

M I Bichurin

List of Publications by Year in descending order

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138
all docs

138
docs citations

138
times ranked

4165
citing authors

#	ARTICLE	IF	CITATIONS
1	Multiferroic magnetoelectric composites: Historical perspective, status, and future directions. Journal of Applied Physics, 2008, 103, .	1.1	3,224
2	Theory of low-frequency magnetoelectric coupling in magnetostrictive-piezoelectric bilayers. Physical Review B, 2003, 68, .	1.1	451
3	Resonance magnetoelectric effects in layered magnetostrictive-piezoelectric composites. Physical Review B, 2003, 68, .	1.1	391
4	Theory of low-frequency magnetoelectric effects in ferromagnetic-ferroelectric layered composites. Journal of Applied Physics, 2002, 92, 7681-7683.	1.1	215
5	Microwave magnetoelectric effects in single crystal bilayers of yttrium iron garnet and lead magnesium niobate-lead titanate. Physical Review B, 2004, 70, .	1.1	181
6	Theory of magnetoelectric effects at microwave frequencies in a piezoelectric/magnetostrictive multilayer composite. Physical Review B, 2001, 64, .	1.1	135
7	Magnetic and magnetoelectric susceptibilities of a ferroelectric/ferromagnetic composite at microwave frequencies. Physical Review B, 2002, 66, .	1.1	131
8	Magnetoelectric properties of LiCoPO ₄ and LiNiPO ₄ . Physical Review B, 2000, 62, 12247-12253.	1.1	130
9	Resonant magnetoelectric coupling in trilayers of ferromagnetic alloys and piezoelectric lead zirconate titanate: The influence of bias magnetic field. Physical Review B, 2005, 71, .	1.1	109
10	Theory of magnetoelectric effects in ferrite piezoelectric nanocomposites. Physical Review B, 2007, 75, .	1.1	105
11	Theory of magnetoelectric effect for bending modes in magnetostrictive-piezoelectric bilayers. Journal of Applied Physics, 2009, 105, .	1.1	105
12	Magnetoelectric microwave phase shifter. Applied Physics Letters, 2006, 88, 183507.	1.5	98
13	Magnetoelectric gyration effect in Tb _{1-x} Dy _x Fe ₂ •Pb(Zr,Ti)O ₃ laminated composites at the electromechanical resonance. Applied Physics Letters, 2006, 89, 243512.	1.5	84
14	Theory of magnetoelectric effects at magnetoacoustic resonance in single-crystal ferromagnetic-ferroelectric heterostructures. Physical Review B, 2005, 72, .	1.1	79
15	Magnetoelectric effects in porous ferromagnetic-piezoelectric bulk composites: Experiment and theory. Physical Review B, 2007, 75, .	1.1	78
16	Frequency and field dependence of magnetoelectric interactions in layered ferromagnetic transition metal-piezoelectric lead zirconate titanate. Applied Physics Letters, 2005, 87, 222507.	1.5	71
17	Magnetoelectric interactions in ferromagnetic-piezoelectric layered structures: Phenomena and devices. Journal of Electroceramics, 2007, 19, 243-250.	0.8	69
18	A quasi(unidirectional) Tellegen gyrator. Journal of Applied Physics, 2006, 100, 124509.	1.1	67

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19	Large magnetoelectric susceptibility: The fundamental property of piezoelectric and magnetostrictive laminated composites. <i>Journal of Applied Physics</i> , 2007, 101, 014102.	1.1	54
20	Present status of theoretical modeling the magnetoelectric effect in magnetostrictive-piezoelectric nanostructures. Part I: Low frequency and electromechanical resonance ranges. <i>Journal of Applied Physics</i> , 2010, 107, 053904.	1.1	54
21	Magnetoelectric Interactions in Lead-Based and Lead-Free Composites. <i>Materials</i> , 2011, 4, 651-702.	1.3	52
22	Investigation of magnetoelectric interaction in composite. <i>Ferroelectrics</i> , 1997, 204, 289-297.	0.3	50
23	Magnetoelectric Current Sensors. <i>Sensors</i> , 2017, 17, 1271.	2.1	50
24	Electromechanical resonance in magnetoelectric layered structures. <i>Physics of the Solid State</i> , 2010, 52, 2116-2122.	0.2	48
25	Microwave magnetoelectric effects in ferrite-piezoelectric composites and dual electric and magnetic field tunable filters. <i>Journal of Electroceramics</i> , 2010, 24, 5-9.	0.8	47
26	Magnetoelectric microwave phase shifters. <i>Ferroelectrics</i> , 1997, 204, 311-319.	0.3	43
27	Giant magnetoelectric effect in composite materials in the region of electromechanical resonance. <i>Technical Physics Letters</i> , 2004, 30, 6-8.	0.2	43
28	Multiferroic Magnetoelectric Composites and Their Applications. <i>Advances in Condensed Matter Physics</i> , 2012, 2012, 1-3.	0.4	41
29	Magnetoelectric Sensor of Magnetic Field. <i>Ferroelectrics</i> , 2002, 280, 199-202.	0.3	39
30	Modeling of Magnetoelectric Effects in Composites. <i>Springer Series in Materials Science</i> , 2014, , .	0.4	35
31	Modeling of Magnetoelectric Effect in Ferromagnetic/Piezoelectric Multilayer Composites. <i>Ferroelectrics</i> , 2002, 280, 165-175.	0.3	34
32	Resonant amplification of the magnetoelectric effect in ferrite-piezoelectric composites. <i>Physics of the Solid State</i> , 2004, 46, 1674-1680.	0.2	34
33	Magnetoelectric gyrator. <i>European Physical Journal B</i> , 2009, 71, 383-385.	0.6	34
34	Magnetoelectric Magnetic Field Sensors: A Review. <i>Sensors</i> , 2021, 21, 6232.	2.1	33
35	Magnetoelectric effect at thickness shear mode in ferrite-piezoelectric bilayer. <i>Applied Physics Letters</i> , 2013, 103, .	1.5	32
36	Magnetoelectric interactions in bilayers of yttrium iron garnet and lead magnesium niobate-lead titanate: Evidence for strong coupling in single crystals and epitaxial films. <i>Applied Physics Letters</i> , 2005, 86, 222506.	1.5	30

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37	Microwave Magnetoelectric Devices. <i>Advances in Condensed Matter Physics</i> , 2012, 2012, 1-10.	0.4	30
38	Influence of mechanical boundary conditions and microstructural features on magnetoelectric behavior in a three-phase multiferroic particulate composite. <i>Physical Review B</i> , 2004, 70, .	1.1	29
39	Magnetoelectric effect in magnetostriction-piezoelectric multiferroics. <i>Low Temperature Physics</i> , 2010, 36, 544-549.	0.2	29
40	Modeling of Magnetoelectric Interaction in Magnetostrictive-Piezoelectric Composites. <i>Advances in Condensed Matter Physics</i> , 2012, 2012, 1-12.	0.4	29
41	Composite magnetoelectrics: Their microwave properties. <i>Ferroelectrics</i> , 1994, 162, 33-35.	0.3	26
42	Microwave and MM-wave magnetoelectric interactions in ferrite-ferroelectric bilayers. <i>European Physical Journal B</i> , 2009, 71, 371-375.	0.6	26
43	Flexural deformation and bending mode of magnetoelectric nanobilayer. <i>Journal of Applied Physics</i> , 2009, 106, .	1.1	26
44	Present status of theoretical modeling the magnetoelectric effect in magnetostrictive-piezoelectric nanostructures. Part II: Magnetic and magnetoacoustic resonance ranges. <i>Journal of Applied Physics</i> , 2010, 107, .	1.1	25
45	Ultrasensitive flexible magnetoelectric sensor. <i>APL Materials</i> , 2021, 9, .	2.2	25
46	Magnetoelectric effect in hybrid magnetostrictive-piezoelectric composites in the electromechanical resonance region. <i>Journal of Applied Physics</i> , 2005, 97, 113910.	1.1	24
47	Demagnetizing factors for two parallel ferromagnetic plates and their applications to magnetoelectric laminated sensors. <i>Journal of Applied Physics</i> , 2011, 109, .	1.1	24
48	Controlling the Goos-Hänchen shift with external electric and magnetic fields in an electro-optic/magneto-electric heterostructure. <i>Journal of Applied Physics</i> , 2016, 119, .	1.1	23
49	Microwave magnetoelectric effects in bilayers of piezoelectrics and ferrites with cubic magnetocrystalline anisotropy. <i>Journal of Applied Physics</i> , 2010, 108, 063923.	1.1	20
50	Magnetoelectric properties of LiCoPO ₄ : microscopic theory. <i>Physica B: Condensed Matter</i> , 1999, 271, 304-308.	1.3	19
51	Magnetoelectric Microwave Devices. <i>Ferroelectrics</i> , 2002, 280, 211-218.	0.3	19
52	Electromechanical resonance in ferrite-piezoelectric nanopillars, nanowires, nanobilayers, and magnetoelectric interactions. <i>Journal of Applied Physics</i> , 2010, 107, .	1.1	19
53	FERROMAGNETIC-FERROELECTRIC LAYERED STRUCTURES: MAGNETOELECTRIC INTERACTIONS AND DEVICES. <i>Integrated Ferroelectrics</i> , 2005, 71, 45-57.	0.3	18
54	Tunable magnetoelectric response of dimensionally gradient laminate composites. <i>Applied Physics Letters</i> , 2012, 100, .	1.5	18

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55	Controlling optical beam shifts upon reflection from a magneto-electric liquid-crystal-based system for applications to chemical vapor sensing. <i>Applied Physics B: Lasers and Optics</i> , 2017, 123, 1.	1.1	16
56	Microwave magnetoelectric effects in bilayer of ferrite and piezoelectric. <i>EPJ Applied Physics</i> , 2009, 45, 30801.	0.3	14
57	Microscopic mechanism of magnetoelectric effect in microwave range. <i>Ferroelectrics</i> , 1997, 204, 225-232.	0.3	13
58	Predicting Magnetoelectric Coupling in Layered and Graded Composites. <i>Sensors</i> , 2017, 17, 1651.	2.1	13
59	Principle of tunable chemical vapor detection exploiting the angular Goos-Hänchen shift in a magneto-electric liquid-crystal-based system. <i>Journal of Optics (United Kingdom)</i> , 2017, 19, 095802.	1.0	13
60	Magnetoelectric Effect in the Bidomain Lithium Niobate/Nickel/Metglas Gradient Structure. <i>Physica Status Solidi (B): Basic Research</i> , 2020, 257, 1900398.	0.7	12
61	Self-Biased Bidomain LiNbO ₃ /Ni/Metglas Magnetoelectric Current Sensor. <i>Sensors</i> , 2020, 20, 7142.	2.1	12
62	Electromechanical Resonance in Magnetoelectric Composites: Direct and Inverse Effect. <i>Solid State Phenomena</i> , 2012, 189, 129-143.	0.3	11
63	Modeling of Magnetoelectric Effects in Ferromagnetic / Piezoelectric Bulk Composites. , 2004, , 65-70.		11
64	Optical absorption of Co ²⁺ in LiCoPO ₄ . <i>Physica B: Condensed Matter</i> , 1999, 270, 82-87.	1.3	10
65	Metal-ceramic laminate composite magnetoelectric gradiometer. <i>Review of Scientific Instruments</i> , 2010, 81, 033906.	0.6	10
66	Thermal dependence of the lateral shift of a light beam reflected from a liquid crystal cell deposited on a magnetic film. <i>Journal of Applied Physics</i> , 2018, 123, .	1.1	9
67	Resonance Magnetoelectric Effect in Multilayer Composites. <i>Ferroelectrics</i> , 2002, 280, 187-197.	0.3	8
68	Physics of Composites for Low-Frequency Magnetoelectric Devices. <i>Sensors</i> , 2022, 22, 4818.	2.1	8
69	Magnetoacoustic resonance in tangentially magnetized ferrite-piezoelectric bilayers. <i>Technical Physics Letters</i> , 2006, 32, 1021-1023.	0.2	7
70	Magnetoelectric gradiometer. <i>European Physical Journal B</i> , 2009, 71, 387-392.	0.6	7
71	Magnetoelectric Laminate Composite: Effect of Piezoelectric Layer on Magnetoelectric Properties. <i>Ferroelectrics</i> , 2014, 473, 110-128.	0.3	7
72	A Magnetoelectric Automotive Crankshaft Position Sensor. <i>Sensors</i> , 2020, 20, 5494.	2.1	7

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73	Influence of external electric field on magnetic resonance frequency in magnetic ferroelectrics. <i>Ferroelectrics</i> , 1995, 167, 147-150.	0.3	6
74	The crankshaft position sensor based on magnetoelectric materials. , 2016, , .		6
75	Magnetoelectrics in microwave range. <i>Ferroelectrics</i> , 1994, 161, 53-57.	0.3	5
76	Modeling of the magnetoelectric effect in finite-size three-layer laminates under closed-circuit conditions. <i>Journal of Applied Physics</i> , 2010, 107, 09D914.	1.1	5
77	Bending Modes and Magnetoelectric Effects in Asymmetric Ferromagnetic-Ferroelectric Structure. <i>Solid State Phenomena</i> , 0, 190, 281-284.	0.3	5
78	Current sensor based on magnetoelectric effect. , 2014, , .		5
79	Magnetoelectric energy harvester. , 2015, , 161-207.		5
80	Two-range magnetoelectric sensor. <i>AIP Advances</i> , 2017, 7, .	0.6	5
81	Electric field induced broadening of magnetic resonance line in ferrite/piezoelectric bilayer. <i>Journal of Applied Physics</i> , 2017, 121, 224103.	1.1	5
82	Electrodynamic Analysis of Strip Line on Magnetoelectric Substrate. <i>Ferroelectrics</i> , 2002, 280, 203-209.	0.3	4
83	Three-dimensional left-handed material lens. <i>Applied Physics Letters</i> , 2007, 91, .	1.5	4
84	A magnetic field controlled negative index microwave lens. <i>Microwave and Optical Technology Letters</i> , 2008, 50, 2804-2807.	0.9	4
85	Nomograph method for predicting magnetoelectric coupling. <i>Journal of Magnetism and Magnetic Materials</i> , 2016, 412, 1-6.	1.0	4
86	Enhanced Magnetoelectric Coupling in Layered Structure of Piezoelectric Bimorph and Metallic Alloy. <i>Journal of Electronic Materials</i> , 2016, 45, 4197-4201.	1.0	4
87	Modelling of magneto-acoustic resonance in ferrite piezoelectric bilayers. <i>Journal Physics D: Applied Physics</i> , 2009, 42, 215001.	1.3	3
88	Multimodal energy harvesting system. <i>Proceedings of SPIE</i> , 2011, , .	0.8	3
89	Magnetoelectric Interaction in Magnetically Ordered Materials (Review). , 2011, , .		3
90	Low-Frequency Magnetoelectric Effects in Magnetostrictive-Piezoelectric Composites. <i>Springer Series in Materials Science</i> , 2014, , 19-44.	0.4	3

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91	Hysteresis curves for ferroelectric crystals in a varying external field. Relaxation model. Technical Physics, 2014, 59, 1158-1162.	0.2	3
92	Magnetolectric Effects in Ferromagnetic and Piezoelectric Multilayer Composites. , 2004, , 35-55.		3
93	Electric-Field-Induced Shift of the Magnetic Resonance Line in Ferriteâ€“Piezoelectric Composites. Technical Physics Letters, 2005, 31, 673.	0.2	2
94	Modeling the Hysteretic Behavior of Textured and Random Ferroelectric Ceramics. Solid State Phenomena, 2013, 202, 127-141.	0.3	2
95	Simulation of hysteresis curves of crystalline ferroelectrics using the controlling electric field parameters. Technical Physics, 2015, 60, 1803-1808.	0.2	2
96	Magnetolectric Effects in Ferromagnetic Metal-Piezoelectric Oxide Layered Structures. , 2004, , 57-63.		2
97	Left-Handed Materials Based on Ferromagnetic â€” Ferroelectric Composites. , 2004, , 81-86.		2
98	Maxwell-Wagner Relaxation in ME Composites. Springer Series in Materials Science, 2014, , 45-56.	0.4	2
99	Short Introduction to the Proceedings of MEIPIC-4. Ferroelectrics, 2002, 279, xvii-xx.	0.3	2
100	Hybrid magnetolectric converter. Journal of Physics: Conference Series, 2020, 1658, 012038.	0.3	2
101	Application of magnetolectric sensors in biomedicine. Journal of Physics: Conference Series, 2021, 2052, 012022.	0.3	2
102	Short Introduction to the Proceedings of MEIPIC-4. Ferroelectrics, 2002, 279, 17-20.	0.3	1
103	Microwave Magneto-Electric Interactions in Multiferroics. Materials Research Society Symposia Proceedings, 2006, 966, 1.	0.1	1
104	Magnetolectric Interaction in Solids. Springer Series in Materials Science, 2014, , 1-17.	0.4	1
105	Magnetic Field Tunable Electromechanical Resonance Properties of Magnetolectric Bilayer. Solid State Phenomena, 0, 233-234, 349-352.	0.3	1
106	Dual tunable magnetolectric resonator in a slot line for Microwave Applications. , 2016, , .		1
107	Design of Metglas/polyvinylidene fluoride magnetolectric laminates for energy harvesting from power cords. , 2016, , .		1
108	Torsion Mode of the Magneto-Electric Effect in a Metglas/GaAs Layered Structure. IEEE Magnetics Letters, 2022, 13, 1-4.	0.6	1

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109	Short Introduction to the Proceedings of MEIPIC-4. Ferroelectrics, 2002, 280, 23-26.	0.3	0
110	Ferrite-Piezoelectric Composites for Microwave Devices. , 2006, , .		0
111	Magnetolectric Tunable Microwave Band-Pass Filter. , 2007, , .		0
112	Electrically-tunable MM-wave waveguide phase shifter based on hexaferrite-piezoelectric layered structure. , 2010, , .		0
113	Structure â€“ Property Relationships of Near-Eutectic BaTiO3 â€“ CoFe2O4 Magnetolectric Composites. , 0, , .		0
114	Bending modes of two-phase magnetolectric structure. , 2014, , .		0
115	Magnetolectric Effect in Ferrite-Piezoelectric Dual-Phase Structure. Solid State Phenomena, 0, 233-234, 353-356.	0.3	0
116	Generation of microwave oscillations in a current-driven magnetic nanocontact with ferroelectric and multiferroic junction. , 2016, , .		0
117	Modelling of multiferroic microwave patch antenna. , 2016, , .		0
118	Magnetolectric Alternator. Energy Harvesting and Systems, 2016, 3, 173-180.	1.7	0
119	Magnetolectric effects in compositionally-stepped multilayers of lead-free piezoelectric and magnetostrictive components. , 2017, , .		0
120	Exploiting the Goos-HÃnchen and Imbert-Fedorov effects in a magneto-electric liquid-crystal-based system for applications to tunable chemical vapor detection. , 2017, , .		0
121	Voltage-Tunable vapour detector using optical beam shifts in a magneto-electric multilayered structure. , 2017, , .		0
122	Magnetolectric effects at electromechanical resonance in laminates of lead-free piezoelectric bimorph and magnetostrictive component. IOP Conference Series: Materials Science and Engineering, 2018, 441, 012038.	0.3	0
123	Crankshaft position magnetolectric sensor for controller area network bus. , 2019, , .		0
124	Statistical thermodynamics of uniaxial ferroelectric: exactly solved model. Ferroelectrics, 2019, 543, 54-66.	0.3	0
125	Magnetic resonance in layered ferrite-piezoelectric structures. Ferroelectrics, 2019, 551, 1-4.	0.3	0
126	Modeling and Development of Position Sensors Based on Multiferroic Layered Structures. , 2020, , .		0

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127	Magnetoelectric Structure for Energy Harvesting. , 2021, , .		0
128	Electromechanical Resonance in Multilayer and Bulk Magnetoelectric Composites. , 2004, , 71-80.		0
129	Magnetoelectric Effect in Electromechanical Resonance Region. Springer Series in Materials Science, 2014, , 57-73.	0.4	0
130	Magnetic Resonance in Composites. Springer Series in Materials Science, 2014, , 75-92.	0.4	0
131	ME Effect at Magnetoacoustic Resonance Range. Springer Series in Materials Science, 2014, , 93-104.	0.4	0
132	The study of the Metglas/GaAs/Metglas magnetostrictive-piezo-semiconductive structure for practical application. Journal of Physics: Conference Series, 2021, 2052, 012032.	0.3	0