

# Matthias Käbel

## List of Publications by Year in descending order

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Version: 2024-02-01

55  
papers

1,726  
citations

257450

24  
h-index

276875

41  
g-index

55  
all docs

55  
docs citations

55  
times ranked

1576  
citing authors

#	ARTICLE	IF	CITATIONS
1	Attosecond tracing of correlated electron-emission in non-sequential double ionization. Nature Communications, 2012, 3, 813.	12.8	205
2	Time-Resolved Measurement of Interatomic Coulombic Decay in $\text{Ne}^{2+}$ . Physical Review Letters, 2013, 111, 093402.	7.8	117
3	Interference Carpets in Above-Threshold Ionization: From the Coulomb-Free to the Coulomb-Dominated Regime. Physical Review Letters, 2012, 108, 223601.	7.8	94
4	Attosecond Correlated Dynamics of Two Electrons Passing through a Transition State. Physical Review Letters, 2012, 108, 073003.	7.8	83
5	Review of attosecond resolved measurement and control via carrier-envelope phase tagging with above-threshold ionization. Journal of Physics B: Atomic, Molecular and Optical Physics, 2012, 45, 074003.	1.5	82
6	Subfemtosecond steering of hydrocarbon deprotonation through superposition of vibrational modes. Nature Communications, 2014, 5, 3800.	12.8	78
7	Solid-state light-phase detector. Nature Photonics, 2014, 8, 214-218.	31.4	75
8	Steering Proton Migration in Hydrocarbons Using Intense Few-Cycle Laser Fields. Physical Review Letters, 2016, 116, 193001.	7.8	74
9	Carrier-Envelope Phase Control over Pathway Interference in Strong-Field Dissociation of $\text{H}_2^+$ . Physical Review Letters, 2013, 111, 163004.	7.8	62
10	Electron Rearrangement Dynamics in Dissociating $\text{H}_2^+$ . Physical Review Letters, 2014, 113, 073001.	7.8	52
11	Controlling the Spacing of Attosecond Pulse Trains from Relativistic Surface Plasmas. Physical Review Letters, 2011, 106, 185002.	7.8	51
12	Coherent Electronic Wave Packet Motion in $\text{C}_2^+$ by the Waveform and Polarization of Few-Cycle Laser Fields. Physical Review Letters, 2015, 114, 123004.	7.8	51
13	High repetition rate plasma mirror for temporal contrast enhancement of terawatt femtosecond laser pulses by three orders of magnitude. Applied Physics B: Lasers and Optics, 2011, 103, 295-302.	2.2	46
14	Tracing nuclear-wave-packet dynamics in singly and doubly charged states of $\text{N}^{2+}$ and $\text{O}^{2+}$ with XUV-pump-probe experiments. Physical Review A, 2012, 86, .	2.5	42
15	Single-shot velocity-map imaging of attosecond light-field control at kilohertz rate. Review of Scientific Instruments, 2011, 82, 093109.	1.3	41
16	Carrier-envelope phase-tagged imaging of the controlled electron acceleration from $\text{SiO}_2$ nanospheres in intense few-cycle laser fields. New Journal of Physics, 2012, 14, 075010.	2.9	37
17	Non-sequential double ionization of Ar: from the single- to the many-cycle regime. New Journal of Physics, 2014, 16, 033008.	2.9	31
18	Complete characterization of single-cycle double ionization of argon from the nonsequential to the sequential ionization regime. Physical Review A, 2016, 93, .	2.5	30

#	ARTICLE	IF	CITATIONS
19	Nonsequential double ionization of $N_2$ in a near-single-cycle laser pulse. <i>Physical Review A</i> , 2013, 88, .	2.5	29
20	Spatiotemporal imaging of valence electron motion. <i>Nature Communications</i> , 2019, 10, 1042.	12.8	27
21	Visualization of bond rearrangements in acetylene using near single-cycle laser pulses. <i>Faraday Discussions</i> , 2016, 194, 495-508.	3.2	26
22	Probing multiphoton light-induced molecular potentials. <i>Nature Communications</i> , 2020, 11, 2596.	12.8	26
23	Strong-field control of the dissociative ionization of $N_2O$ with near-single-cycle pulses. <i>New Journal of Physics</i> , 2014, 16, 065017.	2.9	25
24	Non-sequential double ionization with near-single cycle laser pulses. <i>Scientific Reports</i> , 2017, 7, 7488.	3.3	25
25	Femtosecond streaking in ambient air. <i>Optica</i> , 2020, 7, 1372.	9.3	25
26	Streak Camera for Strong-Field Ionization. <i>Physical Review Letters</i> , 2017, 119, 183201.	7.8	21
27	Controlled directional ion emission from several fragmentation channels of CO driven by a few-cycle laser field. <i>Physical Review A</i> , 2012, 86, .	2.5	20
28	Few-cycle laser driven reaction nanoscopy on aerosolized silica nanoparticles. <i>Nature Communications</i> , 2019, 10, 4655.	12.8	19
29	Terahertz-Field-Induced Time Shifts in Atomic Photoemission. <i>Physical Review Letters</i> , 2019, 122, 073001.	7.8	18
30	Single-Cycle Non-Sequential Double Ionization. <i>IEEE Journal of Selected Topics in Quantum Electronics</i> , 2015, 21, 1-9.	2.9	17
31	Attosecond-controlled photoemission from metal nanowire tips in the few-electron regime. <i>APL Photonics</i> , 2017, 2, .	5.7	17
32	Carrier-envelope-phase tagging in measurements with long acquisition times. <i>New Journal of Physics</i> , 2012, 14, 093027.	2.9	16
33	Intensity dependence of the attosecond control of the dissociative ionization of $D_2$ . <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 2014, 47, 124020.	1.5	16
34	Threshold photodissociation dynamics of $NO_2$ studied by time-resolved cold target recoil ion momentum spectroscopy. <i>Journal of Chemical Physics</i> , 2019, 151, 174301.	3.0	16
35	Carrier-envelope-phase measurement of few-cycle mid-infrared laser pulses using high harmonic generation in ZnO. <i>Optics Express</i> , 2020, 28, 7314.	3.4	15
36	Particle and x-ray generation by irradiation of gaseous and solid targets with a 100â€‰TW laser pulse. <i>Plasma Physics and Controlled Fusion</i> , 2009, 51, 124049.	2.1	14

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37	Multiple ionization and fragmentation dynamics of molecular iodine studied in IR-XUV pump-probe experiments. Faraday Discussions, 2014, 171, 41-56.	3.2	14
38	Time-resolved study of ICD in Ne dimers using FEL radiation. Journal of Electron Spectroscopy and Related Phenomena, 2015, 204, 245-256.	1.7	14
39	Phase- and intensity-resolved measurements of above threshold ionization by few-cycle pulses. Journal of Physics B: Atomic, Molecular and Optical Physics, 2018, 51, 134007.	1.5	14
40	High-Order Phase-Dependent Asymmetry in the Above-Threshold Ionization Plateau. Physical Review Letters, 2021, 126, 113201.	7.8	13
41	Phase- and intensity-dependence of ultrafast dynamics in hydrocarbon molecules in few-cycle laser fields. Molecular Physics, 2017, 115, 1835-1845.	1.7	8
42	Characterization of Extreme Ultra-Violet Free-Electron Laser Pulses by Autocorrelation. Springer Proceedings in Physics, 2012, , 61-68.	0.2	8
43	Quantum interference and imaging using intense laser fields. European Physical Journal D, 2021, 75, 1.	1.3	8
44	Laser intensity effects in carrier-envelope phase-tagged time of flight-photoemission electron microscopy. Applied Physics B: Lasers and Optics, 2016, 122, 1.	2.2	6
45	Laser-Driven Anharmonic Oscillator: Ground-State Dissociation of the Helium Hydride Molecular Ion by Midinfrared Pulses. Physical Review Letters, 2021, 127, 043202.	7.8	5
46	Strong-field laser-induced fragmentation of small molecules from fast to slow. Advances in Atomic, Molecular and Optical Physics, 2020, , 67-162.	2.3	5
47	Rescattering effects in streaking experiments of strong-field ionization. Physical Review A, 2019, 100, .	2.5	4
48	Streaking strong-field double ionization. Physical Review A, 2019, 100, .	2.5	3
49	Experimental study of the laser-induced ionization of heavy metal and metalloid ions: Au <sup>+</sup> and Si <sup>2+</sup> in intense and sculpted femtosecond laser fields. Journal of Physics B: Atomic, Molecular and Optical Physics, 2021, 54, 174002.	1.5	1
50	Confining the double ionization dynamics of argon to half of a laser cycle. Journal of Physics: Conference Series, 2012, 388, 032026.	0.4	0
51	Investigating temporal structure of FEL pulses by XUV pump-probe autocorrelation measurements. Journal of Physics: Conference Series, 2012, 388, 032011.	0.4	0
52	Time-resolved XUV-induced isomerization and H <sub>3</sub> formation in C <sub>2</sub> H <sub>4</sub> cation. Journal of Physics: Conference Series, 2012, 388, 032014.	0.4	0
53	Carrier-envelope phase control over fragmentation of H <sub>2</sub> <sup>+</sup> and D <sub>2</sub> . Journal of Physics: Conference Series, 2015, 635, 112045.	0.4	0
54	Strong near-field induced molecular processes on nanoparticles. , 2017, , .		0

#	ARTICLE	IF	CITATIONS
55	Signatures of Light-Induced Potential Energy Surfaces in $H_2^+$ . Journal of Physics: Conference Series, 2020, 1412, 092017.	0.4	0