Rustem N Shakhmuratov

List of Publications by Year
in descending order

71	660	687363 13	642732 23
papers	citations	h-index	g-index

72	72	72	276
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Generation of Pulses From Periodically Sawtooth Phase-Modulated CW Laser Field Using the Temporal Fractional Talbot Effect. Journal of Lightwave Technology, 2022, 40, 1895-1901.	4.6	2
2	Methods of Coherent Control of Spectral and Temporal Properties of Gamma Photons and Their Potential Applications. Crystallography Reports, 2020, 65, 409-411.	0.6	0
3	MÃ¶ssbauer Method for Studying Vibrations in a Granular Medium Excited by Ultrasound. JETP Letters, 2020, 111, 167-171.	1.4	1
4	Increasing efficiency of quantum memory based on atomic frequency combs. Laser Physics, 2020, 30, 095205.	1.2	4
5	Pulse shaping by a frequency filtering of a sawtooth phase-modulated cw laser. Physical Review A, 2019, 100, .	2.5	5
6	Time-delayed coincidence technique for subnatural-width spectroscopy as an interference phenomenon. Physical Review A, 2019, 99, .	2.5	2
7	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
8	MÃ¶ssbauer Method for Measuring Subangstrom Displacements of Thin Films. JETP Letters, 2018, 108, 772-776.	1.4	3
9	Application of harmonic and anharmonic frequency crystals for manipulation with quantum states. Physical Review A, 2018, 98, .	2.5	1
10	Transformation of the frequency-modulated continuous-wave field into a train of short pulses by resonant filters. Physical Review A, 2017, 95, .	2.5	5
11	Application of the MÃ¶ssbauer effect to the study of subnanometer harmonic displacements in thin solids. Physical Review B, 2017, 95, .	3.2	11
12	New applications of the MÃ¶ssbauer effect. Bulletin of the Russian Academy of Sciences: Physics, 2017, 81, 779-783.	0.6	0
13	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
14	Application of the MÃ¶ssbauer effect to the study of optoâ€acoustic phenomena. Physica Status Solidi (B): Basic Research, 2015, 252, 469-475.	1.5	3
15	Transformation of a single-photon field into bunches of pulses. Physical Review A, 2015, 92, .	2.5	27
16	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
17	Coherent methods for controlling MÃ¶ssbauer photons. Bulletin of the Russian Academy of Sciences: Physics, 2015, 79, 951-954.	0.6	1
18	Transformation of subradiant states to superradiant states in a thick resonant medium. Physical Review A, 2014, 90, .	2.5	3

#	Article	IF	Citations
19	Coherent control of the waveforms of recoilless Î³-ray photons. Nature, 2014, 508, 80-83.	27.8	107
20	Formation of regular pulses with high peak intensity from a random flow of gamma quanta. Bulletin of the Russian Academy of Sciences: Physics, 2014, 78, 199-202.	0.6	2
21	Single gamma-photon revival from sandwich absorbers. Physical Review A, 2013, 87, .	2.5	23
22	Reversible absorption of weak fields revealed in coherent transients. Physical Review A, 2012, 85, .	2.5	10
23	Principles of controlling a single-photon radiation state using optically thick resonant media. Bulletin of the Russian Academy of Sciences: Physics, 2012, 76, 248-251.	0.6	4
24	Radiation burst from a single<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mi>Î³</mml:mi></mml:math>-photon field. Physical Review A, 2011, 84, .	2.5	25
25	Coherent forward scattering of a single photon wave packet in a resonant medium. Bulletin of the Russian Academy of Sciences: Physics, 2010, 74, 954-958.	0.6	0
26	Towards more relaxed conditions for a gammaâ€ray laser: Methods to realize induced transparency for nuclear resonant gamma radiation. Laser and Photonics Reviews, 2010, 4, 1-20.	8.7	12
27	The energy storage in the formation of slow light. Journal of Modern Optics, 2010, 57, 1355-1365.	1.3	6
28	Slow<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mi>Î³</mml:mi></mml:math>photon with a doublet structure: Time delay via a transition from destructive to constructive interference of collectively scattered radiation with the incoming photon. Physical Review A, 2009, 80, .	2.5	22
29	Increase of the fractional delay of the pulse in an electromagnetically-induced-transparency medium. Physical Review A, 2008, 78, .	2.5	1
30	Slow light with a doublet structure: Underlying physical processes and basic limitations. Physical Review A, 2008, 77, .	2.5	11
31	Off-resonance slow light. Physical Review A, 2008, 78, .	2.5	9
32	Single photon emitted by a single particle in free-space vacuum modes and its resonant interaction with two- and three-level absorbers. Physical Review A, 2007, 75, .	2.5	4
33	Instantaneous processing of â€œslow lightâ€ Amplitude-duration control, storage, and splitting. Physical Review A, 2007, 76, .	2.5	7
34	Suppression ofÎ³-photon absorption via quantum interference. Journal of Modern Optics, 2007, 54, 2595-2605.	1.3	6
35	Slow light with persistent spectral hole burning in waveguides. Journal of Luminescence, 2007, 127, 22-27.	3.1	16
36	Where is the energy of slow light stored?. Laser Physics, 2007, 17, 652-655.	1.2	3

#	Article	IF	Citations
37	Level mixing induced transparency. Laser Physics, 2007, 17, 716-719.	1.2	0
38	Group velocity in a nuclear EIT-like Î› scheme and comparison with optical EIT. Laser Physics, 2007, 17, 1234-1239.	1.2	3
39	Two types of adiabatons in electromagnetically induced transparency. Physical Review A, 2006, 74, .	2.5	12
40	Level mixing induced transparency II. Different transition probabilities of the crossing lines. Applied Physics B: Lasers and Optics, 2006, 83, 635-641.	2.2	2
41	Slow Light with Persistent Spectral Hole Burning. , 2006, , .		0
42	Level mixing induced transparency for gamma radiation. Applied Physics B: Lasers and Optics, 2005, 81, 883-888.	2.2	11
43	Pulse transformation and time-frequency filtering with electromagnetically induced transparency. Physical Review A, 2005, 71, .	2.5	19
44	Slow light with persistent hole burning. Physical Review A, 2005, 71, .	2.5	54
45	Aspects of EIT with gamma radiation. Journal of Modern Optics, 2004, 51, 2589-2598.	1.3	7
46	Slowing Down of Gamma Photons. Hyperfine Interactions, 2003, 151/152, 93-104.	0.5	5
47	Adiabatic-following criterion, estimation of the nonadiabatic excitation fraction, and quantum jumps. Physical Review A, 2003, 68, .	2.5	6
48	Stimulated nutation echo: application to the driven decoherence study. Journal of Physics Condensed Matter, 2003, 15, 4215-4228.	1.8	3
49	Nuclear Emission Holography. Hyperfine Interactions, 2002, 139/140, 691-698.	0.5	0
50	Title is missing!. Hyperfine Interactions, 2002, 139/140, 685-690.	0.5	7
51	Induced Transparency for Gamma Radiation via Nuclear Level Mixing. Hyperfine Interactions, 2002, 143, 97-110.	0.5	14
52	Resonant-Detector MÃ¶ssbauer Spectroscopic Studies of Sn Doped SiO2 Analysed Using Quantum Mechanical Theory. , 2002, , 685-690.		0
53	Electromagnetically Induced Transparency for Gamma-Quanta Using an RF Field. Hyperfine Interactions, 2001, 135, 215-221.	0.5	8
54	Inversionless amplification and propagation in an electronuclear level-mixing scheme. Physical Review A, 2001, 64, .	2.5	9

#	Article	IF	Citations
55	Electromagnetically Induced Transparency via Adiabatic Following of the Nonabsorbing State. Physical Review Letters, 2001, 87, 153601.	7.8	8
56	<title>Example of spatial coherence in nuclear radiation: nuclear emission holography</title>. , 2000, , .		1
57	Gain without inversion for gamma radiation. Optics Communications, 2000, 179, 525-536.	2.1	16
58	Quantum-mechanical theory of enhanced resolution in MÃ¶ssbauer spectroscopy using a resonant detector. Physical Review B, 2000, 62, 6148-6157.	3.2	15
59	Dark state in ruby: Analysis of the feasibility. Physical Review A, 2000, 62, .	2.5	5
60	Transient nutations decay: The effect of field-modified dipolar interaction. Physical Review A, 1999, 59, 4087-4090.	2.5	22
61	Transient nutation signal locking. Physical Review A, 1999, 59, 3788-3796.	2.5	4
62	Phase-noise influence on coherent transients and hole burning. Physical Review A, 1998, 58, 3099-3113.	2.5	6
63	Influence of Giant Nuclear-spin Polarisation on Resonant Gamma-ray Absorption and Emission. Australian Journal of Physics, 1998, 51, 339.	0.6	0
64	<title>New look at non-Bloch decay of transient nutation and free induction in S=1/2 systems</title>. , 1997, 3239, 206.		2
65	Non-Bloch Transients in Solids: Free Induction Decay and Transient Nutations. Physical Review Letters, 1997, 79, 2963-2966.	7.8	30
66	Optical stimulated nutation echo. Physical Review A, 1997, 55, 1423-1429.	2.5	7
67	<title>Non-Markovian dephasing influence on two-wave interaction in a resonant medium</title>. , 1997, 3239, 357.		2
68	Time-domain violation of the optical Bloch equations for solids. Physical Review B, 1993, 48, 6903-6907.	3.2	7
69	Nuclear magnetic dephasing in solids. Journal of Physics Condensed Matter, 1991, 3, 8683-8694.	1.8	6
70	Role of quasienergy levels in the processes of amplification of light by stimulated emission of radiation. Soviet Journal of Quantum Electronics, 1986, 16, 182-188.	0.1	1
71	Optical filter with electromagnetically induced transparency. , 0, , .		0