

Sotiris E Pratsinis

List of Publications by Citations

Source: <https://exaly.com/author-pdf/8158910/sotiris-e-pratsinis-publications-by-citations.pdf>

Version: 2024-04-25

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.

The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

326
papers

21,788
citations

84
h-index

132
g-index

340
ext. papers

23,851
ext. citations

6.7
avg, IF

7.37
L-index

#	Paper	IF	Citations
326	Flame aerosol synthesis of ceramic powders. <i>Progress in Energy and Combustion Science</i> , 1998 , 24, 197-219	3.6	692
325	Antibacterial activity of nanosilver ions and particles. <i>Environmental Science & Technology</i> , 2010 , 44, 5649-54	10.3	625
324	Si:WO ₃ Sensors for highly selective detection of acetone for easy diagnosis of diabetes by breath analysis. <i>Analytical Chemistry</i> , 2010 , 82, 3581-7	7.8	456
323	Flame aerosol synthesis of smart nanostructured materials. <i>Journal of Materials Chemistry</i> , 2007 , 17, 4743		428
322	Simultaneous nucleation, condensation, and coagulation in aerosol reactors. <i>Journal of Colloid and Interface Science</i> , 1988 , 124, 416-427	9.3	424
321	OH Surface Density of SiO ₂ and TiO ₂ by Thermogravimetric Analysis. <i>Langmuir</i> , 2003 , 19, 160-165	4	389
320	Flame Synthesis of Nanoparticles. <i>Chemical Engineering and Technology</i> , 2001 , 24, 583-596	2	329
319	Nanoparticle synthesis at high production rates by flame spray pyrolysis. <i>Chemical Engineering Science</i> , 2003 , 58, 1969-1976	4.4	311
318	Breath analysis by nanostructured metal oxides as chemo-resistive gas sensors. <i>Materials Today</i> , 2015 , 18, 163-171	21.8	310
317	Flame-made ceria nanoparticles. <i>Journal of Materials Research</i> , 2002 , 17, 1356-1362	2.5	296
316	Ferroelectric WO ₃ Nanoparticles for Acetone Selective Detection. <i>Chemistry of Materials</i> , 2008 , 20, 4794-4796	4.796	283
315	A Simple Model for the Evolution of the Characteristics of Aggregate Particles Undergoing Coagulation and Sintering. <i>Aerosol Science and Technology</i> , 1993 , 19, 514-526	3.4	281
314	Coagulation and fragmentation: Universal steady-state particle-size distribution. <i>AIChE Journal</i> , 1996 , 42, 1612-1620	3.6	254
313	A discrete-sectional model for particulate production by gas-phase chemical reaction and aerosol coagulation in the free-molecular regime. <i>Journal of Colloid and Interface Science</i> , 1990 , 139, 63-86	9.3	230
312	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	4.3	221
311	Aerosol flame synthesis of catalysts. <i>Advanced Powder Technology</i> , 2006 , 17, 457-480	4.6	217
310	Breath acetone monitoring by portable Si:WO ₃ gas sensors. <i>Analytica Chimica Acta</i> , 2012 , 738, 69-75	6.6	213

309	An integrated microrobotic platform for on-demand, targeted therapeutic interventions. <i>Advanced Materials</i> , 2014 , 26, 952-7	24	200
308	Flame-Made Durable Doped-CaO Nanosorbents for CO ₂ Capture. <i>Energy & Fuels</i> , 2009 , 23, 1093-1100	10.1	185
307	Homogeneous ZnO Nanoparticles by Flame Spray Pyrolysis. <i>Journal of Nanoparticle Research</i> , 2002 , 4, 337-343	2.3	182
306	The role of gas mixing in flame synthesis of titania powders. <i>Powder Technology</i> , 1996 , 86, 87-93	5.2	172
305	Self-preserving size distributions of agglomerates. <i>Journal of Aerosol Science</i> , 1995 , 26, 175-185	4.3	170
304	Flame sprayed visible light-active Fe-TiO ₂ for photomineralisation of oxalic acid. <i>Catalysis Today</i> , 2007 , 120, 203-213	5.3	166
303	Optimal Doping for Enhanced SnO ₂ Sensitivity and Thermal Stability. <i>Advanced Functional Materials</i> , 2008 , 18, 1969-1976	15.6	166
302	Fluoro-apatite and Calcium Phosphate Nanoparticles by Flame Synthesis. <i>Chemistry of Materials</i> , 2005 , 17, 36-42	9.6	162
301	Direct synthesis of maghemite, magnetite and wustite nanoparticles by flame spray pyrolysis. <i>Advanced Powder Technology</i> , 2009 , 20, 190-194	4.6	160
300	Direct (one-step) synthesis of . <i>Chemical Engineering Science</i> , 2005 , 60, 5852-5861	4.4	159
299	Soft- and hard-agglomerate aerosols made at high temperatures. <i>Langmuir</i> , 2004 , 20, 5933-9	4	153
298	Toxicity of silver nanoparticles in macrophages. <i>Small</i> , 2013 , 9, 2576-84	11	152
297	Dopants in Vapor-Phase Synthesis of Titania Powders. <i>Journal of the American Ceramic Society</i> , 1992 , 75, 3408-3416	3.8	151
296	Gas phase production of particles in reactive turbulent flows. <i>Journal of Aerosol Science</i> , 1991 , 22, 637-653	4.3	147
295	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	7.3	143
294	Laminar and turbulent shear-induced flocculation of fractal aggregates. <i>AIChE Journal</i> , 1999 , 45, 1114-1124	3.24	143
293	Quantifying the origin of released Ag ⁺ ions from nanosilver. <i>Langmuir</i> , 2012 , 28, 15929-36	4	141
292	Hybrid, silica-coated, Janus-like plasmonic-magnetic nanoparticles. <i>Chemistry of Materials</i> , 2011 , 23, 1985-1992	6.140	140

291	Rapid synthesis of stable ZnO quantum dots. <i>Journal of Applied Physics</i> , 2002 , 92, 6537-6540	2.5	138
290	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, 12578-84	4	137
289	Breath Sensors for Health Monitoring. <i>ACS Sensors</i> , 2019 , 4, 268-280	9.2	137
288	Vapor synthesis of titania powder by titanium tetrachloride oxidation. <i>AIChE Journal</i> , 1991 , 37, 1561-1570	3.6	135
287	Iron from nanocompounds containing iron and zinc is highly bioavailable in rats without tissue accumulation. <i>Nature Nanotechnology</i> , 2010 , 5, 374-80	28.7	134
286	Engineering nanosilver as an antibacterial, biosensor and bioimaging material. <i>Current Opinion in Chemical Engineering</i> , 2011 , 1, 3-10	5.4	133
285	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	3.8	133
284	Selective sensing of NH ₃ by Si-doped β-MoO ₃ for breath analysis. <i>Sensors and Actuators B: Chemical</i> , 2016 , 223, 266-273	8.5	131
283	Fractal Analysis of Flame-Synthesized Nanostructured Silica and Titania Powders Using Small-Angle X-ray Scattering. <i>Langmuir</i> , 1998 , 14, 5751-5756	4	129
282	Flame-made platinum/alumina: structural properties and catalytic behaviour in enantioselective hydrogenation. <i>Journal of Catalysis</i> , 2003 , 213, 296-304	7.3	128
281	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	9.2	126
280	Nanorods of ZnO Made by Flame Spray Pyrolysis. <i>Chemistry of Materials</i> , 2006 , 18, 572-578	9.6	126
279	Bismuth Oxide Nanoparticles by Flame Spray Pyrolysis. <i>Journal of the American Ceramic Society</i> , 2004 , 85, 1713-1718	3.8	122
278	Dopants in Flame Synthesis of Titania. <i>Journal of the American Ceramic Society</i> , 1995 , 78, 2984-2992	3.8	121
277	Micropatterning Layers by Flame Aerosol Deposition-Annealing. <i>Advanced Materials</i> , 2008 , 20, 3005-3010	10.4	120
276	Scale-up of nanoparticle synthesis in diffusion flame reactors. <i>Chemical Engineering Science</i> , 2003 , 58, 4581-4589	4.4	119
275	Highly selective detection of methanol over ethanol by a handheld gas sensor. <i>Nature Communications</i> , 2019 , 10, 4220	17.4	117
274	Kinetics of Titanium(IV) Chloride Oxidation. <i>Journal of the American Ceramic Society</i> , 1990 , 73, 2158-2163	3.8	114

273	Zirconia Nanoparticles Made in Spray Flames at High Production Rates. <i>Journal of the American Ceramic Society</i> , 2004 , 87, 197-202	3.8	113
272	Computational fluid-particle dynamics for the flame synthesis of alumina particles. <i>Chemical Engineering Science</i> , 2000 , 55, 177-191	4.4	112
271	Synthesis of catalytic materials in flames: opportunities and challenges. <i>Chemical Society Reviews</i> , 2016 , 45, 3053-68	58.5	111
270	Hermetically Coated Superparamagnetic Fe ₂ O ₃ Particles with SiO ₂ Nanofilms. <i>Chemistry of Materials</i> , 2009 , 21, 2094-2100	9.6	110
269	Design of nanomaterial synthesis by aerosol processes. <i>Annual Review of Chemical and Biomolecular Engineering</i> , 2012 , 3, 103-27	8.9	109
268	Flame synthesis of nanocrystalline ceria-zirconia: effect of carrier liquid. <i>Chemical Communications</i> , 2003 , 588-9	5.8	109
267	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	4.3	106
266	Non-toxic dry-coated nanosilver for plasmonic biosensors. <i>Advanced Functional Materials</i> , 2010 , 20, 4250-4257	4.7	104
265	Aggregate Morphology Evolution by Sintering: Number & Diameter of Primary Particles. <i>Journal of Aerosol Science</i> , 2012 , 46, 7-19	4.3	103
264	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	2.5	100
263	Flame-made Alumina Supported PdPt Nanoparticles: Structural Properties and Catalytic Behavior in Methane Combustion. <i>Catalysis Letters</i> , 2005 , 104, 9-16	2.8	100
262	Probing the dynamics of nanoparticle growth in a flame using synchrotron radiation. <i>Nature Materials</i> , 2004 , 3, 370-4	27	98
261	Dispersed nanoelectrode devices. <i>Nature Nanotechnology</i> , 2010 , 5, 54-60	28.7	97
260	Aerosol-based technologies in nanoscale manufacturing: from functional materials to devices through core chemical engineering. <i>AIChE Journal</i> , 2010 , 56, 3028-3035	3.6	96
259	In situ coating of flame-made TiO ₂ particles with nanothin SiO ₂ films. <i>Langmuir</i> , 2008 , 24, 12553-8	4	96
258	Sintering Rate and Mechanism of TiO Nanoparticles by Molecular Dynamics. <i>Journal of Physical Chemistry C</i> , 2011 , 115, 11030-11035	3.8	95
257	Structure of Flame-Made Silica Nanoparticles by Ultra-Small-Angle X-ray Scattering. <i>Langmuir</i> , 2004 , 20, 1915-1921	4	95
256	Effect of reaction temperature on CVD-made TiO ₂ primary particle diameter. <i>Chemical Engineering Science</i> , 2003 , 58, 3327-3335	4.4	95

255	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	3.9	94
254	Agglomerates and aggregates of nanoparticles made in the gas phase. <i>Advanced Powder Technology</i> , 2014 , 25, 71-90	4.6	94
253	Antioxidant and antiradical SiO ₂ nanoparticles covalently functionalized with gallic acid. <i>ACS Applied Materials & Interfaces</i> , 2012 , 4, 6609-17	9.5	94
252	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	5.3	94
251	Minimal cross-sensitivity to humidity during ethanol detection by SnO ₂ -TiO ₂ solid solutions. <i>Nanotechnology</i> , 2009 , 20, 315502	3.4	93
250	Titania formation by TiCl ₄ gas phase oxidation, surface growth and coagulation. <i>Journal of Aerosol Science</i> , 2002 , 33, 17-34	4.3	93
249	Fragmentation and restructuring of soft-agglomerates under shear. <i>Journal of Colloid and Interface Science</i> , 2010 , 342, 261-8	9.3	92
248	Nanosilver on nanostructured silica: Antibacterial activity and Ag surface area. <i>Chemical Engineering Journal</i> , 2011 , 170, 547-554	14.7	91
247	Flame synthesis of functional nanostructured materials and devices: Surface growth and aggregation. <i>Proceedings of the Combustion Institute</i> , 2017 , 36, 29-50	5.9	89
246	Synthesis, characterization, and bioavailability in rats of ferric phosphate nanoparticles. <i>Journal of Nutrition</i> , 2007 , 137, 614-9	4.1	89
245	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	3.9	88
244	Design of metal nanoparticle synthesis by vapor flow condensation. <i>Chemical Engineering Science</i> , 2002 , 57, 1753-1762	4.4	87
243	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	15.6	86
242	Multiparticle sintering dynamics: from fractal-like aggregates to compact structures. <i>Langmuir</i> , 2011 , 27, 6358-67	4	84
241	Flame-made Nb- and Cu-doped TiO ₂ sensors for CO and ethanol. <i>Sensors and Actuators B: Chemical</i> , 2008 , 130, 449-457	8.5	83
240	Criteria for Flame-Spray Synthesis of Hollow, Shell-Like, or Inhomogeneous Oxides. <i>Journal of the American Ceramic Society</i> , 2005 , 88, 1388-1393	3.8	83
239	Computational analysis of coagulation and coalescence in the flame synthesis of titania particles. <i>Powder Technology</i> , 2001 , 118, 242-250	5.2	83
238	Nozzle-quenching process for controlled flame synthesis of titania nanoparticles. <i>AIChE Journal</i> , 2003 , 49, 1667-1675	3.6	82

237	Structure & strength of silica-PDMS nanocomposites. <i>Polymer</i> , 2010 , 51, 1796-1804	3.9	81
236	Hydrothermal stability of pure and modified microporous silica membranes. <i>Journal of Materials Science</i> , 1995 , 30, 2803-2808	4.3	81
235	Pd Subnano-Clusters on TiO ₂ for Solar-Light Removal of NO. <i>ACS Catalysis</i> , 2016 , 6, 1887-1893	13.1	79
234	Correlations between blood glucose and breath components from portable gas sensors and PTR-TOF-MS. <i>Journal of Breath Research</i> , 2013 , 7, 037110	3.1	78
233	Battery Performance: Design and Fabrication of Microspheres with Hierarchical Internal Structure for Tuning Battery Performance (Adv. Sci. 6/2015). <i>Advanced Science</i> , 2015 , 2,	13.6	78
232	Color-tunable nanophosphors by co-doping flame-made YO with Tb and Eu. <i>Journal of Physical Chemistry C</i> , 2011 , 115, 1084-1089	3.8	78
231	The Structure of Agglomerates consisting of Polydisperse Particles. <i>Aerosol Science and Technology</i> , 2012 , 46, 347-353	3.4	77
230	Selective sensing of isoprene by Ti-doped ZnO for breath diagnostics. <i>Journal of Materials Chemistry B</i> , 2016 , 4, 5358-5366	7.3	76
229	Flame-made nanoparticles for nanocomposites. <i>Nano Today</i> , 2010 , 5, 48-65	17.9	76
228	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	4.4	76
227	Vapor phase synthesis of Al-doped titania powders. <i>Journal of Materials Research</i> , 1994 , 9, 1241-1249	2.5	76
226	In Situ EPR Study of the Redox Properties of CuO/FeO ₂ Catalysts for Preferential CO Oxidation (PROX). <i>ACS Catalysis</i> , 2016 , 6, 3520-3530	13.1	76
225	Simultaneous deposition of Au nanoparticles during flame synthesis of TiO ₂ and SiO ₂ . <i>Journal of Materials Research</i> , 2003 , 18, 115-120	2.5	75
224	Two-Nozzle Flame Synthesis of Pt/Ba/Al ₂ O ₃ for NO _x Storage. <i>Chemistry of Materials</i> , 2006 , 18, 2532-2537	3.6	74
223	Sniffing Entrapped Humans with Sensor Arrays. <i>Analytical Chemistry</i> , 2018 , 90, 4940-4945	7.8	72
222	Fluid-particle dynamics during combustion spray aerosol synthesis of ZrO ₂ . <i>Chemical Engineering Journal</i> , 2012 , 191, 491-502	14.7	72
221	Evolution of primary and aggregate particle-size distributions by coagulation and sintering. <i>AICHE Journal</i> , 2000 , 46, 407-415	3.6	72
220	Droplet and Particle Dynamics during Flame Spray Synthesis of Nanoparticles. <i>Industrial & Engineering Chemistry Research</i> , 2005 , 44, 6222-6232	3.9	71

219	In Situ Fourier Transform Infrared Characterization of the Effect of Electrical Fields on the Flame Synthesis of TiO ₂ Particles. <i>Chemistry of Materials</i> , 1997 , 9, 2702-2708	9.6	70
218	Brilliant Yellow, Transparent Pure, and SiO ₂ -Coated BiVO ₄ Nanoparticles Made in Flames. <i>Chemistry of Materials</i> , 2008 , 20, 6346-6351	9.6	70
217	Non-agglomerated dry silica nanoparticles. <i>Powder Technology</i> , 2004 , 140, 40-48	5.2	70
216	Sintering Time for Silica Particle Growth. <i>Aerosol Science and Technology</i> , 2001 , 34, 237-246	3.4	70
215	Kinetics of Carbothermal Reduction Synthesis of Boron Carbide. <i>Journal of the American Ceramic Society</i> , 1992 , 75, 2509-2514	3.8	70
214	Noninvasive Body Fat Burn Monitoring from Exhaled Acetone with Si-doped WO ₃ -sensing Nanoparticles. <i>Analytical Chemistry</i> , 2017 , 89, 10578-10584	7.8	69
213	Size controlled CuO nanoparticles for Li-ion batteries. <i>Journal of Power Sources</i> , 2013 , 241, 415-422	8.9	67
212	PHOTOCATALYTIC DESTRUCTION OF PHENOL AND SALICYLIC ACID WITH AEROSOL-MADE AND COMMERCIAL TITANIA POWDERS. <i>Chemical Engineering Communications</i> , 1996 , 151, 251-269	2.2	67
211	Flame-Made Pt/Ceria/Zirconia for Low-Temperature Oxygen Exchange. <i>Chemistry of Materials</i> , 2005 , 17, 3352-3358	9.6	66
210	Growth of zirconia particles made by flame spray pyrolysis. <i>AIChE Journal</i> , 2004 , 50, 3085-3094	3.6	66
209	Effect of solvent composition on oxide morphology during flame spray pyrolysis of metal nitrates. <i>Physical Chemistry Chemical Physics</i> , 2011 , 13, 9246-52	3.6	65
208	Corona-assisted flame synthesis of ultrafine titania particles. <i>Applied Physics Letters</i> , 1995 , 66, 3275-3277	3.4	65
207	Zeolite membranes for highly selective formaldehyde sensors. <i>Sensors and Actuators B: Chemical</i> , 2018 , 257, 916-923	8.5	65
206	Oxidative Dehydrogenation of Ethane with CO ₂ over Flame-Made Ga-Loaded TiO ₂ . <i>ACS Catalysis</i> , 2015 , 5, 690-702	13.1	64
205	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	3.8	63
204	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	9.3	63
203	Electrically controlled flame synthesis of nanophase TiO ₂ , SiO ₂ , and SnO ₂ powders. <i>Journal of Materials Research</i> , 1997 , 12, 1031-1042	2.5	63
202	Radiopaque dental adhesives: dispersion of flame-made Ta ₂ O ₅ /SiO ₂ nanoparticles in methacrylic matrices. <i>Journal of Dentistry</i> , 2008 , 36, 579-87	4.8	63

201	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	2.5	63
200	Influence of support acid/base properties on the platinum-catalyzed enantioselective hydrogenation of activated ketones. <i>Journal of Catalysis</i> , 2010 , 271, 115-124	7.3	62
199	Direct measurement of entrainment during nanoparticle synthesis in spray flames. <i>Combustion and Flame</i> , 2006 , 144, 809-820	5.3	62
198	Unprecedented formation of metastable monoclinic BaCO ₃ nanoparticles. <i>Thermochimica Acta</i> , 2006 , 445, 23-26	2.9	62
197	Reactive polycyclic aromatic hydrocarbon dimerization drives soot nucleation. <i>Physical Chemistry Chemical Physics</i> , 2018 , 20, 10926-10938	3.6	60
196	Flame Aerosol Synthesis of Metal Oxide Catalysts with Unprecedented Structural and Catalytic Properties. <i>ChemCatChem</i> , 2011 , 3, 1234-1256	5.2	59
195	Monte Carlo Simulation of Particle Coagulation and Sintering. <i>Aerosol Science and Technology</i> , 1994 , 21, 83-93	3.4	59
194	Single Pd atoms on TiO ₂ dominate photocatalytic NO _x removal. <i>Applied Catalysis B: Environmental</i> , 2018 , 226, 127-134	21.8	58
193	Coagulation-agglomeration of fractal-like particles: structure and self-preserving size distribution. <i>Langmuir</i> , 2015 , 31, 1320-7	4	57
192	The quality of SiO ₂ -coatings on flame-made TiO ₂ -based nanoparticles. <i>Journal of Materials Chemistry</i> , 2008 , 18, 3547		57
191	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 /NO _x storage-reduction catalysts. <i>Journal of Catalysis</i> , 2006 , 243, 229-238	7.3	57
190	Morphology and composition of spray-flame-made yttria-stabilized zirconia nanoparticles. <i>Nanotechnology</i> , 2005 , 16, S609-17	3.4	57
189	Highly Selective and Rapid Breath Isoprene Sensing Enabled by Activated Alumina Filter. <i>ACS Sensors</i> , 2018 , 3, 677-683	9.2	56
188	Metal-support interactions in catalysts for environmental remediation. <i>Environmental Science: Nano</i> , 2017 , 4, 2076-2092	7.1	54
187	Design of high-temperature, gas-phase synthesis of hard or soft TiO ₂ agglomerates. <i>AIChE Journal</i> , 2006 , 52, 1318-1325	3.6	54
186	The effect of ionic additives on aerosol coagulation. <i>Journal of Colloid and Interface Science</i> , 1992 , 153, 106-117	9.3	54
185	Brownian coagulation at high concentration. <i>Langmuir</i> , 2007 , 23, 9882-90	4	53
184	Development and characterization of a Versatile Engineered Nanomaterial Generation System (VENGES) suitable for toxicological studies. <i>Inhalation Toxicology</i> , 2010 , 22 Suppl 2, 107-16	2.7	52

183	Competition between $TiCl_4$ hydrolysis and oxidation and its effect on product TiO_2 powder. <i>AIChE Journal</i> , 1994 , 40, 1183-1192	3.6	52
182	Effect of Ba and K addition and controlled spatial deposition of Rh in Rh/ Al_2O_3 catalysts for CO_2 hydrogenation. <i>Applied Catalysis A: General</i> , 2014 , 477, 93-101	5.1	51
181	A Safer Formulation Concept for Flame-Generated Engineered Nanomaterials. <i>ACS Sustainable Chemistry and Engineering</i> , 2013 , 1, 843-857	8.3	50
180	Synthesis of SiO_2 and SnO_2 particles in diffusion flame reactors. <i>AIChE Journal</i> , 1997 , 43, 2657-2664	3.6	50
179	Manufacture of optical waveguide preforms by modified chemical vapor deposition. <i>AIChE Journal</i> , 1988 , 34, 912-921	3.6	50
178	Morphology of Oxide Particles Made by the Emulsion Combustion Method. <i>Journal of the American Ceramic Society</i> , 2003 , 86, 898-904	3.8	47
177	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	1.5	46
176	Crystallinity dynamics of gold nanoparticles during sintering or coalescence. <i>AIChE Journal</i> , 2016 , 62, 589-598	3.6	44
175	Guiding Ketogenic Diet with Breath Acetone Sensors. <i>Sensors</i> , 2018 , 18,	3.8	44
174	Nanostructure Evolution: From Aggregated to Spherical SiO_2 Particles Made in Diffusion Flames. <i>European Journal of Inorganic Chemistry</i> , 2008 , 2008, 911-918	2.3	43
173	Narrowing the size distribution of aerosol-made titania by surface growth and coagulation. <i>Journal of Aerosol Science</i> , 2004 , 35, 405-420	4.3	43
172	Gas-phase synthesis of nanoparticles: scale-up and design of flame reactors. <i>Powder Technology</i> , 2005 , 150, 117-122	5.2	43
171	Flame-coating of titania particles with silica. <i>Journal of Materials Research</i> , 2005 , 20, 1336-1347	2.5	43
170	Theory for Aerosol Generation in Laminar Flow Condensers. <i>Aerosol Science and Technology</i> , 1989 , 11, 100-119	3.4	43
169	Flame-nozzle synthesis of nanoparticles with closely controlled size, morphology and crystallinity. <i>Materials Letters</i> , 2002 , 55, 318-321	3.3	42
168	One-Step Flame-Synthesis of Carbon-Embedded and -Supported Platinum Clusters. <i>Chemistry of Materials</i> , 2008 , 20, 2117-2123	9.6	41
167	Characteristics and Catalytic Properties of Pd/ SiO_2 Synthesized by One-step Flame Spray Pyrolysis in Liquid-phase Hydrogenation of 1-Heptyne. <i>Catalysis Letters</i> , 2007 , 119, 346-352	2.8	41
166	Flame-made Pd/ La_2O_3/Al_2O_3 nanoparticles: thermal stability and catalytic behavior in methane combustion. <i>Journal of Materials Chemistry</i> , 2005 , 15, 605		41

165	Flame temperature measurements during electrically assisted aerosol synthesis of nanoparticles. <i>Combustion and Flame</i> , 2002 , 128, 369-381	5.3	41
164	Uniform nanoparticles by flame-assisted spray pyrolysis (FASP) of low cost precursors. <i>Journal of Nanoparticle Research</i> , 2011 , 13, 2715-2725	2.3	40
163	Development and optimization of iron- and zinc-containing nanostructured powders for nutritional applications. <i>Nanotechnology</i> , 2009 , 20, 475101	3.4	40
162	Wafer-level flame-spray-pyrolysis deposition of gas-sensitive layers on microsensors. <i>Journal of Micromechanics and Microengineering</i> , 2008 , 18, 035040	2	40
161	Luminescence and crystallinity of flame-made Y ₂ O ₃ :Eu ³⁺ nanoparticles. <i>Advanced Powder Technology</i> , 2007 , 18, 5-22	4.6	40
160	Synthesis of zinc oxide/silica composite nanoparticles by flame spray pyrolysis. <i>Journal of Materials Science</i> , 2002 , 37, 4627-4632	4.3	40
159	Quasi-Self-Preserving Log-Normal Size Distributions in the Transition Regime. <i>Particle and Particle Systems Characterization</i> , 1994 , 11, 359-366	3.1	40
158	Optical waveguide preform fabrication: Silica formation and growth in a high-temperature aerosol reactor. <i>Journal of Applied Physics</i> , 1989 , 65, 2445-2450	2.5	40
157	Influence of Pt location on BaCO ₃ or Al ₂ O ₃ during NO _x storage reduction. <i>Journal of Catalysis</i> , 2009 , 261, 201-207	7.3	39
156	Synthesis of silica-carbon particles in a turbulent H ₂ -air flame aerosol reactor. <i>AIChE Journal</i> , 2001 , 47, 1533-1543	3.6	39
155	Thermodynamics of Vapor Synthesis of AlN by Nitridation of Aluminum and Its Halides. <i>Journal of the American Ceramic Society</i> , 1992 , 75, 920-928	3.8	39
154	Fine tuning the surface acid/base properties of single step flame-made Pt/alumina. <i>Applied Catalysis A: General</i> , 2010 , 374, 48-57	5.1	38
153	Visible-light active black TiO ₂ -Ag/TiO _x particles. <i>Applied Catalysis B: Environmental</i> , 2014 , 154-155, 9-15	21.8	37
152	Nanoparticulate Tungsten Oxide for Catalytic Epoxidations. <i>ACS Catalysis</i> , 2013 , 3, 321-327	13.1	37
151	Coagulation and Fragmentation: The Variation of Shear Rate and the Time Lag for Attainment of Steady State. <i>Industrial & Engineering Chemistry Research</i> , 1996 , 35, 3074-3080	3.9	37
150	Modeling the formation of boron carbide particles in an aerosol flow reactor. <i>AIChE Journal</i> , 1992 , 38, 1685-1692	3.6	37
149	Developing a tissue glue by engineering the adhesive and hemostatic properties of metal oxide nanoparticles. <i>Nanoscale</i> , 2017 , 9, 8418-8426	7.7	36
148	Plasmonic biocompatible silver-gold alloyed nanoparticles. <i>Chemical Communications</i> , 2014 , 50, 13559-63	3.8	36

147	Continuous flame aerosol synthesis of carbon-coated nano-LiFePO ₄ for Li-ion batteries. <i>Journal of Aerosol Science</i> , 2011 , 42, 657-667	4.3	36
146	Size-selected agglomerates of SnO ₂ nanoparticles as gas sensors. <i>Journal of Applied Physics</i> , 2009 , 106, 084316	2.5	36
145	Monitoring breath markers under controlled conditions. <i>Journal of Breath Research</i> , 2015 , 9, 047101	3.1	35
144	Aerosol synthesis of AlN by nitridation of aluminum vapor and clusters. <i>Journal of Materials Research</i> , 1995 , 10, 512-520	2.5	35
143	Morphology and mobility diameter of carbonaceous aerosols during agglomeration and surface growth. <i>Carbon</i> , 2017 , 121, 527-535	10.4	35
142	Morphology and Crystallinity of Coalescing Nanosilver by Molecular Dynamics. <i>Journal of Physical Chemistry C</i> , 2015 , 119, 10116-10122	3.8	34
141	Strategies for control of ceramic powder synthesis by gas-to-particle conversion. <i>Powder Technology</i> , 1995 , 82, 79-91	5.2	34
140	Flexible, Multifunctional, Magnetically Actuated Nanocomposite Films. <i>Advanced Functional Materials</i> , 2013 , 23, 34-41	15.6	33
139	Role of Gas-Aerosol Mixing during in Situ Coating of Flame-Made Titania Particles. <i>Industrial & Engineering Chemistry Research</i> , 2009 , 48, 85-92	3.9	33
138	Coagulation of Agglomerates Consisting of Polydisperse Primary Particles. <i>Langmuir</i> , 2016 , 32, 9276-85	4	32
137	Oxidative coupling of methane on flame-made Mn-Na ₂ WO ₄ /SiO ₂ : Influence of catalyst composition and reaction conditions. <i>Applied Catalysis A: General</i> , 2014 , 484, 97-107	5.1	31
136	High concentration agglomerate dynamics at high temperatures. <i>Langmuir</i> , 2006 , 22, 10238-45	4	31
135	Size Tunable Synthesis of Highly Crystalline BaTiO ₃ Nanoparticles using Salt-Assisted Spray Pyrolysis. <i>Journal of Nanoparticle Research</i> , 2003 , 5, 191-198	2.3	31
134	Selective side-chain oxidation of alkyl aromatic compounds catalyzed by cerium modified silver catalysts. <i>Journal of Molecular Catalysis A</i> , 2010 , 331, 40-49		30
133	Flame synthesis of composite carbon black-fumed silica nanostructured particles. <i>Journal of Aerosol Science</i> , 1998 , 29, 647-659	4.3	30
132	The effect of external electric fields during flame synthesis of titania. <i>Powder Technology</i> , 2003 , 135-136, 310-320	5.2	30
131	Adsorption and activation of molecular oxygen over atomic copper(I/II) site on ceria. <i>Nature Communications</i> , 2020 , 11, 4008	17.4	30
130	Nd-Doped BiVO ₄ luminescent nanothermometers of high sensitivity. <i>Chemical Communications</i> , 2019 , 55, 7147-7150	5.8	29

129	A pocket-sized device enables detection of methanol adulteration in alcoholic beverages. <i>Nature Food</i> , 2020 , 1, 351-354	14.4	29
128	Carbon-coated titania nanostructured particles: Continuous, one-step flame-synthesis. <i>Journal of Materials Research</i> , 2003 , 18, 2670-2676	2.5	29
127	Continuous surface functionalization of flame-made TiO ₂ nanoparticles. <i>Langmuir</i> , 2010 , 26, 5815-22	4	28
126	Orthogonal gas sensor arrays by chemoresistive material design. <i>Mikrochimica Acta</i> , 2018 , 185, 563	5.8	28
125	Superior Acetone Selectivity in Gas Mixtures by Catalyst-Filtered Chemoresistive Sensors. <i>Advanced Science</i> , 2020 , 7, 2001503	13.6	27
124	Selective formaldehyde detection at ppb in indoor air with a portable sensor. <i>Journal of Hazardous Materials</i> , 2020 , 399, 123052	12.8	26
123	Flame aerosol deposition of Y ₂ O ₃ :Eu nanophosphor screens and their photoluminescent performance. <i>Nanotechnology</i> , 2010 , 21, 225603	3.4	26
122	Variability of particle configurations achievable by 2-nozzle flame syntheses of the Au-Pd-TiO ₂ system and their catalytic behaviors in the selective hydrogenation of acetylene. <i>Applied Catalysis A: General</i> , 2018 , 549, 1-7	5.1	25
121	Atomically dispersed Pd on nanostructured TiO ₂ for NO removal by solar light. <i>AIChE Journal</i> , 2017 , 63, 139-146	3.6	25
120	Evolution of the Morphology of Zinc Oxide/Silica Particles Made by Spray Combustion. <i>Journal of the American Ceramic Society</i> , 2004 , 87, 365-370	3.8	25
119	Titania/Silica doped with transition metals via flame synthesis: structural properties and catalytic behavior in epoxidation. <i>Journal of Materials Chemistry</i> , 2002 , 12, 3620-3625		25
118	Dynamics of Hollow and Solid Alumina Particle Formation in Spray Flames. <i>Journal of the American Ceramic Society</i> , 2004 , 87, 523-525	3.8	24
117	Packaging of Sol-Gel-Made Porous Nanostructured Titania Particles by Spray Drying. <i>Journal of the American Ceramic Society</i> , 2001 , 84, 2802-2808	3.8	24
116	Role of particle evaporation during synthesis of lead oxide by aerosol decomposition. <i>Journal of Materials Research</i> , 1992 , 7, 3333-3341	2.5	24
115	Soot light absorption and refractive index during agglomeration and surface growth. <i>Proceedings of the Combustion Institute</i> , 2019 , 37, 1177-1184	5.9	24
114	Restructuring of aggregates and their primary particle size distribution during sintering. <i>AIChE Journal</i> , 2013 , 59, 1118-1126	3.6	23
113	Surface Composition and Crystallinity of Coalescing Silver-Gold Nanoparticles. <i>ACS Nano</i> , 2017 , 11, 11653-11660	3.6	23
112	Design of Turbulent Flame Aerosol Reactors by Mixing-Limited Fluid Dynamics. <i>Industrial & Engineering Chemistry Research</i> , 2011 , 50, 3159-3168	3.9	23

111	Novel Differential Reactor for the Measurement of Overall Quantum Yields. <i>Industrial & Engineering Chemistry Research</i> , 1999 , 38, 1376-1383	3.9	22
110	In Situ Monitoring of the Deposition of Flame-Made Chemoresistive Gas-Sensing Films. <i>ACS Applied Materials & Interfaces</i> , 2017 , 9, 23926-23933	9.5	21
109	Silica-Coated TiN Particles for Killing Cancer Cells. <i>ACS Applied Materials & Interfaces</i> , 2019 , 11, 22550-22560	9.5	21
108	Rapid and Selective NH Sensing by Porous CuBr. <i>Advanced Science</i> , 2020 , 7, 1903390	13.6	21
107	Flame-Made Pt/K/Al ₂ O ₃ for NO _x Storage Reduction (NSR) Catalysts. <i>Topics in Catalysis</i> , 2009 , 52, 1799-1802	13.9	21
106	Agglomerate TiO ₂ Aerosol Dynamics at High Concentrations. <i>Particle and Particle Systems Characterization</i> , 2007 , 24, 56-65	3.1	20
105	Impaction and Rebound of Particles at Acute Incident Angles. <i>Aerosol Science and Technology</i> , 1993 , 18, 143-155	3.4	20
104	Sampling and dilution of nanoparticles at high temperature. <i>Aerosol Science and Technology</i> , 2016 , 50, 591-604	3.4	20
103	Silica-Coated Nonstoichiometric Nano Zn-Ferrites for Magnetic Resonance Imaging and Hyperthermia Treatment. <i>Advanced Healthcare Materials</i> , 2016 , 5, 2698-2706	10.1	20
102	Engineering the Bioactivity of Flame-Made Ceria and Ceria/Bioglass Hybrid Nanoparticles. <i>ACS Applied Materials & Interfaces</i> , 2019 , 11, 2830-2839	9.5	20
101	Single-Nanoparticle Thermometry with a Nanopipette. <i>ACS Nano</i> , 2020 , 14, 7358-7369	16.7	19
100	Catalytic Filter for Continuous and Selective Ethanol Removal Prior to Gas Sensing. <i>ACS Sensors</i> , 2020 , 5, 1058-1067	9.2	19
99	Estimating the internal and surface oxidation of soot agglomerates. <i>Combustion and Flame</i> , 2019 , 209, 493-499	5.3	19
98	The silanol content and in vitro cytolytic activity of flame-made silica. <i>Journal of Colloid and Interface Science</i> , 2017 , 507, 95-106	9.3	19
97	Design of Gas-phase Synthesis of Core-Shell Particles by Computational Fluid - Aerosol Dynamics. <i>AIChE Journal</i> , 2011 , 57, 3132-3142	3.6	19
96	Flame Synthesis of Nanosize Powders. <i>ACS Symposium Series</i> , 1996 , 64-78	0.4	19
95	Light scattering from nanoparticle agglomerates. <i>Powder Technology</i> , 2020 , 365, 52-59	5.2	19
94	Highly selective gas sensing enabled by filters. <i>Materials Horizons</i> , 2021 , 8, 661-684	14.4	19

93	Effect of the Proximity of Pt to Ce or Ba in Pt/Ba/CeO ₂ Catalysts on NO _x Storage/Reduction Performance. <i>Topics in Catalysis</i> , 2009 , 52, 1709-1712	2.3	18
92	Enhanced Ag(+) Ion Release from Aqueous Nanosilver Suspensions by Absorption of Ambient CO ₂ . <i>Langmuir</i> , 2015 , 31, 5284-90	4	17
91	Mono- and bimetallic Rh and Pt NSR-catalysts prepared by controlled deposition of noble metals on support or storage component. <i>Applied Catalysis B: Environmental</i> , 2012 , 113-114, 160-171	21.8	17
90	Thermal Energy Dissipation by SiO ₂ -Coated Plasmonic-Superparamagnetic Nanoparticles in Alternating Magnetic Fields. <i>Chemistry of Materials</i> , 2013 , 25, 4603-4612	9.6	17
89	Palladium embedded in SnO enhances the sensitivity of flame-made chemoresistive gas sensors. <i>Mikrochimica Acta</i> , 2020 , 187, 96	5.8	17
88	Nanoparticles for Biomedicine: Coagulation During Synthesis and Applications. <i>Annual Review of Chemical and Biomolecular Engineering</i> , 2019 , 10, 155-174	8.9	16
87	Aggregate characteristics accounting for the evolving fractal-like structure during coagulation and sintering. <i>Journal of Aerosol Science</i> , 2015 , 89, 58-68	4.3	16
86	Rapid synthesis of flexible conductive polymer nanocomposite films. <i>Nanotechnology</i> , 2015 , 26, 125601	3.4	16
85	Highly scalable production of uniformly-coated superparamagnetic nanoparticles for triggered drug release from alginate hydrogels. <i>RSC Advances</i> , 2016 , 6, 21503-21510	3.7	16
84	Homogeneous Iron Phosphate Nanoparticles by Combustion of Sprays. <i>Industrial & Engineering Chemistry Research</i> , 2012 , 51, 7891-7900	3.9	16
83	The effect of settling on cytotoxicity evaluation of SiO ₂ nanoparticles. <i>Journal of Aerosol Science</i> , 2017 , 108, 56-66	4.3	15
82	Towards carbon-free flame spray synthesis of homogeneous oxide nanoparticles from aqueous solutions. <i>Advanced Powder Technology</i> , 2013 , 24, 632-642	4.6	15
81	Structural dependence of the efficiency of functionalization of silica-coated FeO _x magnetic nanoparticles studied by ATR-IR. <i>Applied Surface Science</i> , 2011 , 257, 2861-2869	6.7	15
80	Codeposition of SiO ₂ /GeO ₂ during production of optical fiber preforms by modified chemical vapor deposition. <i>International Journal of Heat and Mass Transfer</i> , 1990 , 33, 1977-1986	4.9	15
79	Monitoring Lipolysis by Sensing Breath Acetone down to Parts-per-Billion. <i>Small Science</i> , 2021 , 1, 2100004		15
78	Thermal annealing dynamics of carbon-coated LiFePO ₄ nanoparticles studied by in-situ analysis. <i>Journal of Solid State Chemistry</i> , 2016 , 242, 96-102	3.3	14
77	Nanoparticle Filler Content and Shape in Polymer Nanocomposites. <i>KONA Powder and Particle Journal</i> , 2019 , 36, 3-32	3.4	14
76	Impact of Humidity on Silica Nanoparticle Agglomerate Morphology and Size Distribution. <i>Langmuir</i> , 2018 , 34, 8532-8541	4	14

75	Process Design for Size-Controlled Flame Spray Synthesis of Li ₄ Ti ₅ O ₁₂ and Electrochemical Performance. <i>Chemical and Process Engineering - Inzynieria Chemiczna I Procesowa</i> , 2017 , 38, 51-66		13
74	Deep Tissue Imaging with Highly Fluorescent Near-Infrared Nanocrystals after Systematic Host Screening. <i>Chemistry of Materials</i> , 2017 , 29, 8158-8166	9.6	13
73	Synthèse du bioxyde de titane dans un réacteur à flamme: effet de l'orientation et de la configuration de la flamme. <i>Annales De Chimie: Science Des Matériaux</i> , 2002 , 27, 37-46	2.1	13
72	Agglomerate-free BaTiO ₃ particles by salt-assisted spray pyrolysis. <i>Journal of Materials Research</i> , 2002 , 17, 3222-3229	2.5	13
71	Volatile Metal Oxide Evaporation during Aerosol Decomposition. <i>Journal of the American Ceramic Society</i> , 1995 , 78, 2490-2496	3.8	13
70	Y-doped ZnO films for acetic acid sensing down to ppb at high humidity. <i>Sensors and Actuators B: Chemical</i> , 2021 , 327, 128843	8.5	13
69	The impact of organic carbon on soot light absorption. <i>Carbon</i> , 2021 , 172, 742-749	10.4	13
68	Nanogenerator power output: influence of particle size and crystallinity of BaTiO. <i>Nanotechnology</i> , 2017 , 28, 275705	3.4	12
67	Annealing dynamics of WO ₃ by in situ XRD. <i>Materials Research Bulletin</i> , 2014 , 59, 199-204	5.1	12
66	Influence of controlled spatial deposition of Pt and Pd in NO _x storage-reduction catalysts on their efficiency. <i>Applied Catalysis B: Environmental</i> , 2011 , 101, 682-689	21.8	12
65	18. History of Manufacture of Fine Particles in High-Temperature Aerosol Reactors 2011 , 475-508		12
64	Simultaneous Nanothermometry and Deep-Tissue Imaging. <i>Advanced Science</i> , 2020 , 7, 2000370	13.6	11
63	Coercivity Determines Magnetic Particle Heating. <i>Advanced Healthcare Materials</i> , 2018 , 7, e1800287	10.1	11
62	The Intrinsic Catalytic Activity in Photoreactors. <i>Environmental Science & Technology</i> , 2000 , 34, 3435-3442	10.3	11
61	The Electrophilicity of Surface Carbon Species in the Redox Reactions of CuO-CeO Catalysts. <i>Angewandte Chemie - International Edition</i> , 2021 , 60, 14420-14428	16.4	11
60	Screening Methanol Poisoning with a Portable Breath Detector. <i>Analytical Chemistry</i> , 2021 , 93, 1170-1178	11.4	11
59	Gas-phase manufacturing of nanoparticles: Molecular dynamics and mesoscale simulations. <i>Particulate Science and Technology</i> , 2016 , 34, 483-493	2	10
58	Single-Step Fabrication of Polymer Nanocomposite Films. <i>Materials</i> , 2018 , 11,	3.5	10

57	Facile meltPEGylation of flame-made luminescent Tb-doped yttrium oxide particles: hemocompatibility, cellular uptake and comparison to silica. <i>Chemical Communications</i> , 2018 , 54, 2914-2917	5.8	9
56	Aerosol Flame Reactors for the Synthesis of Nanoparticles. <i>KONA Powder and Particle Journal</i> , 2000 , 18, 170-182	3.4	9
55	Thickness Optimization of Highly Porous Flame-Aerosol Deposited WO Films for NO Sensing at ppb. <i>Nanomaterials</i> , 2020 , 10,	5.4	8
54	Reduced Magnetic Coupling in Ultrasmall Iron Oxide T MRI Contrast Agents.. <i>ACS Applied Bio Materials</i> , 2018 , 1, 783-791	4.1	8
53	Air Entrainment During Flame Aerosol Synthesis of Nanoparticles. <i>Aerosol Science and Technology</i> , 2014 , 48, 1195-1206	3.4	8
52	Determination of the volume fraction of soot accounting for its composition and morphology. <i>Proceedings of the Combustion Institute</i> , 2021 , 38, 1189-1196	5.9	8
51	Electrically Assisted Aerosol Reactors using Ring Electrodes. <i>Materials Research Society Symposia Proceedings</i> , 1998 , 520, 3		7
50	A Correlation for Particle Wall Losses by Diffusion in Dilution Chambers. <i>Aerosol Science and Technology</i> , 1993 , 18, 213-218	3.4	7
49	In situ measurement of conductivity during nanocomposite film deposition. <i>Applied Surface Science</i> , 2016 , 371, 329-336	6.7	7
48	Detecting methanol in hand sanitizers. <i>IScience</i> , 2021 , 24, 102050	6.1	7
47	A perspective on gas-phase synthesis of nanomaterials: Process design, impact and outlook. <i>Chemical Engineering Journal</i> , 2021 , 421, 129884	14.7	7
46	110th Anniversary: Synthesis of Plasmonic Silica-Coated TiN Particles. <i>Industrial & Engineering Chemistry Research</i> , 2019 , 58, 16610-16619	3.9	6
45	The impact of molecular simulations in gas-phase manufacture of nanomaterials. <i>Current Opinion in Chemical Engineering</i> , 2019 , 23, 174-183	5.4	6
44	Fracture toughness of zirconia nanoparticle-filled dental composites. <i>Journal of Materials Science</i> , 2009 , 44, 6117-6124	4.3	6
43	Handheld Device for Selective Benzene Sensing over Toluene and Xylene. <i>Advanced Science</i> , 2021 , e2103853	3.5	6
42	Mobility and settling rate of agglomerates of polydisperse nanoparticles. <i>Journal of Chemical Physics</i> , 2018 , 148, 064703	3.9	5
41	Multimineral nutritional supplements in a nano-CaO matrix. <i>Journal of Materials Research</i> , 2013 , 28, 1129-1138	5	5
40	Motor Vehicle Contributions to Fine Carbonaceous Aerosol in Los Angeles. <i>Aerosol Science and Technology</i> , 1994 , 21, 360-366	3.4	5

39	Spirit Distillation: Monitoring Methanol Formation with a Hand-Held Device. <i>ACS Food Science & Technology</i> , 2021 , 1, 839-844		5
38	Pressure- and Temperature-Induced Monoclinic-to-Orthorhombic Phase Transition in Silicalite-1. <i>Journal of Physical Chemistry C</i> , 2018 , 122, 6217-6229	3.8	4
37	Monitoring the Dynamics of Concentrated Suspensions by Enhanced Backward Light Scattering. <i>Particle and Particle Systems Characterization</i> , 1999 , 16, 201-206	3.1	4
36	Dissolution and storage stability of nanostructured calcium carbonates and phosphates for nutrition. <i>Journal of Nanoparticle Research</i> , 2016 , 18, 1	2.3	3
35	Non-Toxic Dry-Coated Nanosilver for Plasmonic Biosensors. <i>Advanced Functional Materials</i> , 2010 , 20, 4249-4249	15.6	3
34	GRAIN GROWTH AND DENSIFICATION IN PALLADIUM OXIDE PARTICLES DURING SPRAY PYROLYSIS. <i>Chemical Engineering Communications</i> , 1996 , 151, 211-226	2.2	3
33	In-Situ Particle Size and Shape Analysis During Flame Synthesis of Nanosize Powders. <i>ACS Symposium Series</i> , 1997 , 170-186	0.4	3
32	In situ infrared measurements on TiO ₂ flames: Gas and particle concentrations. <i>AIChE Journal</i> , 2002 , 48, 59-68	3.6	3
31	Receptor Models for Ambient Carbonaceous Aerosols. <i>Aerosol Science and Technology</i> , 1989 , 10, 258-266	3.4	3
30	Gas-phase Synthesis of Silver Nanoparticles for Plasmonic Biosensors. <i>Materials Research Society Symposia Proceedings</i> , 2013 , 1509, 1		2
29	Effect of Dopants in Vapor Phase Synthesis of Titania Powders. <i>Materials Research Society Symposia Proceedings</i> , 1992 , 271, 951		2
28	Receptor Modeling for Contaminant Particle Source Apportionment in Clean Rooms. <i>Aerosol Science and Technology</i> , 1990 , 12, 805-812	3.4	2
27	AEROSOL-BASED FLAME SYNTHESIS: A MICROREACTOR FOR SILICA NANOPARTICLES 2002 , 193-217		2
26	Acetone Sensing and Catalytic Conversion by Pd-Loaded SnO. <i>Materials</i> , 2021 , 14,	3.5	2
25	Si:WO ₃ sensors for noninvasive diabetes diagnosis by breath analysis 2010 ,		1
24	Structure and Strength of Silica-PDMS Nanocomposites. <i>Materials Research Society Symposia Proceedings</i> , 2011 , 1312, 1		1
23	Composite nanosilver structures suitable for plasmonic biosensors. <i>Materials Research Society Symposia Proceedings</i> , 2012 , 1416, 25		1
22	INTRODUCTION: The Role of Aerosols in Materials Processing. <i>Aerosol Science and Technology</i> , 1993 , 19, 409-410	3.4	1

21	Synthesis of Titania Powder by Titanium Tetrachloride Oxidation in an Aerosol Flow Reactor. <i>Materials Research Society Symposia Proceedings</i> , 1991 , 249, 139		1
20	Flame-made chemoresistive gas sensors and devices. <i>Progress in Energy and Combustion Science</i> , 2022 , 90, 100992	33.6	1
19	Sintering Time for Silica Particle Growth		1
18	Selective monitoring of breath isoprene by a portable detector during exercise and at rest. <i>Sensors and Actuators B: Chemical</i> , 2022 , 357, 131444	8.5	0
17	Scalable Synthesis of Ultrasmall Metal Oxide Radio-Enhancers Outperforming Gold. <i>Chemistry of Materials</i> , 2021 , 33, 3098-3112	9.6	0
16	The Electrophilicity of Surface Carbon Species in the Redox Reactions of CuO-CeO ₂ Catalysts. <i>Angewandte Chemie</i> , 2021 , 133, 14541-14549	3.6	0
15	Precision in Thermal Therapy: Clinical Requirements and Solutions from Nanotechnology. <i>Advanced Therapeutics</i> , 2021 , 4, 2000193	4.9	0
14	BiO boosts brightness, biocompatibility and stability of Mn-doped Ba(VO) as NIR-II contrast agent. <i>Journal of Materials Chemistry B</i> , 2021 , 9, 3038-3046	7.3	0
13	Santoro flame: The volume fraction of soot accounting for its morphology & composition. <i>Combustion and Flame</i> , 2022 , 240, 112025	5.3	0
12	High-throughput generation of aircraft-like soot. <i>Aerosol Science and Technology</i> , 1-16	3.4	0
11	Cancer Treatment: Photothermal Killing of Cancer Cells by the Controlled Plasmonic Coupling of Silica-Coated Au/Fe ₂ O ₃ Nanoaggregates (Adv. Funct. Mater. 19/2014). <i>Advanced Functional Materials</i> , 2014 , 24, 2817-2817	15.6	
10	Silica Coated Multifunctional Plasmonic Nanoparticles for Theranostics. <i>Materials Research Society Symposia Proceedings</i> , 2013 , 1506, 1		
9	Dispersed Nanoelectrodes for High Performance Gas Sensors. <i>Materials Research Society Symposia Proceedings</i> , 2011 , 1292, 93		
8	31. Optimierte Produktgestaltung nanoskaliger Metalloxide mittels numerischer Simulation. <i>Chemie-Ingenieur-Technik</i> , 1998 , 70, 1083-1083	0.8	
7	D-108 In Situ Studies of Nano-Particle Growth in Flames. <i>Powder Diffraction</i> , 2004 , 19, 195-195	1.8	
6	Flame Synthesis of Nanoparticles. <i>Chemie-Ingenieur-Technik</i> , 2001 , 73, 708-708	0.8	
5	Synthesis of nanostructured silica powders by a room temperature aerosol process. <i>Materials Research Society Symposia Proceedings</i> , 1998 , 520, 115		
4	Fundamentals of Particle Flocculation and Removal From Water. <i>Materials Research Society Symposia Proceedings</i> , 1994 , 344, 217		

- 3 Aerosol Coating of Silica Fibers with Nanoparticles. *Materials Research Society Symposia Proceedings*, **1994**, 344, 27
- 2 Monte Carlo Simulation of Gas Phase Particle Formation and Sintering. *Materials Research Society Symposia Proceedings*, **1992**, 278, 261
- 1 Modeling of the Formation of Boron Carbide Particles in an Aerosol Flow Reactor. *Materials Research Society Symposia Proceedings*, **1992**, 242, 643