Alexei F Khalizov

List of Publications by Year
in descending order

69	5,045	196777	124990
papers	citations	29 h-index	64 g-index

72	72	72	4791
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Molecular Simulation of Benzene Adsorption in Graphitic and Amorphous Carbon Slit Pores. Journal of Chemical & Engineering Data, 2022, 67, 1765-1778.	1.0	1
2	Kinetic model for competitive condensation of vapor between concave and convex surfaces in a soot aggregate. Aerosol Science and Technology, 2021, 55, 302-315.	1.5	4
3	Radiatively driven NH3 release from agricultural field during wintertime slack season. Atmospheric Environment, 2021, 247, 118228.	1.9	2
4	Heterogeneous Chemistry of Mercuric Chloride on Inorganic Salt Surfaces. Journal of Physical Chemistry A, 2021, 125, 3943-3952.	1.1	3
5	Vapor Condensation and Coating Evaporation Are Both Responsible for Soot Aggregate Restructuring. Environmental Science & Technology, 2021, 55, 8622-8630.	4.6	12
6	Exchange Reactions Alter Molecular Speciation of Gaseous Oxidized Mercury. ACS Earth and Space Chemistry, 2021, 5, 1842-1853.	1.2	6
7	Direct detection of gas-phase mercuric chloride by ion drift - Chemical ionization mass spectrometry. Atmospheric Environment, 2020, 238, 117687.	1.9	12
8	Absorption and scattering of light by soot aggregates with uniform and pendular ring coatings. Journal of Aerosol Science, 2020, 147, 105583.	1.8	4
9	Effect of organic coatings derived from the OH-initiated oxidation of amines on soot morphology and cloud activation. Atmospheric Research, 2020, 239, 104905.	1.8	8
10	Thermal Stability of Particle-Phase Monoethanolamine Salts. Environmental Science & Technology, 2018, 52, 2409-2417.	4.6	5
11	Single Parameter for Predicting the Morphology of Atmospheric Black Carbon. Environmental Science & Technology, 2018, 52, 14169-14179.	4.6	19
12	Sizeâ€resolved measurements of mixing state and cloudâ€nucleating ability of aerosols in Nanjing, China. Journal of Geophysical Research D: Atmospheres, 2017, 122, 9430-9450.	1.2	22
13	The Impact of Sampling Medium and Environment on Particle Morphology. Atmosphere, 2017, 8, 162.	1.0	6
14	An unexpected restructuring of combustion soot aggregates by subnanometer coatings of polycyclic aromatic hydrocarbons. Geophysical Research Letters, 2016, 43, 11,080.	1.5	25
15	Measurement of atmospheric amines and ammonia using the high resolution time-of-flight chemical ionization mass spectrometry. Atmospheric Environment, 2015, 102, 249-259.	1.9	130
16	High Sensitivity of Diesel Soot Morphological and Optical Properties to Combustion Temperature in a Shock Tube. Environmental Science & Technology, 2014, 48, 6444-6452.	4.6	18
17	Role of stabilized Criegee Intermediate in secondary organic aerosol formation from the ozonolysis of Î±-cedrene. Atmospheric Environment, 2014, 94, 448-457.	1.9	40
18	New Directions: Light absorbing aerosols and their atmospheric impacts. Atmospheric Environment, 2013, 81, 713-715.	1.9	174

#	Article	IF	Citations
19	Role of OH-Initiated Oxidation of Isoprene in Aging of Combustion Soot. Environmental Science & Technology, 2013, 47, 2254-2263.	4.6	75
20	Rapid modification of cloudâ€nucleating ability of aerosols by biogenic emissions. Geophysical Research Letters, 2013, 40, 6293-6297.	1.5	40
21	Measurements of submicron aerosols in Houston, Texas during the 2009 SHARP field campaign. Journal of Geophysical Research D: Atmospheres, 2013, 118, 10,518.	1.2	56
22	Soot Aging from OH-Initiated Oxidation of Toluene. Environmental Science & Technology, 2012, 46, 9464-9472.	4.6	73
23	Heterogeneous Reactions of Epoxides in Acidic Media. Journal of Physical Chemistry A, 2012, 116, 6078-6090.	1.1	42
24	Characterization of Soot Aerosol Produced from Combustion of Propane in a Shock Tube. Aerosol Science and Technology, 2012, 46, 925-936.	1.5	26
25	Nucleation and Growth of Nanoparticles in the Atmosphere. Chemical Reviews, 2012, 112, 1957-2011.	23.0	938
26	Heterogeneous Reactions of Alkylamines with Ammonium Sulfate and Ammonium Bisulfate. Environmental Science & Technology, 2011, 45, 4748-4755.	4.6	113
27	Laboratory Investigation on the Role of Organics in Atmospheric Nanoparticle Growth. Journal of Physical Chemistry A, 2011, 115, 8940-8947.	1.1	34
28	Size dependence of volume and surface nucleation rates for homogeneous freezing of supercooled water droplets. Atmospheric Chemistry and Physics, 2011, 11, 2853-2861.	1.9	40
29	Volume nucleation rates for homogeneous freezing in supercooled water microdroplets: results from a combined experimental and modelling approach. Atmospheric Chemistry and Physics, 2010, 10, 7945-7961.	1.9	62
30	Atmospheric nanoparticles formed from heterogeneous reactions of organics. Nature Geoscience, 2010, 3, 238-242.	5.4	269
31	Heterogeneous Reaction of NO₂ on Fresh and Coated Soot Surfaces. Journal of Physical Chemistry A, 2010, 114, 7516-7524.	1.1	90
32	Heterogeneous Chemistry of Alkylamines with Sulfuric Acid: Implications for Atmospheric Formation of Alkylaminium Sulfates. Environmental Science & Technology, 2010, 44, 2461-2465.	4.6	130
33	Atmospheric Pressure-Ion Drift Chemical Ionization Mass Spectrometry for Detection of Trace Gas Species. Analytical Chemistry, 2010, 82, 7302-7308.	3.2	39
34	Processing of Soot by Controlled Sulphuric Acid and Water Condensationâ€"Mass and Mobility Relationship. Aerosol Science and Technology, 2009, 43, 629-640.	1.5	178
35	Formation of nanoparticles of blue haze enhanced by anthropogenic pollution. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 17650-17654.	3.3	244
36	Effects of Coating of Dicarboxylic Acids on the Massâ^'Mobility Relationship of Soot Particles. Environmental Science & Technology, 2009, 43, 2787-2792.	4.6	98

#	Article	IF	Citations
37	Enhanced Light Absorption and Scattering by Carbon Soot Aerosol Internally Mixed with Sulfuric Acid. Journal of Physical Chemistry A, 2009, 113, 1066-1074.	1.1	200
38	Hydrogen-Bonding Interaction in Molecular Complexes and Clusters of Aerosol Nucleation Precursors. Journal of Physical Chemistry A, 2009, 113, 680-689.	1.1	183
39	Effects of dicarboxylic acid coating on the optical properties of soot. Physical Chemistry Chemical Physics, 2009, 11, 7869.	1.3	99
40	Formation of highly hygroscopic soot aerosols upon internal mixing with sulfuric acid vapor. Journal of Geophysical Research, 2009, 114, .	3.3	172
41	Variability in morphology, hygroscopicity, and optical properties of soot aerosols during atmospheric processing. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 10291-10296.	3.3	678
42	A Novel, One-Pot Synthesis of Novel 3F, 5F, and 8F Aromatic Polymers. Macromolecular Rapid Communications, 2007, 28, 183-187.	2.0	38
43	Retrieval of aerosol physical and chemical properties from mid-infrared extinction spectra. Journal of Quantitative Spectroscopy and Radiative Transfer, 2007, 107, 294-305.	1.1	18
44	Modeling of flow dynamics in laminar aerosol flow tubes. Journal of Aerosol Science, 2006, 37, 1174-1187.	1.8	10
45	Development and characterization of a laminar aerosol flow tube. Review of Scientific Instruments, 2006, 77, 033102.	0.6	12
46	Superacid-Catalyzed Polycondensation of Acenaphthenequinone with Aromatic Hydrocarbons. Macromolecules, 2005, 38, 6005-6014.	2.2	34
47	Frequency Dependent Complex Refractive Indices of Supercooled Liquid Water and Ice Determined from Aerosol Extinction Spectra. Journal of Physical Chemistry A, 2005, 109, 2760-2764.	1.1	68
48	Local order and dynamics in supercooled water: A study by IR spectroscopy and molecular dynamic simulations. Journal of Chemical Physics, 2004, 121, 6941-6947.	1.2	31
49	Characterization of atmospheric aerosols from infrared measurements: simulations, testing, and applications. Applied Optics, 2004, 43, 5503.	2.1	20
50	A Theoretical Study on the Reactions of Hg with Halogens: Atmospheric Implications.. ChemInform, 2003, 34, no.	0.1	0
51	A Theoretical Study on the Reactions of Hg with Halogens:Â Atmospheric Implications. Journal of Physical Chemistry A, 2003, 107, 6360-6365.	1.1	88
52	Reactions of Gaseous Mercury with Atomic and Molecular Halogens:Â Kinetics, Product Studies, and Atmospheric Implications. Journal of Physical Chemistry A, 2002, 106, 7310-7320.	1.1	258
53	Complex of chlorine dioxide with TEMPO and its conversion into oxoammonium salt. Journal of Physical Organic Chemistry, 2001, 14, 38-42.	0.9	10
54	Free-radical chain decomposition of ozone initiated by di(tert-butyl) trioxide. Russian Chemical Bulletin, 2001, 50, 63-67.	0.4	3

#	Article	IF	Citations
55	Stability of XSO2 (X=F, Cl, and Br) radical: impact of the basis set on Xâ€“S bonding energy in ab initio and DFT calculations. Chemical Physics Letters, 2001, 350, 173-180.	1.2	5
56	Formation of hydrotrioxides during ozonation of hydrocarbons on silica gel. Decomposition of hydrotrioxides. Journal of Physical Organic Chemistry, 2000, 13, 87-96.	0.9	11
57	Kinetics and Products of Oxidation of 2-Isopropyl-1,3-Dioxolane by Chlorine Dioxide. Reaction Kinetics and Catalysis Letters, 2000, 70, 177-182.	0.6	2
58	Complexes of chlorine dioxide with nitroxyl radicals. Tetrahedron Letters, 1999, 40, 4737-4740.	0.7	16
59	Kinetics of radical decomposition of di(tert-butyl) trioxide. Russian Chemical Bulletin, 1999, 48, 61-65.	0.4	3
60	Interaction of singlet oxygen with biomolecules, 2.1O2 quenching by glycirrhizic acid derivatives. Reaction Kinetics and Catalysis Letters, 1998, 63, 279-282.	0.6	0
61	Adamantylhydrotrioxide formation during ozonation of adamantane on silica gel. Mendeleev Communications, 1997, 7, 227-228.	0.6	11
62	Induced decomposition of di(tert-butyl)trioxide. Russian Chemical Bulletin, 1997, 46, 884-887.	0.4	5
63	Chemiluminescence during ozonation of adamantane on silica gel. Reaction Kinetics and Catalysis Letters, 1996, 58, 403-406.	0.6	1
64	Effect of the medium on the decomposition rate of di-t-butyl trioxide. Reaction Kinetics and Catalysis Letters, 1995, 54, 427-430.	0.6	2
65	Effect of medium on the rate constant of decomposition of di(tert-butyl)trioxide. Russian Chemical Bulletin, 1995, 44, 1127-1128.	0.4	1
66	ESR studies of radical breakdown for di-t-butyl trioxide. Reaction Kinetics and Catalysis Letters, 1994, 52, 249-254.	0.6	9
67	Chemiluminescence in the thermal decomposition of di(tert-butyl) trioxide. Russian Chemical Bulletin, 1993, 42, 1968-1971.	0.4	6
68	Chemiluminescence in the decomposition of di(tert-butyl) trioxide (CH3)3C-OOO-C(CH3)3. Russian Chemical Bulletin, 1993, 42, 1609-1610.	0.4	1
69	Chemiluminescent studies for the kinetics of decomposition of Di-(tert-butyl)-trioxide. Reaction Kinetics and Catalysis Letters, 1993, 51, 389-392.	0.6	4