Olga Kocharovskaya

List of Publications by Year
in descending order

70	2,201	23	46
papers	citations	h-index	g-index
		279798	223800
70	70	70	847
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Amplification without inversion: The double-Î› scheme. Physical Review A, 1990, 42, 523-535.	2.5	291
2	Stopping Light via Hot Atoms. Physical Review Letters, 2001, 86, 628-631.	7.8	276
3	Slow, Ultraslow, Stored, and Frozen Light. Advances in Atomic, Molecular and Optical Physics, 2001, , 191-242.	2.3	179
4	Narrowing of electromagnetically induced transparency resonance in a Doppler-broadened medium. Physical Review A, 2002, 66, .	2.5	168
5	Inversionless amplification in a three-level medium. Physical Review A, 1992, 45, 1997-2005.	2.5	113
6	Coherent control of the waveforms of recoilless Î³-ray photons. Nature, 2014, 508, 80-83.	27.8	107
7	Coherent Optical Control of MÃ¶ssbauer Spectra. Physical Review Letters, 1999, 82, 3593-3596.	7.8	80
8	Lasing without inversion: The double Î› scheme. Optics Communications, 1990, 77, 215-220.	2.1	74
9	Atomic interference phenomena in solids with a long-lived spin coherence. Physical Review A, 2002, 66, .	2.5	74
10	Decaying-dressed-state analysis of a coherently driven three-level Î› system. Journal of Modern Optics, 2008, 55, 3159-3171.	1.3	58
11	Electromagnetically induced transparency in rubidium vapor prepared by a comb of short optical pulses. Physical Review A, 2005, 71, .	2.5	54
12	Atomic Coherence via Modified Spontaneous Relaxation of Driven Three-Level Atoms. Physical Review Letters, 1995, 74, 2451-2454.	7.8	53
13	Lasing without inversion via decay-induced coherence. Physical Review A, 2001, 65, .	2.5	48
14	Acoustically Induced Transparency in Optically Dense Resonance Medium. Physical Review Letters, 2006, 96, 093602.	7.8	36
15	Inversionless amplification of a monochromatic field by a three-level medium. Physical Review A, 1992, 46, 2700-2706.	2.5	34
16	Frequency up-conversion in a three-level medium without inversion. Optics Communications, 1991, 84, 179-183.	2.1	31
17	Field-dependent relaxation effects in a three-level system driven by a strong coherent field. Physical Review A, 1999, 60, 3091-3110.	2.5	28
18	Formation of a Single Attosecond Pulse via Interaction of Resonant Radiation with a Strongly Perturbed Atomic Transition. Physical Review Letters, 2013, 110, 213903.	7.8	27

#	ARTICLE	IF	CITATIONS
19	Transformation of a single-photon field into bunches of pulses. Physical Review A, 2015, 92, .	2.5	27
20	Inversionless lasing with self-generated driving field. Physical Review A, 2001, 64, .	2.5	26
21	Inversionless amplification in a multilevel system. Physical Review A, 1993, 47, 5003-5008.	2.5	25
22	Inversionless amplification in the three-level atoms with and without a hidden inversion in reservoir. Physical Review A, 1998, 58, 649-654.	2.5	24
23	Multimode cavity-assisted quantum storage via continuous phase-matching control. Physical Review A, 2013, 88, .	2.5	24
24	Quantum storage via refractive-index control. Physical Review A, 2011, 83, .	2.5	21
25	Quantum storage based on control-field angular scanning. Physical Review A, 2013, 87, .	2.5	21
26	Formation of ultrashort pulses via quantum interference between Stark-split atomic transitions in a hydrogenlike medium. Physical Review A, 2013, 88, .	2.5	21
27	Attosecond Pulse Amplification in a Plasma-Based X-Ray Laser Dressed by an Infrared Laser Field. Physical Review Letters, 2019, 123, 243903.	7.8	19
28	Nuclear Quantum Memory and Time Sequencing of a Single <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mi>Î³</mml:mi></mml:math> Photon. Physical Review Letters, 2019, 123, 250504.	7.8	18
29	Laser control of Mossbauer spectra as a way to gamma-ray lasing. Optics Communications, 2000, 179, 537-547.	2.1	17
30	Generation of coherent terahertz pulses in ruby at room temperature. Physical Review A, 2006, 74, .	2.5	15
31	All-optical quantum storage based on spatial chirp of the control field. Physical Review A, 2014, 90, .	2.5	15
32	Formation and amplification of subfemtosecond x-ray pulses in a plasma medium of hydrogenlike ions with a modulated resonant transition. Physical Review A, 2017, 96, .	2.5	15
33	Quantum optics with X-rays. Nature Photonics, 2017, 11, 685-686.	31.4	12
34	Observation of Acoustically Induced Transparency for <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:mi>Î³</mml:mi></mml:mrow></mml:math> -Ray Photons. Physical Review Letters, 2020, 124, 163602.	7.8	12
35	<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mi>Î³</mml:mi></mml:math>-ray-pulse formation in a vibrating recoilless resonant absorber. Physical Review A, 2015, 92, .	2.5	10
36	Ultimate capabilities for compression of the waveform of a recoilless Î³-ray photon into a pulse sequence in an optically deep vibrating resonant absorber. Physical Review A, 2018, 98, .	2.5	9

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37	Sub-fs pulse formation in a seeded hydrogenlike plasma-based x-ray laser dressed by an infrared field: Analytical theory and numerical optimization. Physical Review Research, 2020, 2, .	3.6	9
38	Attosecond pulse formation via switching of resonant interaction by tunnel ionization. Physical Review A, 2015, 91, .	2.5	8
39	Modification of MÃ¶ssbauer Spectra under the Action of Electromagnetic Fields. Hyperfine Interactions, 2001, 135, 233-255.	0.5	7
40	Compression ofÎ³-ray photons into ultrashort pulses. Physical Review A, 2003, 68, .	2.5	7
41	Resonant enhancement of refractive index in transition element doped crystals via coherent control of excited state absorption. Journal of Modern Optics, 2009, 56, 1933-1940.	1.3	7
42	Conversion of recoilless<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mi>Î³</mml:mi></mml:math>radiation into a periodic sequence of short intense pulses in a set of several sequentially placed resonant absorbers. Physical Review A, 2015, 92, .	2.5	7
43	Application of the low-finesse <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mi>Î³</mml:mi></mml:math> -ray frequency comb for high-resolution spectroscopy. Physical Review A, 2016, 94, .	2.5	7
44	Suppression ofÎ³-photon absorption via quantum interference. Journal of Modern Optics, 2007, 54, 2595-2605.	1.3	6
45	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
46	Light, the universe and everything â€“ 12 Herculean tasks for quantum cowboys and black diamond skiers. Journal of Modern Optics, 2018, 65, 1261-1308.	1.3	6
47	Acoustically induced transparency for synchrotron hard x-ray photons. Scientific Reports, 2021, 11, 7930.	3.3	6
48	Attosecond-pulse formation in the water-window range by an optically dressed hydrogen-like plasma-based <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msup><mml:mrow><mml:mi mathvariant="normal">C</mml:mi></mml:mrow><mml:mrow><mml:mn>5</mml:mn><mml:mo>+</mml:mo></mml:mrow></mml:msu x-ray laser. Physical Review A, 2020, 102, .	2.5	6
49	Amplification of elliptically polarized sub-femtosecond pulses in neon-like X-ray laser modulated by an IR field. Scientific Reports, 2022, 12, 6204.	3.3	6
50	Effective two-level Maxwell-Bloch formalism and coherent pulse propagation in a driven three-level medium. Physical Review A, 1999, 59, 3986-3997.	2.5	5
51	Laser-MÃ¶ssbauer Spectroscopy as a New Tool for Nuclear Transitions. Hyperfine Interactions, 2002, 143, 121-131.	0.5	5
52	Experimental observation of laser-induced modification of MÃ¶ssbauer spectra. Journal of Modern Optics, 2004, 51, 2579-2587.	1.3	5
53	Refractive index control for optical quantum storage. Journal of Modern Optics, 2011, 58, 1971-1976.	1.3	5
54	Coherent forward scattering ofÎ³-ray and XUV radiation in the medium with the modulated quasi-resonant transition. Journal of Physics B: Atomic, Molecular and Optical Physics, 2016, 49, 205602.	1.5	5

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55	Stop and go control of light in hot atomic gases. Journal of Modern Optics, 2002, 49, 2637-2643.	1.3	4
56	Formation of ultrashort pulses from quasimonochromatic XUV radiation via infrared-field-controlled forward scattering. Physical Review A, 2016, 94, .	2.5	4
57	MÃ¶ssbauer spectra narrowing by spinning magnetic field. Journal of Modern Optics, 2004, 51, 2615-2625.	1.3	3
58	Effects of optical radiation on the MÃ¶ssbauer spectrum of¹⁵¹Eu³⁺: CaF₂. Journal of Modern Optics, 2005, 52, 877-884.	1.3	3
59	Experimental observation of vibrations produced by pulsed laser beam in MgO:57Fe. Hyperfine Interactions, 2006, 167, 917-921.	0.5	3
60	The Dawn of Quantum Biophotonics. , 2016, , 147-176.		3
61	Dynamical manifestations of two mechanisms of lasing without inversion. Journal of Optics B: Quantum and Semiclassical Optics, 1999, 1, 580-587.	1.4	2
62	Enhanced Amplification of Attosecond Pulses in a Hydrogen-like Plasma-Based X-ray Laser Modulated by an Infrared Field at the Second Harmonic of Fundamental Frequency. Photonics, 2022, 9, 51.	2.0	2
63	MÃ¶ssbauer spectra narrowing by the â€˜magic-angleâ€˜ technique. Journal of Modern Optics, 2005, 52, 2401-2410.	1.3	1
64	Coherent control of one-photon and two-photon optical fluorescence channels in three-level ladder system. Journal of Modern Optics, 2009, 56, 1941-1948.	1.3	1
65	Electromagnetically induced transparency in a two-level system via atomic vibration. , 2006, , .		0
66	Optical fluorescence at the combinational frequency in coherently driven three-level systems. Journal of Modern Optics, 2011, 58, 2036-2042.	1.3	0
67	Amplification of a train of attosecond pulses in active medium of a plasma-based x-ray laser dressed by an optical laser field. , 2018, , .		0
68	Temporal and spectral control of the X-ray pulses in a resonant medium with a modulated transition frequency. , 2021, , .		0
69	Spectral width of electromagnetically induced transparency in hot atomic gases. , 2003, , 603-604.		0
70	Experimental observation of vibrations produced by pulsed laser beam in MgO:57Fe. , 2006, , 917-921.		0