

Hyun Gil Cha

List of Publications by Year in descending order

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89
papers

3,817
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147726

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123376

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94
all docs

94
docs citations

94
times ranked

5892
citing authors

#	ARTICLE	IF	CITATIONS
1	Combined biomass valorization and hydrogen production in a photoelectrochemical cell. <i>Nature Chemistry</i> , 2015, 7, 328-333.	6.6	564
2	Electrochemical Synthesis of Photoelectrodes and Catalysts for Use in Solar Water Splitting. <i>Chemical Reviews</i> , 2015, 115, 12839-12887.	23.0	481
3	Synthesis and Characterization of Antibacterial Ag ⁺ /SiO ₂ Nanocomposite. <i>Journal of Physical Chemistry C</i> , 2007, 111, 3629-3635.	1.5	283
4	Preparation and Characterization of the Antibacterial Cu Nanoparticle Formed on the Surface of SiO ₂ Nanoparticles. <i>Journal of Physical Chemistry B</i> , 2006, 110, 24923-24928.	1.2	229
5	Electrocatalysis of 5-hydroxymethylfurfural at cobalt based spinel catalysts with filamentous nanoarchitecture in alkaline media. <i>Applied Catalysis B: Environmental</i> , 2019, 242, 85-91.	10.8	145
6	Biological Valorization of Poly(ethylene terephthalate) Monomers for Upcycling Waste PET. <i>ACS Sustainable Chemistry and Engineering</i> , 2019, 7, 19396-19406.	3.2	141
7	Preparation of Dendritic Copper Nanostructures and Their Characterization for Electroreduction. <i>Journal of Physical Chemistry C</i> , 2009, 113, 15891-15896.	1.5	106
8	Recent Advances in Sustainable Plastic Upcycling and Biopolymers. <i>Biotechnology Journal</i> , 2020, 15, e1900489.	1.8	92
9	Depolymerization of PET into terephthalic acid in neutral media catalyzed by the ZSM-5 acidic catalyst. <i>Chemical Engineering Journal</i> , 2020, 398, 125655.	6.6	89
10	Facile preparation of Fe ₂ O ₃ thin film with photoelectrochemical properties. <i>Chemical Communications</i> , 2011, 47, 2441-2443.	2.2	80
11	Axis-Oriented, Anatase TiO ₂ Single Crystals with Dominant {001} and {100} Facets. <i>Crystal Growth and Design</i> , 2011, 11, 3947-3953.	1.4	76
12	Enhancing Photocatalytic C-O Bond Cleavage in Lignin Model Compounds by Silver-Exchanged Cadmium Sulfide. <i>ACS Catalysis</i> , 2020, 10, 8465-8475.	5.5	70
13	Nanocrystals of Hematite with Unconventional Shape-Truncated Hexagonal Bipyramid and Its Optical and Magnetic Properties. <i>Crystal Growth and Design</i> , 2012, 12, 862-868.	1.4	67
14	Vast Magnetic Monolayer Film with Surfactant-Stabilized Fe ₃ O ₄ Nanoparticles Using Langmuir-Blodgett Technique. <i>Journal of Physical Chemistry B</i> , 2007, 111, 9288-9293.	1.2	66
15	Synthesis of Highly Magnetized Iron Nanoparticles by a Solventless Thermal Decomposition Method. <i>Journal of Physical Chemistry C</i> , 2007, 111, 6275-6280.	1.5	60
16	Dielectric and magnetic properties of (x)CoFe ₂ O ₄ +(1-x)Ba _{0.8} Sr _{0.2} TiO ₃ magnetoelectric composites. <i>Materials Chemistry and Physics</i> , 2009, 116, 6-10.	2.0	58
17	Single-Crystalline Porous Hematite Nanorods: Photocatalytic and Magnetic Properties. <i>Journal of Physical Chemistry C</i> , 2011, 115, 19129-19135.	1.5	53
18	Five different chitin nanomaterials from identical source with different advantageous functions and performances. <i>Carbohydrate Polymers</i> , 2019, 205, 392-400.	5.1	53

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19	Preparation and characterization of Fe_2O_3 nanorod-thin film by metal-organic chemical vapor deposition. <i>Thin Solid Films</i> , 2009, 517, 1853-1856.	0.8	52
20	Preparation of magnetic FeCo nanoparticles by coprecipitation route. <i>Current Applied Physics</i> , 2007, 7, 404-408.	1.1	50
21	Nonstop Monomer-to-Aramid Nanofiber Synthesis with Remarkable Reinforcement Ability. <i>Macromolecules</i> , 2019, 52, 923-934.	2.2	49
22	Biobased thermoplastic elastomer with seamless 3D-Printability and superior mechanical properties empowered by in-situ polymerization in the presence of nanocellulose. <i>Composites Science and Technology</i> , 2020, 185, 107885.	3.8	49
23	Effect of Different Surfactants on the Size Control and Optical Properties of $\text{Y}_2\text{O}_3:\text{Eu}^{3+}$ Nanoparticles Prepared by Coprecipitation Method. <i>Journal of Physical Chemistry C</i> , 2009, 113, 13600-13604.	1.5	44
24	Carbon Support with Tunable Porosity Prepared by Carbonizing Chitosan for Catalytic Oxidation of 5-Hydroxymethylfurfural. <i>ACS Sustainable Chemistry and Engineering</i> , 2019, 7, 3742-3748.	3.2	43
25	Surface Investigation and Magnetic Behavior of Co Nanoparticles Prepared via a Surfactant-Mediated Polyol Process. <i>Journal of Physical Chemistry C</i> , 2009, 113, 5081-5086.	1.5	40
26	Efficient $\text{Fe}_2\text{O}_3/\text{C-g-C}_3\text{N}_4$ Z-scheme heterojunction photocatalyst prepared by facile one-step carbonizing process. <i>Journal of Physics and Chemistry of Solids</i> , 2019, 130, 93-99.	1.9	38
27	A chemo-microbial hybrid process for the production of 2-pyrone-4,6-dicarboxylic acid as a promising bioplastic monomer from PET waste. <i>Green Chemistry</i> , 2020, 22, 3461-3469.	4.6	36
28	Synthesis and Characterization of Highly Magnetized Nanocrystalline $\text{Co}_{30}\text{Fe}_{70}$ Alloy by Chemical Reduction. <i>Journal of Physical Chemistry B</i> , 2006, 110, 24418-24423.	1.2	35
29	Effect of Different Additives on the Size Control and Emission Properties of $\text{Y}_2\text{O}_3:\text{Eu}^{3+}$ Nanoparticles Prepared through the Coprecipitation Method. <i>Journal of Physical Chemistry C</i> , 2009, 113, 16652-16657.	1.5	35
30	Characterization and Magnetic Behavior of Fe and Nd-Fe-B Nanoparticles by Surfactant-Capped High-Energy Ball Mill. <i>Journal of Physical Chemistry C</i> , 2007, 111, 1219-1222.	1.5	32
31	Preparation and Characterization of the Magnetic Fluid of Trimethoxyhexadecylsilane-Coated Fe_3O_4 Nanoparticles. <i>Journal of Physical Chemistry C</i> , 2010, 114, 9802-9807.	1.5	31
32	Vertical cobalt dendrite array films: electrochemical deposition and characterization, glucose oxidation and magnetic properties. <i>Journal of Materials Chemistry</i> , 2012, 22, 12296.	6.7	31
33	Bulklike Thermal Behavior of Antibacterial Ag^+SiO_2 Nanocomposites. <i>Journal of Physical Chemistry C</i> , 2009, 113, 5105-5110.	1.5	30
34	Study on synthesis and magnetic properties of Nd-Fe-B alloy via reduction-diffusion process. <i>Physica Scripta</i> , 2007, T129, 321-325.	1.2	29
35	A ball milling-based one-step transformation of chitin biomass to organo-dispersible strong nanofibers passing highly time and energy consuming processes. <i>International Journal of Biological Macromolecules</i> , 2019, 125, 660-667.	3.6	29
36	Deep eutectic solvent stabilised Co-P films for electrocatalytic oxidation of 5-hydroxymethylfurfural into 2,5-furandicarboxylic acid. <i>New Journal of Chemistry</i> , 2020, 44, 14239-14245.	1.4	28

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37	Solventless Nanoparticles Synthesis under Low Pressure. <i>Inorganic Chemistry</i> , 2008, 47, 121-127.	1.9	26
38	Fabrication of hollow metal oxide nanocrystals by etching cuprous oxide with metal(ii) ions: approach to the essential driving force. <i>Nanoscale</i> , 2013, 5, 11227.	2.8	26
39	Photocatalysis: progress using manganese-doped hematite nanocrystals. <i>New Journal of Chemistry</i> , 2013, 37, 4004.	1.4	25
40	Superlattice of Ag Nanoparticles Prepared by New One-Step Synthetic Method in Aqueous Phase. <i>Chemistry of Materials</i> , 2007, 19, 5049-5051.	3.2	24
41	Characterization of the Spiroanthoxazine Doped Photochromic Glass: The Effect of Matrix Polarity and Pore Size. <i>Journal of Physical Chemistry C</i> , 2008, 112, 1140-1145.	1.5	23
42	One-dimensional ferromagnetic dendritic iron wire array growth by facile electrochemical deposition. <i>Nanoscale</i> , 2012, 4, 1565.	2.8	23
43	Manual assembly of nanocrystals for enhanced photoelectrochemical efficiency of hematite film. <i>Chemical Communications</i> , 2015, 51, 6407-6410.	2.2	22
44	Chitosan-Derived Porous Activated Carbon for the Removal of the Chemical Warfare Agent Simulant Dimethyl Methylphosphonate. <i>Nanomaterials</i> , 2019, 9, 1703.	1.9	21
45	Emission controlled dual emitting Eu-doped CaMgSi ₂ O ₆ nanophosphors. <i>Journal of Luminescence</i> , 2015, 157, 131-136.	1.5	19
46	Which electrode is better for biomass valorization: Cu(OH) ₂ or CuO nanowire?. <i>Korean Journal of Chemical Engineering</i> , 2020, 37, 556-562.	1.2	18
47	Preparation for exchange-coupled permanent magnetic composite between $\hat{I}\pm$ -Fe (soft) and Nd ₂ Fe ₁₄ B (hard). <i>Current Applied Physics</i> , 2007, 7, 400-403.	1.1	16
48	Selective Alcohol on Dark Cathodes by Photoelectrochemical CO ₂ Valorization and Their In Situ Characterization. <i>ACS Energy Letters</i> , 2019, 4, 1549-1555.	8.8	15
49	Controlling crystal growth orientation and crystallinity of cadmium sulfide nanocrystals in aqueous phase by using cationic surfactant. <i>CrystEngComm</i> , 2012, 14, 7888.	1.3	12
50	Synthesis and Characterization of Crystalline FeCo Nanoparticles. <i>Journal of Nanoscience and Nanotechnology</i> , 2006, 6, 3417-3421.	0.9	11
51	Hierarchical NiO hollow microspheres: electrochemical and magnetic properties. <i>RSC Advances</i> , 2012, 2, 9786.	1.7	11
52	Selective liquid chemicals on CO ₂ reduction by energy level tuned rGO/TiO ₂ dark cathode with BiVO ₄ photoanode. <i>Applied Catalysis B: Environmental</i> , 2021, 295, 120267.	10.8	11
53	Synthesis of $\hat{I}\pm$ -Fe Nanoparticles by Solventless Thermal Decomposition. <i>Journal of Nanoscience and Nanotechnology</i> , 2006, 6, 3412-3416.	0.9	9
54	Template Assisted Growth of Cobalt Ferrite Nanowires. <i>Journal of Nanoscience and Nanotechnology</i> , 2009, 9, 4942-4947.	0.9	9

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55	The Renewable and Sustainable Conversion of Chitin into a Chiral Nitrogen-Doped Carbon Sheath Nanofiber for Enantioselective Adsorption. <i>ChemSusChem</i> , 2019, 12, 3236-3242.	3.6	9
56	PREPARATION AND CHARACTERIZATION OF Ag (CORE)/SiO ₂ (SHELL) NANOPARTICLES. <i>Surface Review and Letters</i> , 2007, 14, 693-696.	0.5	8
57	Preparation of aqueous dispersion of colloidal γ -Fe nanoparticle by phase transfer. <i>Sensors and Actuators B: Chemical</i> , 2007, 126, 221-225.	4.0	8
58	Kinetics of Decolorization of Spironaphthooxazine-Doped Photochromic Polymer Films. <i>Journal of Physical Chemistry B</i> , 2009, 113, 12923-12927.	1.2	8
59	Enhanced photoluminescence of single crystalline ZnO nanotubes in ZnAl ₂ O ₄ shell. <i>CrystEngComm</i> , 2012, 14, 1205.	1.3	8
60	Synthesis and Characterization of Crystalline FeCo Nanoparticles. <i>Journal of Nanoscience and Nanotechnology</i> , 2006, 6, 3417-3421.	0.9	6
61	Enhanced Exchange-Coupling Effect in Nd-Fe-B/Fe-B Nanocomposite Magnet. <i>Journal of Nanoscience and Nanotechnology</i> , 2010, 10, 186-190.	0.9	6
62	New Avenues to Efficient Chemical Synthesis of Exchange Coupled Hard/Soft Nanocomposite Magnet. <i>Journal of Nanoscience and Nanotechnology</i> , 2009, 9, 4453-4458.	0.9	5
63	Preparation and Antibiotic Property of Ag-SiO ₂ Nanoparticle. <i>Molecular Crystals and Liquid Crystals</i> , 2007, 464, 83/[665]-91/[673].	0.4	4
64	Preparation and Characterization of Nd ₂ Fe ₁₄ B/ γ -Fe Nanocomposite Magnetic Material by Reduction Diffusion Process. <i>Molecular Crystals and Liquid Crystals</i> , 2007, 464, 127/[709]-135/[717].	0.4	4
65	PREPARATION OF ANTIBACTERIAL SILVER-CONTAINING SILICA NANOCOMPOSITE. <i>Surface Review and Letters</i> , 2008, 15, 117-122.	0.5	4
66	Exchange-Coupling Effect of Nd ₂ Fe ₁₄ B/FeCo Nanocomposite by Colloidal Method. <i>Molecular Crystals and Liquid Crystals</i> , 2007, 464, 1/[583]-7/[589].	0.4	3
67	Hydrothermal Synthesis of Anatase TiO ₂ Nanorods with High Crystallinity Using Ammonia Solution as a Solvent. <i>Journal of Nanoscience and Nanotechnology</i> , 2011, 11, 6007-6012.	0.9	3
68	Synthesis of γ -Fe Nanoparticles by Solventless Thermal Decomposition. <i>Journal of Nanoscience and Nanotechnology</i> , 2006, 6, 3412-3416.	0.9	3
69	TREATMENT OF TiO ₂ FOR THE SUPPRESSION OF PHOTO-CATALYTIC PROPERTY AND DISPERSION STABILITY. <i>International Journal of Nanoscience</i> , 2006, 05, 795-801.	0.4	2
70	Synthesis and Characterization of Vitamin Encapsulated Mesoporous Silica with TEOS. <i>Journal of Nano Research</i> , 2008, 3, 89-96.	0.8	2
71	Study of the Magnetic Phase of Fe-Pt Alloy Nanoparticles. <i>Journal of Nanoscience and Nanotechnology</i> , 2008, 8, 4666-4669.	0.9	2
72	The Influence of Low Temperature on β -Ray Irradiated Permanent Magnets. <i>Journal of Nanoscience and Nanotechnology</i> , 2009, 9, 6953-6.	0.9	2

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73	Magnetic Property of Sm-Co Nanoparticles Prepared by Solution Phase Metal Salt Reduction. Journal of Nanoscience and Nanotechnology, 2009, 9, 7071-5.	0.9	2
74	The effect of hydrogen treatment on magnetic property of porous iron oxides nanorods. Materials Letters, 2014, 136, 245-250.	1.3	2
75	Reduction diffusion process for preparation of Nd-Fe-B based alloy. , 2006, , .		1
76	A Study on the Exchange-Coupling Effect of Nd ₂ Fe ₁₄ B/CoFe Forming Core/Shell Shape. Molecular Crystals and Liquid Crystals, 2007, 472, 155/[545]-160/[550].	0.4	1
77	Preparation and Characterization of Cu@SiO ₂ Nanocomposite. Molecular Crystals and Liquid Crystals, 2007, 472, 217/[607]-223/[613].	0.4	1
78	The Synthesis and Characterization of SmCo Magnetic Nanoparticle by Thermal Decomposition. Molecular Crystals and Liquid Crystals, 2007, 464, 39/[621]-49/[631].	0.4	1
79	Copper Metallization on the Surface-Modified Polyimide Films by Electroless Plating Method. Molecular Crystals and Liquid Crystals, 2008, 492, 275/[639]-282/[646].	0.4	1
80	Copper Plating on the Polyimide Film by Electroless Plating Techniques for EMI Shielding. Journal of Nanoscience and Nanotechnology, 2009, 9, 7065-70.	0.9	1
81	Synthesis of alpha-Fe nanoparticles by solventless thermal decomposition. Journal of Nanoscience and Nanotechnology, 2006, 6, 3412-6.	0.9	1
82	Synthesis and characteristics of NdFeB magnetic nanoparticle. , 2006, , .		0
83	Preparation and characterization of Ag nanoparticle using hydrothermal process. , 2006, , .		0
84	Preparation and Characterization of Soft Phase Magnetic Fe -Fe Nanoparticles by Different Methods. Solid State Phenomena, 2007, 119, 151-154.	0.3	0
85	γ -Ray Irradiation on Microsized Nd-Fe-B and Sr-Ferrite Magnets at Low Temperature. Journal of Nanoscience and Nanotechnology, 2009, 9, 4067-4072.	0.9	0
86	Characterization on the Microstructure of γ -Ray Irradiated Nd ₂ Fe ₁₄ B Magnet. Journal of Nanoscience and Nanotechnology, 2009, 9, 827-831.	0.9	0
87	Characterization of Ag Nanoparticle Superlattice Structure Prepared Using Two Carboxylic Acids. Journal of Nanoscience and Nanotechnology, 2009, 9, 4324-4327.	0.9	0
88	Correction to Nanocrystals of Hematite with Unconventional Shape-Truncated Hexagonal Bipyramid and Its Optical and Magnetic Properties. Crystal Growth and Design, 2012, 12, 1694-1694.	1.4	0
89	Length control of packed single crystalline TiO ₂ nanorods for dye-sensitized solar cell. , 2015, , .		0