Oleg V Boyarkin

List of Publications by Year in descending order

49 papers	2,312 citations	304368 22 h-index	205818 48 g-index
55 all docs	55 docs citations	55 times ranked	1357 citing authors

#	Article	IF	Citations
1	Spectroscopic studies of cold, gas-phase biomolecular ions. International Reviews in Physical Chemistry, 2009, 28, 481-515.	0.9	308
2	Electronic Spectroscopy of Cold, Protonated Tryptophan and Tyrosine. Journal of the American Chemical Society, 2006, 128, 2816-2817.	6.6	263
3	Conformation-Specific Spectroscopy and Photodissociation of Cold, Protonated Tyrosine and Phenylalanine. Journal of the American Chemical Society, 2007, 129, 11814-11820.	6.6	195
4	Interplay of Intra- and Intermolecular H-Bonding in a Progressively Solvated Macrocyclic Peptide. Science, 2012, 336, 320-323.	6.0	152
5	Microsolvation Effects on the Excited-State Dynamics of Protonated Tryptophan. Journal of the American Chemical Society, 2006, 128, 16938-16943.	6.6	144
6	Spectroscopic Signatures of Gas-Phase Helices:Â Ac-Phe-(Ala)5-Lys-H+and Ac-Phe-(Ala)10-Lys-H+. Journal of the American Chemical Society, 2007, 129, 13820-13821.	6.6	116
7	Spectroscopy and conformational preferences of gas-phase helices. Physical Chemistry Chemical Physics, 2009, 11, 125-132.	1.3	115
8	UV and IR Spectroscopic Studies of Cold Alkali Metal Ionâ€“Crown Ether Complexes in the Gas Phase. Journal of the American Chemical Society, 2011, 133, 12256-12263.	6.6	90
9	Conformation-specific infrared and ultraviolet spectroscopy of tyrosine-based protonated dipeptides. Journal of Chemical Physics, 2007, 127, 154322.	1.2	80
10	Highly Resolved Spectra of Gas-Phase Gramicidin S: A Benchmark for Peptide Structure Calculations. Journal of the American Chemical Society, 2010, 132, 4040-4041.	6.6	78
11	Coldâ€Ion Spectroscopy Reveals the Intrinsic Structure of a Decapeptide. Angewandte Chemie - International Edition, 2011, 50, 5383-5386.	7.2	63
12	Accurate bond dissociation energy of water determined by triple-resonance vibrational spectroscopy and ab initio calculations. Chemical Physics Letters, 2013, 568-569, 14-20.	1.2	60
13	Exploring the Mechanism of IRâ€“UV Doubleâ€Resonance for Quantitative Spectroscopy of Protonated Polypeptides and Proteins. Angewandte Chemie - International Edition, 2013, 52, 6002-6005.	7.2	54
14	Cryogenic Methods for the Spectroscopy of Large, Biomolecular Ions. Topics in Current Chemistry, 2014, 364, 43-97.	4.0	47
15	Cryogenically cooled octupole ion trap for spectroscopy of biomolecular ions. Review of Scientific Instruments, 2014, 85, 033105.	0.6	46
16	Microhydration Effects on the Encapsulation of Potassium Ion by Dibenzo-18-Crown-6. Journal of the American Chemical Society, 2014, 136, 1815-1824.	6.6	46
17	Fragmentation mechanism of UV-excited peptides in the gas phase. Journal of Chemical Physics, 2014, 141, 154309.	1.2	42
18	Cold ion spectroscopy for structural identifications of biomolecules. International Reviews in Physical Chemistry, 2018, 37, 559-606.	0.9	39

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19	Colors for Molecular Masses: Fusion of Spectroscopy and Mass Spectrometry for Identification of Biomolecules. Analytical Chemistry, 2015, 87, 4607-4611.	3.2	34
20	Vibrational Signatures of Conformer-Specific Intramolecular Interactions in Protonated Tryptophan. Journal of Physical Chemistry A, 2016, 120, 5598-5608.	1.1	32
21	Conformational Structures of a Decapeptide Validated by First Principles Calculations and Cold Ion Spectroscopy. ChemPhysChem, 2015, 16, 1374-1378.	1.0	28
22	Resonance Energy Transfer Relates the Gasâ€Phase Structure and Pharmacological Activity of Opioid Peptides. Angewandte Chemie - International Edition, 2016, 55, 689-692.	7.2	25
23	Identification of Tyrosine-Phosphorylated Peptides Using Cold Ion Spectroscopy. Journal of the American Chemical Society, 2014, 136, 9288-9291.	6.6	18
24	Intrinsic structure of pentapeptide Leu-enkephalin: geometry optimization and validation by comparison of VSCF-PT2 calculations with cold ion spectroscopy. Physical Chemistry Chemical Physics, 2018, 20, 24894-24901.	1.3	18
25	Interplay of Hâ€Bonds with Aromatics in Isolated Complexes Identifies Isomeric Carbohydrates. Angewandte Chemie - International Edition, 2019, 58, 7346-7350.	7.2	18
26	Nonstatistical UV Fragmentation of Gas-Phase Peptides Reveals Conformers and Their Structural Features. Journal of Physical Chemistry Letters, 2016, 7, 1067-1071.	2.1	17
27	A Decapeptide Hydrated by Two Waters: Conformers Determined by Theory and Validated by Cold Ion Spectroscopy. Journal of Physical Chemistry A, 2017, 121, 9401-9408.	1.1	16
28	Identification of Isomeric Ephedrines by Cold Ion UV Spectroscopy: Toward Practical Implementation. Analytical Chemistry, 2017, 89, 544-547.	3.2	15
29	Identification and Quantification of Any Isoforms of Carbohydrates by 2D UV-MS Fingerprinting of Cold Ions. Analytical Chemistry, 2020, 92, 14624-14632.	3.2	13
30	Exploring the relevance of gas-phase structures to biology: cold ion spectroscopy of the decapeptide neurokinin A. Physical Chemistry Chemical Physics, 2017, 19, 3468-3472.	1.3	12
31	Microhydration of Biomolecules: Revealing the Native Structures by Cold Ion IR Spectroscopy. Journal of Physical Chemistry Letters, 2021, 12, 907-911.	2.1	12
32	High Susceptibility of Histidine to Charge Solvation Revealed by Cold Ion Spectroscopy. Angewandte Chemie - International Edition, 2017, 56, 15639-15643.	7.2	11
33	Initial Steps of Amyloidogenic Peptide Assembly Revealed by Coldâ€Ion Spectroscopy. Angewandte Chemie - International Edition, 2018, 57, 213-217.	7.2	10
34	Identification of isoforms of aspartic acid residues in peptides by 2D UV-MS fingerprinting of cold ions. Analyst, The, 2018, 143, 833-836.	1.7	8
35	Identification of Isomeric Lipids by UV Spectroscopy of Noncovalent Complexes with Aromatic Molecules. Analytical Chemistry, 2021, 93, 12822-12826.	3.2	8
36	Peptide Bond Ultraviolet Absorption Enables Vibrational Cold-Ion Spectroscopy of Nonaromatic Peptides. Journal of Physical Chemistry Letters, 2018, 9, 5262-5266.	2.1	7

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37	Spectroscopic Evidence for Peptide-Bond-Selective Ultraviolet Photodissociation. Journal of Physical Chemistry Letters, 2020, 11, 206-209.	2.1	7
38	Tracking local and global structural changes in a protein by cold ion spectroscopy. Physical Chemistry Chemical Physics, 2022, 24, 8158-8165.	1.3	6
39	Dissociation threshold of H218O: Validating ab initio calculations by state-selective triple-resonance spectroscopy. Chemical Physics Letters, 2015, 627, 73-76.	1.2	5
40	Method for Identification of Threonine Isoforms in Peptides by Ultraviolet Photofragmentation of Cold Ions. Analytical Chemistry, 2019, 91, 6709-6715.	3.2	5
41	Identification of Isomeric Biomolecules by Infrared Spectroscopy of Solvent-Tagged Ions. Analytical Chemistry, 2022, 94, 9514-9518.	3.2	5
42	Ultraviolet Photodissociation of Peptides: New Insight on the Mobile Proton Model. Journal of Experimental and Theoretical Physics, 2020, 130, 626-632.	0.2	4
43	Revealing Single-Bond Anomeric Selectivity in Carbohydrateâ€“Protein Interactions. Journal of Physical Chemistry Letters, 2020, 11, 3327-3331.	2.1	4
44	Accelerating photofragmentation UV Spectroscopyâ€“Mass spectrometry fingerprinting for quantification of isomeric peptides. Talanta, 2021, 232, 122412.	2.9	4
45	Interplay of Hâ€Bonds with Aromatics in Isolated Complexes Identifies Isomeric Carbohydrates. Angewandte Chemie, 2019, 131, 7424-7428.	1.6	3
46	Gas-phase structures reflect the pain-relief potency of enkephalin peptides. Physical Chemistry Chemical Physics, 2019, 21, 22700-22703.	1.3	3
47	Initial Steps of Amyloidogenic Peptide Assembly Revealed by Coldâ€Ion Spectroscopy. Angewandte Chemie, 2018, 130, 219-223.	1.6	2
48	High Susceptibility of Histidine to Charge Solvation Revealed by Cold Ion Spectroscopy. Angewandte Chemie, 2017, 129, 15845-15849.	1.6	1
49	Titelbild: Exploring the Mechanism of IR-UV Double-Resonance for Quantitative Spectroscopy of Protonated Polypeptides and Proteins (Angew. Chem. 23/2013). Angewandte Chemie, 2013, 125, 6001-6001.	1.6	0