Mikhail Emelin

List of Publications by Year
in descending order

31 papers	379 citations	840776 11 h-index	752698 20 g-index
31 all docs	31 docs citations	31 times ranked	273 citing authors

#	Article	IF	Citations
1	Enhancing High Harmonic Generation in a Short-Pulse Two-Color Laser Field by Controlling the Atomic-Electron Subcycle Detachment and Acceleration Dynamics. Physics of Wave Phenomena, 2021, 29, 50-59.	1.1	1
2	Polarization control of quasimonochromatic XUV light produced via resonant high-order harmonic generation. Physical Review A, 2021, 103, .	2.5	14
3	Ultrahigh-order harmonic generation in the subnanometer wavelength range: the role of finite atomic size. Journal of the Optical Society of America B: Optical Physics, 2021, 38, 2329.	2.1	2
4	Generation of ultrashort X-ray bursts without attosecond frequency modulation in Coulomb collisions of nuclei of diatomic heteronuclear molecules ionised by an ultraintense laser pulse. Quantum Electronics, 2019, 49, 330-336.	1.0	0
5	Wavelength scaling laws for high-order harmonic yield from atoms driven by mid- and long-wave infrared laser fields. Journal of the Optical Society of America B: Optical Physics, 2019, 36, 3236.	2.1	5
6	Ultimate capabilities for few-cycle pulse formation via resonant interaction of XUV radiation with IR-field-dressed atoms. Physical Review A, 2017, 95, .	2.5	6
7	Probing the field-free orientation dynamics of polar molecules using laser-induced THz wave generation. Molecular Physics, 2017, 115, 1797-1802.	1.7	0
8	Tailoring the pulse shape to efficiently populate atomic electron metastable states in a relativistically intense high-frequency laser field. Physical Review A, 2017, 96, .	2.5	2
9	Two-color high-harmonic generation in plasmas: efficiency dependence on the generating particle properties. Optics Express, 2016, 24, 13971.	3.4	26
10	Subattosecond keV beats of the high-harmonic x-ray field produced with few-cycle mid-IR laser pulses: Magnetic-field effects. Physical Review A, 2016, 93, .	2.5	1
11	Control of the photoelectron dynamics for the effective conversion of short-pulse, frequency-modulated optical radiation into X-ray radiation. Quantum Electronics, 2015, 45, 393-400.	1.0	2
12	Multi-keV ultrahigh-order harmonics produced in gases with subrelativistically intense mid-IR laser pulses. Journal of the Optical Society of America B: Optical Physics, 2015, 32, 2478.	2.1	9
13	Generation of terahertz radiation at optical breakdown of air: The dependence of the optimal phase shift between the components of a two-color laser pulse on their intensity. JETP Letters, 2015, 101, 74-78.	1.4	3
14	Atomic photoionization and dynamical stabilization with subrelativistically intense high-frequency light: Magnetic-field effects revisited. Physical Review A, 2014, 89, .	2.5	22
15	On the possibility of the generation of high harmonics with photon energies greater than 10 keV upon interaction of intense mid-IR radiation with neutral gases. Quantum Electronics, 2014, 44, 470-477.	1.0	18
16	Coulomb effects in directional current excitation in the ionization of gas by a two-color laser field. Journal of Physics B: Atomic, Molecular and Optical Physics, 2014, 47, 204028.	1.5	15
17	On the potential of mid-IR lasers for generating high harmonics with subnanometer wavelengths in gases. Quantum Electronics, 2013, 43, 211-216.	1.0	7
18	Unidirectional current excitation in tunneling ionization of asymmetric molecules. Physical Review A, 2013, 87, .	2.5	13

#	Article	IF	Citations
19	Frequency tunable single attosecond pulse production from aligned diatomic molecules ionized by intense laser field. Optics Express, 2010, 18, 2269.	3.4	10
20	Quantum Interference in Ionization of Excited Molecules: X-Ray Emission Control and Dynamic Imaging. Springer Series in Chemical Physics, 2010, , 75-88.	0.2	0
21	10.1007/s11447-008-2001-4. , 2010, 106, 203.		0
22	Publisherâ€™s Note: Analytic Description of the High-Energy Plateau in Harmonic Generation by Atoms: Can the Harmonic Power Increase with Increasing Laser Wavelengths? [Phys. Rev. Lett.102, 243901 (2009)]. Physical Review Letters, 2009, 102, .	7.8	5
23	Analytic Description of the High-Energy Plateau in Harmonic Generation by Atoms: Can the Harmonic Power Increase with Increasing Laser Wavelengths?. Physical Review Letters, 2009, 102, 243901.	7.8	132
24	Single attosecond burst generation during ionization of excited atoms by intense ultrashort laser pulses. Journal of Experimental and Theoretical Physics, 2008, 106, 203-217.	0.9	9
25	Monitoring long-term evolution of molecular vibrational wave packet using high-order harmonic generation. New Journal of Physics, 2008, 10, 025026.	2.9	16
26	High-Harmonic Generation From Excited Molecules: X-Ray Spectra Control and Dynamical Imaging. , 2008, , .		0
27	Attosecond Pulse Production using Excited Atoms and Molecules. AIP Conference Proceedings, 2006, , .	0.4	2
28	High-efficiency generation of attosecond pulses during atomic ionization from excited electronic states. Europhysics Letters, 2005, 69, 913-919.	2.0	17
29	Transient enhancement of high-order harmonic generation in expanding molecules. Physical Review A, 2004, 70, .	2.5	27
30	Possibilities for controlling attosecond x-ray pulse generation during molecular ionization by femtosecond laser radiation. Radiophysics and Quantum Electronics, 2004, 47, 818-831.	0.5	1
31	Attosecond burst and high-harmonic generation in molecular ionization by ultrashort laser pulses. JETP Letters, 2003, 77, 212-216.	1.4	14