Rachel A Caruso

List of Publications by Year
in descending order

156 papers	17,553 citations	20817 60 h-index	21540 114 g-index
161 all docs	161 docs citations	161 times ranked	18982 citing authors

#	Article	IF	Citations
1	Nanoengineering of Inorganic and Hybrid Hollow Spheres by Colloidal Templating. , 1998, 282, 1111-1114.		3,921
2	Mesoporous Anatase TiO₂ Beads with High Surface Areas and Controllable Pore Sizes: A Superior Candidate for Highâ€Performance Dyeâ€Sensitized Solar Cells. Advanced Materials, 2009, 21, 2206-2210.	21.0	926
3	Magnetic Nanocomposite Particles and Hollow Spheres Constructed by a Sequential Layering Approach. Chemistry of Materials, 2001, 13, 109-116.	6.7	579
4	Multilayered Titania, Silica, and Laponite Nanoparticle Coatings on Polystyrene Colloidal Templates and Resulting Inorganic Hollow Spheres. Chemistry of Materials, 2001, 13, 400-409.	6.7	529
5	Gas-assisted preparation of lead iodide perovskite films consisting of a monolayer of single crystalline grains for high efficiency planar solar cells. Nano Energy, 2014, 10, 10-18.	16.0	504
6	Solâ^'Gel Nanocoating:Â An Approach to the Preparation of Structured Materials. Chemistry of Materials, 2001, 13, 3272-3282.	6.7	447
7	Dye-Sensitized Solar Cells Employing a Single Film of Mesoporous TiO₂ Beads Achieve Power Conversion Efficiencies Over 10%. ACS Nano, 2010, 4, 4420-4425.	14.6	412
8	Synthesis of Monodisperse Mesoporous Titania Beads with Controllable Diameter, High Surface Areas, and Variable Pore Diameters (14â^'23 nm). Journal of the American Chemical Society, 2010, 132, 4438-4444.	13.7	405
9	Hollow Titania Spheres from Layered Precursor Deposition on Sacrificial Colloidal Core Particles. Advanced Materials, 2001, 13, 740-744.	21.0	385
10	Dualâ€Function Scattering Layer of Submicrometerâ€Sized Mesoporous TiO₂ Beads for Highâ€Efficiency Dyeâ€Sensitized Solar Cells. Advanced Functional Materials, 2010, 20, 1301-1305.	14.9	385
11	Titanium Dioxide Tubes from Solâ€"Gel Coating of Electrospun Polymer Fibers. Advanced Materials, 2001, 13, 1577.	21.0	381
12	Finite-size and pressure effects on the Raman spectrum of nanocrystalline anataseTiO2. Physical Review B, 2005, 71, .	3.2	374
13	Production of Hollow Microspheres from Nanostructured Composite Particles. Chemistry of Materials, 1999, 11, 3309-3314.	6.7	291
14	Template Synthesis and Photocatalytic Properties of Porous Metal Oxide Spheres Formed by Nanoparticle Infiltration. Chemistry of Materials, 2004, 16, 2287-2292.	6.7	270
15	Encapsulation for improving the lifetime of flexible perovskite solar cells. Nano Energy, 2015, 18, 118-125.	16.0	232
16	Recent Progress in the Synthesis of Spherical Titania Nanostructures and Their Applications. Advanced Functional Materials, 2013, 23, 1356-1374.	14.9	195
17	Hierarchically Porous Monolithic LiFePO₄/Carbon Composite Electrode Materials for High Power Lithium Ion Batteries. Chemistry of Materials, 2009, 21, 5300-5306.	6.7	189
18	Photocatalytic Activities of Porous Titania and Titania/Zirconia Structures Formed by Using a Polymer Gel Templating Technique. Chemistry of Materials, 2002, 14, 5103-5108.	6.7	181

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19	Synthesis of Macroporous Titania and Inorganic Composite Materials from Coated Colloidal SpheresA Novel Route to Tune Pore Morphology. Chemistry of Materials, 2001, 13, 364-371.	6.7	174
20	Colloidal Crystal Templating to Produce Hierarchically Porous LiFePO4 Electrode Materials for High Power Lithium Ion Batteries. Chemistry of Materials, 2009, 21, 2895-2903.	6.7	163
21	Sonochemical Formation of Gold Sols. Langmuir, 2002, 18, 7831-7836.	3.5	156
22	Morphology Variation of Porous Polymer Gels by Polymerization in Lyotropic Surfactant Phases. Macromolecules, 1999, 32, 1383-1389.	4.8	148
23	Metalâ€“organic frameworks for chemical sensing devices. Materials Horizons, 2021, 8, 2387-2419.	12.2	139
24	Recent progress in hybrid perovskite solar cells based on n-type materials. Journal of Materials Chemistry A, 2017, 5, 10092-10109.	10.3	136
25	Chemical Bonding and Physical Trapping of Sulfur in Mesoporous MagnÃ©li Ti₄O₇ Microspheres for Highâ€Performance Liâ€“S Battery. Advanced Energy Materials, 2017, 7, 1601616.	19.5	130
26	Cellulose Acetate Templates for Porous Inorganic Network Fabrication. Advanced Materials, 2000, 12, 1921-1923.	21.0	128
27	Enhancing photocatalytic activity of titania materials by using porous structures and the addition of gold nanoparticles. Journal of Materials Chemistry, 2011, 21, 20-28.	6.7	125
28	Extremely high arsenic removal capacity for mesoporous aluminium magnesium oxide composites. Environmental Science: Nano, 2016, 3, 94-106.	4.3	123
29	Mesoporous TiO₂/g-C₃N₄ Microspheres with Enhanced Visible-Light Photocatalytic Activity. Journal of Physical Chemistry C, 2017, 121, 22114-22122.	3.1	118
30	Templating of Porous Polymeric Beads to Form Porous Silica and Titania Spheres. Advanced Materials, 2002, 14, 1768-1772.	21.0	104
31	Agarose Template for the Fabrication of Macroporous Metal Oxide Structures. Langmuir, 2006, 22, 3332-3336.	3.5	104
32	Effect of the Microstructure of the Functional Layers on the Efficiency of Perovskite Solar Cells. Advanced Materials, 2017, 29, 1601715.	21.0	104
33	Gold Nanoparticle Incorporation into Porous Titania Networks Using an Agarose Gel Templating Technique for Photocatalytic Applications. Chemistry of Materials, 2008, 20, 3917-3926.	6.7	103
34	Inorganic Macroporous Films from Preformed Nanoparticles and Membrane Templates: Synthesis and Investigation of Photocatalytic and Photoelectrochemical Properties. Advanced Functional Materials, 2003, 13, 789-794.	14.9	102
35	Thin Films of Dendritic Anatase Titania Nanowires Enable Effective Holeâ€Blocking and Efficient Lightâ€Harvesting for Highâ€Performance Mesoscopic Perovskite Solar Cells. Advanced Functional Materials, 2015, 25, 3264-3272.	14.9	101
36	Stability Comparison of Perovskite Solar Cells Based on Zinc Oxide and Titania on Polymer Substrates. ChemSusChem, 2016, 9, 687-695.	6.8	101

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37	Surfaceâ€Metastable Phaseâ€Initiated Seeding and Ostwald Ripening: A Facile Fluorineâ€Free Process towards Spherical Fluffy Core/Shell, Yolk/Shell, and Hollow Anatase Nanostructures. Angewandte Chemie - International Edition, 2013, 52, 10986-10991.	13.8	99
38	High Reversible Pseudocapacity in Mesoporous Yolkâ€"Shell Anatase TiO₂/TiO₂(B) Microspheres Used as Anodes for Liâ€Ion Batteries. Advanced Functional Materials, 2017, 27, 1703270.	14.9	99
39	Porous â€œCoral-likeâ€•TiO2Structures Produced by Templating Polymer Gels. Langmuir, 1998, 14, 6333-6336.	3.5	98
40	Developing sustainable, high-performance perovskites in photocatalysis: design strategies and applications. Chemical Society Reviews, 2021, 50, 13692-13729.	38.1	97
41	Micrometer-to-Nanometer Replication of Hierarchical Structures by Using a Surface Solâ€"Gel Process. Angewandte Chemie - International Edition, 2004, 43, 2746-2748.	13.8	96
42	High-Performance Coral Reef-like Carbon Nitrides: Synthesis and Application in Photocatalysis and Heavy Metal Ion Adsorption. ACS Applied Materials & Interfaces, 2017, 9, 4540-4547.	8.0	94
43	Photocatalytic Properties of Porous Metal Oxide Networks Formed by Nanoparticle Infiltration in a Polymer Gel Template. Journal of Physical Chemistry B, 2003, 107, 952-957.	2.6	92
44	Low temperature processing of flexible planar perovskite solar cells with efficiency over 10%. Journal of Power Sources, 2015, 278, 325-331.	7.8	89
45	Modification of TiO2Network Structures Using a Polymer Gel Coating Technique. Chemistry of Materials, 2001, 13, 1114-1123.	6.7	86
46	Activity and Selectivity of a Nanostructured CuO/ZrO₂Catalyst in the Steam Reforming of Methanol. Catalysis Letters, 2004, 94, 61-68.	2.6	86
47	Enhanced Electrochromic Properties of WO₃ Nanotree-like Structures Synthesized via a Two-Step Solvothermal Process Showing Promise for Electrochromic Window Application. ACS Applied Nano Materials, 2018, 1, 2552-2558.	5.0	84
48	Silica Films with Bimodal Pore Structure Prepared by Using Membranes as Templates and Amphiphiles as Porogens. Advanced Functional Materials, 2002, 12, 307.	14.9	83
49	Titania and Mixed Titania/Aluminum, Gallium, or Indium Oxide Spheres: Sol-Gel/Template Synthesis and Photocatalytic Properties. Advanced Functional Materials, 2005, 15, 239-245.	14.9	82
50	Flowerlike WSe₂ and WS₂ microspheres: one-pot synthesis, formation mechanism and application in heavy metal ion sequestration. Chemical Communications, 2016, 52, 4481-4484.	4.1	81
51	Tricomponent brookite/anatase TiO₂/g-C₃N₄ heterojunction in mesoporous hollow microspheres for enhanced visible-light photocatalysis. Journal of Materials Chemistry A, 2018, 6, 7236-7245.	10.3	74
52	Template Synthesis and Adsorption Properties of Hierarchically Porous Zirconium Titanium Oxides. Langmuir, 2009, 25, 5286-5293.	3.5	73
53	Facile Synthesis of Monodisperse Mesoporous Zirconium Titanium Oxide Microspheres with Varying Compositions and High Surface Areas for Heavy Metal Ion Sequestration. Advanced Functional Materials, 2012, 22, 1966-1971.	14.9	73
54	Hierarchically Porous Titania Networks with Tunable Anatase:Rutile Ratios and Their Enhanced Photocatalytic Activities. ACS Applied Materials & Interfaces, 2014, 6, 13129-13137.	8.0	73

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55	Thin Films of Tin Oxide Nanosheets Used as the Electron Transporting Layer for Improved Performance and Ambient Stability of Perovskite Photovoltaics. Solar Rrl, 2017, 1, 1700117.	5.8	69
56	Ultrasound-induced formation and dissolution of colloidal CdS. Journal of the Chemical Society, Faraday Transactions, 1997, 93, 1791-1795.	1.7	66
57	High performance LiFePO4 electrode materials: influence of colloidal particle morphology and porosity on lithium-ion battery power capability. Energy and Environmental Science, 2010, 3, 813.	30.8	66
58	Zn-doped TiO2 electrodes in dye-sensitized solar cells for enhanced photocurrent. Journal of Materials Chemistry, 2012, 22, 17128.	6.7	65
59	Sonochemical formation of colloidal platinum. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2000, 169, 219-225.	4.7	64
60	Methyl orange removal by combined visible-light photocatalysis and membrane distillation. Dyes and Pigments, 2013, 98, 106-112.	3.7	64
61	Hierarchically Porous WO₃/CdWO₄ Fiber-in-Tube Nanostructures Featuring Readily Accessible Active Sites and Enhanced Photocatalytic Effectiveness for Antibiotic Degradation in Water. ACS Applied Materials & Interfaces, 2021, 13, 21138-21148.	8.0	64
62	Solâ€“gel synthesis of hierarchically porous TiO2 beads using calcium alginate beads as sacrificial templates. Journal of Materials Chemistry, 2012, 22, 4073.	6.7	63
63	One-Pot Synthesis of Hierarchically Structured Ceramic Monoliths with Adjustable Porosity. Chemistry of Materials, 2010, 22, 4379-4385.	6.7	62
64	Increased nanopore filling: Effect on monolithic all-solid-state dye-sensitized solar cells. Applied Physics Letters, 2007, 90, 213510.	3.3	61
65	Preparation of Boron-Doped Porous Titania Networks Containing Gold Nanoparticles with Enhanced Visible-Light Photocatalytic Activity. ACS Applied Materials & Interfaces, 2012, 4, 476-482.	8.0	61
66	Modification of mesoporous TiO2electrodes by surface treatment with titanium(IV), indium(III) and zirconium(IV) oxide precursors: preparation, characterization and photovoltaic performance in dye-sensitized nanocrystalline solar cells. Nanotechnology, 2007, 18, 125608.	2.6	60
67	Enhanced electrochromic performance of WO₃ nanowire networks grown directly on fluorine-doped tin oxide substrates. Journal of Materials Chemistry C, 2016, 4, 10500-10508.	5.5	60
68	Versatile inorganic-organic hybrid WO x -ethylenediamine nanowires: Synthesis, mechanism and application in heavy metal ion adsorption and catalysis. Nano Research, 2014, 7, 903-916.	10.4	59
69	High surface area mesoporous titaniumâ€“zirconium oxide nanofibrous web: a heavy metal ion adsorbent. Journal of Materials Chemistry A, 2013, 1, 5847.	10.3	56
70	Sonochemistry and Sonoluminescence in Aqueous AuCl4- Solutions in the Presence of Surface-Active Solutes. Journal of Physical Chemistry B, 1999, 103, 9231-9236.	2.6	55
71	High-Throughput Synthesis and Screening of Titania-Based Photocatalysts. ACS Combinatorial Science, 2015, 17, 548-569.	3.8	54
72	Uranyl-Sorption Properties of Amorphous and Crystalline TiO₂/ZrO₂ Millimeter-Sized Hierarchically Porous Beads. Environmental Science & Technology, 2012, 46, 7913-7920.	10.0	52

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73	Solventâ€Mediated Dimension Tuning of Semiconducting Oxide Nanostructures as Efficient Charge Extraction Thin Films for Perovskite Solar Cells with Efficiency Exceeding 16%. Advanced Energy Materials, 2016, 6, 1502027.	19.5	52
74	Effective gel for gold nanoparticle formation, support and metal oxide templating. Chemical Communications, 2007, , 3060.	4.1	51
75	Solvothermal Growth of Bismuth Chalcogenide Nanoplatelets by the Oriented Attachment Mechanism: An in Situ PXRD Study. Chemistry of Materials, 2015, 27, 3471-3482.	6.7	51
76	A design for monolithic all-solid-state dye-sensitized solar cells with a platinized carbon counterelectrode. Applied Physics Letters, 2009, 94, 103102.	3.3	50
77	Engineering of Monodisperse Mesoporous Titania Beads for Photocatalytic Applications. ACS Applied Materials & Interfaces, 2013, 5, 9421-9428.	8.0	49
78	Lyotropic liquid crystalline phase behaviour in amphiphileâ€“protic ionic liquid systems. Physical Chemistry Chemical Physics, 2012, 14, 3825.	2.8	47
79	Nanocasting and Nanocoating. Topics in Current Chemistry, 2003, , 91-118.	4.0	44
80	Template synthesis of porous gold microspheres. Chemical Communications, 2003, , 1478.	4.1	43
81	Mesoporous Titanium Zirconium Oxide Nanospheres with Potential for Drug Delivery Applications. ACS Applied Materials & Interfaces, 2013, 5, 10926-10932.	8.0	43
82	Flexible dye-sensitized solar cells containing multiple dyes in discrete layers. Energy and Environmental Science, 2011, 4, 2803.	30.8	41
83	Collagen-Templated Bioactive Titanium Dioxide Porous Networks for Drug Delivery. ACS Applied Materials & Interfaces, 2012, 4, 4717-4725.	8.0	41
84	Effect of Mesoporous TiO2 Bead Diameter in Working Electrodes on the Efficiency of Dye-Sensitized Solar Cells. ChemSusChem, 2011, 4, 1498-1503.	6.8	40
85	Printing approaches to inorganic semiconductor photocatalyst fabrication. Journal of Materials Chemistry A, 2019, 7, 10858-10878.	10.3	40
86	Solâ€“gel templating of membranes to form thick, porous titania, titania/zirconia and titania/silica films. Journal of Materials Chemistry, 2006, 16, 1414-1420.	6.7	39
87	N-doped Li₄Ti₅O₁₂ nanoflakes derived from 2D protonated titanate for high performing anodes in lithium ion batteries. Journal of Materials Chemistry A, 2016, 4, 7772-7780.	10.3	39
88	Preparation and characterization of CuOâ€“ZrO2 nanopowders. Journal of Materials Chemistry, 2002, 12, 1442-1445.	6.7	38
89	Understanding Solvothermal Crystallization of Mesoporous Anatase Beads by In Situ Synchrotron PXRD and SAXS. Chemistry of Materials, 2014, 26, 4563-4571.	6.7	37
90	Advancing Metalâ€Organic Frameworks toward Smart Sensing: Enhanced Fluorescence by a Photonic Metalâ€Organic Framework for Organic Vapor Sensing. Advanced Optical Materials, 2020, 8, 2000961.	7.3	36

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91	Probing the Effects of Templating on the UV and Visible Light Photocatalytic Activity of Porous Nitrogen-Modified Titania Monoliths for Dye Removal. ACS Applied Materials & Interfaces, 2016, 8, 17194-17204.	8.0	34
92	Ordered Mesoporous Graphitic Carbon/Iron Carbide Composites with High Porosity as a Sulfur Host for Liâ€“S Batteries. ACS Applied Materials & Interfaces, 2019, 11, 13194-13204.	8.0	34
93	Largeâ€Scale Production of Bismuth Chalcogenide and Graphene Heterostructure and Its Application for Flexible Broadband Photodetector. Advanced Electronic Materials, 2016, 2, 1600077.	5.1	33
94	Al-Containing Porous Titanium Dioxide Networks:Â Solâˆ'Gel Synthesis within Agarose Gel Template and Photocatalytic Activity. Chemistry of Materials, 2006, 18, 5835-5839.	6.7	32
95	Pore Size and Volume Effects on the Incorporation of Polymer into Macro- and Mesoporous Zirconium Titanium Oxide Membranes. ACS Applied Materials & Interfaces, 2009, 1, 2893-2901.	8.0	32
96	The influence of ruthenium substitution in LaCoO₃ towards bi-functional electrocatalytic activity for rechargeable Znâ€“air batteries. Journal of Materials Chemistry A, 2020, 8, 20612-20620.	10.3	32
97	Strong Silica Monoliths with Large Mesopores Prepared Using Agarose Gel Templates. Langmuir, 2011, 27, 2124-2127.	3.5	31
98	Construction of nanostructured electrodes on flexible substrates using pre-treated building blocks. Applied Physics Letters, 2012, 100, .	3.3	31
99	Solvothermal synthesis and photocatalytic application of porous Au/TiO2 nanocomposites. Journal of Materials Chemistry, 2012, 22, 11701.	6.7	31
100	Solution-processed Zn2SnO4 electron transporting layer for efficient planar perovskite solar cells. Materials Today Energy, 2018, 7, 260-266.	4.7	30
101	One-Pot Preparation and Uranyl Adsorption Properties of Hierarchically Porous Zirconium Titanium Oxide Beads using Phase Separation Processes to Vary Macropore Morphology. Langmuir, 2010, 26, 17581-17588.	3.5	29
102	Electrospun PVDFâ€“TiO2 with tuneable TiO2 crystal phases: synthesis and application in photocatalytic redox reactions. Journal of Materials Chemistry A, 2017, 5, 641-648.	10.3	29
103	Noble Metalâ€Modified Porous Titania Networks and their Application as Photocatalysts. ChemCatChem, 2011, 3, 1763-1771.	3.7	28
104	Amine-Functionalized Titania-based Porous Structures for Carbon Dioxide Postcombustion Capture. Journal of Physical Chemistry C, 2013, 117, 9747-9757.	3.1	28
105	Enhanced Photocatalytic Activity: Macroporous Electrospun Mats of Mesoporous Au/TiO₂ Nanofibers. ChemCatChem, 2013, 5, 2646-2654.	3.7	28
106	Optimizing semiconductor thin films with smooth surfaces and well-interconnected networks for high-performance perovskite solar cells. Journal of Materials Chemistry A, 2016, 4, 12463-12470.	10.3	28
107	Spiky Mesoporous Anatase Titania Beads: A Metastable Ammonium Titanateâ€Mediated Synthesis. Chemistry - A European Journal, 2012, 18, 13762-13769.	3.3	27
108	Amphiphile Micelle Structures in the Protic Ionic Liquid Ethylammonium Nitrate and Water. Journal of Physical Chemistry B, 2015, 119, 179-191.	2.6	27

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109	Temperature-induced modulation of mesopore size in hierarchically porous amorphous TiO₂/ZrO₂ beads for improved dye adsorption capacity. Journal of Materials Chemistry A, 2015, 3, 3768-3776.	10.3	26
110	Monodisperse anatase titania microspheres with high-thermal stability and large pore size (â^¼80 nm) as efficient photocatalysts. Journal of Materials Chemistry A, 2017, 5, 3645-3654.	10.3	26
111	Monitoring Bisphosphonate Surface Functionalization and Acid Stability of Hierarchically Porous Titanium Zirconium Oxides. Langmuir, 2011, 27, 12985-12995.	3.5	25
112	Long-range ordered lyotropic liquid crystals in intermediate-range ordered protic ionic liquid used as templates for hierarchically porous silica. Journal of Materials Chemistry, 2012, 22, 10069.	6.7	25
113	Al-doped TiO2 Photoanode for Dye-Sensitized Solar Cells. Australian Journal of Chemistry, 2011, 64, 820.	0.9	24
114	Synthesis and Photocatalytic Activity of Titania Monoliths Prepared with Controlled Macro- and Mesopore Structure. ACS Applied Materials & Interfaces, 2012, 4, 4123-4130.	8.0	24
115	The Effect of the Scattering Layer in Dyeâ€Sensitized Solar Cells Employing a Cobaltâ€Based Aqueous Gel Electrolyte. ChemSusChem, 2015, 8, 3704-3711.	6.8	23
116	Integrated planar and bulk dual heterojunctions capable of efficient electron and hole extraction for perovskite solar cells with >17% efficiency. Nano Energy, 2017, 32, 187-194.	16.0	23
117	Solvent-Mediated Intragranular-Coarsening of CH₃NH₃PbI₃ Thin Films toward High-Performance Perovskite Photovoltaics. ACS Applied Materials & Interfaces, 2017, 9, 31959-31967.	8.0	23
118	Rollâ€toâ€Roll Processes for the Fabrication of Perovskite Solar Cells under Ambient Conditions. Solar Rrl, 2021, 5, 2100341.	5.8	22
119	One-pot synthesis of silica monoliths with hierarchically porous structure. Microporous and Mesoporous Materials, 2012, 148, 137-144.	4.4	21
120	Quasi-Solid-State Dye-Sensitized Solar Cells on Plastic Substrates. Journal of Physical Chemistry C, 2014, 118, 16366-16374.	3.1	21
121	Direct spun aligned carbon nanotube web-reinforced proton exchange membranes for fuel cells. RSC Advances, 2014, 4, 32787-32790.	3.6	21
122	Monodisperse mesoporous anatase beads as high performance and safer anodes for lithium ion batteries. Nanoscale, 2015, 7, 17947-17956.	5.6	21
123	Macro-/mesoporous titania thin films: analysing the effect of pore architecture on photocatalytic activity using high-throughput screening. Journal of Materials Chemistry A, 2015, 3, 24557-24567.	10.3	21
124	Synthesis, characterization, antibacterial activity and cytotoxicity of hollow TiO₂-coated CeO₂nanocontainers encapsulating silver nanoparticles for controlled silver release. Journal of Materials Chemistry B, 2016, 4, 1166-1174.	5.8	21
125	Photodegradation of SiO₂-Coated CdS Nanoparticles within Silica Gels. Journal of Nanoscience and Nanotechnology, 2001, 1, 95-99.	0.9	20
126	Mesoporous Nitrogenâ€Modified Titania with Enhanced Dye Adsorption Capacity and Visible Light Photocatalytic Activity. ChemistrySelect, 2016, 1, 4868-4878.	1.5	20

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127	Effect of TiO₂ microbead pore size on the performance of DSSCs with a cobalt based electrolyte. Nanoscale, 2014, 6, 13787-13794.	5.6	19
128	Parameters responsible for the degradation of CH 3 NH 3 PbI 3 -based solar cells on polymer substrates. Nano Energy, 2016, 22, 211-222.	16.0	18
129	Hydrophilic gels with new superstructures and their hybrids by nanocasting technologies. Macromolecular Symposia, 2000, 152, 163-172.	0.7	17
130	Use of metamodels for rapid discovery of narrow bandgap oxide photocatalysts. IScience, 2021, 24, 103068.	4.1	17
131	Size Matters: Incorporation of Poly(acrylic acid) and Small Molecules into Hierarchically Porous Metal Oxides Prepared with and without Templates. Langmuir, 2010, 26, 14203-14209.	3.5	16
132	Mesoporous titania beads for flexible dye-sensitized solar cells. Journal of Materials Chemistry C, 2014, 2, 1284-1289.	5.5	16
133	Mesoporous Europo-Gadolinosilicate Nanoparticles as Bimodal Medical Imaging Agents and a Potential Theranostic Platform. Advanced Healthcare Materials, 2013, 2, 836-845.	7.6	15
134	Sub-100ÂÂ°C solution processed amorphous titania nanowire thin films for high-performance perovskite solar cells. Journal of Power Sources, 2016, 329, 17-22.	7.8	14
135	One-Pot Preparation and CO₂ Adsorption Modeling of Porous Carbon, Metal Oxide, and Hybrid Beads. ACS Applied Materials & Interfaces, 2013, 5, 5009-5014.	8.0	13
136	Three-dimensional titanium oxide nanoarrays for perovskite photovoltaics: surface engineering for cascade charge extraction and beneficial surface passivation. Sustainable Energy and Fuels, 2017, 1, 1960-1967.	4.9	13
137	Fluoride Perovskite (KNi_{<i>x</i>}Co_{1â€“<i>x</i>}F₃) Oxygen-Evolution Electrocatalyst with Highly Polarized Electronic Configuration. ACS Applied Energy Materials, 2021, 4, 13425-13430.	5.1	12
138	Porous Vanadium/Titanium Oxidesâ€”Synthesis, Characterization, and Photocatalytic Activity. Australian Journal of Chemistry, 2007, 60, 533.	0.9	11
139	High-Throughput Preparation of Hexagonally Ordered Mesoporous Silica and Gadolinosilicate Nanoparticles for use as MRI Contrast Agents. ACS Combinatorial Science, 2012, 14, 443-450.	3.8	11
140	Synthesis of Microporous Silica Templated by Gelatin. Chemistry Letters, 2004, 33, 202-203.	1.3	10
141	Plasmon imaging: An efficient TEM-based method for locating noble metal particles dispersed on oxide catalysts at very low densities. Micron, 2008, 39, 344-347.	2.2	10
142	Indium Oxides and Related Indiumâ€based Photocatalysts for Water Treatment: Materials Studied, Photocatalytic Performance, and Special Highlights. Solar Rrl, 2021, 5, 2100086.	5.8	10
143	Trace-Level Fluorination of Mesoporous TiO₂ Improves Photocatalytic and Pb(II) Adsorbent Performances. Inorganic Chemistry, 2020, 59, 17631-17637.	4.0	9
144	Low-Temperature Solution-Processed Amorphous Titania Nanowire Thin Films for 1 cm² Perovskite Solar Cells. ACS Applied Materials & Interfaces, 2020, 12, 11450-11458.	8.0	9

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145	Charge Transport in Photoanodes Constructed with Mesoporous TiO₂ Beads for Dye-Sensitized Solar Cells. Journal of Physical Chemistry C, 2014, 118, 16635-16642.	3.1	8
146	Confined Synthesis: From Layered Titanate to Highly Efficient and Durable Mesoporous Cu/TiO₂ Hydrogen Evolution Photocatalysts. ACS Applied Energy Materials, 2021, 4, 4050-4058.	5.1	8
147	Mesoporous gadolinoâ€"aluminosilicate nanoparticles as magnetic resonance imaging contrast agents. Journal of Materials Chemistry B, 2013, 1, 1219.	5.8	7
148	Effect of cosolvents on the self-assembly of a non-ionic polyethylene oxideâ€"polypropylene oxideâ€"polyethylene oxide block copolymer in the protic ionic liquid ethylammonium nitrate. Journal of Colloid and Interface Science, 2015, 441, 46-51.	9.4	7
149	Perovskite Solar Cells: Effect of the Microstructure of the Functional Layers on the Efficiency of Perovskite Solar Cells (Adv. Mater. 20/2017). Advanced Materials, 2017, 29, .	21.0	3
150	HRTEM study of Cu/ZrO2 catalyst. An evidence of a new perovskite-like oxide ZrCuO3. Journal of Materials Science Letters, 2003, 22, 335-337.	0.5	1
151	Graphene Photodetectors: Large-Scale Production of Bismuth Chalcogenide and Graphene Heterostructure and Its Application for Flexible Broadband Photodetector (Adv. Electron. Mater.) Tj ETQq1 1 0.784314 rgBT /Overlock 1	5.1	0
152	Perovskite Solar Cells: Solventâ€Mediated Dimension Tuning of Semiconducting Oxide Nanostructures as Efficient Charge Extraction Thin Films for Perovskite Solar Cells with Efficiency Exceeding 16% (Adv. Energy Mater. 7/2016). Advanced Energy Materials, 2016, 6, .	19.5	0
153	Low Temperature Synthesis of TiO2 Nanoparticles with Tuneable Phase Composition and their Photocatalytic Activity. Australian Journal of Chemistry, 2020, , .	0.9	0
154	Chapter 7. Controlling the Photoanode Mesostructure for Dye-sensitized and Perovskite-sensitized Solar Cells. , 2016, , 292-323.		0
155	Embedding CeO2 nanocontainers in a TiO2 coating on glass surfaces. AIMS Bioengineering, 2017, 4, 171-178.	1.1	0
156	Embedding CeO2 nanocontainers in a TiO2 coating on glass surfaces. AIMS Bioengineering, 2017, 4, 171-178.	1.1	0