

# Roman Pisarev

## List of Publications by Year in descending order

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61  
papers

3,951  
citations

186265

28  
h-index

128289

60  
g-index

62  
all docs

62  
docs citations

62  
times ranked

3843  
citing authors

#	ARTICLE	IF	CITATIONS
1	Subterahertz and terahertz spin and lattice dynamics of the insulating ferromagnet PbMnBO <sub>4</sub> . Physical Review Research, 2022, 4, .	3.6	1
2	Zeeman and Davydov splitting of Frenkel excitons in the antiferromagnet CuB <sub>2</sub> O <sub>4</sub> . Physical Review B, 2022, 105, .	3.2	4
3	Laser-induced THz magnetism of antiferromagnetic CoF <sub>2</sub> . Journal of Physics Condensed Matter, 2022, 34, 225801.	1.8	8
4	Lattice dynamics and spontaneous magnetodielectric effect in ilmenite CoTiO <sub>3</sub> . Journal of Alloys and Compounds, 2021, 858, 157633.	5.5	16
5	Toroidal nonreciprocity of optical second harmonic generation. Physical Review B, 2021, 103, .	3.2	9
6	Incipient geometric lattice instability of cubic fluoroperovskites. Physical Review B, 2021, 104, .	3.2	11
7	Magnetic and antiferromagnetic nonreciprocity of light propagation in magnetoelectric CuB <sub>2</sub> O <sub>4</sub> . Physical Review B, 2021, 104, .	3.2	2
8	Terahertz light-driven coupling of antiferromagnetic spins to lattice. Science, 2021, 374, 1608-1611.	12.6	45
9	Resonant Pumping of $d-d$ Crystal Field Electronic Transitions as a Mechanism of Ultrafast Optical Control of the Exchange Interactions in Low-Dimensional Perovskites. Physical Review Letters, 2020, 125, 157201.	7.8	33
10	Exciton and exciton-magnon photoluminescence in the antiferromagnet $\text{CuB}_2\text{O}_4$ . Physical Review B, 2020, 102, .	3.2	7
11	Spontaneous Magnetodielectric Effect and Its Coupling to the Lattice Dynamics in Fluoroperovskites. Journal of Experimental and Theoretical Physics, 2020, 131, 189-200.	0.9	2
12	Incipient multiferroicity in $\text{Pnmp}$ fluoroperovskite. Physical Review B, 2020, 101, 104401.	3.2	12
13	Dynamic and topological mechanisms of the spontaneous magnetodielectric effect in the antiferromagnetic fluoroperovskites $\text{KMnF}_3$ and $\text{RbCoF}_3$ . Physical Review B, 2019, 100, .	3.2	12
14	Laser-driven quantum magnonics and terahertz dynamics of the order parameter in antiferromagnets. Physical Review B, 2019, 100, .	3.2	37
15	Unveiling hidden structural instabilities and magnetodielectric effect in manganese fluoroperovskites $\text{AMnF}_3$ . Physical Review B, 2018, 98, .	3.2	9
16	Third harmonic generation on exciton-polaritons in bulk semiconductors subject to a magnetic field. Physical Review B, 2018, 98, .	3.2	9
17	Exciton Spectroscopy of Semiconductors by the Method of Optical Harmonics Generation (Review). Physics of the Solid State, 2018, 60, 1471-1486.	0.6	17
18	Lattice and magnetic dynamics of a quasi-one-dimensional chain antiferromagnet PbFeBO <sub>4</sub> . Journal of Physics Condensed Matter, 2017, 29, 025808.	1.8	5

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19	<p>Lattice dynamics and a magnetic-structural phase transition in the nickel orthoborate <math>\text{Ni}_3\text{O}</math></p> <p>Physical Review B, 2015, 92, .</p>	3.2	14
20	<p>Macrospin dynamics in antiferromagnets triggered by sub-20 femtosecond injection of nanomagnons. Nature Communications, 2016, 7, 10645.</p>	12.8	91
21	<p>Terahertz magnetization dynamics induced by femtosecond resonant pumping of <math>\text{DyFeO}_3</math> in the multisublattice antiferromagnet</p> <p>Physical Review B, 2015, 92, .</p>	3.2	26
22	<p>Electric field effect on optical harmonic generation at the exciton resonances in GaAs. Physical Review B, 2015, 92, .</p>	3.2	23
23	<p>Antiferromagnetic Dichroism in a Complex Multisublattice Magnetoelectric <math>\text{Cu}_2\text{O}</math></p> <p>Physical Review Letters, 2015, 114, 247210.</p>	7.8	20
24	<p>Femtosecond Photo-Induced Phenomena in Multiferroic Hexagonal Manganite <math>\text{YMnO}_3</math>. Solid State Phenomena, 2015, 233-234, 149-152.</p>	0.3	0
25	<p>Ultrafast optical modification of exchange interactions in iron oxides. Nature Communications, 2015, 6, 8190.</p>	12.8	164
26	<p>Controlling coherent and incoherent spin dynamics by steering the photoinduced energy flow. Physical Review B, 2014, 89, .</p>	3.2	49
27	<p>Lattice dynamics of piezoelectric copper metaborate <math>\text{Cu}_2\text{O}</math></p> <p>Physical Review B, 2013, 88, .</p>	3.2	20
28	<p>Second-harmonic generation spectroscopy of excitons in ZnO. Physical Review B, 2013, 88, .</p>	3.2	58
29	<p>Ultrafast photoinduced linear and circular optical anisotropy in the multiferroic hexagonal manganite <math>\text{YMnO}_3</math>. Physical Review B, 2013, 88, .</p>	3.2	7
30	<p>Optical properties and electronic structure of multiferroic hexagonal orthoferrites <math>\text{R}_2\text{FeO}_3</math> (<math>\text{R} = \text{Ho, Er, Lu}</math>). Journal of Applied Physics, 2012, 111, .</p>	2.5	42
31	<p>Electronic transitions and genuine crystal-field parameters in copper metaborate <math>\text{Cu}_2\text{O}</math></p> <p>Physical Review B, 2011, 84, .</p>	3.2	35
32	<p>Novel mechanisms of optical harmonics generation in semiconductors. Physica Status Solidi (B): Basic Research, 2010, 247, 1498-1504.</p>	1.5	17
33	<p>Near-band-gap electronic structure of the tetragonal rare-earth cuprates <math>\text{R}_2\text{BiCu}_2\text{O}_7</math> the bismuth cuprate</p> <p>Physical Review B, 2010, 82, .</p>	3.2	23
34	<p>Optical spectroscopy of charge transfer transitions in multiferroic manganites, ferrites, and related insulators. Low Temperature Physics, 2010, 36, 489-510.</p>	0.6	40
35	<p>Spin-Induced Optical Second Harmonic Generation in the Centrosymmetric Magnetic Semiconductors <math>\text{EuTe}</math> and <math>\text{EuSe}</math>. Physical Review Letters, 2009, 103, 057203.</p>	7.8	45
36	<p>Charge transfer transitions in multiferroic <math>\text{BiFeO}_3</math> related ferrite insulators. Physical Review B, 2009, 79, .</p>	3.2	191

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37	Optical study of the electronic structure and magnetic ordering in a weak ferromagnet FeBO <sub>3</sub> . JETP Letters, 2008, 86, 712-717.	1.4	16
38	Impulsive excitation of coherent magnons and phonons by subpicosecond laser pulses in the weak ferromagnet $\text{FeBO}_3$ . Physical Review B, 2008, 78, .	3.2	92
39	Mixed-valent multiferroic $\text{TbMn}_2\text{O}_5$ . Physical Review B, 2008, 77, .	3.2	39
40	Spin and Orbital Quantization of Electronic States as Origins of Second Harmonic Generation in Semiconductors. Physical Review Letters, 2006, 96, 117211.	7.8	13
41	Orbital quantization of electronic states in a magnetic field as the origin of second-harmonic generation in diamagnetic semiconductors. Physical Review B, 2006, 74, .	3.2	21
42	Anomalous optical properties of the mixed-valent lithium cuprate $\text{LiCu}_2\text{O}_2$ . Physical Review B, 2006, 74, .	3.2	13
43	Magnetic-field-induced second-harmonic generation in the diluted magnetic semiconductors $\text{Cd}_{1-x}\text{Mn}_x\text{Te}$ . Physical Review B, 2006, 74, .	3.2	11
44	Magnetic-Field-Induced Second-Harmonic Generation in Semiconductor GaAs. Physical Review Letters, 2005, 94, 157404.	7.8	33
45	Linear and nonlinear optical spectroscopy of gadolinium iron borate $\text{GdFe}_3(\text{BO}_3)_4$ . JETP Letters, 2004, 80, 293-297.	1.4	34
46	Impact of Ferroelectric Ordering on Optical and Magnetic Properties of Hexagonal Manganites. Ferroelectrics, 2004, 303, 113-118.	0.6	2
47	Magnetic-Field Induced Second Harmonic Generation in $\text{Cu}_2\text{O}_4$ . Physical Review Letters, 2004, 93, 037204.	7.8	62
48	Electronic structure of hexagonal rare-earth manganites $\text{RMnO}_3$ . JETP Letters, 2003, 78, 143-147.	1.4	58
49	Spin-rotation phenomena and magnetic phase diagrams of hexagonal $\text{RMnO}_3$ . Journal of Applied Physics, 2003, 93, 8194-8196.	2.5	139
50	Magnetic phase diagram of $\text{Cu}_2\text{O}_4$ . Journal of Applied Physics, 2003, 93, 6960-6962.	2.5	13
51	Structure and Interaction of Antiferromagnetic Domain Walls in Hexagonal $\text{YMnO}_3$ . Physical Review Letters, 2003, 90, 177204.	7.8	95
52	Observation of coupled magnetic and electric domains. Nature, 2002, 419, 818-820.	27.8	1,395
53	Second harmonic generation in anisotropic magnetic films. Physical Review B, 2001, 63, .	3.2	52
54	Second Harmonic Generation in the Centrosymmetric Antiferromagnet NiO. Physical Review Letters, 2001, 87, 137202.	7.8	118

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55	Time-resolved nonlinear optical spectroscopy of Mn <sup>3+</sup> ions in rare-earth hexagonal manganites RMnO <sub>3</sub> (R=Sc, Y, Er). <i>Physical Review B</i> , 2001, 64, .	3.2	28
56	Determination of the Magnetic Symmetry of Hexagonal Manganites by Second Harmonic Generation. <i>Physical Review Letters</i> , 2000, 84, 5620-5623.	7.8	306
57	Broken symmetries and optical phenomena in crystals. <i>Ferroelectrics</i> , 1996, 183, 39-50.	0.6	6
58	Crystal optics of magnetoelectrics. <i>Ferroelectrics</i> , 1994, 162, 191-209.	0.6	37
59	Second Harmonic Generation and Magnetic-Dipole-Electric-Dipole Interference in Antiferromagnetic Cr <sub>2</sub> O <sub>3</sub> . <i>Physical Review Letters</i> , 1994, 73, 2127-2130.	7.8	197
60	Optical phenomena in BaMnF <sub>4</sub> near its phase-transition temperatures. <i>Physical Review B</i> , 1983, 28, 2677-2685.	3.2	37
61	Determination of T <sub>N</sub> for KNiF <sub>3</sub> through elastic, magneto-optical, and heat capacity measurements. <i>Applied Physics Letters</i> , 1972, 21, 161-162.	3.3	28