Wendelin J Stark

List of Publications by Year
in descending order

245	17,521	15466 65	15683 125
papers	citations	h-index	g-index

265	265	265	22011
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	In Vitro Cytotoxicity of Oxide Nanoparticles:Â Comparison to Asbestos, Silica, and the Effect of Particle Solubilityâ€. Environmental Science & Technology, 2006, 40, 4374-4381.	4.6	1,207
2	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.	4.6	785
3	The degree and kind of agglomeration affect carbon nanotube cytotoxicity. Toxicology Letters, 2007, 168, 121-131.	0.4	732
4	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.	4.6	725
5	Robust Chemical Preservation of Digital Information on DNA in Silica with Errorâ€Correcting Codes. Angewandte Chemie - International Edition, 2015, 54, 2552-2555.	7.2	458
6	Nanoparticles in Biological Systems. Angewandte Chemie - International Edition, 2011, 50, 1242-1258.	7.2	457
7	Polymer/bioactive glass nanocomposites for biomedical applications: A review. Composites Science and Technology, 2010, 70, 1764-1776.	3.8	451
8	Removal of Oxide Nanoparticles in a Model Wastewater Treatment Plant: Influence of Agglomeration and Surfactants on Clearing Efficiency. Environmental Science & Technology, 2008, 42, 5828-5833.	4.6	431
9	Nanoparticle cytotoxicity depends on intracellular solubility: Comparison of stabilized copper metal and degradable copper oxide nanoparticles. Toxicology Letters, 2010, 197, 169-174.	0.4	350
10	Nanoparticles as Semiâ€Heterogeneous Catalyst Supports. Chemistry - A European Journal, 2010, 16, 8950-8967.	1.7	341
11	Comparison of nanoscale and microscale bioactive glass on the properties of P(3HB)/BioglassÂ® composites. Biomaterials, 2008, 29, 1750-1761.	5.7	305
12	Covalently Functionalized Cobalt Nanoparticles as a Platform for Magnetic Separations in Organic Synthesis. Angewandte Chemie - International Edition, 2007, 46, 4909-4912.	7.2	301
13	Remineralization of human dentin using ultrafine bioactive glass particles. Acta Biomaterialia, 2007, 3, 936-943.	4.1	276
14	Graphene-stabilized copper nanoparticles as an air-stable substitute for silver and gold in low-cost ink-jet printable electronics. Nanotechnology, 2008, 19, 445201.	1.3	253
15	No Evidence for Cerium Dioxide Nanoparticle Translocation in Maize Plants. Environmental Science & Technology, 2010, 44, 8718-8723.	4.6	246
16	Ultrapure Green Light-Emitting Diodes Using Two-Dimensional Formamidinium Perovskites: Achieving Recommendation 2020 Color Coordinates. Nano Letters, 2017, 17, 5277-5284.	4.5	221
17	A Recyclable Nanoparticleâ€Supported Palladium Catalyst for the Hydroxycarbonylation of Aryl Halides in Water. Angewandte Chemie - International Edition, 2010, 49, 1867-1870.	7.2	209
18	Aerosol flame reactors for manufacture of nanoparticles. Powder Technology, 2002, 126, 103-108.	2.1	192

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19	Persistence of engineered nanoparticles in a municipal solid-waste incineration plant. Nature Nanotechnology, 2012, 7, 520-524.	15.6	186
20	Selective Chemical Modification of Graphene Surfaces: Distinction Between Singleâ€•and Bilayer Graphene. Small, 2010, 6, 1125-1130.	5.2	176
21	Accelerated mineralization of dense collagen-nano bioactive glass hybrid gels increases scaffold stiffness and regulates osteoblastic function. Biomaterials, 2011, 32, 8915-8926.	5.7	176
22	Fluoro-apatite and Calcium Phosphate Nanoparticles by Flame Synthesis. Chemistry of Materials, 2005, 17, 36-42.	3.2	174
23	Ultraporous 3D polymer meshes by lowâ€temperature electrospinning: Use of ice crystals as a removable void template. Polymer Engineering and Science, 2007, 47, 2020-2026.	1.5	172
24	Carbon Modifications and Surfaces for Catalytic Organic Transformations. ACS Catalysis, 2012, 2, 1267-1284.	5.5	170
25	TEMPO Supported on Magnetic C/Coâ€Nanoparticles: A Highly Active and Recyclable Organocatalyst. Chemistry - A European Journal, 2008, 14, 8262-8266.	1.7	167
26	Flame Aerosol Synthesis of Vanadiaâ€“Titania Nanoparticles: Structural and Catalytic Properties in the Selective Catalytic Reduction of NO by NH3. Journal of Catalysis, 2001, 197, 182-191.	3.1	155
27	Gas phase synthesis of fcc-cobalt nanoparticles. Journal of Materials Chemistry, 2006, 16, 1825.	6.7	155
28	Flame-made platinum/alumina: structural properties and catalytic behaviour in enantioselective hydrogenation. Journal of Catalysis, 2003, 213, 296-304.	3.1	153
29	Glass and bioglass nanopowders by flame synthesis. Chemical Communications, 2006, , 1384.	2.2	150
30	Poly(3-hydroxybutyrate) multifunctional composite scaffolds for tissue engineering applications. Biomaterials, 2010, 31, 2806-2815.	5.7	149
31	Magnetic EDTA: coupling heavy metal chelators to metal nanomagnets for rapid removal of cadmium, lead and copper from contaminated water. Chemical Communications, 2009, , 4862.	2.2	145
32	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.	1.5	134
33	Synthesis and Covalent Surface Functionalization of Nonoxidic Iron Coreâ"Shell Nanomagnets. Chemistry of Materials, 2009, 21, 3275-3281.	3.2	132
34	Flame synthesis of nanocrystalline ceriaâ€“zirconia: effect of carrier liquid. Chemical Communications, 2003, , 588-589.	2.2	122
35	Energy Consumption During Nanoparticle Production: How Economic is Dry Synthesis?. Journal of Nanoparticle Research, 2006, 8, 1-9.	0.8	118
36	In vivo and in vitro evaluation of flexible, cottonwool-like nanocomposites as bone substitute material for complex defects. Acta Biomaterialia, 2009, 5, 1775-1784.	4.1	115

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37	Highly Sensitive Optical Detection of Humidity on Polymer/Metal Nanoparticle Hybrid Films. Langmuir, 2007, 23, 3473-3477.	1.6	113
38	Blood Purification Using Functionalized Core/Shell Nanomagnets. Small, 2010, 6, 1388-1392.	5.2	113
39	A DNA-of-things storage architecture to create materials with embedded memory. Nature Biotechnology, 2020, 38, 39-43.	9.4	113
40	Microâ€organismâ€Triggered Release of Silver Nanoparticles from Biodegradable Oxide Carriers Allows Preparation of Selfâ€Sterilizing Polymer Surfaces. Small, 2008, 4, 824-832.	5.2	112
41	Cotton woolâ€like nanocomposite biomaterials prepared by electrospinning: In vitro bioactivity and osteogenic differentiation of human mesenchymal stem cells. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2008, 84B, 350-362.	1.6	111
42	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.	7.8	111
43	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.	5.2	111
44	Magnetically Recoverable, Thermostable, Hydrophobic DNA/Silica Encapsulates and Their Application as Invisible Oil Tags. ACS Nano, 2014, 8, 2677-2685.	7.3	104
45	Palladium Nanoparticles Supported on Magnetic Carbonâ€Coated Cobalt Nanobeads: Highly Active and Recyclable Catalysts for Alkene Hydrogenation. Advanced Functional Materials, 2014, 24, 2020-2027.	7.8	102
46	Flame synthesis of calcium-, strontium-, barium fluoride nanoparticles and sodium chloride. Chemical Communications, 2005, , 1767.	2.2	99
47	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
48	Cu(II)â^'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.	3.2	97
49	Bottom-up Fabrication of Metal/Metal Nanocomposites from Nanoparticles of Immiscible Metals. Chemistry of Materials, 2010, 22, 155-160.	3.2	93
50	Permanent Patternâ€Resolved Adjustment of the Surface Potential of Grapheneâ€like Carbon through Chemical Functionalization. Angewandte Chemie - International Edition, 2009, 48, 224-227.	7.2	92
51	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.	1.5	92
52	Flame-made nanocrystalline ceria/zirconia: structural properties and dynamic oxygen exchange capacity. Journal of Catalysis, 2003, 220, 35-43.	3.1	91
53	An Untethered, Jumping Roly-Poly Soft Robot Driven by Combustion. Soft Robotics, 2015, 2, 33-41.	4.6	87
54	Reading and writing digital data in DNA. Nature Protocols, 2020, 15, 86-101.	5.5	81

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55	Tissue engineered bone grafts based on biomimetic nanocomposite PLGA/amorphous calcium phosphate scaffold and human adipose-derived stem cells. Injury, 2012, 43, 1689-1697.	0.7	80
56	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
57	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
58	Use of NIR light and upconversion phosphors in light-curable polymers. Dental Materials, 2012, 28, 304-311.	1.6	76
59	Improved degradation and bioactivity of amorphous aerosol derived tricalcium phosphate nanoparticles in poly(lactide-co-glycolide). Nanotechnology, 2006, 17, 2054-2061.	1.3	75
60	Flame-Made Pt/Ceria/Zirconia for Low-Temperature Oxygen Exchange. Chemistry of Materials, 2005, 17, 3352-3358.	3.2	72
61	Immobilized Î²-Cyclodextrin on Surface-Modified Carbon-Coated Cobalt Nanomagnets: Reversible Organic Contaminant Adsorption and Enrichment from Water. Langmuir, 2011, 27, 1924-1929.	1.6	70
62	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
63	Soft Iron/Silicon Composite Tubes for Magnetic Peristaltic Pumping: Frequencyâ€Ðependent Pressure and Volume Flow. Advanced Functional Materials, 2013, 23, 3845-3849.	7.8	69
64	Functionalizing a dentin bonding resin to become bioactive. Dental Materials, 2014, 30, 868-875.	1.6	69
65	Organic Synthesis on Graphene. Accounts of Chemical Research, 2013, 46, 2297-2306.	7.6	68
66	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.	4.6	67
67	A Soft Total Artificial Heartâ€"First Concept Evaluation on a Hybrid Mock Circulation. Artificial Organs, 2017, 41, 948-958.	1.0	67
68	Low cost DNA data storage using photolithographic synthesis and advanced information reconstruction and error correction. Nature Communications, 2020, 11, 5345.	5.8	66
69	Phase transitions in amorphous calcium phosphates with different Ca/P ratios. Thermochimica Acta, 2008, 468, 75-80.	1.2	65
70	Elastomeric nanocomposites as cell delivery vehicles and cardiac support devices. Soft Matter, 2010, 6, 4715.	1.2	65
71	Combining Data Longevity with High Storage Capacityâ€"Layerâ€byâ€Layer DNA Encapsulated in Magnetic Nanoparticles. Advanced Functional Materials, 2019, 29, 1901672.	7.8	65
72	Comparison of amorphous TCP nanoparticles to micron-sized Î±-TCP as starting materials for calcium phosphate cements. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2007, 83B, 400-407.	1.6	64

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73	MOF Channels within Porous Polymer Film: Flexible, Self-Supporting ZIF-8 Poly(ether sulfone) Composite Membrane. Chemistry of Materials, 2016, 28, 7638-7644.	3.2	63
74	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.	2.8	61
75	Phosphate starvation as an antimicrobial strategy: the controllable toxicity of lanthanum oxide nanoparticles. Chemical Communications, 2012, 48, 3869.	2.2	58
76	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
77	Flame synthesis of calcium carbonate nanoparticles. Chemical Communications, 2005, , 648.	2.2	56
78	Functionalized Graphene-Coated Cobalt Nanoparticles for Highly Efficient Surface-Assisted Laser Desorption/Ionization Mass Spectrometry Analysis. Analytical Chemistry, 2012, 84, 9268-9275.	3.2	56
79	High-strength metal nanomagnets for diagnostics and medicine: carbon shells allow long-term stability and reliable linker chemistry. Nanomedicine, 2009, 4, 787-798.	1.7	54
80	A Bioinspired Ultraporous Nanofiberâ€Hydrogel Mimic of the Cartilage Extracellular Matrix. Advanced Healthcare Materials, 2016, 5, 3129-3138.	3.9	54
81	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.	1.8	52
82	Particles with an identity: Tracking and tracing in commodity products. Powder Technology, 2016, 291, 344-350.	2.1	52
83	Silica-Encapsulated DNA-Based Tracers for Aquifer Characterization. Environmental Science & Technology, 2018, 52, 12142-12152.	4.6	50
84	Large-Scale Synthesis of PbSâ€“TiO‹sub›2‹/sub› Heterojunction Nanoparticles in a Single Step for Solar Cell Application. Journal of Physical Chemistry C, 2012, 116, 16264-16270.	1.5	49
85	Palladium nanoparticles supported on ionic liquid modified, magnetic nanobeads â€“ recyclable, high-capacity catalysts for alkene hydrogenation. RSC Advances, 2014, 4, 8541.	1.7	49
86	Hollow Silica as an Optically Transparent and Thermally Insulating Polymer Additive. Langmuir, 2016, 32, 338-345.	1.6	49
87	Flame Made Titania/Silica Epoxidation Catalysts. Journal of Catalysis, 2001, 203, 516-524.	3.1	46
88	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.	0.8	46
89	Endotoxin Removal by Magnetic Separationâ€Based Blood Purification. Advanced Healthcare Materials, 2013, 2, 829-835.	3.9	46
90	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.	2.8	45

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91	3D printed lost-wax casted soft silicone monoblocks enable heart-inspired pumping by internal combustion. RSC Advances, 2014, 4, 16039-16042.	1.7	43
92	Device for continuous extracorporeal blood purification using target-specific metal nanomagnets. Nephrology Dialysis Transplantation, 2011, 26, 2948-2954.	0.4	42
93	Nanomagnet-based removal of lead and digoxin from living rats. Nanoscale, 2013, 5, 8718.	2.8	42
94	Biocompatibility and Bone Formation of Flexible, Cotton Wool-like PLGA/Calcium Phosphate Nanocomposites in Sheep. The Open Orthopaedics Journal, 2011, 5, 63-71.	0.1	42
95	Syngas production from butane using a flame-made Rh/Ce0.5Zr0.5O2 catalyst. Applied Catalysis B: Environmental, 2007, 73, 336-344.	10.8	41
96	Particle Emission and Exposure during Nanoparticle Synthesis in Research Laboratories. Annals of Occupational Hygiene, 2009, 53, 829-38.	1.9	41
97	Surfactantâ€Free, Meltâ€Processable Metalâ€“Polymer Hybrid Materials: Use of Graphene as a Dispersing Agent. Advanced Materials, 2008, 20, 3044-3049.	11.1	40
98	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
99	Combined Covalent and Noncovalent Functionalization of Nanomagnetic Carbon Surfaces with Dendrimers and BODIPY Fluorescent Dye. Chemistry of Materials, 2011, 23, 3606-3613.	3.2	39
100	Physico-Chemical Differences Between Particle- and Molecule-Derived Toxicity: Can We Make Inherently Safe Nanoparticles?. Chimia, 2009, 63, 38.	0.3	38
101	Stabilizing synthetic DNA for long-term data storage with earth alkaline salts. Chemical Communications, 2020, 56, 3613-3616.	2.2	38
102	Comparative assessment of timeâ€related bioactive glass and calcium hydroxide effects on mechanical properties of human root dentin. Dental Traumatology, 2009, 25, 126-129.	0.8	37
103	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.	3.3	37
104	Soluble nanoparticles as removable pore templates for the preparation of polymer ultrafiltration membranes. Journal of Membrane Science, 2012, 387-388, 76-82.	4.1	36
105	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.	1.1	36
106	Porous Polymer Membranes by Hard Templating â€“ A Review. Advanced Engineering Materials, 2018, 20, 1700611.	1.6	35
107	Tomographic Reservoir Imaging with DNA-Labeled Silica Nanotracers: The First Field Validation. Environmental Science & Technology, 2018, 52, 13681-13689.	4.6	35
108	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.	2.0	34

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109	Optimization of Bioglass^{Â®} Scaffold Fabrication Process. Journal of the American Ceramic Society, 2011, 94, 4184-4190.	1.9	34
110	Incorporation of Penicillinâ€Producing Fungi into Living Materials to Provide Chemically Active and Antibioticâ€Releasing Surfaces. Angewandte Chemie - International Edition, 2012, 51, 11293-11296.	7.2	34
111	Efficient Magnetic Recycling of Covalently Attached Enzymes on Carbon-Coated Metallic Nanomagnets. Bioconjugate Chemistry, 2014, 25, 677-684.	1.8	34
112	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.	0.8	32
113	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.	1.4	32
114	pH-dependent antibacterial effects on oral microorganisms through pure PLGA implants and composites with nanosized bioactive glass. Acta Biomaterialia, 2013, 9, 9118-9125.	4.1	32
115	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.	0.7	32
116	Inorganic nanoparticles for transfection of mammalian cells and removal of viruses from aqueous solutions. Biotechnology and Bioengineering, 2007, 98, 1083-1093.	1.7	31
117	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.	3.9	31
118	Effect of thermal treatments on the reactivity of nanosized tricalcium phosphate powders. Journal of Materials Chemistry, 2008, 18, 4460.	6.7	30
119	Energy-Efficient Noble Metal Recovery by the Use of Acid-Stable Nanomagnets. Industrial & Engineering Chemistry Research, 2010, 49, 9355-9362.	1.8	30
120	Magnetic Silyl Scaffold Enables Efficient Recycling of Protecting Groups. Chemistry - A European Journal, 2011, 17, 10566-10573.	1.7	30
121	Heterogeneous Catalysis by Flame-Made Nanoparticles. Chimia, 2002, 56, 485-489.	0.3	29
122	Rapid Production of a Porous Cellulose Acetate Membrane for Water Filtration using Readily Available Chemicals. Journal of Chemical Education, 2017, 94, 483-487.	1.1	29
123	Preparation of Homogeneous, Bulk Nanocrystalline Ni/Mo Alloys with Tripled Vickers Hardness Using Flame-Made Metal Nanoparticles. Chemistry of Materials, 2007, 19, 4847-4854.	3.2	28
124	Light-curable polymer/calcium phosphate nanocomposite glue for bone defect treatment. Acta Biomaterialia, 2010, 6, 2704-2710.	4.1	28
125	Printable Nanoporous Silver Membranes. Chemistry of Materials, 2010, 22, 4980-4986.	3.2	28
126	Labeling Milk along Its Production Chain with DNA Encapsulated in Silica. Journal of Agricultural and Food Chemistry, 2014, 62, 10615-10620.	2.4	28

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127	Selective Biosorption and Recovery of Tungsten from an Urban Mine and Feasibility Evaluation. Industrial & Engineering Chemistry Research, 2016, 55, 2903-2910.	1.8	27
128	Titaniaâ€“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
129	Disk-shaped packed bed micro-reactor for butane-to-syngas processing. Chemical Engineering Science, 2008, 63, 5193-5201.	1.9	26
130	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
131	Pressureless Mechanical Induction of Stem Cell Differentiation Is Dose and Frequency Dependent. PLoS ONE, 2013, 8, e81362.	1.1	26
132	Porous polysulfone coatings for enhanced drug delivery. Biomedical Microdevices, 2012, 14, 603-612.	1.4	25
133	Design, Performance and Reinforcement of Bearing-Free Soft Silicone Combustion-Driven Pumps. Industrial & Engineering Chemistry Research, 2014, 53, 12519-12526.	1.8	25
134	Nondestructive in-line sub-picomolar detection of magnetic nanoparticles in flowing complex fluids. Scientific Reports, 2018, 8, 3491.	1.6	25
135	Roll-to-Roll Preparation of Mesoporous Membranes by Nanoparticle Template Removal. Industrial & Engineering Chemistry Research, 2014, 53, 9214-9220.	1.8	24
136	Magnet-guided transduction of mammalian cells and mice using engineered magnetic lentiviral particles. Journal of Biotechnology, 2009, 141, 118-122.	1.9	23
137	Thermal Treatment of Flameâ€Synthesized Amorphous Tricalcium Phosphate Nanoparticles. Journal of the American Ceramic Society, 2010, 93, 3455-3463.	1.9	23
138	Monomer-on-Monomer (MoM) Mitsunobu Reaction: Facile Purification Utilizing Surface-Initiated Sequestration. Organic Letters, 2011, 13, 8-10.	2.4	23
139	Iron core/shell nanoparticles as magnetic drug carriers: possible interactions with the vascular compartment. Nanomedicine, 2011, 6, 1199-1213.	1.7	23
140	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.	3.9	23
141	Quantitative Recovery of Magnetic Nanoparticles from Flowing Blood: Trace Analysis and the Role of Magnetization. Advanced Functional Materials, 2013, 23, 4888-4896.	7.8	23
142	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.	4.6	23
143	Lengthâ€dependent DNA degradation kinetic model: Decay compensation in DNA tracer concentration measurements. AICHE Journal, 2019, 65, 40-48.	1.8	23
144	DNA synthesis for true random number generation. Nature Communications, 2020, 11, 5869.	5.8	23

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145	Template-Particle Stabilized Bicontinuous Emulsion Yielding Controlled Assembly of Hierarchical High-Flux Filtration Membranes. ACS Applied Materials & Interfaces, 2015, 7, 611-617.	4.0	22
146	Hollow Carbon Nanobubbles: Synthesis, Chemical Functionalization, and Containerâ€Type Behavior in Water. Angewandte Chemie - International Edition, 2016, 55, 8761-8765.	7.2	22
147	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.	1.8	22
148	Spherical calcium phosphate nanoparticle fillers allow polymer processing of bone fixation devices with high bioactivity. Polymer Engineering and Science, 2010, 50, 952-960.	1.5	21
149	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.	15.6	21
150	Magnetic Superbasic Proton Sponges Are Readily Removed and Permit Direct Product Isolation. Journal of Organic Chemistry, 2014, 79, 10908-10915.	1.7	21
151	Integrating DNA Encapsulates and Digital Microfluidics for Automated Data Storage in DNA. Small, 2022, 18, e2107381.	5.2	21
152	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.	2.0	20
153	Submicrometer-Sized Thermometer Particles Exploiting Selective Nucleic Acid Stability. Small, 2016, 12, 452-456.	5.2	20
154	Selective Low-Energy Carbon Dioxide Adsorption Using Monodisperse Nitrogen-Rich Hollow Carbon Submicron Spheres. Langmuir, 2018, 34, 30-35.	1.6	19
155	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.	2.9	18
156	Purification of NaYF₄-Based Upconversion Phosphors. Chemistry of Materials, 2014, 26, 2015-2020.	3.2	18
157	Ultrasensitive Quantification of Pesticide Contamination and Drift Using Silica Particles with Encapsulated DNA. Environmental Science and Technology Letters, 2016, 3, 19-23.	3.9	18
158	Efficient Recycling of Poly(lactic acid) Nanoparticle Templates for the Synthesis of Hollow Silica Spheres. ACS Sustainable Chemistry and Engineering, 2017, 5, 4941-4947.	3.2	18
159	Bioactive glass containing silicone composites for left ventricular assist device drivelines: role of Bioglass 45S5Â® particle size on mechanical properties and cytocompatibility. Journal of Materials Science, 2017, 52, 9023-9038.	1.7	18
160	Silica Microcapsules for Longâ€Term, Robust, and Reliable Room Temperature RNA Preservation. Advanced Healthcare Materials, 2015, 4, 1332-1338.	3.9	17
161	Incorporation of particulate bioactive glasses into a dental root canal sealer. Biomedical Glasses, 2016, 2, .	2.4	17
162	In vivo risk evaluation of carbon-coated iron carbide nanoparticles based on short- and long-term exposure scenarios. Nanomedicine, 2016, 11, 783-796.	1.7	17

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163	Rapid Identification of SARS-CoV-2 Variants of Concern Using a Portable peakPCR Platform. Analytical Chemistry, 2021, 93, 16350-16359.	3.2	17
164	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
165	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.	6.6	16
166	Synthesis of Trisubstituted Ureas by a Multistep Sequence Utilizing Recyclable Magnetic Reagents and Scavengers. Chemistry - A European Journal, 2013, 19, 10038-10045.	1.7	16
167	Gas-phase synthesis of magnetic metal/polymer nanocomposites. Nanotechnology, 2014, 25, 505602.	1.3	16
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