

# C Jeffrey Brinker

## List of Publications by Year in descending order

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205  
papers

24,147  
citations

8181

76  
h-index

7348

152  
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215  
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215  
docs citations

215  
times ranked

25248  
citing authors

#	ARTICLE	IF	CITATIONS
1	Evaporation-Induced Self-Assembly: Nanostructures Made Easy. <i>Advanced Materials</i> , 1999, 11, 579-585.	21.0	1,967
2	Continuous formation of supported cubic and hexagonal mesoporous films by sol-gel dip-coating. <i>Nature</i> , 1997, 389, 364-368.	27.8	1,417
3	Aerosol-assisted self-assembly of mesostructured spherical nanoparticles. <i>Nature</i> , 1999, 398, 223-226.	27.8	955
4	The targeted delivery of multicomponent cargos to cancer cells by nanoporous particle-supported lipid bilayers. <i>Nature Materials</i> , 2011, 10, 389-397.	27.5	933
5	Mesoporous Silica Nanoparticle Nanocarriers: Biofunctionality and Biocompatibility. <i>Accounts of Chemical Research</i> , 2013, 46, 792-801.	15.6	801
6	Template-Based Approaches to the Preparation of Amorphous, Nanoporous Silicas. <i>Chemistry of Materials</i> , 1996, 8, 1682-1701.	6.7	745
7	Chemically Exfoliated MoS <sub>2</sub> as Near-Infrared Photothermal Agents. <i>Angewandte Chemie - International Edition</i> , 2013, 52, 4160-4164.	13.8	575
8	Continuous self-assembly of organic-inorganic nanocomposite coatings that mimic nacre. <i>Nature</i> , 1998, 394, 256-260.	27.8	554
9	Self-assembly of mesoscopically ordered chromatic polydiacetylene/silica nanocomposites. <i>Nature</i> , 2001, 410, 913-917.	27.8	531
10	Evaporation-Induced Self-Assembly of Hybrid Bridged Silsesquioxane Film and Particulate Mesophases with Integral Organic Functionality. <i>Journal of the American Chemical Society</i> , 2000, 122, 5258-5261.	13.7	475
11	Self-Assembly of Ordered, Robust, Three-Dimensional Gold Nanocrystal/Silica Arrays. <i>Science</i> , 2004, 304, 567-571.	12.6	468
12	Silica aerogel films prepared at ambient pressure by using surface derivatization to induce reversible drying shrinkage. <i>Nature</i> , 1995, 374, 439-443.	27.8	412
13	Rapid prototyping of patterned functional nanostructures. <i>Nature</i> , 2000, 405, 56-60.	27.8	396
14	Controlled Synthesis of 2-D and 3-D Dendritic Platinum Nanostructures. <i>Journal of the American Chemical Society</i> , 2004, 126, 635-645.	13.7	381
15	Fundamentals of sol-gel dip-coating. <i>Journal De Physique III</i> , 1994, 4, 1231-1242.	0.3	372
16	Processing Pathway Dependence of Amorphous Silica Nanoparticle Toxicity: Colloidal vs Pyrolytic. <i>Journal of the American Chemical Society</i> , 2012, 134, 15790-15804.	13.7	372
17	Photoregulation of Mass Transport through a Photoresponsive Azobenzene-Modified Nanoporous Membrane. <i>Nano Letters</i> , 2004, 4, 551-554.	9.1	352
18	Aqueous Sol-Gel Process for Protein Encapsulation. <i>Chemistry of Materials</i> , 2000, 12, 2434-2441.	6.7	329

#	ARTICLE	IF	CITATIONS
19	Porous Nanoparticle Supported Lipid Bilayers (Protocells) as Delivery Vehicles. <i>Journal of the American Chemical Society</i> , 2009, 131, 1354-1355.	13.7	323
20	Cell-Specific Delivery of Diverse Cargos by Bacteriophage MS2 Virus-like Particles. <i>ACS Nano</i> , 2011, 5, 5729-5745.	14.6	286
21	Electrostatically Mediated Liposome Fusion and Lipid Exchange with a Nanoparticle-Supported Bilayer for Control of Surface Charge, Drug Containment, and Delivery. <i>Journal of the American Chemical Society</i> , 2009, 131, 7567-7569.	13.7	250
22	Surfactant-Assisted Synthesis of Water-Soluble and Biocompatible Semiconductor Quantum Dot Micelles. <i>Nano Letters</i> , 2005, 5, 645-648.	9.1	233
23	Delivery of Small Interfering RNA by Peptide-Targeted Mesoporous Silica Nanoparticle-Supported Lipid Bilayers. <i>ACS Nano</i> , 2012, 6, 2174-2188.	14.6	212
24	Surface Interactions with Compartmentalized Cellular Phosphates Explain Rare Earth Oxide Nanoparticle Hazard and Provide Opportunities for Safer Design. <i>ACS Nano</i> , 2014, 8, 1771-1783.	14.6	212
25	Synthetic amorphous silica nanoparticles: toxicity, biomedical and environmental implications. <i>Nature Reviews Materials</i> , 2020, 5, 886-909.	48.7	212
26	Dual-layer asymmetric microporous silica membranes. <i>Journal of Membrane Science</i> , 2000, 169, 255-268.	8.2	203
27	Confinement-induced quorum sensing of individual <i>Staphylococcus aureus</i> bacteria. <i>Nature Chemical Biology</i> , 2010, 6, 41-45.	8.0	189
28	Establishing the effects of mesoporous silica nanoparticle properties on in vivo disposition using imaging-based pharmacokinetics. <i>Nature Communications</i> , 2018, 9, 4551.	12.8	189
29	Mesoporous Silica Nanoparticle-Supported Lipid Bilayers (Protocells) for Active Targeting and Delivery to Individual Leukemia Cells. <i>ACS Nano</i> , 2016, 10, 8325-8345.	14.6	180
30	Bio-inspired Murray materials for mass transfer and activity. <i>Nature Communications</i> , 2017, 8, 14921.	12.8	176
31	Photoresponsive Nanocomposite Formed by Self-Assembly of an Azobenzene-Modified Silane. <i>Angewandte Chemie - International Edition</i> , 2003, 42, 1731-1734.	13.8	170
32	Peering into the Self-Assembly of Surfactant Templated Thin-Film Silica Mesophases. <i>Journal of the American Chemical Society</i> , 2003, 125, 11646-11655.	13.7	168
33	Optically Defined Multifunctional Patterning of Photosensitive Thin-Film Silica Mesophases. <i>Science</i> , 2000, 290, 107-111.	12.6	166
34	Two-Wave Nanotherapy To Target the Stroma and Optimize Gemcitabine Delivery To a Human Pancreatic Cancer Model in Mice. <i>ACS Nano</i> , 2013, 7, 10048-10065.	14.6	163
35	Modulus density scaling behaviour and framework architecture of nanoporous self-assembled silicas. <i>Nature Materials</i> , 2007, 6, 418-423.	27.5	159
36	Corrosion inhibition using superhydrophobic films. <i>Corrosion Science</i> , 2008, 50, 897-902.	6.6	159

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37	Evaporation-Controlled Self-Assembly of Silica Surfactant Mesophases. <i>Journal of Physical Chemistry B</i> , 2003, 107, 6114-6118.	2.6	155
38	Controlling the Metal to Semiconductor Transition of $\text{MoS}_2$ and $\text{WS}_2$ in Solution. <i>Journal of the American Chemical Society</i> , 2015, 137, 1742-1745.	13.7	155
39	Ligand-targeted theranostic nanomedicines against cancer. <i>Journal of Controlled Release</i> , 2016, 240, 267-286.	9.9	154
40	Pore structure evolution in silica gel during aging/drying. III. Effects of surface tension. <i>Journal of Non-Crystalline Solids</i> , 1992, 144, 32-44.	3.1	153
41	Protocells: Modular Mesoporous Silica Nanoparticle-Supported Lipid Bilayers for Drug Delivery. <i>Small</i> , 2016, 12, 2173-2185.	10.0	150
42	On the issue of transparency and reproducibility in nanomedicine. <i>Nature Nanotechnology</i> , 2019, 14, 629-635.	31.5	149
43	Cell-Directed Assembly of Lipid-Silica Nanostructures Providing Extended Cell Viability. <i>Science</i> , 2006, 313, 337-341.	12.6	147
44	An inorganic-organic proton exchange membrane for fuel cells with a controlled nanoscale pore structure. <i>Nature Nanotechnology</i> , 2010, 5, 230-236.	31.5	145
45	Molecular sieve sensors for selective detection at the nanogram level. <i>Journal of the American Chemical Society</i> , 1989, 111, 7640-7641.	13.7	137
46	Functional Nanocomposites Prepared by Self-Assembly and Polymerization of Diacetylene Surfactants and Silicic Acid. <i>Journal of the American Chemical Society</i> , 2003, 125, 1269-1277.	13.7	135
47	A New Application of UV-Ozone Treatment in the Preparation of Substrate-Supported, Mesoporous Thin Films. <i>Chemistry of Materials</i> , 2000, 12, 3879-3884.	6.7	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. <i>Langmuir</i> , 2001, 17, 7961-7965.	3.5	127
49	Sol-Gel-Based Advanced Porous Silica Materials for Biomedical Applications. <i>Advanced Functional Materials</i> , 2020, 30, 1909539.	14.9	125
50	Self-Directed Assembly of Photoactive Hybrid Silicates Derived from an Azobenzene-Bridged Silsesquioxane. <i>Journal of the American Chemical Society</i> , 2002, 124, 14540-14541.	13.7	124
51	A General Route to Macroscopic Hierarchical 3D Nanowire Networks. <i>Angewandte Chemie - International Edition</i> , 2004, 43, 6169-6173.	13.8	123
52	Drying transition of confined water. <i>Nature</i> , 2006, 442, 526-526.	27.8	123
53	Mathematical modeling in cancer nanomedicine: a review. <i>Biomedical Microdevices</i> , 2019, 21, 40.	2.8	122
54	Evaporation-Induced Self-Assembly: Functional Nanostructures Made Easy. <i>MRS Bulletin</i> , 2004, 29, 631-640.	3.5	116

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55	Aerosol-Assisted Self-Assembly of Single-Crystal Core/Nanoporous Shell Particles as Model Controlled Release Capsules. <i>Journal of the American Chemical Society</i> , 2006, 128, 4512-4513.	13.7	115
56	Gas/vapor adsorption in imogolite: a microporous tubular aluminosilicate. <i>Langmuir</i> , 1993, 9, 1051-1057.	3.5	113
57	Pore structure evolution in silica gel during aging/drying I. Temporal and thermal aging. <i>Journal of Non-Crystalline Solids</i> , 1992, 142, 189-196.	3.1	110
58	DNA translocation through an array of kinked nanopores. <i>Nature Materials</i> , 2010, 9, 667-675.	27.5	109
59	Reduction of Acute Inflammatory Effects of Fumed Silica Nanoparticles in the Lung by Adjusting Silanol Display through Calcination and Metal Doping. <i>ACS Nano</i> , 2015, 9, 9357-9372.	14.6	108
60	Polydiacetylene/Silica Nanocomposites with Tunable Mesostructure and Thermochromatism from Diacetylenic Assembling Molecules. <i>Journal of the American Chemical Society</i> , 2005, 127, 12782-12783.	13.7	107
61	In Situ Fluorescence Probing of the Chemical Changes during Sol-Gel Thin Film Formation. <i>Journal of the American Ceramic Society</i> , 1995, 78, 1640-1648.	3.8	99
62	Self-Assembly and Characterization of Mesostructured Silica Films with a 3D Arrangement of Isolated Spherical Mesopores. <i>Advanced Functional Materials</i> , 2003, 13, 47-52.	14.9	99
63	Microporous Silica Prepared by Organic Templating: A Relationship between the Molecular Template and Pore Structure. <i>Chemistry of Materials</i> , 1999, 11, 1223-1229.	6.7	96
64	Solution Synthesis of Germanium Nanowires Using a Ge <sub>2</sub> +Alkoxide Precursor. <i>Journal of the American Chemical Society</i> , 2006, 128, 5244-5250.	13.7	96
65	SupraCells: Living Mammalian Cells Protected within Functional Modular Nanoparticle-Based Exoskeletons. <i>Advanced Materials</i> , 2019, 31, e1900545.	21.0	96
66	Where Are We Heading in Nanotechnology Environmental Health and Safety and Materials Characterization?. <i>ACS Nano</i> , 2015, 9, 5627-5630.	14.6	91
67	Versatile Surface Functionalization of Metal-Organic Frameworks through Direct Metal Coordination with a Phenolic Lipid Enables Diverse Applications. <i>Advanced Functional Materials</i> , 2018, 28, 1705274.	14.9	90
68	Morphological control of surfactant-templated metal oxide films. <i>Current Opinion in Colloid and Interface Science</i> , 2006, 11, 126-132.	7.4	89
69	Porous inorganic materials. <i>Current Opinion in Solid State and Materials Science</i> , 1996, 1, 798-805.	11.5	88
70	Amorphous silica molecular sieving membranes by sol-gel processing. <i>Advanced Materials</i> , 1996, 8, 588-591.	21.0	87
71	Microporous sol-gel derived aminosilicate membrane for enhanced carbon dioxide separation. <i>Separation and Purification Technology</i> , 2005, 42, 249-257.	7.9	86
72	Mesoporous silica-supported lipid bilayers (protocells) for DNA cargo delivery to the spinal cord. <i>Journal of Controlled Release</i> , 2013, 168, 209-224.	9.9	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.	3.1	85
74	Aqueous sol-gel encapsulation of genetically engineered Moraxella spp. cells for the detection of organophosphates. Biosensors and Bioelectronics, 2005, 20, 1433-1437.	10.1	85
75	Metal-Organic Framework Nanoparticle-Assisted Cryopreservation of Red Blood Cells. Journal of the American Chemical Society, 2019, 141, 7789-7796.	13.7	82
76	Interface Chemistry of Nanostructured Materials: Ion Adsorption on Mesoporous Alumina. Journal of Colloid and Interface Science, 2002, 254, 23-30.	9.4	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.	7.1	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.	13.7	77
79	Comparative Study of Inorganic Cluster-Surfactant Arrays. Chemistry of Materials, 2005, 17, 2885-2895.	6.7	75
80	Thermochromatism and Structural Evolution of Metastable Polydiacetylenic Crystals. Journal of Physical Chemistry B, 2006, 110, 7221-7225.	2.6	72
81	Synthesis and characterization of highly ordered functional mesoporous silica thin films with positively chargeable -NH <sub>2</sub> groups. Chemical Communications, 2003, , 1146-1147.	4.1	71
82	Tubular ceramic-supported sol-gel silica-based membranes for flue gas carbon dioxide capture and sequestration. Journal of Membrane Science, 2009, 341, 30-36.	8.2	70
83	Microstructural Characterization of Polystyrene-block-poly(ethylene oxide)-Templated Silica Films with Cubic-Ordered Spherical Mesopores. Langmuir, 2003, 19, 7295-7301.	3.5	67
84	Biomimetic Rebuilding of Multifunctional Red Blood Cells: Modular Design Using Functional Components. ACS Nano, 2020, 14, 7847-7859.	14.6	67
85	Investigating the Interface of Superhydrophobic Surfaces in Contact with Water. Langmuir, 2005, 21, 7805-7811.	3.5	65
86	Cell-Directed Assembly of Bio/Nano Interfaces-A New Scheme for Cell Immobilization. Accounts of Chemical Research, 2007, 40, 836-845.	15.6	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 CO <sub>2</sub> separation and capture. <i>Nature Communications</i> , 2018, 9, 990.	12.8	62
92	Engineering of monosized lipid-coated mesoporous silica nanoparticles for CRISPR delivery. <i>Acta Biomaterialia</i> , 2020, 114, 358-368.	8.3	62
93	Free-Standing, Patternable Nanoparticle/Polymer Monolayer Arrays Formed by Evaporation Induced Self-Assembly at a Fluid Interface. <i>Journal of the American Chemical Society</i> , 2008, 130, 3284-3285.	13.7	61
94	A mathematical model to predict nanomedicine pharmacokinetics and tumor delivery. <i>Computational and Structural Biotechnology Journal</i> , 2020, 18, 518-531.	4.1	61
95	Repetitive Dosing of Fumed Silica Leads to Profibrogenic Effects through Unique Structure-Activity Relationships and Biopersistence in the Lung. <i>ACS Nano</i> , 2016, 10, 8054-8066.	14.6	58
96	Synthesis of Organo-Silane Functionalized Nanocrystal Micelles and Their Self-Assembly. <i>Journal of the American Chemical Society</i> , 2005, 127, 13746-13747.	13.7	56
97	Nanometer-Thick Conformal Pore Sealing of Self-Assembled Mesoporous Silica by Plasma-Assisted Atomic Layer Deposition. <i>Journal of the American Chemical Society</i> , 2006, 128, 11018-11019.	13.7	55
98	Dip Coating. , 2013, , 233-261.		55
99	Integrated nanotechnology platform for tumor-targeted multimodal imaging and therapeutic cargo release. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2016, 113, 1877-1882.	7.1	55
100	Self-Assembly of an Environmentally Responsive Polymer/Silica Nanocomposite. <i>Journal of the American Chemical Society</i> , 2003, 125, 5626-5627.	13.7	54
101	Multiphoton Lithography of Nanocrystalline Platinum and Palladium for Site-Specific Catalysis in 3D Microenvironments. <i>Journal of the American Chemical Society</i> , 2012, 134, 4007-4010.	13.7	54
102	Multiphased assembly of nanoporous silica particles. <i>Journal of Non-Crystalline Solids</i> , 2001, 285, 71-78.	3.1	50
103	Enlarged Pore Size in Mesoporous Silica Films Templated by Pluronic F127: Use of Poloxamer Mixtures and Increased Template/SiO <sub>2</sub> Ratios in Materials Synthesized by Evaporation-Induced Self-Assembly. <i>Chemistry of Materials</i> , 2015, 27, 75-84.	6.7	50
104	Multifunctional Protocells for Enhanced Penetration in 3D Extracellular Tumoral Matrices. <i>Chemistry of Materials</i> , 2018, 30, 112-120.	6.7	50
105	Aerosol-assisted deposition of surfactant-templated mesoporous silica membranes on porous ceramic supports. <i>Microporous and Mesoporous Materials</i> , 2003, 66, 91-101.	4.4	49
106	Understanding the Connection between Nanoparticle Uptake and Cancer Treatment Efficacy using Mathematical Modeling. <i>Scientific Reports</i> , 2018, 8, 7538.	3.3	49
107	In-Situ X-ray Scattering Study of Continuous Silica-Surfactant Self-Assembly during Steady-State Dip Coating. <i>Journal of Physical Chemistry B</i> , 2003, 107, 7683-7688.	2.6	48
108	Protein-Directed Assembly of Arbitrary Three-Dimensional Nanoporous Silica Architectures. <i>ACS Nano</i> , 2011, 5, 1401-1409.	14.6	48

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109	Modular Metal-Organic Polyhedra Superassembly: From Molecular-Level Design to Targeted Drug Delivery. <i>Advanced Materials</i> , 2019, 31, e1806774.	21.0	48
110	Sub-10 nm Thick Microporous Membranes Made by Plasma-Defined Atomic Layer Deposition of a Bridged Silsesquioxane Precursor. <i>Journal of the American Chemical Society</i> , 2007, 129, 15446-15447.	13.7	47
111	Experimental evidence for two fundamentally different E <sup>2</sup> precursors in amorphous silicon dioxide. <i>Journal of Non-Crystalline Solids</i> , 1991, 136, 151-162.	3.1	46
112	Minimum thermal conductivity considerations in aerogel thin films. <i>Journal of Applied Physics</i> , 2012, 111, .	2.5	46
113	Neutron Reflectivity Study of Lipid Membranes Assembled on Ordered Nanocomposite and Nanoporous Silica Thin Films. <i>Langmuir</i> , 2005, 21, 2865-2870.	3.5	45
114	Aqueous Stability of Mesoporous Silica Films Doped or Grafted with Aluminum Oxide. <i>Langmuir</i> , 2003, 19, 10403-10408.	3.5	43
115	Delivery of Ricin Toxin A-Chain by Peptide-Targeted Mesoporous Silica Nanoparticle-Supported Lipid Bilayers. <i>Advanced Healthcare Materials</i> , 2012, 1, 348-353.	7.6	42
116	Quantitative SAXS Analysis of Oriented 2D Hexagonal Cylindrical Silica Mesostructures in Thin Films Obtained from Nonionic Surfactants. <i>Langmuir</i> , 2005, 21, 3858-3866.	3.5	41
117	Mechanically tunable multiphoton fabricated protein hydrogels investigated using atomic force microscopy. <i>Soft Matter</i> , 2010, 6, 2842.	2.7	40
118	Controlled Fabrication of Functional Capsules Based on the Synergistic Interaction between Polyphenols and MOFs under Weak Basic Condition. <i>ACS Applied Materials &amp; Interfaces</i> , 2017, 9, 14258-14264.	8.0	37
119	Conversion of Metal-Organic Cage to Ligand-Free Ultrasmall Noble Metal Nanocluster Catalysts Confined within Mesoporous Silica Nanoparticle Supports. <i>Nano Letters</i> , 2019, 19, 1512-1519.	9.1	36
120	Encapsulation of <i>S. cerevisiae</i> in Poly(glycerol) Silicate Derived Matrices: Effect of Matrix Additives and Cell Metabolic Phase on Long-Term Viability and Rate of Gene Expression. <i>Chemistry of Materials</i> , 2011, 23, 2555-2564.	6.7	35
121	In situ pore structure studies of xerogel drying. <i>Chemistry of Materials</i> , 1989, 1, 34-40.	6.7	34
122	Hierarchically Organized Nanoparticle Mesostructure Arrays Formed through Hydrothermal Self-Assembly. <i>Chemistry of Materials</i> , 2006, 18, 3034-3038.	6.7	34
123	Dynamic Investigation of Gold Nanocrystal Assembly Using In Situ Grazing-Incidence Small-Angle X-ray Scattering. <i>Langmuir</i> , 2008, 24, 10575-10578.	3.5	34
124	Oriented inorganic films. <i>Current Opinion in Colloid and Interface Science</i> , 1998, 3, 166-173.	7.4	33
125	Cell-Directed Integration into Three-Dimensional Lipid-Silica Nanostructured Matrices. <i>ACS Nano</i> , 2010, 4, 5539-5550.	14.6	33
126	Pendant/bridged/mesoporous silsesquioxane nanoparticles: Versatile and biocompatible platforms for smart delivery of therapeutics. <i>Chemical Engineering Journal</i> , 2018, 340, 125-147.	12.7	32



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127	Bioinspired Cell Silicification: From Extracellular to Intracellular. <i>Journal of the American Chemical Society</i> , 2021, 143, 6305-6322.	13.7	32
128	Photoresponsive Nanocomposite Formed by Self-Assembly of an Azobenzene-Modified Silane. <i>Angewandte Chemie</i> , 2003, 115, 1773-1776.	2.0	31
129	Directed Aerosol Writing of Ordered Silica Nanostructures on Arbitrary Surfaces with Self-Assembling Inks. <i>Small</i> , 2008, 4, 982-989.	10.0	31
130	Aerosol-Assisted Formation of Mesoporous Thin Films. <i>Advanced Materials</i> , 2003, 15, 1733-1736.	21.0	30
131	Cell-directed-assembly: Directing the formation of nano/bio interfaces and architectures with living cells. <i>Biochimica Et Biophysica Acta - General Subjects</i> , 2011, 1810, 259-267.	2.4	30
132	Structural Studies of Anomalous Behavior in the Silica-Alumina Gel System. <i>Journal of the American Ceramic Society</i> , 1990, 73, 2815-2821.	3.8	28
133	Hydrothermal synthesis of monodisperse single-crystalline alpha-quartz nanospheres. <i>Chemical Communications</i> , 2011, 47, 7524.	4.1	28
134	Modular Assembly of Red Blood Cell Superstructures from Metal-Organic Framework Nanoparticle-Based Building Blocks. <i>Advanced Functional Materials</i> , 2021, 31, 2005935.	14.9	28
135	Synthetic fossilization of soft biological tissues and their shape-preserving transformation into silica or electron-conductive replicas. <i>Nature Communications</i> , 2014, 5, 5665.	12.8	27
136	Preparation and characterization of mesoporous polymer-functionalized sol-gel-derived thin films. <i>Progress in Organic Coatings</i> , 2003, 47, 393-400.	3.9	26
137	Biocompatible Microfabrication of 3D Isolation Chambers for Targeted Confinement of Individual Cells and Their Progeny. <i>Analytical Chemistry</i> , 2012, 84, 8985-8989.	6.5	26
138	A novel approach for targeted delivery to motoneurons using cholera toxin-B modified protocells. <i>Journal of Neuroscience Methods</i> , 2016, 273, 160-174.	2.5	26
139	Silica bioreplication preserves three-dimensional spheroid structures of human pluripotent stem cells and HepG2 cells. <i>Scientific Reports</i> , 2015, 5, 13635.	3.3	25
140	Biodegradable Silica-Based Nanoparticles: Dissolution Kinetics and Selective Bond Cleavage. <i>The Enzymes</i> , 2018, 43, 181-214.	1.7	25
141	Spray-Dried Multiscale Nano-biocomposites Containing Living Cells. <i>ACS Nano</i> , 2015, 9, 6961-6977.	14.6	24
142	Image-guided mathematical modeling for pharmacological evaluation of nanomaterials and monoclonal antibodies. <i>Wiley Interdisciplinary Reviews: Nanomedicine and Nanobiotechnology</i> , 2020, 12, e1628.	6.1	24
143	Optical Detection of Ion-Channel-Induced Proton Transport in Supported Phospholipid Bilayers. <i>Nano Letters</i> , 2007, 7, 2446-2451.	9.1	23
144	Molecular Dynamics Simulations of the Silica-Cell Membrane Interaction: Insights on Biomaterialization and Nanotoxicity. <i>Journal of Physical Chemistry C</i> , 2018, 122, 21330-21343.	3.1	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. <i>Nano Letters</i> , 2013, 13, 1041-1046.	9.1	22
146	Anomalously Low Surface Area and Density in the Silica-Alumina Gel System. <i>Journal of the American Ceramic Society</i> , 1989, 72, 2354-2358.	3.8	21
147	Direct Measurement of Solvation Forces in Complex Microporous Media: A New Characterization Tool. <i>Langmuir</i> , 1998, 14, 2602-2605.	3.5	21
148	Optical and electrical properties of self-assembled, ordered gold nanocrystal/silica thin films prepared by sol-gel processing. <i>Thin Solid Films</i> , 2005, 491, 38-42.	1.8	21
149	Aerosol-assisted synthesis of monodisperse single-crystalline $\beta$ -cristobalite nanospheres. <i>Chemical Communications</i> , 2012, 48, 1293-1295.	4.1	21
150	A Molecular Basis for Advanced Materials in Water Treatment. <i>MRS Bulletin</i> , 2008, 33, 42-47.	3.5	20
151	Characterization of Lipid-Templated Silica and Hybrid Thin Film Mesophases by Grazing Incidence Small-Angle X-ray Scattering. <i>Langmuir</i> , 2009, 25, 9500-9509.	3.5	20
152	Numerical Simulation of Ethanol-Water-NaCl Droplet Evaporation. <i>Industrial &amp; Engineering Chemistry Research</i> , 2010, 49, 5631-5643.	3.7	20
153	Direct Transfer of Mesoporous Silica Nanoparticles between Macrophages and Cancer Cells. <i>Cancers</i> , 2020, 12, 2892.	3.7	19
154	Cell-Directed Localization and Orientation of a Functional Foreign Transmembrane Protein within a Silica Nanostructure. <i>Journal of the American Chemical Society</i> , 2009, 131, 14255-14257.	13.7	17
155	Three-Dimensional Encapsulation of <i>Saccharomyces cerevisiae</i> in Silicate Matrices Creates Distinct Metabolic States as Revealed by Gene Chip Analysis. <i>ACS Nano</i> , 2017, 11, 3560-3575.	14.6	17
156	Predicting breast cancer response to neoadjuvant chemotherapy based on tumor vascular features in needle biopsies. <i>JCI Insight</i> , 2019, 4, .	5.0	17
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