Yang Chen

List of Publications by Year
in descending order

50 papers	868 citations	471509 17 h-index	526287 27 g-index
50 all docs	50 docs citations	50 times ranked	465 citing authors

#	Article	IF	Citations
1	Polishing behavior of PS/CeO2 hybrid microspheres with controlled shell thickness on silicon dioxide CMP. Applied Surface Science, 2011, 257, 8679-8685.	6.1	71
2	Polymethylmethacrylate (PMMA)/CeO 2 hybrid particles for enhanced chemical mechanical polishing performance. Tribology International, 2015, 82, 211-217.	5.9	62
3	Synthesis, characterization of CeO2@SiO2 nanoparticles and their oxide CMP behavior. Microelectronic Engineering, 2010, 87, 1716-1720.	2.4	52
4	Preparation, characterization and oxide CMP performance of composite polystyrene-core ceria-shell abrasives. Microelectronic Engineering, 2011, 88, 200-205.	2.4	51
5	Compressive elastic moduli and polishing performance of non-rigid core/shell structured PS/SiO2 composite abrasives evaluated by AFM. Applied Surface Science, 2014, 290, 433-439.	6.1	35
6	Atomic force microscopy indentation to determine mechanical property for polystyreneâ€“silica coreâ€“shell hybrid particles with controlled shell thickness. Thin Solid Films, 2015, 579, 57-63.	1.8	35
7	Design of ceria grafted mesoporous silica composite particles for high-efficiency and damage-free oxide chemical mechanical polishing. Journal of Alloys and Compounds, 2018, 736, 276-288.	5.5	34
8	Monodispersed mesoporous silica (mSiO2) spheres as abrasives for improved chemical mechanical planarization performance. Journal of Materials Science, 2016, 51, 5811-5822.	3.7	30
9	Meso-silica/Erbium-doped ceria binary particles as functionalized abrasives for photochemical mechanical polishing (PCMP). Applied Surface Science, 2021, 550, 149353.	6.1	29
10	Facile fabrication of porous hollow CeO2 microspheres using polystyrene spheres as templates. Journal of Porous Materials, 2012, 19, 289-294.	2.6	28
11	Youngâ€™s modulus of PS/CeO2 composite with core/shell structure microspheres measured using atomic force microscopy. Journal of Nanoparticle Research, 2012, 14, 1.	1.9	26
12	Synergetic effect of organic cores and inorganic shells for core/shell structured composite abrasives for chemical mechanical planarization. Applied Surface Science, 2014, 314, 180-187.	6.1	25
13	Development of polystyrene/polyaniline/ceria (PS/PANI/CeO2) multi-component abrasives for photochemical mechanical polishing/planarization applications. Applied Surface Science, 2022, 575, 151784.	6.1	25
14	Core/shell composites with polystyrene cores and meso-silica shells as abrasives for improved chemical mechanical polishing behavior. Journal of Nanoparticle Research, 2015, 17, 1.	1.9	22
15	Visible-light-active mesoporous ceria (CeO2) nanospheres for improved photocatalytic performance. Journal of Alloys and Compounds, 2022, 898, 162895.	5.5	22
16	Three-dimensional ordered macroporous carbon as counter electrodes in dye-sensitized solar cells. Thin Solid Films, 2013, 539, 122-126.	1.8	20
17	Development of carbon sphere/ceria (CS/CeO2) heterostructured particles and their applications to functional abrasives toward photochemical mechanical polishing. Applied Surface Science, 2022, 593, 153449.	6.1	20
18	Development of mesoporous SiO2/CeO2 core/shell nanoparticles with tunable structures for non-damage and efficient polishing. Ceramics International, 2020, 46, 4670-4678.	4.8	18

#	Article	IF	Citations
19	Core/shell structured PS/mSiO2 hybrid particles: Controlled preparation, mechanical property, and their size-dependent CMP performance. Journal of Alloys and Compounds, 2019, 779, 511-520.	5.5	17
20	Silica abrasives containing solid cores and mesoporous shells: Synthesis, characterization and polishing behavior for SiO2 film. Journal of Alloys and Compounds, 2016, 663, 60-67.	5.5	16
21	Polystyrene coreâ€"silica shell composite particles: effect of mesoporous shell structures on oxide CMP and mechanical stability. RSC Advances, 2017, 7, 6548-6558.	3.6	14
22	Core/Shell Structured Solid-Silica/Mesoporous-Silica Microspheres as Novel Abrasives for Chemical Mechanical Polishing. Tribology Letters, 2015, 58, 1.	2.6	13
23	Copper Chemical Mechanical Polishing Performances of Polystyrene/Ceria Hybrid Abrasives with a Core/Shell Structure. Journal of Inorganic and Organometallic Polymers and Materials, 2018, 28, 1655-1663.	3.7	12
24	Copper-incorporated dendritic mesoporous silica nanospheres and enhanced chemical mechanical polishing (CMP) performance via Cu2+/H2O2 heterogeneous Fenton-like system. Applied Surface Science, 2022, 601, 154262.	6.1	12
25	Evaluation of oxide chemical mechanical polishing performance of polystyrene coated ceria hybrid abrasives. Journal of Materials Science: Materials in Electronics, 2016, 27, 2919-2925.	2.2	11
26	Composite particles with dendritic mesoporous-silica cores and nano-sized CeO2 shells and their application to abrasives in chemical mechanical polishing. Materials Chemistry and Physics, 2020, 240, 122279.	4.0	11
27	Development of Zr- and Gd-doped porous ceria (pCeO2) abrasives for achieving high-quality and high-efficiency oxide chemical mechanical polishing. Ceramics International, 2022, 48, 14039-14049.	4.8	11
28	Polystyrene-Core Silica-Shell Composite Abrasives: The Influence of Core Size on Oxide Chemical Mechanical Planarization. Journal of Electronic Materials, 2015, 44, 2522-2528.	2.2	10
29	Coreâ€"shell structured polystyrene coated silica composite abrasives with homogeneous shells: The effects of polishing pressure and particle size on oxide-CMP. Precision Engineering, 2016, 43, 71-77.	3.4	10
30	Synthesis and Characterization of Hollow Mesoporous Silica Spheres Using Negative-Charged Polystyrene Particles as Templates. Journal of Inorganic and Organometallic Polymers and Materials, 2017, 27, 380-384.	3.7	10
31	Core/shell structured sSiO2/mSiO2 composite particles: The effect of the core size on oxide chemical mechanical polishing. Advanced Powder Technology, 2018, 29, 18-26.	4.1	10
32	Dependency of structural change and polishing efficiency of meso-silica/ceria core/shell composite abrasives on calcination temperatures. Journal of Materials Science: Materials in Electronics, 2018, 29, 11466-11477.	2.2	9
33	Fabrication, characterization, and CMP performance of dendritic mesoporous-silica composite particles with tunable pore sizes. Journal of Alloys and Compounds, 2019, 770, 335-344.	5.5	9
34	Preparation, characterization, and application of dendritic silica-supported samarium-doped ceria nanoparticles in ultra-precision polishing for silica films. Journal of Nanoparticle Research, 2019, 21, 1.	1.9	9
35	Preparation of three-dimensional dendritic-like mesoporous silica particles and their pore size-dependent polishing behavior and mechanism. Journal of Porous Materials, 2019, 26, 1869-1877.	2.6	9
36	Polystyrene-supported dendritic mesoporous silica hybrid core/shell particles: controlled synthesis and their pore size-dependent polishing behavior. Journal of Materials Science, 2020, 55, 577-590.	3.7	9

#	ARTICLE	IF	CITATIONS
37	Tunable synthesis, characterization, and CMP performance of dendritic mesoporous silica nanospheres as functionalized abrasives. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2022, 638, 128322.	4.7	9
38	Engineering functionalized PS/mSiO2 composite particles with controlled meso-shell thickness for chemical mechanical planarization applications. Journal of Materials Science: Materials in Electronics, 2017, 28, 284-288.	2.2	7
39	Exploring the Elastic Behavior of Coreâ€“shell Organicâ€“Inorganic Spherical Particles by AFM Indentation Experiments. Journal of Inorganic and Organometallic Polymers and Materials, 2014, 24, 1070-1076.	3.7	6
40	Solid-silica core/mesoporous-silica shell composite abrasives: synthesis, characterization, and the effect of mesoporous shell structures on CMP. Journal of Materials Science: Materials in Electronics, 2018, 29, 3817-3828.	2.2	6
41	Ceria coated hexagonal mesoporous silica coreâ€“shell composite particle abrasives for improved chemicalâ€“mechanical planarization performance. Journal of Porous Materials, 2019, 26, 1005-1015.	2.6	5
42	Fabrication, characterization and photocatalytic degradation activity of PS/PANI/CeO2 tri-layer nanostructured hybrids. Bulletin of Materials Science, 2022, 45, 1.	1.7	5
43	Structural regulation and polishing performance of dendritic mesoporous silica (D-mSiO2) supported with samarium-doped cerium oxide composites. Advanced Powder Technology, 2022, 33, 103595.	4.1	5
44	Facile Fabrication and Characterization of Three-Dimensional Ordered Films of TiO2 Hollow-Spheres. Journal of Inorganic and Organometallic Polymers and Materials, 2015, 25, 780-786.	3.7	4
45	Three-dimensional ordered TiO2 hollow spheres as scattering layer in dye-sensitized solar cells. Applied Physics A: Materials Science and Processing, 2016, 122, 1.	2.3	4
46	Design and fabrication of carbon spheres-supported cerium oxide heterostructured composites for enhanced photocatalytic activity. Ceramics International, 2022, 48, 17714-17722.	4.8	3
47	Synthesis of Monodispersed CeO₂ Nanoparticles Induced by Microwave Irradiation in Alcohol/Water Mixed Solvent and their Application in CMP. Advanced Materials Research, 2012, 479-481, 376-380.	0.3	2
48	Fabrication of Three-Dimensionally Ordered Macroporous TiO2 Films with Enhanced Photovoltaic Conversion Efficiency. Journal of Inorganic and Organometallic Polymers and Materials, 2013, 23, 839-845.	3.7	2
49	Three-Dimensional Ordered CeO2 Hollow Spheres (3DOHSs-CeO2) from Polymethylmethacrylate/CeO2 Core/Shell Microsphere Colloidal Crystals. Journal of Inorganic and Organometallic Polymers and Materials, 2016, 26, 69-74.	3.7	2
50	Evaluation of the mechanical stability of coreâ€“shell structured polystyrene/mesoporous-silica (PS-mSiO2) composite particles. Journal of Porous Materials, 2017, 24, 1667-1671.	2.6	1