Tanya Prozorov

List of Publications by Year
in descending order

58	2,474	236925 25	206112 48
papers	citations	h-index	g-index

59	59	59	3571
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Self-Assembled Monolayers of Alkanesulfonic and -phosphonic Acids on Amorphous Iron Oxide Nanoparticles. Langmuir, 1999, 15, 7111-7115.	3.5	251
2	High Velocity Interparticle Collisions Driven by Ultrasound. Journal of the American Chemical Society, 2004, 126, 13890-13891.	13.7	186
3	A Cultured Greigite-Producing Magnetotactic Bacterium in a Novel Group of Sulfate-Reducing Bacteria. Science, 2011, 334, 1720-1723.	12.6	184
4	Protein-Mediated Synthesis of Uniform Superparamagnetic Magnetite Nanocrystals. Advanced Functional Materials, 2007, 17, 951-957.	14.9	154
5	Sonochemistry and Sonoluminescence of Room-Temperature Ionic Liquids. Journal of the American Chemical Society, 2003, 125, 11138-11139.	13.7	132
6	Novel magnetic nanomaterials inspired by magnetotactic bacteria: Topical review. Materials Science and Engineering Reports, 2013, 74, 133-172.	31.8	124
7	Biomimetic Self-Assembling Copolymerâ^'Hydroxyapatite Nanocomposites with the Nanocrystal Size Controlled by Citrate. Chemistry of Materials, 2011, 23, 2481-2490.	6.7	98
8	Self-Assembly and Biphasic Iron-Binding Characteristics of Mms6, A Bacterial Protein That Promotes the Formation of Superparamagnetic Magnetite Nanoparticles of Uniform Size and Shape. Biomacromolecules, 2012, 13, 98-105.	5.4	90
9	Nucleation of Iron Oxide Nanoparticles Mediated by Mms6 Protein in Situ. ACS Nano, 2014, 8, 9097-9106.	14.6	90
10	Magnetic nanoparticles as efficient bulk pinning centers in type-II superconductors. Physical Review B, 2005, 71, .	3.2	89
11	Cobalt Ferrite Nanocrystals: Out-Performing Magnetotactic Bacteria. ACS Nano, 2007, 1, 228-233.	14.6	86
12	The Mechanisms for Nanoparticle Surface Diffusion and Chain Self-Assembly Determined from Real-Time Nanoscale Kinetics in Liquid. Journal of Physical Chemistry C, 2015, 119, 21261-21269.	3.1	86
13	Magnetic irreversibility and the Verwey transition in nanocrystalline bacterial magnetite. Physical Review B, 2007, 76, .	3.2	84
14	Self-Assembled Monolayer Coatings on Amorphous Iron and Iron Oxide Nanoparticles:Â Thermal Stability and Chemical Reactivity Studies. Langmuir, 1997, 13, 6151-6158.	3.5	83
15	Isolation of obligately alkaliphilic magnetotactic bacteria from extremely alkaline environments. Environmental Microbiology, 2011, 13, 2342-2350.	3.8	72
16	Correlative Electron and Fluorescence Microscopy of Magnetotactic Bacteria in Liquid: Toward In Vivo Imaging. Scientific Reports, 2014, 4, 6854.	3.3	65
17	Size control of in vitro synthesized magnetite crystals by the MamC protein of Magnetococcus marinus strain MC-1. Applied Microbiology and Biotechnology, 2015, 99, 5109-5121.	3.6	60
18	Effect of graphite as a co-dopant on the dehydrogenation and hydrogenation kinetics of Ti-doped sodium aluminum hydride. Journal of Alloys and Compounds, 2005, 395, 252-262.	5.5	57

#	Article	IF	Citations
19	Metabolic engineering of an acid-tolerant yeast strain Pichia kudriavzevii for itaconic acid production. Metabolic Engineering Communications, 2020, 10, e00124.	3.6	53
20	The use of ultrasound radiation for the preparation of magnetic fluids. Thin Solid Films, 1998, 318, 38-41.	1.8	38
21	Effect of surfactant concentration on the size of coated ferromagnetic nanoparticles. Thin Solid Films, 1999, 340, 189-193.	1.8	34
22	Stomatobaculum longum gen. nov., sp. nov., an obligately anaerobic bacterium from the human oral cavity. International Journal of Systematic and Evolutionary Microbiology, 2013, 63, 1450-1456.	1.7	34
23	Sonochemical modification of the superconducting properties of MgB2. Applied Physics Letters, 2003, 83, 2019-2021.	3.3	30
24	Manganese incorporation into the magnetosome magnetite: magnetic signature of doping. European Journal of Mineralogy, 2014, 26, 457-471.	1.3	29
25	Synthesis of a novel photopolymerized nanocomposite hydrogel for treatment of acute mechanical damage to cartilage. Acta Biomaterialia, 2011, 7, 3094-3100.	8.3	25
26	The â€œMelting Pointâ€•of Alkanethiol-Coated Amorphous Fe2O3 Nanoparticles. Advanced Materials, 1998, 10, 532-535.	21.0	23
27	Direct Visualization of the Hydration Layer on Alumina Nanoparticles with the Fluid Cell STEM in situ. Scientific Reports, 2015, 5, 9830.	3.3	22
28	Magnetic microbes: Bacterial magnetite biomineralization. Seminars in Cell and Developmental Biology, 2015, 46, 36-43.	5.0	22
29	Off-axis electron holography of bacterial cells and magnetic nanoparticles in liquid. Journal of the Royal Society Interface, 2017, 14, 20170464.	3.4	22
30	Does the Self-Assembled Coating of Magnetic Nanoparticles Cover Individual Particles or Agglomerates?. Advanced Materials, 1998, 10, 1529-1532.	21.0	21
31	Salt Mediated Self-Assembly of Poly(ethylene glycol)-Functionalized Gold Nanorods. Scientific Reports, 2019, 9, 20349.	3.3	19
32	Visualization of Iron-Binding Micelles in Acidic Recombinant Biomineralization Protein, MamC. Journal of Nanomaterials, 2014, 2014, 1-7.	2.7	15
33	Effects of high-intensity ultrasound on Bi2Sr2CaCu2O8+x superconductor. Applied Physics Letters, 2004, 85, 3513-3515.	3.3	14
34	Effective collective barrier for magnetic relaxation in frozen ferrofluids. Journal of Magnetism and Magnetic Materials, 2004, 281, 312-317.	2.3	14
35	Following iron speciation in the early stages of magnetite magnetosome biomineralization. Journal of Materials Research, 2016, 31, 547-555.	2.6	14
36	Chemical Purity ofShewanella oneidensis-Induced Magnetites. Geomicrobiology Journal, 2013, 30, 731-748.	2.0	10

#	Article	IF	Citations
37	Sonochemical doping of Ti-catalyzed sodium aluminum hydride. Journal of Alloys and Compounds, 2006, 419, 162-171.	5.5	9
38	Direct Observation of Early Stages of Growth of Multilayered DNA-Templated Au-Pd-Au Core-Shell Nanoparticles in Liquid Phase. Frontiers in Bioengineering and Biotechnology, 2019, 7, 19.	4.1	9
39	Imaging of Unstained DNA Origami Triangles with Electron Microscopy. Small Methods, 2019, 3, 1900393.	8.6	7
40	Salt-Induced Liquidâ€“Liquid Phase Separation and Interfacial Crystal Formation in Poly(N-isopropylacrylamide)-Capped Gold Nanoparticles. Journal of Physical Chemistry C, 2021, 125, 5349-5362.	3.1	6
41	Superconducting Nanocomposites: Enhancement of Bulk Pinning and Improvement of Intergrain Coupling. IEEE Transactions on Applied Superconductivity, 2005, 15, 3277-3280.	1.7	3
42	Shape Transformation of Bimetallic Auâ€“Pd Coreâ€“Shell Nanocubes to Multilayered Auâ€“Pdâ€“Au Coreâ€“Shell Hexagonal Platelets. Metallography, Microstructure, and Analysis, 2015, 4, 481-487.	1.0	2
43	New approach to electron microscopy imaging of gel nanocomposites in situ. Micron, 2019, 120, 104-112.	2.2	2
44	Atom Probe Tomography Analysis of Mica. Microscopy and Microanalysis, 2021, , 1-14.	0.4	2
45	Correlative Fluorescence and Liquid Cell STEM of Live Magnetotactic Bacteria. Microscopy and Microanalysis, 2014, 20, 1510-1511.	0.4	1
46	In situ STEM Investigation of Shape-Controlled Synthesis of Au-Pd Core-Shell Nanocubes. Microscopy and Microanalysis, 2015, 21, 951-952.	0.4	1
47	Correlative Electron and Fluorescence Microscopy of Magnetotactic Bacteria in Liquid: Toward In Vivo Imaging. Microscopy and Microanalysis, 2015, 21, 1499-1500.	0.4	1
48	Unstained DNA Origami Imaging: Imaging of Unstained DNA Origami Triangles with Electron Microscopy (Small Methods 12/2019). Small Methods, 2019, 3, 1970039.	8.6	1
49	High-<tex>T_c</tex>Superconductors-Based Nanocomposites With Improved Intergrain Coupling and Enhanced Bulk Pinning. IEEE Transactions on Applied Superconductivity, 2005, 15, 3114-3117.	1.7	0
50	Protein-Mediated Nucleation of Nanoparticles In-Situ. Microscopy and Microanalysis, 2014, 20, 1604-1605.	0.4	0
51	Visualization of Gold Nanoparticle Self-assembly Kinetics. Microscopy and Microanalysis, 2015, 21, 945-946.	0.4	0
52	New Approach to Analysis of Noisy EELS Data. Microscopy and Microanalysis, 2015, 21, 1593-1594.	0.4	0
53	Correlative in situ Analysis of Magnetosome Magnetite Biomineralization. Microscopy and Microanalysis, 2016, 22, 12-13.	0.4	0
54	Direct Observation of the Growth of Au-Pd Core-Shell Nanoparticles Using Low-Dose STEM with the Liquid Cell in situ. Microscopy and Microanalysis, 2016, 22, 744-745.	0.4	0

#	Article	IF	Citations
55	Future Prospects for Biomolecular, Biomimetic, and Biomaterials Research Enabled by New Liquid Cell Electron Microscopy Techniques. , 0, , 476-500.		0
56	In-Situ Nucleation, Growth and Evolution of Au Nanoparticles during Metallization of DNA Origami Visualized with HAADF-STEM. Microscopy and Microanalysis, 2018, 24, 282-283.	0.4	0
57	Correlative Microbially-Assisted Imaging of Cellulose Deconstruction with Electron Microscopy. Microscopy and Microanalysis, 2018, 24, 382-383.	0.4	0
58	In-situ STEM Metallization of DNA Origami. Microscopy and Microanalysis, 2021, 27, 35-36.	0.4	0