

Amy Szuchmacher Blum

List of Publications by Year in descending order

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Version: 2024-02-01

45
papers

2,148
citations

257450

24
h-index

254184

43
g-index

47
all docs

47
docs citations

47
times ranked

2789
citing authors

#	ARTICLE	IF	CITATIONS
1	Molecularly inherent voltage-controlled conductance switching. <i>Nature Materials</i> , 2005, 4, 167-172.	27.5	352
2	Cowpea Mosaic Virus as a Scaffold for 3-D Patterning of Gold Nanoparticles. <i>Nano Letters</i> , 2004, 4, 867-870.	9.1	209
3	Critical phenomena of water bridges in nanoasperity contacts. <i>Journal of Chemical Physics</i> , 2001, 114, 1355-1360.	3.0	171
4	Ru ₂ (ap) ₄ (f-oligo(phenyleneethynyl)) Molecular Wires: Synthesis and Electronic Characterization. <i>Journal of the American Chemical Society</i> , 2005, 127, 10010-10011.	13.7	151
5	Fluorescent Signal Amplification of Carbocyanine Dyes Using Engineered Viral Nanoparticles. <i>Journal of the American Chemical Society</i> , 2006, 128, 5184-5189.	13.7	123
6	An Engineered Virus as a Scaffold for Three-Dimensional Self-Assembly on the Nanoscale. <i>Small</i> , 2005, 1, 702-706.	10.0	114
7	A cowpea mosaic virus nanoscaffold for multiplexed antibody conjugation: Application as an immunoassay tracer. <i>Biosensors and Bioelectronics</i> , 2006, 21, 1668-1673.	10.1	80
8	Comparing the conductivity of molecular wires with the scanning tunneling microscope. <i>Applied Physics Letters</i> , 2003, 82, 3322-3324.	3.3	71
9	Effect of Interfacial Liquid Structuring on the Coherence Length in Nanolubrication. <i>Physical Review Letters</i> , 2002, 88, 154302.	7.8	70
10	Solution Phase Gold Nanorings on a Viral Protein Template. <i>Nano Letters</i> , 2012, 12, 629-633.	9.1	68
11	Charge Transport and Scaling in Molecular Wires. <i>Journal of Physical Chemistry B</i> , 2004, 108, 18124-18128.	2.6	65
12	Role of Hexahistidine in Directed Nanoassemblies of Tobacco Mosaic Virus Coat Protein. <i>ACS Nano</i> , 2011, 5, 1606-1616.	14.6	61
13	Single-Molecule Charge-Transport Measurements that Reveal Technique-Dependent Perturbations. <i>Journal of the American Chemical Society</i> , 2006, 128, 11260-11267.	13.7	60
14	Iron Oxide Surface Chemistry: Effect of Chemical Structure on Binding in Benzoic Acid and Catechol Derivatives. <i>Langmuir</i> , 2017, 33, 3000-3013.	3.5	50
15	Toward Single Molecule Detection of Staphylococcal Enterotoxin B: Mobile Sandwich Immunoassay on Gliding Microtubules. <i>Analytical Chemistry</i> , 2008, 80, 5433-5440.	6.5	42
16	Efficient One-Step PEG-Silane Passivation of Glass Surfaces for Single-Molecule Fluorescence Studies. <i>ACS Applied Materials & Interfaces</i> , 2018, 10, 39505-39511.	8.0	40
17	Molecular electronics based nanosensors on a viral scaffold. <i>Biosensors and Bioelectronics</i> , 2011, 26, 2852-2857.	10.1	35
18	Separation and recovery of intact gold-virus complex by agarose electrophoresis and electroelution: Application to the purification of cowpea mosaic virus and colloidal gold complex. <i>Electrophoresis</i> , 2004, 25, 2901-2906.	2.4	33

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19	Templated self-assembly of quantum dots from aqueous solution using protein scaffolds. <i>Nanotechnology</i> , 2006, 17, 5073-5079.	2.6	32
20	An Engineered Virus as a Bright Fluorescent Tag and Scaffold for Cargo Proteins—Capture and Transport by Gliding Microtubules. <i>Journal of Nanoscience and Nanotechnology</i> , 2006, 6, 2451-2460.	0.9	32
21	Stable water-soluble iron oxide nanoparticles using Tiron. <i>Materials Chemistry and Physics</i> , 2013, 138, 29-37.	4.0	32
22	One-step ligand exchange and switching from hydrophobic to water-stable hydrophilic superparamagnetic iron oxide nanoparticles by mechanochemical milling. <i>Chemical Communications</i> , 2016, 52, 3054-3057.	4.1	31
23	Metrology for molecular electronics. <i>Analytica Chimica Acta</i> , 2006, 568, 20-27.	5.4	28
24	Quantum Dot Fluorescence as a Function of Alkyl Chain Length in Aqueous Environments. <i>Langmuir</i> , 2008, 24, 9194-9197.	3.5	25
25	Short ligands offer long-term water stability and plasmon tunability for silver nanoparticles. <i>RSC Advances</i> , 2015, 5, 6553-6559.	3.6	25
26	Recent Advances in Bio-Templated Metallic Nanomaterial Synthesis and Electrocatalytic Applications. <i>ChemSusChem</i> , 2021, 14, 758-791.	6.8	24
27	Conductance Switching in the Photoswitchable Protein Dronpa. <i>Journal of the American Chemical Society</i> , 2012, 134, 16119-16122.	13.7	17
28	Viral-based nanomaterials for plasmonic and photonic materials and devices. <i>Wiley Interdisciplinary Reviews: Nanomedicine and Nanobiotechnology</i> , 2018, 10, e1508.	6.1	15
29	Electronic Properties of Molecular Memory Circuits on a Nanoscale Scaffold. <i>IEEE Transactions on Nanobioscience</i> , 2007, 6, 270-274.	3.3	14
30	Nanoring formation via <i>in situ</i> photoreduction of silver on a virus scaffold. <i>Nanotechnology</i> , 2016, 27, 485603.	2.6	14
31	Biosynthesized silver nanorings as a highly efficient and selective electrocatalysts for CO ₂ reduction. <i>Nanoscale</i> , 2019, 11, 18595-18603.	5.6	12
32	Long term storage of virus templated fluorescent materials for sensing applications. <i>Nanotechnology</i> , 2008, 19, 105504.	2.6	9
33	Molecular sensing: modulating molecular conduction through intermolecular interactions. <i>Physical Chemistry Chemical Physics</i> , 2013, 15, 8318.	2.8	8
34	Nanometals templated by tobacco mosaic virus coat protein with enhanced catalytic activity. <i>Applied Catalysis B: Environmental</i> , 2021, 298, 120540.	20.2	7
35	Tunable longitudinal modes in extended silver nanoparticle assemblies. <i>Beilstein Journal of Nanotechnology</i> , 2016, 7, 1219-1228.	2.8	6
36	Sensing of heavy metal ions by intrinsic TMV coat protein fluorescence. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2018, 195, 21-24.	3.9	6

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37	Tobacco Mosaic Virus Capsid Protein as Targets for the Self-Assembly of Gold Nanoparticles. <i>Methods in Molecular Biology</i> , 2014, 1108, 105-112.	0.9	4
38	Tunable Assembly of Protein Enables Fabrication of Platinum Nanostructures with Different Catalytic Activity. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 52588-52597.	8.0	4
39	Plasmonic Enhancement of Two-Photon Excitation Fluorescence by Colloidal Assemblies of Very Small AuNPs Templated on M13 Phage. <i>Biomacromolecules</i> , 2020, 21, 2705-2713.	5.4	3
40	Biomolecular Self-Assembly of Nanorings on a Viral Protein Template. <i>Biomacromolecules</i> , 2022, 23, 3407-3416.	5.4	2
41	Dual-affinity peptides to generate dense surface coverages of nanoparticles. <i>Applied Surface Science</i> , 2014, 296, 24-30.	6.1	1
42	TMV Disk Scaffolds for Making sub-30 nm Silver Nanorings. <i>Methods in Molecular Biology</i> , 2018, 1798, 109-118.	0.9	1
43	Alcohol-perturbed self-assembly of the tobacco mosaic virus coat protein. <i>Beilstein Journal of Nanotechnology</i> , 2022, 13, 355-362.	2.8	1
44	Virus Nanoparticles for Signal Enhancement in Microarray Biosensors. <i>ACS Symposium Series</i> , 2009, , 141-154.	0.5	0
45	The Importance of Calcium Ions in Poly-A RNA Mediated Tobacco Mosaic Virus-Like Rod Formation. <i>Journal of Nanoscience and Nanotechnology</i> , 2017, 17, 224-230.	0.9	0