

Wendelin J Stark

List of Publications by Citations

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247
papers

15,077
citations

60
h-index

116
g-index

265
ext. papers

16,288
ext. citations

7.4
avg, IF

6.64
L-index

#	Paper	IF	Citations
247	In vitro cytotoxicity of oxide nanoparticles: comparison to asbestos, silica, and the effect of particle solubility. <i>Environmental Science & Technology</i> , 2006 , 40, 4374-81	10.3	1065
246	Exposure of engineered nanoparticles to human lung epithelial cells: influence of chemical composition and catalytic activity on oxidative stress. <i>Environmental Science & Technology</i> , 2007 , 41, 4158-63	10.3	713
245	Oxide nanoparticle uptake in human lung fibroblasts: effects of particle size, agglomeration, and diffusion at low concentrations. <i>Environmental Science & Technology</i> , 2005 , 39, 9370-6	10.3	673
244	The degree and kind of agglomeration affect carbon nanotube cytotoxicity. <i>Toxicology Letters</i> , 2007 , 168, 121-31	4.4	657
243	Nanoparticles in biological systems. <i>Angewandte Chemie - International Edition</i> , 2011 , 50, 1242-58	16.4	417
242	Removal of oxide nanoparticles in a model wastewater treatment plant: influence of agglomeration and surfactants on clearing efficiency. <i>Environmental Science & Technology</i> , 2008 , 42, 5828-33	10.3	399
241	Polymer/bioactive glass nanocomposites for biomedical applications: A review. <i>Composites Science and Technology</i> , 2010 , 70, 1764-1776	8.6	384
240	Nanoparticles as semi-heterogeneous catalyst supports. <i>Chemistry - A European Journal</i> , 2010 , 16, 8950-678	4.7	311
239	Nanoparticle cytotoxicity depends on intracellular solubility: comparison of stabilized copper metal and degradable copper oxide nanoparticles. <i>Toxicology Letters</i> , 2010 , 197, 169-74	4.4	306
238	Covalently functionalized cobalt nanoparticles as a platform for magnetic separations in organic synthesis. <i>Angewandte Chemie - International Edition</i> , 2007 , 46, 4909-12	16.4	280
237	Comparison of nanoscale and microscale bioactive glass on the properties of P(3HB)/Bioglass composites. <i>Biomaterials</i> , 2008 , 29, 1750-61	15.6	280
236	Robust chemical preservation of digital information on DNA in silica with error-correcting codes. <i>Angewandte Chemie - International Edition</i> , 2015 , 54, 2552-5	16.4	275
235	Remineralization of human dentin using ultrafine bioactive glass particles. <i>Acta Biomaterialia</i> , 2007 , 3, 936-43	10.8	244
234	Graphene-stabilized copper nanoparticles as an air-stable substitute for silver and gold in low-cost ink-jet printable electronics. <i>Nanotechnology</i> , 2008 , 19, 445201	3.4	226
233	No evidence for cerium dioxide nanoparticle translocation in maize plants. <i>Environmental Science & Technology</i> , 2010 , 44, 8718-23	10.3	219
232	A recyclable nanoparticle-supported palladium catalyst for the hydroxycarbonylation of aryl halides in water. <i>Angewandte Chemie - International Edition</i> , 2010 , 49, 1867-70	16.4	199
231	Aerosol flame reactors for manufacture of nanoparticles. <i>Powder Technology</i> , 2002 , 126, 103-108	5.2	179

230	Selective chemical modification of graphene surfaces: distinction between single- and bilayer graphene. <i>Small</i> , 2010 , 6, 1125-30	11	167
229	Ultrapure Green Light-Emitting Diodes Using Two-Dimensional Formamidinium Perovskites: Achieving Recommendation 2020 Color Coordinates. <i>Nano Letters</i> , 2017 , 17, 5277-5284	11.5	166
228	Fluoro-apatite and Calcium Phosphate Nanoparticles by Flame Synthesis. <i>Chemistry of Materials</i> , 2005 , 17, 36-42	9.6	162
227	Accelerated mineralization of dense collagen-nano bioactive glass hybrid gels increases scaffold stiffness and regulates osteoblastic function. <i>Biomaterials</i> , 2011 , 32, 8915-26	15.6	157
226	Ultraporous 3D polymer meshes by low-temperature electrospinning: Use of ice crystals as a removable void template. <i>Polymer Engineering and Science</i> , 2007 , 47, 2020-2026	2.3	157
225	Persistence of engineered nanoparticles in a municipal solid-waste incineration plant. <i>Nature Nanotechnology</i> , 2012 , 7, 520-4	28.7	156
224	TEMPO supported on magnetic C/Co-nanoparticles: a highly active and recyclable organocatalyst. <i>Chemistry - A European Journal</i> , 2008 , 14, 8262-6	4.8	154
223	Carbon Modifications and Surfaces for Catalytic Organic Transformations. <i>ACS Catalysis</i> , 2012 , 2, 1267-1284	13.4	152
222	Flame Aerosol Synthesis of Vanadia/Titania Nanoparticles: Structural and Catalytic Properties in the Selective Catalytic Reduction of NO by NH ₃ . <i>Journal of Catalysis</i> , 2001 , 197, 182-191	7.3	143
221	Poly(3-hydroxybutyrate) multifunctional composite scaffolds for tissue engineering applications. <i>Biomaterials</i> , 2010 , 31, 2806-15	15.6	141
220	Gas phase synthesis of fcc-cobalt nanoparticles. <i>Journal of Materials Chemistry</i> , 2006 , 16, 1825		139
219	Magnetic EDTA: coupling heavy metal chelators to metal nanomagnets for rapid removal of cadmium, lead and copper from contaminated water. <i>Chemical Communications</i> , 2009 , 4862-4	5.8	136
218	Glass and bioglass nanopowders by flame synthesis. <i>Chemical Communications</i> , 2006 , 1384-6	5.8	135
217	Flame-made platinum/alumina: structural properties and catalytic behaviour in enantioselective hydrogenation. <i>Journal of Catalysis</i> , 2003 , 213, 296-304	7.3	128
216	Synthesis and Covalent Surface Functionalization of Nonoxidic Iron Core/Shell Nanomagnets. <i>Chemistry of Materials</i> , 2009 , 21, 3275-3281	9.6	124
215	Effect of nanoparticulate bioactive glass particles on bioactivity and cytocompatibility of poly(3-hydroxybutyrate) composites. <i>Journal of the Royal Society Interface</i> , 2010 , 7, 453-65	4.1	115
214	Flame synthesis of nanocrystalline ceria-zirconia: effect of carrier liquid. <i>Chemical Communications</i> , 2003 , 588-9	5.8	109
213	Immobilization on a Nanomagnetic Co/C Surface Using ROM Polymerization: Generation of a Hybrid Material as Support for a Recyclable Palladium Catalyst. <i>Advanced Functional Materials</i> , 2010 , 20, 4323-4328	15.6	108

212	Blood purification using functionalized core/shell nanomagnets. <i>Small</i> , 2010 , 6, 1388-92	11	105
211	Highly sensitive optical detection of humidity on polymer/metal nanoparticle hybrid films. <i>Langmuir</i> , 2007 , 23, 3473-7	4	104
210	In vivo and in vitro evaluation of flexible, cottonwool-like nanocomposites as bone substitute material for complex defects. <i>Acta Biomaterialia</i> , 2009 , 5, 1775-84	10.8	103
209	Cotton wool-like nanocomposite biomaterials prepared by electrospinning: in vitro bioactivity and osteogenic differentiation of human mesenchymal stem cells. <i>Journal of Biomedical Materials Research - Part B Applied Biomaterials</i> , 2008 , 84, 350-62	3.5	103
208	Energy Consumption During Nanoparticle Production: How Economic is Dry Synthesis?. <i>Journal of Nanoparticle Research</i> , 2006 , 8, 1-9	2.3	103
207	Micro-organism-triggered release of silver nanoparticles from biodegradable oxide carriers allows preparation of self-sterilizing polymer surfaces. <i>Small</i> , 2008 , 4, 824-32	11	102
206	Palladium Nanoparticles Supported on Magnetic Carbon-Coated Cobalt Nanobeads: Highly Active and Recyclable Catalysts for Alkene Hydrogenation. <i>Advanced Functional Materials</i> , 2014 , 24, 2020-2027	15.6	95
205	Flame synthesis of calcium-, strontium-, barium fluoride nanoparticles and sodium chloride. <i>Chemical Communications</i> , 2005 , 1767-9	5.8	91
204	Cu(II)Azabis(oxazoline) Complexes Immobilized on Magnetic Co/C Nanoparticles: Kinetic Resolution of 1,2-Diphenylethane-1,2-diol under Batch and Continuous-Flow Conditions. <i>Chemistry of Materials</i> , 2010 , 22, 305-310	9.6	90
203	Permanent pattern-resolved adjustment of the surface potential of graphene-like carbon through chemical functionalization. <i>Angewandte Chemie - International Edition</i> , 2009 , 48, 224-7	16.4	89
202	Magnetically recoverable, thermostable, hydrophobic DNA/silica encapsulates and their application as invisible oil tags. <i>ACS Nano</i> , 2014 , 8, 2677-85	16.7	87
201	Effect of particle size, crystal phase and crystallinity on the reactivity of tricalcium phosphate cements for bone reconstruction. <i>Journal of Materials Chemistry</i> , 2007 , 17, 4072		84
200	Chemical Aerosol Engineering as a Novel Tool for Material Science: From Oxides to Salt and Metal Nanoparticles. <i>Aerosol Science and Technology</i> , 2010 , 44, 161-172	3.4	83
199	Flame-made nanocrystalline ceria/zirconia: structural properties and dynamic oxygen exchange capacity. <i>Journal of Catalysis</i> , 2003 , 220, 35-43	7.3	83
198	Bottom-up Fabrication of Metal/Metal Nanocomposites from Nanoparticles of Immiscible Metals. <i>Chemistry of Materials</i> , 2010 , 22, 155-160	9.6	74
197	Magnetothermally responsive C/Co@PNIPAM-nanoparticles enable preparation of self-separating phase-switching palladium catalysts. <i>Journal of Materials Chemistry</i> , 2011 , 21, 2991		74
196	Direct synthesis of carbon quantum dots in aqueous polymer solution: one-pot reaction and preparation of transparent UV-blocking films. <i>Journal of Materials Chemistry A</i> , 2017 , 5, 5187-5194	13	72
195	Improved degradation and bioactivity of amorphous aerosol derived tricalcium phosphate nanoparticles in poly(lactide-co-glycolide). <i>Nanotechnology</i> , 2006 , 17, 2054-2061	3.4	72

194	Flame-made nanocrystalline ceria/zirconia doped with alumina or silica: structural properties and enhanced oxygen exchange capacity. <i>Journal of Materials Chemistry</i> , 2003 , 13, 2979		72
193	Tissue engineered bone grafts based on biomimetic nanocomposite PLGA/amorphous calcium phosphate scaffold and human adipose-derived stem cells. <i>Injury</i> , 2012 , 43, 1689-97	2.5	70
192	Flame-Made Pt/Ceria/Zirconia for Low-Temperature Oxygen Exchange. <i>Chemistry of Materials</i> , 2005 , 17, 3352-3358	9.6	66
191	Immobilized β -cyclodextrin on surface-modified carbon-coated cobalt nanomagnets: reversible organic contaminant adsorption and enrichment from water. <i>Langmuir</i> , 2011 , 27, 1924-9	4	65
190	Use of NIR light and upconversion phosphors in light-curable polymers. <i>Dental Materials</i> , 2012 , 28, 304-14	7.7	61
189	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. <i>Environmental Science & Technology</i> , 2009 , 43, 2634-40	10.3	61
188	Flexible, silver containing nanocomposites for the repair of bone defects: antimicrobial effect against E. coli infection and comparison to tetracycline containing scaffolds. <i>Journal of Materials Chemistry</i> , 2008 , 18, 2679		61
187	Two-layer membranes of calcium phosphate/collagen/PLGA nanofibres: in vitro biomineralisation and osteogenic differentiation of human mesenchymal stem cells. <i>Nanoscale</i> , 2011 , 3, 401-9	7.7	59
186	Organic synthesis on graphene. <i>Accounts of Chemical Research</i> , 2013 , 46, 2297-306	24.3	58
185	Comparison of amorphous TCP nanoparticles to micron-sized alpha-TCP as starting materials for calcium phosphate cements. <i>Journal of Biomedical Materials Research - Part B Applied Biomaterials</i> , 2007 , 83, 400-7	3.5	57
184	Soft Iron/Silicon Composite Tubes for Magnetic Peristaltic Pumping: Frequency-Dependent Pressure and Volume Flow. <i>Advanced Functional Materials</i> , 2013 , 23, 3845-3849	15.6	56
183	Phase transitions in amorphous calcium phosphates with different Ca/P ratios. <i>Thermochimica Acta</i> , 2008 , 468, 75-80	2.9	56
182	An Untethered, Jumping Roly-Poly Soft Robot Driven by Combustion. <i>Soft Robotics</i> , 2015 , 2, 33-41	9.2	55
181	Gold adsorption on the carbon surface of C/Co nanoparticles allows magnetic extraction from extremely diluted aqueous solutions. <i>Journal of Materials Chemistry</i> , 2009 , 19, 8239		55
180	Functionalizing a dentin bonding resin to become bioactive. <i>Dental Materials</i> , 2014 , 30, 868-75	5.7	53
179	Elastomeric nanocomposites as cell delivery vehicles and cardiac support devices. <i>Soft Matter</i> , 2010 , 6, 4715	3.6	52
178	MOF Channels within Porous Polymer Film: Flexible, Self-Supporting ZIF-8 Poly(ether sulfone) Composite Membrane. <i>Chemistry of Materials</i> , 2016 , 28, 7638-7644	9.6	52
177	High-strength metal nanomagnets for diagnostics and medicine: carbon shells allow long-term stability and reliable linker chemistry. <i>Nanomedicine</i> , 2009 , 4, 787-98	5.6	51

176	Flame synthesis of calcium carbonate nanoparticles. <i>Chemical Communications</i> , 2005 , 648-50	5.8	51
175	A DNA-of-things storage architecture to create materials with embedded memory. <i>Nature Biotechnology</i> , 2020 , 38, 39-43	44.5	50
174	Functionalized graphene-coated cobalt nanoparticles for highly efficient surface-assisted laser desorption/ionization mass spectrometry analysis. <i>Analytical Chemistry</i> , 2012 , 84, 9268-75	7.8	49
173	Phosphate starvation as an antimicrobial strategy: the controllable toxicity of lanthanum oxide nanoparticles. <i>Chemical Communications</i> , 2012 , 48, 3869-71	5.8	49
172	Particles with an identity: Tracking and tracing in commodity products. <i>Powder Technology</i> , 2016 , 291, 344-350	5.2	44
171	Exposure of aerosols and nanoparticle dispersions to in vitro cell cultures: A review on the dose relevance of size, mass, surface and concentration. <i>Journal of Aerosol Science</i> , 2010 , 41, 1123-1142	4.3	44
170	Palladium nanoparticles supported on ionic liquid modified, magnetic nanobeads [recyclable, high-capacity catalysts for alkene hydrogenation. <i>RSC Advances</i> , 2014 , 4, 8541	3.7	43
169	A Soft Total Artificial Heart-First Concept Evaluation on a Hybrid Mock Circulation. <i>Artificial Organs</i> , 2017 , 41, 948-958	2.6	42
168	Large-Scale Synthesis of PbS@TiO ₂ Heterojunction Nanoparticles in a Single Step for Solar Cell Application. <i>Journal of Physical Chemistry C</i> , 2012 , 116, 16264-16270	3.8	42
167	Flame spray synthesis under a non-oxidizing atmosphere: Preparation of metallic bismuth nanoparticles and nanocrystalline bulk bismuth metal. <i>Journal of Nanoparticle Research</i> , 2006 , 8, 729-736 ^{2,3}	2.3	42
166	Device for continuous extracorporeal blood purification using target-specific metal nanomagnets. <i>Nephrology Dialysis Transplantation</i> , 2011 , 26, 2948-54	4.3	41
165	A Bioinspired Ultraporous Nanofiber-Hydrogel Mimic of the Cartilage Extracellular Matrix. <i>Advanced Healthcare Materials</i> , 2016 , 5, 3129-3138	10.1	40
164	Effects of flame made zinc oxide particles in human lung cells - a comparison of aerosol and suspension exposures. <i>Particle and Fibre Toxicology</i> , 2012 , 9, 33	8.4	40
163	Syngas production from butane using a flame-made Rh/Ce _{0.5} Zr _{0.5} O ₂ catalyst. <i>Applied Catalysis B: Environmental</i> , 2007 , 73, 336-344	21.8	39
162	Flame Made Titania/Silica Epoxidation Catalysts. <i>Journal of Catalysis</i> , 2001 , 203, 516-524	7.3	39
161	Biocompatibility and Bone Formation of Flexible, Cotton Wool-like PLGA/Calcium Phosphate Nanocomposites in Sheep. <i>The Open Orthopaedics Journal</i> , 2011 , 5, 63-71	0.3	39
160	Stable dispersions of ferromagnetic carbon-coated metal nanoparticles: preparation via surface initiated atom transfer radical polymerization. <i>Journal of Materials Chemistry</i> , 2012 , 22, 12064		38
159	Nanomagnet-based removal of lead and digoxin from living rats. <i>Nanoscale</i> , 2013 , 5, 8718-23	7.7	37

158	Endotoxin removal by magnetic separation-based blood purification. <i>Advanced Healthcare Materials</i> , 2013 , 2, 829-35	10.1	37
157	Hollow Silica as an Optically Transparent and Thermally Insulating Polymer Additive. <i>Langmuir</i> , 2016 , 32, 338-45	4	35
156	Combined Covalent and Noncovalent Functionalization of Nanomagnetic Carbon Surfaces with Dendrimers and BODIPY Fluorescent Dye. <i>Chemistry of Materials</i> , 2011 , 23, 3606-3613	9.6	35
155	Comparative assessment of time-related bioactive glass and calcium hydroxide effects on mechanical properties of human root dentin. <i>Dental Traumatology</i> , 2009 , 25, 126-9	4.5	35
154	Surfactant-Free, Melt-Processable Metal-Polymer Hybrid Materials: Use of Graphene as a Dispersing Agent. <i>Advanced Materials</i> , 2008 , 20, 3044-3049	24	35
153	Particle emission and exposure during nanoparticle synthesis in research laboratories. <i>Annals of Occupational Hygiene</i> , 2009 , 53, 829-38		34
152	Physico-Chemical Differences Between Particle- and Molecule-Derived Toxicity: Can We Make Inherently Safe Nanoparticles?. <i>Chimia</i> , 2009 , 63, 38-43	1.3	34
151	Combining Data Longevity with High Storage Capacity—Layer-by-Layer DNA Encapsulated in Magnetic Nanoparticles. <i>Advanced Functional Materials</i> , 2019 , 29, 1901672	15.6	33
150	3D printed lost-wax casted soft silicone monoblocks enable heart-inspired pumping by internal combustion. <i>RSC Advances</i> , 2014 , 4, 16039-16042	3.7	32
149	Reading and writing digital data in DNA. <i>Nature Protocols</i> , 2020 , 15, 86-101	18.8	32
148	Soluble nanoparticles as removable pore templates for the preparation of polymer ultrafiltration membranes. <i>Journal of Membrane Science</i> , 2012 , 387-388, 76-82	9.6	31
147	Efficient magnetic recycling of covalently attached enzymes on carbon-coated metallic nanomagnets. <i>Bioconjugate Chemistry</i> , 2014 , 25, 677-84	6.3	30
146	pH-dependent antibacterial effects on oral microorganisms through pure PLGA implants and composites with nanosized bioactive glass. <i>Acta Biomaterialia</i> , 2013 , 9, 9118-25	10.8	30
145	Magnetic silyl scaffold enables efficient recycling of protecting groups. <i>Chemistry - A European Journal</i> , 2011 , 17, 10566-73	4.8	30
144	Cerium oxide nanoparticle uptake kinetics from the gas-phase into lung cells in vitro is transport limited. <i>European Journal of Pharmaceutics and Biopharmaceutics</i> , 2011 , 77, 368-75	5.7	29
143	Nanopartikel in biologischen Systemen. <i>Angewandte Chemie</i> , 2011 , 123, 1276-1293	3.6	29
142	Energy-Efficient Noble Metal Recovery by the Use of Acid-Stable Nanomagnets. <i>Industrial & Engineering Chemistry Research</i> , 2010 , 49, 9355-9362	3.9	29
141	Fluorinated groups mediate the immunomodulatory effects of volatile anesthetics in acute cell injury. <i>American Journal of Respiratory Cell and Molecular Biology</i> , 2011 , 45, 617-24	5.7	29

140	Optimization of Bioglass□ Scaffold Fabrication Process. <i>Journal of the American Ceramic Society</i> , 2011 , 94, 4184-4190	3.8	28
139	Incorporating microorganisms into polymer layers provides bioinspired functional living materials. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2012 , 109, 90-4	11.5	28
138	Preparation of nano-gypsum from anhydrite nanoparticles: Strongly increased Vickers hardness and formation of calcium sulfate nano-needles. <i>Journal of Nanoparticle Research</i> , 2007 , 9, 275-281	2.3	28
137	Silica-Encapsulated DNA-Based Tracers for Aquifer Characterization. <i>Environmental Science & Technology</i> , 2018 , 52, 12142-12152	10.3	27
136	Proliferation of ASC-derived endothelial cells in a 3D electrospun mesh: impact of bone-biomimetic nanocomposite and co-culture with ASC-derived osteoblasts. <i>Injury</i> , 2014 , 45, 974-80	2.5	26
135	Effect of thermal treatments on the reactivity of nanosized tricalcium phosphate powders. <i>Journal of Materials Chemistry</i> , 2008 , 18, 4460		26
134	Preparation of Homogeneous, Bulk Nanocrystalline Ni/Mo Alloys with Tripled Vickers Hardness Using Flame-Made Metal Nanoparticles. <i>Chemistry of Materials</i> , 2007 , 19, 4847-4854	9.6	26
133	Tracking Trace Amounts of Submicrometer Silica Particles in Wastewaters and Activated Sludge Using Silica-Encapsulated DNA Barcodes. <i>Environmental Science and Technology Letters</i> , 2014 , 1, 484-489 ¹¹		25
132	Printable Nanoporous Silver Membranes. <i>Chemistry of Materials</i> , 2010 , 22, 4980-4986	9.6	25
131	Light-curable polymer/calcium phosphate nanocomposite glue for bone defect treatment. <i>Acta Biomaterialia</i> , 2010 , 6, 2704-10	10.8	25
130	Titania□silica doped with transition metals via flame synthesis: structural properties and catalytic behavior in epoxidation. <i>Journal of Materials Chemistry</i> , 2002 , 12, 3620-3625		25
129	Incorporation of penicillin-producing fungi into living materials to provide chemically active and antibiotic-releasing surfaces. <i>Angewandte Chemie - International Edition</i> , 2012 , 51, 11293-6	16.4	24
128	Inorganic nanoparticles for transfection of mammalian cells and removal of viruses from aqueous solutions. <i>Biotechnology and Bioengineering</i> , 2007 , 98, 1083-93	4.9	24
127	Monomer-on-monomer (MoM) Mitsunobu reaction: facile purification utilizing surface-initiated sequestration. <i>Organic Letters</i> , 2011 , 13, 8-10	6.2	23
126	Magnet-guided transduction of mammalian cells and mice using engineered magnetic lentiviral particles. <i>Journal of Biotechnology</i> , 2009 , 141, 118-22	3.7	23
125	Disk-shaped packed bed micro-reactor for butane-to-syngas processing. <i>Chemical Engineering Science</i> , 2008 , 63, 5193-5201	4.4	23
124	Safe One-Pot Synthesis of Fluorescent Carbon Quantum Dots from Lemon Juice for a Hands-On Experience of Nanotechnology. <i>Journal of Chemical Education</i> , 2019 , 96, 540-545	2.4	22
123	Porous Polymer Membranes by Hard Templating □A Review. <i>Advanced Engineering Materials</i> , 2018 , 20, 1700611	3.5	22

122	Reactivity of calcium phosphate nanoparticles prepared by flame spray synthesis as precursors for calcium phosphate cements. <i>Journal of Materials Chemistry</i> , 2011 , 21, 13963		22
121	Selective Biosorption and Recovery of Tungsten from an Urban Mine and Feasibility Evaluation. <i>Industrial & Engineering Chemistry Research</i> , 2016 , 55, 2903-2910	3.9	22
120	Rapid Production of a Porous Cellulose Acetate Membrane for Water Filtration using Readily Available Chemicals. <i>Journal of Chemical Education</i> , 2017 , 94, 483-487	2.4	21
119	Inflammatory response of lung macrophages and epithelial cells after exposure to redox active nanoparticles: effect of solubility and antioxidant treatment. <i>Environmental Science & Technology</i> , 2014 , 48, 13960-8	10.3	21
118	Labeling milk along its production chain with DNA encapsulated in silica. <i>Journal of Agricultural and Food Chemistry</i> , 2014 , 62, 10615-20	5.7	21
117	Design, Performance and Reinforcement of Bearing-Free Soft Silicone Combustion-Driven Pumps. <i>Industrial & Engineering Chemistry Research</i> , 2014 , 53, 12519-12526	3.9	21
116	Scaling up magnetic filtration and extraction to the ton per hour scale using carbon coated metal nanoparticles. <i>Separation and Purification Technology</i> , 2012 , 96, 68-74	8.3	21
115	Quantitative Recovery of Magnetic Nanoparticles from Flowing Blood: Trace Analysis and the Role of Magnetization. <i>Advanced Functional Materials</i> , 2013 , 23, 4888-4896	15.6	21
114	Low cost DNA data storage using photolithographic synthesis and advanced information reconstruction and error correction. <i>Nature Communications</i> , 2020 , 11, 5345	17.4	21
113	Roll-to-Roll Preparation of Mesoporous Membranes by Nanoparticle Template Removal. <i>Industrial & Engineering Chemistry Research</i> , 2014 , 53, 9214-9220	3.9	20
112	Iron core/shell nanoparticles as magnetic drug carriers: possible interactions with the vascular compartment. <i>Nanomedicine</i> , 2011 , 6, 1199-213	5.6	20
111	A fast hybrid start-up process for thermally self-sustained catalytic-butane reforming in micro-SOFC power plants. <i>Energy and Environmental Science</i> , 2011 , 4, 3041	35.4	20
110	Spherical calcium phosphate nanoparticle fillers allow polymer processing of bone fixation devices with high bioactivity. <i>Polymer Engineering and Science</i> , 2010 , 50, 952-960	2.3	20
109	Insulator coated metal nanoparticles with a core/shell geometry exhibit a temperature sensitivity similar to advanced spinels. <i>Sensors and Actuators A: Physical</i> , 2007 , 138, 120-129	3.9	20
108	Heterogeneous Catalysis by Flame-Made Nanoparticles. <i>Chimia</i> , 2002 , 56, 485-489	1.3	20
107	Pressureless mechanical induction of stem cell differentiation is dose and frequency dependent. <i>PLoS ONE</i> , 2013 , 8, e81362	3.7	20
106	Hollow Carbon Nanobubbles: Synthesis, Chemical Functionalization, and Container-Type Behavior in Water. <i>Angewandte Chemie - International Edition</i> , 2016 , 55, 8761-5	16.4	20
105	Magnetic superbasic proton sponges are readily removed and permit direct product isolation. <i>Journal of Organic Chemistry</i> , 2014 , 79, 10908-15	4.2	19

104	Porous polysulfone coatings for enhanced drug delivery. <i>Biomedical Microdevices</i> , 2012 , 14, 603-12	3.7	19
103	Thermal Treatment of Flame-Synthesized Amorphous Tricalcium Phosphate Nanoparticles. <i>Journal of the American Ceramic Society</i> , 2010 , 93, 3455-3463	3.8	19
102	Template-particle stabilized bicontinuous emulsion yielding controlled assembly of hierarchical high-flux filtration membranes. <i>ACS Applied Materials & Interfaces</i> , 2015 , 7, 611-7	9.5	18
101	Stabilizing synthetic DNA for long-term data storage with earth alkaline salts. <i>Chemical Communications</i> , 2020 , 56, 3613-3616	5.8	18
100	Tomographic Reservoir Imaging with DNA-Labeled Silica Nanotracers: The First Field Validation. <i>Environmental Science & Technology</i> , 2018 , 52, 13681-13689	10.3	18
99	Purification of NaYF ₄ -Based Upconversion Phosphors. <i>Chemistry of Materials</i> , 2014 , 26, 2015-2020	9.6	17
98	Submicrometer-Sized Thermometer Particles Exploiting Selective Nucleic Acid Stability. <i>Small</i> , 2016 , 12, 452-6	11	17
97	Selective Low-Energy Carbon Dioxide Adsorption Using Monodisperse Nitrogen-Rich Hollow Carbon Submicron Spheres. <i>Langmuir</i> , 2018 , 34, 30-35	4	17
96	Highly elastomeric poly(3-hydroxyoctanoate) based natural polymer composite for enhanced keratinocyte regeneration. <i>International Journal of Polymeric Materials and Polymeric Biomaterials</i> , 2017 , 66, 326-335	3	16
95	Tissue mechanics of piled critical size biomimetic and biomineralizable nanocomposites: Formation of bioreactor-induced stem cell gradients under perfusion and compression. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2015 , 47, 124-134	4.1	16
94	Nondestructive in-line sub-picomolar detection of magnetic nanoparticles in flowing complex fluids. <i>Scientific Reports</i> , 2018 , 8, 3491	4.9	16
93	In vivo risk evaluation of carbon-coated iron carbide nanoparticles based on short- and long-term exposure scenarios. <i>Nanomedicine</i> , 2016 , 11, 783-96	5.6	16
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91	Gas-phase synthesis of magnetic metal/polymer nanocomposites. <i>Nanotechnology</i> , 2014 , 25, 505602	3.4	16
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