

Petr S Bednyakov

List of Publications by Year in descending order

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papers

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1163117

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all docs

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docs citations

30
times ranked

1235
citing authors

#	ARTICLE	IF	CITATIONS
1	Free-electron gas at charged domain walls in insulating BaTiO ₃ . Nature Communications, 2013, 4, 1808.	12.8	367
2	Physics and applications of charged domain walls. Npj Computational Materials, 2018, 4, .	8.7	128
3	Formation of charged ferroelectric domain walls with controlled periodicity. Scientific Reports, 2015, 5, 15819.	3.3	83
4	Dielectric ordering of water molecules arranged in a dipolar lattice. Nature Communications, 2020, 11, 3927.	12.8	33
5	Charged Domain Walls in Ferroelectrics. Springer Series in Materials Science, 2016, , 103-138.	0.6	21
6	Free-carrier-compensated charged domain walls produced with superbandgap illumination in insulating ferroelectrics. Advanced Materials, 2016, 28, 9498-9503.	21.0	20
7	Fast polarization mechanisms in the uniaxial tungsten-bronze relaxor strontium barium niobate SBN-81. Scientific Reports, 2017, 7, 18034.	3.3	13
8	Black aluminum-coated Pt/Pb(Zr _{0.56} Ti _{0.44})O ₃ /Pt thin film structures for pyroelectric energy harvesting from a light source. Journal of Applied Physics, 2019, 126, .	2.5	13
9	Investigation of the dielectric properties of BaTiO ₃ single crystals of different qualities by the thermal noise method. Physics of the Solid State, 2011, 53, 350-357.	0.6	8
10	Unusual ferroelectric and magnetic phases in multiferroic $\langle \text{mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"} \langle \text{mml:mrow} \langle \text{mml:mn} \rangle 2 \langle \text{mml:mn} \rangle \langle \text{mml:msub} \langle \text{mml:mrow} \langle \text{mml:mi} \rangle H \langle \text{mml:mi} \rangle \langle \text{mml:msup} \langle \text{mml:mn} \rangle 2 \langle \text{mml:msup} \rangle \rangle \rangle \rangle$ ceramics. Physical Review B, 2017, 95, .	2.5	8
11	Observation of dielectric universalities in albumin, cytochrome C and Shewanella oneidensis MR-1 extracellular matrix. Scientific Reports, 2017, 7, 15731.	3.3	8
12	Lead-substituted barium hexaferrite for tunable terahertz optoelectronics. NPG Asia Materials, 2021, 13, .	7.9	7
13	Broadband dielectric spectroscopy of standard and core-shell BaTiO ₃ -NiO ceramic composites compared to the BaTiO ₃ ceramics. Ferroelectrics, 2016, 500, 1-19.	0.6	6
14	Electric-field influence on the neutron diffuse scattering near the ferroelectric transition of Sr _{0.61} Ba _{0.39} Nb ₂ O ₆ . Phase Transitions, 2016, 89, 808-815.	1.3	6
15	Dielectric and Piezoelectric Properties of K(Ta _{0.51} Nb _{0.49})O ₃ Single Crystal. Ferroelectrics, 2013, 447, 108-116.	0.6	4
16	Dielectric and polarization studies of magnetoelectric coupling in non-relaxor Pb(Fe _{1/2} Ta _{1/2})O ₃ multiferroic ceramics. Ferroelectrics, 2017, 509, 80-91.	0.6	4
17	H ₂ O Molecules Hosted By A Crystalline Matrix – “New State Of Water?”. EPJ Web of Conferences, 2018, 195, 06018.	0.3	4
18	Acoustic phonons in unfilled tetragonal tungsten-bronze crystals. Phase Transitions, 2018, 91, 976-983.	1.3	4

#	ARTICLE	IF	CITATIONS
19	Nanoscale Conductive Sheets in Ferroelectric BaTiO ₃ : Large Hall Electron Mobilities at Head-to-Head Domain Walls. ACS Applied Nano Materials, 0, , .	5.0	3
20	An automated setup for studying thin ferroelectric films by the thermal-noise method. Instruments and Experimental Techniques, 2010, 53, 737-742.	0.5	2
21	Investigation of ferroelectric materials by the thermal noise method: Advantages and limitations. Ferroelectrics, 2016, 500, 203-217.	0.6	2
22	Extrinsic permittivity in domain engineered rhombohedral BaTiO ₃ monocrystal. Journal of Applied Physics, 2018, 124, 024101.	2.5	1
23	Hertz-To-Terahertz Dielectric Response of Nanoconfined Water Molecules. Proceedings (mdpi), 2019, 26, .	0.2	1
24	Broadband dielectric spectroscopy of La _{0.65} Sr _{0.35} MnO ₃ @TiO ₂ core-shell nanocomposites. Journal of Physics Condensed Matter, 2020, 32, 415701.	1.8	1
25	Investigation of the dielectric properties of polymer composite films with a ferroelectric filler using the bridge and thermal noise methods. Moscow University Physics Bulletin (English Translation of) Tj ETQq1 1 0.784314 rgBT0/Overlook		
26	Dielectric properties of K(Ta _{0.53} Nb _{0.47} O ₃) ₃ single crystal. , 2012, , .		0
27	Correlation between domain structure and piezoelectric properties: Experimental study of (111) _c oriented BaTiO ₃ single crystal. , 2014, , .		0
28	Hertz-to-terahertz dielectric response of nanoconfined water molecules. , 2019, , .		0
29	Broad-Band Spectroscopy of Nanoconfined Water Molecules. IFMBE Proceedings, 2020, , 7-11.	0.3	0
30	Real and imaginary permittivity measured by thermal noise dielectric spectroscopy. Journal of Applied Physics, 2022, 131, 214101.	2.5	0