Vladimir A Gritsenko

List of Publications by Year
in descending order

176	3,401	136885	189801
papers	citations	32 h-index	50 g-index

179	179	179	2913
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Electronic properties of hafnium oxide: A contribution from defects and traps. Physics Reports, 2016, 613, 1-20.	10.3	134
2	Two-band conduction of amorphous silicon nitride. Physica Status Solidi A, 1974, 26, 489-495.	1.7	108
3	Electronic structure of silicon dioxide (a review). Physics of the Solid State, 2014, 56, 207-222.	0.2	103
4	Oxygen deficiency defects in amorphous Al2O3. Journal of Applied Physics, 2010, 108, .	1.1	99
5	Electronic structure of Î´-Ta2O5 with oxygen vacancy: ab initio calculations and comparison with experiment. Journal of Applied Physics, 2011, 110, .	1.1	94
6	Atomic and electronic structure of amorphous and crystalline hafnium oxide: X-ray photoelectron spectroscopy and density functional calculations. Journal of Applied Physics, 2007, 101, 053704.	1.1	84
7	Excess silicon at the silicon nitride/thermal oxide interface in oxideâ€“nitrideâ€“oxide structures. Journal of Applied Physics, 1999, 86, 3234-3240.	1.1	83
8	Electronic structure of Î±-Al2O3: Ab initio simulations and comparison with experiment. JETP Letters, 2007, 85, 165-168.	0.4	83
9	Raman study of silicon nanocrystals formed in SiNx films by excimer laser or thermal annealing. Applied Physics Letters, 1998, 73, 1212-1214.	1.5	81
10	Thermally assisted hole tunneling at theAuâˆ’Si3N4interface and the energy-band diagram of metal-nitride-oxide-semiconductor structures. Physical Review B, 1998, 57, R2081-R2083.	1.1	80
11	Short Range Order and the Nature of Defects and Traps in Amorphous Silicon Oxynitride Governed by the Mott Rule. Physical Review Letters, 1998, 81, 1054-1057.	2.9	76
12	Identification of the nature of traps involved in the field cycling of Hf0.5Zr0.5O2-based ferroelectric thin films. Acta Materialia, 2019, 166, 47-55.	3.8	76
13	Charge transport in dielectrics via tunneling between traps. Journal of Applied Physics, 2011, 109, .	1.1	68
14	Two-bands charge transport in silicon nitride due to phonon-assisted trap ionization. Journal of Applied Physics, 2004, 96, 4293-4296.	1.1	67
15	Charge transport mechanism in amorphous alumina. Applied Physics Letters, 2009, 94, .	1.5	66
16	Mechanism of GeO₂ resistive switching based on the multi-phonon assisted tunneling between traps. Applied Physics Letters, 2012, 100, 243506.	1.5	63
17	Atomic structure of the amorphous nonstoichiometric silicon oxides and nitrides. Physics-Uspekhi, 2008, 51, 699-708.	0.8	56
18	Application and electronic structure of high-permittivity dielectrics. Physics-Uspekhi, 2010, 53, 561-575.	0.8	56

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19	Oxygen Vacancy in Hafnia as a Blue Luminescence Center and a Trap of Charge Carriers. Journal of Physical Chemistry C, 2016, 120, 19980-19986.	1.5	47
20	Charge Transport and the Nature of Traps in Oxygen Deficient Tantalum Oxide. ACS Applied Materials & Interfaces, 2018, 10, 3769-3775.	4.0	45
21	Nature of traps responsible for the memory effect in silicon nitride. Applied Physics Letters, 2016, 109, .	1.5	43
22	Transport mechanisms of electrons and holes in dielectric films. Physics-Uspekhi, 2013, 56, 999-1012.	0.8	42
23	The origin of 2.7 eV luminescence and 5.2 eV excitation band in hafnium oxide. Applied Physics Letters, 2014, 104, 071904.	1.5	40
24	The origin of 2.7â€‰eV blue luminescence band in zirconium oxide. Journal of Applied Physics, 2014, 116, .	1.1	39
25	Origin of traps and charge transport mechanism in hafnia. Applied Physics Letters, 2014, 105, 222901.	1.5	38
26	Electronic band structure and effective masses of electrons and holes in the Î± and Î² phases of silicon nitride. Physics of the Solid State, 2007, 49, 1628-1632.	0.2	35
27	Optical Properties of TiO2 Films Deposited by Reactive Electron Beam Sputtering. Journal of Electronic Materials, 2017, 46, 6089-6095.	1.0	35
28	Electronic structure of aluminum oxide: ab initio simulations ofÎ±andÎ³phases and comparison with experiment for amorphous films. EPJ Applied Physics, 2010, 52, 30501.	0.3	34
29	Electronic structure of an oxygen vacancy in Al2O3 from the results of Ab Initio quantum-chemical calculations and photoluminescence experiments. Journal of Experimental and Theoretical Physics, 2010, 111, 989-995.	0.2	34
30	Short-range order, large-scale potential fluctuations, and photoluminescence in amorphous SiNx. Journal of Experimental and Theoretical Physics, 2004, 98, 760-769.	0.2	33
31	Electronic structure of TiO2 rutile with oxygen vacancies: Ab initio simulations and comparison with the experiment. Journal of Experimental and Theoretical Physics, 2011, 112, 310-316.	0.2	33
32	Electronic structure of silicon nitride. Physics-Uspekhi, 2012, 55, 498-507.	0.8	33
33	Impact of oxygen vacancy on the ferroelectric properties of lanthanum-doped hafnium oxide. Applied Physics Letters, 2020, 117, .	1.5	33
34	Valence band offset at silicon/silicon nitride and silicon nitride/silicon oxide interfaces. Thin Solid Films, 2003, 437, 135-139.	0.8	29
35	Charge transport in amorphous Hf0.5Zr0.5O2. Applied Physics Letters, 2015, 106, .	1.5	29
36	Numerical simulation of intrinsic defects in SiO2 and Si3N4. Semiconductors, 2001, 35, 997-1005.	0.2	28

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37	Bonding and band offset in N[sub 2]O-grown oxynitride. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 2003, 21, 241.	1.6	27
38	Composition and structure of hafnia films on silicon. Inorganic Materials, 2008, 44, 965-970.	0.2	27
39	Phonon-coupled trap-assisted charge injection in metal-nitride-oxide-silicon/silicon-oxide-nitride-oxide-silicon structures. Journal of Applied Physics, 2009, 105, .	1.1	27
40	Short-range order in amorphous SiOx by x ray photoelectron spectroscopy. Journal of Applied Physics, 2011, 110, .	1.1	26
41	Memristor effect in GeO[SiO2] and GeO[SiO] solid alloys films. Applied Physics Letters, 2019, 114, .	1.5	26
42	Charge transport mechanism in thin films of amorphous and ferroelectric Hf0.5Zr0.5O2. JETP Letters, 2015, 102, 544-547.	0.4	25
43	Study of Excess Silicon at Si3â€‰Nâ€‰4â€‰/â€‰Thermal SiO2 Interface Using EELS and Ellipsometric Measurements. Journal of the Electrochemical Society, 1999, 146, 780-785.	1.3	24
44	Electronic Structure of Noncentrosymmetric Î±-GeO2 with Oxygen Vacancy: Ab Initio Calculations and Comparison with Experiment. Journal of Physical Chemistry C, 2014, 118, 3644-3650.	1.5	24
45	All Nonmetal Resistive Random Access Memory. Scientific Reports, 2019, 9, 6144.	1.6	24
46	Charge transport mechanism in the metalâ€“nitrideâ€“oxideâ€“silicon forming-free memristor structure. Applied Physics Letters, 2020, 116, .	1.5	24
47	High Performance All Nonmetal SiNx Resistive Random Access Memory with Strong Process Dependence. Scientific Reports, 2020, 10, 2807.	1.6	24
48	The atomic and electron structure of ZrO2. Journal of Experimental and Theoretical Physics, 2006, 102, 799-809.	0.2	22
49	Structure of silicon/oxide and nitride/oxide interfaces. Physics-Uspekhi, 2009, 52, 869-877.	0.8	22
50	Charge transport mechanism in SiNx-based memristor. Applied Physics Letters, 2019, 115, 253502.	1.5	21
51	Charge transport mechanism in the forming-free memristor based on silicon nitride. Scientific Reports, 2021, 11, 2417.	1.6	21
52	Electron and hole injection in metal-oxide-nitride-oxide-silicon structures. Journal of Experimental and Theoretical Physics, 2006, 102, 810-820.	0.2	19
53	Two-band conduction in TiO2. Physics of the Solid State, 2006, 48, 224-228.	0.2	19
54	Trap-assisted tunneling hole injection in SiO2: Experiment and theory. Journal of Experimental and Theoretical Physics, 2009, 109, 786-793.	0.2	19

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55	Bipolar conductivity in amorphous HfO2. Applied Physics Letters, 2011, 99, .	1.5	19
56	Atomic and electronic structure of ferroelectric La-doped HfO₂ films. Materials Research Express, 2019, 6, 036403.	0.8	19
57	Charge transport in thin hafnium and zirconium oxide films. Optoelectronics, Instrumentation and Data Processing, 2017, 53, 184-189.	0.2	18
58	Charge transport mechanism of high-resistive state in RRAM based on SiOx. Applied Physics Letters, 2019, 114, .	1.5	18
59	Exceedingly High Performance Top-Gate P-Type SnO Thin Film Transistor with a Nanometer Scale Channel Layer. Nanomaterials, 2021, 11, 92.	1.9	18
60	Electronic structure of amorphous silicon oxynitride with different compositions. Journal of Applied Physics, 2009, 105, 073706.	1.1	17
61	Atomic and Electronic Structures of Traps in Silicon Oxide and Silicon Oxynitride. Critical Reviews in Solid State and Materials Sciences, 2011, 36, 129-147.	6.8	17
62	Charge transport in dielectrics by tunneling between traps. Journal of Experimental and Theoretical Physics, 2011, 112, 1026-1034.	0.2	17
63	Cathodo- and photoluminescence increase in amorphous hafnium oxide under annealing in oxygen. Journal of Experimental and Theoretical Physics, 2015, 120, 710-715.	0.2	17
64	Ab initio simulation of the electronic structure of Î´-Ta2O5 with oxygen vacancy and comparison with experiment. Journal of Experimental and Theoretical Physics, 2011, 112, 1035-1041.	0.2	16
65	Electronic structure and charge transport in nonstoichiometric tantalum oxide. Nanotechnology, 2018, 29, 264001.	1.3	16
66	Improved Device Distribution in High-Performance SiNx Resistive Random Access Memory via Arsenic Ion Implantation. Nanomaterials, 2021, 11, 1401.	1.9	16
67	Wigner crystallization of electrons and holes in amorphous silicon nitride. Antiferromagnetic ordering of localized electrons and holes as a result of a resonance exchange interaction. JETP Letters, 1996, 64, 531-537.	0.4	15
68	Multiphonon mechanism of the ionization of traps in Al2O3: Experiment and numerical simulation. JETP Letters, 2009, 89, 506-509.	0.4	15
69	Percolation conductivity in hafnium sub-oxides. Applied Physics Letters, 2014, 105, 262903.	1.5	15
70	Structure and electrophysical properties of boron nitride thin films. Physica Status Solidi A, 1976, 34, 85-94.	1.7	14
71	Atomic and electronic structures of lutetium oxide Lu2O3. Journal of Experimental and Theoretical Physics, 2013, 116, 323-329.	0.2	14
72	Optical Properties of Nonstoichiometric Tantalum Oxide TaOx (x < 5/2) According to Spectral-Ellipsometry and Raman-Scattering Data. Optics and Spectroscopy (English Translation of) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 5		14

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73	The charge transport mechanism and electron trap nature in thermal oxide on silicon. Applied Physics Letters, 2016, 109, .	1.5	13
74	Leakage Currents Mechanism in Thin Films of Ferroelectric Hf_{0.5}Zr_{0.5}O₂. ECS Transactions, 2017, 75, 123-129.	0.3	13
75	High-Performance Top-Gate Thin-Film Transistor with an Ultra-Thin Channel Layer. Nanomaterials, 2020, 10, 2145.	1.9	13
76	ONO Structures and Oxynitrides in Modern Microelectronics: Material Science, Characterization and Application. , 0, , 251-295.		12
77	Electronic structure of silicon oxynitride: Ab-initio and experimental study, comparison with silicon nitride. Journal of Applied Physics, 2011, 110, 114103.	1.1	12
78	Critical properties and charge transport in ethylene bridged organosilica low-Îº dielectrics. Journal of Applied Physics, 2020, 127, .	1.1	12
79	Electronic structure and charge transport mechanism in a forming-free SiO _x -based memristor. Nanotechnology, 2020, 31, 505704.	1.3	12
80	Unsteady silicon nitride conductivity in high electric fields. Physica Status Solidi A, 1978, 48, 31-37.	1.7	11
81	Short-range order and luminescence in amorphous silicon oxynitride. The Philosophical Magazine: Physics of Condensed Matter B, Statistical Mechanics, Electronic, Optical and Magnetic Properties, 2000, 80, 1857-1868.	0.6	11
82	The atomic structure and chemical composition of HfOx (x < 2) films prepared by ion-beam sputtering deposition. Materials Research Express, 2016, 3, 085008.	0.8	11
83	Dispersion of the refractive index in high-k dielectrics. Optics and Spectroscopy (English Translation) Tj ETQq1 1 0.784314 rgBT /Over	0.2	11
84	Electronic structure of stoichiometric and oxygen-deficient ferroelectric Hf_{0.5}Zr_{0.5}O₂. Nanotechnology, 2018, 29, 194001.	1.3	11
85	Charge transport mechanism in periodic mesoporous organosilica low-k dielectric. Applied Physics Letters, 2019, 115, 082904.	1.5	11
86	Atomic and Electronic Structures of a-SiNx:H. Journal of Experimental and Theoretical Physics, 2019, 129, 924-934.	0.2	11
87	Charge transport mechanism in La:HfO2. Applied Physics Letters, 2020, 117, .	1.5	11
88	Multiphonon ionization of deep centers in amorphous silicon nitride: Experiment and numerical simulations. JETP Letters, 2003, 77, 385-388.	0.4	10
89	Two-band conductivity of ZrO2 synthesized by molecular beam epitaxy. JETP Letters, 2005, 81, 587-589.	0.4	10
90	Single band electronic conduction in hafnium oxide prepared by atomic layer deposition. Microelectronics Reliability, 2007, 47, 36-40.	0.9	10

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91	Electronic Structure of Oxygen Vacancies in the Orthorhombic Noncentrosymmetric Phase Hf0.5Zr0.5O2. JETP Letters, 2018, 107, 55-60.	0.4	10
92	Conductance of amorphous germanium nitride films in high electric fields. Physica Status Solidi A, 1975, 28, 387-393.	1.7	9
93	Wigner crystallization and a resonance exchange mechanism for electrons localized in an amorphous insulator with a high trap density. JETP Letters, 1996, 64, 525-530.	0.4	9
94	Capturing properties of a threefold coordinated silicon atom in silicon nitride: Positive correlation energy model. Physics of the Solid State, 2003, 45, 2031-2035.	0.2	9
95	Bipolar conductivity in nanocrystallized TiO2. Applied Physics Letters, 2012, 101, .	1.5	9
96	Nanoscale potential fluctuations in nonstoichiometrics tantalum oxide. Nanotechnology, 2018, 29, 425202.	1.3	9
97	Origin of the blue luminescence band in zirconium oxide. Physics of the Solid State, 2015, 57, 1347-1351.	0.2	8
98	Silicon Nitride on Si: Electronic Structure for Flash Memory Devices. Materials and Energy, 2016, , 273-322.	2.5	8
99	The Evolution of the Conductivity and Cathodoluminescence of the Films of Hafnium Oxide in the Case of a Change in the Concentration of Oxygen Vacancies. Physics of the Solid State, 2018, 60, 2050-2057.	0.2	8
100	Local Oscillations of Siliconâ€“Silicon Bonds in Silicon Nitride. Technical Physics Letters, 2018, 44, 424-427.	0.2	8
101	Oxygen vacancies in zirconium oxide as the blue luminescence centres and traps responsible for charge transport: Part IIâ€”Films. Materialia, 2021, 15, 100980.	1.3	8
102	A New Memory Element Based on Silicon Nanoclusters in a ZrO[sub 2] Insulator with a High Permittivity for Electrically Erasable Read-Only Memory. Semiconductors, 2005, 39, 716.	0.2	7
103	Siâ€“Si bond as a deep trap for electrons and holes in silicon nitride. JETP Letters, 2016, 103, 171-174.	0.4	7
104	Three-Dimensional Non-Linear Complex Model of Dynamic Memristor Switching. ECS Transactions, 2017, 75, 95-104.	0.3	7
105	The atomic and electronic structure of Hf0.5Zr0.5O2 and Hf0.5Zr0.5O2:La films. Journal of Science: Advanced Materials and Devices, 2021, 6, 595-600.	1.5	7
106	MINDO/3 calculation of the electronic structure of silicon nitride. Physics of the Solid State, 1997, 39, 1191-1196.	0.2	6
107	Quantum confinement and electron spin resonance characteristics in Si-implanted silicon oxide films. Journal of Applied Physics, 2011, 109, 084502.	1.1	6
108	Study of the atomic and electronic structures of amorphous silicon nitride and defects in it. JETP Letters, 2011, 94, 202-205.	0.4	6

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109	Evolution of the conductivity type in germania by varying the stoichiometry. Applied Physics Letters, 2013, 103, .	1.5	6
110	Electronic structure of SiN x. JETP Letters, 2014, 98, 709-712.	0.4	6
111	Electronic structure of silicon nitride according to ab initio quantum-chemical calculations and experimental data. Journal of Experimental and Theoretical Physics, 2010, 111, 659-666.	0.2	5
112	Wigner crystallization due to electrons localized at deep traps in two-dimensional amorphous dielectric. Applied Physics Letters, 2010, 96, 263510.	1.5	5
113	Structure of Hf0.9La0.1O2 Ferroelectric Films Obtained by the Atomic Layer Deposition. JETP Letters, 2019, 109, 116-120.	0.4	5
114	Charge Transport Mechanism in a Formless Memristor Based on Silicon Nitride. Russian Microelectronics, 2020, 49, 372-377.	0.1	5
115	Oxygen vacancies in zirconium oxide as the blue luminescence centres and traps responsible for charge transport: Part Iâ€”Crystals. Materialia, 2021, 15, 100979.	1.3	5
116	Bipolar conductivity in ferroelectric La:HfZrO films. Applied Physics Letters, 2021, 118, .	1.5	5
117	On the conductivity of amorphous silicon nitride in high electric fields. Physica Status Solidi A, 1977, 44, K167-K170.	1.7	4
118	High-field conductivity of amorphous insulator films. Physica Status Solidi A, 1979, 52, 47-57.	1.7	4
119	Hole trapping on the twofold-coordinated silicon atom in SiO2. Physics of the Solid State, 2002, 44, 1028-1030.	0.2	4
120	Quantization of the electronic spectrum and localization of electrons and holes in silicon quantum dots. Physics of the Solid State, 2011, 53, 860-863.	0.2	4
121	Nanoscale Potential Fluctuation in Non-Stoichiometric Hafnium Suboxides. ECS Transactions, 2015, 69, 237-241.	0.3	4
122	Mechanism of charge transport of stress induced leakage current and trap nature in thermal oxide on silicon. Journal of Physics: Conference Series, 2017, 864, 012003.	0.3	4
123	Leakage currents mechanism in thin films of ferroelectric Hf_{0.5}Zr_{0.5}O₂. Journal of Physics: Conference Series, 2017, 864, 012002.	0.3	4
124	Optical Properties of Nonstoichiometric Silicon Oxide SiOx (x < 2). Optics and Spectroscopy (English Translation of Optika I Spektroskopiya), 2019, 127, 836-840.	0.2	4
125	Charge Transport Mechanism in Atomic Layer Deposited Oxygenâ€Ðeficient TaO x Films. Physica Status Solidi (B): Basic Research, 2021, 258, 2000432.	0.7	4
126	Electronic structure of oxygen vacancy and poly-vacancy in α- and γ-Al<inf>2</inf>O<inf>3</inf>. , 2010, , .		3

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127	Large-scale potential fluctuations caused by SiO x compositional inhomogeneity. Physics of the Solid State, 2012, 54, 493-498.	0.2	3
128	Charge carrier transport mechanism in high-Îº dielectrics and their based resistive memory cells. Optoelectronics, Instrumentation and Data Processing, 2014, 50, 310-314.	0.2	3
129	Optical properties of nonstoichiometric ZrO x according to spectroellipsometry data. Optics and Spectroscopy (English Translation of Optika I Spektroskopiya), 2016, 121, 241-245.	0.2	3
130	Nanoscale Potential Fluctuations in Zirconium Oxide and the Flash Memory Based on Electron and Hole Localization. Advanced Electronic Materials, 2018, 4, 1700592.	2.6	3
131	Multiphonon trap ionization transport in nonstoichiometric SiN x. Materials Research Express, 2019, 6, 036304.	0.8	3
132	Optical Properties of the SiOx (x < 2) Thin Films Obtained by Hydrogen Plasma Processing of Thermal Silicon Dioxide. Optics and Spectroscopy (English Translation of Optika I Spektroskopiya), 2020, 128, 1577-1582.	0.2	3
133	Multiphonon Ionization of Deep Centers in Amorphous Boron Nitride. JETP Letters, 2021, 114, 433-436.	0.4	3
134	Remarkably High-Performance Nanosheet GeSn Thin-Film Transistor. Nanomaterials, 2022, 12, 261.	1.9	3
135	Atomic Structure and Optical Properties of Plasma Enhanced Chemical Vapor Deposited SiCOH Low-k Dielectric Film. Optics and Spectroscopy (English Translation of Optika I Spektroskopiya), 2021, 129, 645-651.	0.2	3
136	High-Permittivity-Insulator EEPROM Cell Using Al2O3 or ZrO2. Russian Microelectronics, 2003, 32, 69-74.	0.1	2
137	Wigner crystallization of electrons in deep traps in a two-dimensional dielectric. Journal of Experimental and Theoretical Physics, 2011, 112, 479-481.	0.2	2
138	Relaxation of the electric current in Si3N4: Experiment and numerical simulation. Physics of the Solid State, 2017, 59, 47-52.	0.2	2
139	Atomic and Electronic Structures of Metal-Rich Noncentrosymmetric ZrOx. JETP Letters, 2018, 108, 226-230.	0.4	2
140	Electronic Structure of Amorphous SiOx with Variable Composition. JETP Letters, 2018, 108, 127-131.	0.4	2
141	Nanosized Potential Fluctuations in SiOx Synthesized by Plasma-Enhanced Chemical Vapor Deposition. Physics of the Solid State, 2019, 61, 2560-2568.	0.2	2
142	Charge Transport Mechanism and Trap Origin in Methylâ€Terminated Organosilicate Glass Lowâ€Îº Dielectrics. Physica Status Solidi (A) Applications and Materials Science, 2021, 218, 2000654.	0.8	2
143	Atomic and Electronic Structure of SiOx Films Obtained with Hydrogen Electron Cyclotron Resonance Plasma. Journal of Experimental and Theoretical Physics, 2020, 131, 940-944.	0.2	2
144	Forming-Free Memristors Based on Hafnium Oxide Processed in Electron Cyclotron Resonance Hydrogen Plasma. JETP Letters, 2022, 115, 79-83.	0.4	2

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145	Charge Transport in Nonstoichiometric SiOx Obtained by Treatment of Thermal SiO2 in Hydrogen Plasma of Electronic-Cyclotron Resonance. Russian Microelectronics, 2022, 51, 24-35.	0.1	2
146	Memory Properties of SiOx- and SiNx-Based Memristors. Nanobiotechnology Reports, 2021, 16, 722-731.	0.2	2
147	On the influence of illumination on charges trapped in MNOS structures. Physica Status Solidi A, 1976, 38, K57-K59.	1.7	1
148	Interaction with charge carriers and the optical absorption spectrum of an associate formed by elementary defects (an oxygen vacancy and a silylene center) in SiO2. Physics of the Solid State, 2004, 46, 2021-2025.	0.2	1
149	Charge transport in thin layers of ferroelectric Hf0.5Zr0.5O2. Russian Microelectronics, 2016, 45, 350-356.	0.1	1
150	Multilayer graphene-based flash memory. Russian Microelectronics, 2016, 45, 63-67.	0.1	1
151	Determination of Trap Density in Hafnium Oxide Films Produced by Different Atomic Layer Deposition Techniques. ECS Transactions, 2017, 80, 265-270.	0.3	1
152	Short-Range Order and Charge Transport in SiOx: Experiment and Numerical Simulation. Technical Physics Letters, 2018, 44, 541-544.	0.2	1
153	Nanoscale potential fluctuations and electron percolation in silicon oxide (SiOx, x = 1.4, 1.6). Materials Research Express, 2019, 6, 116409.	0.8	1
154	Mechanism of stress induced leakage current in Si3N4. Materials Research Express, 2019, 6, 076401.	0.8	1
155	Silicon Nanocrystals and Amorphous Nanoclusters in SiOx and SiNx: Atomic, Electronic Structure, and Memristor Effects. , 2020, , .		1
156	43.2: Invited Paper: High Mobility Oxide Complementary TFTs for Systemâ€onâ€Display and Threeâ€Dimensional Brainâ€Mimicking IC. Digest of Technical Papers SID International Symposium, 2021, 52, 292-294.	0.1	1
157	Short-range order, large-scale potential fluctuations, and photoluminescence in amorphous SiNx. , 2004, 98, 760.		1
158	Charge Transport Mechanism in a PECVD Deposited Low-k SiOCH Dielectric. Journal of Electronic Materials, 2022, 51, 2521-2527.	1.0	1
159	Electronic Structure of Si-Si Bond in Si3n4 and Sio2: Experiment and Simulation by Mindo/3. Materials Research Society Symposia Proceedings, 1996, 446, 169.	0.1	0
160	Enhancement of the electron-stimulated desorption from amorphous aluminum oxide films on silicon during an increase in the substrate temperature. Technical Physics, 2012, 57, 693-696.	0.2	0
161	The Charge Trap Density Evolution in Wake-Up and Fatigue Modes of FRAM. ECS Transactions, 2017, 80, 279-281.	0.3	0
162	Investigation of Hf(Zr)O2 Film Ferroelectric Properties Grown by Atomic Layer Deposition Method. , 2018, , .		0

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163	The Origin of Traps Responsible for Localization and Charge Transport in Memory Devices. ECS Meeting Abstracts, 2016, , .	0.0	0
164	Charge Transport Mechanism of Stress Induced Leakage Current in Thermal Silicon Oxide. ECS Meeting Abstracts, 2016, , .	0.0	0
165	Electronic Structure of Oxygen Deficient Noncentrosymmetric Orthorhombic Hf0.5Zr0.5O2. ECS Meeting Abstracts, 2016, , .	0.0	0
166	Leakage Currents Mechanism in Thin Films of Ferroelectric Hf0.5Zr0.5O2. ECS Meeting Abstracts, 2016, , .	0.0	0
167	Three-Dimensional Non-Linear Complex Model of Dynamic Memristor Switching. ECS Meeting Abstracts, 2016, , .	0.0	0
168	Determination of Trap Density in Hafnium Oxide Films Produced by Different Atomic Layer Deposition Techniques. ECS Meeting Abstracts, 2017, , .	0.0	0
169	The Charge Trap Density Evolution in Wake-Up and Fatigue Modes of FRAM. ECS Meeting Abstracts, 2017, , .	0.0	0
170	Đžxygen Vacancy Influence on the Stabilization Properties of Ferroelectric Hf0.5Zr0.5O2: First Principle Study. ECS Meeting Abstracts, 2018, , .	0.0	0
171	Evolution of the Charge Trap Density during Endurance of Ferroelectric HfO2:La. ECS Meeting Abstracts, 2018, , .	0.0	0
172	The Relationship between the Oxygen Vacancies Density with the Electronic and Optical Properties of Hafnium Oxide. ECS Meeting Abstracts, 2018, , .	0.0	0
173	Silicon oxides and silicon nitrides: structure, properties and applications in memristors. , 2019, , .		0
174	Optical Properties of (ZrO2)1Ââ€“Âx(Y2O3)Ñ... (Ñ... = 0â€“0.037) Crystals Grown by Directional Crystallization of the Melt. Optics and Spectroscopy (English Translation of Optika I Spektroskopiya), 2020, 128, 1963-1969.	0.2	0
175	Oxygen Vacancies in Zirconium Oxide as the Blue Luminescence Centers and Traps Responsible for Charge Transport. SSRN Electronic Journal, 0, , .	0.4	0
176	Charge Transport in Amorphous Silicon Nitride. Journal of Experimental and Theoretical Physics, 2021, 133, 488-493.	0.2	0