

# J Mathias Weber

## List of Publications by Year in descending order

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97  
papers

2,915  
citations

125106

35  
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223390

49  
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103  
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103  
docs citations

103  
times ranked

1934  
citing authors

#	ARTICLE	IF	CITATIONS
1	Effects of Formate Binding to a Bipyridine-Based Cobalt-4N Complex. <i>Journal of Physical Chemistry A</i> , 2021, 125, 7297-7302.	1.1	3
2	Intrinsic Structure and Electronic Spectrum of Deprotonated Biliverdin: Cryogenic Ion Spectroscopy and Ion Mobility. <i>Journal of the American Chemical Society</i> , 2021, 143, 17778-17785.	6.6	7
3	Spectroscopy of Resonant Intermediate States for Triplet-Triplet Annihilation Upconversion in Crystalline Rubrene: Radical Ions as Sensitizers. <i>Journal of Physical Chemistry Letters</i> , 2020, 11, 7212-7217.	2.1	6
4	Intrinsic electronic spectra of cryogenically prepared protoporphyrin IX ions <i>in vacuo</i> - deprotonation-induced Stark shifts. <i>Physical Chemistry Chemical Physics</i> , 2020, 22, 20295-20302.	1.3	6
5	Tag-Free, Temperature Dependent Infrared Spectra of the GFP Chromophore: Revisiting the Question of Isomerism. <i>Journal of Physical Chemistry A</i> , 2020, 124, 7827-7831.	1.1	3
6	Probing the Microsolvation Environment of the Green Fluorescent Protein Chromophore <i>in Vacuo</i> . <i>Journal of Physical Chemistry Letters</i> , 2020, 11, 1940-1946.	2.1	7
7	Size-Dependent Pressure-Response of the Photoluminescence of CsPbBr <sub>3</sub> Nanocrystals. <i>Journal of Physical Chemistry Letters</i> , 2020, 11, 1975-1980.	2.1	35
8	Vibrational Autodetachment from Anionic Nitroalkane Chains: From Molecular Signatures to Thermionic Emission. <i>Journal of Physical Chemistry A</i> , 2019, 123, 8562-8570.	1.1	16
9	Cryogenic Ion Spectroscopy of the Green Fluorescent Protein Chromophore <i>in Vacuo</i> . <i>Journal of Physical Chemistry Letters</i> , 2019, 10, 7817-7822.	2.1	24
10	Titanium Insertion into CO Bonds in Anionic Ti-CO <sub>2</sub> Complexes. <i>Journal of Physical Chemistry A</i> , 2018, 122, 2983-2991.	1.1	20
11	Characterization of Intermediate Oxidation States in CO <sub>2</sub> Activation. <i>Annual Review of Physical Chemistry</i> , 2018, 69, 231-252.	4.8	65
12	Pressure Response of Photoluminescence in Cesium Lead Iodide Perovskite Nanocrystals. <i>Journal of Physical Chemistry C</i> , 2018, 122, 11024-11030.	1.5	41
13	Infrared Photodissociation Spectra of [Sn(CO <sub>2</sub> ) <sub>n</sub> ] <sup>-</sup> Cluster Ions. <i>Journal of Physical Chemistry A</i> , 2018, 122, 3772-3779.	1.1	11
14	Intrinsic photophysics of nitrophenolate ions studied by cryogenic ion spectroscopy. <i>Physical Chemistry Chemical Physics</i> , 2018, 20, 28535-28543.	1.3	7
15	Interactions of Molecular Titanium Oxides TiO <sub>x</sub> (x = 1-3) with Carbon Dioxide in Cluster Anions. <i>Journal of Physical Chemistry A</i> , 2018, 122, 6909-6917.	1.1	13
16	Enhancement of infrared activity by moving electrons through bonds - The case of CO <sub>2</sub> anion and carboxylate. <i>Chemical Physics Letters</i> , 2017, 683, 586-590.	1.2	8
17	Structural Motifs of [Fe(CO <sub>2</sub> ) <sub>n</sub> ] <sup>-</sup> Clusters (n = 3-7). <i>Journal of Physical Chemistry A</i> , 2017, 121, 4132-4138.	1.1	25
18	Interaction of CO <sub>2</sub> with Atomic Manganese in the Presence of an Excess Negative Charge Probed by Infrared Spectroscopy of [Mn(CO <sub>2</sub> ) <sub>n</sub> ] <sup>-</sup> Clusters. <i>Journal of Physical Chemistry A</i> , 2017, 121, 7534-7542.	1.1	24

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19	Electronic Spectra of Tris(2,2'-bipyridine)-M(II) Complex Ions in Vacuo (M = Fe and Os). <i>Inorganic Chemistry</i> , 2017, 56, 7029-7037.	1.9	14
20	Infrared spectroscopic studies on the cluster size dependence of charge carrier structure in nitrous oxide cluster anions. <i>Journal of Chemical Physics</i> , 2016, 144, 104302.	1.2	5
21	The electronic spectrum of cryogenic ruthenium-tris-bipyridine dications in vacuo. <i>Journal of Chemical Physics</i> , 2016, 145, 024304.	1.2	23
22	Ligand Influence on the Electronic Spectra of Dicationic Ruthenium-Bipyridine-Terpyridine Complexes. <i>Journal of Physical Chemistry A</i> , 2016, 120, 2350-2356.	1.1	9
23	Solvent-Driven Reductive Activation of CO <sub>2</sub> by Bismuth: Switching from Metalloformate Complexes to Oxalate Products. <i>Angewandte Chemie - International Edition</i> , 2016, 55, 15171-15174.	7.2	49
24	Hydration of a Binding Site with Restricted Solvent Access: Solvatochromic Shift of the Electronic Spectrum of a Ruthenium Polypyridine Complex, One Molecule at a Time. <i>Journal of Physical Chemistry A</i> , 2016, 120, 7650-7658.	1.1	11
25	UV Spectra of Tris(2,2'-bipyridine)-M(II) Complex Ions in Vacuo (M = Mn, Fe, Co, Ni, Cu, Zn). <i>Inorganic Chemistry</i> , 2016, 55, 11937-11943.	1.9	24
26	Solvens-induzierte reduktive Aktivierung von CO <sub>2</sub> durch Bismut und Änderung des Reaktionsprodukts von Metalloformiat nach Oxalat. <i>Angewandte Chemie</i> , 2016, 128, 15396-15399.	1.6	7
27	Innentitelbild: Solvens-induzierte reduktive Aktivierung von CO <sub>2</sub> durch Bismut und Änderung des Reaktionsprodukts von Metalloformiat nach Oxalat ( <i>Angew. Chem.</i> 48/2016). <i>Angewandte Chemie</i> , 2016, 128, 15098-15098.	1.6	0
28	Heavy atom vibrational modes and low-energy vibrational autodetachment in nitromethane anions. <i>Journal of Chemical Physics</i> , 2015, 142, 234304.	1.2	2
29	Absorption Spectrum of a Ru(II)-Aquo Complex in Vacuo: Resolving Individual Charge-Transfer Transitions. <i>Journal of Physical Chemistry A</i> , 2015, 119, 11509-11513.	1.1	9
30	Ligand influence on the electronic spectra of monocationic copper-bipyridine complexes. <i>Physical Chemistry Chemical Physics</i> , 2015, 17, 31938-31946.	1.3	32
31	Structures of [CoO(CO <sub>2</sub> ) <sub>n</sub> ] <sup>+</sup> and [NiO(CO <sub>2</sub> ) <sub>n</sub> ] <sup>+</sup> Clusters Studied by Infrared Spectroscopy. <i>Journal of Physical Chemistry A</i> , 2015, 119, 843-850.	1.1	19
32	Gas-phase spectroscopy of singly reduced tris(bipyridine)ruthenium ions, Ru(bipy) <sub>3</sub> <sup>+</sup> . <i>Physical Chemistry Chemical Physics</i> , 2015, 17, 5561-5564.	1.3	12
33	The interaction of negative charge with carbon dioxide – insight into solvation, speciation and reductive activation from cluster studies. <i>International Reviews in Physical Chemistry</i> , 2014, 33, 489-519.	0.9	80
34	Interaction of Nickel with Carbon Dioxide in [Ni(CO <sub>2</sub> ) <sub>n</sub> ] <sup>+</sup> Clusters Studied by Infrared Spectroscopy. <i>Journal of Physical Chemistry A</i> , 2014, 118, 8753-8757.	1.1	52
35	Structural Diversity of Copper-CO <sub>2</sub> Complexes: Infrared Spectra and Structures of [Cu(CO <sub>2</sub> ) <sub>n</sub> ] <sup>+</sup> Clusters. <i>Journal of Physical Chemistry A</i> , 2014, 118, 10246-10251.	1.1	56
36	Photodissociation Spectroscopy of the Anionic Copper Nitrate Association Complex Cu(NO <sub>3</sub> ) <sub>3</sub> <sup>-</sup> . <i>Journal of Physical Chemistry A</i> , 2014, 118, 9687-9691.	1.1	6

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37	Infrared Spectra and Structures of Anionic Complexes of Cobalt with Carbon Dioxide Ligands. <i>Journal of Physical Chemistry A</i> , 2014, 118, 4056-4062.	1.1	62
38	Spectroscopy and Photochemistry of Sodium Chromate Ester Cluster Ions. <i>Journal of Physical Chemistry A</i> , 2013, 117, 2144-2151.	1.1	4
39	Solvent-Mediated Reduction of Carbon Dioxide in Anionic Complexes with Silver Atoms. <i>Journal of Physical Chemistry A</i> , 2013, 117, 10764-10771.	1.1	69
40	Vibrationally induced charge transfer in a bimolecular model complex in vacuo. <i>Journal of Chemical Physics</i> , 2013, 138, 224301.	1.2	2
41	On the Photoabsorption by Permanganate Ions in Vacuo and the Role of a Single Water Molecule. New Experimental Benchmarks for Electronic Structure Theory. <i>ChemPhysChem</i> , 2013, 14, 1133-1137.	1.0	16
42	Electronic structure and UV spectrum of hexachloroplatinate dianions in vacuo. <i>Journal of Chemical Physics</i> , 2013, 139, 194310.	1.2	12
43	UV Photophysics of DNA and RNA Nucleotides In Vacuo: Dissociation Channels, Time Scales, and Electronic Spectra. <i>Physical Chemistry in Action</i> , 2013, , 181-207.	0.1	1
44	Infrared spectroscopy of hydrated naphthalene cluster anions. <i>Journal of Chemical Physics</i> , 2012, 137, 104303.	1.2	10
45	Photoelectron spectroscopy of 1-nitropropane and 1-nitrobutane anions. <i>Journal of Chemical Physics</i> , 2012, 136, 064307.	1.2	8
46	Pressure-Induced Changes in the Fluorescence Behavior of Red Fluorescent Proteins. <i>Journal of Physical Chemistry B</i> , 2012, 116, 10311-10316.	1.2	17
47	Solvent-Driven Reductive Activation of Carbon Dioxide by Gold Anions. <i>Journal of the American Chemical Society</i> , 2012, 134, 18804-18808.	6.6	85
48	Spectroscopy and Fragmentation of Undercoordinated Bromoiridates. <i>Journal of Physical Chemistry A</i> , 2011, 115, 13482-13488.	1.1	0
49	Gas-Phase Experiments on Au(III) Photochemistry. <i>Journal of Physical Chemistry A</i> , 2011, 115, 3006-3015.	1.1	11
50	Photoelectron imaging spectroscopy of nitroethane anions. <i>Journal of Chemical Physics</i> , 2011, 134, 244301.	1.2	5
51	UV-photodissociation of non-cyclic and cyclic mononucleotides. <i>International Journal of Mass Spectrometry</i> , 2011, 303, 129-136.	0.7	12
52	Vibrational Autodetachment~Intramolecular Vibrational Relaxation Translated into Electronic Motion. <i>Journal of Physical Chemistry A</i> , 2010, 114, 4017-4030.	1.1	39
53	Microhydration of Nitromethane Anions from Both a Solute and Solvent Perspective. <i>Journal of Physical Chemistry A</i> , 2010, 114, 8933-8938.	1.1	15
54	Low-energy photoelectron imaging spectroscopy of nitromethane anions: Electron affinity, vibrational features, anisotropies, and the dipole-bound state. <i>Journal of Chemical Physics</i> , 2009, 130, 074307.	1.2	47

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55	Electronic photodissociation spectra and decay pathways of gas-phase $\text{IrBr}_6^{2-}$ . <i>Journal of Chemical Physics</i> , 2009, 131, 194309.	1.2	18
56	Photodamage to isolated mononucleotides—photodissociation spectra and fragment channels. <i>Physical Chemistry Chemical Physics</i> , 2009, 11, 1740.	1.3	44
57	Infrared spectra of $\text{SF}_6 \cdots \text{HCOOH} \cdots \text{Ar}^-(n=2)$ : Infrared triggered reaction and Ar-induced reactive inhibition. <i>Journal of Chemical Physics</i> , 2009, 130, 174302.	1.2	7
58	Vibrational Spectroscopy of Nitroalkane Chains Using Electron Autodetachment and Ar Predissociation. <i>Journal of Physical Chemistry A</i> , 2008, 112, 7498-7506.	1.1	37
59	Electronically excited states and visible region photodissociation spectroscopy of $\text{Au}^+ \cdots \text{Ar}^n$ clusters ( $n=7-9$ ): Molecular dimensionality transition?. <i>Journal of Chemical Physics</i> , 2008, 128, 114312.	1.2	40
60	Theoretical and infrared spectroscopic investigation of the $\text{O}_2^+ \cdots \text{benzene}$ and $\text{O}_4^+ \cdots \text{benzene}$ complexes. <i>Journal of Chemical Physics</i> , 2007, 127, 084319.	1.2	10
61	Infrared spectra of $\text{SF}_6^+ \cdots (\text{H}_2\text{O})_n$ ( $n=1-3$ ): Incipient reaction and delayed onset of water network formation. <i>Journal of Chemical Physics</i> , 2007, 127, 244310.	1.2	10
62	Infrared spectroscopy of anionic hydrated fluorobenzenes. <i>Journal of Chemical Physics</i> , 2007, 127, 114311.	1.2	20
63	Aromatic Molecules in Anion Recognition: Electrostatics versus H-Bonding. <i>Journal of the American Chemical Society</i> , 2007, 129, 13022-13026.	6.6	80
64	Infrared spectra of $\text{HC}_2^+ \cdots (\text{C}_2\text{H}_2)_n$ and $\text{O}_2^+ \cdots (\text{C}_2\text{H}_2)_n$ clusters ( $n=2-5$ ). <i>Journal of Chemical Physics</i> , 2006, 125, 094307.	1.2	5
65	High resolution study of anion formation in low-energy electron attachment to $\text{SF}_6$ molecules in a seeded supersonic beam. <i>European Physical Journal D</i> , 2005, 35, 177-191.	0.6	36
66	Mass spectrometry, photoelectron spectroscopy, and quantum chemical studies of fluorofullerene dianions. <i>International Journal of Mass Spectrometry</i> , 2005, 243, 223-230.	0.7	16
67	Unusual hydrogen bonding behavior in binary complexes of coinage metal anions with water. <i>Journal of Chemical Physics</i> , 2005, 123, 084307.	1.2	46
68	Photodetachment spectroscopy of $\text{PtBr}_4^{2-}$ : Probing the Coulomb barrier of a doubly charged anion. <i>Journal of Chemical Physics</i> , 2005, 123, 224308.	1.2	23
69	Infrared spectra of $\text{O}_2^+ \cdots (\text{CO}_2)_n$ clusters ( $n=1-6$ ): Asymmetric docking at the $\sigma^*$ orbital. <i>Journal of Chemical Physics</i> , 2005, 123, 074316.	1.2	14
70	The infrared spectrum of $\text{Au}^+ \cdots \text{CO}_2$ . <i>Journal of Chemical Physics</i> , 2005, 122, 154301.	1.2	56
71	Photoelectron spectroscopy of fullerene dianions $\text{C}_{76}^{2-}$ , $\text{C}_{78}^{2-}$ , and $\text{C}_{84}^{2-}$ . <i>Journal of Chemical Physics</i> , 2005, 122, 094321.	1.2	39
72	A pulsed ion source for the preparation of metal containing cluster anions using supersonic entrainment of laser vaporized metal. <i>Review of Scientific Instruments</i> , 2005, 76, 043301.	0.6	20

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73	An Infrared Investigation of the (CO <sub>2</sub> ) <sub>n</sub> -Clusters: A Core Ion Switching from Both the Ion and Solvent Perspectives. <i>Journal of Physical Chemistry A</i> , 2005, 109, 3146-3152.	1.1	60
74	Infrared spectra of X <sup>-</sup> ⋯CO <sub>2</sub> ⋯Ar cluster anions (X=Cl,Br,I). <i>Journal of Chemical Physics</i> , 2004, 120, 10056-10061.	1.2	41
75	Argon Cluster-Mediated Trapping and Vibrational Spectroscopic Characterization of an OH-⋯HCH <sub>2</sub> ⋯ Intermediate in the O <sup>-</sup> + CH <sub>4</sub> Reaction. <i>Journal of Physical Chemistry A</i> , 2004, 108, 10116-10121.	1.1	7
76	Photoelectron Spectroscopy of Isolated Multiply Negatively Charged Oligonucleotides. <i>Journal of the American Chemical Society</i> , 2004, 126, 8585-8589.	6.6	47
77	Infrared Signatures of a Water Molecule Attached to Triatomic Domains of Molecular Anions: Evolution of the H-bonding Configuration with Domain Length. <i>Journal of Physical Chemistry A</i> , 2003, 107, 6527-6532.	1.1	74
78	Electron Autodetachment from Isolated Nickel and Copper Phthalocyanine <sup>-</sup> Tetrasulfonate Tetraanions: Isomer Specific Rates. <i>Journal of Physical Chemistry A</i> , 2003, 107, 794-803.	1.1	51
79	Photoelectron Spectroscopy of C <sub>84</sub> Dianions. <i>Physical Review Letters</i> , 2003, 91, 113006.	2.9	50
80	Electronic photodissociation spectroscopy of Au <sub>4</sub> <sup>+</sup> ⋯Ar <sub>n</sub> , n=0-4: Experiment and theory. <i>Journal of Chemical Physics</i> , 2003, 119, 3699-3710.	1.2	48
81	Energy broadening due to photoion space charge in a high resolution laser photoelectron source. <i>Review of Scientific Instruments</i> , 2001, 72, 4098-4105.	0.6	14
82	Observation of resonant two-photon photodetachment of water cluster anions via femtosecond photoelectron spectroscopy. <i>Chemical Physics Letters</i> , 2001, 339, 337-342.	1.2	45
83	Argon predissociation and electron autodetachment spectroscopy of size-selected CH <sub>3</sub> NO <sub>2</sub> <sup>-</sup> ⋯Ar <sub>n</sub> clusters. <i>Journal of Chemical Physics</i> , 2001, 115, 10718-10723.	1.2	31
84	Hydration of a structured excess charge distribution: Infrared spectroscopy of the O <sub>2</sub> <sup>-</sup> ⋯(H <sub>2</sub> O) <sub>n</sub> , n=(1-5). <i>Journal of Chemical Physics</i> , 2001, 114, 2698-2706.	1.2	93
85	Vibrational Feshbach resonances in electron attachment to nitrous oxide clusters: decay into heterogeneous and homogeneous cluster anions. <i>Chemical Physics Letters</i> , 2000, 325, 345-353.	1.2	33
86	The infrared predissociation spectra of Cl <sup>-</sup> ⋯H <sub>2</sub> O⋯Ar (n=1-5): experimental determination of the influence of Ar solvent atoms. <i>Chemical Physics Letters</i> , 2000, 327, 1-6.	1.2	37
87	Vibrational Feshbach resonances in electron attachment to carbon dioxide clusters. <i>European Physical Journal D</i> , 2000, 12, 125-131.	0.6	40
88	Effects of solvation on dissociative electron attachment to methyl iodide clusters. <i>European Physical Journal D</i> , 2000, 11, 247-256.	0.6	22
89	Isolating the Spectroscopic Signature of a Hydration Shell With the Use of Clusters: Superoxide Tetrahydrate. <i>Science</i> , 2000, 287, 2461-2463.	6.0	157
90	Vibrational resonance and threshold effects in inelastic electron collisions with methyl iodide molecules. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 1999, 32, 2153-2171.	0.6	99

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91	Odd Rydberg spectrum of $^{40}\text{Ar}(I)$ : high-resolution laser spectroscopy and multichannel quantum defect analysis of the $j=2$ and $3$ levels. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 1999, 32, 2381-2398.	0.6	22
92	Formation of small water cluster anions by attachment of very slow electrons at high resolution. <i>European Physical Journal D</i> , 1999, 7, 587-594.	0.6	49
93	Nuclear-Excited Feshbach Resonances in Electron Attachment to Molecular Clusters. <i>Physical Review Letters</i> , 1999, 82, 516-519.	2.9	50
94	Penning ionization of $\text{C}_{60}$ and $\text{C}_{70}$ . <i>Chemical Physics</i> , 1998, 239, 271-286.	0.9	34
95	Laser Photoelectron Attachment to Molecules in a Skimmed Supersonic Beam: Diagnostics of Weak Electric Fields and Attachment Cross Sections Down to $20\frac{1}{4}\text{eV}$ . <i>Physical Review Letters</i> , 1998, 81, 778-781.	2.9	71
96	Rydberg electron transfer to $\text{C}_{60}$ and $\text{C}_{70}$ . <i>Zeitschrift für Physik D-Atoms Molecules and Clusters</i> , 1996, 37, 351-357.	1.0	47
97	High-resolution measurement and quantum-defect analysis for the Ne $nd'$ $J=1, 2$ and $3$ autoionizing resonances. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 1994, 27, 4897-4907.	0.6	21