

# Karl-Michael Weitzel

## List of Publications by Year in descending order

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92  
papers

1,408  
citations

361413

20  
h-index

414414

32  
g-index

94  
all docs

94  
docs citations

94  
times ranked

877  
citing authors

#	ARTICLE	IF	CITATIONS
1	The ionic conductivity of alkali aluminum germanium phosphate glasses“ comparison of Plasma CAIT with two electrode DC measurements. Zeitschrift Fur Physikalische Chemie, 2022, 236, 1001-1012.	2.8	2
2	The Potential Energy Profile of the HBr <sup>+</sup> + HCl Bimolecular Collision. Journal of Physical Chemistry A, 2022, 126, 1465-1474.	2.5	4
3	Coincident measurement of photo-ion circular dichroism and photo-electron circular dichroism in 1-phenylethylamine. Physical Chemistry Chemical Physics, 2022, 24, 15904-15911.	2.8	5
4	Photoelectron Circular Dichroism of Electrospayed Gramicidin Anions. Journal of Physical Chemistry Letters, 2022, 13, 6110-6116.	4.6	8
5	(Invited) Charge Attachment“Induced Transport: Toward New Paradigms in Solid State Electrochemistry. ECS Meeting Abstracts, 2022, MA2022-01, 1147-1147.	0.0	0
6	Plasma Charge Carrier Attachment Induced Transport in Solid Ionic Materials. ECS Meeting Abstracts, 2022, MA2022-01, 1057-1057.	0.0	0
7	On the disintegration of copper electrodes and the transport of Cu <sup>+</sup> ions in a sodium potassium borosilicate glass. Solid State Ionics, 2021, 359, 115533.	2.7	0
8	Li <sup>+</sup> Ion Site Energy Distribution in Lithium Aluminum Germanium Phosphate. Journal of Physical Chemistry C, 2021, 125, 4977-4985.	3.1	3
9	A chemical dynamics study of the HCl <sup>+</sup> + HCl <sup>+</sup> reaction. International Journal of Mass Spectrometry, 2021, 462, 116515.	1.5	7
10	Photoelektronen“Zirkulardichroismus im Photodetachment von Aminos“uren“Anionen. Angewandte Chemie, 2021, 133, 18005-18009.	2.0	2
11	Photoelectron Circular Dichroism in the Photodetachment of Amino Acid Anions. Angewandte Chemie - International Edition, 2021, 60, 17861-17865.	13.8	21
12	Combined measurement of electronic and ionic work functions, $w(e^{\sim})$ and $w(\text{Li}^+)$ , for lithium phosphate. Journal of Applied Physics, 2020, 128, .	2.5	0
13	Proton and deuteron electrodiffusion in a D263T borosilicate glass by controlled charge attachment from a fs-plasma. Solid State Ionics, 2020, 357, 115469.	2.7	4
14	Theoretical Study of the Dynamics of the HBr <sup>+</sup> + CO <sub>2</sub> $\hat{+}$ HOCO <sup>+</sup> + Br Reaction. Journal of Physical Chemistry A, 2020, 124, 9119-9127.	2.5	10
15	The role of dielectric breakdown in the electro-thermal poling of D263T glass. IEEE Transactions on Dielectrics and Electrical Insulation, 2020, 27, 1422-1427.	2.9	2
16	Coincident measurement of photo-ion circular dichroism and photo-electron circular dichroism. Physical Chemistry Chemical Physics, 2020, 22, 13707-13712.	2.8	16
17	Pathways for Alkali Ion Transport in Mold Compounds. ECS Journal of Solid State Science and Technology, 2020, 9, 053001.	1.8	2
18	Qualitative and Quantitative Distinction of <i>ortho</i> -, <i>meta</i> -, and <i>para</i> -Fluorotoluene by Means of Chirped Femtosecond Laser Ionization. Analytical Chemistry, 2020, 92, 5492-5499.	6.5	13

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19	Ion Selective Transport of Alkali Ions through a Polyelectrolyte Membrane. <i>Advanced Materials Interfaces</i> , 2020, 7, 2000419.	3.7	2
20	Self-Reactions in the HBr <sup>+</sup> (DBr <sup>+</sup> ) + HBr System: A State-Selective Investigation of the Role of Rotation. <i>Journal of Physical Chemistry A</i> , 2020, 124, 8461-8468.	2.5	3
21	Electron attachment induced ion transport $\hat{\epsilon}^+$ Part I: Conductivities and activation energies. <i>Solid State Ionics</i> , 2019, 339, 114996.	2.7	6
22	Electron attachment induced ion transport $\hat{\epsilon}^+$ Part II: The evolution of blocking of charge transport. <i>Solid State Ionics</i> , 2019, 339, 114997.	2.7	3
23	Site energy distribution of sodium ions in a sodium rubidium borate glass. <i>Physical Chemistry Chemical Physics</i> , 2019, 21, 26251-26261.	2.8	10
24	Experimental Studies on Work Functions of Li <sup>+</sup> Ions and Electrons in the Battery Electrode Material LiCoO <sub>2</sub> : A Thermodynamic Cycle Combining Ionic and Electronic Structure. <i>Advanced Energy Materials</i> , 2018, 8, 1703411.	19.5	28
25	Distinction of Structural Isomers of Benzenediamin and Difluorobenzene by Means of Chirped Femtosecond Laser Ionization Mass Spectrometry. <i>Zeitschrift Fur Physikalische Chemie</i> , 2018, 232, 689-703.	2.8	9
26	The Fluoroperovskite TiMnF <sub>3</sub> . <i>Zeitschrift Fur Anorganische Und Allgemeine Chemie</i> , 2018, 644, 1557-1561.	1.2	1
27	Lithium-Ion Batteries: Experimental Studies on Work Functions of Li <sup>+</sup> Ions and Electrons in the Battery Electrode Material LiCoO <sub>2</sub> : A Thermodynamic Cycle Combining Ionic and Electronic Structure (Adv.) <i>Tj ETQq1 1 0.704314 rgBT /Over</i>		
28	Remote access to electrical conductivity by charge attachment from an ambient pressure plasma. <i>Applied Physics Letters</i> , 2018, 113, .	3.3	6
29	Demonstration of the conductive species in $\hat{\epsilon}$ -Li-free $\hat{\epsilon}$ -solid solvent doped with LiBH <sub>4</sub> and its Li <sup>+</sup> dominating conduction mechanism. <i>Electrochimica Acta</i> , 2018, 283, 1188-1194.	5.2	7
30	Electrodifusion versus Chemical Diffusion in Alkali Calcium Phosphate Glasses: Implication of Structural Changes. <i>Journal of Physical Chemistry C</i> , 2017, 121, 3203-3211.	3.1	8
31	Charge attachment induced transport $\hat{\epsilon}^+$ bulk and grain boundary diffusion of potassium in PrMnO <sub>3</sub> . <i>Physical Chemistry Chemical Physics</i> , 2017, 19, 9762-9769.	2.8	13
32	The work function for Li <sup>+</sup> -ion emission from spodumene: A complete characterization of thermionic emission. <i>Journal of Applied Physics</i> , 2016, 120, .	2.5	9
33	Competing K <sup>+</sup> and Ca <sup>++</sup> -ion transport in calcium-potassium-phosphate-glasses. <i>Journal of Non-Crystalline Solids</i> , 2016, 452, 231-237.	3.1	6
34	Transport of ions in a mixed Na <sup>+</sup> /K <sup>+</sup> ion conducting glass - electrodiffusion profiles and electrochemical interphase formation. <i>Electrochimica Acta</i> , 2016, 191, 616-623.	5.2	18
35	Bombardment induced ion transport $\hat{\epsilon}^+$ part IV: ionic conductivity of ultra-thin polyelectrolyte multilayer films. <i>Physical Chemistry Chemical Physics</i> , 2016, 18, 4345-4351.	2.8	12
36	Self-reactions in the HCl <sup>+</sup> (DCl <sup>+</sup> ) + HCl system: a state-selective investigation of the role of rotation. <i>Physical Chemistry Chemical Physics</i> , 2015, 17, 16454-16461.	2.8	6

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37	Highways for ions in polymers - 3D-imaging of electrochemical interphase formation. <i>Electrochimica Acta</i> , 2015, 170, 122-130.	5.2	5
38	Photoionization Yields in Intense fs-Laser Fields – A Systematic Investigation of Chirp Effects. <i>Zeitschrift Fur Physikalische Chemie</i> , 2015, 229, 1729-1746.	2.8	6
39	Effect of structure and composition on the DC-conductivity in calcium phosphate glasses of the type $x \text{CaO} \cdot (55-x) \text{M}_2\text{O} \cdot 45 \text{P}_2\text{O}_5$ (M=Na, K, Rb, Cs). <i>Journal of Non-Crystalline Solids</i> , 2015, 430, 73-78.	3.1	10
40	Hydrogen Migration in Intense Laser Fields: Analysis and Control in Concert. <i>Springer Series in Chemical Physics</i> , 2015, , 1-21.	0.2	2
41	Bombardment Induced Transport of Rb <sup>+</sup> through a K <sup>+</sup> Conducting Glass vs. K <sup>+</sup> Transport through a Rb <sup>+</sup> Conducting Glass. <i>Zeitschrift Fur Physikalische Chemie</i> , 2014, 228, 609-627.	2.8	13
42	Special Issue Commemorating the Paper –“The Diffraction of X-rays by Crystals”–by William Lawrence Bragg ( <i>ZPC</i> , 104, 337–348 (1923); Nobel Lecture, September 6, 1922). <i>Zeitschrift Fur Physikalische Chemie</i> , 2014, 228, 953-956.	2.8	0
43	Formation of fragment ions (H <sup>+</sup> , H <sub>3</sub> <sup>+</sup> , CH <sub>3</sub> <sup>+</sup> ) from ethane in intense femtosecond laser fields –“ from understanding to control. <i>Faraday Discussions</i> , 2013, 163, 461.	3.2	28
44	Low energy bombardment induced cesium ion transport through a sodium ion conductor: Concentration profiles and diffusion coefficients. <i>Solid State Ionics</i> , 2013, 242, 20-25.	2.7	5
45	Ion Transport Through Polyelectrolyte Multilayers. <i>Macromolecular Rapid Communications</i> , 2013, 34, 1820-1826.	3.9	9
46	Bombardment Induced Potassium Ion Transport Through a Sodium Ion Conductor: Conductivities and Diffusion Profiles. <i>Zeitschrift Fur Physikalische Chemie</i> , 2012, 226, 341-353.	2.8	23
47	Potassium ion transport through poly-para-xylylene films. <i>IEEE Transactions on Dielectrics and Electrical Insulation</i> , 2012, 19, 1167-1174.	2.9	4
48	Analysis of Chirality by Femtosecond Laser Ionization Mass Spectrometry. <i>Chirality</i> , 2012, 24, 684-690.	2.6	39
49	Bombardment induced ion transport –“Part II. Experimental potassium ion conductivities in borosilicate glass. <i>Physical Chemistry Chemical Physics</i> , 2011, 13, 20123.	2.8	32
50	Circular dichroism in ion yields employing femtosecond laser ionization –“the role of laser pulse duration. <i>Physical Chemistry Chemical Physics</i> , 2011, 13, 2378-2386.	2.8	31
51	Femtosecond interferometry of molecular dynamics –“ the role of relative and absolute phase of two individual laser pulses. <i>Zeitschrift Fur Physikalische Chemie</i> , 2011, 225, 1073-1088.	2.8	1
52	Circular Dichroism in Ion Yields in Multiphoton Ionization of (R)-Propylene Oxide Employing Femtosecond Laser Pulses. <i>Zeitschrift Fur Physikalische Chemie</i> , 2011, 225, 587-594.	2.8	15
53	Bond-dissociation energies of cations –“Pushing the limits to quantum state resolution. <i>Mass Spectrometry Reviews</i> , 2011, 30, 221-235.	5.4	12
54	Unusual mechanism for H <sub>3</sub> <sup>+</sup> formation from ethane as obtained by femtosecond laser pulse ionization and quantum chemical calculations. <i>Journal of Chemical Physics</i> , 2011, 134, 114302.	3.0	51

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55	Rotational dependence of the proton-transfer reaction $\text{HBr}^+ + \text{CO}_2 \hat{\rightarrow} \text{HOCO}^+ + \text{Br}$ . II. Comparison of $\text{HBr}^+ (2\frac{1}{2})$ and $\text{HBr}^+ (2\frac{1}{2})$ . Journal of Chemical Physics, 2010, 133, 234301.	3.0	13
56	Control of competing dissociation channels by femtosecond interferometry: Aspects of electron and nuclear dynamics. Chemical Physics Letters, 2010, 487, 209-213.	2.6	3
57	Field effects in alkali ion emitters: Transition from Langmuir-Child to Schottky regime. Journal of Applied Physics, 2010, 107, .	2.5	19
58	Rotational dependence of the proton-transfer reaction $\text{HBr}^+ + \text{CO}_2 \hat{\rightarrow} \text{HOCO}^+ + \text{Br}$ . I. Energy versus angular momentum effects. Journal of Chemical Physics, 2010, 132, 174305.	3.0	18
59	Time-correlated transport of potassium ions through a thin poly-p-xylylene membrane. Journal Physics D: Applied Physics, 2010, 43, 025501.	2.8	5
60	Circular Dichroism in Ion Yields of Femtosecond-Laser Mass Spectrometry. ChemPhysChem, 2009, 10, 1199-1202.	2.1	45
61	Transport of Caesium ions through thin poly-p-xylylene films. Thin Solid Films, 2009, 517, 4583-4586.	1.8	6
62	Reactive scattering of $\text{NH}_3^+ (v, J)$ ions at film covered indium tin oxide (ITO) surfaces. International Journal of Mass Spectrometry, 2008, 277, 245-250.	1.5	5
63	Controlling the Electrons Provides Means for Controlling Chemistry. ChemPhysChem, 2007, 8, 213-215.	2.1	13
64	Distinction of <i>ortho</i> - and <i>para</i> -Xylene by Femtosecond-Laser Mass Spectrometry. ChemPhysChem, 2007, 8, 2185-2188.	2.1	13
65	Laser pulse control of photofragmentation in $\text{DCl}^+$ : The effect of carrier envelope phase. Chemical Physics, 2007, 338, 277-284.	1.9	10
66	Control of Branching Ratios in the Dissociative Ionization of Deuterium Chloride. Journal of Physical Chemistry A, 2006, 110, 6395-6398.	2.5	16
67	Formation of $\text{C}_7\text{H}_7^+$ ions from ethylbenzene and <i>o</i> -xylene ions: Fragmentation versus isomerization. International Journal of Mass Spectrometry, 2006, 252, 189-196.	1.5	17
68	On the control of product yields in the photofragmentation of deuteriumchlorid ions ( $\text{DCl}^+$ ). Journal of Chemical Physics, 2005, 123, 164308.	3.0	17
69	The resonance enhanced multiphoton ionisation spectroscopy of ammonia isotopomers $\text{NH}_3$ , $\text{NH}_2\text{D}$ , $\text{NHD}_2$ and $\text{ND}_3$ . Physical Chemistry Chemical Physics, 2005, 7, 1527.	2.8	18
70	Two-Photon Dissociation Spectroscopy of State-Selected $\text{HCl}^+$ and $\text{DCl}^+$ Ions. ChemPhysChem, 2004, 5, 1507-1512.	2.1	3
71	State-Selective Predissociation Spectroscopy of $\text{HCl}^+$ and $\text{DCl}^+$ Ions. Journal of Physical Chemistry A, 2004, 108, 9924-9930.	2.5	23
72	Rotational State Distribution of $\text{HBr}^+$ Ions Formed by Resonance Enhanced Multiphoton Ionization. Zeitschrift Fur Physikalische Chemie, 2004, 218, 311-326.	2.8	15

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73	The Kinetics of Methyl Loss from Ethylbenzene and Xylene Ions: The Tropylium versus Benzylum Story Revisited. <i>Journal of Physical Chemistry A</i> , 2003, 107, 10625-10630.	2.5	30
74	A new route to the dissociation energy of ionic and neutral HCl via lineshape analysis of single rotational transitions. <i>Physical Chemistry Chemical Physics</i> , 2002, 4, 4083-4086.	2.8	24
75	The binding energies of small Ar, CO and N <sub>2</sub> cluster ions. <i>International Journal of Mass Spectrometry</i> , 2002, 214, 175-212.	1.5	30
76	Unimolecular and bimolecular reactions of state selected HCl <sup>+</sup> ions formed via the R(1) pump line of the f 3 $\sigma$ 2 $\pi$ 1 $\sigma$ <sup>+</sup> REMPI spectrum. <i>Physical Chemistry Chemical Physics</i> , 2001, 3, 2253-2257.	2.8	14
77	Ion-Molecule Reactions of State Selected HCl <sup>+</sup> Ions with Carbon Dioxide and Ethene. <i>Zeitschrift Fur Physikalische Chemie</i> , 2001, 215, .	2.8	5
78	Observation of Accurate Ion Dissociation Thresholds in Pulsed Field Ionization-Photoelectron Studies. <i>Physical Review Letters</i> , 2001, 86, 3526-3529.	7.8	38
79	High-resolution pulsed field ionization photoelectron-photoion coincidence study of CH <sub>4</sub> : Accurate 0 K dissociation threshold for CH <sub>3</sub> <sup>+</sup> . <i>Journal of Chemical Physics</i> , 1999, 111, 8267-8270.	3.0	82
80	High-resolution pulsed field ionization photoelectron-photoion coincidence spectroscopy using synchrotron radiation. <i>Review of Scientific Instruments</i> , 1999, 70, 3892-3906.	1.3	77
81	State selective predissociation spectroscopy of hydrogen chloride ions (HCl <sup>+</sup> ) via the A <sup>2</sup> $\Sigma^+$ 1 $\Sigma^+$ $\rightarrow$ X <sup>2</sup> $\Sigma^+$ 3/2 <sub>2</sub> transition. <i>Molecular Physics</i> , 1999, 97, 43-52.	1.7	15
82	High-resolution pulsed field ionization photoelectron-photoion coincidence study of C <sub>2</sub> H <sub>2</sub> : Accurate 0 K dissociation threshold for C <sub>2</sub> H <sup>+</sup> . <i>Physical Chemistry Chemical Physics</i> , 1999, 1, 5259-5262.	2.8	42
83	Ab initio study of the equilibrium conformation of the ArCO <sup>+</sup> ion. <i>Chemical Physics</i> , 1998, 237, 43-49.	1.9	3
84	State Selective Predissociation Spectroscopy of Hydrogen Bromide Ions (HBr <sup>+</sup> ) via the 2 $\Sigma^+$ $\rightarrow$ 2 $\Pi$ (i=1/2, 3/2) Transition. <i>Journal of Physical Chemistry A</i> , 1998, 102, 1927-1934.	2.5	34
85	The formation of ArCO <sup>+</sup> ions by dissociative ionization of argon/carbonmonoxide clusters. <i>Journal of Chemical Physics</i> , 1997, 107, 6667-6676.	3.0	9
86	The distinction of direct and pulsed-field ionized zero kinetic energy photoelectrons in electron/ion coincidence experiments. <i>Chemical Physics Letters</i> , 1996, 251, 295-300.	2.6	20
87	ZEKE-PEPICO investigations of dissociation energies in ionic reactions. <i>Chemical Physics Letters</i> , 1994, 224, 371-380.	2.6	41
88	The Determination of the Transition State Structure from the J Dependence of the Dissociation Energy E <sub>sub&gt;0&lt;/sub&gt;</sub> (J): The Methane and Ethane Ion Dissociation. <i>Zeitschrift Fur Elektrotechnik Und Elektrochemie</i> , 1993, 97, 134-139.	0.9	28
89	Photoelectron Photoion Coincidence Studies of Ion Dissociation Dynamics. , 1991, , 259-296.		42
90	Shifts in photoionization fragmentation onsets. A direct measure of cooling in a supersonic molecular beam. <i>Chemical Physics</i> , 1991, 150, 263-273.	1.9	50

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91	On the distinction between tight and loose transition states in unimolecular dissociations. <i>Chemical Physics Letters</i> , 1991, 186, 490-494.	2.6	14
92	Threshold photoelectron photoion coincidence study of the ethane loss from energy selected pentane ions cooled in a supersonic expansion. <i>International Journal of Mass Spectrometry and Ion Processes</i> , 1991, 107, 301-317.	1.8	18