Ki-Yong Kim

List of Publications by Year in descending order

73 papers	3,830 citations	172207 29 h-index	133063 59 g-index
73 all docs	73 docs citations	73 times ranked	2163 citing authors

#	Article	IF	Citations
1	Coherent control of terahertz supercontinuum generation in ultrafast laserâ€“gas interactions. Nature Photonics, 2008, 2, 605-609.	15.6	707
2	Terahertz emission from ultrafast ionizing air in symmetry-broken laser fields. Optics Express, 2007, 15, 4577.	1.7	651
3	Off-Axis Phase-Matched Terahertz Emission from Two-Color Laser-Induced Plasma Filaments. Physical Review Letters, 2012, 109, 183902.	2.9	168
4	Intense terahertz generation in two-color laser filamentation: energy scaling with terawatt laser systems. New Journal of Physics, 2013, 15, 075002.	1.2	151
5	Generation of coherent terahertz radiation in ultrafast laser-gas interactions. Physics of Plasmas, 2009, 16, .	0.7	145
6	Generation of strong terahertz fields exceeding 8 MV/cm at 1â€‰kHz and real-time beam profiling. Applied Physics Letters, 2014, 105, .	1.5	130
7	X-ray and extreme ultraviolet emission induced by variable pulse-width irradiation of Ar and Kr clusters and droplets. Physical Review E, 2000, 62, R5931-R5934.	0.8	122
8	Single-shot supercontinuum spectral interferometry. Applied Physics Letters, 2002, 81, 4124-4126.	1.5	101
9	Measurement of the Superluminal Group Velocity of an Ultrashort Bessel Beam Pulse. Physical Review Letters, 2002, 88, 073901.	2.9	100
10	Measurement of the average size and density of clusters in a gas jet. Applied Physics Letters, 2003, 83, 3210-3212.	1.5	83
11	Self-Focusing of Intense Laser Pulses in a Clustered Gas. Physical Review Letters, 2003, 90, 103402.	2.9	81
12	Single-shot terahertz pulse characterization via two-dimensional electro-optic imaging with dual echelons. Optics Letters, 2007, 32, 1968.	1.7	78
13	High-Power Broadband Terahertz Generation via Two-Color Photoionization in Gases. IEEE Journal of Quantum Electronics, 2012, 48, 797-805.	1.0	76
14	MeV electron acceleration at 1â€‰â€‰kHz with <10â€‰â€‰mJ laser pulses. Optics Letters, 2017, 42, 215.	1.7	76
15	Time-Resolved Explosion of Intense-Laser-Heated Clusters. Physical Review Letters, 2003, 90, 023401.	2.9	75
16	Observation of terahertz radiation coherently generated by acoustic waves. Nature Physics, 2009, 5, 285-288.	6.5	66
17	Two-dimensional plasma current and optimized terahertz generation in two-color photoionization. Optics Express, 2012, 20, 19778.	1.7	63
18	Generation of scalable terahertz radiation from cylindrically focused two-color laser pulses in air. Applied Physics Letters, 2016, 108, .	1.5	61

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19	In-line holographic imaging and electron density extraction of ultrafast ionized air filaments. Journal of the Optical Society of America B: Optical Physics, 2008, 25, 1988.	0.9	58
20	Guiding of Intense Laser Pulses in Plasma Waveguides Produced from Efficient, Femtosecond End-Pumped Heating of Clustered Gases. Physical Review Letters, 2005, 94, 205004.	2.9	48
21	Efficient terahertz and Brunel harmonic generation from air plasma via mid-infrared coherent control. Optica, 2019, 6, 1338.	4.8	47
22	Tubular plasma generation with a high-power hollow Bessel beam. Physical Review E, 2000, 62, R7603-R7606.	0.8	46
23	Algorithm for high-resolution single-shot THz measurement using in-line spectral interferometry with chirped pulses. Applied Physics Letters, 2005, 87, 211109.	1.5	43
24	Single-shot measurement of laser-induced double step ionization of helium. Optics Express, 2002, 10, 1563.	1.7	42
25	Mechanism of elliptically polarized terahertz generation in two-color laser filamentation. Optics Letters, 2013, 38, 1034.	1.7	42
26	Single-shot, interferometric, high-resolution, terahertz field diagnostic. Applied Physics Letters, 2006, 88, 041123.	1.5	41
27	Measurements of Terahertz Electrical Conductivity of Intense Laser-Heated Dense Aluminum Plasmas. Physical Review Letters, 2008, 100, 135002.	2.9	40
28	Scaling and saturation of high-power terahertz radiation generation in two-color laser filamentation. Applied Physics Letters, 2013, 102, .	1.5	34
29	THz generation by optical Cherenkov emission from ionizing two-color laser pulses. Physical Review A, 2013, 88, .	1.0	32
30	Binder- and conductive additive-free laser-induced graphene/LiNi1/3Mn1/3Co1/3O2 for advanced hybrid supercapacitors. NPG Asia Materials, 2020, 12, .	3.8	28
31	Hydrodynamic time scales for intense laser-heated clusters. Journal of the Optical Society of America B: Optical Physics, 2003, 20, 118.	0.9	25
32	Plasma waveguides efficiently generated by Bessel beams in elongated cluster gas jets. Physical Review E, 2005, 72, 036411.	0.8	25
33	Spectral redshifts in the intense laser-cluster interaction. Physical Review A, 2005, 71, .	1.0	24
34	X-ray spectroscopy of1cmplasma channels produced by self-guided pulse propagation in elongated cluster jets. Physical Review E, 2006, 73, 066403.	0.8	23
35	Generation and Characterization of Strong Terahertz Fields From ƙHz Laser Filamentation. IEEE Journal of Selected Topics in Quantum Electronics, 2017, 23, 1-7.	1.9	23
36	Observation of modulations in Lyman-Î±line profiles of multicharged ions in clusters irradiated by femtosecond laser pulses: Effect of a dynamic electric field. Physical Review A, 2006, 73, .	1.0	22

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37	Details of electro-optic terahertz detection with a chirped probe pulse. Optics Express, 2007, 15, 1376.	1.7	21
38	Highly enhanced terahertz conversion by two-color laser filamentation at low gas pressures. Optics Express, 2019, 27, 22663.	1.7	20
39	Clustered gases as a medium for efficient plasma waveguide generation. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2006, 364, 647-661.	1.6	19
40	Atomic-Scale Time and Space Resolution of Terahertz Frequency Acoustic Waves. Physical Review Letters, 2008, 101, 014302.	2.9	18
41	Single-shot ultrafast imaging via spatiotemporal division of femtosecond laser pulses. Journal of the Optical Society of America B: Optical Physics, 2018, 35, 2822.	0.9	18
42	Generation of 0.7 mJ multicycle 15 THz radiation by phase-matched optical rectification in lithium niobate. Optics Letters, 2020, 45, 3617.	1.7	17
43	Gases of exploding laser-heated cluster nanoplasmas as a nonlinear optical medium. Physics of Plasmas, 2004, 11, 2882-2889.	0.7	15
44	Alignment-dependent terahertz radiation in two-color photoionization of molecules. Physical Review A, 2013, 87, .	1.0	14
45	All-optical characterization of cryogenically cooled argon clusters in continuous gas jets. Applied Physics Letters, 2014, 105, .	1.5	14
46	Scalable terahertz generation by large-area optical rectification at 80 TW laser power. Optics Letters, 2019, 44, 5634.	1.7	14
47	Resonant self-trapping of high intensity Bessel beams in underdense plasmas. Physical Review E, 2002, 65, 056408.	0.8	13
48	Amplitude ambiguities in second-harmonic generation frequency-resolved optical gating. Optics Letters, 2007, 32, 3558.	1.7	12
49	Spectral Characterization of a Microbolometer Focal Plane Array at Terahertz Frequencies. IEEE Transactions on Terahertz Science and Technology, 2019, 9, 150-154.	2.0	12
50	Measurement of ultrafast dynamics in the interaction of intense laser pulses with gases, clusters, and plasma waveguides. Physics of Plasmas, 2005, 12, 056712.	0.7	9
51	Multicycle terahertz pulse generation by optical rectification in LiNbO₃, LiTaO₃, and BBO crystals. Optics Express, 2020, 28, 21220.	1.7	9
52	Ultrabroadband microwave radiation from near- and mid-infrared laser-produced plasmas in air. Physical Review A, 2021, 104, .	1.0	7
53	Comment on "Temporally resolved electro-optic effect". Optics Letters, 2007, 32, 1341.	1.7	4
54	Terahertz radiation from shocked materials. Materials Today, 2007, 10, 44-50.	8.3	4

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55	Terahertz-driven harmonics. Nature Photonics, 2014, 8, 92-94.	15.6	3
56	Single-shot terahertz spectrometer using a microbolometer camera. Applied Physics Letters, 2020, 117, .	1.5	2
57	Simplified single-shot supercontinuum spectral interferometry. Optics Express, 2020, 28, 11023.	1.7	2
58	Simplified chirp characterization in single-shot supercontinuum spectral interferometry. Optics Express, 2018, 26, 20572.	1.7	2
59	Three envelope approach for ultrafast pulse characterization in a pump-probe experiment. Applied Physics Letters, 2008, 92, 061111.	1.5	1
60	B-dot Probe Study of Two-Color Laser-Produced Elongated Air Filaments. , 2009, , .		1
61	Terahertz Generation via Two Color Photoionization in Preformed Plasma. , 2010, , .		1
62	Broadband THz Spectral Characterization with THz Bandpass Filters. , 2018, , .		1
63	Atomic-scale time and space resolution of THz frequency acoustic waves. , 2008, , .		0
64	Amplitude ambiguities in second-harmonic-generation frequency-resolved optical gating: reply to comment. Optics Letters, 2009, 34, 2603.	1.7	0
65	Terahertz generation from cylindircally focused two-color laser pulses in air. , 2015, , .		0
66	Strong terahertz field generation at high repetition rates. , 2015, , .		0
67	Laser-driven strong THz field generation. , 2017, , .		0
68	Generation of Terahertz and Harmonic Radiation in Ultrafast Laser-Gas Interactions. , 2009, , .		0
69	Demonstration of snapshot terahertz spectral power characterization with a microbolometer focal plane array. , 2019, , .		0
70	Simplified Single-shot Supercontinuum Spectral Interferometry (SSSSI). , 2019, , .		0
71	Non-Scanning THz Spectral Characterization with a Microbolometer Focal Plane Array. , 2019, , .		0
72	Ultra-Broadband UV to Microwave Coherent Radiation from Mid-Infrared Interactions in Thin Gas Jets and Clusters. , 2019, , .		0

#	Article	IF	Citations
73	Efficient terahertz and Brunei harmonic generation from air plasma with femtosecond two-color mid-infrared lasers. , 2020, , .		0