Tobias Vossmeyer

List of Publications by Year
in descending order

62	2,208	279798	223800
papers	citations	23 h-index	46 g-index

63	63	63	3003
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Strengthening Engineered Nanocrystal Three-Dimensional Superlattices via Ligand Conformation and Reactivity. ACS Nano, 2022, 16, 11692-11707.	14.6	8
2	Transfer Printing of Freestanding Nanoassemblies: A Route to Membrane Resonators with Adjustable Prestress. ACS Applied Materials & Interfaces, 2021, 13, 40932-40941.	8.0	3
3	Little Adjustments Significantly Simplify the Gram-Scale Synthesis of High-Quality Iron Oxide Nanocubes. Langmuir, 2021, 37, 9851-9857.	3.5	3
4	Constitutive and fracture behavior of ultra-strong supercrystalline nanocomposites. Applied Physics Reviews, 2021, 8, 031414.	11.3	7
5	Gold Nanoparticle-Based Chemiresistors: Recognition of Volatile Organic Compounds Using Tunable Response Kinetics. ACS Applied Nano Materials, 2021, 4, 10399-10408.	5.0	8
6	Pressure Sensors: Crossâ€Linked Gold Nanoparticle Composite Membranes as Highly Sensitive Pressure Sensors (Adv. Funct. Mater. 40/2020). Advanced Functional Materials, 2020, 30, 2070269.	14.9	1
7	Fully Printed Flexible Chemiresistors with Tunable Selectivity Based on Gold Nanoparticles. Chemosensors, 2020, 8, 116.	3.6	5
8	Mapping the Mechanical Properties of Hierarchical Supercrystalline Ceramic-Organic Nanocomposites. Molecules, 2020, 25, 4790.	3.8	9
9	Crossâ€Linked Gold Nanoparticle Composite Membranes as Highly Sensitive Pressure Sensors. Advanced Functional Materials, 2020, 30, 2003381.	14.9	20
10	Fully Printed Flexible Chemiresistors with Tunable Selectivity Based on Gold Nanoparticle Composites. Proceedings (mdpi), 2020, 56, .	0.2	0
11	Towards Nanomaterials-Based Biocompatible and Biodegradable Strain Sensors for Healthcare and Medical Applications. Proceedings (mdpi), 2020, 56, 17.	0.2	1
12	Seeded Growth Synthesis of Zirconia@Gold Particles in Aqueous Solution. Nanomaterials, 2020, 10, 1197.	4.1	1
13	Shape-controlling effects of hydrohalic and carboxylic acids in TiO2 nanoparticle synthesis. Journal of Chemical Physics, 2020, 152, 064702.	3.0	8
14	Lithographic Patterning and Selective Functionalization of Metal Nanoparticle Composite Films. ACS Applied Electronic Materials, 2020, 2, 3741-3748.	4.3	6
15	Cross-Linked Nanoparticle Membranes for Microelectromechanical Chemical Sensors and Pressure Sensors. Proceedings (mdpi), 2019, 2, .	0.2	0
16	Tuning the Elasticity of Cross-Linked Gold Nanoparticle Assemblies. Journal of Physical Chemistry C, 2019, 123, 19165-19174.	3.1	11
17	Modulating the Mechanical Properties of Supercrystalline Nanocomposite Materials via Solventâ€“Ligand Interactions. Langmuir, 2019, 35, 13893-13903.	3.5	26
18	Elasticity of Cross-Linked Titania Nanocrystal Assemblies Probed by AFM-Bulge Tests. Nanomaterials, 2019, 9, 1230.	4.1	6

#	Article	IF	Citations
19	Synthesis and thermal stability of ZrO₂@SiO₂ coreâ€“shell submicron particles. RSC Advances, 2019, 9, 26902-26914.	3.6	15
20	Alumina-Doped Zirconia Submicro-Particles: Synthesis, Thermal Stability, and Microstructural Characterization. Materials, 2019, 12, 2856.	2.9	13
21	Cross-Linked Polystyrene Shells Grown on Iron Oxide Nanoparticles via Surface-Grafted AGETâ€“ATRP in Microemulsion. Langmuir, 2019, 35, 8790-8798.	3.5	15
22	Hierarchical supercrystalline nanocomposites through the self-assembly of organically-modified ceramic nanoparticles. Scientific Reports, 2019, 9, 3435.	3.3	22
23	Highly Responsive PEG/Gold Nanoparticle Thin-Film Humidity Sensor via Inkjet Printing Technology. Langmuir, 2019, 35, 3256-3264.	3.5	53
24	Pressure induced local phase transformation in nanocrystalline tetragonal zirconia microparticles. Scripta Materialia, 2019, 163, 86-90.	5.2	4
25	Structure and Stability of PEGâ€•and Mixed PEGâ€Layerâ€Coated Nanoparticles at High Particle Concentrations Studied In Situ by Smallâ€Angle Xâ€Ray Scattering. Particle and Particle Systems Characterization, 2018, 35, 1700319.	2.3	17
26	Nanoparticle Composites as Functional Materials for Novel Devices: Chemical Sensing and Optoelectronic Applications. , 2018, , .		1
27	Fabrication of Strain Gauges via Contact Printing: A Simple Route to Healthcare Sensors Based on Cross-Linked Gold Nanoparticles. ACS Applied Materials & Interfaces, 2018, 10, 37374-37385.	8.0	42
28	Stability of rareâ€earthâ€doped spherical yttriaâ€stabilized zirconia synthesized by ultrasonic spray pyrolysis. Journal of the American Ceramic Society, 2017, 100, 4425-4434.	3.8	10
29	Cross-Linked Gold-Nanoparticle Membrane Resonators as Microelectromechanical Vapor Sensors. ACS Sensors, 2017, 2, 540-546.	7.8	21
30	Electrostatically Actuated Membranes of Cross-Linked Gold Nanoparticles: Novel Concepts for Electromechanical Gas Sensors. Proceedings (mdpi), 2017, 1, .	0.2	4
31	Membranes of organically cross-linked gold nanoparticles: Novel materials for MEMS/NEMS sensors and actuators. , 2017, , .		0
32	Electrostatically driven drumhead resonators based on freestanding membranes of cross-linked gold nanoparticles. Nanoscale, 2016, 8, 15880-15887.	5.6	19
33	Highâ€Temperature Stable Zirconia Particles Doped with Yttrium, Lanthanum, and Gadolinium. Particle and Particle Systems Characterization, 2016, 33, 645-655.	2.3	18
34	Determination of the packing fraction in photonic glass using synchrotron radiation nanotomography. Journal of Synchrotron Radiation, 2016, 23, 1440-1446.	2.4	9
35	Tuning the Interaction of Nanoparticles from Repulsive to Attractive by Pressure. Journal of Physical Chemistry C, 2016, 120, 19856-19861.	3.1	19
36	Gold nanoparticle superlattices: correlating chemiresistive responses with analyte sorption and swelling. Journal of Materials Chemistry C, 2016, 4, 8214-8225.	5.5	33

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37	Ligand Layer Engineering To Control Stability and Interfacial Properties of Nanoparticles. Langmuir, 2016, 32, 7897-7907.	3.5	31
38	Gold nanoparticle superlattices: structure and cavities studied by GISAXS and PALS. RSC Advances, 2016, 6, 113163-113172.	3.6	13
39	Yttria-stabilized zirconia microspheres: novel building blocks for high-temperature photonics. Journal of Materials Chemistry C, 2016, 4, 62-74.	5.5	34
40	Resistive pressure sensors based on freestanding membranes of gold nanoparticles. Nanoscale, 2016, 8, 183-186.	5.6	47
41	Synthesis and Characterization of Monodisperse Metallodielectric SiO₂@Pt@SiO₂ Coreâ€“Shellâ€“Shell Particles. Langmuir, 2016, 32, 848-857.	3.5	15
42	Synthesis of tripodal catecholates and their immobilization on zinc oxide nanoparticles. Beilstein Journal of Organic Chemistry, 2015, 11, 678-686.	2.2	9
43	Freestanding Membranes of Cross-Linked Gold Nanoparticles: Novel Functional Materials for Electrostatic Actuators. ACS Applied Materials & Interfaces, 2015, 7, 15123-15128.	8.0	30
44	Synthesis and thermal stability of zirconia and yttria-stabilized zirconia microspheres. Journal of Colloid and Interface Science, 2015, 448, 582-592.	9.4	70
45	Tungsten band edge absorber/emitter based on a monolayer of ceramic microspheres. Optics Express, 2015, 23, A1236.	3.4	22
46	Data-adaptive image-denoising for detecting and quantifying nanoparticle entry in mucosal tissues through intravital 2-photon microscopy. Beilstein Journal of Nanotechnology, 2014, 5, 2016-2025.	2.8	8
47	Ceramic Photonic Glass for Broadband Omnidirectional Reflection. ACS Photonics, 2014, 1, 1127-1133.	6.6	28
48	CdSe/CdS-quantum rods: fluorescent probes for in vivo two-photon laser scanning microscopy. Nanoscale, 2014, 6, 10413-10422.	5.6	31
49	Elastic and Viscoelastic Properties of Cross-Linked Gold Nanoparticles Probed by AFM Bulge Tests. Journal of Physical Chemistry C, 2014, 118, 4386-4395.	3.1	31
50	Little Adjustments Significantly Improve the Turkevich Synthesis of Gold Nanoparticles. Langmuir, 2014, 30, 10779-10784.	3.5	155
51	Effect of the Spacer Structure on the Stability of Gold Nanoparticles Functionalized with Monodentate Thiolated Poly(ethylene glycol) Ligands. Langmuir, 2013, 29, 9897-9908.	3.5	80
52	Cross-Linked Gold Nanoparticles on Polyethylene: Resistive Responses to Tensile Strain and Vapors. ACS Applied Materials & Interfaces, 2012, 4, 6151-6161.	8.0	92
53	Freestanding films of crosslinked gold nanoparticles prepared via layer-by-layer spin-coating. Nanotechnology, 2011, 22, 305303.	2.6	41
54	Networked Goldâ€Nanoparticle Coatings on Polyethylene: Charge Transport and Strain Sensitivity. Advanced Functional Materials, 2008, 18, 1611-1616.	14.9	89

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55	Gold Nanoparticle/Organic Networks as Chemiresistor Coatings: The Effect of Film Morphology on Vapor Sensitivity. Journal of Physical Chemistry C, 2008, 112, 12507-12514.	3.1	84
56	Vapor Sensitivity of Networked Gold Nanoparticle Chemiresistors:â€‰ Importance of Flexibility and Resistivity of the Interlinkage. Journal of Physical Chemistry C, 2007, 111, 12855-12859.	3.1	84
57	Vapor Sorption and Electrical Response of Au-Nanoparticleâ€“ Dendrimer Composites. Advanced Functional Materials, 2007, 17, 881-888.	14.9	72
58	Lithographic patterning of nanoparticle films self-assembled from organic solutions by using a water-soluble mask. Applied Physics Letters, 2005, 86, 034108.	3.3	17
59	Chemiresistor coatings from Pt- and Au-nanoparticle/nonanedithiol films: sensitivity to gases and solvent vapors. Sensors and Actuators B: Chemical, 2004, 98, 188-195.	7.8	97
60	Optical and Electrical Properties of Three-Dimensional Interlinked Gold Nanoparticle Assemblies. Journal of the American Chemical Society, 2004, 126, 3349-3356.	13.7	232
61	Gold-nanoparticle/organic linker films: self-assembly, electronic and structural characterisation, composition and vapour sensitivity. Faraday Discussions, 2004, 125, 77-97.	3.2	73
62	Self-Assembled Gold Nanoparticle/Alkanedithiol Films:Â Preparation, Electron Microscopy, XPS-Analysis, Charge Transport, and Vapor-Sensing Propertiesâ€. Journal of Physical Chemistry B, 2003, 107, 7406-7413.	2.6	285