Kevin Pagel

List of Publications by Year in Descending Order

121 papers	3,663 citations	37 h-index	57 g-index
139 ext. papers	4,387 ext. citations	8 avg, IF	5.71 L-index

#	Paper	IF	Citations
121	Cryogenic infrared spectroscopy provides mechanistic insight into the fragmentation of phospholipid silver adducts.. *Analytical and Bioanalytical Chemistry*, **2022**, 1	4.4	0
120	Kohlenhydratanalytik **2022**, 659-688		
119	Non-ionic hybrid detergents for protein delipidation.. *Biochimica Et Biophysica Acta - Biomembranes*, **2022**, 183958	3.8	1
118	Spectroscopy of Small and Large Biomolecular Ions in Helium-Nanodroplets. *Topics in Applied Physics*, **2022**, 241-280	0.5	
117	Dissecting structure-function of 3-O-sulfated heparin and engineered heparan sulfates.. *Science Advances*, **2021**, 7, eabl6026	14.3	2
116	Gas-phase infrared spectroscopy of glycans and glycoconjugates.. *Current Opinion in Structural Biology*, **2021**, 72, 194-202	8.1	3
115	Analytical challenges of glycosaminoglycans at biological interfaces. *Analytical and Bioanalytical Chemistry*, **2021**, 1	4.4	3
114	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	3.5	0
113	Gas-Phase Structural Analysis of Supramolecular Assemblies. *Accounts of Chemical Research*, **2021**, 54, 2445-2456	24.3	6
112	Chondroitin Sulfate Disaccharides in the Gas Phase: Differentiation and Conformational Constraints. *Journal of Physical Chemistry A*, **2021**, 125, 4373-4379	2.8	5
111	Non-covalent double bond sensors for gas-phase infrared spectroscopy of unsaturated fatty acids. *Analytical and Bioanalytical Chemistry*, **2021**, 413, 3643-3653	4.4	2
110	Polysulfate hemmen durch elektrostatische Wechselwirkungen die SARS-CoV-2-Infektion**. *Angewandte Chemie*, **2021**, 133, 16005-16014	3.6	
109	Polysulfates Block SARS-CoV-2 Uptake through Electrostatic Interactions*. *Angewandte Chemie - International Edition*, **2021**, 60, 15870-15878	16.4	14
108	Plate-height model of ion mobility-mass spectrometry: Part 2-Peak-to-peak resolution and peak capacity. *Journal of Separation Science*, **2021**, 44, 2798-2813	3.4	2
107	Protein Secondary Structure Affects Glycan Clustering in Native Mass Spectrometry. *Life*, **2021**, 11,	3	1
106	Dendritic Oligoglycerol Regioisomer Mixtures and Their Utility for Membrane Protein Research. *Chemistry - A European Journal*, **2021**, 27, 2537-2542	4.8	7
105	Unravelling the structural complexity of glycolipids with cryogenic infrared spectroscopy. *Nature Communications*, **2021**, 12, 1201	17.4	16

104	Modular Ion Mobility Calibrants for Organometallic Anions Based on Tetraorganylborate Salts. *Analytical Chemistry*, **2021**, 93, 9797-9807	7.8	1
103	Mass Spectrometry-Based Techniques to Elucidate the Sugar Code. *Chemical Reviews*, **2021**,	68.1	8
102	Unveiling Glycerolipid Fragmentation by Cryogenic Infrared Spectroscopy. *Journal of the American Chemical Society*, **2021**, 143, 14827-14834	16.4	4
101	The interaction of chondroitin sulfate with a lipid monolayer observed by using nonlinear vibrational spectroscopy. *Physical Chemistry Chemical Physics*, **2021**, 23, 13389-13395	3.6	2
100	Direct Experimental Characterization of the Ferrier Glycosyl Cation in the Gas Phase. *Organic Letters*, **2020**, 22, 8916-8919	6.2	9
99	Unterscheidung von isomeren Sphingolipiden mittels kryogener Infrarotspektroskopie. *Angewandte Chemie*, **2020**, 132, 13740-13744	3.6	0
98	Shotgun ion mobility mass spectrometry sequencing of heparan sulfate saccharides. *Nature Communications*, **2020**, 11, 1481	17.4	24
97	A new azobenzene-based design strategy for detergents in membrane protein research. *Chemical Science*, **2020**, 11, 3538-3546	9.4	10
96	Fernpartizipation in Glykosylierungen von Galaktose-Bausteinen: Direktnachweis durch kryogene Schwingungsspektroskopie. *Angewandte Chemie*, **2020**, 132, 6224-6229	3.6	12
95	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	6.5	4
94	Remote Participation during Glycosylation Reactions of Galactose Building Blocks: Direct Evidence from Cryogenic Vibrational Spectroscopy. *Angewandte Chemie - International Edition*, **2020**, 59, 6166-6171	16.4	43
93	Modular detergents tailor the purification and structural analysis of membrane proteins including G-protein coupled receptors. *Nature Communications*, **2020**, 11, 564	17.4	36
92	IR action spectroscopy of glycosaminoglycan oligosaccharides. *Analytical and Bioanalytical Chemistry*, **2020**, 412, 533-537	4.4	16
91	Plate-height model of ion mobility-mass spectrometry. *Analyst, The*, **2020**, 145, 6313-6333	5	5
90	Cryogenic Infrared Spectroscopy Reveals Structural Modularity in the Vibrational Fingerprints of Heparan Sulfate Diastereomers. *Analytical Chemistry*, **2020**, 92, 10228-10232	7.8	13
89	The Impact of Leaving Group Anomericity on the Structure of Glycosyl Cations of Protected Galactosides. *ChemPhysChem*, **2020**, 21, 1905-1907	3.2	12
88	Emergence of low-symmetry foldamers from single monomers. *Nature Chemistry*, **2020**, 12, 1180-1186	17.6	18
87	Innentitelbild: Unterscheidung von isomeren Sphingolipiden mittels kryogener Infrarotspektroskopie (Angew. Chem. 32/2020). *Angewandte Chemie*, **2020**, 132, 13226-13226	3.6	

86	Resolving Sphingolipid Isomers Using Cryogenic Infrared Spectroscopy. *Angewandte Chemie - International Edition*, **2020**, 59, 13638-13642	16.4	14
85	In-depth structural analysis of glycans in the gas phase. *Chemical Science*, **2019**, 10, 1272-1284	9.4	39
84	Recommendations for reporting ion mobility Mass Spectrometry measurements. *Mass Spectrometry Reviews*, **2019**, 38, 291-320	11	191
83	Switchable Solubility of Azobenzene-Based Bolaamphiphiles. *ChemPhysChem*, **2019**, 20, 1690-1697	3.2	5
82	Exon Inclusion Modulates Conformational Plasticity and Autoinhibition of the Intersectin 1 SH3A Domain. *Structure*, **2019**, 27, 977-987.e5	5.2	2
81	An Intrinsic Hydrophobicity Scale for Amino Acids and Its Application to Fluorinated Compounds. *Angewandte Chemie - International Edition*, **2019**, 58, 8216-8220	16.4	18
80	Eine intrinsische Hydrophobieskala f□ Aminos□ren und ihre Anwendung auf fluorierte Verbindungen. *Angewandte Chemie*, **2019**, 131, 8300-8304	3.6	0
79	Comparison of the fragmentation behavior of DNA and LNA single strands and duplexes. *Journal of Mass Spectrometry*, **2019**, 54, 402-411	2.2	3
78	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	3.5	9
77	Advancing Solutions to the Carbohydrate Sequencing Challenge. *Journal of the American Chemical Society*, **2019**, 141, 14463-14479	16.4	55
76	Separation of isomeric glycans by ion mobility spectrometry - the impact of fluorescent labelling. *Analyst, The*, **2019**, 144, 5292-5298	5	12
75	The role of the mobile proton in fucose migration. *Analytical and Bioanalytical Chemistry*, **2019**, 411, 4637-4645	4.4	14
74	Exploring the Potential of Dendritic Oligoglycerol Detergents for Protein Mass Spectrometry. *Journal of the American Society for Mass Spectrometry*, **2019**, 30, 174-180	3.5	11
73	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	3.5	20
72	Fucose Migration in Intact Protonated Glycan Ions: A Universal Phenomenon in Mass Spectrometry. *Angewandte Chemie - International Edition*, **2018**, 57, 7440-7443	16.4	36
71	Charge-induced geometrical reorganization of DNA oligonucleotides studied by tandem mass spectrometry and ion mobility. *European Journal of Mass Spectrometry*, **2018**, 24, 225-230	1.1	4
70	Trendbericht: Analytische Chemie 2016/2017. *Nachrichten Aus Der Chemie*, **2018**, 66, 389-399	0.1	
69	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	1.9	11

68	To Anion- or not to Anion- The Case of Anion-Binding to Divalent Fluorinated Pyridines in the Gas Phase. *Chemistry - A European Journal*, **2018**, 24, 12879-12889	4.8	2
67	Fucose-Migration in intakten protonierten Glykan-Ionen ein universelles Phänomen in der Massenspektrometrie. *Angewandte Chemie*, **2018**, 130, 7562-7565	3.6	3
66	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	16.4	34
65	Glycan analysis by ion mobility-mass spectrometry and gas-phase spectroscopy. *Current Opinion in Chemical Biology*, **2018**, 42, 16-24	9.7	50
64	Switchable synchronisation of pirouetting motions in a redox-active [3]rotaxane. *Nanoscale*, **2018**, 10, 21425-21433	7.7	15
63	Unravelling the structure of glycosyl cations via cold-ion infrared spectroscopy. *Nature Communications*, **2018**, 9, 4174	17.4	38
62	Surprising solvent-induced structural rearrangements in large [N⋯⋯N] halogen-bonded supramolecular capsules: an ion mobility-mass spectrometry study. *Chemical Science*, **2018**, 9, 8343-8351	9.4	31
61	Glycan Isomer Identification Using Ultraviolet Photodissociation Initiated Radical Chemistry. *Analytical Chemistry*, **2018**, 90, 11581-11588	7.8	24
60	The protofilament architecture of a de novo designed coiled coil-based amyloidogenic peptide. *Journal of Structural Biology*, **2018**, 203, 263-272	3.4	2
59	Identification of Lewis and Blood Group Carbohydrate Epitopes by Ion Mobility-Tandem-Mass Spectrometry Fingerprinting. *Analytical Chemistry*, **2017**, 89, 2318-2325	7.8	44
58	Noncharged and Charged Monodendronised Perylene Bisimides as Highly Fluorescent Labels and their Bioconjugates. *Chemistry - A European Journal*, **2017**, 23, 4849-4862	4.8	11
57	Presynaptic Calmodulin targets: lessons from structural proteomics. *Expert Review of Proteomics*, **2017**, 14, 223-242	4.2	7
56	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	11.5	75
55	Glycan Analysis by Ion Mobility-Mass Spectrometry. *Angewandte Chemie - International Edition*, **2017**, 56, 8342-8349	16.4	94
54	Ion mobility-mass spectrometry as a tool to investigate protein-ligand interactions. *Analytical and Bioanalytical Chemistry*, **2017**, 409, 4305-4310	4.4	28
53	Glykananalyse mittels Ionenmobilitäs-Massenspektrometrie. *Angewandte Chemie*, **2017**, 129, 8458-8466	3.6	3
52	From Compact to String-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	3.5	13
51	Glycan Fingerprinting via Cold-Ion Infrared Spectroscopy. *Angewandte Chemie - International Edition* , **2017**, 56, 11248-11251	16.4	88

50	Critical Evaluation of Native Electrospray Ionization Mass Spectrometry for Fragment-Based Screening. *ChemMedChem*, **2017**, 12, 1201-1211	3.7	10
49	Ion mobility-mass spectrometry and orthogonal gas-phase techniques to study amyloid formation and inhibition. *Current Opinion in Structural Biology*, **2017**, 46, 7-15	8.1	26
48	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	4.9	27
47	Von normalen Proteinen zu unlöslichen Ablagerungen. *Nachrichten Aus Der Chemie*, **2017**, 65, 874-878	0.1	
46	Fingerabdrücke für Glykane durch Spektroskopie kalter Ionen. *Angewandte Chemie*, **2017**, 129, 11400-11404	3.6	12
45	Infrared spectrum and structure of the homochiral serine octamer-dichloride complex. *Nature Chemistry*, **2017**, 9, 1263-1268	17.6	44
44	An infrared spectroscopy approach to follow β-sheet formation in peptide amyloid assemblies. *Nature Chemistry*, **2017**, 9, 39-44	17.6	127
43	GlycoMob: an ion mobility-mass spectrometry collision cross section database for glycomics. *Glycoconjugate Journal*, **2016**, 33, 399-404	3	59
42	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	16.4	85
41	The impact of environment and resonance effects on the site of protonation of aminobenzoic acid derivatives. *Physical Chemistry Chemical Physics*, **2016**, 18, 25474-25482	3.6	47
40	Conformational Shift of a β-Hairpin Peptide upon Complex Formation with an Oligo-proline Peptide Studied by Mass Spectrometry. *ChemistrySelect*, **2016**, 1, 3651-3656	1.8	3
39	Gas-phase microsolvation of ubiquitin: investigation of crown ether complexation sites using ion mobility-mass spectrometry. *Analyst, The*, **2016**, 141, 5502-10	5	16
38	Travelling-wave ion mobility mass spectrometry and negative ion fragmentation of hybrid and complex N-glycans. *Journal of Mass Spectrometry*, **2016**, 51, 1064-1079	2.2	26
37	Die Erhaltung nativer Proteinstrukturen unter Ausschluss von Lösungsmittel: eine Untersuchung mit Hilfe der Kombination von Ionenmobilität mit Spektroskopie. *Angewandte Chemie*, **2016**, 128, 14380-14384	3.6	3
36	Rücktitelbild: Die Erhaltung nativer Proteinstrukturen unter Ausschluss von Lösungsmittel: eine Untersuchung mit Hilfe der Kombination von Ionenmobilität mit Spektroskopie (Angew. Chem. 45/2016). *Angewandte Chemie*, **2016**, 128, 14386-14386	3.6	
35	Distinguishing N-acetylneuraminic acid linkage isomers on glycopeptides by ion mobility-mass spectrometry. *Chemical Communications*, **2016**, 52, 4381-4	5.8	74
34	Travelling-wave ion mobility and negative ion fragmentation of high-mannose N-glycans. *Journal of Mass Spectrometry*, **2016**, 51, 219-35	2.2	32
33	Photooxygenation and gas-phase reactivity of multiply threaded pseudorotaxanes. *Journal of Mass Spectrometry*, **2016**, 51, 269-81	2.2	1

32	Assessing the stability of alanine-based helices by conformer-selective IR spectroscopy. *Physical Chemistry Chemical Physics*, **2016**, 18, 19950-4	3.6	12
31	Charge-Induced Unzipping of Isolated Proteins to a Defined Secondary Structure. *Angewandte Chemie - International Edition*, **2016**, 55, 3295-9	16.4	52
30	Ladungsinduziertes Entwinden isolierter Proteine zu einer definierten Sekundärstruktur. *Angewandte Chemie*, **2016**, 128, 3356-3360	3.6	14
29	Ion mobility separation of deprotonated oligosaccharide isomers - evidence for gas-phase charge migration. *Chemical Communications*, **2016**, 52, 12353-12356	5.8	46
28	Online monitoring the isomerization of an azobenzene-based dendritic bolaamphiphile using ion mobility-mass spectrometry. *Chemical Communications*, **2015**, 51, 8801-4	5.8	22
27	Native like helices in a specially designed peptide in the gas phase. *Physical Chemistry Chemical Physics*, **2015**, 17, 5376-85	3.6	13
26	Protomers of benzocaine: solvent and permittivity dependence. *Journal of the American Chemical Society*, **2015**, 137, 4236-42	16.4	132
25	Identification of carbohydrate anomers using ion mobility-mass spectrometry. *Nature*, **2015**, 526, 241-4	50.4	223
24	Collision cross sections of high-mannose N-glycans in commonly observed adduct states--identification of gas-phase conformers unique to [M-H](-) ions. *Analyst, The*, **2015**, 140, 6799-803	5	35
23	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, 7373-85	3.6	42
22	Analyzing the higher order structure of proteins with conformer-selective ultraviolet photodissociation. *Proteomics*, **2015**, 15, 2804-12	4.8	38
21	Energy-resolved ion mobility-mass spectrometry--a concept to improve the separation of isomeric carbohydrates. *Journal of the American Society for Mass Spectrometry*, **2014**, 25, 471-9	3.5	41
20	Estimating collision cross sections of negatively charged N-glycans using traveling wave ion mobility-mass spectrometry. *Analytical Chemistry*, **2014**, 86, 10789-95	7.8	74
19	Photodissociation of conformer-selected ubiquitin ions reveals site-specific cis/trans isomerization of proline peptide bonds. *Journal of the American Chemical Society*, **2014**, 136, 10308-14	16.4	80
18	Intrinsically Disordered p53 and Its Complexes Populate Compact Conformations in the Gas Phase. *Angewandte Chemie*, **2013**, 125, 379-383	3.6	4
17	Intrinsically disordered p53 and its complexes populate compact conformations in the gas phase. *Angewandte Chemie - International Edition*, **2013**, 52, 361-5	16.4	77
16	Ion mobility-mass spectrometry of complex carbohydrates: collision cross sections of sodiated N-linked glycans. *Analytical Chemistry*, **2013**, 85, 5138-45	7.8	112
15	How cations change peptide structure. *Chemistry - A European Journal*, **2013**, 19, 11224-34	4.8	32

14	Protein structure in the gas phase: the influence of side-chain microsolvation. *Journal of the American Chemical Society*, **2013**, 135, 1177-80	16.4	66
13	Structure analysis of an amyloid-forming model peptide by a systematic glycine and proline scan. *Biomacromolecules*, **2011**, 12, 2988-96	6.9	17
12	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, 358-68	6.5	54
11	Alternate dissociation pathways identified in charge-reduced protein complex ions. *Analytical Chemistry*, **2010**, 82, 5363-72	7.8	126
10	Secondary Structure of Ac-Alan-LysH+ Polyalanine Peptides (n = 5,10,15) in Vacuo: Helical or Not?. *Journal of Physical Chemistry Letters*, **2010**, 1, 3465-3470	6.4	72
9	Amide-I and -II vibrations of the cyclic beta-sheet model peptide gramicidin S in the gas phase. *Journal of the American Chemical Society*, **2010**, 132, 2085-93	16.4	56
8	Gas-phase IR spectra of intact □helical coiled coil protein complexes. *International Journal of Mass Spectrometry*, **2009**, 283, 161-168	1.9	17
7	How metal ions affect amyloid formation: Cu2+- and Zn2+-sensitive peptides. *ChemBioChem*, **2008**, 9, 531-6	3.8	49
6	Intramolecular charge interactions as a tool to control the coiled-coil-to-amyloid transformation. *Chemistry - A European Journal*, **2008**, 14, 11442-51	4.8	29
5	Following polypeptide folding and assembly with conformational switches. *Current Opinion in Chemical Biology*, **2008**, 12, 730-9	9.7	46
4	Random coils, beta-sheet ribbons, and alpha-helical fibers: one peptide adopting three different secondary structures at will. *Journal of the American Chemical Society*, **2006**, 128, 2196-7	16.4	101
3	From alpha-helix to beta-sheet--a reversible metal ion induced peptide secondary structure switch. *Organic and Biomolecular Chemistry*, **2005**, 3, 2500-2	3.9	38
2	Directing the secondary structure of polypeptides at will: from helices to amyloids and back again?. *Organic and Biomolecular Chemistry*, **2005**, 3, 3843-50	3.9	38
1	Advanced approaches for the characterization of a de novo designed antiparallel coiled coil peptide. *Organic and Biomolecular Chemistry*, **2005**, 3, 1189-94	3.9	22