George Biskos

List of Publications by Year in descending order

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95 papers	3,819 citations	147566 31 h-index	138251 58 g-index
101 all docs	101 docs citations	101 times ranked	5311 citing authors

#	Article	IF	Citations
1	The rise of low-cost sensing for managing air pollution in cities. Environment International, 2015, 75, 199-205.	4.8	597
2	Plasmonic nanoparticle-semiconductor composites for efficient solar water splitting. Journal of Materials Chemistry A, 2016, 4, 17891-17912.	5.2	165
3	Prompt deliquescence and efflorescence of aerosol nanoparticles. Atmospheric Chemistry and Physics, 2006, 6, 4633-4642.	1.9	158
4	Nanosize Effect on the Deliquescence and the Efflorescence of Sodium Chloride Particles. Aerosol Science and Technology, 2006, 40, 97-106.	1.5	142
5	Phase Transitions of Single Salt Particles Studied Using a Transmission Electron Microscope with an Environmental Cell. Aerosol Science and Technology, 2005, 39, 849-856.	1.5	118
6	Ozonolysis of Mixed Oleic-Acid/Stearic-Acid Particles:Â Reaction Kinetics and Chemical Morphology. Journal of Physical Chemistry A, 2005, 109, 10910-10919.	1.1	111
7	Real-time sensors for indoor air monitoring and challenges ahead in deploying them to urban buildings. Science of the Total Environment, 2016, 560-561, 150-159.	3.9	111
8	Unipolar diffusion charging of aerosol particles in the transition regime. Journal of Aerosol Science, 2005, 36, 247-265.	1.8	102
9	Nanosize effect on the hygroscopic growth factor of aerosol particles. Geophysical Research Letters, 2006, 33, .	1.5	100
10	Hot Carrier Generation and Extraction of Plasmonic Alloy Nanoparticles. ACS Photonics, 2017, 4, 1146-1152.	3.2	97
11	Enhancement of the Photoelectrochemical Performance of CuWO₄ Thin Films for Solar Water Splitting by Plasmonic Nanoparticle Functionalization. Journal of Physical Chemistry C, 2015, 119, 2096-2104.	1.5	90
12	Description and Theoretical Analysis of a Differential Mobility Spectrometer. Aerosol Science and Technology, 2005, 39, 527-541.	1.5	86
13	Cloud droplet activation of mixed organic-sulfate particles produced by the photooxidation of isoprene. Atmospheric Chemistry and Physics, 2010, 10, 3953-3964.	1.9	86
14	Generation and Sizing of Particles for Aerosol-Based Nanotechnology. KONA Powder and Particle Journal, 2008, 26, 13-35.	0.9	82
15	Biomass-burning impact on CCN number, hygroscopicity and cloud formation during summertime in the eastern Mediterranean. Atmospheric Chemistry and Physics, 2016, 16, 7389-7409.	1.9	76
16	Toward industrial scale synthesis of ultrapure singlet nanoparticles with controllable sizes in a continuous gas-phase process. Scientific Reports, 2015, 5, 15788.	1.6	75
17	Climatology and trends of aerosol optical depth over the Mediterranean basin during the last 12 years (2002â€“2014) based on Collection 006 MODIS-Aqua data. Science of the Total Environment, 2016, 551-552, 292-303.	3.9	68
18	Can disc diffusion susceptibility tests assess the antimicrobial activity of engineered nanoparticles?. Journal of Nanoparticle Research, 2018, 20, 62.	0.8	56

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19	New particle formation in the southern Aegean Sea during the Etesians: importance for CCN production and cloud droplet number. Atmospheric Chemistry and Physics, 2017, 17, 175-192.	1.9	55
20	Vertical profiles of aerosol mass concentration derived by unmanned airborne in situ and remote sensing instruments during dust events. Atmospheric Measurement Techniques, 2018, 11, 2897-2910.	1.2	50
21	Metal oxide semiconducting nanomaterials for air quality gas sensors: operating principles, performance, and synthesis techniques. Mikrochimica Acta, 2022, 189, 196.	2.5	46
22	Characterization of Tungsten Oxide Thin Films Produced by Spark Ablation for NO₂ Gas Sensing. ACS Applied Materials & Interfaces, 2016, 8, 3933-3939.	4.0	44
23	Monte-Carlo simulation of unipolar diffusion charging for spherical and non-spherical particles. Journal of Aerosol Science, 2004, 35, 707-730.	1.8	42
24	Electrostatic characterisation of corona-wire aerosol chargers. Journal of Electrostatics, 2005, 63, 69-82.	1.0	41
25	General Approach to the Evolution of Singlet Nanoparticles from a Rapidly Quenched Point Source. Journal of Physical Chemistry C, 2016, 120, 621-630.	1.5	41
26	Scalable and Environmentally Benign Process for Smart Textile Nanofinishing. ACS Applied Materials & Interfaces, 2016, 8, 14756-14765.	4.0	39
27	Indirect evidence of the composition of nucleation mode atmospheric particles in the high Arctic. Journal of Geophysical Research D: Atmospheres, 2016, 121, 965-975.	1.2	37
28	Particulate matter and health effects in offices - A review. Building and Environment, 2019, 156, 62-73.	3.0	35
29	Theoretical investigation of X12O12 (XÂ=ÂBe, Mg, and Ca) in sensing CH2N2: A DFT study. Computational and Theoretical Chemistry, 2021, 1198, 113168.	1.1	35
30	Hygroscopic growth of nucleation-mode acidic sulfate particles. Journal of Aerosol Science, 2009, 40, 338-347.	1.8	33
31	Engineered Nanomaterials: Knowledge Gaps in Fate, Exposure, Toxicity, and Future Directions. Journal of Nanomaterials, 2014, 2014, 1-16.	1.5	33
32	The Role of Size and Dimerization of Decorating Plasmonic Silver Nanoparticles on the Photoelectrochemical Solar Water Splitting Performance of BiVO₄ Photoanodes. ChemNanoMat, 2016, 2, 739-747.	1.5	33
33	Atomic Cluster Generation with an Atmospheric Pressure Spark Discharge Generator. Aerosol Science and Technology, 2015, 49, 886-894.	1.5	32
34	Chemical composition and hygroscopic properties of aerosol particles over the Aegean Sea. Atmospheric Chemistry and Physics, 2013, 13, 11595-11608.	1.9	31
35	Atmospheric composition in the Eastern Mediterranean: Influence of biomass burning during summertime using the WRF-Chem model. Atmospheric Environment, 2016, 132, 317-331.	1.9	31
36	Enhancing the detection efficiency of condensation particle counters for sub-2 nm particles. Journal of Aerosol Science, 2018, 117, 44-53.	1.8	31

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37	Enhancing the absorption of 1-chloro-1,2,2,2-tetrafluoroethane on carbon nanotubes: an ab initio study. Bulletin of Materials Science, 2021, 44, 1.	0.8	31
38	Characterization of Nb-doped WO3 thin films produced by Electrostatic Spray Deposition. Thin Solid Films, 2013, 534, 32-39.	0.8	30
39	Physical and chemical processes of air masses in the Aegean Sea during Etesians: Aegean-GAME airborne campaign. Science of the Total Environment, 2015, 506-507, 201-216.	3.9	30
40	Assessment of factors influencing PM mass concentration measured by gravimetric & beta attenuation techniques at a suburban site. Atmospheric Environment, 2016, 131, 409-417.	1.9	30
41	Internally mixed nanoparticles from oscillatory spark ablation between electrodes of different materials. Aerosol Science and Technology, 2018, 52, 505-514.	1.5	30
42	A comprehensive investigation of the intermolecular interactions between CH₂N₂and X₁₂Y₁₂(X = B, Al, Ga; Y = N, P, As) nanocages. Canadian Journal of Chemistry, 2021, 99, 733-741.	0.6	30
43	Green manufacturing of metallic nanoparticles: a facile and universal approach to scaling up. Journal of Materials Chemistry A, 2016, 4, 11222-11227.	5.2	29
44	Magnetic Phase Transition in Spark-Produced Ternary LaFeSi Nanoalloys. ACS Applied Materials & Interfaces, 2018, 10, 6073-6078.	4.0	29
45	Estimation of the emissions by transport in two port cities of the northeastern Mediterranean, Greece. Environmental Pollution, 2020, 257, 113598.	3.7	29
46	Optical hydrogen sensing with nanoparticulate Pdâ€“Au films produced by spark ablation. Sensors and Actuators B: Chemical, 2015, 221, 290-296.	4.0	26
47	Airborne Engineered Nanoparticles: Potential Risks and Monitoring Challenges for Assessing their Impacts on Children. Paediatric Respiratory Reviews, 2012, 13, 79-83.	1.2	25
48	Particulate matter pollution from aviation-related activity at a small airport of the Aegean Sea Insular Region. Science of the Total Environment, 2017, 596-597, 187-193.	3.9	23
49	Dewatering of wastewater sludge through a solar still. Renewable Energy, 2002, 26, 247-256.	4.3	22
50	Nanoparticle emissions from traditional pottery manufacturing. Environmental Sciences: Processes and Impacts, 2014, 16, 1489-1494.	1.7	21
51	Performance evaluation of the cost-effective and lightweight Alphasense optical particle counter for use onboard unmanned aerial vehicles. Aerosol Science and Technology, 2018, 52, 385-392.	1.5	21
52	The Unmanned Systems Research Laboratory (USRL): A New Facility for UAV-Based Atmospheric Observations. Atmosphere, 2021, 12, 1042.	1.0	21
53	A Cost-Effective Electrostatic Precipitator for Aerosol Nanoparticle Segregation. Aerosol Science and Technology, 2015, 49, iv-vi.	1.5	20
54	Summertime particulate matter and its composition in Greece. Atmospheric Environment, 2019, 213, 597-607.	1.9	20

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55	Particle number size distribution statistics at City-Centre Urban Background, urban background, and remote stations in Greece during summer. Atmospheric Environment, 2019, 213, 711-726.	1.9	19
56	Workplace Exposure to Nanoparticles during Thermal Spraying of Ceramic Coatings. Annals of Work Exposures and Health, 2019, 63, 91-106.	0.6	19
57	Comparison of particle size distributions and volatile organic compounds exhaled by e-cigarette and cigarette users. Journal of Aerosol Science, 2020, 141, 105487.	1.8	19
58	Towards understanding the characteristics of new particle formation in the Eastern Mediterranean. Atmospheric Chemistry and Physics, 2021, 21, 9223-9251.	1.9	19
59	Airborne ultrafine particles in a naturally ventilated metro station: Dominant sources and mixing state determined by particle size distribution and volatility measurements. Environmental Pollution, 2018, 239, 82-94.	3.7	16
60	Nucleation events at a coastal city during the warm period: Kerbside versus urban background measurements. Atmospheric Environment, 2016, 140, 60-68.	1.9	15
61	Methods for Assessing Basic Particle Properties and Cytotoxicity of Engineered Nanoparticles. Toxics, 2014, 2, 79-91.	1.6	14
62	Aerosol chemistry above an extended archipelago of the eastern Mediterranean basin during strong northern winds. Atmospheric Chemistry and Physics, 2015, 15, 8401-8421.	1.9	13
63	Lightweight differential mobility analyzers: Toward new and inexpensive manufacturing methods. Aerosol Science and Technology, 2016, 50, 2-5.	1.5	13
64	Toxicity of pure silver nanoparticles produced by spark ablation on the aquatic plant Lemna minor. Journal of Aerosol Science, 2019, 128, 17-21.	1.8	13
65	Performance comparison of two thermodenuders in Volatility Tandem DMA measurements. Journal of Aerosol Science, 2016, 92, 38-52.	1.8	12
66	Effect of Al- and Ga-doping on the adsorption of H<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mrow /><mml:mn>2</mml:mn></mml:msub></mml:math>SiCl<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mrow /><mml:mn>2</mml:mn></mml:msub></mml:math>onto the outer surface of boron nitride nanotube: a DFT study. Comptes Rendus Chimie, 2021, 24, 291-304.	0.2	12
67	Relative humidity non-uniformities in Hygroscopic Tandem Differential Mobility Analyzer measurements. Journal of Aerosol Science, 2016, 101, 1-9.	1.8	11
68	Particulate pollution transport episodes from Eurasia to a remote region of northeast Mediterranean. Atmospheric Environment, 2016, 128, 45-52.	1.9	11
69	Out-scaling electrohydrodynamic atomization systems for the production of well-defined droplets. Powder Technology, 2011, 214, 382-387.	2.1	10
70	Investigation of Turbulence Parametrization Schemes with Reference to the Atmospheric Boundary Layer Over the Aegean Sea During Etesian Winds. Boundary-Layer Meteorology, 2017, 164, 303-329.	1.2	9
71	Hygroscopic properties of potassium-halide nanoparticles. Aerosol Science and Technology, 2018, 52, 536-545.	1.5	9
72	The Multiple Monodisperse Outlet Differential Mobility Analyzer: Derivation of Its Transfer Function and Resolution. Aerosol Science and Technology, 2012, 46, 951-965.	1.5	8

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73	Contribution of locally-produced and transported air pollution to particulate matter in a small insular coastal city. Atmospheric Pollution Research, 2020, 11, 667-678.	1.8	8
74	The Nano-Particle Mass Classifier (Nano-PMC): Development, Characterization, and Application for Determining the Mass, Apparent Density, and Shape of Particles with Masses Down to the Zeptogram Range. Aerosol Science and Technology, 2015, 49, 495-507.	1.5	7
75	Thin Film and Nanostructured Pd-Based Materials for Optical H2 Sensors: A Review. Nanomaterials, 2021, 11, 3100.	1.9	7
76	Linking indoor particulate matter and black carbon with sick building syndrome symptoms in a public office building. Atmospheric Pollution Research, 2022, 13, 101292.	1.8	7
77	A tunable high-pass filter for simple and inexpensive size-segregation of sub-10-nm nanoparticles. Scientific Reports, 2017, 7, 45678.	1.6	6
78	Long-term observations of the background aerosol at Cabauw, The Netherlands. Science of the Total Environment, 2018, 625, 752-761.	3.9	6
79	Heavy metals inhalation exposure analysis from particulate matter emitted from dry and wet recycling processes of waste electrical and electronic equipment. Environmental Progress and Sustainable Energy, 2019, 38, e13265.	1.3	6
80	Particle size distributions and hygroscopic restructuring of ultrafine particles emitted during thermal spraying. Aerosol Science and Technology, 2020, 54, 1359-1372.	1.5	6
81	Connectivity enhancement of highly porous WO₃nanostructured thin films by in situ growth of K_{0.33}WO₃nanowires. CrystEngComm, 2014, 16, 1228-1231.	1.3	5
82	Modification of the TSI 3081 differential mobility analyzer to include three monodisperse outlets: Comparison between experimental and theoretical performance. Aerosol Science and Technology, 2016, 50, 1342-1351.	1.5	5
83	New method for the protection and restoration of calcareous cultural heritage stones by polyelectrolytes and hydroxyapatite nanocrystals. Journal of Colloid and Interface Science, 2021, 604, 604-615.	5.0	5
84	Comparison Between the Theoretical and Experimental Performance of a Differential Mobility Analyzer with Three Monodisperse-Particle Outlets. Aerosol Science and Technology, 2013, 47, 406-416.	1.5	4
85	Characterization of atmospheric-pressure spark generated atomic silver and gold clusters by time-of-flight mass spectrometry. Journal of Aerosol Science, 2021, 156, 105780.	1.8	4
86	Physical and Chemical Processes of Polluted Air Masses During Etesians: Aegean-Game Airborne Campaign â€“ An Outline. Springer Atmospheric Sciences, 2013, , 1239-1244.	0.4	4
87	Temperature and pressure effects on the performance of the portable TSI 3007 condensation particle counter: Implications on ground and aerial observations. Journal of Aerosol Science, 2022, 159, 105877.	1.8	3
88	Qualification of the Alphasense optical particle counter for inline air quality monitoring. Aerosol Science and Technology, 2021, 55, 361-370.	1.5	3
89	The regime of Aerosol Optical Depth and Ã…ngstrÃ¶m exponent over Central and South Asia. E3S Web of Conferences, 2019, 99, 01003.	0.2	2
90	Improved performance of Differential Mobility Analyzers with 3D-printed flow straighteners. Journal of Aerosol Science, 2020, 145, 105545.	1.8	2

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91	Air Pollution Modeling in a North Aegean City: Effects of the Transportation System on Local Air Quality. Springer Atmospheric Sciences, 2017, , 1093-1098.	0.4	1
92	Solar Irradiance Prediction over the Aegean Sea: Shortwave Parameterization Schemes and Aerosol Radiation Feedback. Springer Proceedings in Complexity, 2018, , 141-145.	0.2	1
93	Nanoparticles and Nanoparticle-Based Materials Produced by Spark Ablation for Environmental Gas Sensors. , 2019, , 335-353.		1
94	Synthesis of mesostructured thin films by ionic wind assisted electrostatic spray deposition. Particuology, 2016, 27, 128-132.	2.0	0
95	Performance evaluation of a 3D-printed sharp-cut cyclone. Environmental Sciences: Processes and Impacts, 2022, 24, 1173-1180.	1.7	0