Konstantin A Vorotilov

List of Publications by Year
in descending order

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129	1,290	430874	501196
papers	citations	18 h-index	28 g-index

130	130	130	812
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Microstructure analysis of porous lead zirconateâ€“titanate films. Journal of the American Ceramic Society, 2022, 105, 639.	3.8	5
2	Effect of surface hydrophobisation on the properties of a microporous phenylene-bridged organosilicate film. Journal of Non-Crystalline Solids, 2022, 576, 121258.	3.1	2
3	Optical characteristics of LaNiO3 thin films in the terahertzâ€“infrared frequency range. Journal of Applied Physics, 2022, 131, 025305.	2.5	3
4	Methylated porous low-k materials: critical properties and plasma resistance. , 2022, , .		0
5	Charge Transport Mechanism in a PECVD Deposited Low-k SiOCH Dielectric. Journal of Electronic Materials, 2022, 51, 2521-2527.	2.2	1
6	Effect of H atoms and UV wideband radiation on cured low-k OSG films. Journal Physics D: Applied Physics, 2022, 55, 255206.	2.8	1
7	In-Situ Imaging of a Light-Induced Modification Process in Organo-Silica Films via Time-Domain Brillouin Scattering. Nanomaterials, 2022, 12, 1600.	4.1	3
8	Effect of metal electrodes on the steady-state leakage current in PZT thin film capacitors. Journal of Electroceramics, 2022, 49, 15-21.	2.0	2
9	Modification of Porous Ultralow-k Film by Vacuum Ultraviolet Emission. ACS Applied Electronic Materials, 2022, 4, 2760-2776.	4.3	3
10	Charge Transport Mechanism and Trap Origin in Methylâ€Terminated Organosilicate Glass Lowâ€ºk Dielectrics. Physica Status Solidi (A) Applications and Materials Science, 2021, 218, 2000654.	1.8	2
11	Once again on the hysteresis loop: leakage current consideration. Ferroelectrics, 2021, 573, 1-8.	0.6	1
12	Dielectric contribution of the IR absorption bands of porous organosilicate glass thin films on a platinum sublayer. Journal Physics D: Applied Physics, 2021, 54, 215304.	2.8	5
13	Chemical and phase inhomogeneity in LaNiO₃ electrodes prepared by chemical solution deposition. Ferroelectrics, 2021, 574, 29-36.	0.6	2
14	Effect of Substrate on PZT Films Properties. , 2021, , .		0
15	Mechanical Properties of Low-k Dielectric Deposited on Subtractively Patterned Cu Lines for Advanced Interconnects. , 2021, , .		0
16	Comparison of Characteristics of Thin PZT Films on Si-on-Sapphire and Si Substrates. Physics of the Solid State, 2021, 63, 1145-1152.	0.6	3
17	Evaluation of Mechanical Properties of Porous OSG Films by PFQNM AFM and Benchmarking with Traditional Instrumentation. Langmuir, 2020, 36, 9377-9387.	3.5	23
18	Atomic force microscopy of porous ferroelectric PZT films. Journal of Physics: Conference Series, 2020, 1697, 012090.	0.4	0

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19	Effects of Methyl Terminal and Carbon Bridging Groups Ratio on Critical Properties of Porous Organosilicate Glass Films. Materials, 2020, 13, 4484.	2.9	17
20	Terahertz and Infrared Spectroscopy of Dense and Porous Organosilicate Glass Thin Films. Doklady Physics, 2020, 65, 51-56.	0.7	2
21	Critical properties and charge transport in ethylene bridged organosilica low-Î° dielectrics. Journal of Applied Physics, 2020, 127, .	2.5	12
22	Effect of terminal methyl group concentration on critical properties and plasma resistance of organosilicate low-k dielectrics. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2020, 38, .	2.1	12
23	A detailed ellipsometric porosimetry and positron annihilation spectroscopy study of porous organosilicate-glass films with various ratios of methyl terminal and ethylene bridging groups. Microporous and Mesoporous Materials, 2020, 306, 110434.	4.4	11
24	Ferroelectric memory: state-of-the-art manufacturing and research. Russian Technological Journal, 2020, 8, 44-67.	1.0	17
25	Mechanical properties of nanoporous organo silicate glass films for the use in integrated circuits interconnects. AIP Conference Proceedings, 2020, , .	0.4	2
26	Discharge currents in dense and porous PZT films. Ferroelectrics, 2019, 544, 82-87.	0.6	0
27	Charge transport mechanism in periodic mesoporous organosilica low-k dielectric. Applied Physics Letters, 2019, 115, 082904.	3.3	11
28	Detection of idden defects in low-k dielectrics by atomic force microscopy. Journal of Physics: Conference Series, 2019, 1327, 012011.	0.4	1
29	Ion beam etching of dense and porous PZT films. Ferroelectrics, 2019, 544, 75-81.	0.6	5
30	Effect of water content on the structural properties of porous methyl-modified silicate films. Journal of Sol-Gel Science and Technology, 2019, 92, 273-281.	2.4	15
31	Effect of the C-bridge on UV properties of organosilicate films. Thin Solid Films, 2019, 685, 329-334.	1.8	10
32	Dead layer thickness estimation at the ferroelectric film-metal interface in PZT. Applied Physics Letters, 2019, 114, .	3.3	12
33	Conductive AFM study of the local current in thin ferroelectric sol-gel PZT films. Journal of Physics: Conference Series, 2019, 1400, 077002.	0.4	0
34	Layer Crystallization in PZT/LNO/Si Heterostructures. Physics of the Solid State, 2019, 61, 2464-2467.	0.6	3
35	Structural Features and Mutual Influence of the Layers in PZTâ€“LNOâ€“SiOxâ€“Si and PZTâ€“LNOâ€“Si Compositions. Crystallography Reports, 2019, 64, 961-967.	0.6	2
36	Effects of vacuum-plasma etching on the electrical properties of thin ferroelectric PZT films. , 2019, , .		0

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37	Determination of the Steady State Leakage Current in Structures with Ferroelectric Ceramic Films. Physics of the Solid State, 2018, 60, 433-436.	0.6	3
38	Effect of the Crystal Structure on the Electrical Properties of Thin-Film PZT Structures. Physics of the Solid State, 2018, 60, 553-558.	0.6	5
39	The Mechanisms of Absorption of Terahertz and Infrared Radiation in PZT Films. Physics of the Solid State, 2018, 60, 1226-1234.	0.6	4
40	Formation of PZT Structures on Silicon. Bulletin of the Russian Academy of Sciences: Physics, 2018, 82, 341-345.	0.6	2
41	Properties of Solâ€“Gel Derived Thin Organoalkylenesiloxane Films. Inorganic Materials, 2018, 54, 405-411.	0.8	4
42	Structural Features of PLZT Films. Crystallography Reports, 2018, 63, 646-655.	0.6	4
43	Effect of terminal methyl groups concentration on properties of organosilicate glass low dielectric constant films. Japanese Journal of Applied Physics, 2018, 57, 07MC01.	1.5	20
44	Formation Mechanisms for Hetero-Phase Ferroelectric Films of Lead Zirconate Titanate. Journal of the Russian Universities Radioelectronics, 2018, , 26-36.	0.2	0
45	Unexpected behavior of transient current in thin PZT films caused by grain-boundary conduction. Journal of Applied Physics, 2017, 121, .	2.5	12
46	Effect of Bridging and Terminal Alkyl Groups on Structural and Mechanical Properties of Porous Organosilicate Films. ECS Journal of Solid State Science and Technology, 2017, 6, N182-N188.	1.8	22
47	Effect of seed layer with low lead content on electrical properties of PZT thin films. Journal of Materials Research, 2017, 32, 1618-1627.	2.6	7
48	Estimation of steady-state leakage current in polycrystalline PZT thin films. AIP Advances, 2016, 6, 095025.	1.3	12
49	Leakage currents in porous PZT films. Ferroelectrics, 2016, 503, 77-84.	0.6	9
50	Effect of methyltrimethoxysilane hydrolysis and condensation conditions on the properties of thin polymethylsilsesquioxane films. Inorganic Materials, 2016, 52, 625-629.	0.8	10
51	Effect of the synthesis conditions on the properties of polycrystalline films of lead zirconate titanate of nonstoichiometric composition. Glass Physics and Chemistry, 2016, 42, 295-301.	0.7	18
52	Effect of the Brij 30 porogen on the properties of solâ€“gel derived thin polymethylsilsesquioxane films. Inorganic Materials, 2016, 52, 968-972.	0.8	5
53	Electrodynamic properties of porous PZT-Pt films at terahertz frequency range. Physica Status Solidi C: Current Topics in Solid State Physics, 2016, 14, 1600211.	0.8	7
54	Peculiarities of Electrical Characteristics of Ferroelectric Memory Elements Based on PZT-Films. Russian Physics Journal, 2016, 58, 1301-1305.	0.4	3

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55	Porous PZT Films Prepared by PVP Assisted Sol-Gel Process. Ferroelectrics, 2015, 484, 43-48.	0.6	8
56	Giant Self-Polarization in FeRAM Element Based on Sol-Gel PZT Films. Materials Research Society Symposia Proceedings, 2015, 1729, 87-92.	0.1	0
57	Electrophysical Properties of Integrated Ferroelectric Capacitors Based on Sol-Gel PZT Films. Ferroelectrics, 2015, 484, 32-42.	0.6	4
58	Terahertz-infrared electrodynamics of lead zirconate-titanate films on a platinum sublayer. Physics of the Solid State, 2015, 57, 1155-1159.	0.6	2
59	Effect of spontaneous polarization change on current-voltage characteristics of thin ferroelectric films. Physics of the Solid State, 2015, 57, 476-479.	0.6	1
60	Formation and properties of porous films of lead zirconate titanate. Physics of the Solid State, 2015, 57, 499-502.	0.6	8
61	Electrophysical properties of lead zirconate titanate films doped with lanthanum. Russian Microelectronics, 2014, 43, 438-444.	0.5	1
62	Negative differential conductivity in thin ferroelectric films. Applied Physics Letters, 2014, 105, 182904.	3.3	10
63	Simulation of Negative Differential Resistivity in Thin Ferroelectric Films. Ferroelectrics, 2014, 465, 28-35.	0.6	10
64	Effect of Lanthanum Doping on Leakage Currents of Sol-Gel PZT Thin Films. Ferroelectrics, 2014, 465, 54-59.	0.6	8
65	Role of precursors in the formation of lead zirconate titanate thin films. Inorganic Materials, 2014, 50, 612-616.	0.8	28
66	Electrodynamic properties of lead Zirconate-Titanate thin films in the terahertz frequency range. Physics of the Solid State, 2014, 56, 2206-2212.	0.6	7
67	Leakage currents in ferroelectric thin films. Phase Transitions, 2013, 86, 1141-1151.	1.3	31
68	Crystallization behaviour of PZT in multilayer heterostructures. Phase Transitions, 2013, 86, 1152-1165.	1.3	29
69	Effect of Sol-Gel PZT Film Thickness on the Hysteresis Properties. Ferroelectrics, 2012, 439, 74-79.	0.6	2
70	Depolarization Currents in Thin Ferroelectric Films. Ferroelectrics, 2012, 439, 56-61.	0.6	6
71	Effect of Lead Content on Microstructure of Sol-Gel PZT Structures. Ferroelectrics, 2012, 433, 146-157.	0.6	19
72	Structure and phase composition of BiFeO3 : La films synthesized by chemical deposition from solutions. Physics of the Solid State, 2012, 54, 997-998.	0.6	2

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73	Crystallization of lead zirconate titanate films by laser annealing. Physics of the Solid State, 2012, 54, 999-1001.	0.6	12
74	Leakage currents in thin ferroelectric films. Physics of the Solid State, 2012, 54, 911-914.	0.6	15
75	Ferroelectric memory. Physics of the Solid State, 2012, 54, 894-899.	0.6	45
76	CORRELATION OF GRAIN AND DOMAIN STRUCTURES IN PZT THIN FILMS. Integrated Ferroelectrics, 2009, 106, 70-80.	0.7	2
77	Specific features of the formation of the crystal structure of lead zirconate titanate in the Si-SiO2-Ti(TiO2)-Pt-Pb(Zr x Ti1 â˜ x)O3 systems. Physics of the Solid State, 2009, 51, 1337-1340.	0.6	13
78	Terahertz dielectric spectra of (Ba,Sr)TiO3 thin films. Physics of the Solid State, 2009, 51, 1351-1355.	0.6	17
79	Electron microscopy of the barium strontium titanate film structure on Pt-Ti-SiO2-Si substrates after laser annealing. Physics of the Solid State, 2009, 51, 1482-1484.	0.6	3
80	Electron microscopy of barium strontium titanate nanostructures in the aluminum oxide matrix. Physics of the Solid State, 2009, 51, 1485-1488.	0.6	1
81	Structure of Ba0.7Sr0.3TiO3 films grown by chemical solution deposition on polycor substrates. Journal of Surface Investigation, 2008, 2, 677-682.	0.5	1
82	Laser annealing of ferroelectric thin films. Proceedings of SPIE, 2007, , .	0.8	2
83	Investigation of the low-and infralow-frequency dielectric response of Ba0.7Sr0.3TiO3 thin films. Physics of the Solid State, 2006, 48, 1177-1178.	0.6	0
84	Effect of mechanical stresses on the dielectric response of PZT ferroelectric thin films. Physics of the Solid State, 2006, 48, 1179-1181.	0.6	3
85	Structure of (Ba0.7Sr0.3)TiO3 films prepared by chemical solution deposition during crystallization on a sublayer. Physics of the Solid State, 2006, 48, 1205-1207.	0.6	1
86	Structure of (Ba0.7Sr0.3)TiO3 films prepared by chemical solution deposition on sapphire substrates. Physics of the Solid State, 2006, 48, 1208-1209.	0.6	2
87	Nonlinear-optical and micro-Raman diagnostics of thin films and nanostructures of ABO3 ferroelectrics. Physics of the Solid State, 2006, 48, 1210-1213.	0.6	5
88	Influence of Crystallization Process on Structural State of CSD BST Thin Films. Ferroelectrics, 2006, 335, 13-21.	0.6	7
89	Crystallization of PZT in Porous Alumina Membrane Channels. Ferroelectrics, 2006, 336, 247-254.	0.6	12
90	Domain contribution to the low and infralow frequency dielectric response of ferroelectric thin PZT films prepared by the sol-gel method. Crystallography Reports, 2004, 49, 137-142.	0.6	0

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91	Laser Annealing of Thin-Film Ferroelectric Heterostructures. Journal of Russian Laser Research, 2004, 25, 234-238.	0.6	4
92	Electric Non-Linearity in Ferroelectric Films of the BaxSr1 â˜'xTiO3Type. Ferroelectrics, 2004, 307, 167-170.	0.6	1
93	Microstructure and Dielectric Properties of (Ba 0.7 Sr 0.3)TiO 3 Thin Films. Ferroelectrics, 2003, 286, 261-265.	0.6	7
94	Ferroelectrics Templated in Nanoporous Silicon Membranes. Ferroelectrics, 2003, 286, 205-211.	0.6	8
95	Microstructure of PZT Capacitor Structures. Ferroelectrics, 2003, 286, 311-320.	0.6	8
96	Effect of Lead Content on the Microstructure and Electrical Properties of Sol-Gel PZT Thin Films. Ferroelectrics, 2002, 271, 51-56.	0.6	12
97	Nonlinear optical and electrostatic force microscopy for ferroelectric polarization imaging. Applied Physics B: Lasers and Optics, 2002, 74, 783-788.	2.2	3
98	Porous silicon-based ferroelectric nanostructures. Journal of Experimental and Theoretical Physics, 2002, 95, 502-504.	0.9	21
99	Local probing of the polarization state in thin Pb(ZrTi)O3 films during polarization reversal. Applied Physics Letters, 2001, 78, 796-798.	3.3	20
100	Effects of lead concentration on dielectric properties of ferroelectric Ni/PZT/Pt thin films at low and infralow frequencies. Ferroelectrics, 2001, 258, 277-284.	0.6	0
101	Title is missing!. Russian Microelectronics, 2001, 30, 175-178.	0.5	2
102	Title is missing!. Russian Microelectronics, 2001, 30, 371-380.	0.5	0
103	Growth of CdZnTe single crystals for radiation detectors. Journal of Crystal Growth, 1999, 197, 666-669.	1.5	19
104	Title is missing!. Journal of Sol-Gel Science and Technology, 1999, 16, 109-118.	2.4	48
105	Sol-Gel Derived Barium-Strontium Titanate Films. Journal of Sol-Gel Science and Technology, 1998, 13, 877-883.	2.4	19
106	Ferroelectric Thin Films of Bismuth Strontium Tantalate Prepared by Alkoxide Route. Journal of Sol-Gel Science and Technology, 1998, 13, 889-893.	2.4	15
107	Thin ORMOSIL Films with Different Organics. Journal of Sol-Gel Science and Technology, 1998, 13, 467-472.	2.4	12
108	Alkoxy-derived ferroelectric PZT films: The effect of lead acetate dehydration techniques and lead content in the electrochemically prepared solutions on the properties of the films. Integrated Ferroelectrics, 1998, 19, 193-209.	0.7	17

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109	Sol-gel processing of bismuth strontium tantalate thin films. European Physical Journal Special Topics, 1998, 08, Pr9-83-Pr9-86.	0.2	0
110	Optical second harmonic generation studies of thin ferroelectric ceramic films. Ferroelectrics, 1997, 190, 143-148.	0.6	17
111	ORMOSIL Films: Properties and Microelectronic Applications. Journal of Sol-Gel Science and Technology, 1997, 8, 581-584.	2.4	4
112	ORMOSIL films: Properties and microelectronic applications. Journal of Sol-Gel Science and Technology, 1997, 8, 581-584.	2.4	14
113	Structure, properties and applications of phenyl-modified silicate films. Thin Solid Films, 1996, 288, 57-63.	1.8	18
114	Optical second-harmonic generation studies of thin lead-zirconate-titanate ferroelectric films. Ferroelectrics, 1996, 186, 215-218.	0.6	15
115	Spin coating process of sol-gel silicate films deposition: Effect of spin speed and processing temperature. Journal of Sol-Gel Science and Technology, 1995, 5, 173-183.	2.4	49
116	Ferroelectric capacitors for integrated circuits. Microelectronic Engineering, 1995, 29, 41-44.	2.4	16
117	Integrated ferroelectrics: Some results and considerations. Ferroelectrics, 1995, 167, 177-180.	0.6	0
118	Fundamental Properties and Some Applications of Sol-gel Ceramic Thin Films. , 1995, , 427-437.		1
119	Anodic dissolution of metals in methoxyethanolâ€"a way to new precursors for sol-gel technology. Integrated Ferroelectrics, 1994, 4, 275-279.	0.7	12
120	Alkoxy-derived Y2O3-stabilized ZrO2 thin films. Thin Solid Films, 1994, 249, 1-5.	1.8	22
121	Effect of processing temperature during spin-on application on the properties of sol-gel silica films. Journal of Sol-Gel Science and Technology, 1994, 2, 559-562.	2.4	2
122	Sol-gel films for integrated circuits. Journal of Sol-Gel Science and Technology, 1994, 2, 563-567.	2.4	10
123	Effect of annealing conditions on alkoxy-derived PZT thin films. Microstructural and CV study. Integrated Ferroelectrics, 1993, 3, 33-49.	0.7	52
124	Microelectronic applications of ferroelectric films. Integrated Ferroelectrics, 1993, 3, 59-68.	0.7	25
125	TdP213. Ferroelectric thin films for microelectronic applications. Ferroelectrics, 1992, 134, 365-376.	0.6	7
126	Sol-gel TiO2 films on silicon substrates. Thin Solid Films, 1992, 207, 180-184.	1.8	100

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127	Sol-gel silicon dioxide films. Thin Solid Films, 1992, 209, 188-194.	1.8	34
128	BaTiO3 films on silicon wafers from metal alkoxides. Ferroelectrics, 1991, 123, 261-271.	0.6	23
129	Dielectric permittivity of organosilicate glass thin films on a sapphire substrate determined using time-domain THz and Fourier IR spectroscopy. Journal Physics D: Applied Physics, 0, , .	2.8	1