in Crosslinked Resorcinarene Shells. *Supramolecular Chemistry*, **2002**, 14, 291-294	1.8	22
66	Prenucleation and coalescence of cobalt nanoclusters mediated by multivalent calixarene complexes. *Chemical Communications*, **2009**, 4254-6	5.8	20
65	Resorcinarene-Encapsulated Gold Nanorods: Solvatochromatism and Magnetic Nanoshell Formation. *Supramolecular Chemistry*, **2008**, 20, 35-40	1.8	20
64	syn additions to 4alpha-epoxypyranosides: synthesis of L-idopyranosides. *Organic Letters*, **2007**, 9, 4849-52	5.2	20
63	Glycosyl dithiocarbamates: β-selective couplings without auxiliary groups. *Journal of Organic Chemistry*, **2014**, 79, 2611-24	4.2	19
62	Preparation of Super-Stable Gold Nanorods via Encapsulation into Block Copolymer Micelles. *ACS Applied Materials & Interfaces*, **2012**, 4, 1872-7	9.5	19
61	Conversion of D-glucals into L-glycals and mirror-image carbohydrates. *Organic Letters*, **2004**, 6, 119-21	6.2	19
60	Flux Closure in Self-Assembled Cobalt Nanoparticle Rings. *Angewandte Chemie*, **2003**, 115, 5749-5751	3.6	19
59	Fabrication of anisotropic metal nanostructures using innovations in template-assisted lithography. *ACS Nano*, **2012**, 6, 998-1003	16.7	18

58	Gold nanorods: multifunctional agents for cancer imaging and therapy. *Methods in Molecular Biology*, **2010**, 624, 119-30	1.4	18
57	Calixarene-stabilised cobalt nanoparticle rings: Self-assembly and collective magnetic properties. *Supramolecular Chemistry*, **2009**, 21, 189-195	1.8	18
56	Extraction and Dispersion of Large Gold Nanoparticles in Nonpolar Solvents. *Journal of Dispersion Science and Technology*, **2001**, 22, 485-489	1.5	18
55	Nanometric resolution in the hydrodynamic size analysis of ligand-stabilized gold nanorods. *Langmuir*, **2014**, 30, 13737-43	4	17
54	Nanoprobe implantation into mammalian cells by cationic transfection. *Chemical Communications*, **2004**, 784-5	5.8	17
53	TiN@TiO2 CoreShell Nanoparticles as Plasmon-Enhanced Photosensitizers: The Role of Hot Electron Injection. *Laser and Photonics Reviews*, **2020**, 14, 1900376	8.3	16
52	Differential response of macrophages to core-shell Fe3O4@Au nanoparticles and nanostars. *Nanoscale*, **2012**, 4, 7143-8	7.7	16
51	Stereoselective epoxidation of 4-deoxypentenosides: a polarized-pi model. *Organic Letters*, **2006**, 8, 4545-8	5.2	16
50	Time-Resolved Proteomic Visualization of Dendrimer Cellular Entry and Trafficking. *Journal of the American Chemical Society*, **2015**, 137, 12772-12775	16.4	15
49	Formation of the ST12 phase in nanocrystalline Ge at ambient pressure. *Journal of Materials Chemistry*, **2010**, 20, 331-337		15
48	siRNA Delivery Using Dithiocarbamate-Anchored Oligonucleotides on Gold Nanorods. *Bioconjugate Chemistry*, **2019**, 30, 443-453	6.3	15
47	Plasmonic Nanomaterials. *Nanostructure Science and Technology*, **2004**, 173-200	0.9	14
46	Label-free detection of Staphylococcus aureus captured on immutable ligand arrays. *ACS Applied Materials & Interfaces*, **2013**, 5, 6404-11	9.5	13
45	Glycal assembly by the in situ generation of glycosyl dithiocarbamates. *Organic Letters*, **2012**, 14, 3380-3	6.2	13
44	Photolithography of Dithiocarbamate-Anchored Monolayers and Polymers on Gold. *Journal of Materials Chemistry*, **2011**, 21, 4371-4376		13
43	Designing Plasmonic Nanomaterials as Sensors of Biochemical Transport. *E-Journal of Surface Science and Nanotechnology*, **2006**, 4, 9-18	0.7	13
42	Preparation of orthogonally protected chitosan oligosaccharides: observation of an anomalous remote substituent effect. *Carbohydrate Research*, **2002**, 337, 1319-24	2.9	13
41	Plasmon-resonant gold nanorods provide spectroscopic OCT contrast in excised human breast tumors **2008**,		11

40	Rapid Uptake and Photodynamic Inactivation of Staphylococci by Ga(III)-Protoporphyrin IX. *ACS Infectious Diseases*, **2018**, 4, 1564-1573	5.5	11
39	Calixarene-Mediated Synthesis of Cobalt Nanoparticles: An Accretion Model for Separate Control over Nucleation and Growth. *Chemistry of Materials*, **2014**, 26, 941-950	9.6	10
38	Synthesis and Characterization of Resorcinarene-Encapsulated Nanoparticles. *Materials Research Society Symposia Proceedings*, **1999**, 581, 59		10
37	Synthesis and reactivity of 4-deoxypentenosyl disaccharides. *Journal of Organic Chemistry*, **2014**, 79, 4878-91	4.2	9
36	Tuning the Optical Properties of Large Gold Nanoparticle Arrays. *Materials Research Society Symposia Proceedings*, **2001**, 676, 611		9
35	Roll-to-Roll Manufactured Sensors for Nitroaromatic Organophosphorus Pesticides Detection. *ACS Applied Materials & Interfaces*, **2021**, 13, 35961-35971	9.5	9
34	Micellization and Single-Particle Encapsulation with Dimethylammoniopropyl Sulfobetaines. *ACS Omega*, **2017**, 2, 1287-1294	3.9	8
33	PRACTICAL SYNTHESIS OF AROMATIC DITHIOCARBAMATES. *Synthetic Communications*, **2014**, 44, 2336-2343		8
32	Dry Etching with Nanoparticles: Formation of High Aspect-Ratio Pores and Channels Using Magnetic Gold Nanoclusters. *Advanced Materials*, **2018**, 30, 1703091	24	8
31	Selective Detection of Ethylene by MoS-Carbon Nanotube Networks Coated with Cu(I)-Pincer Complexes. *ACS Sensors*, **2020**, 5, 1699-1706	9.2	7
30	Metal-mesh lithography. *ACS Applied Materials & Interfaces*, **2011**, 3, 4812-8	9.5	7
29	Probing osmotic effects on invertase with L-(-)-sucrose. *Organic and Biomolecular Chemistry*, **2008**, 6, 3362-5	3.9	7
28	Solid-Phase Synthesis of 2-Aminoethyl Glucosamine Sulfoforms. *Journal of Carbohydrate Chemistry*, **2012**, 31, 384-419	1.7	6
27	Solid-phase synthesis of alpha-glucosamine sulfoforms with fragmentation analysis by tandem mass spectrometry. *Journal of Organic Chemistry*, **2008**, 73, 6059-72	4.2	6
26	Signal Generation with Gold Nanoparticles: Photophysical Properties for Sensor and Imaging Applications	319-349	
25	15N Nuclear Magnetic Resonance Spectroscopy. Changes in Nuclear Overhauser Effects andT1with Viscosity. *Journal of the American Chemical Society*, **1997**, 119, 2915-2920	16.4	5
24	Antimicrobial photodynamic activity of gallium-substituted haemoglobin on silver nanoparticles. *Nanoscale*, **2020**, 12, 21734-21742	7.7	5
23	Label-Free Detection and Discrimination of Bacterial Pathogens Based on Hemin Recognition. *Bioconjugate Chemistry*, **2016**, 27, 1713-22	6.3	5

22	Sulfoform generation from an orthogonally protected disaccharide. *Carbohydrate Research*, **2012**, 355, 19-27	2.9	4
21	Evaluation of steric effects on the exocyclic conformations of 6-C-methyl-substituted 2-acetamido-2-deoxy-beta-D-glucopyranosides. *Carbohydrate Research*, **2002**, 337, 83-6	2.9	4
20	Frozen-solution conformational analysis by REDOR spectroscopy. *Journal of the American Chemical Society*, **2003**, 125, 14958-9	16.4	4
19	Steady-State and Transient Performance of Ion-Sensitive Electrodes Suitable for Wearable and Implantable Electro-chemical Sensing. *IEEE Transactions on Biomedical Engineering*, **2021**, PP,	5	4
18	Eco-friendly (green) synthesis of magnetically active gold nanoclusters. *Science and Technology of Advanced Materials*, **2017**, 18, 210-218	7.1	3
17	A zinc-responsive fluorophore based on 5?-(p-hydroxyphenyl)-pyridylthiazole. *Materials Chemistry Frontiers*, **2020**, 4, 899-904	7.8	3
16	Cryoprotection with L- and meso-trehalose: stereochemical implications. *ChemBioChem*, **2006**, 7, 1959-64	3.8	3
15	Synthesis and conformational analysis of 6-C-methyl-substituted 2-acetamido-2-deoxy-beta-D-glucopyranosyl mono- and disaccharides. *Journal of Organic Chemistry*, **2005**, 70, 214-26	4.2	3
14	Lithium Naphthalenide **2014**, 1-6		1
13	Gold Nanorods as Theranostic Agents **2011**, 659-681		1
12	Ligand-functionalized gold nanorods as theragnostic agents **2009**,		1
11	Plasmon-resonant nanorods as multimodal agents for two-photon luminescent imaging and photothermal therapy **2007**,		1
10	Focus on the Advances in Nanomedicine Symposium, 233rd National Meeting of the American Chemical Society, 2006. *Nanomedicine*, **2007**, 2, 83-83	5.6	1
9	Controlled Growth of Gold Nanorod Arrays from Polyethylenimine-coated Alumina Templates. *Materials Research Society Symposia Proceedings*, **2005**, 900E, O.12.32.1-O.12.32.7		1
8	Antidelaminating, Thermally Stable, and Cost-Effective Flexible Kapton Platforms for Nitrate Sensors, Mercury Aptasensors, Protein Sensors, and p-Type Organic Thin-Film Transistors. *ACS Applied Materials & Interfaces*, **2021**, 13, 11369-11384	9.5	1
7	Chiroptical Transitions of Enantiomeric Ligand-Activated Nickel Oxides.. *Small*, **2022**, e2107570	11	0
6	Calixarene-Encapsulated Nanoparticles: Synthesis, Stabilization, and Self-Assembly **2016**, 921-939		
5	Focus on organic electronics. *Science and Technology of Advanced Materials*, **2014**, 15, 040301	7.1	

4	Cellular Interactions of Plasmon-Resonant Gold Nanorods **2010**, 507-533	
3	Off-Axis Electron Holography of Self-Assembled Co Nanoparticle Rings. *Materials Research Society Symposia Proceedings*, **2007**, 1026, 1	
2	TEM Image Analysis of Self-Organized Large Gold Nanoparticle Arrays. *Microscopy and Microanalysis* , **2002**, 8, 1134-1135	0.5
1	XIIIth International Symposium on Supramolecular Chemistry, University of Notre Dame, SouthBend, IN, July 25□0, 2004: Preface. *Supramolecular Chemistry*, **2005**, 17, 7-8	1.8