# Olga Kocharovskaya

## List of Publications by Year in descending order



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|---|---|---|---|
| 70 papers | 2,201 citations | 279701 23 h-index | 223716 46 g-index |
| 70 all docs | 70 docs citations | 70 times ranked | 847 citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | 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. | 0.9 | 2 |
| 2 | Amplification of elliptically polarized sub-femtosecond pulses in neon-like X-ray laser modulated by an IR field. Scientific Reports, 2022, 12, 6204. | 1.6 | 6 |
| 3 | Acoustically induced transparency for synchrotron hard x-ray photons. Scientific Reports, 2021, 11, 7930. | 1.6 | 6 |
| 4 | Temporal and spectral control of the X-ray pulses in a resonant medium with a modulated transition frequency. , 2021, , . | | 0 |
| 5 | 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. | 2.9 | 12 |
| 6 | 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, . | 1.3 | 9 |
| 7 | 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, . | 1.0 | 6 |
| 8 | 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. | 2.9 | 18 |
| 9 | Attosecond Pulse Amplification in a Plasma-Based X-Ray Laser Dressed by an Infrared Laser Field. Physical Review Letters, 2019, 123, 243903. | 2.9 | 19 |
| 10 | Light, the universe and everything â€“ 12 Herculean tasks for quantum cowboys and black diamond skiers. Journal of Modern Optics, 2018, 65, 1261-1308. | 0.6 | 6 |
| 11 | 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 |
| 12 | 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, . | 1.0 | 9 |
| 13 | Ultimate capabilities for few-cycle pulse formation via resonant interaction of XUV radiation with IR-field-dressed atoms. Physical Review A, 2017, 95, . | 1.0 | 6 |
| 14 | 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, . | 1.0 | 15 |
| 15 | Quantum optics with X-rays. Nature Photonics, 2017, 11, 685-686. | 15.6 | 12 |
| 16 | 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. | 0.6 | 5 |
| 17 | Formation of ultrashort pulses from quasimonochromatic XUV radiation via infrared-field-controlled forward scattering. Physical Review A, 2016, 94, . | 1.0 | 4 |
| 18 | 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, . | 1.0 | 7 |

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|---|---|---|---|
| 19 | The Dawn of Quantum Biophotonics. , 2016, , 147-176. | | 3 |
| 20 | Transformation of a single-photon field into bunches of pulses. Physical Review A, 2015, 92, . | 1.0 | 27 |
| 21 | <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, . | 1.0 | 10 |
| 22 | 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, . | 1.0 | 7 |
| 23 | Attosecond pulse formation via switching of resonant interaction by tunnel ionization. Physical Review A, 2015, 91, . | 1.0 | 8 |
| 24 | All-optical quantum storage based on spatial chirp of the control field. Physical Review A, 2014, 90, . | 1.0 | 15 |
| 25 | Coherent control of the waveforms of recoilless Î³-ray photons. Nature, 2014, 508, 80-83. | 13.7 | 107 |
| 26 | Multimode cavity-assisted quantum storage via continuous phase-matching control. Physical Review A, 2013, 88, . | 1.0 | 24 |
| 27 | Quantum storage based on control-field angular scanning. Physical Review A, 2013, 87, . | 1.0 | 21 |
| 28 | Formation of a Single Attosecond Pulse via Interaction of Resonant Radiation with a Strongly Perturbed Atomic Transition. Physical Review Letters, 2013, 110, 213903. | 2.9 | 27 |
| 29 | Formation of ultrashort pulses via quantum interference between Stark-split atomic transitions in a hydrogenlike medium. Physical Review A, 2013, 88, . | 1.0 | 21 |
| 30 | Quantum storage via refractive-index control. Physical Review A, 2011, 83, . | 1.0 | 21 |
| 31 | Optical fluorescence at the combinational frequency in coherently driven three-level systems. Journal of Modern Optics, 2011, 58, 2036-2042. | 0.6 | 0 |
| 32 | Refractive index control for optical quantum storage. Journal of Modern Optics, 2011, 58, 1971-1976. | 0.6 | 5 |
| 33 | Coherent control of one-photon and two-photon optical fluorescence channels in three-level ladder system. Journal of Modern Optics, 2009, 56, 1941-1948. | 0.6 | 1 |
| 34 | 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. | 0.6 | 7 |
| 35 | Decaying-dressed-state analysis of a coherently driven three-level Î› system. Journal of Modern Optics, 2008, 55, 3159-3171. | 0.6 | 58 |
| 36 | Suppression ofÎ³-photon absorption via quantum interference. Journal of Modern Optics, 2007, 54, 2595-2605. | 0.6 | 6 |

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|---|---|---|---|
| 37 | Acoustically Induced Transparency in Optically Dense Resonance Medium. Physical Review Letters, 2006, 96, 093602. | 2.9 | 36 |
| 38 | Experimental observation of vibrations produced by pulsed laser beam in MgO:57Fe. Hyperfine Interactions, 2006, 167, 917-921. | 0.2 | 3 |
| 39 | Electromagnetically induced transparency in a two-level system via atomic vibration. , 2006, , . | | 0 |
| 40 | Generation of coherent terahertz pulses in ruby at room temperature. Physical Review A, 2006, 74, . | 1.0 | 15 |
| 41 | Experimental observation of vibrations produced by pulsed laser beam in MgO:57Fe. , 2006, , 917-921. | | 0 |
| 42 | Electromagnetically induced transparency in rubidium vapor prepared by a comb of short optical pulses. Physical Review A, 2005, 71, . | 1.0 | 54 |
| 43 | MÃ¶ssbauer spectra narrowing by the â€˜magic-angleâ€˜ technique. Journal of Modern Optics, 2005, 52, 2401-2410. | 0.6 | 1 |
| 44 | Effects of optical radiation on the MÃ¶ssbauer spectrum of<sup>151</sup>Eu<sup>3+</sup>: CaF<sub>2</sub>. Journal of Modern Optics, 2005, 52, 877-884. | 0.6 | 3 |
| 45 | MÃ¶ssbauer spectra narrowing by spinning magnetic field. Journal of Modern Optics, 2004, 51, 2615-2625. | 0.6 | 3 |
| 46 | Experimental observation of laser-induced modification of MÃ¶ssbauer spectra. Journal of Modern Optics, 2004, 51, 2579-2587. | 0.6 | 5 |
| 47 | Compression of $^3$-ray photons into ultrashort pulses. Physical Review A, 2003, 68, . | 1.0 | 7 |
| 48 | Spectral width of electromagnetically induced transparency in hot atomic gases. , 2003, , 603-604. | | 0 |
| 49 | Stop and go control of light in hot atomic gases. Journal of Modern Optics, 2002, 49, 2637-2643. | 0.6 | 4 |
| 50 | Atomic interference phenomena in solids with a long-lived spin coherence. Physical Review A, 2002, 66, . | 1.0 | 74 |
| 51 | Laser-MÃ¶ssbauer Spectroscopy as a New Tool for Nuclear Transitions. Hyperfine Interactions, 2002, 143, 121-131. | 0.2 | 5 |
| 52 | Narrowing of electromagnetically induced transparency resonance in a Doppler-broadened medium. Physical Review A, 2002, 66, . | 1.0 | 168 |
| 53 | Slow, Ultraslow, Stored, and Frozen Light. Advances in Atomic, Molecular and Optical Physics, 2001, , 191-242. | 2.3 | 179 |
| 54 | Modification of MÃ¶ssbauer Spectra under the Action of Electromagnetic Fields. Hyperfine Interactions, 2001, 135, 233-255. | 0.2 | 7 |

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|---|---|---|---|
| 55 | Stopping Light via Hot Atoms. Physical Review Letters, 2001, 86, 628-631. | 2.9 | 276 |
| 56 | Inversionless lasing with self-generated driving field. Physical Review A, 2001, 64, . | 1.0 | 26 |
| 57 | Lasing without inversion via decay-induced coherence. Physical Review A, 2001, 65, . | 1.0 | 48 |
| 58 | Laser control of Mossbauer spectra as a way to gamma-ray lasing. Optics Communications, 2000, 179, 537-547. | 1.0 | 17 |
| 59 | Dynamical manifestations of two mechanisms of lasing without inversion. Journal of Optics B: Quantum and Semiclassical Optics, 1999, 1, 580-587. | 1.4 | 2 |
| 60 | Field-dependent relaxation effects in a three-level system driven by a strong coherent field. Physical Review A, 1999, 60, 3091-3110. | 1.0 | 28 |
| 61 | Coherent Optical Control of MÃ¶ssbauer Spectra. Physical Review Letters, 1999, 82, 3593-3596. | 2.9 | 80 |
| 62 | Effective two-level Maxwell-Bloch formalism and coherent pulse propagation in a driven three-level medium. Physical Review A, 1999, 59, 3986-3997. | 1.0 | 5 |
| 63 | Inversionless amplification in the three-level atoms with and without a hidden inversion in reservoir. Physical Review A, 1998, 58, 649-654. | 1.0 | 24 |
| 64 | Atomic Coherence via Modified Spontaneous Relaxation of Driven Three-Level Atoms. Physical Review Letters, 1995, 74, 2451-2454. | 2.9 | 53 |
| 65 | Inversionless amplification in a multilevel system. Physical Review A, 1993, 47, 5003-5008. | 1.0 | 25 |
| 66 | Inversionless amplification in a three-level medium. Physical Review A, 1992, 45, 1997-2005. | 1.0 | 113 |
| 67 | Inversionless amplification of a monochromatic field by a three-level medium. Physical Review A, 1992, 46, 2700-2706. | 1.0 | 34 |
| 68 | Frequency up-conversion in a three-level medium without inversion. Optics Communications, 1991, 84, 179-183. | 1.0 | 31 |
| 69 | Lasing without inversion: The double Î› scheme. Optics Communications, 1990, 77, 215-220. | 1.0 | 74 |
| 70 | Amplification without inversion: The double-Î› scheme. Physical Review A, 1990, 42, 523-535. | 1.0 | 291 |