Wendelin J Stark

List of Publications by Year in Descending Order

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	Anhydrous calcium phosphate crystals stabilize DNA for dry storage.. *Chemical Communications*, **2022**,	5.8	1
246	Integrating DNA Encapsulates and Digital Microfluidics for Automated Data Storage in DNA.. *Small*, **2022**, e2107381	11	3
245	Rapid Identification of SARS-CoV-2 Variants of Concern Using a Portable PCR Platform. *Analytical Chemistry*, **2021**,	7.8	4
244	Increased Longevity and Pumping Performance of an Injection Molded Soft Total Artificial Heart. *Soft Robotics*, **2021**, 8, 588-593	9.2	0
243	Ecotoxicological Assessment of DNA-Tagged Silica Particles for Environmental Tracing. *Environmental Science & Technology*, **2021**, 55, 6867-6875	10.3	1
242	Suspension of Amorphous Calcium Phosphate Nanoparticles Impact Commitment of Human Adipose-Derived Stem Cells In Vitro. *Biology*, **2021**, 10,	4.9	1
241	Preparation of Functionalized Carbon-Coated Cobalt Nanoparticles with Sulfonated Arene Derivatives, a Study on Surface Functionalization and Stability. *Chemistry - A European Journal*, **2021**, 27, 4108-4114	4.8	2
240	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	3.9	0
239	Genomic Encryption of Digital Data Stored in Synthetic DNA. *Angewandte Chemie*, **2020**, 132, 8554-8558	3.6	1
238	Genomic Encryption of Digital Data Stored in Synthetic DNA. *Angewandte Chemie - International Edition*, **2020**, 59, 8476-8480	16.4	6
237	Stabilizing synthetic DNA for long-term data storage with earth alkaline salts. *Chemical Communications*, **2020**, 56, 3613-3616	5.8	18
236	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	4.1	5
235	A DNA-of-things storage architecture to create materials with embedded memory. *Nature Biotechnology*, **2020**, 38, 39-43	44.5	50
234	Reading and writing digital data in DNA. *Nature Protocols*, **2020**, 15, 86-101	18.8	32
233	DNA synthesis for true random number generation. *Nature Communications*, **2020**, 11, 5869	17.4	13
232	Low cost DNA data storage using photolithographic synthesis and advanced information reconstruction and error correction. *Nature Communications*, **2020**, 11, 5345	17.4	21
231	Small-Size Polymerase Chain Reaction Device with Improved Heat Transfer and Combined Feedforward/Feedback Control Strategy. *Industrial & Engineering Chemistry Research*, **2019**, 58, 9665-9674	3.9	4

230	Strategies of Immobilizing Cells in Whole-cell Microbial Biosensor Devices Targeted for Analytical Field Applications. *Analytical Sciences*, **2019**, 35, 839-847	1.7	7
229	Continuous Production of a Shelf-Stable Living Material as a Biosensor Platform. *Advanced Materials Technologies*, **2019**, 4, 1900266	6.8	6
228	Combining Data Longevity with High Storage Capacity—Layer-by-Layer DNA Encapsulated in Magnetic Nanoparticles. *Advanced Functional Materials*, **2019**, 29, 1901672	15.6	33
227	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	2.4	22
226	Hybrid nanocomposite as a chest wall graft with improved integration by adipose-derived stem cells. *Scientific Reports*, **2019**, 9, 10910	4.9	3
225	YestroSens, a field-portable S. cerevisiae biosensor device for the detection of endocrine-disrupting chemicals: Reliability and stability. *Biosensors and Bioelectronics*, **2019**, 146, 111710	11.8	6
224	DNA Barcode Quantification As a Robust Tool for Measuring Mixing Ratios in Two-Component Systems.. *ACS Applied Bio Materials*, **2019**, 2, 5062-5068	4.1	
223	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	3.5	3
222	The light triggered dissolution of gold wires using potassium ferrocyanide solutions enables cumulative illumination sensing. *Sensors and Actuators B: Chemical*, **2019**, 282, 52-59	8.5	10
221	Cartilage/bone interface fabricated under perfusion: Spatially organized commitment of adipose-derived stem cells without medium supplementation. *Journal of Biomedical Materials Research - Part B Applied Biomaterials*, **2019**, 107, 1833-1843	3.5	8
220	Long-Term Performance of a Pneumatically Actuated Soft Pump Manufactured by Rubber Compression Molding. *Soft Robotics*, **2019**, 6, 206-213	9.2	4
219	Length-dependent DNA degradation kinetic model: Decay compensation in DNA tracer concentration measurements. *AICHE Journal*, **2019**, 65, 40-48	3.6	6
218	Nondestructive in-line sub-picomolar detection of magnetic nanoparticles in flowing complex fluids. *Scientific Reports*, **2018**, 8, 3491	4.9	16
217	Thermoresponsive Microspheres as Smart Pore Plugs: Self-Venting Clothing Membranes for Smart Outdoor Textiles. *Macromolecular Materials and Engineering*, **2018**, 303, 1700562	3.9	6
216	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	4.1	8
215	Water dispersible surface-functionalized platinum/carbon nanorattles for size-selective catalysis. *Chemical Science*, **2018**, 9, 362-367	9.4	9
214	Porous Polymer Membranes by Hard Templating—A Review. *Advanced Engineering Materials*, **2018**, 20, 1700611	3.5	22
213	Selective Low-Energy Carbon Dioxide Adsorption Using Monodisperse Nitrogen-Rich Hollow Carbon Submicron Spheres. *Langmuir*, **2018**, 34, 30-35	4	17

212	Silica-Encapsulated DNA-Based Tracers for Aquifer Characterization. *Environmental Science & Technology*, **2018**, 52, 12142-12152	10.3	27
211	Hydrogen as a Bio-Orthogonal Trigger for Spatiotemporally Controlled Caged Prodrug Activation. *Helvetica Chimica Acta*, **2018**, 101, e1800134	2	
210	Tomographic Reservoir Imaging with DNA-Labeled Silica Nanotracers: The First Field Validation. *Environmental Science & Technology*, **2018**, 52, 13681-13689	10.3	18
209	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	13	72
208	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	8.3	12
207	Stabilization of 2D Water Films in Porous Triple-Layer Membranes with a Hydrophilic Core: Cooling Textiles and Passive Evaporative Room Climate Control . *Advanced Engineering Materials*, **2017**, 19, 1700134	3.5	7
206	Protein Reduction and Dialysis-Free Work-Up through Phosphines Immobilized on a Magnetic Support: TCEP-Functionalized Carbon-Coated Cobalt Nanoparticles. *Chemistry - A European Journal*, **2017**, 23, 8585-8589	4.8	4
205	Efficient Recycling of Poly(lactic acid) Nanoparticle Templates for the Synthesis of Hollow Silica Spheres. *ACS Sustainable Chemistry and Engineering*, **2017**, 5, 4941-4947	8.3	14
204	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	4.3	11
203	Rapid Production of a Porous Cellulose Acetate Membrane for Water Filtration using Readily Available Chemicals. *Journal of Chemical Education*, **2017**, 94, 483-487	2.4	21
202	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	16
201	Effects of seeding adipose-derived stem cells on electrospun nanocomposite used as chest wall graft in a murine model. *Injury*, **2017**, 48, 2080-2088	2.5	6
200	A Soft Total Artificial Heart-First Concept Evaluation on a Hybrid Mock Circulation. *Artificial Organs*, **2017**, 41, 948-958	2.6	42
199	Ultrapure Green Light-Emitting Diodes Using Two-Dimensional Formamidinium Perovskites: Achieving Recommendation 2020 Color Coordinates. *Nano Letters*, **2017**, 17, 5277-5284	11.5	166
198	A Bioinspired Ultraporous Nanofiber-Hydrogel Mimic of the Cartilage Extracellular Matrix. *Advanced Healthcare Materials*, **2016**, 5, 3129-3138	10.1	40
197	Hollow Silica as an Optically Transparent and Thermally Insulating Polymer Additive. *Langmuir*, **2016**, 32, 338-45	4	35
196	Ultrasensitive Quantification of Pesticide Contamination and Drift Using Silica Particles with Encapsulated DNA. *Environmental Science and Technology Letters*, **2016**, 3, 19-23	11	13
195	In vivo risk evaluation of carbon-coated iron carbide nanoparticles based on short- and long-term exposure scenarios. *Nanomedicine*, **2016**, 11, 783-96	5.6	16

194	Particles with an identity: Tracking and tracing in commodity products. *Powder Technology*, **2016**, 291, 344-350	5.2	44
193	Click and release: fluoride cleavable linker for mild bioorthogonal separation. *Chemical Communications*, **2016**, 52, 938-41	5.8	12
192	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	
191	Submicrometer-Sized Thermometer Particles Exploiting Selective Nucleic Acid Stability. *Small*, **2016**, 12, 452-6	11	17
190	DNA-Based Sensor Particles Enable Measuring Light Intensity in Single Cells. *Advanced Materials*, **2016**, 28, 2765-70	24	3
189	Incorporation of particulate bioactive glasses into a dental root canal sealer. *Biomedical Glasses*, **2016**, 2,	2.7	13
188	Kohlenstoff-Nanoblächen: Synthese, chemische Funktionalisierung und containerartiges Verhalten in Wasser. *Angewandte Chemie*, **2016**, 128, 8905-8909	3.6	3
187	Hollow Carbon Nanobubbles: Synthesis, Chemical Functionalization, and Container-Type Behavior in Water. *Angewandte Chemie - International Edition*, **2016**, 55, 8761-5	16.4	20
186	Selective Biosorption and Recovery of Tungsten from an Urban Mine and Feasibility Evaluation. *Industrial & Engineering Chemistry Research*, **2016**, 55, 2903-2910	3.9	22
185	Nanoscale bioactive glass activates osteoclastic differentiation of RAW 264.7 cells. *Nanomedicine*, **2016**, 11, 1093-105	5.6	15
184	Application of the Prunus spp. Cyanide Seed Defense System onto Wheat: Reduced Insect Feeding and Field Growth Tests. *Journal of Agricultural and Food Chemistry*, **2016**, 64, 3501-7	5.7	7
183	MOF Channels within Porous Polymer Film: Flexible, Self-Supporting ZIF-8 Poly(ether sulfone) Composite Membrane. *Chemistry of Materials*, **2016**, 28, 7638-7644	9.6	52
182	Adsorption and separation of amyloid beta aggregates using ferromagnetic nanoparticles coated with charged polymer brushes. *Journal of Materials Chemistry B*, **2015**, 3, 3351-3357	7.3	6
181	Programmable living material containing reporter micro-organisms permits quantitative detection of oligosaccharides. *Biomaterials*, **2015**, 61, 1-9	15.6	12
180	Porous, Water-Resistant Multifilament Yarn Spun from Gelatin. *Biomacromolecules*, **2015**, 16, 1997-2005	6.9	10
179	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	4.1	16
178	Silica Microcapsules for Long-Term, Robust, and Reliable Room Temperature RNA Preservation. *Advanced Healthcare Materials*, **2015**, 4, 1332-8	10.1	13
177	Uptake of ferromagnetic carbon-encapsulated metal nanoparticles in endothelial cells: influence of shear stress and endothelial activation. *Nanomedicine*, **2015**, 10, 3537-46	5.6	5

176	An Untethered, Jumping Roly-Poly Soft Robot Driven by Combustion. *Soft Robotics*, **2015**, 2, 33-41	9.2	55
175	Template-particle stabilized bicontinuous emulsion yielding controlled assembly of hierarchical high-flux filtration membranes. *ACS Applied Materials & Interfaces*, **2015**, 7, 611-7	9.5	18
174	RNA Storage: Silica Microcapsules for Long-Term, Robust, and Reliable Room Temperature RNA Preservation (Adv. Healthcare Mater. 9/2015). *Advanced Healthcare Materials*, **2015**, 4, 1262-1262	10.1	1
173	Robuste chemische Speicherung von digitalen Informationen auf DNA in Silicat unter Verwendung fehlerkorrigierender Codes. *Angewandte Chemie*, **2015**, 127, 2582-2586	3.6	10
172	Contrast Agent Incorporation into Silicone Enables Real-Time Flow-Structure Analysis of Mammalian Vein-Inspired Soft Pumps. *Advanced Functional Materials*, **2015**, 25, 2129-2137	15.6	10
171	Fibers Mechanically Similar to Sheep Wool Obtained by Wet Spinning of Gelatin and Optional Plasticizers. *Macromolecular Materials and Engineering*, **2015**, 300, 234-241	3.9	12
170	Magnetically deliverable calcium phosphate nanoparticles for localized gene expression. *RSC Advances*, **2015**, 5, 9997-10004	3.7	7
169	Robust chemical preservation of digital information on DNA in silica with error-correcting codes. *Angewandte Chemie - International Edition*, **2015**, 54, 2552-5	16.4	275
168	Palladium Nanoparticles Supported on Magnetic Carbon-Coated Cobalt Nanobeads: Highly Active and Recyclable Catalysts for Alkene Hydrogenation. *Advanced Functional Materials*, **2014**, 24, 2020-2027	15.6	95
167	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, 974-80	2.5	26
166	Magnetically recoverable, thermostable, hydrophobic DNA/silica encapsulates and their application as invisible oil tags. *ACS Nano*, **2014**, 8, 2677-85	16.7	87
165	Self-defending anti-vandalism surfaces based on mechanically triggered mixing of reactants in polymer foils. *Journal of Materials Chemistry A*, **2014**, 2, 8425-8430	13	4
164	Palladium nanoparticles supported on ionic liquid modified, magnetic nanobeads recyclable, high-capacity catalysts for alkene hydrogenation. *RSC Advances*, **2014**, 4, 8541	3.7	43
163	Roll-to-Roll Preparation of Mesoporous Membranes by Nanoparticle Template Removal. *Industrial & Engineering Chemistry Research*, **2014**, 53, 9214-9220	3.9	20
162	Magnetic superbasic proton sponges are readily removed and permit direct product isolation. *Journal of Organic Chemistry*, **2014**, 79, 10908-15	4.2	19
161	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, 13960-8	10.3	21
160	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	13	3
159	PCR quantification of SiO_2 particle uptake in cells in the ppb and ppm range via silica encapsulated DNA barcodes. *Chemical Communications*, **2014**, 50, 10707-9	5.8	4

158	Labeling milk along its production chain with DNA encapsulated in silica. *Journal of Agricultural and Food Chemistry*, **2014**, 62, 10615-20	5.7	21
157	3D printed lost-wax casted soft silicone monoblocks enable heart-inspired pumping by internal combustion. *RSC Advances*, **2014**, 4, 16039-16042	3.7	32
156	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	7.3	16
155	Design, Performance and Reinforcement of Bearing-Free Soft Silicone Combustion-Driven Pumps. *Industrial & Engineering Chemistry Research*, **2014**, 53, 12519-12526	3.9	21
154	Efficient magnetic recycling of covalently attached enzymes on carbon-coated metallic nanomagnets. *Bioconjugate Chemistry*, **2014**, 25, 677-84	6.3	30
153	Micro Mirror Polymer Composite Offers Mechanically Switchable Light Transmittance. *Advanced Engineering Materials*, **2014**, 16, 878-883	3.5	4
152	Functionalizing a dentin bonding resin to become bioactive. *Dental Materials*, **2014**, 30, 868-75	5.7	53
151	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	5.1	9
150	Purification of NaYF4-Based Upconversion Phosphors. *Chemistry of Materials*, **2014**, 26, 2015-2020	9.6	17
149	Gas-phase synthesis of magnetic metal/polymer nanocomposites. *Nanotechnology*, **2014**, 25, 505602	3.4	16
148	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	11	25
147	Spinning Angora Rabbit Wool-Like Porous Fibers from a Non-Equilibrated Gelatin/Water/2-Propanol Mixture. *Advanced Functional Materials*, **2014**, 24, 1831-1839	15.6	10
146	Bioactive nanocomposite for chest-wall replacement: Cellular response in a murine model. *Journal of Biomaterials Applications*, **2014**, 29, 36-45	2.9	10
145	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	3.7	15
144	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	1.7	2
143	Ferromagnetic inks facilitate large scale paper recycling and reduce bleach chemical consumption. *Langmuir*, **2013**, 29, 5093-8	4	6
142	Soft Iron/Silicon Composite Tubes for Magnetic Peristaltic Pumping: Frequency-Dependent Pressure and Volume Flow. *Advanced Functional Materials*, **2013**, 23, 3845-3849	15.6	56
141	Nanomagnet-based removal of lead and digoxin from living rats. *Nanoscale*, **2013**, 5, 8718-23	7.7	37

140	Organic synthesis on graphene. *Accounts of Chemical Research*, **2013**, 46, 2297-306	24.3	58
139	pH-dependent antibacterial effects on oral microorganisms through pure PLGA implants and composites with nanosized bioactive glass. *Acta Biomaterialia*, **2013**, 9, 9118-25	10.8	30
138	Flame Synthesis of Complex Fluoride-Based Nanoparticles as Upconversion Phosphors. *KONA Powder and Particle Journal*, **2013**, 30, 267-275	3.4	4
137	Quantitative Recovery of Magnetic Nanoparticles from Flowing Blood: Trace Analysis and the Role of Magnetization. *Advanced Functional Materials*, **2013**, 23, 4888-4896	15.6	21
136	Nanoparticles: Endotoxin Removal by Magnetic Separation-Based Blood Purification (Adv. Healthcare Mater. 6/2013). *Advanced Healthcare Materials*, **2013**, 2, 828-828	10.1	1
135	Endotoxin removal by magnetic separation-based blood purification. *Advanced Healthcare Materials* , **2013**, 2, 829-35	10.1	37
134	Synthesis of trisubstituted ureas by a multistep sequence utilizing recyclable magnetic reagents and scavengers. *Chemistry - A European Journal*, **2013**, 19, 10038-45	4.8	13
133	Rapid surface-biostructure interaction analysis using strong metal-based nanomagnets. *Langmuir*, **2013**, 29, 14117-23	4	2
132	Heat-Induced Dry Tailoring of Porosity in Polymer Scaffolds. *Macromolecular Materials and Engineering*, **2013**, 298, 1143-1148	3.9	2
131	Pressureless mechanical induction of stem cell differentiation is dose and frequency dependent. *PLoS ONE*, **2013**, 8, e81362	3.7	20
130	Use of NIR light and upconversion phosphors in light-curable polymers. *Dental Materials*, **2012**, 28, 304-15	5.7	61
129	Soluble nanoparticles as removable pore templates for the preparation of polymer ultrafiltration membranes. *Journal of Membrane Science*, **2012**, 387-388, 76-82	9.6	31
128	Functionalized graphene-coated cobalt nanoparticles for highly efficient surface-assisted laser desorption/ionization mass spectrometry analysis. *Analytical Chemistry*, **2012**, 84, 9268-75	7.8	49
127	Tissue engineered bone grafts based on biomimetic nanocomposite PLGA/amorphous calcium phosphate scaffold and human adipose-derived stem cells. *Injury*, **2012**, 43, 1689-97	2.5	70
126	Incorporation of Penicillin-Producing Fungi into Living Materials to Provide Chemically Active and Antibiotic-Releasing Surfaces. *Angewandte Chemie*, **2012**, 124, 11455-11458	3.6	9
125	Incorporation of penicillin-producing fungi into living materials to provide chemically active and antibiotic-releasing surfaces. *Angewandte Chemie - International Edition*, **2012**, 51, 11293-6	16.4	24
124	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, 2664-71	9.5	15
123	Stable dispersions of ferromagnetic carbon-coated metal nanoparticles: preparation via surface initiated atom transfer radical polymerization. *Journal of Materials Chemistry*, **2012**, 22, 12064		38

122	Magnetic Cobalt[0]-graphene Nanospheres **2012**,		1
121	Nanoparticle-Assisted, Catalytic Etching of Carbon Surfaces as a Method to Manufacture Nanogrooves. *Journal of Physical Chemistry C*, **2012**, 116, 13693-13698	3.8	8
120	Persistence of engineered nanoparticles in a municipal solid-waste incineration plant. *Nature Nanotechnology*, **2012**, 7, 520-4	28.7	156
119	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	8.3	21
118	Large-Scale Synthesis of PbS□TiO2 Heterojunction Nanoparticles in a Single Step for Solar Cell Application. *Journal of Physical Chemistry C*, **2012**, 116, 16264-16270	3.8	42
117	Physical defect formation in few layer graphene-like carbon on metals: influence of temperature, acidity, and chemical functionalization. *Langmuir*, **2012**, 28, 4565-72	4	13
116	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	8.4	40
115	Phosphate starvation as an antimicrobial strategy: the controllable toxicity of lanthanum oxide nanoparticles. *Chemical Communications*, **2012**, 48, 3869-71	5.8	49
114	Carbon Modifications and Surfaces for Catalytic Organic Transformations. *ACS Catalysis*, **2012**, 2, 1267-1284	9.1	152
113	Magnetic Nanobeads as Support for Zinc(II)-Cyclen Complexes: Selective and Reversible Extraction of Riboflavin. *ChemistryOpen*, **2012**, 1, 125-9	2.3	11
112	Chemical modification of graphene characterized by Raman and transport experiments. *Nanoscale*, **2012**, 4, 3781-5	7.7	14
111	Porous polysulfone coatings for enhanced drug delivery. *Biomedical Microdevices*, **2012**, 14, 603-12	3.7	19
110	Carbon coated magnetic nanoparticles as supports in microwave-assisted palladium catalyzed Suzuki-Miyaura couplings. *Green Processing and Synthesis*, **2012**, 1,	3.9	2
109	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, 90-4	11.5	28
108	Nanocomposites of high-density polyethylene with amorphous calcium phosphate: in vitro biomineralization and cytocompatibility of human mesenchymal stem cells. *Biomedical Materials (Bristol)*, **2012**, 7, 054103	3.5	7
107	Immobilized □cyclodextrin on surface-modified carbon-coated cobalt nanomagnets: reversible organic contaminant adsorption and enrichment from water. *Langmuir*, **2011**, 27, 1924-9	4	65
106	Two-layer membranes of calcium phosphate/collagen/PLGA nanofibres: in vitro biomineralisation and osteogenic differentiation of human mesenchymal stem cells. *Nanoscale*, **2011**, 3, 401-9	7.7	59
105	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, 368-75	5.7	29

104	Combined Covalent and Noncovalent Functionalization of Nanomagnetic Carbon Surfaces with Dendrimers and BODIPY Fluorescent Dye. *Chemistry of Materials*, **2011**, 23, 3606-3613	9.6	35
103	From Embedded to Supported Metal/Oxide Nanomaterials: Thermal Behavior and Structural Evolution at Elevated Temperatures *Journal of Physical Chemistry C*, **2011**, 115, 1269-1276	3.8	11
102	Reactivity of calcium phosphate nanoparticles prepared by flame spray synthesis as precursors for calcium phosphate cements. *Journal of Materials Chemistry*, **2011**, 21, 13963		22
101	Optimization of Bioglass Scaffold Fabrication Process. *Journal of the American Ceramic Society*, **2011**, 94, 4184-4190	3.8	28
100	Accelerated mineralization of dense collagen-nano bioactive glass hybrid gels increases scaffold stiffness and regulates osteoblastic function. *Biomaterials*, **2011**, 32, 8915-26	15.6	157
99	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	14.7	15
98	Iron core/shell nanoparticles as magnetic drug carriers: possible interactions with the vascular compartment. *Nanomedicine*, **2011**, 6, 1199-213	5.6	20
97	Incorporation of reactive silver-tricalcium phosphate nanoparticles into polyamide 6 allows preparation of self-disinfecting fibers. *Polymer Engineering and Science*, **2011**, 51, 71-77	2.3	12
96	Nanopartikel in biologischen Systemen. *Angewandte Chemie*, **2011**, 123, 1276-1293	3.6	29
95	Nanoparticles in biological systems. *Angewandte Chemie - International Edition*, **2011**, 50, 1242-58	16.4	417
94	Magnetic silyl scaffold enables efficient recycling of protecting groups. *Chemistry - A European Journal*, **2011**, 17, 10566-73	4.8	30
93	Magnetothermally responsive C/Co@PNIPAM-nanoparticles enable preparation of self-separating phase-switching palladium catalysts. *Journal of Materials Chemistry*, **2011**, 21, 2991		74
92	A fast hybrid start-up process for thermally self-sustained catalyticn-butane reforming in micro-SOFC power plants. *Energy and Environmental Science*, **2011**, 4, 3041	35.4	20
91	Monomer-on-monomer (MoM) Mitsunobu reaction: facile purification utilizing surface-initiated sequestration. *Organic Letters*, **2011**, 13, 8-10	6.2	23
90	Fluorinated groups mediate the immunomodulatory effects of volatile anesthetics in acute cell injury. *American Journal of Respiratory Cell and Molecular Biology*, **2011**, 45, 617-24	5.7	29
89	Device for continuous extracorporeal blood purification using target-specific metal nanomagnets. *Nephrology Dialysis Transplantation*, **2011**, 26, 2948-54	4.3	41
88	Biocompatibility and Bone Formation of Flexible, Cotton Wool-like PLGA/Calcium Phosphate Nanocomposites in Sheep. *The Open Orthopaedics Journal*, **2011**, 5, 63-71	0.3	39
87	Thermal Treatment of Flame-Synthesized Amorphous Tricalcium Phosphate Nanoparticles. *Journal of the American Ceramic Society*, **2010**, 93, 3455-3463	3.8	19

86	No evidence for cerium dioxide nanoparticle translocation in maize plants. *Environmental Science & Technology*, **2010**, 44, 8718-23	10.3	219
85	Energy-Efficient Noble Metal Recovery by the Use of Acid-Stable Nanomagnets. *Industrial & Engineering Chemistry Research*, **2010**, 49, 9355-9362	3.9	29
84	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. *Chemistry of Materials*, **2010**, 22, 305-310	9.6	90
83	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	4.3	44
82	Nanoparticle cytotoxicity depends on intracellular solubility: comparison of stabilized copper metal and degradable copper oxide nanoparticles. *Toxicology Letters*, **2010**, 197, 169-74	4.4	306
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