Martin KozÃ¡k

List of Publications by Year
in descending order

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56	880	471371	501076
papers	citations	17	28
		h-index	g-index

59	59	59	822
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Ponderomotive Generation and Detection of Attosecond Free-Electron Pulse Trains. Physical Review Letters, 2018, 120, 103203.	2.9	121
2	Inelastic ponderomotive scattering of electrons atÂa high-intensity optical travelling wave inÂvacuum. Nature Physics, 2018, 14, 121-125.	6.5	80
3	Optical gating and streaking of free electrons with sub-optical cycle precision. Nature Communications, 2017, 8, 14342.	5.8	62
4	Elements of a dielectric laser accelerator. Optica, 2018, 5, 687.	4.8	50
5	Acceleration of sub-relativistic electrons with an evanescent optical wave at a planar interface. Optics Express, 2017, 25, 19195.	1.7	46
6	Dielectric laser electron acceleration in a dual pillar grating with a distributed Bragg reflector. Optics Letters, 2019, 44, 1520.	1.7	38
7	Nonlinear optical properties of nanocrystalline diamond. Optics Express, 2010, 18, 1349.	1.7	34
8	Ultrafast scanning electron microscope applied for studying the interaction between free electrons and optical near-fields of periodic nanostructures. Journal of Applied Physics, 2018, 124, .	1.1	29
9	A miniaturized electron source based on dielectric laser accelerator operation at higher spatial harmonics and a nanotip photoemitter. Journal of Physics B: Atomic, Molecular and Optical Physics, 2016, 49, 034006.	0.6	26
10	Gallium Oxide for Highâ€Power Optical Applications. Advanced Optical Materials, 2020, 8, 1901522.	3.6	25
11	All-Optical Scheme for Generation of Isolated Attosecond Electron Pulses. Physical Review Letters, 2019, 123, 203202.	2.9	23
12	Two- and three-photon absorption in chemical vapor deposition diamond. Journal of the Optical Society of America B: Optical Physics, 2012, 29, 1141.	0.9	21
13	Large prolongation of free-exciton photoluminescence decay in diamond by two-photon excitation. Optics Letters, 2012, 37, 2049.	1.7	21
14	Optical study of carrier diffusion and recombination in <scp>CVD</scp> diamond. Physica Status Solidi (A) Applications and Materials Science, 2013, 210, 2008-2015.	0.8	20
15	Anisotropy and polarization dependence of multiphoton charge carrier generation rate in diamond. Physical Review B, 2019, 99, .	1.1	20
16	Dynamics of electronâ€“hole liquid condensation in CVD diamond studied by femtosecond pump and probe spectroscopy. Diamond and Related Materials, 2013, 34, 13-18.	1.8	18
17	Temperature and density dependence of exciton dynamics in IIa diamond: Experimental and theoretical study. Physica Status Solidi (A) Applications and Materials Science, 2014, 211, 2244-2250.	0.8	18
18	Dielectric laser acceleration of sub-relativistic electrons by few-cycle laser pulses. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2017, 865, 84-86.	0.7	18

#	Article	IF	Citations
19	Coherent phonon dynamics in micro- and nanocrystalline diamond. Optics Express, 2013, 21, 31521.	1.7	17
20	Hot-carrier transport in diamond controlled by femtosecond laser pulses. New Journal of Physics, 2015, 17, 053027.	1.2	16
21	Outline of a dielectric laser acceleration experiment at SwissFEL. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2017, 865, 87-90.	0.7	16
22	Photoexcited charge carrier dynamics in silicon nanocrystal/SiO2 superlattices. Physica E: Low-Dimensional Systems and Nanostructures, 2014, 56, 177-182.	1.3	13
23	Dynamics of photoexcited carriers in CVD diamond studied by mid-infrared femtosecond spectroscopy. Diamond and Related Materials, 2017, 71, 13-19.	1.8	10
24	Control of condensation and evaporation of electronâ€“hole liquid in diamond by femtosecond laser pulses. Physica Status Solidi - Rapid Research Letters, 2013, 7, 278-281.	1.2	9
25	Coherent phonon dynamics in diamond detected via multiphoton absorption. Applied Physics Letters, 2019, 115, .	1.5	9
26	Optical harmonic generation in nanocrystalline diamond. Physica E: Low-Dimensional Systems and Nanostructures, 2012, 44, 1300-1303.	1.3	8
27	Transverse and longitudinal characterization of electron beams using interaction with optical near-fields. Optics Letters, 2016, 41, 3435.	1.7	8
28	Silicon dual pillar structure with a distributed Bragg reflector for dielectric laser accelerators: Design and fabrication. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2018, 909, 221-223.	0.7	8
29	Experimental observation of anharmonic effects in coherent phonon dynamics in diamond. Diamond and Related Materials, 2018, 90, 202-206.	1.8	8
30	Electron Vortex Beam Generation via Chiral Light-Induced Inelastic Ponderomotive Scattering. ACS Photonics, 2021, 8, 431-435.	3.2	8
31	Excitation of Rydberg wave packets with chirped laser pulses. Physical Review A, 2012, 86, .	1.0	7
32	Influence of boron doping and hydrogen passivation on recombination of photoexcited charge carriers in silicon nanocrystal/SiC multilayers. Journal of Applied Physics, 2013, 114, .	1.1	7
33	Nonlinear inelastic scattering of electrons at an optical standing wave. Physical Review A, 2018, 98, .	1.0	7
34	Challenges in simulating beam dynamics of dielectric laser acceleration. International Journal of Modern Physics A, 2019, 34, 1942031.	0.5	7
35	Generation of few-cycle laser pulses at 2ÂÎ¼m with passively stabilized carrier-envelope phase characterized by f-3f interferometry. Optics and Laser Technology, 2021, 144, 107394.	2.2	7
36	Laser-driven acceleration of subrelativistic electrons near a nanostructured dielectric grating: From acceleration via higher spatial harmonics to necessary elements of a dielectric accelerator. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2016, 829, 50-51.	0.7	6

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37	Observation of ultrafast impact ionization in diamond driven by mid-infrared femtosecond pulses. Journal of Applied Physics, 2020, 128, 015701.	1.1	5
38	Multiphoton-excited exciton molecules in diamond. Journal of Luminescence, 2021, 231, 117774.	1.5	5
39	Diamond-based dielectric laser acceleration. Optics Express, 2022, 30, 505.	1.7	5
40	Hot-phonon-induced indirect absorption in silicon nanocrystals. Journal of Applied Physics, 2013, 114, 173103.	1.1	4
41	State-selective Rydberg excitation with femtosecond pulses. Physical Review A, 2013, 87, .	1.0	4
42	Simple technique for the compression of nanojoule pulses from few-cycle laser oscillator to 17-cycle duration via nonlinear spectral broadening in diamond. Optics Letters, 2018, 43, 3654.	1.7	4
43	Electron acceleration in moving laser-induced gratings produced by chirped femtosecond pulses. Journal of Physics B: Atomic, Molecular and Optical Physics, 2015, 48, 195601.	0.6	3
44	Sub-picosecond electron dynamics in polycrystalline diamond films. Diamond and Related Materials, 2020, 108, 107935.	1.8	2
45	Compact Ultrashort Pulsed 2.05 Âµm All-PM Fiber Laser For Dielectric Laser Acceleration of Non-relativistic Electrons. , 2016, , .		2
46	Asynchronous Inelastic Scattering of Electrons at the Ponderomotive Potential of Optical Waves. Physical Review Letters, 2022, 129, .	2.9	2
47	Optical velocity meter based on Ramsey oscillations in a double-grating setup. Physical Review A, 2014, 89, .	1.0	1
48	Sub-optical-cycle control of free electrons by optical near-fields. , 2017, , .		1
49	Effect of temperature and excitation intensity on photoexcited charge carrier dynamics in Si-NCs/SiO₂superlattices. Proceedings of SPIE, 2013, , .	0.8	0
50	Type-I InAs quantum dots covered by GaAsSb strain reducing layer. Proceedings of SPIE, 2014, , .	0.8	0
51	Comparison of mechanical resistance of SnCu and SnBi of solder joints. , 2017, , .		0
52	From strong-field physics in and at nanoscale matter to photonics-based laser accelerators. EPJ Web of Conferences, 2019, 205, 08009.	0.1	0
53	Novel Materials-based Laser Acceleration. , 2021, , .		0
54	Silicon nanostructures for efficient high-harmonic generation. , 2021, , .		0

#	Article	IF	Citations
55	Valley-dependent Bloch-Siegert shift in monolayer WSe2: transition to the strong-field regime. , 2021, , .		0
56	Angular dependence of non-perturbative VUV harmonics in silicon. , 2021, , .		0