

Matthias Käbel

List of Publications by Year in descending order

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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	High-Order Phase-Dependent Asymmetry in the Above-Threshold Ionization Plateau. <i>Physical Review Letters</i> , 2021, 126, 113201.		7.8	13
2	Laser-Driven Anharmonic Oscillator: Ground-State Dissociation of the Helium Hydride Molecular Ion by Midinfrared Pulses. <i>Physical Review Letters</i> , 2021, 127, 043202.		7.8	5
3	Experimental study of the laser-induced ionization of heavy metal and metalloid ions: Au+ and Si2+ in intense and sculpted femtosecond laser fields. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 2021, 54, 174002.		1.5	1
4	Quantum interference and imaging using intense laser fields. <i>European Physical Journal D</i> , 2021, 75, 1.		1.3	8
5	Signatures of Light-Induced Potential Energy Surfaces in H2+. <i>Journal of Physics: Conference Series</i> , 2020, 1412, 092017.		0.4	0
6	Strong-field laser-induced fragmentation of small molecules from fast to slow. <i>Advances in Atomic, Molecular and Optical Physics</i> , 2020, , 67-162.		2.3	5
7	Probing multiphoton light-induced molecular potentials. <i>Nature Communications</i> , 2020, 11, 2596.		12.8	26
8	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
9	Femtosecond streaking in ambient air. <i>Optica</i> , 2020, 7, 1372.		9.3	25
10	Few-cycle laser driven reaction nanoscopy on aerosolized silica nanoparticles. <i>Nature Communications</i> , 2019, 10, 4655.		12.8	19
11	Threshold photodissociation dynamics of NO2 studied by time-resolved cold target recoil ion momentum spectroscopy. <i>Journal of Chemical Physics</i> , 2019, 151, 174301.		3.0	16
12	Streaking strong-field double ionization. <i>Physical Review A</i> , 2019, 100, .		2.5	3
13	Spatiotemporal imaging of valence electron motion. <i>Nature Communications</i> , 2019, 10, 1042.		12.8	27
14	Terahertz-Field-Induced Time Shifts in Atomic Photoemission. <i>Physical Review Letters</i> , 2019, 122, 073001.		7.8	18
15	Rescattering effects in streaking experiments of strong-field ionization. <i>Physical Review A</i> , 2019, 100, .		2.5	4
16	Phase- and intensity-resolved measurements of above threshold ionization by few-cycle pulses. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 2018, 51, 134007.		1.5	14
17	Attosecond-controlled photoemission from metal nanowire tips in the few-electron regime. <i>APL Photonics</i> , 2017, 2, .		5.7	17
18	Phase- and intensity-dependence of ultrafast dynamics in hydrocarbon molecules in few-cycle laser fields. <i>Molecular Physics</i> , 2017, 115, 1835-1845.		1.7	8

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19	Non-sequential double ionization with near-single cycle laser pulses. <i>Scientific Reports</i> , 2017, 7, 7488.	3.3	25
20	Streak Camera for Strong-Field Ionization. <i>Physical Review Letters</i> , 2017, 119, 183201.	7.8	21
21	Strong near-field induced molecular processes on nanoparticles. , 2017, , .	0	
22	Visualization of bond rearrangements in acetylene using near single-cycle laser pulses. <i>Faraday Discussions</i> , 2016, 194, 495-508.	3.2	26
23	Complete characterization of single-cycle double ionization of argon from the nonsequential to the sequential ionization regime. <i>Physical Review A</i> , 2016, 93, .	2.5	30
24	Steering Proton Migration in Hydrocarbons Using Intense Few-Cycle Laser Fields. <i>Physical Review Letters</i> , 2016, 116, 193001.	7.8	74
25	Laser intensity effects in carrier-envelope phase-tagged time of flight-photoemission electron microscopy. <i>Applied Physics B: Lasers and Optics</i> , 2016, 122, 1.	2.2	6
26	Time-resolved study of ICD in Ne dimers using FEL radiation. <i>Journal of Electron Spectroscopy and Related Phenomena</i> , 2015, 204, 245-256.	1.7	14
27	Carrier-envelope phase control over fragmentation of H ₂ + and D ₂ . <i>Journal of Physics: Conference Series</i> , 2015, 635, 112045.	0.4	0
28	Single-Cycle Non-Sequential Double Ionization. <i>IEEE Journal of Selected Topics in Quantum Electronics</i> , 2015, 21, 1-9.	2.9	17
29	Coherent Electronic Wave Packet Motion in C_{60} Induced by the Waveform and Polarization of Few-Cycle Laser Fields. <i>Physical Review Letters</i> , 2015, 114, 123004.	7.8	51
30	Strong-field control of the dissociative ionization of N ₂ O with near-single-cycle pulses. <i>New Journal of Physics</i> , 2014, 16, 065017.	2.9	25
31	Multiple ionization and fragmentation dynamics of molecular iodine studied in IR-XUV pump-probe experiments. <i>Faraday Discussions</i> , 2014, 171, 41-56.	3.2	14
32	Non-sequential double ionization of Ar: from the single- to the many-cycle regime. <i>New Journal of Physics</i> , 2014, 16, 033008.	2.9	31
33	Electron Rearrangement Dynamics in Dissociating C_{60} Accessed by Extreme Ultraviolet Pump-Probe Experiments. <i>Physical Review Letters</i> , 2014, 113, 073001.	7.8	52
34	Subfemtosecond steering of hydrocarbon deprotonation through superposition of vibrational modes. <i>Nature Communications</i> , 2014, 5, 3800.	12.8	78
35	Solid-state light-phase detector. <i>Nature Photonics</i> , 2014, 8, 214-218.	31.4	75
36	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

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37	Nonsequential double ionization of N \times mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline">$\mathrm{N}$$\times$$\mathrm{mml:msub}$$\mathrm{mml:mrow}$$\mathrm{mml:mn}>2$$\mathrm{mml:mn}$$\mathrm{mml:msub}$$\mathrm{mml:math}$$\mathrm{in\ a}$ near-single-cycle laser pulse. Physical Review A, 2013, 88, .	2.5	29
38	Carrier-Envelope Phase Control over Pathway Interference in Strong-Field Dissociation of H \times mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="block"> $H </math>$\times$$\mathrm{mml:msup}$$\mathrm{mml:mi}$$\mathrm{mathvariant="bold"}$$\mathrm{H}$$\times$$\mathrm{mml:mn}>2$$\mathrm{mml:mn}$$\mathrm{mml:mo}$\mathrm{mathvariant="bold"}</math>$+$$\mathrm{mml:mo}$$\mathrm{mml:msup}$$\mathrm{mml:math}$. Physical Review Letters, 2013, 111, 163004.$	7.8	62
39	Time-Resolved Measurement of Interatomic Coulombic Decay in Ne \times mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="block"> $\mathrm{Ne} </math>$\times$$\mathrm{mml:mi}$$\mathrm{mml:mn}>2$$\mathrm{mml:mn}$$\mathrm{mml:msub}$$\mathrm{mml:math}$. Physical Review Letters, 2013, 111, 093402.$	7.8	117
40	Carrier-envelope-phase tagging in measurements with long acquisition times. New Journal of Physics, 2012, 14, 093027.	2.9	16
41	Attosecond tracing of correlated electron-emission in non-sequential double ionization. Nature Communications, 2012, 3, 813.	12.8	205
42	Attosecond Correlated Dynamics of Two Electrons Passing through a Transition State. Physical Review Letters, 2012, 108, 073003.	7.8	83
43	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
44	Confining the double ionization dynamics of argon to half of a laser cycle. Journal of Physics: Conference Series, 2012, 388, 032026.	0.4	0
45	Investigating temporal structure of FEL pulses by XUV pump-probe autocorrelation measurements. Journal of Physics: Conference Series, 2012, 388, 032011.	0.4	0
46	Time-resolved XUV-induced isomerization and H ₃ formation in C ₂ H ₄ cation. Journal of Physics: Conference Series, 2012, 388, 032014.	0.4	0
47	Controlled directional ion emission from several fragmentation channels of CO driven by a few-cycle laser field. Physical Review A, 2012, 86, .	2.5	20
48	Carrier-envelope phase-tagged imaging of the controlled electron acceleration from SiO ₂ nanospheres in intense few-cycle laser fields. New Journal of Physics, 2012, 14, 075010. Tracing nuclear-wave-packet dynamics in singly and doubly charged states of N \times mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="block"> $\mathrm{N} </math>$\times$$\mathrm{mml:msub}$$\mathrm{mml:mrow}$$\mathrm{mml:mn}>2$$\mathrm{mml:mn}$$\mathrm{mml:msub}$$\mathrm{mml:math}$ and O\timesmml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="block">\mathrm{O} </math>$\times$$\mathrm{mml:msub}$$\mathrm{mml:mrow}$$\mathrm{mml:mn}>2$$\mathrm{mml:mn}$$\mathrm{mml:msub}$$\mathrm{mml:math}$ with XUV-pump-XUV-probe experiments. Physical Review A, 2012, 86, .$	2.9	37
49	Interference Carpets in Above-Threshold Ionization: From the Coulomb-Free to the Coulomb-Dominated Regime. Physical Review Letters, 2012, 108, 223601.	7.8	94
50	Characterization of Extreme Ultra-Violet Free-Electron Laser Pulses by Autocorrelation. Springer Proceedings in Physics, 2012, , 61-68.	0.2	8
52	Controlling the Spacing of Attosecond Pulse Trains from Relativistic Surface Plasmas. Physical Review Letters, 2011, 106, 185002.	7.8	51
53	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
54	Single-shot velocity-map imaging of attosecond light-field control at kilohertz rate. Review of Scientific Instruments, 2011, 82, 093109.	1.3	41

#	ARTICLE	IF	CITATIONS
55	Particle and x-ray generation by irradiation of gaseous and solid targets with a 100 TW laser pulse. Plasma Physics and Controlled Fusion, 2009, 51, 124049.	2.1	14