

# Toshinori Suzuki

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/4599588/publications.pdf>

Version: 2024-02-01

107  
papers

4,016  
citations

101543

36  
h-index

128289

60  
g-index

108  
all docs

108  
docs citations

108  
times ranked

2563  
citing authors

#	ARTICLE	IF	CITATIONS
1	FEMTOSECOND TIME-RESOLVED PHOTOELECTRON IMAGING. Annual Review of Physical Chemistry, 2006, 57, 555-592.	10.8	257
2	Generation of sub-two-cycle mid-infrared pulses by four-wave mixing through filamentation in air. Optics Letters, 2007, 32, 3330.	3.3	215
3	Direct measurement of vertical binding energy of a hydrated electron. Physical Chemistry Chemical Physics, 2010, 12, 3653.	2.8	152
4	Generation of 12 fs deep-ultraviolet pulses by four-wave mixing through filamentation in neon gas. Optics Letters, 2007, 32, 2481.	3.3	144
5	Nonadiabatic dynamics within the time dependent density functional theory: Ultrafast photodynamics in pyrazine. Chemical Physics, 2008, 349, 319-324.	1.9	137
6	Fully State-Resolved Differential Cross Sections for the Inelastic Scattering of the Open-Shell NO Molecule by Ar. Science, 2001, 294, 832-834.	12.6	108
7	Probing Ultrafast Internal Conversion through Conical Intersection via Time-Energy Map of Photoelectron Angular Anisotropy. Journal of the American Chemical Society, 2009, 131, 10392-10393.	13.7	108
8	Photoelectron Imaging on Time-Dependent Molecular Alignment Created by a Femtosecond Laser Pulse. Physical Review Letters, 2001, 86, 4500-4503.	7.8	100
9	Genuine binding energy of the hydrated electron. Science Advances, 2017, 3, e1603224.	10.3	99
10	Vibrational distribution of CH <sub>3</sub> produced by the reaction of O(1D <sub>2</sub> ) atom with CH <sub>4</sub> . Journal of Chemical Physics, 1993, 98, 2387-2398.	3.0	95
11	Effective attenuation length of an electron in liquid water between 10 and 600 eV. Physical Review E, 2014, 90, 010302.	2.1	92
12	Photoelectron spectroscopy of aqueous solutions: Streaming potentials of NaX (X = Cl, Br, and I) solutions and electron binding energies of liquid water and X <sup>•-</sup> . Journal of Chemical Physics, 2014, 140, 174506.	3.0	90
13	High-resolution soft X-ray photoelectron spectroscopy of liquid water. Physical Chemistry Chemical Physics, 2011, 13, 413-417.	2.8	85
14	Time-resolved photoelectron imaging of ultrafast S <sub>2</sub> →S <sub>1</sub> internal conversion through conical intersection in pyrazine. Journal of Chemical Physics, 2010, 132, 174302.	3.0	84
15	Non-adiabatic effects in chemistry revealed by time-resolved charged-particle imaging. International Reviews in Physical Chemistry, 2001, 20, 313-356.	2.3	83
16	Femtosecond time-resolved photoelectron imaging. Faraday Discussions, 1999, 113, 37-46.	3.2	77
17	Time-resolved photoelectron spectroscopy of non-adiabatic electronic dynamics in gas and liquid phases. International Reviews in Physical Chemistry, 2012, 31, 265-318.	2.3	76
18	Femtosecond time-resolved photoelectron imaging on ultrafast electronic dephasing in an isolated molecule. Journal of Chemical Physics, 1999, 111, 4859-4861.	3.0	75

#	ARTICLE	IF	CITATIONS
19	Ultrafast photodynamics of furan. <i>Journal of Chemical Physics</i> , 2010, 133, 234303.	3.0	69
20	Time-resolved photoelectron imaging spectra from non-adiabatic molecular dynamics simulations. <i>Journal of Chemical Physics</i> , 2013, 139, 134104.	3.0	59
21	Direct Observation of Ground-State Product Formation in a 1,3-Cyclohexadiene Ring-Opening Reaction. <i>Journal of Physical Chemistry Letters</i> , 2015, 6, 343-346.	4.6	56
22	A crossed molecular beam apparatus using high-resolution ion imaging. <i>Review of Scientific Instruments</i> , 1999, 70, 3265-3270.	1.3	52
23	Ultraviolet photochemical reaction of $[\text{Fe}(\text{III})(\text{C}_2\text{O}_4)_3]^{3-}$ in aqueous solutions studied by femtosecond time-resolved X-ray absorption spectroscopy using an X-ray free electron laser. <i>Structural Dynamics</i> , 2015, 2, 034901.	2.3	52
24	Time-resolved photoelectron imaging of $S_2 \rightarrow S_1$ internal conversion in benzene and toluene. <i>Journal of Chemical Physics</i> , 2011, 134, 184313.	3.0	51
25	Time-resolved photoelectron spectroscopy of bulk liquids at ultra-low kinetic energy. <i>Chemical Physics Letters</i> , 2010, 494, 111-116.	2.6	50
26	Time- and Angle-Resolved Photoemission Spectroscopy of Hydrated Electrons Near a Liquid Water Surface. <i>Physical Review Letters</i> , 2014, 112, 187603.	7.8	49
27	Wavelength Dependence of UV Photoemission from Solvated Electrons in Bulk Water, Methanol, and Ethanol. <i>Journal of Physical Chemistry A</i> , 2016, 120, 1153-1159.	2.5	49
28	Femtosecond photoelectron imaging on pyrazine: Spectroscopy of 3s and 3p Rydberg states. <i>Journal of Chemical Physics</i> , 2001, 115, 8810-8818.	3.0	47
29	He I Ultraviolet Photoelectron Spectroscopy of Benzene and Pyridine in Supersonic Molecular Beams Using Photoelectron Imaging. <i>Journal of Physical Chemistry A</i> , 2011, 115, 2953-2965.	2.5	47
30	Binding energy of solvated electrons and retrieval of true UV photoelectron spectra of liquids. <i>Science Advances</i> , 2019, 5, eaaw6896.	10.3	47
31	Femtosecond Photoelectron Imaging on Pyridine: Ultrafast Electronic Dephasing from the $S_1(n\pi^*)$ State and Rydberg State Energetics. <i>Journal of Physical Chemistry A</i> , 2003, 107, 10897-10903.	2.5	46
32	Photoelectron spectra of solvated electrons in bulk water, methanol, and ethanol. <i>Chemical Physics Letters</i> , 2012, 535, 12-16.	2.6	46
33	Experimental and theoretical investigation of a multicolor filament. <i>Physical Review A</i> , 2009, 80, .	2.5	44
34	Simultaneous generation of sub-20 fs deep and vacuum ultraviolet pulses in a single filamentation cell and application to time-resolved photoelectron imaging. <i>Optics Express</i> , 2013, 21, 22423.	3.4	38
35	3s Rydberg and Cationic States of Pyrazine Studied by Photoelectron Spectroscopy. <i>Journal of Physical Chemistry A</i> , 2008, 112, 2293-2310.	2.5	37
36	Full observation of ultrafast cascaded radiationless transitions from $S_2(\tilde{\nu}_1^{\leftarrow})$ state of pyrazine using vacuum ultraviolet photoelectron imaging. <i>Journal of Chemical Physics</i> , 2016, 145, 044306.	3.0	37

#	ARTICLE	IF	CITATIONS
37	Isotope effect on ultrafast charge-transfer-to-solvent reaction from I <sup>+</sup> to water in aqueous NaI solution. <i>Chemical Science</i> , 2011, 2, 1094.	7.4	35
38	Resolving Nonadiabatic Dynamics of Hydrated Electrons Using Ultrafast Photoemission Anisotropy. <i>Physical Review Letters</i> , 2016, 116, 137601.	7.8	33
39	Femtosecond Photoelectron Imaging on Pyrazine: S <sub>1</sub> → T <sub>1</sub> Intersystem Crossing and Rotational Coherence Transfer. <i>Journal of Physical Chemistry A</i> , 2004, 108, 6823-6835.	2.5	32
40	Molecular Frame Image Restoration and Partial Wave Analysis of Photoionization Dynamics of NO by Time-Energy Mapping of Photoelectron Angular Distribution. <i>Physical Review Letters</i> , 2010, 104, 073002.	7.8	31
41	Observation of the wavepacket dynamics on the 1 <sup>+</sup> B <sub>2</sub> (1 <sup>+</sup> Σ <sub>u</sub> <sup>+</sup> ) state of CS <sub>2</sub> by sub-20 fs photoelectron imaging using 159 nm probe pulses. <i>Journal of Chemical Physics</i> , 2015, 142, 074308.	3.0	30
42	Femtosecond X-ray emission study of the spin cross-over dynamics in haem proteins. <i>Nature Communications</i> , 2020, 11, 4145.	12.8	29
43	Multihit two-dimensional charged-particle imaging system with real-time image processing at 1000 frames/s. <i>Review of Scientific Instruments</i> , 2009, 80, 013706.	1.3	28
44	Direct Measurement of Vertical Electron Binding Energies of Solvated Electrons in Methanol and Ethanol. <i>Chemistry Letters</i> , 2010, 39, 668-670.	1.3	28
45	Ultrafast photoelectron spectroscopy of aqueous solutions. <i>Journal of Chemical Physics</i> , 2019, 151, 090901.	3.0	28
46	Probing ultrafast dynamics during and after passing through conical intersections. <i>Physical Chemistry Chemical Physics</i> , 2019, 21, 13902-13905.	2.8	28
47	Femtosecond photoelectron imaging of pyridazine: S <sub>1</sub> lifetime and (3s(n <sup>+</sup> 1), 3p(n <sup>+</sup> 1)) Rydberg state energetics. <i>Journal of Chemical Physics</i> , 2003, 119, 300-303.	3.0	26
48	Femtosecond Photoelectron Imaging on Pyrazine: (1+2 <sup>+</sup> ) REMPI of Deuterated Pyrazine. <i>Journal of Physical Chemistry A</i> , 2004, 108, 5764-5769.	2.5	26
49	A Crossed Molecular Beam Imaging Study of the O(1D <sub>2</sub> )+HCl → OH+Cl(2P <sub>J=3/2, 1/2</sub> ) Reaction. <i>ChemPhysChem</i> , 2006, 7, 1250-1257.	2.1	26
50	Generation of sub-17-fs vacuum ultraviolet pulses at 133 nm using cascaded four-wave mixing through filamentation in Ne. <i>Optics Letters</i> , 2014, 39, 6021.	3.3	26
51	Photoelectron Angular Distribution in Valence Shell Ionization of Heteroaromatic Molecules Studied by the Continuum Multiple Scattering X <sub>±</sub> Method. <i>Journal of Physical Chemistry A</i> , 2008, 112, 402-411.	2.5	25
52	Generation of intense single-order harmonic pulse in the vacuum ultraviolet region using a deep ultraviolet driving laser. <i>Optics Letters</i> , 2012, 37, 2118.	3.3	25
53	Time-resolved photoelectron imaging using a femtosecond UV laser and a VUV free-electron laser. <i>Physical Review A</i> , 2010, 81, .	2.5	24
54	Photoelectron kinetic energy dependence in near threshold ionization of NO from A state studied by time-resolved photoelectron imaging. <i>Journal of Chemical Physics</i> , 2004, 121, 8846-8853.	3.0	23

#	ARTICLE	IF	CITATIONS
55	Angle-resolved photoemission spectroscopy of liquid water at 29.5 eV. <i>Structural Dynamics</i> , 2017, 4, 044014.	2.3	23
56	Collision Energy Dependence of the O(1D) + HCl → OH + Cl(2P) Reaction Studied by Crossed Beam Scattering and Quasiclassical Trajectory Calculations on Ab Initio Potential Energy Surfaces. <i>Journal of Physical Chemistry A</i> , 2008, 112, 818-825.	2.5	22
57	Super-Resolution Photoelectron Imaging with Real-Time Subpixelation by Field Programmable Gate Array and Its Application to NO and Benzene Photoionization. <i>Journal of Physical Chemistry A</i> , 2009, 113, 14536-14544.	2.5	22
58	Charge-transfer-to-solvent reactions from I <sup>+</sup> to water, methanol, and ethanol studied by time-resolved photoelectron spectroscopy of liquids. <i>Journal of Chemical Physics</i> , 2016, 145, 074502.	3.0	22
59	Excited-state dynamics of furan studied by sub-20-fs time-resolved photoelectron imaging using 159-nm pulses. <i>Journal of Chemical Physics</i> , 2015, 143, 014302.	3.0	21
60	Determination of ionization dynamical parameters by time-resolved photoelectron imaging. <i>Molecular Physics</i> , 2007, 105, 1675-1693.	1.7	20
61	Ultrafast Ring-Opening Reaction of 1,3-Cyclohexadiene: Identification of Nonadiabatic Pathway via Doubly Excited State. <i>Journal of the American Chemical Society</i> , 2021, 143, 8034-8045.	13.7	20
62	Spectral phase transfer to ultrashort UV pulses through four-wave mixing. <i>Optics Express</i> , 2010, 18, 16183.	3.4	19
63	Excited-State Dynamics of CS <sub>2</sub> Studied by Photoelectron Imaging with a Time Resolution of 22 fs. <i>Chemistry - an Asian Journal</i> , 2011, 6, 3028-3034.	3.3	19
64	Ultrafast Internal Conversion and Solvation of Electrons in Water, Methanol, and Ethanol. <i>Journal of Physical Chemistry Letters</i> , 2019, 10, 4499-4504.	4.6	19
65	Ultrafast electronic dynamics in polyatomic molecules studied using femtosecond vacuum ultraviolet and x-ray pulses. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 2014, 47, 124001.	1.5	18
66	Ultrafast photodynamics of pyrazine in the vacuum ultraviolet region studied by time-resolved photoelectron imaging using 7.8-eV pulses. <i>Journal of Chemical Physics</i> , 2016, 145, 044307.	3.0	18
67	Ultrafast Dynamics of Water Radiolysis: Hydrated Electron Formation, Solvation, Recombination, and Scavenging. <i>Journal of Physical Chemistry Letters</i> , 2020, 11, 5510-5516.	4.6	18
68	Reaction mechanism duality in O(1D <sub>2</sub> ) + CD <sub>4</sub> → OD + CD <sub>3</sub> identified from scattering distributions of rotationally state selected CD <sub>3</sub> . <i>Physical Chemistry Chemical Physics</i> , 2008, 10, 7222.	2.8	17
69	Effect of electron correlation and shape resonance on photoionization from the S <sub>1</sub> and S <sub>2</sub> states of pyrazine. <i>Journal of Chemical Physics</i> , 2012, 137, 194314.	3.0	16
70	Real-time detection of S(1D) photofragments produced from the 1(B) state of CS <sub>2</sub> by vacuum ultraviolet photoelectron imaging using 133 nm probe pulses. <i>Journal of Chemical Physics</i> , 2017, 147, 013932.	3.0	16
71	Rovibrational state specific scattering distributions of the O(1D) + CD <sub>4</sub> → OD + CD <sub>3</sub> (v <sub>1</sub> , v <sub>2</sub> , N) reaction. <i>Physical Chemistry Chemical Physics</i> , 2011, 13, 8371.	2.8	14
72	Surface potential of liquid microjet investigated using extreme ultraviolet photoelectron spectroscopy. <i>Journal of Chemical Physics</i> , 2020, 152, 144503.	3.0	14

#	ARTICLE	IF	CITATIONS
73	Unravelling the Electronic State of NO <sub>2</sub> Product in Ultrafast Photodissociation of Nitromethane. <i>Journal of Physical Chemistry Letters</i> , 2018, 9, 270-273.	4.6	13
74	Ultrafast dissociation processes in the NO dimer studied with time-resolved photoelectron imaging. <i>Journal of Electron Spectroscopy and Related Phenomena</i> , 2005, 142, 193-205.	1.7	12
75	Time-resolved photoelectron spectroscopy of polyatomic molecules using 42-nm vacuum ultraviolet laser based on high harmonics generation. <i>Chemical Physics Letters</i> , 2017, 684, 397-401.	2.6	12
76	Design and characterization of a magnetic bottle electron spectrometer for time-resolved extreme UV and X-ray photoemission spectroscopy of liquid microjets. <i>Structural Dynamics</i> , 2021, 8, 034303.	2.3	12
77	Photoelectron Imaging Spectroscopy of S <sub>1</sub> ( <sup>1</sup> B <sub>2u</sub> $\tilde{\nu}_1$ ) Benzene via <sup>6</sup> A <sub>1g</sub> ( <sup>1</sup> A <sub>1g</sub> ) Levels. <i>Journal of Physical Chemistry A</i> , 2011, 115, 2096-2102.	2.5	11
78	Solvated electron formation from the conduction band of liquid methanol: Transformation from a shallow to deep trap state. <i>Journal of Chemical Physics</i> , 2019, 151, 114503.	3.0	11
79	Valence Photoelectron Spectra of Liquid Methanol and Ethanol Measured Using He II Radiation. <i>Journal of Physical Chemistry A</i> , 2021, 125, 2492-2503.	2.5	11
80	Ultrafast Extreme Ultraviolet Photoelectron Spectroscopy of Nonadiabatic Photodissociation of CS <sub>2</sub> from <sup>1</sup> B <sub>2</sub> ( <sup>1</sup> $\tilde{\nu}_1$ State: Product Formation via an Intermediate Electronic State. <i>Journal of Physical Chemistry Letters</i> , 2021, 12, 3755-3761.	4.6	11
81	Simultaneous generation of ultrashort pulses at 158 and 198 nm in a single filamentation cell by cascaded four-wave mixing in Ar. <i>Applied Physics B: Lasers and Optics</i> , 2012, 108, 815-819.	2.2	10
82	Two-color deep-ultraviolet 40-fs pulses based on parametric amplification at 100 kHz. <i>Optics Express</i> , 2011, 19, 22637.	3.4	9
83	Unexpectedly broad photoelectron spectrum as a signature of ultrafast electronic relaxation of Rydberg states of carbon dioxide. <i>Physical Review A</i> , 2017, 95, .	2.5	9
84	Extreme ultraviolet time-resolved photoelectron spectroscopy of aqueous aniline solution: enhanced surface concentration and pump-induced space charge effect. <i>Molecular Physics</i> , 2021, 119, e1748240.	1.7	9
85	Shallow and deep trap states of solvated electrons in methanol and their formation, electronic excitation, and relaxation dynamics. <i>Chemical Science</i> , 2022, 13, 3837-3844.	7.4	9
86	Vacuum Ultraviolet and Soft X-ray Photoelectron Spectroscopy of Liquid Beams Using a Hemispherical Photoelectron Spectrometer with a Multistage Differential Pumping System. <i>Journal of the Chinese Chemical Society</i> , 2013, 60, 1403-1410.	1.4	8
87	UV-Driven Harmonic Generation for Time-Resolved Photoelectron Spectroscopy of Polyatomic Molecules. <i>Applied Sciences (Switzerland)</i> , 2018, 8, 1784.	2.5	8
88	Charge-Transfer-to-Solvent Reaction in a Hydrophobic Tetrabutylammonium Iodide Molecular Layer in Aqueous Solution. <i>Journal of Physical Chemistry B</i> , 2019, 123, 3769-3775.	2.6	8
89	Ultrafast Internal Conversion of Aromatic Molecules Studied by Photoelectron Spectroscopy using Sub-20 fs Laser Pulses. <i>Molecules</i> , 2014, 19, 2410-2433.	3.8	7
90	Photoisomerization of Vibrationally Hot Tetramethylethylene Produced by Ultrafast Internal Conversion from the Excited State. <i>Journal of Physical Chemistry A</i> , 2016, 120, 5099-5102.	2.5	6

#	ARTICLE	IF	CITATIONS
91	Ultrafast Photoisomerization of Ethylene Studied Using Time-Resolved Extreme Ultraviolet Photoelectron Spectroscopy. <i>Journal of Physical Chemistry A</i> , 2022, 126, 3873-3879.	2.5	6
92	TIME-RESOLVED PHOTOELECTRON SPECTROSCOPY AND IMAGING. <i>Advanced Series in Physical Chemistry</i> , 2004, , 529-578.	1.5	5
93	Methyl substitution effects on the non-adiabatic dynamics of benzene: lifting three-state quasi-degeneracy at conical intersections. <i>Physical Chemistry Chemical Physics</i> , 2020, 22, 2814-2818.	2.8	5
94	Exploration of Gas-Liquid Interfaces for Liquid Water and Methanol Using Extreme Ultraviolet Laser Photoemission Spectroscopy. <i>Journal of Physical Chemistry B</i> , 2021, 125, 10514-10526.	2.6	5
95	Linear and circular dichroism in photoelectron angular distributions caused by electron correlation. <i>Physical Review A</i> , 2015, 91, .	2.5	4
96	On the Relation between the Interfacial Charge of a Discharging Nozzle and Electrification of a Liquid Microjet. <i>Chemistry Letters</i> , 2018, 47, 16-19.	1.3	4
97	Time-Resolved Photoelectron Imaging of Acetone with 9.3 eV Photoexcitation. <i>Journal of Physical Chemistry A</i> , 2019, 123, 6848-6853.	2.5	4
98	Femtosecond Time-Resolved Photoelectron Imaging Study of Photoinduced Molecular Dynamics. <i>Journal of the Chinese Chemical Society</i> , 2006, 53, 113-122.	1.4	3
99	Spiers Memorial Lecture: Introduction to ultrafast spectroscopy and imaging of photochemical reactions. <i>Faraday Discussions</i> , 2021, 228, 11-38.	3.2	3
100	Visualization of chemical reaction dynamics: Toward understanding complex polyatomic reactions. <i>Proceedings of the Japan Academy Series B: Physical and Biological Sciences</i> , 2013, 89, 1-15.	3.8	2
101	Nonadiabatic Electronic Dynamics in Isolated Molecules and in Solution Studied by Ultrafast Time-Resolved Energy Mapping of Photoelectron Distributions. <i>Bulletin of the Chemical Society of Japan</i> , 2014, 87, 341-354.	3.2	2
102	Femtosecond X-ray spectroscopy of haem proteins. <i>Faraday Discussions</i> , 2021, 228, 312-328.	3.2	2
103	Non-adiabatic Dynamics of Molecules Studied Using Vacuum-Ultraviolet Ultrafast Photoelectron Spectroscopy. , 2019, , 287-306.		1
104	Ultrafast Photoelectron Imaging Using Tunable UV and Vacuum UV Pulses. <i>Chemistry Letters</i> , 2015, 44, 791-793.	1.3	0
105	Non-Adiabatic Chemical Dynamics Studied by Ultrafast Photoelectron Imaging Spectroscopy. <i>The Review of Laser Engineering</i> , 2012, 40, 739.	0.0	0
106	Initial Phase in Quantum Beat Created via Ultrafast Internal Conversion of Pyrazine. , 2014, , .		0
107	Initial Phase Shifts in the Quantum Beat Resulting from the Ultrafast Internal Conversion of Pyrazine. <i>Springer Proceedings in Physics</i> , 2015, , 172-175.	0.2	0