Oleg Kostko

List of Publications by Year
in descending order

79 papers	3,036 citations	147801 31 h-index	168389 53 g-index
82 all docs	82 docs citations	82 times ranked	2851 citing authors

#	Article	IF	Citations
1	An investigation of aqueous ammonium nitrate aerosols with soft X-ray spectroscopy. Molecular Physics, 2022, 120, .	1.7	4
2	Thermal and Catalytic Decomposition of 2-Hydroxyethylhydrazine and 2-Hydroxyethylhydrazinium Nitrate Ionic Liquid. Journal of Physical Chemistry A, 2022, 126, 373-394.	2.5	4
3	Studying Interfacial Dark Reactions of Glyoxal and Hydrogen Peroxide Using Vacuum Ultraviolet Single Photon Ionization Mass Spectrometry. Atmosphere, 2021, 12, 338.	2.3	1
4	Experimental characterization of resist materials. , 2021, , .		5
5	Gas-phase synthesis of corannulene â€“ a molecular building block of fullerenes. Physical Chemistry Chemical Physics, 2021, 23, 5740-5749.	2.8	10
6	Local electronic structure of histidine in aqueous solution. Physical Chemistry Chemical Physics, 2021, 23, 8847-8853.	2.8	14
7	New Insights into Secondary Organic Aerosol Formation at the Airâ€“Liquid Interface. Journal of Physical Chemistry Letters, 2021, 12, 324-329.	4.6	9
8	Probing Self-Assembly in Arginineâ€“Oleic Acid Solutions with Terahertz Spectroscopy and X-ray Scattering. Journal of Physical Chemistry Letters, 2020, 11, 9507-9514.	4.6	5
9	Gas phase formation of cyclopentanaphthalene (benzindene) isomers via reactions of 5- and 6-indenyl radicals with vinylacetylene. Physical Chemistry Chemical Physics, 2020, 22, 22493-22500.	2.8	13
10	Determination of effective attenuation length of slow electrons in polymer films. Journal of Applied Physics, 2020, 127, .	2.5	8
11	Exciton energy transfer reveals spectral signatures of excited states in clusters. Physical Chemistry Chemical Physics, 2020, 22, 14284-14292.	2.8	5
12	Probing sulphur clusters in a microfluidic electrochemical cell with synchrotron-based photoionization mass spectrometry. Physical Chemistry Chemical Physics, 2020, 22, 14449-14453.	2.8	3
13	From atoms to aerosols: probing clusters and nanoparticles with synchrotron based mass spectrometry and X-ray spectroscopy. Physical Chemistry Chemical Physics, 2020, 22, 2713-2737.	2.8	34
14	Using Nanoparticle X-ray Spectroscopy to Probe the Formation of Reactive Chemical Gradients in Diffusion-Limited Aerosols. Journal of Physical Chemistry A, 2019, 123, 6034-6044.	2.5	12
15	To Be or Not To Be a Molecular Ion: The Role of the Solvent in Photoionization of Arginine. Journal of Physical Chemistry Letters, 2019, 10, 1860-1865.	4.6	6
16	Probing Reactivity of Gold Atoms with Acetylene and Ethylene with VUV Photoionization Mass Spectrometry and Ab Initio Studies. Journal of Physical Chemistry A, 2019, 123, 2194-2202.	2.5	10
17	Velocity map imaging of inelastic and elastic low energy electron scattering in organic nanoparticles. Journal of Chemical Physics, 2019, 151, 184702.	3.0	13
18	Fundamental understanding of chemical processes in extreme ultraviolet resist materials. Journal of Chemical Physics, 2018, 149, 154305.	3.0	15

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19	Enabling liquid vapor analysis using synchrotron VUV single photon ionization mass spectrometry with a microfluidic interface. Review of Scientific Instruments, 2018, 89, 115105.	1.3	6
20	Guanidinium Group Remains Protonated in a Strongly Basic Arginine Solution. ChemPhysChem, 2017, 18, 1503-1506.	2.1	46
21	Atmospheric dayglow diagnostics involving the O₂(<i>bâ€X</i>) Atmospheric band emission: Global Oxygen and Temperature (GOAT) mapping. Journal of Geophysical Research: Space Physics, 2017, 122, 3640-3649.	2.4	12
22	Ab initio dynamics and photoionization mass spectrometry reveal ionâ€“molecule pathways from ionized acetylene clusters to benzene cation. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, E4125-E4133.	7.1	24
23	Low energy electron attenuation lengths in coreâ€“shell nanoparticles. Physical Chemistry Chemical Physics, 2017, 19, 13372-13378.	2.8	13
24	Soft X-ray spectroscopy of nanoparticles by velocity map imaging. Journal of Chemical Physics, 2017, 147, 013931.	3.0	30
25	HACA's Heritage: A Freeâ€Radical Pathway to Phenanthrene in Circumstellar Envelopes of Asymptotic Giant Branch Stars. Angewandte Chemie - International Edition, 2017, 56, 4515-4519.	13.8	48
26	HACA's Heritage: A Freeâ€Radical Pathway to Phenanthrene in Circumstellar Envelopes of Asymptotic Giant Branch Stars. Angewandte Chemie, 2017, 129, 4586-4590.	2.0	20
27	Probing the Heterogeneous Ozonolysis of Squalene Nanoparticles by Photoemission. Journal of Physical Chemistry A, 2016, 120, 8645-8656.	2.5	26
28	The thermal decomposition of the benzyl radical in a heated micro-reactor. II. Pyrolysis of the tropyl radical. Journal of Chemical Physics, 2016, 145, 014305.	3.0	28
29	Probing Ionic Complexes of Ethylene and Acetylene with Vacuum-Ultraviolet Radiation. Journal of Physical Chemistry A, 2016, 120, 5053-5064.	2.5	11
30	Proton transfer in acetaldehydeâ€“water clusters mediated by a single water molecule. Physical Chemistry Chemical Physics, 2016, 18, 25569-25573.	2.8	13
31	VUV and XUV reflectance of optically coated mirrors for selection of high harmonics. Optics Express, 2016, 24, 18209.	3.4	4
32	Hydrogenâ€Abstraction/Acetyleneâ€Addition Exposed. Angewandte Chemie, 2016, 128, 15207-15211.	2.0	7
33	Hydrogenâ€Abstraction/Acetyleneâ€Addition Exposed. Angewandte Chemie - International Edition, 2016, 55, 14983-14987.	13.8	48
34	Vacuum Ultraviolet Photoionization of Complex Chemical Systems. Annual Review of Physical Chemistry, 2016, 67, 19-40.	10.8	54
35	Unexpected Chemistry from the Reaction of Naphthyl and Acetylene at Combustionâ€Like Temperatures. Angewandte Chemie - International Edition, 2015, 54, 5421-5424.	13.8	62
36	Selective Formation of Indene through the Reaction of Benzyl Radicals with Acetylene. ChemPhysChem, 2015, 16, 2091-2093.	2.1	37

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37	Isomerization and Fragmentation of Cyclohexanone in a Heated Micro-Reactor. Journal of Physical Chemistry A, 2015, 119, 12635-12647.	2.5	11
38	Toward the Oxidation of the Phenyl Radical and Prevention of PAH Formation in Combustion Systems. Journal of Physical Chemistry A, 2015, 119, 7145-7154.	2.5	41
39	Probing Methanol Cluster Growth by Vacuum Ultraviolet Ionization. Journal of Physical Chemistry A, 2015, 119, 4083-4092.	2.5	14
40	GAS PHASE SYNTHESIS OF (ISO)QUINOLINE AND ITS ROLE IN THE FORMATION OF NUCLEOBASES IN THE INTERSTELLAR MEDIUM. Astrophysical Journal, 2015, 803, 53.	4.5	29
41	The thermal decomposition of the benzyl radical in a heated micro-reactor. I. Experimental findings. Journal of Chemical Physics, 2015, 142, 044307.	3.0	46
42	On the formation of pyridine in the interstellar medium. Physical Chemistry Chemical Physics, 2015, 17, 32000-32008.	2.8	33
43	Isotope effects and spectroscopic assignments in the non-dissociative photoionization spectrum of N2. Journal of Chemical Physics, 2014, 140, 194303.	3.0	10
44	Vacuum Ultraviolet Photoionization Studies of PtCH₂ and Hâ€Ptâ€CH₃: A Potential Energy Surface for the Pt+CH₄ Reaction. Angewandte Chemie - International Edition, 2013, 52, 888-891.	13.8	23
45	Thermal decomposition of CH3CHO studied by matrix infrared spectroscopy and photoionization mass spectroscopy. Journal of Chemical Physics, 2012, 137, 164308.	3.0	49
46	AN EXPERIMENTAL AND THEORETICAL STUDY OF THE IONIZATION ENERGIES OF SiC₂H<i>_x</i>(<i>x</i>= 0, 1, 2) ISOMERS. Astrophysical Journal, 2012, 761, 178.	4.5	30
47	Thermal Decomposition Mechanism of 1-Ethyl-3-methylimidazolium Bromide Ionic Liquid. Journal of Physical Chemistry A, 2012, 116, 5867-5876.	2.5	57
48	Ionization of dimethyluracil dimers leads to facile proton transfer in the absence of hydrogen bonds. Nature Chemistry, 2012, 4, 323-329.	13.6	69
49	The effect of microhydration on ionization energies of thymine. Faraday Discussions, 2011, 150, 313.	3.2	38
50	Soft Ionization of Thermally Evaporated Hypergolic Ionic Liquid Aerosols. Journal of Physical Chemistry A, 2011, 115, 4630-4635.	2.5	23
51	Vacuum-Ultraviolet Photoionization and Mass Spectrometric Characterization of Lignin Monomers Coniferyl and Sinapyl Alcohols. Journal of Physical Chemistry A, 2011, 115, 3279-3290.	2.5	18
52	The products of the thermal decomposition of CH3CHO. Journal of Chemical Physics, 2011, 135, 014306.	3.0	43
53	First-principles determination of the structure of NaN and NaNâ˜’ clusters with up to 80 atoms. Journal of Chemical Physics, 2011, 134, 164304.	3.0	31
54	MEASUREMENTS OF ISOTOPE EFFECTS IN THE PHOTOIONIZATION OF N ₂ AND IMPLICATIONS FOR TITAN'S ATMOSPHERE. Astrophysical Journal Letters, 2011, 728, L32.	8.3	29

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55	Desorption Dynamics, Internal Energies, and Imaging of Organic Molecules from Surfaces with Laser Desorption and Vacuum Ultraviolet (VUV) Photoionization. Chemistry - an Asian Journal, 2011, 6, 3066-3076.	3.3	22
56	DETERMINATION OF IONIZATION ENERGIES OF C<i>_n</i>N (<i>n</i>= 4-12): VACUUM ULTRAVIOLET PHOTOIONIZATION EXPERIMENTS AND THEORETICAL CALCULATIONS. Astrophysical Journal, 2010, 717, 674-682.	4.5	31
57	AN EXPERIMENTAL AND THEORETICAL STUDY ON THE IONIZATION ENERGIES OF POLYYNES (H-(Câ‰¡C)<i>_n</i>-H;<i>n</i>= 1-9). Astrophysical Journal, 2010, 719, 1884-1889.	4.5	52
58	The effect of Ï€-stacking, H-bonding, and electrostatic interactions on the ionization energies of nucleic acid bases: adenineâ€"adenine, thymineâ€"thymine and adenineâ€"thymine dimers. Physical Chemistry Chemical Physics, 2010, 12, 2292.	2.8	88
59	On the ionization energies of C4H3 isomers. Chemical Physics Letters, 2010, 485, 281-285.	2.6	21
60	Spectroscopic signatures of proton transfer dynamics in the water dimer cation. Journal of Chemical Physics, 2010, 132, 194311.	3.0	69
61	Electronic Structure and Spectroscopy of Nucleic Acid Bases: Ionization Energies, Ionization-Induced Structural Changes, and Photoelectron Spectra. Journal of Physical Chemistry A, 2010, 114, 12305-12317.	2.5	91
62	Tunable Wavelength Soft Photoionization of Ionic Liquid Vapors. Journal of Physical Chemistry A, 2010, 114, 879-883.	2.5	29
63	Determination of Ionization Energies of Small Silicon Clusters with Vacuum Ultraviolet Radiation. Journal of Physical Chemistry A, 2010, 114, 3176-3181.	2.5	39
64	Ionization of cytosine monomer and dimer studied by VUV photoionization and electronic structure calculations. Physical Chemistry Chemical Physics, 2010, 12, 2860.	2.8	65
65	Heats of Vaporization of Room Temperature Ionic Liquids by Tunable Vacuum Ultraviolet Photoionization. Journal of Physical Chemistry B, 2010, 114, 1361-1367.	2.6	49
66	Untangling the chemical evolution of Titan's atmosphere and surfaceâ€"from homogeneous to heterogeneous chemistry. Faraday Discussions, 2010, 147, 429.	3.2	118
67	Structural evolution of the sodium cluster anions<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msubsup><mml:mrow><mml:mtext>Na</mml:mtext></mml:mrow><mml:mrow><mml:mn>20</ Physical Review B, 2009, 80, .	3.2	19
68	Vacuum-Ultraviolet Photoionization Measurement and ab Initio Calculation of the Ionization Energy of Gas-Phase SiO₂. Journal of Physical Chemistry A, 2009, 113, 1225-1230.	2.5	21
69	Experimental Observation of Guanine Tautomers with VUV Photoionization. Journal of Physical Chemistry A, 2009, 113, 4829-4832.	2.5	53
70	Mass-Analyzed Threshold Ionization (MATI) Spectroscopy of Atoms and Molecules Using VUV Synchrotron Radiation. Journal of Physical Chemistry A, 2009, 113, 14206-14211.	2.5	24
71	Vacuum-Ultraviolet (VUV) Photoionization of Small Methanol and Methanolâˆ'Water Clusters. Journal of Physical Chemistry A, 2008, 112, 9555-9562.	2.5	43
72	Structure Determination of Medium-Sized Sodium Clusters. Physical Review Letters, 2007, 98, 043401.	7.8	89

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73	Photoelectron spectroscopy of the structure and dynamics of free size selected sodium clusters. Journal of Physics: Conference Series, 2007, 88, 012034.	0.4	12
74	Au34â^': A Chiral Gold Cluster?. Angewandte Chemie - International Edition, 2007, 46, 2944-2948.	13.8	139
75	Size-Dependent Structural Evolution and Chemical Reactivity of Gold Clusters. ChemPhysChem, 2007, 8, 157-161.	2.1	197
76	Photoelectron spectra of Nan- and Cun- with nâ€‰=â€‰20â€"40: observation of surprising similarities. European Physical Journal D, 2005, 34, 133-137.	1.3	32
77	Melting of Sodium Clusters: Where Do the Magic Numbers Come from?. Physical Review Letters, 2005, 94, 035701.	7.8	188
78	Transition from a Bloch-Wilson to a free-electron density of states in Znnâ^' clusters. Journal of Chemical Physics, 2005, 123, 221102.	3.0	12
79	Symmetry and Electronic Structure of Noble-Metal Nanoparticles and the Role of Relativity. Physical Review Letters, 2004, 93, 093401.	7.8	241