C Jeffrey Brinker

List of Publications by Year
in descending order

205 papers	24,147 citations	8159 76 h-index	7333 152 g-index
215 all docs	215 docs citations	215 times ranked	25248 citing authors

#	Article	IF	Citations
1	Evaporation-Induced Self-Assembly: Nanostructures Made Easy. Advanced Materials, 1999, 11, 579-585.	11.1	1,967
2	Continuous formation of supported cubic and hexagonal mesoporous films by solâ€“gel dip-coating. Nature, 1997, 389, 364-368.	13.7	1,417
3	Aerosol-assisted self-assembly of mesostructured spherical nanoparticles. Nature, 1999, 398, 223-226.	13.7	955
4	The targeted delivery of multicomponent cargos to cancer cells by nanoporous particle-supported lipid bilayers. Nature Materials, 2011, 10, 389-397.	13.3	933
5	Mesoporous Silica Nanoparticle Nanocarriers: Biofunctionality and Biocompatibility. Accounts of Chemical Research, 2013, 46, 792-801.	7.6	801
6	Template-Based Approaches to the Preparation of Amorphous, Nanoporous Silicas. Chemistry of Materials, 1996, 8, 1682-1701.	3.2	745
7	Chemically Exfoliated MoS₂ as Nearâ€Infrared Photothermal Agents. Angewandte Chemie - International Edition, 2013, 52, 4160-4164.	7.2	575
8	Continuous self-assembly of organicâ€“inorganic nanocomposite coatings that mimic nacre. Nature, 1998, 394, 256-260.	13.7	554
9	Self-assembly of mesoscopically ordered chromatic polydiacetylene/silica nanocomposites. Nature, 2001, 410, 913-917.	13.7	531
10	Evaporation-Induced Self-Assembly of Hybrid Bridged Silsesquioxane Film and Particulate Mesophases with Integral Organic Functionality. Journal of the American Chemical Society, 2000, 122, 5258-5261.	6.6	475
11	Self-Assembly of Ordered, Robust, Three-Dimensional Gold Nanocrystal/Silica Arrays. Science, 2004, 304, 567-571.	6.0	468
12	Silica aerogel films prepared at ambient pressure by using surface derivatization to induce reversible drying shrinkage. Nature, 1995, 374, 439-443.	13.7	412
13	Rapid prototyping of patterned functional nanostructures. Nature, 2000, 405, 56-60.	13.7	396
14	Controlled Synthesis of 2-D and 3-D Dendritic Platinum Nanostructures. Journal of the American Chemical Society, 2004, 126, 635-645.	6.6	381
15	Fundamentals of sol-gel dip-coating. Journal De Physique III, 1994, 4, 1231-1242.	0.3	372
16	Processing Pathway Dependence of Amorphous Silica Nanoparticle Toxicity: Colloidal vs Pyrolytic. Journal of the American Chemical Society, 2012, 134, 15790-15804.	6.6	372
17	Photoregulation of Mass Transport through a Photoresponsive Azobenzene-Modified Nanoporous Membrane. Nano Letters, 2004, 4, 551-554.	4.5	352
18	Aqueous Solâ˜Gel Process for Protein Encapsulation. Chemistry of Materials, 2000, 12, 2434-2441.	3.2	329

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19	Porous Nanoparticle Supported Lipid Bilayers (Protocells) as Delivery Vehicles. Journal of the American Chemical Society, 2009, 131, 1354-1355.	6.6	323
20	Cell-Specific Delivery of Diverse Cargos by Bacteriophage MS2 Virus-like Particles. ACS Nano, 2011, 5, 5729-5745.	7.3	286
21	Electrostatically Mediated Liposome Fusion and Lipid Exchange with a Nanoparticle-Supported Bilayer for Control of Surface Charge, Drug Containment, and Delivery. Journal of the American Chemical Society, 2009, 131, 7567-7569.	6.6	250
22	Surfactant-Assisted Synthesis of Water-Soluble and Biocompatible Semiconductor Quantum Dot Micelles. Nano Letters, 2005, 5, 645-648.	4.5	233
23	Delivery of Small Interfering RNA by Peptide-Targeted Mesoporous Silica Nanoparticle-Supported Lipid Bilayers. ACS Nano, 2012, 6, 2174-2188.	7.3	212
24	Surface Interactions with Compartmentalized Cellular Phosphates Explain Rare Earth Oxide Nanoparticle Hazard and Provide Opportunities for Safer Design. ACS Nano, 2014, 8, 1771-1783.	7.3	212
25	Synthetic amorphous silica nanoparticles: toxicity, biomedical and environmental implications. Nature Reviews Materials, 2020, 5, 886-909.	23.3	212
26	Dual-layer asymmetric microporous silica membranes. Journal of Membrane Science, 2000, 169, 255-268.	4.1	203
27	Confinement-induced quorum sensing of individual Staphylococcus aureus bacteria. Nature Chemical Biology, 2010, 6, 41-45.	3.9	189
28	Establishing the effects of mesoporous silica nanoparticle properties on in vivo disposition using imaging-based pharmacokinetics. Nature Communications, 2018, 9, 4551.	5.8	189
29	Mesoporous Silica Nanoparticle-Supported Lipid Bilayers (Protocells) for Active Targeting and Delivery to Individual Leukemia Cells. ACS Nano, 2016, 10, 8325-8345.	7.3	180
30	Bio-inspired Murray materials for mass transfer and activity. Nature Communications, 2017, 8, 14921.	5.8	176
31	Photoresponsive Nanocomposite Formed by Self-Assembly of an Azobenzene-Modified Silane. Angewandte Chemie - International Edition, 2003, 42, 1731-1734.	7.2	170
32	Peering into the Self-Assembly of Surfactant Templated Thin-Film Silica Mesophases. Journal of the American Chemical Society, 2003, 125, 11646-11655.	6.6	168
33	Optically Defined Multifunctional Patterning of Photosensitive Thin-Film Silica Mesophases. Science, 2000, 290, 107-111.	6.0	166
34	Two-Wave Nanotherapy To Target the Stroma and Optimize Gemcitabine Delivery To a Human Pancreatic Cancer Model in Mice. ACS Nano, 2013, 7, 10048-10065.	7.3	163
35	Modulusâ€“density scaling behaviour and framework architecture of nanoporous self-assembled silicas. Nature Materials, 2007, 6, 418-423.	13.3	159
36	Corrosion inhibition using superhydrophobic films. Corrosion Science, 2008, 50, 897-902.	3.0	159

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37	Evaporation-Controlled Self-Assembly of Silica Surfactant Mesophases. Journal of Physical Chemistry B, 2003, 107, 6114-6118.	1.2	155
38	Controlling the Metal to Semiconductor Transition of MoS₂ and WS₂ in Solution. Journal of the American Chemical Society, 2015, 137, 1742-1745.	6.6	155
39	Ligand-targeted theranostic nanomedicines against cancer. Journal of Controlled Release, 2016, 240, 267-286.	4.8	154
40	Pore structure evolution in silica gel during aging/drying. III. Effects of surface tension. Journal of Non-Crystalline Solids, 1992, 144, 32-44.	1.5	153
41	Protocells: Modular Mesoporous Silica Nanoparticleâ€Supported Lipid Bilayers for Drug Delivery. Small, 2016, 12, 2173-2185.	5.2	150
42	On the issue of transparency and reproducibility in nanomedicine. Nature Nanotechnology, 2019, 14, 629-635.	15.6	149
43	Cell-Directed Assembly of Lipid-Silica Nanostructures Providing Extended Cell Viability. Science, 2006, 313, 337-341.	6.0	147
44	An inorganicâ€“organic proton exchange membrane for fuel cells with a controlled nanoscale pore structure. Nature Nanotechnology, 2010, 5, 230-236.	15.6	145
45	Molecular sieve sensors for selective detection at the nanogram level. Journal of the American Chemical Society, 1989, 111, 7640-7641.	6.6	137
46	Functional Nanocomposites Prepared by Self-Assembly and Polymerization of Diacetylene Surfactants and Silicic Acid. Journal of the American Chemical Society, 2003, 125, 1269-1277.	6.6	135
47	A New Application of UVâ^'Ozone Treatment in the Preparation of Substrate-Supported, Mesoporous Thin Films. Chemistry of Materials, 2000, 12, 3879-3884.	3.2	128
48	Syntheses of Silica/Polystyrene-block-Poly(ethylene oxide) Films with Regular and Reverse Mesostructures of Large Characteristic Length Scales by Solvent Evaporation-Induced Self-Assembly. Langmuir, 2001, 17, 7961-7965.	1.6	127
49	Solâ€“Gelâ€Based Advanced Porous Silica Materials for Biomedical Applications. Advanced Functional Materials, 2020, 30, 1909539.	7.8	125
50	Self-Directed Assembly of Photoactive Hybrid Silicates Derived from an Azobenzene-Bridged Silsesquioxane. Journal of the American Chemical Society, 2002, 124, 14540-14541.	6.6	124
51	A General Route to Macroscopic Hierarchical 3D Nanowire Networks. Angewandte Chemie - International Edition, 2004, 43, 6169-6173.	7.2	123
52	Drying transition of confined water. Nature, 2006, 442, 526-526.	13.7	123
53	Mathematical modeling in cancer nanomedicine: a review. Biomedical Microdevices, 2019, 21, 40.	1.4	122
54	Evaporation-Induced Self-Assembly: Functional Nanostructures Made Easy. MRS Bulletin, 2004, 29, 631-640.	1.7	116

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55	Aerosol-Assisted Self-Assembly of Single-Crystal Core/Nanoporous Shell Particles as Model Controlled Release Capsules. Journal of the American Chemical Society, 2006, 128, 4512-4513.	6.6	115
56	Gas/vapor adsorption in imogolite: a microporous tubular aluminosilicate. Langmuir, 1993, 9, 1051-1057.	1.6	113
57	Pore structure evolution in silica gel during aging/drying I. Temporal and thermal aging. Journal of Non-Crystalline Solids, 1992, 142, 189-196.	1.5	110
58	DNA translocation through an array of kinkedÂnanopores. Nature Materials, 2010, 9, 667-675.	13.3	109
59	Reduction of Acute Inflammatory Effects of Fumed Silica Nanoparticles in the Lung by Adjusting Silanol Display through Calcination and Metal Doping. ACS Nano, 2015, 9, 9357-9372.	7.3	108
60	Polydiacetylene/Silica Nanocomposites with Tunable Mesostructure and Thermochromatism from Diacetylenic Assembling Molecules. Journal of the American Chemical Society, 2005, 127, 12782-12783.	6.6	107
61	In Situ Fluorescence Probing of the Chemical Changes during Sol-Gel Thin Film Formation. Journal of the American Ceramic Society, 1995, 78, 1640-1648.	1.9	99
62	Self-Assembly and Characterization of Mesostructured Silica Films with a 3D Arrangement of Isolated Spherical Mesopores. Advanced Functional Materials, 2003, 13, 47-52.	7.8	99
63	Microporous Silica Prepared by Organic Templating:Â Relationship between the Molecular Template and Pore Structure. Chemistry of Materials, 1999, 11, 1223-1229.	3.2	96
64	Solution Synthesis of Germanium Nanowires Using a Ge2+Alkoxide Precursor. Journal of the American Chemical Society, 2006, 128, 5244-5250.	6.6	96
65	SupraCells: Living Mammalian Cells Protected within Functional Modular Nanoparticleâ€Based Exoskeletons. Advanced Materials, 2019, 31, e1900545.	11.1	96
66	Where Are We Heading in Nanotechnology Environmental Health and Safety and Materials Characterization?. ACS Nano, 2015, 9, 5627-5630.	7.3	91
67	Versatile Surface Functionalization of Metalâ€“Organic Frameworks through Direct Metal Coordination with a Phenolic Lipid Enables Diverse Applications. Advanced Functional Materials, 2018, 28, 1705274.	7.8	90
68	Morphological control of surfactant-templated metal oxide films. Current Opinion in Colloid and Interface Science, 2006, 11, 126-132.	3.4	89
69	Porous inorganic materials. Current Opinion in Solid State and Materials Science, 1996, 1, 798-805.	5.6	88
70	Amorphous silica molecular sieving membranes by sol-gel processing. Advanced Materials, 1996, 8, 588-591.	11.1	87
71	Microporous solâ€“gel derived aminosilicate membrane for enhanced carbon dioxide separation. Separation and Purification Technology, 2005, 42, 249-257.	3.9	86
72	Mesoporous silica-supported lipid bilayers (protocells) for DNA cargo delivery to the spinal cord. Journal of Controlled Release, 2013, 168, 209-224.	4.8	86

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73	Pore structure evolution in silica gel during aging/drying II. Effect of pore fluids. Journal of Non-Crystalline Solids, 1992, 142, 197-207.	1.5	85
74	Aqueous solâ€“gel encapsulation of genetically engineered Moraxella spp. cells for the detection of organophosphates. Biosensors and Bioelectronics, 2005, 20, 1433-1437.	5.3	85
75	Metalâ€“Organic Framework Nanoparticle-Assisted Cryopreservation of Red Blood Cells. Journal of the American Chemical Society, 2019, 141, 7789-7796.	6.6	82
76	Interface Chemistry of Nanostructured Materials: Ion Adsorption on Mesoporous Alumina. Journal of Colloid and Interface Science, 2002, 254, 23-30.	5.0	80
77	Cellular complexity captured in durable silica biocomposites. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 17336-17341.	3.3	78
78	Re-examining the Size/Charge Paradigm: Differing in Vivo Characteristics of Size- and Charge-Matched Mesoporous Silica Nanoparticles. Journal of the American Chemical Society, 2013, 135, 16030-16033.	6.6	77
79	Comparative Study of Inorganic Clusterâ^'Surfactant Arrays. Chemistry of Materials, 2005, 17, 2885-2895.	3.2	75
80	Thermochromatism and Structural Evolution of Metastable Polydiacetylenic Crystals. Journal of Physical Chemistry B, 2006, 110, 7221-7225.	1.2	72
81	Synthesis and characterization of highly ordered functional mesoporous silica thin films with positively chargeable â€“NH2 groups. Chemical Communications, 2003, , 1146-1147.	2.2	71
82	Tubular ceramic-supported solâ€“gel silica-based membranes for flue gas carbon dioxide capture and sequestration. Journal of Membrane Science, 2009, 341, 30-36.	4.1	70
83	Microstructural Characterization of Polystyrene-block-poly(ethylene oxide)-Templated Silica Films with Cubic-Ordered Spherical Mesopores. Langmuir, 2003, 19, 7295-7301.	1.6	67
84	Biomimetic Rebuilding of Multifunctional Red Blood Cells: Modular Design Using Functional Components. ACS Nano, 2020, 14, 7847-7859.	7.3	67
85	Investigating the Interface of Superhydrophobic Surfaces in Contact with Water. Langmuir, 2005, 21, 7805-7811.	1.6	65
86	Cell-Directed Assembly of Bio/Nano Interfacesâ€”A New Scheme for Cell Immobilization. Accounts of Chemical Research, 2007, 40, 836-845.	7.6	65
87	Unusual Hydrocarbon Chain Packing Mode and Modification of Crystallite Growth Habit in the		

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91	Ultra-thin enzymatic liquid membrane for CO2 separation and capture. Nature Communications, 2018, 9, 990.	5.8	62
92	Engineering of monosized lipid-coated mesoporous silica nanoparticles for CRISPR delivery. Acta Biomaterialia, 2020, 114, 358-368.	4.1	62
93	Free-Standing, Patternable Nanoparticle/Polymer Monolayer Arrays Formed by Evaporation Induced Self-Assembly at a Fluid Interface. Journal of the American Chemical Society, 2008, 130, 3284-3285.	6.6	61
94	A mathematical model to predict nanomedicine pharmacokinetics and tumor delivery. Computational and Structural Biotechnology Journal, 2020, 18, 518-531.	1.9	61
95	Repetitive Dosing of Fumed Silica Leads to Profibrogenic Effects through Unique Structureâ€“Activity Relationships and Biopersistence in the Lung. ACS Nano, 2016, 10, 8054-8066.	7.3	58
96	Synthesis of Organo-Silane Functionalized Nanocrystal Micelles and Their Self-Assembly. Journal of the American Chemical Society, 2005, 127, 13746-13747.	6.6	56
97	Nanometer-Thick Conformal Pore Sealing of Self-Assembled Mesoporous Silica by Plasma-Assisted Atomic Layer Deposition. Journal of the American Chemical Society, 2006, 128, 11018-11019.	6.6	55
98	Dip Coating. , 2013, , 233-261.		55
99	Integrated nanotechnology platform for tumor-targeted multimodal imaging and therapeutic cargo release. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 1877-1882.	3.3	55
100	Self-Assembly of an Environmentally Responsive Polymer/Silica Nanocomposite. Journal of the American Chemical Society, 2003, 125, 5626-5627.	6.6	54
101	Multiphoton Lithography of Nanocrystalline Platinum and Palladium for Site-Specific Catalysis in 3D Microenvironments. Journal of the American Chemical Society, 2012, 134, 4007-4010.	6.6	54
102	Multiphased assembly of nanoporous silica particles. Journal of Non-Crystalline Solids, 2001, 285, 71-78.	1.5	50
103	Enlarged Pore Size in Mesoporous Silica Films Templated by Pluronic F127: Use of Poloxamer Mixtures and Increased Template/SiO₂ Ratios in Materials Synthesized by Evaporation-Induced Self-Assembly. Chemistry of Materials, 2015, 27, 75-84.	3.2	50
104	Multifunctional Protocells for Enhanced Penetration in 3D Extracellular Tumoral Matrices. Chemistry of Materials, 2018, 30, 112-120.	3.2	50
105	Aerosol-assisted deposition of surfactant-templated mesoporous silica membranes on porous ceramic supports. Microporous and Mesoporous Materials, 2003, 66, 91-101.	2.2	49
106	Understanding the Connection between Nanoparticle Uptake and Cancer Treatment Efficacy using Mathematical Modeling. Scientific Reports, 2018, 8, 7538.	1.6	49
107	In-Situ X-ray Scattering Study of Continuous Silicaâ”Surfactant Self-Assembly during Steady-State Dip Coating. Journal of Physical Chemistry B, 2003, 107, 7683-7688.	1.2	48
108	Protein-Directed Assembly of Arbitrary Three-Dimensional Nanoporous Silica Architectures. ACS Nano, 2011, 5, 1401-1409.	7.3	48

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109	Modular Metalâ€“Organic Polyhedra Superassembly: From Molecularâ€Level Design to Targeted Drug Delivery. Advanced Materials, 2019, 31, e1806774.	11.1	48
110	Sub-10 nm Thick Microporous Membranes Made by Plasma-Defined Atomic Layer Deposition of a Bridged Silsesquioxane Precursor. Journal of the American Chemical Society, 2007, 129, 15446-15447.	6.6	47
111	Experimental evidence for two fundamentally different Eâ€² precursors in amorphous silicon dioxide. Journal of Non-Crystalline Solids, 1991, 136, 151-162.	1.5	46
112	Minimum thermal conductivity considerations in aerogel thin films. Journal of Applied Physics, 2012, 111, .	1.1	46
113	Neutron Reflectivity Study of Lipid Membranes Assembled on Ordered Nanocomposite and Nanoporous Silica Thin Films. Langmuir, 2005, 21, 2865-2870.	1.6	45
114	Aqueous Stability of Mesoporous Silica Films Doped or Grafted with Aluminum Oxide. Langmuir, 2003, 19, 10403-10408.	1.6	43
115	Delivery of Ricin Toxin Aâ€Chain by Peptideâ€Targeted Mesoporous Silica Nanoparticleâ€Supported Lipid Bilayers. Advanced Healthcare Materials, 2012, 1, 348-353.	3.9	42
116	Quantitative SAXS Analysis of Oriented 2D Hexagonal Cylindrical Silica Mesostructures in Thin Films Obtained from Nonionic Surfactants. Langmuir, 2005, 21, 3858-3866.	1.6	41
117	Mechanically tunable multiphoton fabricated protein hydrogels investigated using atomic force microscopy. Soft Matter, 2010, 6, 2842.	1.2	40
118	Controlled Fabrication of Functional Capsules Based on the Synergistic Interaction between Polyphenols and MOFs under Weak Basic Condition. ACS Applied Materials & Interfaces, 2017, 9, 14258-14264.	4.0	37
119	Conversion of Metalâ€“Organic Cage to Ligand-Free Ultrasmall Noble Metal Nanocluster Catalysts Confined within Mesoporous Silica Nanoparticle Supports. Nano Letters, 2019, 19, 1512-1519.	4.5	36
120	Encapsulation of S. cerevisiae in Poly(glycerol) Silicate Derived Matrices: Effect of Matrix Additives and Cell Metabolic Phase on Long-Term Viability and Rate of Gene Expression. Chemistry of Materials, 2011, 23, 2555-2564.	3.2	35
121	In situ pore structure studies of xerogel drying. Chemistry of Materials, 1989, 1, 34-40.	3.2	34
122	Hierarchically Organized Nanoparticle Mesostructure Arrays Formed through Hydrothermal Self-Assembly. Chemistry of Materials, 2006, 18, 3034-3038.	3.2	34
123	Dynamic Investigation of Gold Nanocrystal Assembly Using In Situ Grazing-Incidence Small-Angle X-ray Scattering. Langmuir, 2008, 24, 10575-10578.	1.6	34
124	Oriented inorganic films. Current Opinion in Colloid and Interface Science, 1998, 3, 166-173.	3.4	33
125	Cell-Directed Integration into Three-Dimensional Lipidâ^'Silica Nanostructured Matrices. ACS Nano, 2010, 4, 5539-5550.	7.3	33
126	Pendant/bridged/mesoporous silsesquioxane nanoparticles: Versatile and biocompatible platforms for smart delivery of therapeutics. Chemical Engineering Journal, 2018, 340, 125-147.	6.6	32

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127	Bioinspired Cell Silicification: From Extracellular to Intracellular. Journal of the American Chemical Society, 2021, 143, 6305-6322.	6.6	32
128	Photoresponsive Nanocomposite Formed by Self-Assembly of an Azobenzene-Modified Silane. Angewandte Chemie, 2003, 115, 1773-1776.	1.6	31
129	Directed Aerosol Writing of Ordered Silica Nanostructures on Arbitrary Surfaces with Selfâ€Assembling Inks. Small, 2008, 4, 982-989.	5.2	31
130	Aerosol-Assisted Formation of Mesostructured Thin Films. Advanced Materials, 2003, 15, 1733-1736.	11.1	30
131	Cell-directed-assembly: Directing the formation of nano/bio interfaces and architectures with living cells. Biochimica Et Biophysica Acta - General Subjects, 2011, 1810, 259-267.	1.1	30
132	Structural Studies of Anomalous Behavior in the Silica-Alumina Gel System. Journal of the American Ceramic Society, 1990, 73, 2815-2821.	1.9	28
133	Hydrothermal synthesis of monodisperse single-crystalline alpha-quartz nanospheres. Chemical Communications, 2011, 47, 7524.	2.2	28
134	Modular Assembly of Red Blood Cell Superstructures from Metalâ€“Organic Framework Nanoparticleâ€Based Building Blocks. Advanced Functional Materials, 2021, 31, 2005935.	7.8	28
135	Synthetic fossilization of soft biological tissues and their shape-preserving transformation into silica or electron-conductive replicas. Nature Communications, 2014, 5, 5665.	5.8	27
136	Preparation and characterization of mesostructured polymer-functionalized solâ€“gel-derived thin films. Progress in Organic Coatings, 2003, 47, 393-400.	1.9	26
137	Biocompatible Microfabrication of 3D Isolation Chambers for Targeted Confinement of Individual Cells and Their Progeny. Analytical Chemistry, 2012, 84, 8985-8989.	3.2	26
138	A novel approach for targeted delivery to motoneurons using cholera toxin-B modified protocells. Journal of Neuroscience Methods, 2016, 273, 160-174.	1.3	26
139	Silica bioreplication preserves three-dimensional spheroid structures of human pluripotent stem cells and HepG2 cells. Scientific Reports, 2015, 5, 13635.	1.6	25
140	Biodegradable Silica-Based Nanoparticles: Dissolution Kinetics and Selective Bond Cleavage. The Enzymes, 2018, 43, 181-214.	0.7	25
141	Spray-Dried Multiscale Nano-biocomposites Containing Living Cells. ACS Nano, 2015, 9, 6961-6977.	7.3	24
142	Imageâ€guided mathematical modeling for pharmacological evaluation of nanomaterials and monoclonal antibodies. Wiley Interdisciplinary Reviews: Nanomedicine and Nanobiotechnology, 2020, 12, e1628.	3.3	24
143	Optical Detection of Ion-Channel-Induced Proton Transport in Supported Phospholipid Bilayers. Nano Letters, 2007, 7, 2446-2451.	4.5	23
144	Molecular Dynamics Simulations of the Silicaâ€“Cell Membrane Interaction: Insights on Biomineralization and Nanotoxicity. Journal of Physical Chemistry C, 2018, 122, 21330-21343.	1.5	23

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145	Revealing the Interfacial Self-Assembly Pathway of Large-Scale, Highly-Ordered, Nanoparticle/Polymer Monolayer Arrays at an Air/Water Interface. Nano Letters, 2013, 13, 1041-1046.	4.5	22
146	Anomalously Low Surface Area and Density in the Silica-Alumina Gel System. Journal of the American Ceramic Society, 1989, 72, 2354-2358.	1.9	21
147	Direct Measurement of Solvation Forces in Complex Microporous Media:Â A New Characterization Tool. Langmuir, 1998, 14, 2602-2605.	1.6	21
148	Optical and electrical properties of self-assembled, ordered gold nanocrystal/silica thin films prepared by solâ€“gel processing. Thin Solid Films, 2005, 491, 38-42.	0.8	21
149	Aerosol-assisted synthesis of monodisperse single-crystalline Î±-cristobalite nanospheres. Chemical Communications, 2012, 48, 1293-1295.	2.2	21
150	A Molecular Basis for Advanced Materials in Water Treatment. MRS Bulletin, 2008, 33, 42-47.	1.7	20
151	Characterization of Lipid-Templated Silica and Hybrid Thin Film Mesophases by Grazing Incidence Small-Angle X-ray Scattering. Langmuir, 2009, 25, 9500-9509.	1.6	20
152	Numerical Simulation of Ethanolâ^'Waterâ^'NaCl Droplet Evaporation. Industrial & Engineering Chemistry Research, 2010, 49, 5631-5643.	1.8	20
153	Direct Transfer of Mesoporous Silica Nanoparticles between Macrophages and Cancer Cells. Cancers, 2020, 12, 2892.	1.7	19
154	Cell-Directed Localization and Orientation of a Functional Foreign Transmembrane Protein within a Silica Nanostructure. Journal of the American Chemical Society, 2009, 131, 14255-14257.	6.6	17
155	Three-Dimensional Encapsulation of Saccharomyces cerevisiae in Silicate Matrices Creates Distinct Metabolic States as Revealed by Gene Chip Analysis. ACS Nano, 2017, 11, 3560-3575.	7.3	17
156	Predicting breast cancer response to neoadjuvant chemotherapy based on tumor vascular features in needle biopsies. JCI Insight, 2019, 4, .	2.3	17
157	Orthogonal Cellâ€Based Biosensing: Fluorescent, Electrochemical, and Colorimetric Detection with Silicaâ€Immobilized Cellular Communities Integrated with an ITOâ€“Glass/Plastic Laminate Cartridge. Small, 2012, 8, 2743-2751.	5.2	16
158	Nanoporous Silica-Based Protocells at Multiple Scales for Designs of Life and Nanomedicine. Life, 2015, 5, 214-229.	1.1	16
159	Nano as a Rosetta Stone: The Global Roles and Opportunities for Nanoscience and Nanotechnology. ACS Nano, 2019, 13, 10853-10855.	7.3	16
160	Advanced Nanomaterials-Assisted Cell Cryopreservation: A Mini Review. ACS Applied Bio Materials, 2021, 4, 2996-3014.	2.3	16
161	Convective Assembly of 2D Lattices of Virusâ€like Particles Visualized by Inâ€Situ Grazingâ€Incidence Smallâ€Angle Xâ€Ray Scattering. Small, 2011, 7, 1043-1050.	5.2	15
162	Uptake and intracellular fate of cholera toxin subunit b-modified mesoporous silica nanoparticle-supported lipid bilayers (aka protocells) in motoneurons. Nanomedicine: Nanotechnology, Biology, and Medicine, 2018, 14, 661-672.	1.7	15

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163	Combo combat. Nature Materials, 2012, 11, 831-832.	13.3	14
164	Two-photon absorption of matrix-free Ge nanocrystals. Applied Physics Letters, 2006, 89, 111107.	1.5	13
165	Measurements and simulations of the near-surface composition of evaporating ethanolâ€“water droplets. Physical Chemistry Chemical Physics, 2009, 11, 7780.	1.3	13
166	Integration of a Closeâ€Packed Quantum Dot Monolayer with a Photonicâ€Crystal Cavity Via Interfacial Selfâ€Assembly and Transfer. Small, 2010, 6, 2126-2129.	5.2	13
167	Influence of Silica Matrix Composition and Functional Component Additives on the Bioactivity and Viability of Encapsulated Living Cells. ACS Biomaterials Science and Engineering, 2015, 1, 1231-1238.	2.6	13
168	Robust and Long-Term Cellular Protein and Enzymatic Activity Preservation in Biomineralized Mammalian Cells. ACS Nano, 2022, 16, 2164-2175.	7.3	13
169	Large-conductance cholesterolâ€“amphotericin B channels in reconstituted lipid bilayers. Biosensors and Bioelectronics, 2007, 22, 1359-1367.	5.3	11
170	Porous Ice Phases with VI and Distorted VII Structures Constrained in Nanoporous Silica. Nano Letters, 2014, 14, 6554-6558.	4.5	11
171	InÂsitu fluorescence probing of the chemical and structural changes during formation of hexagonal phase cetyltrimethylammonium bromide and lamellar phase CTAB/Poly(dodecylmethacrylate) solâ€“gel silica thin films. Journal of Sol-Gel Science and Technology, 2008, 47, 300-310.	1.1	10
172	Transformation of a Close-Packed Au Nanoparticle/Polymer Monolayer into a Large Area Array of Oriented Au Nanowires via E-beam Promoted Uniaxial Deformation and Room Temperature Sintering. Journal of the American Chemical Society, 2011, 133, 11410-11413.	6.6	10
173	Quartz on Silicon. Science, 2013, 340, 818-819.	6.0	10
174	Lithographically Defined Macroscale Modulation of Lateral Fluidity and Phase Separation Realized via Patterned Nanoporous Silica-Supported Phospholipid Bilayers. Journal of the American Chemical Society, 2013, 135, 15718-15721.	6.6	10
175	Uptake and Toxicity of Respirable Carbon-Rich Uranium-Bearing Particles: Insights into the Role of Particulates in Uranium Toxicity. Environmental Science & Technology, 2021, 55, 9949-9957.	4.6	10
176	Sol-Gel Films With Tailored Microstructures. Materials Research Society Symposia Proceedings, 1992, 271, 541.	0.1	9
177	Tricontinuous Cubic Nanostructure and Pore Size Patterning in Mesostructured Silica Films Templated with Glycerol Monooleate. Chemistry of Materials, 2011, 23, 2107-2112.	3.2	9
178	Are nearly free silanols a unifying structural determinant of silica particle toxicity?. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 30006-30008.	3.3	9
179	Effect of Physical Structure on the Phase Development of Aluminosilicate Gels. Journal of the American Ceramic Society, 1991, 74, 2393-2397.	1.9	8
180	Environmental microscopy in stone conservation. Scanning, 1996, 18, 508-514.	0.7	8

#	Article	IF	Citations
181	Amphotericin B channels in phospholipid membrane-coated nanoporous silicon surfaces: Implications for photovoltaic driving of ions across membranes. Biosensors and Bioelectronics, 2007, 22, 1605-1611.	5.3	8
182	Salt-induced lipid transfer between colloidal supported lipid bilayers. Soft Matter, 2010, 6, 2628.	1.2	8
183	Atomic Layer Deposition of <scp>I</scp>-Alanine Polypeptide. Journal of the American Chemical Society, 2014, 136, 15821-15824.	6.6	7
184	Engineering of large-pore lipid-coated mesoporous silica nanoparticles for dual cargo delivery to cancer cells. Journal of Sol-Gel Science and Technology, 2019, 89, 78-90.	1.1	7
185	Aggregation morphology of planar engineered nanomaterials. Journal of Colloid and Interface Science, 2020, 561, 849-853.	5.0	7
186	Catalytic Membrane Sensors. A Thin Film Modified H2Resistive Sensor for Multi-Molecular Detection. Comments on Inorganic Chemistry, 1999, 20, 209-231.	3.0	6
187	Synthesis of Polyhedral Metalâ€“Organic Framework@Mesoporous Silica Hybrid Nanocomposites with Branched Shapes. ACS Applied Bio Materials, 2021, 4, 1221-1228.	2.3	4
188	Emerging Lipid-Coated Silica Nanoparticles for Cancer Therapy. Nanotechnology in the Life Sciences, 2021, , 335-361.	0.4	4
189	Imogolite as a Material for Fabrication of Inorganic Membranes. Materials Research Society Symposia Proceedings, 1992, 271, 511.	0.1	3
190	X-Ray characterization of self-assembled long-chain phosphatidylcholine/bile salt/silica mesostructured films with nanoscale homogeneity. Chemical Communications, 2011, 47, 1806-1808.	2.2	3
191	Monodisperse Mesoporous Microparticles Prepared by Evaporation-Induced Self Assembly Within Aerosols. Materials Research Society Symposia Proceedings, 2003, 775, 1111.	0.1	3
192	Stress Development in Low Dielectric Constant Silica Films During Drying and Heating Process. Materials Research Society Symposia Proceedings, 1999, 594, 463.	0.1	2
193	Electrical and Optical Properties of Self-Assembled, Ordered Gold Nanocrystal/Silica Thin Films Prepared by Sol-Gel Processing. Materials Research Society Symposia Proceedings, 2005, 872, 1.	0.1	2
194	Ligandâ€Directed Profiling of Organelles with Internalizing Phage Libraries. Current Protocols in Protein Science, 2015, 79, 30.4.1-30.4.30.	2.8	2
195	Novel Amine-Functional Membrane for Metabolic CO2 Removal from Spacesuit Breathing Loop. AIP Conference Proceedings, 2003, , .	0.3	1
196	Photoresponsive Hybrid Silica Materials Containing Azobenzene Ligands. , 0, , 457-507.		1
197	Photoresponsive Release from Azobenzene-Modified Single Cubic Crystal NaCl/Silica Particles. Journal of Nanomaterials, 2011, 2011, 1-6.	1.5	1
198	Laser Machined Plastic Laminates: Towards Portable Diagnostic Devices for Use in Low Resource Environments. Electroanalysis, 2015, 27, 2503-2512.	1.5	1

#	Article	IF	Citations
199	The impact of metal doping on fumed silica structure and amino acid thermal condensation catalytic properties. Journal of Materials Science, 2021, 56, 16916-16927.	1.7	1
200	Growing Contributions of Nano in 2020. ACS Nano, 2020, 14, 16163-16164.	7.3	1
201	Effects of Surface Chemistry and Topology on the Kinesin-Driven Motility of Microtubule Shuttles. ACS Applied Bio Materials, 2020, 3, 7908-7918.	2.3	1
202	In-Situ Characterization of Stress Development in Gelatin Film During Controlled Drying. Materials Research Society Symposia Proceedings, 1999, 594, 263.	0.1	0
203	Surface Plasmon Excitation in Three-dimensional, Ordered, Gold Nanocrystal Arrays Using a Prism Coupler. Materials Research Society Symposia Proceedings, 2005, 900, 1.	0.1	0
204	NANOPARTICLE-MICELLE: A NEW BUILDING BLOCK FOR FACILE SELF-ASSEMBLY AND INTEGRATION OF 2-, 3-DIMENSIONAL FUNCTIONAL NANOSTRUCTURES. Annual Review of Nano Research, 2006, , 153-187.	0.2	0
205	Tanks and Truth. ACS Nano, 2022, 16, 4975-4976.	7.3	0