Hyon Bin Na

List of Publications by Year
in descending order

60	11,322	94381 37	123376 61
papers	citations	h-index	g-index

64	64	64	15689
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Synthesis of Highly Crystalline and Monodisperse Maghemite Nanocrystallites without a Size-Selection Process. Journal of the American Chemical Society, 2001, 123, 12798-12801.	6.6	1,937
2	Inorganic Nanoparticles for MRI Contrast Agents. Advanced Materials, 2009, 21, 2133-2148.	11.1	1,597
3	Large-Scale Synthesis of Uniform and Extremely Small-Sized Iron Oxide Nanoparticles for High-Resolution T₁ Magnetic Resonance Imaging Contrast Agents. Journal of the American Chemical Society, 2011, 133, 12624-12631.	6.6	835
4	Generalized and Facile Synthesis of Semiconducting Metal Sulfide Nanocrystals. Journal of the American Chemical Society, 2003, 125, 11100-11105.	6.6	619
5	Nonblinking and Nonbleaching Upconverting Nanoparticles as an Optical Imaging Nanoprobe and T1 Magnetic Resonance Imaging Contrast Agent. Advanced Materials, 2009, 21, 4467-4471.	11.1	548
6	Development of aT1â€...Contrast Agent for Magnetic Resonance Imaging Using MnO Nanoparticles. Angewandte Chemie - International Edition, 2007, 46, 5397-5401.	7.2	545
7	Designed Synthesis of Atom-Economical Pd/Ni Bimetallic Nanoparticle-Based Catalysts for Sonogashira Coupling Reactions. Journal of the American Chemical Society, 2004, 126, 5026-5027.	6.6	465
8	Wrapâ€“bakeâ€“peelÂprocessÂforÂnanostructural transformation fromÂÎ²-FeOOHÂnanorodsÂto biocompatible iron oxide nanocapsules. Nature Materials, 2008, 7, 242-247.	13.3	401
9	Luminescent quantum dots as platforms for probing in vitro and in vivo biological processes. Advanced Drug Delivery Reviews, 2012, 64, 138-166.	6.6	386
10	Simple Synthesis of Functionalized Superparamagnetic Magnetite/Silica Core/Shell Nanoparticles and their Application as Magnetically Separable Highâ€Performance Biocatalysts. Small, 2008, 4, 143-152.	5.2	351
11	Synthesis of Nanorattles Composed of Gold Nanoparticles Encapsulated in Mesoporous Carbon and Polymer Shells. Nano Letters, 2002, 2, 1383-1387.	4.5	258
12	High-resolution three-photon biomedical imaging using doped ZnS nanocrystals. Nature Materials, 2013, 12, 359-366.	13.3	240
13	Nanostructured T1 MRI contrast agents. Journal of Materials Chemistry, 2009, 19, 6267.	6.7	233
14	On the pH-Dependent Quenching of Quantum Dot Photoluminescence by Redox Active Dopamine. Journal of the American Chemical Society, 2012, 134, 6006-6017.	6.6	213
15	Synthesis of Uniform Hollow Oxide Nanoparticles through Nanoscale Acid Etching. Nano Letters, 2008, 8, 4252-4258.	4.5	210
16	Simple Fabrication of a Highly Sensitive and Fast Glucose Biosensor Using Enzymes Immobilized in Mesocellular Carbon Foam. Advanced Materials, 2005, 17, 2828-2833.	11.1	202
17	Crosslinked enzyme aggregates in hierarchically-ordered mesoporous silica: A simple and effective method for enzyme stabilization. Biotechnology and Bioengineering, 2007, 96, 210-218.	1.7	187
18	Multidentate Catechol-Based Polyethylene Glycol Oligomers Provide Enhanced Stability and Biocompatibility to Iron Oxide Nanoparticles. ACS Nano, 2012, 6, 389-399.	7.3	174

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19	MR tracking of transplanted cells with â€œpositive contrastâ€•using manganese oxide nanoparticles. Magnetic Resonance in Medicine, 2008, 60, 1-7.	1.9	164
20	Simple and Generalized Synthesis of Oxideâ^'Metal Heterostructured Nanoparticles and their Applications in Multimodal Biomedical Probes. Journal of the American Chemical Society, 2008, 130, 15573-15580.	6.6	162
21	Various-Shaped Uniform Mn₃O₄ Nanocrystals Synthesized at Low Temperature in Air Atmosphere. Chemistry of Materials, 2009, 21, 2272-2279.	3.2	135
22	A Magnetically Separable, Highly Stable Enzyme System Based on Nanocomposites of Enzymes and Magnetic Nanoparticles Shipped in Hierarchically Ordered, Mesocellular, Mesoporous Silica. Small, 2005, 1, 1203-1207.	5.2	106
23	Versatile PEG-derivatized phosphine oxide ligands for water-dispersible metal oxide nanocrystals. Chemical Communications, 2007, , 5167.	2.2	93
24	Paramagnetic inorganic nanoparticles as <scp>T₁</scp><scp>MRI</scp> contrast agents. Wiley Interdisciplinary Reviews: Nanomedicine and Nanobiotechnology, 2014, 6, 196-209.	3.3	89
25	Selective oxygen species for the oxidative coupling of methane. Molecular Catalysis, 2017, 435, 13-23.	1.0	79
26	Î²-Glucosidase coating on polymer nanofibers for improved cellulosic ethanol production. Bioprocess and Biosystems Engineering, 2010, 33, 141-147.	1.7	73
27	In vitro cytotoxicity screening of water-dispersible metal oxide nanoparticles in human cell lines. Bioprocess and Biosystems Engineering, 2010, 33, 21-30.	1.7	72
28	Synthesis of Uniformly Sized Manganese Oxide Nanocrystals with Various Sizes and Shapes and Characterization of Their T₁ Magnetic Resonance Relaxivity. European Journal of Inorganic Chemistry, 2012, 2012, 2148-2155.	1.0	71
29	One-dimensional crosslinked enzyme aggregates in SBA-15: Superior catalytic behavior to conventional enzyme immobilization. Microporous and Mesoporous Materials, 2008, 111, 18-23.	2.2	69
30	Design of a Multi-Dopamine-Modified Polymer Ligand Optimally Suited for Interfacing Magnetic Nanoparticles with Biological Systems. Langmuir, 2014, 30, 6197-6208.	1.6	63
31	Poly(ethylene glycol)-Based Multidentate Oligomers for Biocompatible Semiconductor and Gold Nanocrystals. Langmuir, 2012, 28, 2761-2772.	1.6	62
32	Effects of the preparation method on the crystallinity and catalytic activity of LaAlO3 perovskites for oxidative coupling of methane. Applied Surface Science, 2018, 429, 55-61.	3.1	50
33	Solventless synthesis of an iron-oxide/graphene nanocomposite and its application as an anode in high-rate Li-ion batteries. Journal of Materials Chemistry A, 2013, 1, 15442.	5.2	48
34	Magnetically-separable and highly-stable enzyme system based on crosslinked enzyme aggregates shipped in magnetite-coated mesoporous silica. Journal of Materials Chemistry, 2009, 19, 7864.	6.7	44
35	Hydrogen production by catalytic decalin dehydrogenation over carbon-supported platinum catalyst: Effect of catalyst preparation method. Catalysis Communications, 2015, 67, 40-44.	1.6	43
36	Sensitive and high-fidelity electrochemical immunoassay using carbon nanotubes coated with enzymes and magnetic nanoparticles. Biosensors and Bioelectronics, 2011, 26, 3192-3199.	5.3	37

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37	Visual determination of hydrogen peroxide and glucose by exploiting the peroxidase-like activity of magnetic nanoparticles functionalized with a poly(ethylene glycol) derivative. Mikrochimica Acta, 2017, 184, 2115-2122.	2.5	35
38	Mesoporous silica-coated luminescent Eu³⁺doped GdVO₄nanoparticles for multimodal imaging and drug delivery. RSC Advances, 2014, 4, 45687-45695.	1.7	31
39	Rapid and efficient protein digestion using trypsinâ€coated magnetic nanoparticles under pressure cycles. Proteomics, 2011, 11, 309-318.	1.3	30
40	Surface Plasmon Resonance Characteristics of Au Nanoparticles Layered Sensor Chip for Direct Detection of Stress Hormone Conjugated by Nanoparticles. Biochip Journal, 2018, 12, 249-256.	2.5	23
41	Multiple roles of palladium-coated magnetic anisotropic particles as catalysts, catalyst supports, and micro-stirrers. Chemical Engineering Journal, 2018, 339, 125-132.	6.6	22
42	Synthesis of mesoporous lanthanum hydroxide with enhanced adsorption performance for phosphate removal. RSC Advances, 2019, 9, 15257-15264.	1.7	21
43	CsPbBr₃ Perovskite Quantum Dot Lightâ€Emitting Diodes Using Atomic Layer Deposited Al₂O₃ and ZnO Interlayers. Physica Status Solidi - Rapid Research Letters, 2020, 14, 1900573.	1.2	19
44	Yield Stress Enhancement of a Ternary Colloidal Suspension via the Addition of Minute Amounts of Sodium Alginate to the Interparticle Capillary Bridges. Langmuir, 2020, 36, 9424-9435.	1.6	19
45	Single enzyme nanoparticles armored by a thin silicate network: Single enzyme caged nanoparticles. Chemical Engineering Journal, 2017, 322, 510-515.	6.6	18
46	Anti-Galvanic Reduction of Silver Ion on Gold and Its Role in Anisotropic Growth of Gold Nanomaterials. Journal of Physical Chemistry C, 2015, 119, 25974-25982.	1.5	16
47	Efficient protein digestion using highly-stable and reproducible trypsin coatings on magnetic nanofibers. Chemical Engineering Journal, 2016, 288, 770-777.	6.6	15
48	Enhanced Brightness and Device Lifetime of Quantum Dot Lightâ€Emitting Diodes by Atomic Layer Deposition. Advanced Materials Interfaces, 2020, 7, 2000343.	1.9	12
49	Single Step Isolation and Activation of Primary CD3⁺ T Lymphocytes Using Alcohol-Dispersed Electrospun Magnetic Nanofibers. Nano Letters, 2012, 12, 4018-4024.	4.5	11
50	Facile Synthesis of Monodispersed Cubic and Spherical Calcite Nanoparticles in the Presence of Cetyltrimethylammonium Bromide. Journal of Nanoscience and Nanotechnology, 2015, 15, 2702-2714.	0.9	11
51	Hollow MnOxPy and Pt/MnOxPy yolk/shell nanoparticles as a T1 MRI contrast agent. Journal of Colloid and Interface Science, 2015, 439, 134-138.	5.0	7
52	Photopolymerization-Based Synthesis of Uniform Magnetic Hydrogels and Colorimetric Glucose Detection. Materials, 2020, 13, 4401.	1.3	7
53	Bulk Nanoencapsulation of Phase Change Materials (PCMs) via Spontaneous Spreading of a UV-Curable Prepolymer. ACS Applied Materials & Interfaces, 2020, 12, 51092-51101.	4.0	6
54	Analog Memristive Characteristics of Square Shaped Lanthanum Oxide Nanoplates Layered Device. Nanomaterials, 2021, 11, 441.	1.9	4

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55	Quantitation of Oxidative Stress Gene Expression in Human Cell Lines Treated with Water-Dispersible MnO Nanoparticles. Journal of Nanoscience and Nanotechnology, 2015, 15, 4126-4135.	0.9	3
56	CsPbBr₃ Perovskite Quantum Dot Lightâ€Emitting Diodes Using Atomic Layer Deposited Al₂O₃ and ZnO Interlayers. Physica Status Solidi - Rapid Research Letters, 2020, 14, 2070012.	1.2	3
57	Pt@Cu/C Core-Shell Catalysts for Hydrogen Production Through Catalytic Dehydrogenation of Decalin. Korean Journal of Materials Research, 2016, 26, 17-21.	0.1	2
58	Lightâ€Emitting Diodes: Enhanced Brightness and Device Lifetime of Quantum Dot Lightâ€Emitting Diodes by Atomic Layer Deposition (Adv. Mater. Interfaces 12/2020). Advanced Materials Interfaces, 2020, 7, 2070067.	1.9	1
59	Synthesis of Pt/C Nanocatalysts by Galvanic Replacement for Dehydrogenation of Decalin. Science of Advanced Materials, 2017, 9, 1540-1545.	0.1	1
60	Generalized and Facile Synthesis of Semiconducting Metal Sulfide Nanocrystals.. ChemInform, 2003, 34, no.	0.1	0