B P Gorshunov

List of Publications by Citations

92 papers	899 citations	15 h-index	26 g-index
104 ext. papers	1,083 ext. citations	2.7 avg, IF	3.5 L-index

#	Paper	IF	Citations
92	Terahertz BWO-Spectrosopy. *Journal of Infrared, Millimeter and Terahertz Waves*, **2005**, 26, 1217-1240		128
91	Intragap states in SmB6. *Physical Review B*, **2000**, 61, 9906-9909	3.3	57
90	Incipient ferroelectricity of water molecules confined to nano-channels of beryl. *Nature Communications*, **2016**, 7, 12842	17.4	48
89	Quantum Behavior of Water Molecules Confined to Nanocavities in Gemstones. *Journal of Physical Chemistry Letters*, **2013**, 4, 2015-20	6.4	40
88	Quantum spin liquids unveil the genuine Mott state. *Nature Materials*, **2018**, 17, 773-777	27	36
87	B-T phase diagram of CoCr2O4 in magnetic fields up to 14 T. *Physical Review B*, **2012**, 85,	3.3	33
86	Magnetic and dielectric response of cobalt-chromium spinel CoCr2O4 in the terahertz frequency range. *Physics of the Solid State*, **2012**, 54, 350-359	0.8	28
85	Methods of terahertz-subterahertz BWO spectroscopy of conducting materials. *Physics of the Solid State*, **2008**, 50, 2001-2012	0.8	28
84	Resonant techniques for studying the complex electrodynamic response of conducting solids in the millimeter and submillimeter wave spectral range. *Review of Scientific Instruments*, **1995**, 66, 2943-2953	1.7	28
83	Vibrational states of a water molecule in a nano-cavity of beryl crystal lattice. *Journal of Chemical Physics*, **2014**, 140, 224317	3.9	27
82	Nature of the low-temperature anomalies in the physical properties of the intermediate-valent compound SmB6. *Journal of Experimental and Theoretical Physics*, **1999**, 88, 533-537	1	25
81	Observation of an intersublattice exchange magnon in CoCr2O4 and analysis of magnetic ordering. *Physical Review B*, **2013**, 87,	3.3	23
80	Electronic specific heat of two-band layered superconductors: Analysis within the generalized two-band □model. *Physical Review B*, **2011**, 84,	3.3	16
79	Dynamics of the coherent ground state in intermediate-valent YbB12. *Physical Review B*, **2006**, 73,	3.3	15
78	Unique interplay between superconducting and ferromagnetic orders in EuRbFe4As4. *Physical Review B*, **2018**, 98,	3.3	15
77	Sub-lattice of Jahn-Teller centers in hexaferrite crystal. *Scientific Reports*, **2020**, 10, 7076	4.9	14
76	FTIR spectroscopy of D2O and HDO molecules in the c-axis channels of synthetic beryl. *American Mineralogist*, **2016**, 101, 175-180	2.9	13

75	Terahertz-infrared spectra of the rare-earth scandate DyScO3 single crystal. *Journal of Applied Physics*, **2013**, 114, 024102	2.5	13
74	Frequency-domain magnetic-resonance spectroscopic investigations of the magnetization dynamics in Mn12Ac single crystals. *Physical Review B*, **2009**, 79,	3.3	13
73	Observation of dynamic charge stripes in TmYbB at the metal-insulator transition. *Journal of Physics Condensed Matter*, **2019**, 31, 065604	1.8	13
72	Redox chemistry in the pigment eumelanin as a function of temperature using broadband dielectric spectroscopy.. *RSC Advances*, **2019**, 9, 3857-3867	3.7	12
71	Ferroelectricity in spinel solid solution Co0.8Ni0.2Cr2O4. *Physical Review B*, **2012**, 85,	3.3	12
70	Dielectric ordering of water molecules arranged in a dipolar lattice. *Nature Communications*, **2020**, 11, 3927	17.4	12
69	Vibrational states of nano-confined water molecules in beryl investigated by first-principles calculations and optical experiments. *Physical Chemistry Chemical Physics*, **2017**, 19, 30740-30748	3.6	11
68	Dielectric properties of semi-insulating Fe-doped InP in the terahertz spectral region. *Scientific Reports*, **2017**, 7, 7360	4.9	11
67	Rotational coherence of encapsulated ortho and para water in fullerene-C revealed by time-domain terahertz spectroscopy. *Scientific Reports*, **2020**, 10, 18329	4.9	11
66	Soft polar modes and phase states of Ca1 PbxTiO3 solid solutions. *Physics of the Solid State*, **2004**, 46, 927-941	0.8	10
65	Collective Infrared Excitation in LuB12 Cage-Glass. *JETP Letters*, **2018**, 107, 100-105	1.2	9
64	Low-Energy Excitations in Quantum Spin Liquids Identified by Optical Spectroscopy. *Physical Review Letters*, **2018**, 121, 056402	7.4	9
63	Observation of multiple superconducting gaps in the infrared reflectivity spectra of Ba(Fe0.9Co0.1)2As2. *JETP Letters*, **2012**, 94, 719-722	1.2	9
62	High-Frequency Dielectric Spectroscopy of Glass-Forming Liquids. *ACS Symposium Series*, **1997**, 168-180	0.4	9
61	Terahertz shielding properties of aero-GaN. *Semiconductor Science and Technology*, **2019**, 34, 12LT02	1.8	8
60	Dynamical studies of fully deuterated BCCD. *Ferroelectrics*, **1994**, 159, 97-102	0.6	8
59	Impedance spectroscopy of single bacterial nanofilament reveals water-mediated charge transfer. *PLoS ONE*, **2018**, 13, e0191289	3.7	7
58	THzIR spectroscopy of single H2O molecules confined in nanocage of beryl crystal lattice. *Phase Transitions*, **2014**, 87, 966-972	1.3	7

57	Observation of dielectric universalities in albumin, cytochrome C and Shewanella oneidensis MR-1 extracellular matrix. *Scientific Reports*, **2017**, 7, 15731	4.9	7
56	Polar phonons and specific features of the ferroelectric states in cadmium titanate. *Physics of the Solid State*, **2005**, 47, 547	0.8	7
55	Aero-GaO Nanomaterial Electromagnetically Transparent from Microwaves to Terahertz for Internet of Things Applications. *Nanomaterials*, **2020**, 10,	5.4	6
54	Nature of the low-energy excitations of a charge-ordered phase of La0.25Ca0.75MnO3 manganites. *JETP Letters*, **2010**, 91, 336-340	1.2	6
53	Anomalous millimeter-wave absorption in the superconducting phase of La2 SrxCuO4. *JETP Letters*, **1998**, 68, 432-436	1.2	6
52	Dielectric properties of nanometer-thick barium-strontium titanate films. *Technical Physics*, **2008**, 53, 1485-1489	0.5	6
51	Terahertz spectroscopy of AuFe spin glasses. *Journal of Experimental and Theoretical Physics*, **2006**, 103, 887-896	1	6
50	Incipient multiferroicity in Pnma fluoroperovskite NaMnF3. *Physical Review B*, **2020**, 101,	3.3	5
49	Dispersion relations of hybrid waves in dielectric media. *Physics of Wave Phenomena*, **2016**, 24, 87-95	1.2	5
48	Far-infrared dielectric response of Rb0.75(ND4)0.25D2PO4. *Ferroelectrics*, **1994**, 157, 227-232	0.6	5
47	Quantum Electric Dipole Lattice. *Journal of Infrared, Millimeter, and Terahertz Waves*, **2018**, 39, 799-815	2.2	4
46	Collective infrared excitation in rare-earth GdxLa1 B6 hexaborides. *Physical Review B*, **2019**, 100,	3.3	4
45	Lattice modes of the chirally pure and racemic phases of tyrosine crystals. *Journal of Experimental and Theoretical Physics*, **2017**, 124, 77-84	1	4
44	Polarization modes in the Ba2Mg2Fe12O22 multiferroic. *Physics of the Solid State*, **2011**, 53, 736-744	0.8	4
43	Absorption of terahertz radiation in Ge/Si(001) heterostructures with quantum dots. *JETP Letters*, **2010**, 92, 793-798	1.2	4
42	Low-frequency dynamic response of the bismuth strontium ferrite (Bi,Sr)FeO3 . *Physics of the Solid State*, **2009**, 51, 498-502	0.8	4
41	Dispersion of dielectric constants in bismuth strontium ferrite (Bi,Sr)FeO3 x Variable-valence perovskite-structure solid solution. *Physics of the Solid State*, **2007**, 49, 1652-1657	0.8	4
40	Doping evolution of the gap structure and spin-fluctuation pairing in Ba(Fe1 Cox)2As2 superconductors. *Physical Review B*, **2019**, 99,	3.3	3

39	Effect of radiation defects on the magnetotransport properties of Ba(Fe1 −x Co x As)2 high-temperature superconductor. *JETP Letters*, **2015**, 101, 247-250	1.2	3
38	Terahertz-infrared spectroscopy of Shewanella oneidensis MR-1 extracellular matrix. *Journal of Biological Physics*, **2018**, 44, 401-417	1.6	3
37	Bandlike electrical transport in Pr1−xCaxMnO3 manganites. *Physical Review B*, **2016**, 93,	3.3	3
36	Quantum behaviour of water molecule in gemstone: terahertz fingerprints. *Journal of Physics: Conference Series*, **2014**, 486, 012019	0.3	3
35	Theoretical analysis of two-gap superconductivity of magnesium diborades and iron pnictides in the generalized -model. *Journal of Experimental and Theoretical Physics*, **2012**, 115, 252-262	1	3
34	Infrared spectroscopy of the intermediate-valence semiconductor YbB12. *Journal of Experimental and Theoretical Physics*, **2006**, 103, 897-903	1	3
33	Distribution of D2O Molecules of First and Second Types in Hydrothermally Grown Beryl Crystals. *Crystal Growth and Design*, **2021**, 21, 2283-2291	3.5	3
32	Laser spectroscopy and dynamics of crystal lattices of chirally pure and racemic phases of amino acids. *Crystallography Reports*, **2017**, 62, 290-295	0.6	2
31	Microwave response of interacting oxide two-dimensional electron systems. *Physical Review B*, **2020**, 102,	3.3	2
30	Dynamic spectral response of solid solutions of the bismuth-strontium ferrite Bi1 −x Sr x FeO3 − in the frequency range 0.3200 THz. *Physics of the Solid State*, **2013**, 55, 1417-1430	0.8	2
29	Two-band BCS mechanism of superconductivity in a Ba(Fe0.9Co0.1)2As2 high-temperature superconductor. *JETP Letters*, **2011**, 93, 736-742	1.2	2
28	Transmission spectra of epitaxial layers of Pb1 −x Eu x Te (0 x 0.37) solid solutions in the frequency range 74000 cm1. *Physics of the Solid State*, **2011**, 53, 810-814	0.8	2
27	Kondo scattering and properties of TmSe in the infrared region. *Journal of Experimental and Theoretical Physics*, **2005**, 101, 913-918	1	2
26	Lead-substituted barium hexaferrite for tunable terahertz optoelectronics. *NPG Asia Materials*, **2021**, 13,	10.3	2
25	Boron 10B11B Isotope Substitution as a Probe of the Mechanism Responsible for the Record Thermionic Emission in LaB6 with the Jahn–Teller Instability1. *JETP Letters*, **2019**, 110, 79-84	1.2	1
24	Subterahertz electrodynamics of (TMTSF)2X (X = ClO4, PF6) salts. *Journal of Experimental and Theoretical Physics*, **2013**, 116, 460-466	1	1
23	Submillimeter ESR spectra of Fe2+ ions in synthetic and natural beryl crystals. *Physics of the Solid State*, **2017**, 59, 1600-1606	0.8	1
22	Terahertz spectroscopy of low-energy excitations in Eu0.42Sr0.58MnO3. *Physical Review B*, **2017**, 96,	3.3	1

21	Observation of a Bulk Nodal-Gap in Overdoped Y(_{0.9})Ca(_{0.1})Ba(_{2})Cu(_{3})O(_{7-delta }) Thin Films. *Journal of Low Temperature Physics*, **2015**, 179, 108-112	1.3	1
20	Nature of low-energy excitations in La1.87Sr0.13CuO4 superconducting cuprate. *JETP Letters*, **2012**, 94, 708-713	1.2	1
19	Localization of conduction electrons in the ferromagnetic clusters AuFe. *JETP Letters*, **2009**, 89, 466-470	1.2	1
18	IR spectroscopy of diamondlike silicon-carbon films. *Technical Physics*, **2008**, 53, 641-645	0.5	1
17	Infrared and submillimeter spectroscopy of grooved silicon structures. *Semiconductors*, **2006**, 40, 834-838	0.7	1
16	Subterahertz BWO spectroscopy: methods and devices		1
15	Grain-Size-Induced Collapse of Variable Range Hopping and Promotion of Ferromagnetism in Manganite La0.5Ca0.5MnO3. *Crystals*, **2022**, 12, 724	2.3	1
14	Electrodynamic properties of nanoporous silicon in the range from terahertz to infrared frequencies. *Physics of the Solid State*, **2007**, 49, 2242-2250	0.8	0
13	Localization of Small Impurities of Water and Carbon Dioxide in Channels of the Structure of Natural Cordierite. *Journal of Surface Investigation*, **2020**, 14, 718-721	0.5	0
12	Nature of Local Symmetry Violations of Ions in the Magnetic Subsystem of Magnetoplumbite Crystal, According to Raman Scattering Spectroscopy Data. *Bulletin of the Russian Academy of Sciences: Physics*, **2018**, 82, 266-268	0.4	
11	Temperature Behavior of the Rotational Order Parameters in a La0.25Ca0.75MnO3 Solid Solution. *Bulletin of the Russian Academy of Sciences: Physics*, **2018**, 82, 335-337	0.4	
10	Effect of nonmagnetic defects on superconducting and transport properties of Ba(Fe1⊠ Co x As)2 high-T c superconductors. *Journal of Experimental and Theoretical Physics*, **2015**, 121, 853-859	1	
9	Study of the structure of a superconducting state of Co-doped BaFe2As2 multiband compounds. *JETP Letters*, **2014**, 100, 328-335	1.2	
8	Terahertz spectroscopy of quantum phase transitions and the temperature-frequency scaling. *Physics of the Solid State*, **2011**, 53, 830-833	0.8	
7	RKKY interaction and a pseudo-gap in terahertz conductivity spectra of the AuFe spin glass. *Physics of Metals and Metallography*, **2008**, 106, 247-252	1.2	
6	BWO-Characterization of Materials and Devices at Frequencies 100-1000 GHz. *Materials Research Society Symposia Proceedings*, **2000**, 631, 291		
5	Evidence of charge-density-wave fluctuations in the low frequency optical conductivity of K0.3MoO3 and (TaSe4)2I. *Ferroelectrics*, **1996**, 176, 309-319	0.6	
4	New Ground State of Dipolar Lattice of D2O@Beryl. *IFMBE Proceedings*, **2022**, 284-290	0.2	

List of Publications

3	Aqueous Cations and Excess of Translational Vibrations as the Evidences of Charge Transport in Biomaterials. *IFMBE Proceedings*, **2022**, 595-601	0.2
2	Accurate Crystal Structure Refinement of Natrolite and Localization of Free Water. *Crystallography Reports*, **2020**, 65, 862-870	0.6
1	Infrared fingerprints of water collective dynamics indicate proton transport in biological systems.. *Physical Review E*, **2022**, 105, 044409	2.4