List of Publications by Year in descending order

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#	Article	IF	CITATIONS
1	Silicaâ€encapsulated DNA tracers for measuring aerosol distribution dynamics in realâ€world settings. Indoor Air, 2022, 32, .	4.3	3
2	Anhydrous calcium phosphate crystals stabilize DNA for dry storage. Chemical Communications, 2022, 58, 3174-3177.	4.1	8
3	Integrating DNA Encapsulates and Digital Microfluidics for Automated Data Storage in DNA. Small, 2022, 18, e2107381.	10.0	21
4	Removal of Circulating Tumor Cells from Blood Samples of Cancer Patients Using Highly Magnetic Nanoparticles: A Translational Research Project. Pharmaceutics, 2022, 14, 1397.	4.5	4
5	Increased Longevity and Pumping Performance of an Injection Molded Soft Total Artificial Heart. Soft Robotics, 2021, 8, 588-593.	8.0	9
6	Preparation of Functionalized Carbon oated Cobalt Nanoparticles with Sulfonated Arene Derivatives, a Study on Surface Functionalization and Stability. Chemistry - A European Journal, 2021, 27, 4108-4114.	3.3	5
7	Ecotoxicological Assessment of DNA-Tagged Silica Particles for Environmental Tracing. Environmental Science & Technology, 2021, 55, 6867-6875.	10.0	6
8	Suspension of Amorphous Calcium Phosphate Nanoparticles Impact Commitment of Human Adipose-Derived Stem Cells In Vitro. Biology, 2021, 10, 675.	2.8	1
9	Rapid Identification of SARS-CoV-2 Variants of Concern Using a Portable <i>peak</i> PCR Platform. Analytical Chemistry, 2021, 93, 16350-16359.	6.5	17
10	3D microtissue–derived human stem cells seeded on electrospun nanocomposites under shear stress: Modulation of gene expression. Journal of the Mechanical Behavior of Biomedical Materials, 2020, 102, 103481.	3.1	8
11	A DNA-of-things storage architecture to create materials with embedded memory. Nature Biotechnology, 2020, 38, 39-43.	17.5	113
12	Reading and writing digital data in DNA. Nature Protocols, 2020, 15, 86-101.	12.0	81
13	DNA synthesis for true random number generation. Nature Communications, 2020, 11, 5869.	12.8	23
14	Low cost DNA data storage using photolithographic synthesis and advanced information reconstruction and error correction. Nature Communications, 2020, 11, 5345.	12.8	66
15	One-Step Photolithographic Surface Patterning of Nanometer-Thick Gold Surfaces by Using a Commercial DLP Projector and the Fabrication of a Microheater. Industrial & Engineering Chemistry Research, 2020, 59, 12048-12055.	3.7	3
16	Genomic Encryption of Digital Data Stored in Synthetic DNA. Angewandte Chemie, 2020, 132, 8554-8558.	2.0	3
17	Genomic Encryption of Digital Data Stored in Synthetic DNA. Angewandte Chemie - International Edition, 2020, 59, 8476-8480.	13.8	13
18	Stabilizing synthetic DNA for long-term data storage with earth alkaline salts. Chemical Communications, 2020, 56, 3613-3616.	4.1	38

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19	Hybrid nanocomposite as a chest wall graft with improved integration by adipose-derived stem cells. Scientific Reports, 2019, 9, 10910.	3.3	6
20	YestroSens, a field-portable S. cerevisiae biosensor device for the detection of endocrine-disrupting chemicals: Reliability and stability. Biosensors and Bioelectronics, 2019, 146, 111710.	10.1	12
21	DNA Barcode Quantification As a Robust Tool for Measuring Mixing Ratios in Two-Component Systems. ACS Applied Bio Materials, 2019, 2, 5062-5068.	4.6	0
22	Small-Size Polymerase Chain Reaction Device with Improved Heat Transfer and Combined Feedforward/Feedback Control Strategy. Industrial & Engineering Chemistry Research, 2019, 58, 9665-9674.	3.7	9
23	Strategies of Immobilizing Cells in Whole-cell Microbial Biosensor Devices Targeted for Analytical Field Applications. Analytical Sciences, 2019, 35, 839-847.	1.6	10
24	Continuous Production of a Shelf‧table Living Material as a Biosensor Platform. Advanced Materials Technologies, 2019, 4, 1900266.	5.8	10
25	Combining Data Longevity with High Storage Capacity—Layerâ€byâ€Layer DNA Encapsulated in Magnetic Nanoparticles. Advanced Functional Materials, 2019, 29, 1901672.	14.9	65
26	Safe One-Pot Synthesis of Fluorescent Carbon Quantum Dots from Lemon Juice for a Hands-On Experience of Nanotechnology. Journal of Chemical Education, 2019, 96, 540-545.	2.3	36
27	Modification of silicone elastomers with Bioglass 45S5® increases in ovo tissue biointegration. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2019, 107, 1180-1188.	3.4	8
28	The light triggered dissolution of gold wires using potassium ferrocyanide solutions enables cumulative illumination sensing. Sensors and Actuators B: Chemical, 2019, 282, 52-59.	7.8	14
29	Cartilage/bone interface fabricated under perfusion: Spatially organized commitment of adiposeâ€derived stem cells without medium supplementation. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2019, 107, 1833-1843.	3.4	11
30	Long-Term Performance of a Pneumatically Actuated Soft Pump Manufactured by Rubber Compression Molding. Soft Robotics, 2019, 6, 206-213.	8.0	9
31	Lengthâ€dependent DNA degradation kinetic model: Decay compensation in DNA tracer concentration measurements. AICHE Journal, 2019, 65, 40-48.	3.6	23
32	Nondestructive in-line sub-picomolar detection of magnetic nanoparticles in flowing complex fluids. Scientific Reports, 2018, 8, 3491.	3.3	25
33	Thermoresponsive Microspheres as Smart Pore Plugs: Selfâ€Venting Clothing Membranes for Smart Outdoor Textiles. Macromolecular Materials and Engineering, 2018, 303, 1700562.	3.6	7
34	Cyclic uniaxial compression of human stem cells seeded on a bone biomimetic nanocomposite decreases anti-osteogenic commitment evoked by shear stress. Journal of the Mechanical Behavior of Biomedical Materials, 2018, 83, 84-93.	3.1	10
35	Water dispersible surface-functionalized platinum/carbon nanorattles for size-selective catalysis. Chemical Science, 2018, 9, 362-367.	7.4	12
36	Porous Polymer Membranes by Hard Templating – A Review. Advanced Engineering Materials, 2018, 20, 1700611.	3.5	35

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37	Selective Low-Energy Carbon Dioxide Adsorption Using Monodisperse Nitrogen-Rich Hollow Carbon Submicron Spheres. Langmuir, 2018, 34, 30-35.	3.5	19
38	Silica-Encapsulated DNA-Based Tracers for Aquifer Characterization. Environmental Science & amp; Technology, 2018, 52, 12142-12152.	10.0	50
39	Hydrogen as a Bio-Orthogonal Trigger for Spatiotemporally Controlled Caged Prodrug Activation. Helvetica Chimica Acta, 2018, 101, e1800134.	1.6	0
40	Tomographic Reservoir Imaging with DNA-Labeled Silica Nanotracers: The First Field Validation. Environmental Science & Technology, 2018, 52, 13681-13689.	10.0	35
41	Direct synthesis of carbon quantum dots in aqueous polymer solution: one-pot reaction and preparation of transparent UV-blocking films. Journal of Materials Chemistry A, 2017, 5, 5187-5194.	10.3	111
42	Facile and Efficient Removal of Tungsten Anions Using Lysine-Promoted Precipitation for Recycling High-Purity Tungsten. ACS Sustainable Chemistry and Engineering, 2017, 5, 3141-3147.	6.7	16
43	Stabilization of 2D Water Films in Porous Triple‣ayer Membranes with a Hydrophilic Core: Cooling Textiles and Passive Evaporative Room Climate Control. Advanced Engineering Materials, 2017, 19, 1700134.	3.5	9
44	Protein Reduction and Dialysisâ€Free Workâ€Up through Phosphines Immobilized on a Magnetic Support: TCEPâ€Functionalized Carbonâ€Coated Cobalt Nanoparticles. Chemistry - A European Journal, 2017, 23, 8585-8589.	3.3	7
45	Efficient Recycling of Poly(lactic acid) Nanoparticle Templates for the Synthesis of Hollow Silica Spheres. ACS Sustainable Chemistry and Engineering, 2017, 5, 4941-4947.	6.7	18
46	Bioactive glass containing silicone composites for left ventricular assist device drivelines: role of Bioglass 45S5® particle size on mechanical properties and cytocompatibility. Journal of Materials Science, 2017, 52, 9023-9038.	3.7	18
47	Rapid Production of a Porous Cellulose Acetate Membrane for Water Filtration using Readily Available Chemicals. Journal of Chemical Education, 2017, 94, 483-487.	2.3	29
48	Highly elastomeric poly(3-hydroxyoctanoate) based natural polymer composite for enhanced keratinocyte regeneration. International Journal of Polymeric Materials and Polymeric Biomaterials, 2017, 66, 326-335.	3.4	22
49	Effects of seeding adipose-derived stem cells on electrospun nanocomposite used as chest wall graft in a murine model. Injury, 2017, 48, 2080-2088.	1.7	7
50	A Soft Total Artificial Heart—First Concept Evaluation on a Hybrid Mock Circulation. Artificial Organs, 2017, 41, 948-958.	1.9	67
51	Ultrapure Green Light-Emitting Diodes Using Two-Dimensional Formamidinium Perovskites: Achieving Recommendation 2020 Color Coordinates. Nano Letters, 2017, 17, 5277-5284.	9.1	221
52	The dissipation rate of news in online mass media evaluated by chemical engineering and process control tools. AICHE Journal, 2016, 62, 1104-1111.	3.6	1
53	Submicrometer-Sized Thermometer Particles Exploiting Selective Nucleic Acid Stability. Small, 2016, 12, 452-456.	10.0	20
54	DNAâ€Based Sensor Particles Enable Measuring Light Intensity in Single Cells. Advanced Materials, 2016, 28, 2765-2770.	21.0	4

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55	Incorporation of particulate bioactive glasses into a dental root canal sealer. Biomedical Glasses, 2016, 2, .	2.4	17
56	Kohlenstoffâ€NanoblÃ <b>¤</b> chen: Synthese, chemische Funktionalisierung und containerartiges Verhalten in Wasser. Angewandte Chemie, 2016, 128, 8905-8909.	2.0	3
57	Hollow Carbon Nanobubbles: Synthesis, Chemical Functionalization, and Containerâ€Type Behavior in Water. Angewandte Chemie - International Edition, 2016, 55, 8761-8765.	13.8	22
58	Selective Biosorption and Recovery of Tungsten from an Urban Mine and Feasibility Evaluation. Industrial & Engineering Chemistry Research, 2016, 55, 2903-2910.	3.7	27
59	Nanoscale bioactive glass activates osteoclastic differentiation of RAW 264.7 cells. Nanomedicine, 2016, 11, 1093-1105.	3.3	15
60	Application of the <i>Prunus</i> spp. Cyanide Seed Defense System onto Wheat: Reduced Insect Feeding and Field Growth Tests. Journal of Agricultural and Food Chemistry, 2016, 64, 3501-3507.	5.2	9
61	MOF Channels within Porous Polymer Film: Flexible, Self-Supporting ZIF-8 Poly(ether sulfone) Composite Membrane. Chemistry of Materials, 2016, 28, 7638-7644.	6.7	63
62	A Bioinspired Ultraporous Nanofiberâ€Hydrogel Mimic of the Cartilage Extracellular Matrix. Advanced Healthcare Materials, 2016, 5, 3129-3138.	7.6	54
63	Hollow Silica as an Optically Transparent and Thermally Insulating Polymer Additive. Langmuir, 2016, 32, 338-345.	3.5	49
64	Ultrasensitive Quantification of Pesticide Contamination and Drift Using Silica Particles with Encapsulated DNA. Environmental Science and Technology Letters, 2016, 3, 19-23.	8.7	18
65	<i>In vivo</i> risk evaluation of carbon-coated iron carbide nanoparticles based on short- and long-term exposure scenarios. Nanomedicine, 2016, 11, 783-796.	3.3	17
66	Particles with an identity: Tracking and tracing in commodity products. Powder Technology, 2016, 291, 344-350.	4.2	52
67	Click and release: fluoride cleavable linker for mild bioorthogonal separation. Chemical Communications, 2016, 52, 938-941.	4.1	13
68	RNA Storage: Silica Microcapsules for Longâ€Term, Robust, and Reliable Room Temperature RNA Preservation (Adv. Healthcare Mater. 9/2015). Advanced Healthcare Materials, 2015, 4, 1262-1262.	7.6	1
69	Stable Ferromagnetic Nanoparticle Dispersions in Aqueous Solutions. Chimia, 2015, 69, 369-369.	0.6	1
70	Robuste chemische Speicherung von digitalen Informationen auf DNA in Silicat unter Verwendung fehlerkorrigierender Codes. Angewandte Chemie, 2015, 127, 2582-2586.	2.0	13
71	Contrast Agent Incorporation into Silicone Enables Realâ€īime Flow‧tructure Analysis of Mammalian Veinâ€Inspired Soft Pumps. Advanced Functional Materials, 2015, 25, 2129-2137.	14.9	12
72	Fibers Mechanically Similar to Sheep Wool Obtained by Wet Spinning of Gelatin and Optional Plasticizers. Macromolecular Materials and Engineering, 2015, 300, 234-241.	3.6	12

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73	Magnetically deliverable calcium phosphate nanoparticles for localized gene expression. RSC Advances, 2015, 5, 9997-10004.	3.6	10
74	Robust Chemical Preservation of Digital Information on DNA in Silica with Errorâ€Correcting Codes. Angewandte Chemie - International Edition, 2015, 54, 2552-2555.	13.8	458
75	Adsorption and separation of amyloid beta aggregates using ferromagnetic nanoparticles coated with charged polymer brushes. Journal of Materials Chemistry B, 2015, 3, 3351-3357.	5.8	7
76	Programmable living material containing reporter micro-organisms permits quantitative detection of oligosaccharides. Biomaterials, 2015, 61, 1-9.	11.4	15
77	Porous, Water-Resistant Multifilament Yarn Spun from Gelatin. Biomacromolecules, 2015, 16, 1997-2005.	5.4	15
78	Tissue mechanics of piled critical size biomimetic and biominerizable nanocomposites: Formation of bioreactor-induced stem cell gradients under perfusion and compression. Journal of the Mechanical Behavior of Biomedical Materials, 2015, 47, 124-134.	3.1	16
79	Silica Microcapsules for Longâ€Term, Robust, and Reliable Room Temperature RNA Preservation. Advanced Healthcare Materials, 2015, 4, 1332-1338.	7.6	17
80	Uptake of ferromagnetic carbon-encapsulated metal nanoparticles in endothelial cells: influence of shear stress and endothelial activation. Nanomedicine, 2015, 10, 3537-3546.	3.3	6
81	An Untethered, Jumping Roly-Poly Soft Robot Driven by Combustion. Soft Robotics, 2015, 2, 33-41.	8.0	87
82	Template-Particle Stabilized Bicontinuous Emulsion Yielding Controlled Assembly of Hierarchical High-Flux Filtration Membranes. ACS Applied Materials & Interfaces, 2015, 7, 611-617.	8.0	22
83	Gas-phase synthesis of magnetic metal/polymer nanocomposites. Nanotechnology, 2014, 25, 505602.	2.6	16
84	Tracking Trace Amounts of Submicrometer Silica Particles in Wastewaters and Activated Sludge Using Silica-Encapsulated DNA Barcodes. Environmental Science and Technology Letters, 2014, 1, 484-489.	8.7	31
85	Spinning Angora Rabbit Wool‣ike Porous Fibers from a Nonâ€Equilibrated Gelatin/Water/2â€Propanol Mixture. Advanced Functional Materials, 2014, 24, 1831-1839.	14.9	10
86	Bioactive nanocomposite for chest-wall replacement: Cellular response in a murine model. Journal of Biomaterials Applications, 2014, 29, 36-45.	2.4	11
87	Limestone nanoparticles as nanopore templates in polymer membranes: narrow pore size distribution and use as self-wetting dialysis membranes. RSC Advances, 2014, 4, 61420-61426.	3.6	16
88	Palladium Nanoparticles Supported on Magnetic Carbon oated Cobalt Nanobeads: Highly Active and Recyclable Catalysts for Alkene Hydrogenation. Advanced Functional Materials, 2014, 24, 2020-2027.	14.9	102
89	Proliferation of ASC-derived endothelial cells in a 3D electrospun mesh: Impact of bone-biomimetic nanocomposite and co-culture with ASC-derived osteoblasts. Injury, 2014, 45, 974-980.	1.7	32
90	Magnetically Recoverable, Thermostable, Hydrophobic DNA/Silica Encapsulates and Their Application as Invisible Oil Tags. ACS Nano, 2014, 8, 2677-2685.	14.6	104

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91	Self-defending anti-vandalism surfaces based on mechanically triggered mixing of reactants in polymer foils. Journal of Materials Chemistry A, 2014, 2, 8425-8430.	10.3	4
92	Palladium nanoparticles supported on ionic liquid modified, magnetic nanobeads – recyclable, high-capacity catalysts for alkene hydrogenation. RSC Advances, 2014, 4, 8541.	3.6	49
93	Roll-to-Roll Preparation of Mesoporous Membranes by Nanoparticle Template Removal. Industrial & Engineering Chemistry Research, 2014, 53, 9214-9220.	3.7	24
94	Magnetic Superbasic Proton Sponges Are Readily Removed and Permit Direct Product Isolation. Journal of Organic Chemistry, 2014, 79, 10908-10915.	3.2	21
95	Inflammatory Response of Lung Macrophages and Epithelial Cells after Exposure to Redox Active Nanoparticles: Effect of Solubility and Antioxidant Treatment. Environmental Science & Technology, 2014, 48, 13960-13968.	10.0	23
96	Induced cyanogenesis from hydroxynitrile lyase and mandelonitrile on wheat with polylactic acid multilayer-coating produces self-defending seeds. Journal of Materials Chemistry A, 2014, 2, 853-858.	10.3	5
97	PCR quantification of SiO <sub>2</sub> particle uptake in cells in the ppb and ppm range via silica encapsulated DNA barcodes. Chemical Communications, 2014, 50, 10707-10709.	4.1	7
98	Labeling Milk along Its Production Chain with DNA Encapsulated in Silica. Journal of Agricultural and Food Chemistry, 2014, 62, 10615-10620.	5.2	28
99	3D printed lost-wax casted soft silicone monoblocks enable heart-inspired pumping by internal combustion. RSC Advances, 2014, 4, 16039-16042.	3.6	43
100	Characterization of carbon-coated magnetic nanoparticles using clinical blood coagulation assays: effect of PEG-functionalization and comparison to silica nanoparticles. Journal of Materials Chemistry B, 2014, 2, 3753-3758.	5.8	18
101	Design, Performance and Reinforcement of Bearing-Free Soft Silicone Combustion-Driven Pumps. Industrial & Engineering Chemistry Research, 2014, 53, 12519-12526.	3.7	25
102	Efficient Magnetic Recycling of Covalently Attached Enzymes on Carbon-Coated Metallic Nanomagnets. Bioconjugate Chemistry, 2014, 25, 677-684.	3.6	34
103	Micro Mirror Polymer Composite Offers Mechanically Switchable Light Transmittance. Advanced Engineering Materials, 2014, 16, 878-883.	3.5	5
104	Functionalizing a dentin bonding resin to become bioactive. Dental Materials, 2014, 30, 868-875.	3.5	69
105	Comparison of flame-made rhodium on Al2O3 or Ce0.5Zr0.5O2 supports for the partial oxidation of methane. Applied Catalysis A: General, 2014, 469, 275-283.	4.3	12
106	Purification of NaYF <sub>4</sub> -Based Upconversion Phosphors. Chemistry of Materials, 2014, 26, 2015-2020.	6.7	18
107	Sensitive Detection of Aromatic Hydrophobic Compounds in Water and Perfluorooctane Sulfonate in Human Serum by Surface-Assisted Laser Desorption/Ionization Mass Spectrometry (SALDI-MS) with Amine Functionalized Graphene-Coated Cobalt Nanoparticles. Mass Spectrometry, 2014, 3, A0028-A0028.	0.6	2
108	Ferromagnetic Inks Facilitate Large Scale Paper Recycling and Reduce Bleach Chemical Consumption. Langmuir, 2013, 29, 5093-5098.	3.5	6

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109	Soft Iron/Silicon Composite Tubes for Magnetic Peristaltic Pumping: Frequencyâ€Dependent Pressure and Volume Flow. Advanced Functional Materials, 2013, 23, 3845-3849.	14.9	69
110	Nanomagnet-based removal of lead and digoxin from living rats. Nanoscale, 2013, 5, 8718.	5.6	42
111	Organic Synthesis on Graphene. Accounts of Chemical Research, 2013, 46, 2297-2306.	15.6	68
112	pH-dependent antibacterial effects on oral microorganisms through pure PLGA implants and composites with nanosized bioactive glass. Acta Biomaterialia, 2013, 9, 9118-9125.	8.3	32
113	Quantitative Recovery of Magnetic Nanoparticles from Flowing Blood: Trace Analysis and the Role of Magnetization. Advanced Functional Materials, 2013, 23, 4888-4896.	14.9	23
114	Nanoparticles: Endotoxin Removal by Magnetic Separationâ€Based Blood Purification (Adv. Healthcare) Tj ETQq0	0.0.rgBT 7.6	/Oyerlock 10
115	Endotoxin Removal by Magnetic Separationâ€Based Blood Purification. Advanced Healthcare Materials, 2013, 2, 829-835.	7.6	46
116	Synthesis of Trisubstituted Ureas by a Multistep Sequence Utilizing Recyclable Magnetic Reagents and Scavengers. Chemistry - A European Journal, 2013, 19, 10038-10045.	3.3	16
117	Rapid Surface–Biostructure Interaction Analysis Using Strong Metal-Based Nanomagnets. Langmuir, 2013, 29, 14117-14123.	3.5	2
118	Heatâ€Induced Dry Tailoring of Porosity in Polymer Scaffolds. Macromolecular Materials and Engineering, 2013, 298, 1143-1148.	3.6	2
119	Flame Synthesis of Complex Fluoride-Based Nanoparticles as Upconversion Phosphors. KONA Powder and Particle Journal, 2013, 30, 267-275.	1.7	6
120	Pressureless Mechanical Induction of Stem Cell Differentiation Is Dose and Frequency Dependent. PLoS ONE, 2013, 8, e81362.	2.5	26
121	Carbon coated magnetic nanoparticles as supports in microwave-assisted palladium catalyzed Suzuki-Miyaura couplings. Green Processing and Synthesis, 2012, 1, .	3.4	2
122	Incorporating microorganisms into polymer layers provides bioinspired functional living materials. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 90-94.	7.1	37
123	Nanocomposites of high-density polyethylene with amorphous calcium phosphate: <i>in vitro</i> biomineralization and cytocompatibility of human mesenchymal stem cells. Biomedical Materials (Bristol), 2012, 7, 054103.	3.3	7
124	Functionalized Graphene-Coated Cobalt Nanoparticles for Highly Efficient Surface-Assisted Laser Desorption/Ionization Mass Spectrometry Analysis. Analytical Chemistry, 2012, 84, 9268-9275.	6.5	56
125	Tissue engineered bone grafts based on biomimetic nanocomposite PLGA/amorphous calcium phosphate scaffold and human adipose-derived stem cells. Injury, 2012, 43, 1689-1697.	1.7	80
126	Incorporation of Penicillinâ€Producing Fungi into Living Materials to Provide Chemically Active and Antibioticâ€Releasing Surfaces. Angewandte Chemie - International Edition, 2012, 51, 11293-11296.	13.8	34

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127	Electrical Resistivity of Assembled Transparent Inorganic Oxide Nanoparticle Thin Layers: Influence of Silica, Insulating Impurities, and Surfactant Layer Thickness. ACS Applied Materials & Interfaces, 2012, 4, 2664-2671.	8.0	15
128	Stable dispersions of ferromagnetic carbon-coated metal nanoparticles: preparation via surface initiated atom transfer radical polymerization. Journal of Materials Chemistry, 2012, 22, 12064.	6.7	40
129	Nanoparticle-Assisted, Catalytic Etching of Carbon Surfaces as a Method to Manufacture Nanogrooves. Journal of Physical Chemistry C, 2012, 116, 13693-13698.	3.1	8
130	Persistence of engineered nanoparticles in a municipal solid-waste incineration plant. Nature Nanotechnology, 2012, 7, 520-524.	31.5	186
131	Scaling up magnetic filtration and extraction to the ton per hour scale using carbon coated metal nanoparticles. Separation and Purification Technology, 2012, 96, 68-74.	7.9	23
132	Large-Scale Synthesis of PbS–TiO <sub>2</sub> Heterojunction Nanoparticles in a Single Step for Solar Cell Application. Journal of Physical Chemistry C, 2012, 116, 16264-16270.	3.1	49
133	Physical Defect Formation in Few Layer Graphene-like Carbon on Metals: Influence of Temperature, Acidity, and Chemical Functionalization. Langmuir, 2012, 28, 4565-4572.	3.5	13
134	Effects of flame made zinc oxide particles in human lung cells - a comparison of aerosol and suspension exposures. Particle and Fibre Toxicology, 2012, 9, 33.	6.2	45
135	Phosphate starvation as an antimicrobial strategy: the controllable toxicity of lanthanum oxide nanoparticles. Chemical Communications, 2012, 48, 3869.	4.1	58
136	Carbon Modifications and Surfaces for Catalytic Organic Transformations. ACS Catalysis, 2012, 2, 1267-1284.	11.2	170
137	Magnetic Nanobeads as Support for Zinc(II)–Cyclen Complexes: Selective and Reversible Extraction of Riboflavin. ChemistryOpen, 2012, 1, 125-129.	1.9	11
138	Chemical modification of graphene characterized by Raman and transport experiments. Nanoscale, 2012, 4, 3781.	5.6	15
139	Porous polysulfone coatings for enhanced drug delivery. Biomedical Microdevices, 2012, 14, 603-612.	2.8	25
140	Use of NIR light and upconversion phosphors in light-curable polymers. Dental Materials, 2012, 28, 304-311.	3.5	76
141	Soluble nanoparticles as removable pore templates for the preparation of polymer ultrafiltration membranes. Journal of Membrane Science, 2012, 387-388, 76-82.	8.2	36
142	Magnetothermally responsive C/Co@PNIPAM-nanoparticles enable preparation of self-separating phase-switching palladium catalysts. Journal of Materials Chemistry, 2011, 21, 2991.	6.7	76
143	A fast hybrid start-up process for thermally self-sustained catalytic n-butane reforming in micro-SOFC power plants. Energy and Environmental Science, 2011, 4, 3041.	30.8	21
144	Monomer-on-Monomer (MoM) Mitsunobu Reaction: Facile Purification Utilizing Surface-Initiated Sequestration. Organic Letters, 2011, 13, 8-10.	4.6	23

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145	Immobilized β-Cyclodextrin on Surface-Modified Carbon-Coated Cobalt Nanomagnets: Reversible Organic Contaminant Adsorption and Enrichment from Water. Langmuir, 2011, 27, 1924-1929.	3.5	70
146	Two-layer membranes of calcium phosphate/collagen/PLGA nanofibres: in vitro biomineralisation and osteogenic differentiation of human mesenchymal stem cells. Nanoscale, 2011, 3, 401-409.	5.6	61
147	Cerium oxide nanoparticle uptake kinetics from the gas-phase into lung cells in vitro is transport limited. European Journal of Pharmaceutics and Biopharmaceutics, 2011, 77, 368-375.	4.3	34
148	Combined Covalent and Noncovalent Functionalization of Nanomagnetic Carbon Surfaces with Dendrimers and BODIPY Fluorescent Dye. Chemistry of Materials, 2011, 23, 3606-3613.	6.7	39
149	From Embedded to Supported Metal/Oxide Nanomaterials: Thermal Behavior and Structural Evolution at Elevated Temperatures. Journal of Physical Chemistry C, 2011, 115, 1269-1276.	3.1	13
150	Reactivity of calcium phosphate nanoparticles prepared by flame spray synthesis as precursors for calcium phosphate cements. Journal of Materials Chemistry, 2011, 21, 13963.	6.7	26
151	Optimization of Bioglass <sup>®</sup> Scaffold Fabrication Process. Journal of the American Ceramic Society, 2011, 94, 4184-4190.	3.8	34
152	Accelerated mineralization of dense collagen-nano bioactive glass hybrid gels increases scaffold stiffness and regulates osteoblastic function. Biomaterials, 2011, 32, 8915-8926.	11.4	176
153	Reversible As(V) adsorption on magnetic nanoparticles and pH dependent desorption concentrates dilute solutions and realizes true moving bed reactor systems. Chemical Engineering Journal, 2011, 175, 244-250.	12.7	16
154	Iron core/shell nanoparticles as magnetic drug carriers: possible interactions with the vascular compartment. Nanomedicine, 2011, 6, 1199-1213.	3.3	23
155	Incorporation of reactive silverâ€ŧricalcium phosphate nanoparticles into polyamide 6 allows preparation of selfâ€disinfecting fibers. Polymer Engineering and Science, 2011, 51, 71-77.	3.1	14
156	Nanoparticles in Biological Systems. Angewandte Chemie - International Edition, 2011, 50, 1242-1258.	13.8	457
157	Magnetic Silyl Scaffold Enables Efficient Recycling of Protecting Groups. Chemistry - A European Journal, 2011, 17, 10566-10573.	3.3	30
158	Fluorinated Groups Mediate the Immunomodulatory Effects of Volatile Anesthetics in Acute Cell Injury. American Journal of Respiratory Cell and Molecular Biology, 2011, 45, 617-624.	2.9	32
159	Device for continuous extracorporeal blood purification using target-specific metal nanomagnets. Nephrology Dialysis Transplantation, 2011, 26, 2948-2954.	0.7	42
160	Biocompatibility and Bone Formation of Flexible, Cotton Wool-like PLGA/Calcium Phosphate Nanocomposites in Sheep. The Open Orthopaedics Journal, 2011, 5, 63-71.	0.2	42
161	Polymer/bioactive glass nanocomposites for biomedical applications: A review. Composites Science and Technology, 2010, 70, 1764-1776.	7.8	451
162	Immobilization on a Nanomagnetic Co/C Surface Using ROM Polymerization: Generation of a Hybrid Material as Support for a Recyclable Palladium Catalyst. Advanced Functional Materials, 2010, 20, 4323-4328.	14.9	111

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163	Nanoparticles as Semiâ€Heterogeneous Catalyst Supports. Chemistry - A European Journal, 2010, 16, 8950-8967.	3.3	341
164	A Recyclable Nanoparticle‣upported Palladium Catalyst for the Hydroxycarbonylation of Aryl Halides in Water. Angewandte Chemie - International Edition, 2010, 49, 1867-1870.	13.8	209
165	Light-curable polymer/calcium phosphate nanocomposite glue for bone defect treatment. Acta Biomaterialia, 2010, 6, 2704-2710.	8.3	28
166	Poly(3-hydroxybutyrate) multifunctional composite scaffolds for tissue engineering applications. Biomaterials, 2010, 31, 2806-2815.	11.4	149
167	Blood Purification Using Functionalized Core/Shell Nanomagnets. Small, 2010, 6, 1388-1392.	10.0	113
168	Selective Chemical Modification of Graphene Surfaces: Distinction Between Single―and Bilayer Graphene. Small, 2010, 6, 1125-1130.	10.0	176
169	Spherical calcium phosphate nanoparticle fillers allow polymer processing of bone fixation devices with high bioactivity. Polymer Engineering and Science, 2010, 50, 952-960.	3.1	21
170	Thermal Treatment of Flameâ€ <del>S</del> ynthesized Amorphous Tricalcium Phosphate Nanoparticles. Journal of the American Ceramic Society, 2010, 93, 3455-3463.	3.8	23
171	No Evidence for Cerium Dioxide Nanoparticle Translocation in Maize Plants. Environmental Science & Technology, 2010, 44, 8718-8723.	10.0	246
172	Energy-Efficient Noble Metal Recovery by the Use of Acid-Stable Nanomagnets. Industrial & Engineering Chemistry Research, 2010, 49, 9355-9362.	3.7	30
173	Cu(II)â <sup>~^</sup> Azabis(oxazoline) Complexes Immobilized on Magnetic Co/C Nanoparticles: Kinetic Resolution of 1,2-Diphenylethane-1,2-diol under Batch and Continuous-Flow Conditions. Chemistry of Materials, 2010, 22, 305-310.	6.7	97
174	Exposure of aerosols and nanoparticle dispersions to in vitro cell cultures: A review on the dose relevance of size, mass, surface and concentration. Journal of Aerosol Science, 2010, 41, 1123-1142.	3.8	52
175	Nanoparticle cytotoxicity depends on intracellular solubility: Comparison of stabilized copper metal and degradable copper oxide nanoparticles. Toxicology Letters, 2010, 197, 169-174.	0.8	350
176	Effect of nanoparticulate bioactive glass particles on bioactivity and cytocompatibility of poly(3-hydroxybutyrate) composites. Journal of the Royal Society Interface, 2010, 7, 453-465.	3.4	134
177	Bottom-up Fabrication of Metal/Metal Nanocomposites from Nanoparticles of Immiscible Metals. Chemistry of Materials, 2010, 22, 155-160.	6.7	93
178	Printable Nanoporous Silver Membranes. Chemistry of Materials, 2010, 22, 4980-4986.	6.7	28
179	Towards electron transport measurements in chemically modified graphene: effect of a solvent. New Journal of Physics, 2010, 12, 125007.	2.9	13
180	Chemical Aerosol Engineering as a Novel Tool for Material Science: From Oxides to Salt and Metal Nanoparticles. Aerosol Science and Technology, 2010, 44, 161-172.	3.1	92

#	Article	IF	CITATIONS
181	Elastomeric nanocomposites as cell delivery vehicles and cardiac support devices. Soft Matter, 2010, 6, 4715.	2.7	65
182	Permanent Patternâ€Resolved Adjustment of the Surface Potential of Graphene‣ike Carbon through Chemical Functionalization. Angewandte Chemie - International Edition, 2009, 48, 224-227.	13.8	92
183	Tricalcium phosphate nanoparticles enable rapid purification, increase transduction kinetics, and modify the tropism of mammalian viruses. Biotechnology and Bioengineering, 2009, 102, 1197-1208.	3.3	11
184	Comparative assessment of timeâ€related bioactive glass and calcium hydroxide effects on mechanical properties of human root dentin. Dental Traumatology, 2009, 25, 126-129.	2.0	37
185	Magnet-guided transduction of mammalian cells and mice using engineered magnetic lentiviral particles. Journal of Biotechnology, 2009, 141, 118-122.	3.8	23
186	In vivo and in vitro evaluation of flexible, cottonwool-like nanocomposites as bone substitute material for complex defects. Acta Biomaterialia, 2009, 5, 1775-1784.	8.3	115
187	Particle Emission and Exposure during Nanoparticle Synthesis in Research Laboratories. Annals of Occupational Hygiene, 2009, 53, 829-38.	1.9	41
188	Direct Combination of Nanoparticle Fabrication and Exposure to Lung Cell Cultures in a Closed Setup as a Method To Simulate Accidental Nanoparticle Exposure of Humans. Environmental Science & Technology, 2009, 43, 2634-2640.	10.0	67
189	Synthesis and Covalent Surface Functionalization of Nonoxidic Iron Coreâ^'Shell Nanomagnets. Chemistry of Materials, 2009, 21, 3275-3281.	6.7	132
190	Magnetic EDTA: coupling heavy metal chelators to metal nanomagnets for rapid removal of cadmium, lead and copper from contaminated water. Chemical Communications, 2009, , 4862.	4.1	145
191	Scaling the Long-Term Shear Stability of Aqueous Pigment Dispersions. Industrial & Engineering Chemistry Research, 2009, 48, 8944-8949.	3.7	2
192	High-strength metal nanomagnets for diagnostics and medicine: carbon shells allow long-term stability and reliable linker chemistry. Nanomedicine, 2009, 4, 787-798.	3.3	54
193	Gold adsorption on the carbon surface of C/Co nanoparticles allows magnetic extraction from extremely diluted aqueous solutions. Journal of Materials Chemistry, 2009, 19, 8239.	6.7	57
194	Physico-Chemical Differences Between Particle- and Molecule-Derived Toxicity: Can We Make Inherently Safe Nanoparticles?. Chimia, 2009, 63, 38.	0.6	38
195	Fast and exergy efficient start-up of micro-solid oxide fuel cell systems by using the reformer or the post-combustor for start-up heating. Journal of Power Sources, 2008, 182, 558-564.	7.8	15
196	Disk-shaped packed bed micro-reactor for butane-to-syngas processing. Chemical Engineering Science, 2008, 63, 5193-5201.	3.8	26
197	Microâ€organismâ€Triggered Release of Silver Nanoparticles from Biodegradable Oxide Carriers Allows Preparation of Selfâ€6terilizing Polymer Surfaces. Small, 2008, 4, 824-832.	10.0	112
198	TEMPO Supported on Magnetic C/Coâ€Nanoparticles: A Highly Active and Recyclable Organocatalyst. Chemistry - A European Journal, 2008, 14, 8262-8266.	3.3	167

#	Article	IF	CITATIONS
199	Cotton woolâ€like nanocomposite biomaterials prepared by electrospinning: <i>In vitro</i> bioactivity and osteogenic differentiation of human mesenchymal stem cells. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2008, 84B, 350-362.	3.4	111
200	Surfactantâ€Free, Meltâ€Processable Metal–Polymer Hybrid Materials: Use of Graphene as a Dispersing Agent. Advanced Materials, 2008, 20, 3044-3049.	21.0	40
201	Comparison of nanoscale and microscale bioactive glass on the properties of P(3HB)/Bioglass® composites. Biomaterials, 2008, 29, 1750-1761.	11.4	305
202	Phase transitions in amorphous calcium phosphates with different Ca/P ratios. Thermochimica Acta, 2008, 468, 75-80.	2.7	65
203	Graphene-stabilized copper nanoparticles as an air-stable substitute for silver and gold in low-cost ink-jet printable electronics. Nanotechnology, 2008, 19, 445201.	2.6	253
204	Removal of Oxide Nanoparticles in a Model Wastewater Treatment Plant: Influence of Agglomeration and Surfactants on Clearing Efficiency. Environmental Science & amp; Technology, 2008, 42, 5828-5833.	10.0	431
205	Effect of thermal treatments on the reactivity of nanosized tricalcium phosphate powders. Journal of Materials Chemistry, 2008, 18, 4460.	6.7	30
206	Flexible, silver containing nanocomposites for the repair of bone defects: antimicrobial effect against E. coli infection and comparison to tetracycline containing scaffolds. Journal of Materials Chemistry, 2008, 18, 2679.	6.7	69
207	Towards Magnetic Molecule and Reagent Separation in Organic Synthesis: Development and Use of Covalently Functionalized Nanomagnets. Chimia, 2008, 62, 13-17.	0.6	4
208	Controlling the Reactivity of Calcium Phosphate Cements. Key Engineering Materials, 2007, 361-363, 295-298.	0.4	1
209	Preparation of Homogeneous, Bulk Nanocrystalline Ni/Mo Alloys with Tripled Vickers Hardness Using Flame-Made Metal Nanoparticles. Chemistry of Materials, 2007, 19, 4847-4854.	6.7	28
210	Large-scale preparation of ceria/bismuth metal-matrix nano-composites with a hardness comparable to steel. Journal of Materials Chemistry, 2007, 17, 1485.	6.7	16
211	Effect of particle size, crystal phase and crystallinity on the reactivity of tricalcium phosphate cements for bone reconstruction. Journal of Materials Chemistry, 2007, 17, 4072.	6.7	99
212	The degree and kind of agglomeration affect carbon nanotube cytotoxicity. Toxicology Letters, 2007, 168, 121-131.	0.8	732
213	Exposure of Engineered Nanoparticles to Human Lung Epithelial Cells:Â Influence of Chemical Composition and Catalytic Activity on Oxidative Stress. Environmental Science & Technology, 2007, 41, 4158-4163.	10.0	785
214	Highly Sensitive Optical Detection of Humidity on Polymer/Metal Nanoparticle Hybrid Films. Langmuir, 2007, 23, 3473-3477.	3.5	113
215	Inorganic nanoparticles for transfection of mammalian cells and removal of viruses from aqueous solutions. Biotechnology and Bioengineering, 2007, 98, 1083-1093.	3.3	31
216	Covalently Functionalized Cobalt Nanoparticles as a Platform for Magnetic Separations in Organic Synthesis. Angewandte Chemie - International Edition, 2007, 46, 4909-4912.	13.8	301

#	Article	IF	CITATIONS
217	Comparison of amorphous TCP nanoparticles to micron-sized α-TCP as starting materials for calcium phosphate cements. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2007, 83B, 400-407.	3.4	64
218	Remineralization of human dentin using ultrafine bioactive glass particles. Acta Biomaterialia, 2007, 3, 936-943.	8.3	276
219	Ultraporous 3D polymer meshes by lowâ€ŧemperature electrospinning: Use of ice crystals as a removable void template. Polymer Engineering and Science, 2007, 47, 2020-2026.	3.1	172
220	Syngas production from butane using a flame-made Rh/Ce0.5Zr0.5O2 catalyst. Applied Catalysis B: Environmental, 2007, 73, 336-344.	20.2	41
221	Preparation of nano-gypsum from anhydrite nanoparticles: Strongly increased Vickers hardness and formation of calcium sulfate nano-needles. Journal of Nanoparticle Research, 2007, 9, 275-281.	1.9	32
222	Insulator coated metal nanoparticles with a core/shell geometry exhibit a temperature sensitivity similar to advanced spinels. Sensors and Actuators A: Physical, 2007, 138, 120-129.	4.1	20
223	Class and bioglass nanopowders by flame synthesis. Chemical Communications, 2006, , 1384.	4.1	150
224	In Vitro Cytotoxicity of Oxide Nanoparticles:Â Comparison to Asbestos, Silica, and the Effect of Particle Solubilityâ€. Environmental Science & Technology, 2006, 40, 4374-4381.	10.0	1,207
225	Improved degradation and bioactivity of amorphous aerosol derived tricalcium phosphate nanoparticles in poly(lactide-co-glycolide). Nanotechnology, 2006, 17, 2054-2061.	2.6	75
226	Gas phase synthesis of fcc-cobalt nanoparticles. Journal of Materials Chemistry, 2006, 16, 1825.	6.7	155
227	Rapid production of micropatterned surfaces using a fluid dynamical instability. Polymer Engineering and Science, 2006, 46, 1541-1547.	3.1	4
228	Energy Consumption During Nanoparticle Production: How Economic is Dry Synthesis?. Journal of Nanoparticle Research, 2006, 8, 1-9.	1.9	118
229	Flame spray synthesis under a non-oxidizing atmosphere: Preparation of metallic bismuth nanoparticles and nanocrystalline bulk bismuth metal. Journal of Nanoparticle Research, 2006, 8, 729-736.	1.9	46
230	Oxide Nanoparticle Uptake in Human Lung Fibroblasts:Â Effects of Particle Size, Agglomeration, and Diffusion at Low Concentrations. Environmental Science & Technology, 2005, 39, 9370-9376.	10.0	725
231	Flame synthesis of calcium-, strontium-, barium fluoride nanoparticles and sodium chloride. Chemical Communications, 2005, , 1767.	4.1	99
232	Flame synthesis of calcium carbonate nanoparticles. Chemical Communications, 2005, , 648.	4.1	56
233	Fluoro-apatite and Calcium Phosphate Nanoparticles by Flame Synthesis. Chemistry of Materials, 2005, 17, 36-42.	6.7	174
234	Flame-Made Pt/Ceria/Zirconia for Low-Temperature Oxygen Exchange. Chemistry of Materials, 2005, 17, 3352-3358.	6.7	72

#	Article	IF	CITATIONS
235	Flame synthesis of nanocrystalline ceria–zirconia: effect of carrier liquid. Chemical Communications, 2003, , 588-589.	4.1	122
236	Flame-made platinum/alumina: structural properties and catalytic behaviour in enantioselective hydrogenation. Journal of Catalysis, 2003, 213, 296-304.	6.2	153
237	Flame-made nanocrystalline ceria/zirconia: structural properties and dynamic oxygen exchange capacity. Journal of Catalysis, 2003, 220, 35-43.	6.2	91
238	Flame-made nanocrystalline ceria/zirconia doped with alumina or silica: structural properties and enhanced oxygen exchange capacity. Journal of Materials Chemistry, 2003, 13, 2979.	6.7	77
239	Heterogeneous Catalysis by Flame-Made Nanoparticles. Chimia, 2002, 56, 485-489.	0.6	29
240	Flame-Made Titania/Silica Epoxidation Catalysts:Â Toward Large-Scale Production. Industrial & Engineering Chemistry Research, 2002, 41, 4921-4927.	3.7	15
241	Titania–silica doped with transition metals via flame synthesis: structural properties and catalytic behavior in epoxidation. Journal of Materials Chemistry, 2002, 12, 3620-3625.	6.7	26
242	Aerosol flame reactors for manufacture of nanoparticles. Powder Technology, 2002, 126, 103-108.	4.2	192
243	Flame Aerosol Synthesis of Vanadia–Titania Nanoparticles: Structural and Catalytic Properties in the Selective Catalytic Reduction of NO by NH3. Journal of Catalysis, 2001, 197, 182-191.	6.2	155
244	Flame Made Titania/Silica Epoxidation Catalysts. Journal of Catalysis, 2001, 203, 516-524.	6.2	46
245	Phase Evolution of Thermally Treated Amorphous Tricalcium Phosphate Nanoparticles. Key Engineering Materials, 0, 396-398, 595-598.	0.4	11