

Pratim Biswas

List of Publications by Year in descending order

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185
papers

14,989
citations

26567

56
h-index

19136

118
g-index

189
all docs

189
docs citations

189
times ranked

18609
citing authors

#	ARTICLE	IF	CITATIONS
1	Characterization of size, surface charge, and agglomeration state of nanoparticle dispersions for toxicological studies. <i>Journal of Nanoparticle Research</i> , 2009, 11, 77-89.	0.8	1,406
2	Assessing the Risks of Manufactured Nanomaterials. <i>Environmental Science & Technology</i> , 2006, 40, 4336-4345.	4.6	1,018
3	Size and Structure Matter: Enhanced CO ₂ Photoreduction Efficiency by Size-Resolved Ultrafine Pt Nanoparticles on TiO ₂ Single Crystals. <i>Journal of the American Chemical Society</i> , 2012, 134, 11276-11281.	6.6	691
4	Nanoparticles and the Environment. <i>Journal of the Air and Waste Management Association</i> , 2005, 55, 708-746.	0.9	545
5	Role of Surface Area, Primary Particle Size, and Crystal Phase on Titanium Dioxide Nanoparticle Dispersion Properties. <i>Nanoscale Research Letters</i> , 2011, 6, 27.	3.1	533
6	Wood's Graphene Oxide Composite for Highly Efficient Solar Steam Generation and Desalination. <i>ACS Applied Materials & Interfaces</i> , 2017, 9, 7675-7681.	4.0	505
7	Bilayered Biofoam for Highly Efficient Solar Steam Generation. <i>Advanced Materials</i> , 2016, 28, 9400-9407.	11.1	457
8	Mechanistic evaluation of translocation and physiological impact of titanium dioxide and zinc oxide nanoparticles on the tomato (<i>Solanum lycopersicum</i> L.) plant. <i>Metallomics</i> , 2015, 7, 1584-1594.	1.0	423
9	Role of Synthesis Method and Particle Size of Nanostructured TiO ₂ on Its Photoactivity. <i>Journal of Catalysis</i> , 2002, 212, 145-156.	3.1	417
10	Nanofertilizer for Precision and Sustainable Agriculture: Current State and Future Perspectives. <i>Journal of Agricultural and Food Chemistry</i> , 2018, 66, 6487-6503.	2.4	416
11	Does nanoparticle activity depend upon size and crystal phase?. <i>Nanotoxicology</i> , 2008, 2, 33-42.	1.6	370
12	Synthesis and in vitro antifungal efficacy of Cu-chitosan nanoparticles against pathogenic fungi of tomato. <i>International Journal of Biological Macromolecules</i> , 2015, 75, 346-353.	3.6	311
13	Laboratory Evaluation and Calibration of Three Low-Cost Particle Sensors for Particulate Matter Measurement. <i>Aerosol Science and Technology</i> , 2015, 49, 1063-1077.	1.5	306
14	TiO ₂ nanoparticle biosynthesis and its physiological effect on mung bean (<i>Vigna radiata</i> L.). <i>Biotechnology Reports (Amsterdam, Netherlands)</i> , 2015, 5, 22-26.	2.1	290
15	Flame aerosol synthesis of nanostructured materials and functional devices: Processing, modeling, and diagnostics. <i>Progress in Energy and Combustion Science</i> , 2016, 55, 1-59.	15.8	249
16	Nanoparticle synthesis and delivery by an aerosol route for watermelon plant foliar uptake. <i>Journal of Nanoparticle Research</i> , 2013, 15, 1.	0.8	211
17	Quantitative Understanding of Nanoparticle Uptake in Watermelon Plants. <i>Frontiers in Plant Science</i> , 2016, 7, 1288.	1.7	208
18	Enhancing the Mobilization of Native Phosphorus in the Mung Bean Rhizosphere Using ZnO Nanoparticles Synthesized by Soil Fungi. <i>Journal of Agricultural and Food Chemistry</i> , 2016, 64, 3111-3118.	2.4	194

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19	Cu-Chitosan Nanoparticle Mediated Sustainable Approach To Enhance Seedling Growth in Maize by Mobilizing Reserved Food. Journal of Agricultural and Food Chemistry, 2016, 64, 6148-6155.	2.4	192
20	Experimental and theoretical studies of ultra-fine particle behavior in electrostatic precipitators. Journal of Electrostatics, 2000, 48, 245-260.	1.0	181
21	Single-step processing of copper-doped titania nanomaterials in a flame aerosol reactor. Nanoscale Research Letters, 2011, 6, 441.	3.1	162
22	Control of Toxic Metal Emissions from Combustors Using Sorbents: A Review. Journal of the Air and Waste Management Association, 1998, 48, 113-127.	0.9	147
23	Combined Charged Residue-Field Emission Model of Macromolecular Electrospray Ionization. Analytical Chemistry, 2009, 81, 369-377.	3.2	146
24	Nanostructured TiO ₂ Films with Controlled Morphology Synthesized in a Single Step Process: Performance of Dye-Sensitized Solar Cells and Photo Watersplitting. Journal of Physical Chemistry C, 2008, 112, 4134-4140.	1.5	142
25	Improved Sensitivity with Low Limit of Detection of a Hydrogen Gas Sensor Based on rGO-Loaded Ni-Doped ZnO Nanostructures. ACS Applied Materials & Interfaces, 2018, 10, 11116-11124.	4.0	137
26	N-doped reduced graphene oxide promoted nano TiO ₂ as a bifunctional adsorbent/photocatalyst for CO ₂ photoreduction: Effect of N species. Chemical Engineering Journal, 2017, 316, 449-460.	6.6	129
27	Kinetics of Titanium(IV) Chloride Oxidation. Journal of the American Ceramic Society, 1990, 73, 2158-2162.	1.9	124
28	Predicting the Band Structure of Mixed Transition Metal Oxides: Theory and Experiment. Journal of Physical Chemistry C, 2009, 113, 2014-2021.	1.5	116
29	Gas treatment in trickle-bed biofilters: Biomass, how much is enough?. , 1997, 54, 583-594.		111
30	Engineered Crumpled Graphene Oxide Nanocomposite Membrane Assemblies for Advanced Water Treatment Processes. Environmental Science & Technology, 2015, 49, 6846-6854.	4.6	108
31	Evaporation-Induced Crumpling of Graphene Oxide Nanosheets in Aerosolized Droplets: Confinement Force Relationship. Journal of Physical Chemistry Letters, 2012, 3, 3228-3233.	2.1	104
32	Graphene Oxides in Water: Correlating Morphology and Surface Chemistry with Aggregation Behavior. Environmental Science & Technology, 2016, 50, 6964-6973.	4.6	101
33	Engineering stable Pt nanoparticles and oxygen vacancies on defective TiO ₂ via introducing strong electronic metal-support interaction for efficient CO ₂ photoreduction. Chemical Engineering Journal, 2020, 389, 123450.	6.6	99
34	Evaluation of Trickle Bed Biofilter Media for Toluene Removal. Journal of the Air and Waste Management Association, 1995, 45, 801-810.	0.9	97
35	Rapid synthesis of nanostructured Cu@TiO ₂ @SiO ₂ composites for CO ₂ photoreduction by evaporation driven self-assembly. Catalysis Science and Technology, 2011, 1, 593.	2.1	97
36	Aerosol-Chemical Vapor Deposition Method For Synthesis of Nanostructured Metal Oxide Thin Films With Controlled Morphology. Journal of Physical Chemistry Letters, 2010, 1, 249-253.	2.1	87

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37	Facile Aerosol Synthesis and Characterization of Ternary Crumpled Graphene@TiO ₂ Magnetite Nanocomposites for Advanced Water Treatment. ACS Applied Materials & Interfaces, 2014, 6, 11766-11774.	4.0	86
38	Controlled size polymer particle production via electrohydrodynamic atomization. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2007, 311, 67-76.	2.3	85
39	<i>In situ</i> characterization of vapor phase growth of iron oxide-silica nanocomposites: Part I. 2-D planar laser-induced fluorescence and Mie imaging. Journal of Materials Research, 1996, 11, 1552-1561.	1.2	83
40	Processing of iron-doped titania powders in flame aerosol reactors. Powder Technology, 2001, 114, 197-204.	2.1	82
41	Sensing mechanism of ethanol and acetone at room temperature by SnO ₂ nano-columns synthesized by aerosol routes: theoretical calculations compared to experimental results. Journal of Materials Chemistry A, 2018, 6, 2053-2066.	5.2	82
42	Optimizing the Synthesis of Red-Emissive Nitrogen-Doped Carbon Dots for Use in Bioimaging. ACS Applied Nano Materials, 2018, 1, 3682-3692.	2.4	80
43	Chitosan-silicon nanofertilizer to enhance plant growth and yield in maize (<i>Zea mays</i> L.). Plant Physiology and Biochemistry, 2021, 159, 53-66.	2.8	78
44	One-step synthesis of noble metal@titanium dioxide nanocomposites in a flame aerosol reactor. Applied Catalysis A: General, 2008, 345, 241-246.	2.2	77
45	Spatiotemporal distribution of indoor particulate matter concentration with a low-cost sensor network. Building and Environment, 2018, 127, 138-147.	3.0	77
46	Evaluation of Nine Low-cost-sensor-based Particulate Matter Monitors. Aerosol and Air Quality Research, 2020, 20, 254-270.	0.9	77
47	Nanostructured photoactive films synthesized by a flame aerosol reactor. AIChE Journal, 2007, 53, 1727-1735.	1.8	74
48	Characterization of iron oxide-silica nanocomposites in flames: Part II. Comparison of discrete-sectional model predictions to experimental data. Journal of Materials Research, 1997, 12, 714-723.	1.2	73
49	Perspective on Nanoparticle Technology for Biomedical Use. Current Pharmaceutical Design, 2016, 22, 2481-2490.	0.9	69
50	Biocompatibility of gold nanoparticles in retinal pigment epithelial cell line. Toxicology in Vitro, 2016, 37, 61-69.	1.1	66
51	Graphene oxides in water: assessing stability as a function of material and natural organic matter properties. Environmental Science: Nano, 2017, 4, 1484-1493.	2.2	65
52	Spatio-temporal measurement of indoor particulate matter concentrations using a wireless network of low-cost sensors in households using solid fuels. Environmental Research, 2017, 152, 59-65.	3.7	64
53	ZnO _{1-x} /carbon dots composite hollow spheres: Facile aerosol synthesis and superior CO ₂ photoreduction under UV, visible and near-infrared irradiation. Applied Catalysis B: Environmental, 2018, 230, 36-48.	10.8	62
54	Flexible solid-state supercapacitor based on tin oxide/reduced graphene oxide/bacterial nanocellulose. RSC Advances, 2018, 8, 31296-31302.	1.7	62

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55	Integrating low-cost air quality sensor networks with fixed and satellite monitoring systems to study ground-level PM _{2.5} . <i>Atmospheric Environment</i> , 2020, 223, 117293.	1.9	61
56	Green Synthesis of TiO ₂ Nanoparticle Using <i>Aspergillus tubingensis</i> . <i>Advanced Science, Engineering and Medicine</i> , 2013, 5, 943-949.	0.3	59
57	Synthesis of nanoparticles in a flame aerosol reactor with independent and strict control of their size, crystal phase and morphology. <i>Nanotechnology</i> , 2007, 18, 285603.	1.3	58
58	Chitosan nanofertilizer to foster source activity in maize. <i>International Journal of Biological Macromolecules</i> , 2020, 145, 226-234.	3.6	57
59	AN EQUILIBRIUM ANALYSIS FOR REACTION OF METAL COMPOUNDS WITH SORBENTS IN HIGH TEMPERATURE SYSTEMS. <i>Chemical Engineering Communications</i> , 1995, 133, 31-52.	1.5	54
60	Charging of particles in unipolar coronas irradiated by in-situ soft X-rays: enhancement of capture efficiency of ultrafine particles. <i>Journal of Aerosol Science</i> , 2002, 33, 1279-1296.	1.8	53
61	An in situ grown bacterial nanocellulose/graphene oxide composite for flexible supercapacitors. <i>Journal of Materials Chemistry A</i> , 2017, 5, 13976-13982.	5.2	53
62	Electrospray-Assisted Fabrication of Moisture-Resistant and Highly Stable Perovskite Solar Cells at Ambient Conditions. <i>Advanced Energy Materials</i> , 2017, 7, 1700210.	10.2	51
63	Study of Numerical Diffusion in a Discrete-Sectional Model and Its Application to Aerosol Dynamics Simulation. <i>Aerosol Science and Technology</i> , 1998, 29, 359-378.	1.5	48
64	A Brownian Dynamics Simulation to Predict Morphology of Nanoparticle Deposits in the Presence of Interparticle Interactions. <i>Aerosol Science and Technology</i> , 2004, 38, 541-554.	1.5	48
65	Non-invasive aerosol delivery and transport of gold nanoparticles to the brain. <i>Scientific Reports</i> , 2017, 7, 44718.	1.6	48
66	KBaTeBiO ₆ : A Lead-Free, Inorganic Double-Perovskite Semiconductor for Photovoltaic Applications. <i>Chemistry of Materials</i> , 2019, 31, 4769-4778.	3.2	46
67	SnO ₂ Nanostructured Thin Films for Room-Temperature Gas Sensing of Volatile Organic Compounds. <i>ACS Applied Materials & Interfaces</i> , 2018, 10, 29972-29981.	4.0	44
68	Optical Characterization Studies of a Low-Cost Particle Sensor. <i>Aerosol and Air Quality Research</i> , 2017, 17, 1691-1704.	0.9	44
69	Study of the Sintering of Nanosized Titania Agglomerates in Flames Using In Situ Light Scattering Measurements. <i>Aerosol Science and Technology</i> , 1997, 27, 507-521.	1.5	42
70	Crystal reorientation in methylammonium lead iodide perovskite thin film with thermal annealing. <i>Journal of Materials Chemistry A</i> , 2019, 7, 12790-12799.	5.2	41
71	Evaluation of Mass and Surface Area Concentration of Particle Emissions and Development of Emissions Indices for Cookstoves in Rural India. <i>Environmental Science & Technology</i> , 2011, 45, 2428-2434.	4.6	40
72	Porous Film Deposition by Electrohydrodynamic Atomization of Nanoparticle Sols. <i>Aerosol Science and Technology</i> , 2008, 42, 75-85.	1.5	39

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73	Synthesis of visible light-active nanostructured TiO ₂ photocatalysts in a flame aerosol reactor. <i>Applied Catalysis B: Environmental</i> , 2009, 86, 145-151.	10.8	39
74	Model for nanoparticle charging by diffusion, direct photoionization, and thermionization mechanisms. <i>Journal of Electrostatics</i> , 2007, 65, 209-220.	1.0	37
75	Photochemically assisted fast abiotic oxidation of manganese and formation of MnO ₂ nanosheets in nitrate solution. <i>Chemical Communications</i> , 2017, 53, 4445-4448.	2.2	37
76	Multicomponent Aerosol Dynamics of the Pb-O ₂ System in a Bench Scale Flame Incinerator. <i>Aerosol Science and Technology</i> , 1992, 17, 119-133.	1.5	36
77	Monte carlo simulation of macromolecular ionization by nanoelectrospray. <i>Journal of the American Society for Mass Spectrometry</i> , 2008, 19, 1098-1107.	1.2	36
78	Modeling Soluble and Particulate Lead Release into Drinking Water from Full and Partially Replaced Lead Service Lines. <i>Environmental Science & Technology</i> , 2017, 51, 3318-3326.	4.6	35
79	Narrow size distribution nanoparticle production by electrospray processing of ferritin. <i>Journal of Aerosol Science</i> , 2008, 39, 432-440.	1.8	34
80	Organic and inorganic speciation of particulate matter formed during different combustion phases in an improved cookstove. <i>Environmental Research</i> , 2017, 158, 33-42.	3.7	34
81	A modeling study of anaerobic biofilm systems: I. Detailed biofilm modeling. <i>Biotechnology and Bioengineering</i> , 1995, 46, 43-53.	1.7	33
82	Comparison of HgO capture efficiencies of three in situ generated sorbents. <i>AIChE Journal</i> , 2001, 47, 954-961.	1.8	33
83	Crumpled reduced graphene oxide-amine-titanium dioxide nanocomposites for simultaneous carbon dioxide adsorption and photoreduction. <i>Catalysis Science and Technology</i> , 2016, 6, 6187-6196.	2.1	33
84	Hyaluronate coating enhances the delivery and biocompatibility of gold nanoparticles. <i>Carbohydrate Polymers</i> , 2018, 186, 243-251.	5.1	32
85	Application of Half Mini DMA for sub 2nm particle size distribution measurement in an electrospray and a flame aerosol reactor. <i>Journal of Aerosol Science</i> , 2014, 71, 52-64.	1.8	31
86	Relationship between pyrolysis products and organic aerosols formed during coal combustion. <i>Proceedings of the Combustion Institute</i> , 2015, 35, 2347-2354.	2.4	31
87	Environmentally benign bio-inspired synthesis of Au nanoparticles, their self-assembly and agglomeration. <i>RSC Advances</i> , 2015, 5, 42081-42087.	1.7	31
88	The high charge fraction of flame-generated particles in the size range below 3 nm measured by enhanced particle detectors. <i>Combustion and Flame</i> , 2017, 176, 72-80.	2.8	31
89	Charged Droplet Dynamics in the Submicrometer Size Range. <i>Journal of Physical Chemistry B</i> , 2009, 113, 970-976.	1.2	30
90	Measurement and numerical simulation of ultrafine particle size distribution in the early stage of high-sodium lignite combustion. <i>Proceedings of the Combustion Institute</i> , 2017, 36, 2083-2090.	2.4	30

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91	Characterization of gaseous and particulate pollutants from gasification-based improved cookstoves. Energy for Sustainable Development, 2016, 32, 130-139.	2.0	27
92	Characterization of particle charging in low-temperature, atmospheric-pressure, flow-through plasmas. Journal Physics D: Applied Physics, 2020, 53, 245204.	1.3	27
93	Using Kriging incorporated with wind direction to investigate ground-level PM2.5 concentration. Science of the Total Environment, 2021, 751, 141813.	3.9	27
94	Evaluation of Trickle Bed Air Biofilter Performance as a Function of Inlet VOC Concentration and Loading, and Biomass Control. Journal of the Air and Waste Management Association, 1998, 48, 627-636.	0.9	26
95	Aerosolized Droplet Mediated Self-Assembly of Photosynthetic Pigment Analogues and Deposition onto Substrates. ACS Nano, 2014, 8, 1429-1438.	7.3	26
96	Osteotropic Radiolabeled Nanophotosensitizer for Imaging and Treating Multiple Myeloma. ACS Nano, 2020, 14, 4255-4264.	7.3	26
97	In Situ light scattering dissymmetry measurements of the evolution of the aerosol size distribution in flames. Journal of Colloid and Interface Science, 1992, 153, 157-166.	5.0	25
98	Nanostructured Graphene-Titanium Dioxide Composites Synthesized by a Single-Step Aerosol Process for Photoreduction of Carbon Dioxide. Environmental Engineering Science, 2014, 31, 428-434.	0.8	25
99	Measurement of Sub-2 nm Clusters of Pristine and Composite Metal Oxides during Nanomaterial Synthesis in Flame Aerosol Reactors. Analytical Chemistry, 2014, 86, 7523-7529.	3.2	25
100	Kinetics of sub-2 nm TiO ₂ particle formation in an aerosol reactor during thermal decomposition of titanium tetraisopropoxide. Journal of Nanoparticle Research, 2015, 17, 1.	0.8	25
101	High-performance photodetector based on hybrid of MoS ₂ and reduced graphene oxide. Nanotechnology, 2018, 29, 404001.	1.3	25
102	NO ₂ gas sensing performance enhancement based on reduced graphene oxide decorated V ₂ O ₅ thin films. Nanotechnology, 2019, 30, 224001.	1.3	25
103	Impaction and Rebound of Particles at Acute Incident Angles. Aerosol Science and Technology, 1993, 18, 143-155.	1.5	24
104	Comparison of Measured Particle Lung-Deposited Surface Area Concentrations by an Aerotrak 9000 Using Size Distribution Measurements for a Range of Combustion Aerosols. Aerosol Science and Technology, 2013, 47, 966-978.	1.5	24
105	Real-Time Particulate and CO Concentrations from Cookstoves in Rural Households in Udaipur, India. Environmental Science & Technology, 2015, 49, 7423-7431.	4.6	24
106	A model for cost-benefit analysis of cooking fuel alternatives from a rural Indian household perspective. Renewable and Sustainable Energy Reviews, 2016, 56, 291-302.	8.2	24
107	Aerosol Dynamics Model for Estimating the Risk from Short-Range Airborne Transmission and Inhalation of Expiratory Droplets of SARS-CoV-2. Environmental Science & Technology, 2021, 55, 8987-8999.	4.6	24
108	Particle Growth by Condensation in a System with Limited Vapor. Aerosol Science and Technology, 1998, 28, 1-20.	1.5	23

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109	Highly Stable Perovskite Solar Cells Fabricated Under Humid Ambient Conditions. IEEE Journal of Photovoltaics, 2017, 7, 532-538.	1.5	23
110	Influence of flame-generated ions on the simultaneous charging and coagulation of nanoparticles during combustion. Aerosol Science and Technology, 2017, 51, 833-844.	1.5	23
111	Associations between household air pollution and reduced lung function in women and children in rural southern India. Journal of Applied Toxicology, 2018, 38, 1405-1415.	1.4	23
112	Mini Review on Gas-Phase Synthesis for Energy Nanomaterials. Energy & Fuels, 2021, 35, 63-85.	2.5	23
113	Deposition of lognormally distributed aerosols accounting for simultaneous diffusion, thermophoresis and coagulation. Journal of Aerosol Science, 1990, 21, 629-640.	1.8	22
114	Tubular Reactor Synthesis of Doped Nanostructured Titanium Dioxide and Its Enhanced Activation by Coronas and Soft X-rays. Industrial & Engineering Chemistry Research, 2005, 44, 5213-5220.	1.8	22
115	Simulation of aerosol dynamics and transport in chemically reacting particulate matter laden flows. Part II: Application to CVD reactors. Chemical Engineering Science, 2004, 59, 359-371.	1.9	21
116	Study of the mobility, surface area, and sintering behavior of agglomerates in the transition regime by tandem differential mobility analysis. Journal of Nanoparticle Research, 2007, 9, 1003-1012.	0.8	21
117	Engineering the outermost layers of TiO ₂ nanoparticles using <i>in situ</i> Mg doping in a flame aerosol reactor. AIChE Journal, 2017, 63, 870-880.	1.8	21
118	Photochemically-Assisted Synthesis of Birnessite Nanosheets and Their Structural Alteration in the Presence of Pyrophosphate. ACS Sustainable Chemistry and Engineering, 2017, 5, 10624-10632.	3.2	20
119	Observation of incipient particle formation during flame synthesis by tandem differential mobility analysis-mass spectrometry (DMA-MS). Proceedings of the Combustion Institute, 2017, 36, 745-752.	2.4	20
120	Hierarchical architecture of CuInS ₂ microsphere thin films: altering laterally aligned crystallographic plane growth by Cd and V doping. CrystEngComm, 2017, 19, 6602-6611.	1.3	18
121	Crumpled graphene oxide decorated SnO ₂ nanocolumns for the electrochemical detection of free chlorine. Applied Nanoscience (Switzerland), 2017, 7, 645-653.	1.6	18
122	Boosting Sensing Performance of Vacancy-Containing Vertically Aligned MoS ₂ Using rGO Particles. IEEE Sensors Journal, 2019, 19, 10214-10220.	2.4	18
123	Exciton Binding Energy of MAPbI ₃ Thin Film Elucidated via Analysis and Modeling of Perovskite Absorption and Photoluminescence Properties Using Various Methodologies. Journal of Physical Chemistry C, 2022, 126, 1046-1054.	1.5	18
124	Characterization of Activated Carbon Fiber Filters for Pressure Drop, Submicrometer Particulate Collection, and Mercury Capture. Journal of the Air and Waste Management Association, 2000, 50, 922-929.	0.9	17
125	Deposition of Multifunctional Titania Ceramic Films by Aerosol Routes. Journal of the American Ceramic Society, 1999, 82, 2573-2579.	1.9	17
126	One-Dimensional, Additive-Free, Single-Crystal TiO ₂ Nanostructured Anodes Synthesized by a Single-Step Aerosol Process for High-Rate Lithium-Ion Batteries. Energy Technology, 2014, 2, 906-911.	1.8	17

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127	Design of Cerenkov Radiation-Assisted Photoactivation of TiO ₂ Nanoparticles and Reactive Oxygen Species Generation for Cancer Treatment. <i>Journal of Nuclear Medicine</i> , 2019, 60, 702-709.	2.8	17
128	A concept of risk apportionment of air emission sources for risk reduction considerations. <i>Environmental Technology (United Kingdom)</i> , 1992, 13, 635-646.	1.2	16
129	Thermal conduction effects impacting morphology during synthesis of columnar nanostructured TiO ₂ thin films. <i>Journal of Materials Chemistry</i> , 2011, 21, 7913.	6.7	16
130	Electrospray Functionalization of Titanium Dioxide Nanoparticles with Transferrin for Cerenkov Radiation Induced Cancer Therapy. <i>ACS Applied Bio Materials</i> , 2019, 2, 1141-1147.	2.3	16
131	Comparison of discrete, discrete-sectional, modal and moment models for aerosol dynamics simulations. <i>Aerosol Science and Technology</i> , 2020, 54, 739-760.	1.5	16
132	Role of exhaust gas recycle on submicrometer particle formation during oxy-coal combustion. <i>Proceedings of the Combustion Institute</i> , 2013, 34, 3479-3487.	2.4	15
133	Highly conductive PEDOT films with enhanced catalytic activity for dye-sensitized solar cells. <i>Solar Energy</i> , 2020, 211, 258-264.	2.9	15
134	In Situ Charge Characterization of TiO ₂ and Cu-TiO ₂ Nanoparticles in a Flame Aerosol Reactor. <i>Journal of Nanoparticle Research</i> , 2012, 14, 1.	0.8	14
135	Characterization of organic and black carbon aerosol formation during coal combustion: An experimental study in a 1 MW pilot scale coal combustor. <i>Fuel</i> , 2016, 180, 653-658.	3.4	14
136	Cluster formation mechanisms of titanium dioxide during combustion synthesis: Observation with an API-TOF. <i>Aerosol Science and Technology</i> , 2017, 51, 1071-1081.	1.5	14
137	Measurement of sub-2 nm stable clusters during silane pyrolysis in a furnace aerosol reactor. <i>Journal of Chemical Physics</i> , 2020, 152, 024304.	1.2	14
138	An Inversion Technique to Determine the Aerosol Size Distribution in Multicomponent Systems from In Situ Light Scattering Measurements. <i>Aerosol Science and Technology</i> , 1995, 22, 24-32.	1.5	13
139	Model based prediction of nanostructured thin film morphology in an aerosol chemical vapor deposition process. <i>Chemical Engineering Journal</i> , 2017, 310, 102-113.	6.6	13
140	Optimization of disinfectant dosage for simultaneous control of lead and disinfection-byproducts in water distribution networks. <i>Journal of Environmental Management</i> , 2020, 276, 111186.	3.8	13
141	Gold nanocage coupled single crystal TiO ₂ nanostructures for near-infrared water photolysis. <i>Journal of Nanoparticle Research</i> , 2014, 16, 1.	0.8	12
142	Mobility and Bipolar Diffusion Charging Characteristics of Crumpled Reduced Graphene Oxide Nanoparticles Synthesized in a Furnace Aerosol Reactor. <i>Journal of Physical Chemistry C</i> , 2017, 121, 10529-10537.	1.5	12
143	Sub-2 nm particle measurement in high-temperature aerosol reactors: a review. <i>Current Opinion in Chemical Engineering</i> , 2018, 21, 60-66.	3.8	12
144	Single-step growth of CuInS ₂ nanospheres morphology thin films by electrospray chemical aerosol deposition technique. <i>Materials Letters</i> , 2019, 238, 206-209.	1.3	12

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145	Plasmonic Au Nanoparticles Sensitized MoS ₂ , for Bifunctional NO ₂ , and Light Sensing. IEEE Sensors Journal, 2021, 21, 4190-4197.	2.4	12
146	Zinc-functionalized thymol nanoemulsion for promoting soybean yield. Plant Physiology and Biochemistry, 2019, 145, 64-74.	2.8	11
147	Modeling simultaneous coagulation and charging of nanoparticles at high temperatures using the method of moments. Journal of Aerosol Science, 2019, 132, 70-82.	1.8	11
148	Superconducting Properties of Aerosol-Generated YBa ₂ Cu ₃ O ₇₋₈ Powders. Journal of the American Ceramic Society, 1993, 76, 678-682.	1.9	10
149	A modeling study of anaerobic biofilm systems: II. Reactor modeling. Biotechnology and Bioengineering, 1995, 46, 54-61.	1.7	10
150	Enhancing charging and capture efficiency of aerosol nanoparticles using an atmospheric-pressure, flow-through RF plasma with a downstream DC bias. Aerosol Science and Technology, 2020, 54, 1249-1254.	1.5	10
151	The prediction of size and charge of particles formed from evaporation of charged droplets generated in an electrospray system. Chemical Engineering Science, 2021, 231, 116237.	1.9	10
152	U.S.'s China Collaboration is Vital to Global Plans for a Healthy Environment and Sustainable Development. Environmental Science & Technology, 2021, 55, 9622-9626.	4.6	10
153	Nano-Structured Sorbent Injection Strategies for Heavy Metal Capture in Combustion Exhausts. Aerosol Science and Technology, 2010, 44, 676-691.	1.5	9
154	Room temperature gas sensing mechanism of SnO ₂ towards chloroform: Comparing first principles calculations with sensing experiments. Applied Surface Science, 2021, 554, 149603.	3.1	9
155	Deployment of networked low-cost sensors and comparison to real-time stationary monitors in New Delhi. Journal of the Air and Waste Management Association, 2021, 71, 1347-1360.	0.9	9
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