Kevin Pagel

List of Publications by Year
in descending order

129 papers	5,025 citations	71102 41 h-index	102487 66 g-index
139 all docs	139 docs citations	139 times ranked	4495 citing authors

#	Article	IF	Citations
1	Mass Spectrometry-Based Techniques to Elucidate the Sugar Code. Chemical Reviews, 2022, 122, 7840-7908.	47.7	67
2	Stateâ€ofâ€theâ€art glycosaminoglycan characterization. Mass Spectrometry Reviews, 2022, 41, 1040-1071.	5.4	16
3	Gas-phase infrared spectroscopy of glycans and glycoconjugates. Current Opinion in Structural Biology, 2022, 72, 194-202.	5.7	10
4	Cryogenic infrared spectroscopy provides mechanistic insight into the fragmentation of phospholipid silver adducts. Analytical and Bioanalytical Chemistry, 2022, 414, 5275-5285.	3.7	8
5	Neighboring Group Participation of Benzoyl Protecting Groups in C3â€•and C6â€Fluorinated Glucose. European Journal of Organic Chemistry, 2022, 2022, .	2.4	10
6	Studying the Key Intermediate of RNA Autohydrolysis by Cryogenic Gasâ€Phase Infrared Spectroscopy. Angewandte Chemie - International Edition, 2022, 61, .	13.8	9
7	Kohlenhydratanalytik. , 2022, , 659-688.		0
8	Frontispiece: Studying the Key Intermediate of RNA Autohydrolysis by Cryogenic Gasâ€Phase Infrared Spectroscopy. Angewandte Chemie - International Edition, 2022, 61, .	13.8	1
9	Frontispiz: Untersuchung des reaktiven Intermediats der RNA Autohydrolyse mittels kryogener Infrarotspektroskopie in der Gasphase. Angewandte Chemie, 2022, 134, .	2.0	0
10	Non-ionic hybrid detergents for protein delipidation. Biochimica Et Biophysica Acta - Biomembranes, 2022, 1864, 183958.	2.6	9
11	Dextran as internal calibrant for N-glycan analysis by liquid chromatography coupled to ion mobility-mass spectrometry. Analytical and Bioanalytical Chemistry, 2022, 414, 5023-5031.	3.7	4
12	Diagnosing cancer from a drop of blood. Natural Sciences, 2022, 2, .	2.1	0
13	Dendritic Oligoglycerol Regioisomer Mixtures and Their Utility for Membrane Protein Research. Chemistry - A European Journal, 2021, 27, 2537-2542.	3.3	12
14	Unravelling the structural complexity of glycolipids with cryogenic infrared spectroscopy. Nature Communications, 2021, 12, 1201.	12.8	36
15	Structural characterization of fondaparinux interaction with per-6-amino-beta-cyclodextrin: An NMR and MS study. Journal of Pharmaceutical and Biomedical Analysis, 2021, 197, 113947.	2.8	3
16	Gas-Phase Structural Analysis of Supramolecular Assemblies. Accounts of Chemical Research, 2021, 54, 2445-2456.	15.6	24
17	Chondroitin Sulfate Disaccharides in the Gas Phase: Differentiation and Conformational Constraints. Journal of Physical Chemistry A, 2021, 125, 4373-4379.	2.5	7
18	Non-covalent double bond sensors for gas-phase infrared spectroscopy of unsaturated fatty acids. Analytical and Bioanalytical Chemistry, 2021, 413, 3643-3653.	3.7	5

#	Article	IF	Citations
19	Polysulfate hemmen durch elektrostatische Wechselwirkungen die SARSâ€CoVâ€2â€Infektion**. Angewandte Chemie, 2021, 133, 16005-16014.	2.0	0
20	Polysulfates Block SARSâ€CoVâ€2 Uptake through Electrostatic Interactions**. Angewandte Chemie - International Edition, 2021, 60, 15870-15878.	13.8	49
21	Plateâ€height model of ion mobilityâ€mass spectrometry: Part 2â€"Peakâ€toâ€peak resolution and peak capacity. Journal of Separation Science, 2021, 44, 2798-2813.	2.5	8
22	Protein Secondary Structure Affects Glycan Clustering in Native Mass Spectrometry. Life, 2021, 11, 554.	2.4	7
23	Modular Ion Mobility Calibrants for Organometallic Anions Based on Tetraorganylborate Salts. Analytical Chemistry, 2021, 93, 9797-9807.	6.5	2
24	Unveiling Glycerolipid Fragmentation by Cryogenic Infrared Spectroscopy. Journal of the American Chemical Society, 2021, 143, 14827-14834.	13.7	15
25	The interaction of chondroitin sulfate with a lipid monolayer observed by using nonlinear vibrational spectroscopy. Physical Chemistry Chemical Physics, 2021, 23, 13389-13395.	2.8	3
26	Analytical challenges of glycosaminoglycans at biological interfaces. Analytical and Bioanalytical Chemistry, 2021, , 1.	3.7	15
27	Dissecting structure-function of 3-O-sulfated heparin and engineered heparan sulfates. Science Advances, 2021, 7, eabl6026.	10.3	23
28	IR action spectroscopy of glycosaminoglycan oligosaccharides. Analytical and Bioanalytical Chemistry, 2020, 412, 533-537.	3.7	24
29	Plate-height model of ion mobility-mass spectrometry. Analyst, The, 2020, 145, 6313-6333.	3.5	13
30	Cryogenic Infrared Spectroscopy Reveals Structural Modularity in the Vibrational Fingerprints of Heparan Sulfate Diastereomers. Analytical Chemistry, 2020, 92, 10228-10232.	6.5	20
31	The Impact of Leaving Group Anomericity on the Structure of Glycosyl Cations of Protected Galactosides. ChemPhysChem, 2020, 21, 1905-1907.	2.1	15
32	Emergence of low-symmetry foldamers from single monomers. Nature Chemistry, 2020, 12, 1180-1186.	13.6	47
33	Innentitelbild: Unterscheidung von isomeren Sphingolipiden mittels kryogener Infrarotspektroskopie (Angew. Chem. 32/2020). Angewandte Chemie, 2020, 132, 13226-13226.	2.0	0
34	Direct Experimental Characterization of the Ferrier Glycosyl Cation in the Gas Phase. Organic Letters, 2020, 22, 8916-8919.	4.6	21
35	Unterscheidung von isomeren Sphingolipiden mittels kryogener Infrarotspektroskopie. Angewandte Chemie, 2020, 132, 13740-13744.	2.0	1
36	Shotgun ion mobility mass spectrometry sequencing of heparan sulfate saccharides. Nature Communications, 2020, 11, 1481.	12.8	39

#	Article	IF	Citations
37	A new azobenzene-based design strategy for detergents in membrane protein research. Chemical Science, 2020, 11, 3538-3546.	7.4	21
38	Fernpartizipation in Glykosylierungen von Galaktoseâ€Bausteinen: Direktnachweis durch kryogene Schwingungsspektroskopie. Angewandte Chemie, 2020, 132, 6224-6229.	2.0	17
39	Sclerotiorin Stabilizes the Assembly of Nonfibrillar Abeta42 Oligomers with Low Toxicity, Seeding Activity, and Beta-sheet Content. Journal of Molecular Biology, 2020, 432, 2080-2098.	4.2	12
40	Remote Participation during Glycosylation Reactions of Galactose Building Blocks: Direct Evidence from Cryogenic Vibrational Spectroscopy. Angewandte Chemie - International Edition, 2020, 59, 6166-6171.	13.8	76
41	Resolving Sphingolipid Isomers Using Cryogenic Infrared Spectroscopy. Angewandte Chemie - International Edition, 2020, 59, 13638-13642.	13.8	22
42	Modular detergents tailor the purification and structural analysis of membrane proteins including G-protein coupled receptors. Nature Communications, 2020, 11, 564.	12.8	72
43	Oligomerisation of Synaptobrevin-2 Studied by Native Mass Spectrometry and Chemical Cross-Linking. Journal of the American Society for Mass Spectrometry, 2019, 30, 149-160.	2.8	14
44	Advancing Solutions to the Carbohydrate Sequencing Challenge. Journal of the American Chemical Society, 2019, 141, 14463-14479.	13.7	108
45	Separation of isomeric glycans by ion mobility spectrometry â€“ the impact of fluorescent labelling. Analyst, The, 2019, 144, 5292-5298.	3.5	21
46	In-depth structural analysis of glycans in the gas phase. Chemical Science, 2019, 10, 1272-1284.	7.4	52
47	Recommendations for reporting ion mobility Mass Spectrometry measurements. Mass Spectrometry Reviews, 2019, 38, 291-320.	5.4	315
48	Switchable Solubility of Azobenzeneâ€Based Bolaamphiphiles. ChemPhysChem, 2019, 20, 1690-1697.	2.1	7
49	Exon Inclusion Modulates Conformational Plasticity and Autoinhibition of the Intersectin 1 SH3A Domain. Structure, 2019, 27, 977-987.e5.	3.3	4
50	An Intrinsic Hydrophobicity Scale for Amino Acids and Its Application to Fluorinated Compounds. Angewandte Chemie - International Edition, 2019, 58, 8216-8220.	13.8	30
51	Eine intrinsische Hydrophobieskala fÃ¼r AminosÃuren und ihre Anwendung auf fluorierte Verbindungen. Angewandte Chemie, 2019, 131, 8300-8304.	2.0	2
52	Comparison of the fragmentation behavior of DNA and LNA single strands and duplexes. Journal of Mass Spectrometry, 2019, 54, 402-411.	1.6	4
53	The role of the mobile proton in fucose migration. Analytical and Bioanalytical Chemistry, 2019, 411, 4637-4645.	3.7	27
54	Exploring the Potential of Dendritic Oligoglycerol Detergents for Protein Mass Spectrometry. Journal of the American Society for Mass Spectrometry, 2019, 30, 174-180.	2.8	15

#	Article	IF	Citations
55	Collision Cross Sections and Ion Mobility Separation of Fragment Ions from Complex N-Glycans. Journal of the American Society for Mass Spectrometry, 2018, 29, 1250-1261.	2.8	26
56	Fucose Migration in Intact Protonated Glycan Ions: A Universal Phenomenon in Mass Spectrometry. Angewandte Chemie - International Edition, 2018, 57, 7440-7443.	13.8	51
57	Charge-induced geometrical reorganization of DNA oligonucleotides studied by tandem mass spectrometry and ion mobility. European Journal of Mass Spectrometry, 2018, 24, 225-230.	1.0	7
58	Trendbericht: Analytische Chemie 2016/2017. Nachrichten Aus Der Chemie, 2018, 66, 389-399.	0.0	0
59	Side-chain effects on the structures of protonated amino acid dimers: A gas-phase infrared spectroscopy study. International Journal of Mass Spectrometry, 2018, 429, 115-120.	1.5	18
60	NFGAIL Amyloid Oligomers: The Onset of Beta-Sheet Formation and the Mechanism for Fibril Formation. Journal of the American Chemical Society, 2018, 140, 244-249.	13.7	47
61	Glycan analysis by ion mobility-mass spectrometry and gas-phase spectroscopy. Current Opinion in Chemical Biology, 2018, 42, 16-24.	6.1	62
62	Switchable synchronisation of pirouetting motions in a redox-active [3]rotaxane. Nanoscale, 2018, 10, 21425-21433.	5.6	19
63	Unravelling the structure of glycosyl cations via cold-ion infrared spectroscopy. Nature Communications, 2018, 9, 4174.	12.8	60
64	Surprising solvent-induced structural rearrangements in large [Nâ‹¯I⁺â‹¯N] halogen-bonded supramolecular capsules: an ion mobility-mass spectrometry study. Chemical Science, 2018, 9, 8343-8351.	7.4	47
65	Glycan Isomer Identification Using Ultraviolet Photodissociation Initiated Radical Chemistry. Analytical Chemistry, 2018, 90, 11581-11588.	6.5	39
66	The protofilament architecture of a de novo designed coiled coil-based amyloidogenic peptide. Journal of Structural Biology, 2018, 203, 263-272.	2.8	6
67	To Anionâ€“Ï€ or not to Anionâ€“Ï€: The Case of Anionâ€Binding to Divalent Fluorinated Pyridines in the Gas Phase. Chemistry - A European Journal, 2018, 24, 12879-12889.	3.3	4
68	Fucoseâ€Migration in intakten protonierten Glykanâ€Ionen â€“ ein universelles PhÃ¤nomen in der Massenspektrometrie. Angewandte Chemie, 2018, 130, 7562-7565.	2.0	7
69	Identification of Lewis and Blood Group Carbohydrate Epitopes by Ion Mobility-Tandem-Mass Spectrometry Fingerprinting. Analytical Chemistry, 2017, 89, 2318-2325.	6.5	57
70	Noncharged and Charged Monodendronised Perylene Bisimides as Highly Fluorescent Labels and their Bioconjugates. Chemistry - A European Journal, 2017, 23, 4849-4862.	3.3	14
71	Presynaptic Calmodulin targets: lessons from structural proteomics. Expert Review of Proteomics, 2017, 14, 223-242.	3.0	15
72	Automated glycan assembly using the Glyconeer 2.1 synthesizer. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, E3385-E3389.	7.1	92

#	Article	IF	Citations
73	Glycan Analysis by Ion Mobilityâ€“Mass Spectrometry. Angewandte Chemie - International Edition, 2017, 56, 8342-8349.	13.8	129
74	Ion mobilityâ€“mass spectrometry as a tool to investigate proteinâ€“ligand interactions. Analytical and Bioanalytical Chemistry, 2017, 409, 4305-4310.	3.7	33
75	Glykananalyse mittels IonenmobilitÃtsâ€Massenspektrometrie. Angewandte Chemie, 2017, 129, 8458-8466.	2.0	4
76	From Compact to Stringâ€”The Role of Secondary and Tertiary Structure in Charge-Induced Unzipping of Gas-Phase Proteins. Journal of the American Society for Mass Spectrometry, 2017, 28, 638-646.	2.8	15
77	Glycan Fingerprinting via Coldâ€Ion Infrared Spectroscopy. Angewandte Chemie - International Edition, 2017, 56, 11248-11251.	13.8	116
78	Critical Evaluation of Native Electrospray Ionization Mass Spectrometry for Fragmentâ€Based Screening. ChemMedChem, 2017, 12, 1201-1211.	3.2	12
79	Ion mobility-mass spectrometry and orthogonal gas-phase techniques to study amyloid formation and inhibition. Current Opinion in Structural Biology, 2017, 46, 7-15.	5.7	31
80	Global N-Glycan Site Occupancy of HIV-1 gp120 by Metabolic Engineering and High-Resolution Intact Mass Spectrometry. ACS Chemical Biology, 2017, 12, 357-361.	3.4	34
81	Von normalen Proteinen zu unlÃ¶slichen Ablagerungen. Nachrichten Aus Der Chemie, 2017, 65, 874-878.	0.0	0
82	FingerabdrÃ¼cke fÃ¼r Glykane durch Spektroskopie kalter Ionen. Angewandte Chemie, 2017, 129, 11400-11404.	2.0	16
83	Infrared spectrum and structure of the homochiral serine octamerâ€“dichloride complex. Nature Chemistry, 2017, 9, 1263-1268.	13.6	56
84	An infrared spectroscopy approach to follow Î²-sheet formation in peptide amyloid assemblies. Nature Chemistry, 2017, 9, 39-44.	13.6	163
85	Travellingâ€wave ion mobility and negative ion fragmentation of highâ€mannose <i>N</i>â€glycans. Journal of Mass Spectrometry, 2016, 51, 219-235.	1.6	34
86	Photooxygenation and gasâ€phase reactivity of multiply threaded pseudorotaxanes. Journal of Mass Spectrometry, 2016, 51, 269-281.	1.6	2
87	Assessing the stability of alanine-based helices by conformer-selective IR spectroscopy. Physical Chemistry Chemical Physics, 2016, 18, 19950-19954.	2.8	13
88	Chargeâ€Induced Unzipping of Isolated Proteins to a Defined Secondary Structure. Angewandte Chemie - International Edition, 2016, 55, 3295-3299.	13.8	64
89	Ladungsinduziertes Entwinden isolierter Proteine zu einer definierten SekundÃrstruktur. Angewandte Chemie, 2016, 128, 3356-3360.	2.0	16
90	Ion mobility separation of deprotonated oligosaccharide isomers â€“ evidence for gas-phase charge migration. Chemical Communications, 2016, 52, 12353-12356.	4.1	56

#	Article	IF	Citations
91	Retention of Native Protein Structures in the Absence of Solvent: A Coupled Ion Mobility and Spectroscopic Study. Angewandte Chemie - International Edition, 2016, 55, 14173-14176.	13.8	106
92	The impact of environment and resonance effects on the site of protonation of aminobenzoic acid derivatives. Physical Chemistry Chemical Physics, 2016, 18, 25474-25482.	2.8	66
93	Conformational Shift of a Î²â€Hairpin Peptide upon Complex Formation with an Oligoâ€“proline Peptide Studied by Mass Spectrometry. ChemistrySelect, 2016, 1, 3651-3656.	1.5	3
94	Gas-phase microsolvation of ubiquitin: investigation of crown ether complexation sites using ion mobility-mass spectrometry. Analyst, The, 2016, 141, 5502-5510.	3.5	19
95	Travellingâ€wave ion mobility mass spectrometry and negative ion fragmentation of hybrid and complex <i>N</i>â€glycans. Journal of Mass Spectrometry, 2016, 51, 1064-1079.	1.6	28
96	Die Erhaltung nativer Proteinstrukturen unter Ausschluss von LÃ¶sungsmittel: eine Untersuchung mit Hilfe der Kombination von IonenmobilitÃt mit Spektroskopie. Angewandte Chemie, 2016, 128, 14380-14384.	2.0	3
97	RÃ¼cktitelbild: Die Erhaltung nativer Proteinstrukturen unter Ausschluss von LÃ¶sungsmittel: eine Untersuchung mit Hilfe der Kombination von IonenmobilitÃt mit Spektroskopie (Angew. Chem. 45/2016). Angewandte Chemie, 2016, 128, 14386-14386.	2.0	0
98	Distinguishing N-acetylneuraminic acid linkage isomers on glycopeptides by ion mobility-mass spectrometry. Chemical Communications, 2016, 52, 4381-4384.	4.1	91
99	GlycoMob: an ion mobility-mass spectrometry collision cross section database for glycomics. Glycoconjugate Journal, 2016, 33, 399-404.	2.7	73
100	Analyzing the higher order structure of proteins with conformerâ€selective ultraviolet photodissociation. Proteomics, 2015, 15, 2804-2812.	2.2	45
101	Online monitoring the isomerization of an azobenzene-based dendritic bolaamphiphile using ion mobility-mass spectrometry. Chemical Communications, 2015, 51, 8801-8804.	4.1	25
102	Native like helices in a specially designed Î² peptide in the gas phase. Physical Chemistry Chemical Physics, 2015, 17, 5376-5385.	2.8	14
103	Protomers of Benzocaine: Solvent and Permittivity Dependence. Journal of the American Chemical Society, 2015, 137, 4236-4242.	13.7	172
104	Identification of carbohydrate anomers using ion mobilityâ€“mass spectrometry. Nature, 2015, 526, 241-244.	27.8	287
105	Collision cross sections of high-mannose N-glycans in commonly observed adduct states â€“ identification of gas-phase conformers unique to [M âˆ' H]^{âˆ'} ions. Analyst, The, 2015, 140, 6799-6803.	3.5	37
106	Exploring the conformational preferences of 20-residue peptides in isolation: Ac-Ala₁₉-Lys + H⁺vs. Ac-Lys-Ala₁₉ + H⁺ and the current reach of DFT. Physical Chemistry Chemical Physics, 2015, 17, 7373-7385.	2.8	48
107	Energy-Resolved Ion Mobility-Mass Spectrometryâ€"A Concept to Improve the Separation of Isomeric Carbohydrates. Journal of the American Society for Mass Spectrometry, 2014, 25, 471-479.	2.8	46
108	Estimating Collision Cross Sections of Negatively Charged <i>N-</i>Glycans using Traveling Wave Ion Mobility-Mass Spectrometry. Analytical Chemistry, 2014, 86, 10789-10795.	6.5	86

#	Article	IF	Citations
109	Photodissociation of Conformer-Selected Ubiquitin Ions Reveals Site-Specific <i>Cis</i>/<i>Trans</i> Isomerization of Proline Peptide Bonds. Journal of the American Chemical Society, 2014, 136, 10308-10314.	13.7	88
110	Is there a Beta-Peptide Equivalent of the Alpha-Helix?. Biophysical Journal, 2014, 106, 654a.	0.5	0
111	Intrinsically Disordered p53 and Its Complexes Populate Compact Conformations in the Gas Phase. Angewandte Chemie - International Edition, 2013, 52, 361-365.	13.8	85
112	Ion Mobilityâ€"Mass Spectrometry of Complex Carbohydrates: Collision Cross Sections of Sodiated N-linked Glycans. Analytical Chemistry, 2013, 85, 5138-5145.	6.5	121
113	How Cations Change Peptide Structure. Chemistry - A European Journal, 2013, 19, 11224-11234.	3.3	36
114	Protein Structure in the Gas Phase: The Influence of Side-Chain Microsolvation. Journal of the American Chemical Society, 2013, 135, 1177-1180.	13.7	77
115	Local Conformational Preferences of Peptides Near Attached Cations: Structure Determination by First-Principles Theory and IR-Spectroscopy. Biophysical Journal, 2012, 102, 46a.	0.5	0
116	Structure Analysis of an Amyloid-Forming Model Peptide by a Systematic Glycine and Proline Scan. Biomacromolecules, 2011, 12, 2988-2996.	5.4	20
117	Interaction of the p53 DNA-Binding Domain with Its N-Terminal Extension Modulates the Stability of the p53 Tetramer. Journal of Molecular Biology, 2011, 409, 358-368.	4.2	81
118	Alternate Dissociation Pathways Identified in Charge-Reduced Protein Complex Ions. Analytical Chemistry, 2010, 82, 5363-5372.	6.5	145
119	Secondary Structure of Ac-Ala_{<i>n</i>}-LysH⁺ Polyalanine Peptides (<i>n</i> =) Tj ETQq1 1 0.784314 rgBT /Ov	4.6	76
120	Amide-I and -II Vibrations of the Cyclic Î²-Sheet Model Peptide Gramicidin S in the Gas Phase. Journal of the American Chemical Society, 2010, 132, 2085-2093.	13.7	62
121	Gas-phase IR spectra of intact Î±-helical coiled coil protein complexes. International Journal of Mass Spectrometry, 2009, 283, 161-168.	1.5	18
122	How Metal Ions Affect Amyloid Formation: Cu²⁺â€•and Zn²⁺â€•Sensitive Peptides. ChemBioChem, 2008, 9, 531-536.	2.6	53
123	Intramolecular Charge Interactions as a Tool to Control the Coiledâ€•Coilâ€•toâ€•Amyloid Transformation. Chemistry - A European Journal, 2008, 14, 11442-11451.	3.3	31
124	Following polypeptide folding and assembly with conformational switches. Current Opinion in Chemical Biology, 2008, 12, 730-739.	6.1	51
125	Random Coils, Î²-Sheet Ribbons, and Î±-Helical Fibers:Â One Peptide Adopting Three Different Secondary Structures at Will. Journal of the American Chemical Society, 2006, 128, 2196-2197.	13.7	109
126	Advanced approaches for the characterization of a de novo designed antiparallel coiled coil peptide. Organic and Biomolecular Chemistry, 2005, 3, 1189.	2.8	24

#	Article	IF	Citations
127	From Î±-helix to Î²-sheet â€“ a reversible metal ion induced peptide secondary structure switch. Organic and Biomolecular Chemistry, 2005, 3, 2500.	2.8	42
128	Directing the secondary structure of polypeptides at will: from helices to amyloids and back again?. Organic and Biomolecular Chemistry, 2005, 3, 3843.	2.8	40
129	Untersuchung des reaktiven Intermediats der RNA Autohydrolyse mittels kryogener Infrarotspektroskopie in der Gasphase. Angewandte Chemie, 0, , .	2.0	0