

Sotiris E Pratsinis

List of Publications by Year in descending order

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333
papers

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citations

2963

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8599

146
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340
all docs

340
docs citations

340
times ranked

19509
citing authors

#	ARTICLE	IF	CITATIONS
1	Flame aerosol synthesis of ceramic powders. Progress in Energy and Combustion Science, 1998, 24, 197-219.	15.8	766
2	Antibacterial Activity of Nanosilver Ions and Particles. Environmental Science & Technology, 2010, 44, 5649-5654.	4.6	735
3	Si:WO ₃ Sensors for Highly Selective Detection of Acetone for Easy Diagnosis of Diabetes by Breath Analysis. Analytical Chemistry, 2010, 82, 3581-3587.	3.2	556
4	Flame aerosol synthesis of smart nanostructured materials. Journal of Materials Chemistry, 2007, 17, 4743.	6.7	505
5	Simultaneous nucleation, condensation, and coagulation in aerosol reactors. Journal of Colloid and Interface Science, 1988, 124, 416-427.	5.0	487
6	OH Surface Density of SiO ₂ and TiO ₂ by Thermogravimetric Analysis. Langmuir, 2003, 19, 160-165.	1.6	449
7	Breath analysis by nanostructured metal oxides as chemo-resistive gas sensors. Materials Today, 2015, 18, 163-171.	8.3	393
8	Flame Synthesis of Nanoparticles. Chemical Engineering and Technology, 2001, 24, 583-596.	0.9	380
9	Nanoparticle synthesis at high production rates by flame spray pyrolysis. Chemical Engineering Science, 2003, 58, 1969-1976.	1.9	353
10	Flame-made Ceria Nanoparticles. Journal of Materials Research, 2002, 17, 1356-1362.	1.2	341
11	Ferroelectric WO ₃ Nanoparticles for Acetone Selective Detection. Chemistry of Materials, 2008, 20, 4794-4796.	3.2	328
12	A Simple Model for the Evolution of the Characteristics of Aggregate Particles Undergoing Coagulation and Sintering. Aerosol Science and Technology, 1993, 19, 514-526.	1.5	325
13	Coagulation and fragmentation: Universal steady-state particle-size distribution. AIChE Journal, 1996, 42, 1612-1620.	1.8	287
14	A discrete-sectional model for particulate production by gas-phase chemical reaction and aerosol coagulation in the free-molecular regime. Journal of Colloid and Interface Science, 1990, 139, 63-86.	5.0	260
15	An Integrated Microrobotic Platform for On-Demand, Targeted Therapeutic Interventions. Advanced Materials, 2014, 26, 952-957.	11.1	259
16	Breath acetone monitoring by portable Si:WO ₃ gas sensors. Analytica Chimica Acta, 2012, 738, 69-75.	2.6	256
17	Aerosol flame synthesis of catalysts. Advanced Powder Technology, 2006, 17, 457-480.	2.0	244
18	Breath Sensors for Health Monitoring. ACS Sensors, 2019, 4, 268-280.	4.0	244

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19	Formation of agglomerate particles by coagulation and sintering Part I. A two-dimensional solution of the population balance equation. <i>Journal of Aerosol Science</i> , 1993, 24, 283-300.	1.8	238
20	Highly selective detection of methanol over ethanol by a handheld gas sensor. <i>Nature Communications</i> , 2019, 10, 4220.	5.8	215
21	Flame-Made Durable Doped-CaO Nanosorbents for CO ₂ Capture. <i>Energy & Fuels</i> , 2009, 23, 1093-1100.	2.5	209
22	Homogeneous ZnO Nanoparticles by Flame Spray Pyrolysis. <i>Journal of Nanoparticle Research</i> , 2002, 4, 337-343.	0.8	208
23	Optimal Doping for Enhanced SnO ₂ Sensitivity and Thermal Stability. <i>Advanced Functional Materials</i> , 2008, 18, 1969-1976.	7.8	193
24	Direct synthesis of maghemite, magnetite and wustite nanoparticles by flame spray pyrolysis. <i>Advanced Powder Technology</i> , 2009, 20, 190-194.	2.0	191
25	The role of gas mixing in flame synthesis of titania powders. <i>Powder Technology</i> , 1996, 86, 87-93.	2.1	189
26	Self-preserving size distributions of agglomerates. <i>Journal of Aerosol Science</i> , 1995, 26, 175-185.	1.8	184
27	Toxicity of Silver Nanoparticles in Macrophages. <i>Small</i> , 2013, 9, 2576-2584.	5.2	184
28	Flame sprayed visible light-active Fe-TiO ₂ for photomineralisation of oxalic acid. <i>Catalysis Today</i> , 2007, 120, 203-213.	2.2	183
29	E-Nose Sensing of Low-ppb Formaldehyde in Gas Mixtures at High Relative Humidity for Breath Screening of Lung Cancer? <i>ACS Sensors</i> , 2016, 1, 528-535.	4.0	176
30	Direct (one-step) synthesis of Si_3O_4 nanoparticles. <i>Chemical Engineering</i> , 2016, 223, 266-273.	1.9	175
31	Selective sensing of NH ₃ by Si-doped ZrO_2 -MoO ₃ for breath analysis. <i>Sensors and Actuators B: Chemical</i> , 2016, 223, 266-273.	4.0	175
32	Soft- and Hard-Agglomerate Aerosols Made at High Temperatures. <i>Langmuir</i> , 2004, 20, 5933-5939.	1.6	174
33	Fluoro-apatite and Calcium Phosphate Nanoparticles by Flame Synthesis. <i>Chemistry of Materials</i> , 2005, 17, 36-42.	3.2	174
34	Quantifying the Origin of Released Ag ⁺ Ions from Nanosilver. <i>Langmuir</i> , 2012, 28, 15929-15936.	1.6	174
35	Dopants in Vapor-Phase Synthesis of Titania Powders. <i>Journal of the American Ceramic Society</i> , 1992, 75, 3408-3416.	1.9	169
36	Gas phase production of particles in reactive turbulent flows. <i>Journal of Aerosol Science</i> , 1991, 22, 637-655.	1.8	161

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37	Synthesis of catalytic materials in flames: opportunities and challenges. <i>Chemical Society Reviews</i> , 2016, 45, 3053-3068.	18.7	161
38	Hybrid, Silica-Coated, Janus-Like Plasmonic-Magnetic Nanoparticles. <i>Chemistry of Materials</i> , 2011, 23, 1985-1992.	3.2	158
39	Laminar and turbulent shear-induced flocculation of fractal aggregates. <i>AIChE Journal</i> , 1999, 45, 1114-1124.	1.8	157
40	Iron from nanocompounds containing iron and zinc is highly bioavailable in rats without tissue accumulation. <i>Nature Nanotechnology</i> , 2010, 5, 374-380.	15.6	156
41	Effect of Zirconia Doping on the Structure and Stability of CaO-Based Sorbents for CO ₂ Capture during Extended Operating Cycles. <i>Journal of Physical Chemistry C</i> , 2011, 115, 24804-24812.	1.5	156
42	Flame Aerosol Synthesis of Vanadia-Titania Nanoparticles: Structural and Catalytic Properties in the Selective Catalytic Reduction of NO by NH ₃ . <i>Journal of Catalysis</i> , 2001, 197, 182-191.	3.1	155
43	Engineering nanosilver as an antibacterial, biosensor and bioimaging material. <i>Current Opinion in Chemical Engineering</i> , 2011, 1, 3-10.	3.8	154
44	Flame-made platinum/alumina: structural properties and catalytic behaviour in enantioselective hydrogenation. <i>Journal of Catalysis</i> , 2003, 213, 296-304.	3.1	153
45	Bismuth Oxide Nanoparticles by Flame Spray Pyrolysis. <i>Journal of the American Ceramic Society</i> , 2002, 85, 1713-1718.	1.9	153
46	Fractal Analysis of Flame-Synthesized Nanostructured Silica and Titania Powders Using Small-Angle X-ray Scattering. <i>Langmuir</i> , 1998, 14, 5751-5756.	1.6	149
47	Vapor synthesis of titania powder by titanium tetrachloride oxidation. <i>AIChE Journal</i> , 1991, 37, 1561-1570.	1.8	148
48	Rapid synthesis of stable ZnO quantum dots. <i>Journal of Applied Physics</i> , 2002, 92, 6537-6540.	1.1	146
49	Anti-Fogging Nanofibrous SiO ₂ and Nanostructured SiO ₂ -TiO ₂ Films Made by Rapid Flame Deposition and In Situ Annealing. <i>Langmuir</i> , 2009, 25, 12578-12584.	1.6	146
50	Design of Nanomaterial Synthesis by Aerosol Processes. <i>Annual Review of Chemical and Biomolecular Engineering</i> , 2012, 3, 103-127.	3.3	143
51	Nanorods of ZnO Made by Flame Spray Pyrolysis. <i>Chemistry of Materials</i> , 2006, 18, 572-578.	3.2	141
52	Zirconia Nanoparticles Made in Spray Flames at High Production Rates. <i>Journal of the American Ceramic Society</i> , 2004, 87, 197-202.	1.9	133
53	Dopants in Flame Synthesis of Titania. <i>Journal of the American Ceramic Society</i> , 1995, 78, 2984-2992.	1.9	132
54	Computational fluid-particle dynamics for the flame synthesis of alumina particles. <i>Chemical Engineering Science</i> , 2000, 55, 177-191.	1.9	130

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55	Micropatterning Layers by Flame Aerosol Deposition–Annealing. <i>Advanced Materials</i> , 2008, 20, 3005-3010.	11.1	130
56	Scale-up of nanoparticle synthesis in diffusion flame reactors. <i>Chemical Engineering Science</i> , 2003, 58, 4581-4589.	1.9	129
57	Antioxidant and Antiradical SiO ₂ Nanoparticles Covalently Functionalized with Gallic Acid. <i>ACS Applied Materials & Interfaces</i> , 2012, 4, 6609-6617.	4.0	129
58	Scale-up of Nanoparticle Synthesis by Flame Spray Pyrolysis: The High-Temperature Particle Residence Time. <i>Industrial & Engineering Chemistry Research</i> , 2014, 53, 10734-10742.	1.8	125
59	Flame synthesis of functional nanostructured materials and devices: Surface growth and aggregation. <i>Proceedings of the Combustion Institute</i> , 2017, 36, 29-50.	2.4	125
60	Kinetics of Titanium(IV) Chloride Oxidation. <i>Journal of the American Ceramic Society</i> , 1990, 73, 2158-2162.	1.9	124
61	Agglomerates and aggregates of nanoparticles made in the gas phase. <i>Advanced Powder Technology</i> , 2014, 25, 71-90.	2.0	124
62	Flame synthesis of nanocrystalline ceria–zirconia: effect of carrier liquid. <i>Chemical Communications</i> , 2003, , 588-589.	2.2	122
63	Aggregate morphology evolution by sintering: Number and diameter of primary particles. <i>Journal of Aerosol Science</i> , 2012, 46, 7-19.	1.8	122
64	Hermetically Coated Superparamagnetic Fe ₂ O ₃ Particles with SiO ₂ Nanofilms. <i>Chemistry of Materials</i> , 2009, 21, 2094-2100.	3.2	120
65	Sintering Rate and Mechanism of TiO ₂ Nanoparticles by Molecular Dynamics. <i>Journal of Physical Chemistry C</i> , 2011, 115, 11030-11035.	1.5	120
66	Non–toxic Dry–Coated Nanosilver for Plasmonic Biosensors. <i>Advanced Functional Materials</i> , 2010, 20, 4250-4257.	7.8	119
67	Nanosilver on nanostructured silica: Antibacterial activity and Ag surface area. <i>Chemical Engineering Journal</i> , 2011, 170, 547-554.	6.6	118
68	Formation of agglomerate particles by coagulation and sintering–Part II. The evolution of the morphology of aerosol-made titania, silica and silica-doped titania powders. <i>Journal of Aerosol Science</i> , 1993, 24, 301-313.	1.8	117
69	Cubic or monoclinic Y ₂ O ₃ :Eu ³⁺ nanoparticles by one step flame spray pyrolysis. <i>Chemical Physics Letters</i> , 2005, 415, 193-197.	1.2	112
70	Fragmentation and restructuring of soft-agglomerates under shear. <i>Journal of Colloid and Interface Science</i> , 2010, 342, 261-268.	5.0	109
71	Flame-made Alumina Supported Pd–Pt Nanoparticles: Structural Properties and Catalytic Behavior in Methane Combustion. <i>Catalysis Letters</i> , 2005, 104, 9-16.	1.4	108
72	Dispersed nanoelectrode devices. <i>Nature Nanotechnology</i> , 2010, 5, 54-60.	15.6	107

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73	<i>In Situ</i> Coating of Flame-Made TiO ₂ Particles with Nanothin SiO ₂ Films. <i>Langmuir</i> , 2008, 24, 12553-12558.	1.6	106
74	Minimal cross-sensitivity to humidity during ethanol detection by SnO ₂ –TiO ₂ solid solutions. <i>Nanotechnology</i> , 2009, 20, 315502.	1.3	106
75	Aerosol-based technologies in nanoscale manufacturing: from functional materials to devices through core chemical engineering. <i>AIChE Journal</i> , 2010, 56, 3028-3035.	1.8	106
76	Effect of reaction temperature on CVD-made TiO ₂ primary particle diameter. <i>Chemical Engineering Science</i> , 2003, 58, 3327-3335.	1.9	105
77	Structure of Flame-Made Silica Nanoparticles by Ultra-Small-Angle X-ray Scattering. <i>Langmuir</i> , 2004, 20, 1915-1921.	1.6	105
78	Flame-made Nb- and Cu-doped TiO ₂ sensors for CO and ethanol. <i>Sensors and Actuators B: Chemical</i> , 2008, 130, 449-457.	4.0	105
79	Titania formation by TiCl ₄ gas phase oxidation, surface growth and coagulation. <i>Journal of Aerosol Science</i> , 2002, 33, 17-34.	1.8	104
80	Probing the dynamics of nanoparticle growth in a flame using synchrotron radiation. <i>Nature Materials</i> , 2004, 3, 370-373.	13.3	103
81	Synthesis, Characterization, and Bioavailability in Rats of Ferric Phosphate Nanoparticles. <i>Journal of Nutrition</i> , 2007, 137, 614-619.	1.3	102
82	The Structure of Agglomerates Consisting of Polydisperse Particles. <i>Aerosol Science and Technology</i> , 2012, 46, 347-353.	1.5	100
83	Monitoring the flame synthesis of TiO ₂ particles by in-situ FTIR spectroscopy and thermophoretic sampling. <i>Combustion and Flame</i> , 2001, 124, 560-572.	2.8	99
84	Photothermal Killing of Cancer Cells by the Controlled Plasmonic Coupling of Silica-Coated Au/Fe ₂ O ₃ Nanoaggregates. <i>Advanced Functional Materials</i> , 2014, 24, 2818-2827.	7.8	99
85	Selective sensing of isoprene by Ti-doped ZnO for breath diagnostics. <i>Journal of Materials Chemistry B</i> , 2016, 4, 5358-5366.	2.9	99
86	Pd Subnano-Clusters on TiO ₂ for Solar-Light Removal of NO. <i>ACS Catalysis</i> , 2016, 6, 1887-1893.	5.5	99
87	Single Pd atoms on TiO ₂ dominate photocatalytic NO _x removal. <i>Applied Catalysis B: Environmental</i> , 2018, 226, 127-134.	10.8	99
88	Design of metal nanoparticle synthesis by vapor flow condensation. <i>Chemical Engineering Science</i> , 2002, 57, 1753-1762.	1.9	98
89	Multiparticle Sintering Dynamics: From Fractal-Like Aggregates to Compact Structures. <i>Langmuir</i> , 2011, 27, 6358-6367.	1.6	98
90	In Situ EPR Study of the Redox Properties of CuO–CeO ₂ Catalysts for Preferential CO Oxidation (PROX). <i>ACS Catalysis</i> , 2016, 6, 3520-3530.	5.5	97

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91	Gas-phase manufacture of particulates: interplay of chemical reaction and aerosol coagulation in the free-molecular regime. <i>Industrial & Engineering Chemistry Research</i> , 1989, 28, 1474-1481.	1.8	96
92	Criteria for Flame-Spray Synthesis of Hollow, Shell-Like, or Inhomogeneous Oxides. <i>Journal of the American Ceramic Society</i> , 2005, 88, 1388-1393.	1.9	96
93	Hydrothermal stability of pure and modified microporous silica membranes. <i>Journal of Materials Science</i> , 1995, 30, 2803-2808.	1.7	95
94	Correlations between blood glucose and breath components from portable gas sensors and PTR-TOF-MS. <i>Journal of Breath Research</i> , 2013, 7, 037110.	1.5	95
95	Adsorption and activation of molecular oxygen over atomic copper(I/II) site on ceria. <i>Nature Communications</i> , 2020, 11, 4008.	5.8	95
96	Reactive polycyclic aromatic hydrocarbon dimerization drives soot nucleation. <i>Physical Chemistry Chemical Physics</i> , 2018, 20, 10926-10938.	1.3	93
97	Structure & strength of silica-PDMS nanocomposites. <i>Polymer</i> , 2010, 51, 1796-1804.	1.8	92
98	Noninvasive Body Fat Burn Monitoring from Exhaled Acetone with Si-doped WO_3 -sensing Nanoparticles. <i>Analytical Chemistry</i> , 2017, 89, 10578-10584.	3.2	92
99	Computational analysis of coagulation and coalescence in the flame synthesis of titania particles. <i>Powder Technology</i> , 2001, 118, 242-250.	2.1	91
100	Sniffing Entrapped Humans with Sensor Arrays. <i>Analytical Chemistry</i> , 2018, 90, 4940-4945.	3.2	91
101	Simultaneous deposition of Au nanoparticles during flame synthesis of TiO_2 and SiO_2 . <i>Journal of Materials Research</i> , 2003, 18, 115-120.	1.2	89
102	Flame-made nanoparticles for nanocomposites. <i>Nano Today</i> , 2010, 5, 48-65.	6.2	89
103	Fluid-particle dynamics during combustion spray aerosol synthesis of ZrO_2 . <i>Chemical Engineering Journal</i> , 2012, 191, 491-502.	6.6	89
104	Zeolite membranes for highly selective formaldehyde sensors. <i>Sensors and Actuators B: Chemical</i> , 2018, 257, 916-923.	4.0	89
105	Competition between gas phase and surface oxidation of $TiCl_4$ during synthesis of TiO_2 particles. <i>Chemical Engineering Science</i> , 1998, 53, 1861-1868.	1.9	88
106	Nozzle-quenching process for controlled flame synthesis of titania nanoparticles. <i>AIChE Journal</i> , 2003, 49, 1667-1675.	1.8	87
107	Two-Nozzle Flame Synthesis of Pt/Ba/ Al_2O_3 for NO_x Storage. <i>Chemistry of Materials</i> , 2006, 18, 2532-2537.	3.2	87
108	Vapor phase synthesis of Al-doped titania powders. <i>Journal of Materials Research</i> , 1994, 9, 1241-1249.	1.2	84

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109	Droplet and Particle Dynamics during Flame Spray Synthesis of Nanoparticles. Industrial & Engineering Chemistry Research, 2005, 44, 6222-6232.	1.8	84
110	Kinetics of Carbothermal Reduction Synthesis of Boron Carbide. Journal of the American Ceramic Society, 1992, 75, 2509-2514.	1.9	82
111	Effect of solvent composition on oxide morphology during flame spray pyrolysis of metal nitrates. Physical Chemistry Chemical Physics, 2011, 13, 9246.	1.3	82
112	Color-Tunable Nanophosphors by Codoping Flame-Made Y_2O_3 with Tb and Eu. Journal of Physical Chemistry C, 2011, 115, 1084-1089.	1.5	81
113	Highly Selective and Rapid Breath Isoprene Sensing Enabled by Activated Alumina Filter. ACS Sensors, 2018, 3, 677-683.	4.0	81
114	Non-agglomerated dry silica nanoparticles. Powder Technology, 2004, 140, 40-48.	2.1	80
115	Oxidative Dehydrogenation of Ethane with CO_2 over Flame-Made Ga-Loaded TiO_2 . ACS Catalysis, 2015, 5, 690-702.	5.5	80
116	Evolution of primary and aggregate particle-size distributions by coagulation and sintering. AIChE Journal, 2000, 46, 407-415.	1.8	79
117	Size controlled CuO nanoparticles for Li-ion batteries. Journal of Power Sources, 2013, 241, 415-422.	4.0	79
118	Metal-support interactions in catalysts for environmental remediation. Environmental Science: Nano, 2017, 4, 2076-2092.	2.2	79
119	Brilliant Yellow, Transparent Pure, and SiO_2 -Coated $BiVO_4$ Nanoparticles Made in Flames. Chemistry of Materials, 2008, 20, 6346-6351.	3.2	77
120	Sintering Time for Silica Particle Growth. Aerosol Science and Technology, 2001, 34, 237-246.	1.5	76
121	Growth of zirconia particles made by flame spray pyrolysis. AIChE Journal, 2004, 50, 3085-3094.	1.8	75
122	PHOTOCATALYTIC DESTRUCTION OF PHENOL AND SALICYLIC ACID WITH AEROSOL-MADE AND COMMERCIAL TITANIA POWDERS. Chemical Engineering Communications, 1996, 151, 251-269.	1.5	74
123	In Situ Fourier Transform Infrared Characterization of the Effect of Electrical Fields on the Flame Synthesis of TiO_2 Particles. Chemistry of Materials, 1997, 9, 2702-2708.	3.2	73
124	Influence of support acid-base properties on the platinum-catalyzed enantioselective hydrogenation of activated ketones. Journal of Catalysis, 2010, 271, 115-124.	3.1	73
125	Flame Aerosol Synthesis of Metal Oxide Catalysts with Unprecedented Structural and Catalytic Properties. ChemCatChem, 2011, 3, 1234-1256.	1.8	73
126	Coagulation-Agglomeration of Fractal-like Particles: Structure and Self-Preserving Size Distribution. Langmuir, 2015, 31, 1320-1327.	1.6	73

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127	Flame-Made Pt/Ceria/Zirconia for Low-Temperature Oxygen Exchange. <i>Chemistry of Materials</i> , 2005, 17, 3352-3358.	3.2	72
128	Unprecedented formation of metastable monoclinic BaCO ₃ nanoparticles. <i>Thermochimica Acta</i> , 2006, 445, 23-26.	1.2	72
129	Electrically Controlled Flame Synthesis of Nanophase TiO ₂ , SiO ₂ and SnO ₂ Powders. <i>Journal of Materials Research</i> , 1997, 12, 1031-1042.	1.2	71
130	Effect of Ba and K addition and controlled spatial deposition of Rh in Rh/Al ₂ O ₃ catalysts for CO ₂ hydrogenation. <i>Applied Catalysis A: General</i> , 2014, 477, 93-101.	2.2	71
131	Direct measurement of entrainment during nanoparticle synthesis in spray flames. <i>Combustion and Flame</i> , 2006, 144, 809-820.	2.8	70
132	Corona-assisted flame synthesis of ultrafine titania particles. <i>Applied Physics Letters</i> , 1995, 66, 3275-3277.	1.5	69
133	Brownian Coagulation at High Concentration. <i>Langmuir</i> , 2007, 23, 9882-9890.	1.6	69
134	Mass-mobility characterization of flame-made ZrO ₂ aerosols: Primary particle diameter and extent of aggregation. <i>Journal of Colloid and Interface Science</i> , 2012, 387, 12-23.	5.0	69
135	Monte Carlo Simulation of Particle Coagulation and Sintering. <i>Aerosol Science and Technology</i> , 1994, 21, 83-93.	1.5	68
136	Radiopaque dental adhesives: Dispersion of flame-made Ta ₂ O ₅ /SiO ₂ nanoparticles in methacrylic matrices. <i>Journal of Dentistry</i> , 2008, 36, 579-587.	1.7	68
137	Green, Silica-Coated Monoclinic Y ₂ O ₃ :Tb ³⁺ Nanophosphors: Flame Synthesis and Characterization. <i>Journal of Physical Chemistry C</i> , 2012, 116, 4493-4499.	1.5	67
138	Independent Control of Metal Cluster and Ceramic Particle Characteristics During One-step Synthesis of Pt/TiO ₂ . <i>Journal of Materials Research</i> , 2005, 20, 2568-2577.	1.2	66
139	Morphology and composition of spray-flame-made yttria-stabilized zirconia nanoparticles. <i>Nanotechnology</i> , 2005, 16, S609-S617.	1.3	66
140	Flame-derived Pt/Ba/CeZr _{1-x} O ₂ CeZr _{1-x} O ₂ : Influence of support on thermal deterioration and behavior as NO _x storage-reduction catalysts. <i>Journal of Catalysis</i> , 2006, 243, 229-238.	3.1	62
141	Guiding Ketogenic Diet with Breath Acetone Sensors. <i>Sensors</i> , 2018, 18, 3655.	2.1	61
142	Competition between TiCl ₄ hydrolysis and oxidation and its effect on product TiO ₂ powder. <i>AIChE Journal</i> , 1994, 40, 1183-1192.	1.8	60
143	The quality of SiO ₂ -coatings on flame-made TiO ₂ -based nanoparticles. <i>Journal of Materials Chemistry</i> , 2008, 18, 3547.	6.7	60
144	Design of high-temperature, gas-phase synthesis of hard or soft TiO ₂ agglomerates. <i>AIChE Journal</i> , 2006, 52, 1318-1325.	1.8	59

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145	The effect of ionic additives on aerosol coagulation. <i>Journal of Colloid and Interface Science</i> , 1992, 153, 106-117.	5.0	58
146	Morphology and mobility diameter of carbonaceous aerosols during agglomeration and surface growth. <i>Carbon</i> , 2017, 121, 527-535.	5.4	58
147	Formation and Growth of SiO ₂ Particles in Low Pressure H ₂ /O ₂ /Ar Flames Doped with SiH ₄ . <i>Combustion Science and Technology</i> , 1997, 123, 287-315.	1.2	57
148	Synthesis of SiO ₂ and SnO ₂ particles in diffusion flame reactors. <i>AIChE Journal</i> , 1997, 43, 2657-2664.	1.8	56
149	Development and characterization of a Versatile Engineered Nanomaterial Generation System (VENGES) suitable for toxicological studies. <i>Inhalation Toxicology</i> , 2010, 22, 107-116.	0.8	55
150	Safer Formulation Concept for Flame-Generated Engineered Nanomaterials. <i>ACS Sustainable Chemistry and Engineering</i> , 2013, 1, 843-857.	3.2	54
151	Crystallinity dynamics of gold nanoparticles during sintering or coalescence. <i>AIChE Journal</i> , 2016, 62, 589-598.	1.8	54
152	Superior Acetone Selectivity in Gas Mixtures by Catalytic Filtered Chemoresistive Sensors. <i>Advanced Science</i> , 2020, 7, 2001503.	5.6	54
153	A pocket-sized device enables detection of methanol adulteration in alcoholic beverages. <i>Nature Food</i> , 2020, 1, 351-354.	6.2	53
154	Manufacture of optical waveguide preforms by modified chemical vapor deposition. <i>AIChE Journal</i> , 1988, 34, 912-921.	1.8	52
155	Visible-light active black TiO ₂ -Ag/TiO _x particles. <i>Applied Catalysis B: Environmental</i> , 2014, 154-155, 9-15.	10.8	52
156	Selective formaldehyde detection at ppb in indoor air with a portable sensor. <i>Journal of Hazardous Materials</i> , 2020, 399, 123052.	6.5	52
157	Flame-made Pd/La ₂ O ₃ /Al ₂ O ₃ nanoparticles: thermal stability and catalytic behavior in methane combustion. <i>Journal of Materials Chemistry</i> , 2005, 15, 605.	6.7	51
158	Synthesis of zinc oxide/silica composite nanoparticles by flame spray pyrolysis. <i>Journal of Materials Science</i> , 2002, 37, 4627-4632.	1.7	50
159	Morphology of Oxide Particles Made by the Emulsion Combustion Method. <i>Journal of the American Ceramic Society</i> , 2003, 86, 898-904.	1.9	50
160	Plasmonic biocompatible silver-gold alloyed nanoparticles. <i>Chemical Communications</i> , 2014, 50, 13559-13562.	2.2	50
161	Gas-phase synthesis of nanoparticles: scale-up and design of flame reactors. <i>Powder Technology</i> , 2005, 150, 117-122.	2.1	49
162	Developing a tissue glue by engineering the adhesive and hemostatic properties of metal oxide nanoparticles. <i>Nanoscale</i> , 2017, 9, 8418-8426.	2.8	49

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163	Theory for Aerosol Generation in Laminar Flow Condensers. <i>Aerosol Science and Technology</i> , 1989, 11, 100-119.	1.5	48
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