Kathrin Breuker

List of Publications by Year
in descending order

78	4,750	109264 35	98753 67
papers	citations	h-index	g-index

86	86	86	3166
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	1-Deazaguanosine-Modified RNA: The Missing Piece for Functional RNA Atomic Mutagenesis. Journal of the American Chemical Society, 2022, 144, 10344-10352.	6.6	7
2	Impact of 3-deazapurine nucleobases on RNA properties. Nucleic Acids Research, 2021, 49, 4281-4293.	6.5	11
3	Phase Correction for Absorption Mode Two-Dimensional Mass Spectrometry. Molecules, 2021, 26, 3388.	1.7	3
4	A natural riboswitch scaffold with self-methylation activity. Nature Communications, 2021, 12, 3877.	5.8	24
5	Radical Transfer Dissociation for Deâ€...Novo Characterization of Modified Ribonucleic Acids by Mass Spectrometry. Angewandte Chemie - International Edition, 2020, 59, 4309-4313.	7.2	16
6	Narrowband Modulation Two-Dimensional Mass Spectrometry and Label-Free Relative Quantification of Histone Peptides. Analytical Chemistry, 2020, 92, 13945-13952.	3.2	9
7	Native mass spectrometry reveals the initial binding events of HIV-1 rev to RRE stem II RNA. Nature Communications, 2020, 11, 5750.	5.8	12
8	Radical Transfer Dissociation for Deâ€...Novo Characterization of Modified Ribonucleic Acids by Mass Spectrometry. Angewandte Chemie, 2020, 132, 4339-4343.	1.6	2
9	The effect of adenine protonation on RNA phosphodiester backbone bond cleavage elucidated by deaza-nucleobase modifications and mass spectrometry. Nucleic Acids Research, 2019, 47, 7223-7234.	6.5	16
10	Differential regulation ofmychomologs by Wnt/Î²â€Catenin signaling in the early metazoanHydra. FEBS Journal, 2019, 286, 2295-2310.	2.2	13
11	NMR resonance assignments of the pathogenesis-related peach allergen Pru p 1.0101. Biomolecular NMR Assignments, 2019, 13, 127-130.	0.4	5
12	Relative Strength of Noncovalent Interactions and Covalent Backbone Bonds in Gaseous RNAâ€“Peptide Complexes. Analytical Chemistry, 2019, 91, 1659-1664.	3.2	12
13	Raw protein from the top down. Nature Chemistry, 2018, 10, 114-116.	6.6	7
14	Replacing H⁺ by Na⁺ or K⁺ in phosphopeptide anions and cations prevents electron capture dissociation. Chemical Science, 2018, 9, 7338-7353.	3.7	8
15	Native Topâ€Down Mass Spectrometry of TAR RNA in Complexes with a Wildâ€Type tat Peptide for Binding Site Mapping. Angewandte Chemie, 2017, 129, 1274-1278.	1.6	7
16	Label-free, direct localization and relative quantitation of the RNA nucleobase methylations m6A, m5C, m3U, and m5U by top-down mass spectrometry. Nucleic Acids Research, 2017, 45, 8014-8025.	6.5	38
17	Native Topâ€Down Mass Spectrometry of TAR RNA in Complexes with a Wildâ€Type tat Peptide for Binding Site Mapping. Angewandte Chemie - International Edition, 2017, 56, 1254-1258.	7.2	33
18	Native Electron Capture Dissociation Maps to Iron-Binding Channels in Horse Spleen Ferritin. Analytical Chemistry, 2017, 89, 10711-10716.	3.2	14

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19	Interactions of Protonated Guanidine and Guanidine Derivatives with Multiply Deprotonated RNA Probed by Electrospray Ionization and Collisionally Activated Dissociation. ChemistryOpen, 2017, 6, 739-750.	0.9	13
20	Nâ€Lauroylation during the Expression of Recombinant Nâ€Myristoylated Proteins: Implications and Solutions. ChemBioChem, 2016, 17, 82-89.	1.3	4
21	Biochemical and Structural Characterization of the Interaction between the Siderocalin NGAL/LCN2 (Neutrophil Gelatinase-associated Lipocalin/Lipocalin 2) and the N-terminal Domain of Its Endocytic Receptor SLC22A17. Journal of Biological Chemistry, 2016, 291, 2917-2930.	1.6	45
22	Unfolding and Folding of the Three-Helix Bundle Protein KIX in the Absence of Solvent. Journal of the American Society for Mass Spectrometry, 2016, 27, 1079-1088.	1.2	17
23	Nucleotide modifications within bacterial messenger RNAs regulate their translation and are able to rewire the genetic code. Nucleic Acids Research, 2016, 44, 852-862.	6.5	120
24	A Miniâ€Twister Variant and Impact of Residues/Cations on the Phosphodiester Cleavage of this Ribozyme Class. Angewandte Chemie - International Edition, 2015, 54, 15128-15133.	7.2	51
25	On the mechanism of RNA phosphodiester backbone cleavage in the absence of solvent. Nucleic Acids Research, 2015, 43, 5171-5181.	6.5	23
26	Probing Protein Structure and Folding in the Gas Phase by Electron Capture Dissociation. Journal of the American Society for Mass Spectrometry, 2015, 26, 1059-1067.	1.2	22
27	Proteins with Highly Similar Native Folds Can Show Vastly Dissimilar Folding Behavior When Desolvated. Angewandte Chemie - International Edition, 2014, 53, 164-168.	7.2	33
28	Hydra myc2, a unique pre-bilaterian member of the myc gene family, is activated in cell proliferation and gametogenesis. Biology Open, 2014, 3, 397-407.	0.6	23
29	Virtual Issue: Structure Characterization of Biomolecules. ChemistryOpen, 2014, 3, 137-137.	0.9	0
30	Characterization of Ribonucleic Acids and Their Modifications by Fourier Transform Ion Cyclotron Resonance Mass Spectrometry. Physical Chemistry in Action, 2014, , 185-202.	0.1	1
31	Charge Site Mass Spectra: Conformation-Sensitive Components of the Electron Capture Dissociation Spectrum of a Protein. Journal of the American Society for Mass Spectrometry, 2013, 24, 807-810.	1.2	21
32	A personal perspective on chemistry-driven RNA research. Biopolymers, 2013, 99, n/a-n/a.	1.2	10
33	Transcriptional control of DNA replication licensing by Myc. Scientific Reports, 2013, 3, 3444.	1.6	37
34	Femtosecond laser vaporization that preserves protein-folded structure: An unproven idea. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, E206; author reply E207.	3.3	8
35	Characterization of Modified RNA by Topâ€Down Mass Spectrometry. Angewandte Chemie - International Edition, 2012, 51, 11289-11292.	7.2	64
36	Does Electron Capture Dissociation Cleave Protein Disulfide Bonds?. ChemistryOpen, 2012, 1, 260-268.	0.9	39

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37	How Ubiquitin Unfolds after Transfer into the Gas Phase. Journal of the American Society for Mass Spectrometry, 2012, 23, 1011-1014.	1.2	93
38	Charge as You Like! Efficient Manipulation of Negative Ion Net Charge in Electrospray Ionization of Proteins and Nucleic Acids. European Journal of Mass Spectrometry, 2011, 17, 333-343.	0.5	27
39	Identification, localization, and relative quantitation of pseudouridine in RNA by tandem mass spectrometry of hydrolysis products. International Journal of Mass Spectrometry, 2011, 304, 91-97.	0.7	25
40	Innentitelbild: Electrostatic Stabilization of a Native Protein Structure in the Gas Phase (Angew.) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 62	1.6	0
41	Electrostatic Stabilization of a Native Protein Structure in the Gas Phase. Angewandte Chemie - International Edition, 2011, 50, 873-877.	7.2	111
42	Inside Cover: Electrostatic Stabilization of a Native Protein Structure in the Gas Phase (Angew. Chem.) Tj ETQq0 0 0 rgBT /Overlock 10 T	7.2	0
43	Electron Detachment Dissociation for Topâ€Down Mass Spectrometry of Acidic Proteins. Chemistry - A European Journal, 2011, 17, 4460-4469.	1.7	29
44	Multi-Step Evolution of Protein Conformation on Electrospray into the Gas Phase. European Journal of Mass Spectrometry, 2010, 16, 437-442.	0.5	12
45	Minimizing base loss and internal fragmentation in collisionally activated dissociation of multiply deprotonated RNA. Journal of the American Society for Mass Spectrometry, 2010, 21, 278-285.	1.2	43
46	Top-down mass spectrometry for sequencing of larger (up to 61 nt) RNA by CAD and EDD. Journal of the American Society for Mass Spectrometry, 2010, 21, 918-929.	1.2	65
47	Stem cell-specific activation of an ancestral myc protooncogene with conserved basic functions in the early metazoan Hydra. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 4051-4056.	3.3	93
48	Numerous Isomers of Serine Octamer Ions Characterized by Infrared Photodissociation Spectroscopy. ChemPhysChem, 2009, 10, 2603-2606.	1.0	37
49	Early Structural Evolution of Native Cytochrome c after Solvent Removal. ChemBioChem, 2008, 9, 2417-2423.	1.3	66
50	Top-down identification and characterization of biomolecules by mass spectrometry. Journal of the American Society for Mass Spectrometry, 2008, 19, 1045-1053.	1.2	109
51	Stepwise evolution of protein native structure with electrospray into the gas phase, 10 ^{â^'12} to 10 ² s. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 18145-18152.	3.3	374
52	The dynamics of water evaporation from partially solvated cytochrome c in the gas phase. Physical Chemistry Chemical Physics, 2007, 9, 4690.	1.3	60
53	In ungewohnter Umgebung. Nachrichten Aus Der Chemie, 2007, 55, 1079-1082.	0.0	0
54	Topâ€down MS, a powerful complement to the high capabilities of proteolysis proteomics. FEBS Journal, 2007, 274, 6256-6268.	2.2	157

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55	Protein Structure and Folding in the Gas Phase: Ubiquitin and Cytochrome c. , 2006, , 177-212.		16
56	Extending Top-Down Mass Spectrometry to Proteins with Masses Greater Than 200 Kilodaltons. Science, 2006, 314, 109-112.	6.0	309
57	The Thermal Unfolding of Native Cytochromec in the Transition from Solution to Gas Phase Probed by Native Electron Capture Dissociation. Angewandte Chemie - International Edition, 2005, 44, 4911-4914.	7.2	71
58	Consecutive Ion Activation for Top Down Mass Spectrometry:â€‰ Improved Protein Sequencing by Nozzleâ^'Skimmer Dissociation. Analytical Chemistry, 2005, 77, 5777-5784.	3.2	50
59	Infrared Photodissociation Spectroscopy of Electrosprayed Ions in a Fourier Transform Mass Spectrometer. Journal of the American Chemical Society, 2005, 127, 4076-4083.	6.6	155
60	Nonergodic and conformational control of the electron capture dissociation of protein cations. Proceedings of the National Academy of Sciences of the United States of America, 2004, 101, 14011-14016.	3.3	158
61	New Mass Spectrometric Methods for the Quantification of Proteinâ€“Ligand Binding in Solution. Angewandte Chemie - International Edition, 2004, 43, 22-25.	7.2	27
62	Triggering of RNA Secondary Structures by a Functionalized Nucleobase. Angewandte Chemie - International Edition, 2004, 43, 3922-3925.	7.2	42
63	New Mass Spectrometric Methods for the Quantification of Proteinâ€”Ligand Binding in Solution.. ChemInform, 2004, 35, no.	0.1	0
64	Dissimilarity in the Reductive Unfolding Pathways of Two Ribonuclease Homologues. Journal of Molecular Biology, 2004, 338, 795-809.	2.0	31
65	Native Electron Capture Dissociation for the Structural Characterization of Noncovalent Interactions in Native Cytochromec. Angewandte Chemie - International Edition, 2003, 42, 4900-4904.	7.2	84
66	Breakdown of chlorophyll: A nonenzymatic reaction accounts for the formation of the colorless "nonfluorescent" chlorophyll catabolites. Proceedings of the National Academy of Sciences of the United States of America, 2003, 100, 6910-6915.	3.3	163
67	Secondary and tertiary structures of gaseous protein ions characterized by electron capture dissociation mass spectrometry and photofragment spectroscopy. Proceedings of the National Academy of Sciences of the United States of America, 2002, 99, 15863-15868.	3.3	226
68	Hydrogen Atom Loss in Electron-Capture Dissociation: A Fourier Transform-Ion Cyclotron Resonance Study with Single Isotopomeric Ubiquitin Ions. European Journal of Mass Spectrometry, 2002, 8, 177-180.	0.5	51
69	Sequencing of Specific Copolymer Oligomers by Electron-Capture-Dissociation Mass Spectrometry. Journal of the American Chemical Society, 2002, 124, 9287-9291.	6.6	60
70	Detailed Unfolding and Folding of Gaseous Ubiquitin Ions Characterized by Electron Capture Dissociation. Journal of the American Chemical Society, 2002, 124, 6407-6420.	6.6	296
71	Chlorophyll breakdown in spinach: on the structure of five nonfluorescent chlorophyll catabolites. Photosynthesis Research, 2002, 74, 109-119.	1.6	65
72	Kinetic Intermediates in the Folding of Gaseous Protein Ions Characterized by Electron Capture Dissociation Mass Spectrometry. Journal of the American Chemical Society, 2001, 123, 9792-9799.	6.6	170

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73	Electron capture dissociation of gaseous multiply charged ions by Fourier-transform ion cyclotron resonance. Journal of the American Society for Mass Spectrometry, 2001, 12, 245-249.	1.2	226
74	Charge/radical site initiation versus coulombic repulsion for cleavage of multiply charged ions. Charge solvation in poly(alkene glycol) ions. Journal of the American Society for Mass Spectrometry, 2001, 12, 565-570.	1.2	48
75	Internal energies of analyte ions generated from different matrix-assisted laser desorption/ionization matrices. Journal of Mass Spectrometry, 2000, 35, 1035-1041.	0.7	58
76	Secondary ion-molecule reactions in matrix-assisted laser desorption/ionization. Journal of Mass Spectrometry, 2000, 35, 1237-1245.	0.7	161
77	Electron capture dissociation of multiply-charged oxygenated cations. A nonergodic process. European Journal of Mass Spectrometry, 1999, 5, 335.	0.7	51
78	The matrix suppression effect in matrix-assisted laser desorption/ionization: application to negative ions and further characteristics. , 1998, 12, 529-534.		88