

# Pratim Biswas

## List of Publications by Year in descending order

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185  
papers

14,989  
citations

25034

57  
h-index

19190

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.	1.9	1,406
2	Assessing the Risks of Manufactured Nanomaterials. <i>Environmental Science &amp; Technology</i> , 2006, 40, 4336-4345.	10.0	1,018
3	Size and Structure Matter: Enhanced CO <sub>2</sub> Photoreduction Efficiency by Size-Resolved Ultrafine Pt Nanoparticles on TiO <sub>2</sub> Single Crystals. <i>Journal of the American Chemical Society</i> , 2012, 134, 11276-11281.	13.7	691
4	Nanoparticles and the Environment. <i>Journal of the Air and Waste Management Association</i> , 2005, 55, 708-746.	1.9	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.	5.7	533
6	Wood's Graphene Oxide Composite for Highly Efficient Solar Steam Generation and Desalination. <i>ACS Applied Materials &amp; Interfaces</i> , 2017, 9, 7675-7681.	8.0	505
7	Bilayered Biofoam for Highly Efficient Solar Steam Generation. <i>Advanced Materials</i> , 2016, 28, 9400-9407.	21.0	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.	2.4	423
9	Role of Synthesis Method and Particle Size of Nanostructured TiO <sub>2</sub> on Its Photoactivity. <i>Journal of Catalysis</i> , 2002, 212, 145-156.	6.2	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.	5.2	416
11	Does nanoparticle activity depend upon size and crystal phase?. <i>Nanotoxicology</i> , 2008, 2, 33-42.	3.0	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.	7.5	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.	3.1	306
14	TiO <sub>2</sub> nanoparticle biosynthesis and its physiological effect on mung bean ( <i>Vigna radiata</i> L.). <i>Biotechnology Reports (Amsterdam, Netherlands)</i> , 2015, 5, 22-26.	4.4	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.	31.2	249
16	Nanoparticle synthesis and delivery by an aerosol route for watermelon plant foliar uptake. <i>Journal of Nanoparticle Research</i> , 2013, 15, 1.	1.9	211
17	Quantitative Understanding of Nanoparticle Uptake in Watermelon Plants. <i>Frontiers in Plant Science</i> , 2016, 7, 1288.	3.6	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.	5.2	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.	5.2	192
20	Experimental and theoretical studies of ultra-fine particle behavior in electrostatic precipitators. Journal of Electrostatics, 2000, 48, 245-260.	1.9	181
21	Single-step processing of copper-doped titania nanomaterials in a flame aerosol reactor. Nanoscale Research Letters, 2011, 6, 441.	5.7	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.	1.9	147
23	Combined Charged Residue-Field Emission Model of Macromolecular Electrospray Ionization. Analytical Chemistry, 2009, 81, 369-377.	6.5	146
24	Nanostructured TiO <sub>2</sub> 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.	3.1	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.	8.0	137
26	N-doped reduced graphene oxide promoted nano TiO <sub>2</sub> as a bifunctional adsorbent/photocatalyst for CO <sub>2</sub> photoreduction: Effect of N species. Chemical Engineering Journal, 2017, 316, 449-460.	12.7	129
27	Kinetics of Titanium(IV) Chloride Oxidation. Journal of the American Ceramic Society, 1990, 73, 2158-2162.	3.8	124
28	Predicting the Band Structure of Mixed Transition Metal Oxides: Theory and Experiment. Journal of Physical Chemistry C, 2009, 113, 2014-2021.	3.1	116
29	Gas treatment in trickle-bed biofilters: Biomass, how much is enough?. Biotechnology and Bioengineering, 1997, 54, 583-594.	3.3	111
30	Engineered Crumpled Graphene Oxide Nanocomposite Membrane Assemblies for Advanced Water Treatment Processes. Environmental Science & Technology, 2015, 49, 6846-6854.	10.0	108
31	Evaporation-Induced Crumpling of Graphene Oxide Nanosheets in Aerosolized Droplets: Confinement Force Relationship. Journal of Physical Chemistry Letters, 2012, 3, 3228-3233.	4.6	104
32	Graphene Oxides in Water: Correlating Morphology and Surface Chemistry with Aggregation Behavior. Environmental Science & Technology, 2016, 50, 6964-6973.	10.0	101
33	Engineering stable Pt nanoparticles and oxygen vacancies on defective TiO <sub>2</sub> via introducing strong electronic metal-support interaction for efficient CO <sub>2</sub> photoreduction. Chemical Engineering Journal, 2020, 389, 123450.	12.7	99
34	Evaluation of Trickle Bed Biofilter Media for Toluene Removal. Journal of the Air and Waste Management Association, 1995, 45, 801-810.	1.9	97
35	Rapid synthesis of nanostructured Cu@TiO <sub>2</sub> @SiO <sub>2</sub> composites for CO <sub>2</sub> photoreduction by evaporation driven self-assembly. Catalysis Science and Technology, 2011, 1, 593.	4.1	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.	4.6	87

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37	Facile Aerosol Synthesis and Characterization of Ternary Crumpled Graphene@TiO <sub>2</sub> Magnetite Nanocomposites for Advanced Water Treatment. ACS Applied Materials & Interfaces, 2014, 6, 11766-11774.	8.0	86
38	Controlled size polymer particle production via electrohydrodynamic atomization. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2007, 311, 67-76.	4.7	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.	2.6	83
40	Processing of iron-doped titania powders in flame aerosol reactors. Powder Technology, 2001, 114, 197-204.	4.2	82
41	Sensing mechanism of ethanol and acetone at room temperature by SnO <sub>2</sub> nano-columns synthesized by aerosol routes: theoretical calculations compared to experimental results. Journal of Materials Chemistry A, 2018, 6, 2053-2066.	10.3	82
42	Optimizing the Synthesis of Red-Emissive Nitrogen-Doped Carbon Dots for Use in Bioimaging. ACS Applied Nano Materials, 2018, 1, 3682-3692.	5.0	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.	5.8	78
44	One-step synthesis of noble metal-titanium dioxide nanocomposites in a flame aerosol reactor. Applied Catalysis A: General, 2008, 345, 241-246.	4.3	77
45	Spatiotemporal distribution of indoor particulate matter concentration with a low-cost sensor network. Building and Environment, 2018, 127, 138-147.	6.9	77
46	Evaluation of Nine Low-cost-sensor-based Particulate Matter Monitors. Aerosol and Air Quality Research, 2020, 20, 254-270.	2.1	77
47	Nanostructured photoactive films synthesized by a flame aerosol reactor. AIChE Journal, 2007, 53, 1727-1735.	3.6	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.	2.6	73
49	Perspective on Nanoparticle Technology for Biomedical Use. Current Pharmaceutical Design, 2016, 22, 2481-2490.	1.9	69
50	Biocompatibility of gold nanoparticles in retinal pigment epithelial cell line. Toxicology in Vitro, 2016, 37, 61-69.	2.4	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.	4.3	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.	7.5	64
53	ZnO <sub>1-x</sub> /carbon dots composite hollow spheres: Facile aerosol synthesis and superior CO <sub>2</sub> photoreduction under UV, visible and near-infrared irradiation. Applied Catalysis B: Environmental, 2018, 230, 36-48.	20.2	62
54	Flexible solid-state supercapacitor based on tin oxide/reduced graphene oxide/bacterial nanocellulose. RSC Advances, 2018, 8, 31296-31302.	3.6	62

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55	Integrating low-cost air quality sensor networks with fixed and satellite monitoring systems to study ground-level PM <sub>2.5</sub> . <i>Atmospheric Environment</i> , 2020, 223, 117293.	4.1	61
56	Green Synthesis of TiO <sub>2</sub> 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.	2.6	58
58	Chitosan nanofertilizer to foster source activity in maize. <i>International Journal of Biological Macromolecules</i> , 2020, 145, 226-234.	7.5	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.	2.6	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.	3.8	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.	10.3	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.	19.5	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.	3.1	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.	3.1	48
65	Non-invasive aerosol delivery and transport of gold nanoparticles to the brain. <i>Scientific Reports</i> , 2017, 7, 44718.	3.3	48
66	KBaTeBiO <sub>6</sub> : A Lead-Free, Inorganic Double-Perovskite Semiconductor for Photovoltaic Applications. <i>Chemistry of Materials</i> , 2019, 31, 4769-4778.	6.7	46
67	SnO <sub>2</sub> Nanostructured Thin Films for Room-Temperature Gas Sensing of Volatile Organic Compounds. <i>ACS Applied Materials &amp; Interfaces</i> , 2018, 10, 29972-29981.	8.0	44
68	Optical Characterization Studies of a Low-Cost Particle Sensor. <i>Aerosol and Air Quality Research</i> , 2017, 17, 1691-1704.	2.1	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.	3.1	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.	10.3	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 &amp; Technology</i> , 2011, 45, 2428-2434.	10.0	40
72	Porous Film Deposition by Electrohydrodynamic Atomization of Nanoparticle Sols. <i>Aerosol Science and Technology</i> , 2008, 42, 75-85.	3.1	39

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73	Synthesis of visible light-active nanostructured TiO <sub>2</sub> photocatalysts in a flame aerosol reactor. <i>Applied Catalysis B: Environmental</i> , 2009, 86, 145-151.	20.2	39
74	Model for nanoparticle charging by diffusion, direct photoionization, and thermionization mechanisms. <i>Journal of Electrostatics</i> , 2007, 65, 209-220.	1.9	37
75	Photochemically assisted fast abiotic oxidation of manganese and formation of MnO <sub>2</sub> nanosheets in nitrate solution. <i>Chemical Communications</i> , 2017, 53, 4445-4448.	4.1	37
76	Multicomponent Aerosol Dynamics of the Pb-O <sub>2</sub> System in a Bench Scale Flame Incinerator. <i>Aerosol Science and Technology</i> , 1992, 17, 119-133.	3.1	36
77	Monte carlo simulation of macromolecular ionization by nanoelectrospray. <i>Journal of the American Society for Mass Spectrometry</i> , 2008, 19, 1098-1107.	2.8	36
78	Modeling Soluble and Particulate Lead Release into Drinking Water from Full and Partially Replaced Lead Service Lines. <i>Environmental Science &amp; Technology</i> , 2017, 51, 3318-3326.	10.0	35
79	Narrow size distribution nanoparticle production by electrospray processing of ferritin. <i>Journal of Aerosol Science</i> , 2008, 39, 432-440.	3.8	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.	7.5	34
81	A modeling study of anaerobic biofilm systems: I. Detailed biofilm modeling. <i>Biotechnology and Bioengineering</i> , 1995, 46, 43-53.	3.3	33
82	Comparison of HgO capture efficiencies of three in situ generated sorbents. <i>AIChE Journal</i> , 2001, 47, 954-961.	3.6	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.	4.1	33
84	Hyaluronate coating enhances the delivery and biocompatibility of gold nanoparticles. <i>Carbohydrate Polymers</i> , 2018, 186, 243-251.	10.2	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.	3.8	31
86	Relationship between pyrolysis products and organic aerosols formed during coal combustion. <i>Proceedings of the Combustion Institute</i> , 2015, 35, 2347-2354.	3.9	31
87	Environmentally benign bio-inspired synthesis of Au nanoparticles, their self-assembly and agglomeration. <i>RSC Advances</i> , 2015, 5, 42081-42087.	3.6	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.	5.2	31
89	Charged Droplet Dynamics in the Submicrometer Size Range. <i>Journal of Physical Chemistry B</i> , 2009, 113, 970-976.	2.6	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.	3.9	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.	4.5	27
92	Characterization of particle charging in low-temperature, atmospheric-pressure, flow-through plasmas. Journal Physics D: Applied Physics, 2020, 53, 245204.	2.8	27
93	Using Kriging incorporated with wind direction to investigate ground-level PM2.5 concentration. Science of the Total Environment, 2021, 751, 141813.	8.0	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.	1.9	26
95	Aerosolized Droplet Mediated Self-Assembly of Photosynthetic Pigment Analogues and Deposition onto Substrates. ACS Nano, 2014, 8, 1429-1438.	14.6	26
96	Osteotropic Radiolabeled Nanophotosensitizer for Imaging and Treating Multiple Myeloma. ACS Nano, 2020, 14, 4255-4264.	14.6	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.	9.4	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.	1.6	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.	6.5	25
100	Kinetics of sub-20 nm TiO <sub>2</sub> particle formation in an aerosol reactor during thermal decomposition of titanium tetraisopropoxide. Journal of Nanoparticle Research, 2015, 17, 1.	1.9	25
101	High-performance photodetector based on hybrid of MoS <sub>2</sub> and reduced graphene oxide. Nanotechnology, 2018, 29, 404001.	2.6	25
102	NO <sub>2</sub> gas sensing performance enhancement based on reduced graphene oxide decorated V <sub>2</sub> O <sub>5</sub> thin films. Nanotechnology, 2019, 30, 224001.	2.6	25
103	Impaction and Rebound of Particles at Acute Incident Angles. Aerosol Science and Technology, 1993, 18, 143-155.	3.1	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.	3.1	24
105	Real-Time Particulate and CO Concentrations from Cookstoves in Rural Households in Udaipur, India. Environmental Science & Technology, 2015, 49, 7423-7431.	10.0	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.	16.4	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.	10.0	24
108	Particle Growth by Condensation in a System with Limited Vapor. Aerosol Science and Technology, 1998, 28, 1-20.	3.1	23



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109	Highly Stable Perovskite Solar Cells Fabricated Under Humid Ambient Conditions. IEEE Journal of Photovoltaics, 2017, 7, 532-538.	2.5	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.	3.1	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.	2.8	23
112	Mini Review on Gas-Phase Synthesis for Energy Nanomaterials. Energy & Fuels, 2021, 35, 63-85.	5.1	23
113	Deposition of lognormally distributed aerosols accounting for simultaneous diffusion, thermophoresis and coagulation. Journal of Aerosol Science, 1990, 21, 629-640.	3.8	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.	3.7	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.	3.8	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.	1.9	21
117	Engineering the outermost layers of TiO <sub>2</sub> nanoparticles using <i>in situ</i> Mg doping in a flame aerosol reactor. AIChE Journal, 2017, 63, 870-880.	3.6	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.	6.7	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.	3.9	20
120	Hierarchical architecture of CuInS <sub>2</sub> microsphere thin films: altering laterally aligned crystallographic plane growth by Cd and V doping. CrystEngComm, 2017, 19, 6602-6611.	2.6	18
121	Crumpled graphene oxide decorated SnO <sub>2</sub> nanocolumns for the electrochemical detection of free chlorine. Applied Nanoscience (Switzerland), 2017, 7, 645-653.	3.1	18
122	Boosting Sensing Performance of Vacancy-Containing Vertically Aligned MoS <sub>2</sub> Using rGO Particles. IEEE Sensors Journal, 2019, 19, 10214-10220.	4.7	18
123	Exciton Binding Energy of MAPbI <sub>3</sub> 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.	3.1	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.	1.9	17
125	Deposition of Multifunctional Titania Ceramic Films by Aerosol Routes. Journal of the American Ceramic Society, 1999, 82, 2573-2579.	3.8	17
126	One-Dimensional, Additive-Free, Single-Crystal TiO <sub>2</sub> Nanostructured Anodes Synthesized by a Single-Step Aerosol Process for High-Rate Lithium-Ion Batteries. Energy Technology, 2014, 2, 906-911.	3.8	17



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127	Design of Cerenkov Radiation-Assisted Photoactivation of TiO <sub>2</sub> Nanoparticles and Reactive Oxygen Species Generation for Cancer Treatment. <i>Journal of Nuclear Medicine</i> , 2019, 60, 702-709.	5.0	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.	2.2	16
129	Thermal conduction effects impacting morphology during synthesis of columnar nanostructured TiO <sub>2</sub> 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.	4.6	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.	3.1	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.	3.9	15
133	Highly conductive PEDOT films with enhanced catalytic activity for dye-sensitized solar cells. <i>Solar Energy</i> , 2020, 211, 258-264.	6.1	15
134	In Situ Charge Characterization of TiO <sub>2</sub> and Cu-TiO <sub>2</sub> Nanoparticles in a Flame Aerosol Reactor. <i>Journal of Nanoparticle Research</i> , 2012, 14, 1.	1.9	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.	6.4	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.	3.1	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.	3.0	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.	3.1	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.	12.7	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.	7.8	13
141	Gold nanocage coupled single crystal TiO <sub>2</sub> nanostructures for near-infrared water photolysis. <i>Journal of Nanoparticle Research</i> , 2014, 16, 1.	1.9	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.	3.1	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.	7.8	12
144	Single-step growth of CuInS <sub>2</sub> nanospheres morphology thin films by electrospray chemical aerosol deposition technique. <i>Materials Letters</i> , 2019, 238, 206-209.	2.6	12

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145	Plasmonic Au Nanoparticles Sensitized MoS <sub>2</sub> , for Bifunctional NO <sub>2</sub> , and Light Sensing. IEEE Sensors Journal, 2021, 21, 4190-4197.	4.7	12
146	Zinc-functionalized thymol nanoemulsion for promoting soybean yield. Plant Physiology and Biochemistry, 2019, 145, 64-74.	5.8	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.	3.8	11
148	Superconducting Properties of Aerosol-Generated YBa <sub>2</sub> Cu <sub>3</sub> O <sub>7-8</sub> Powders. Journal of the American Ceramic Society, 1993, 76, 678-682.	3.8	10
149	A modeling study of anaerobic biofilm systems: II. Reactor modeling. Biotechnology and Bioengineering, 1995, 46, 54-61.	3.3	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.	3.1	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.	3.8	10
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