Kyung Taec Kim

List of Publications by Year
in descending order

76 papers	1,522 citations	361413 20 h-index	315739 38 g-index
76 all docs	76 docs citations	76 times ranked	1365 citing authors

#	Article	IF	Citations
1	Creating High-Harmonic Beams with Controlled Orbital Angular Momentum. Physical Review Letters, 2014, 113, 153901.	7.8	244
2	Petahertz optical oscilloscope. Nature Photonics, 2013, 7, 958-962.	31.4	163
3	Photonic streaking of attosecond pulse trains. Nature Photonics, 2013, 7, 651-656.	31.4	126
4	Singlesubâ˜50â˜attosecondpulse generation from chirp-compensated harmonic radiation using material dispersion. Physical Review A, 2004, 69, .	2.5	114
5	Manipulation of quantum paths for spaceâ€“time characterization of attosecond pulses. Nature Physics, 2013, 9, 159-163.	16.7	94
6	Direct sampling of a light wave in air. Optica, 2018, 5, 402.	9.3	77
7	Attosecond pulses measured from the attosecond lighthouse. Nature Photonics, 2016, 10, 171-175.	31.4	56
8	Manipulating quantum paths for novel attosecond measurement methods. Nature Photonics, 2014, 8, 187-194.	31.4	54
9	Applications of ultrafast wavefront rotation in highly nonlinear optics. Journal of Physics B: Atomic, Molecular and Optical Physics, 2014, 47, 124004.	1.5	53
10	Self-Compression of Attosecond High-Order Harmonic Pulses. Physical Review Letters, 2007, 99, 223904.	7.8	47
11	Macroscopic generation of attosecond-pulse trains in strongly ionized media. Physical Review A, 2009, 79, .	2.5	43
12	Coherent extreme-ultraviolet emission generated through frustrated tunnelling ionization. Nature Photonics, 2018, 12, 620-624.	31.4	42
13	Resolving Multiple Molecular Orbitals Using Two-Dimensional High-Harmonic Spectroscopy. Physical Review Letters, 2015, 114, 153901.	7.8	39
14	Temporal characterization of femtosecond laser pulses using tunneling ionization in the UV, visible, and mid-IR ranges. Scientific Reports, 2019, 9, 16067.	3.3	33
15	Relativistic Nondipole Effects in Strong-Field Atomic Ionization at Moderate Intensities. Physical Review Letters, 2019, 123, 093201.	7.8	30
16	Nondipole effects in strong-field ionization. Physical Review A, 2016, 94, .	2.5	29
17	Attosecond chirp compensation over broadband high-order harmonics to generate near transform-limited 63â€‰as pulses. New Journal of Physics, 2010, 12, 063008.	2.9	28
18	Exit point in the strong field ionization process. Scientific Reports, 2017, 7, 39919.	3.3	23

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19	Complete temporal reconstruction of attosecond high-harmonic pulse trains. New Journal of Physics, 2010, 12, 083019.	2.9	22
20	Generation of a single-cycle pulse using a two-stage compressor and its temporal characterization using a tunnelling ionization method. Scientific Reports, 2019, 9, 1613.	3.3	22
21	Amplitude and Phase Reconstruction of Electron Wave Packets for Probing Ultrafast Photoionization Dynamics. Physical Review Letters, 2012, 108, 093001.	7.8	19
22	High harmonic cutoff energy scaling and laser intensity measurement with a 1.8 Î¼m laser source. Journal of Modern Optics, 2013, 60, 1458-1465.	1.3	18
23	Attosecond-chirp compensation with material dispersion to produce near transform-limited attosecond pulses. Journal of Physics B: Atomic, Molecular and Optical Physics, 2012, 45, 074015.	1.5	17
24	Instantaneous ionization rate as a functional derivative. Communications Physics, 2018, 1, .	5.3	16
25	Controlling attosecond angular streaking with second harmonic radiation. Optics Letters, 2015, 40, 1768.	3.3	11
26	Relativistic approach to the tunneling-time problem. Physical Review A, 2015, 92, .	2.5	10
27	Dynamic wavefront rotation in the attosecond lighthouse. Optica, 2017, 4, 48.	9.3	9
28	Strong-field-approximation model for coherent extreme-ultraviolet emission generated through frustrated tunneling ionization. Physical Review A, 2018, 98, .	2.5	9
29	Attosecond streaking using a rescattered electron in an intense laser field. Scientific Reports, 2020, 10, 22075.	3.3	8
30	Reconstruction algorithm for tunneling ionization with a perturbation for the time-domain observation of an electric-field. Scientific Reports, 2021, 11, 13014.	3.3	7
31	Photoionization in the presence of circularly polarized fundamental and odd-order harmonic fields. Physical Review A, 2017, 95, .	2.5	6
32	Full characterization of an attosecond pulse generated using an infrared driver. Scientific Reports, 2016, 6, 26771.	3.3	5
33	Compression of harmonic pulses by using material dispersion. Applied Physics B: Lasers and Optics, 2004, 79, 563-567.	2.2	4
34	Time correlation inside a laser pulse. Physical Review A, 2020, 101, .	2.5	4
35	Strong-field approximation and its modifications as evolution equations. Physical Review A, 2019, 99, .	2.5	3
36	Atomic ionization driven by the quantized electromagnetic field in a Fock state. Physical Review A, 2020, 102, .	2.5	3

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37	Ionization yield measurement using metal electrodes with a static electric field in ambient air. Journal of Physics B: Atomic, Molecular and Optical Physics, 2020, 53, 174003.	1.5	3
38	Simple man model in the Heisenberg picture. Communications Physics, 2020, 3, .	5.3	3
39	Effect of the finite speed of light in ionization of extended molecular systems. Scientific Reports, 2021, 11, 21457.	3.3	3
40	Analysis of correlations in strong field ionization. Journal of Physics B: Atomic, Molecular and Optical Physics, 2022, 55, 055001.	1.5	3
41	X-ray laser research and applications at c-FAST. Proceedings of SPIE, 2009, , .	0.8	2
42	Endpoint contribution to the instantaneous ionization rate for tunneling ionization. Physical Review A, 2015, 91, .	2.5	2
43	Isolation of attosecond pulses from the attosecond lighthouse. Journal of Physics B: Atomic, Molecular and Optical Physics, 2017, 50, 014006.	1.5	2
44	Phase retrieval approach for an accurate reconstruction of an arbitrary optical waveform in the petahertz optical oscilloscope. Journal of Physics B: Atomic, Molecular and Optical Physics, 2017, 50, 024002.	1.5	2
45	Quantum chaos in strong field ionization of hydrogen. Journal of Physics B: Atomic, Molecular and Optical Physics, 2019, 52, 225002.	1.5	2
46	Entropy-based view of the strong field ionization process. Journal of Physics B: Atomic, Molecular and Optical Physics, 2019, 52, 085601.	1.5	2
47	Classical backpropagation for probing the backward rescattering time of a tunnel-ionized electron in an intense laser field. Physical Review A, 2021, 104, .	2.5	2
48	Creating high-harmonic beams with controlled orbital angular momentum. , 2014, , .		1
49	Quantum path analysis for arbitrary optical-waveform measurements. Physical Review A, 2016, 93, .	2.5	1
50	Low-energy structures in strong-field ionization. Physical Review A, 2016, 93, .	2.5	1
51	Ultrashort light pulses shake atoms. Nature, 2016, 530, 41-42.	27.8	1
52	Distribution of absorbed photons in the tunneling ionization process. Scientific Reports, 2021, 11, 3956.	3.3	1
53	Two-pulse interference and correlation in an attoclock. Physical Review A, 2021, 104, .	2.5	1
54	An All-optical Characterization of the Attosecond Pulse in Space and Time. , 2012, , .		1

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55	Coherent Control of Extreme Ultraviolet Emission Generated through Frustrated Tunneling Ionization. New Journal of Physics, 0, , .	2.9	1
56	Analysis of high-order harmonies in the time-frequency domain for attosecond pulse generation. , 0, , .		0
57	Excitation and exploration of autoionization state in O<inf>2</inf> using XUV-harmonic pump and IR-laser probe. , 2006, , .		0
58	Analysis of the vibrational structures from the autoionization in O2 using harmonics. , 2007, , .		0
59	Complete Temporal Reconstruction of Attosecond Harmonic Pulses. , 2007, , .		0
60	Compression of Attosecond Harmonic Pulses in the Harmonic Generation Medium Itself. , 2007, , .		0
61	Complete Temporal Characterization of Attosecond High Harmonic Pulses using the FROG Technique. , 2007, , .		0
62	Research on the seeding of high-energy harmonic pulse into an x-ray lasing medium. , 2009, , .		0
63	Comparison of RABITT and FROG measurements in the temporal reconstruction of attosecond pulse trains. , 2011, , .		0
64	Generation and measurement of high harmonics with orbital angular momentum. , 2012, , .		0
65	Transform-Limited Attosecond Pulse Generation Through Atto-Chirp Compensation by Material Dispersion. Springer Series in Chemical Physics, 2013, , 71-88.	0.2	0
66	Measurement and control of optical waveforms. , 2015, , .		0
67	Generation and characterization of a single-cycle laser pulse. , 2017, , .		0
68	Investigations on Ultrafast Atomic and Molecular Dynamics with Harmonic Sources. Springer Proceedings in Physics, 2018, , 71-78.	0.2	0
69	Terahertz Wave Generation Using Single or Few-cycle Laser Pulses in a Gaseous Medium. , 2019, , .		0
70	Ultrafast dynamics of autoionization in O2 probed by laser- field-assisted XUV photoionization. , 2006, , .		0
71	ATTOSECOND HIGH HARMONIC PULSES: GENERATION AND TEMPORAL CHARACTERIZATION. , 2010, , .		0
72	Generation of Ultrashort Attosecond High-Harmonic Pulses from Chirp-compensated Ne Harmonics. Springer Proceedings in Physics, 2011, , 197-202.	0.2	0

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73	The Attosecond Lighthouse in Gas: Spatial Gating Technique for Isolated Attosecond Pulses generation. , 2012, , .		0
74	Characterization of Attosecond Pulses in Space and Time. , 2012, , .		0
75	All Optical Measurement of Arbitrary Optical Waveforms. , 2013, , .		0
76	Probing Multiple Molecular Orbitals in an Orthogonally Polarized Two-Color Laser Field. Springer Series in Chemical Physics, 2017, , 67-84.	0.2	0