

# Vladimir A Gritsenko

## List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

163  
papers

2,661  
citations

29  
h-index

43  
g-index

179  
ext. papers

3,012  
ext. citations

2.2  
avg, IF

5.42  
L-index

#	Paper	IF	Citations
163	Forming-Free Memristors Based on Hafnium Oxide Processed in Electron Cyclotron Resonance Hydrogen Plasma. <i>JETP Letters</i> , <b>2022</b> , 115, 79-83	1.2	0
162	Charge Transport in Nonstoichiometric SiO <sub>x</sub> Obtained by Treatment of Thermal SiO <sub>2</sub> in Hydrogen Plasma of Electronic-Cyclotron Resonance. <i>Russian Microelectronics</i> , <b>2022</b> , 51, 24-35	0.5	0
161	Charge Transport Mechanism in a PECVD Deposited Low-k SiOCH Dielectric. <i>Journal of Electronic Materials</i> , <b>2022</b> , 51, 2521-2527	1.9	
160	Multiphonon Ionization of Deep Centers in Amorphous Boron Nitride. <i>JETP Letters</i> , <b>2021</b> , 114, 433-436	1.2	2
159	Charge Transport in Amorphous Silicon Nitride. <i>Journal of Experimental and Theoretical Physics</i> , <b>2021</b> , 133, 488-493	1	
158	Oxygen vacancies in zirconium oxide as the blue luminescence centres and traps responsible for charge transport: Part I Crystals. <i>Materialia</i> , <b>2021</b> , 15, 100979	3.2	2
157	Improved Device Distribution in High-Performance SiN Resistive Random Access Memory via Arsenic Ion Implantation. <i>Nanomaterials</i> , <b>2021</b> , 11,	5.4	7
156	Bipolar conductivity in ferroelectric La:HfZrO films. <i>Applied Physics Letters</i> , <b>2021</b> , 118, 262903	3.4	0
155	Oxygen vacancies in zirconium oxide as the blue luminescence centres and traps responsible for charge transport: Part II Films. <i>Materialia</i> , <b>2021</b> , 15, 100980	3.2	4
154	Charge Transport Mechanism and Trap Origin in Methyl-Terminated Organosilicate Glass Low- $\kappa$ Dielectrics. <i>Physica Status Solidi (A) Applications and Materials Science</i> , <b>2021</b> , 218, 2000654	1.6	2
153	Charge Transport Mechanism in Atomic Layer Deposited Oxygen-Deficient TaO <sub>x</sub> Films. <i>Physica Status Solidi (B): Basic Research</i> , <b>2021</b> , 258, 2000432	1.3	2
152	Exceedingly High Performance Top-Gate P-Type SnO Thin Film Transistor with a Nanometer Scale Channel Layer. <i>Nanomaterials</i> , <b>2021</b> , 11,	5.4	9
151	Charge transport mechanism in the forming-free memristor based on silicon nitride. <i>Scientific Reports</i> , <b>2021</b> , 11, 2417	4.9	11
150	43.2: Invited Paper: High Mobility Oxide Complementary TFTs for System-on-Display and Three-Dimensional Brain-Mimicking IC. <i>Digest of Technical Papers SID International Symposium</i> , <b>2021</b> , 52, 292-294	0.5	1
149	The atomic and electronic structure of Hf <sub>0.5</sub> Zr <sub>0.5</sub> O <sub>2</sub> and Hf <sub>0.5</sub> Zr <sub>0.5</sub> O <sub>2</sub> :La films. <i>Journal of Science: Advanced Materials and Devices</i> , <b>2021</b> , 6, 595-595	4.2	0
148	Atomic Structure and Optical Properties of Plasma Enhanced Chemical Vapor Deposited SiCOH Low-k Dielectric Film. <i>Optics and Spectroscopy (English Translation of Optika I Spektroskopiya)</i> , <b>2021</b> , 129, 645-651	0.7	2
147	Memory Properties of SiO <sub>x</sub> - and SiN <sub>x</sub> -Based Memristors. <i>Nanobiotechnology Reports</i> , <b>2021</b> , 16, 722-731		1

146	High-Performance Top-Gate Thin-Film Transistor with an Ultra-Thin Channel Layer. <i>Nanomaterials</i> , <b>2020</b> , 10,	5.4	8
145	Charge transport mechanism in the metal nitride oxide silicon forming-free memristor structure. <i>Applied Physics Letters</i> , <b>2020</b> , 116, 203502	3.4	14
144	Critical properties and charge transport in ethylene bridged organosilica low-k dielectrics. <i>Journal of Applied Physics</i> , <b>2020</b> , 127, 195105	2.5	6
143	High Performance All Nonmetal SiN Resistive Random Access Memory with Strong Process Dependence. <i>Scientific Reports</i> , <b>2020</b> , 10, 2807	4.9	12
142	Optical Properties of (ZrO <sub>2</sub> ) <sub>1-x</sub> (Y <sub>2</sub> O <sub>3</sub> ) <sub>x</sub> (0 ≤ x ≤ 0.037) Crystals Grown by Directional Crystallization of the Melt. <i>Optics and Spectroscopy (English Translation of Optika i Spektroskopiya)</i> , <b>2020</b> , 128, 1963-1969	0.7	7
141	Atomic and Electronic Structure of SiO <sub>x</sub> Films Obtained with Hydrogen Electron Cyclotron Resonance Plasma. <i>Journal of Experimental and Theoretical Physics</i> , <b>2020</b> , 131, 940-944	1	1
140	Electronic structure and charge transport mechanism in a forming-free SiO <sub>2</sub> -based memristor. <i>Nanotechnology</i> , <b>2020</b> , 31, 505704	3.4	9
139	Charge Transport Mechanism in a Formless Memristor Based on Silicon Nitride. <i>Russian Microelectronics</i> , <b>2020</b> , 49, 372-377	0.5	2
138	Silicon Nanocrystals and Amorphous Nanoclusters in SiO <sub>x</sub> and SiN <sub>x</sub> : Atomic, Electronic Structure, and Memristor Effects <b>2020</b> ,		1
137	Charge transport mechanism in La:HfO <sub>2</sub> . <i>Applied Physics Letters</i> , <b>2020</b> , 117, 142901	3.4	6
136	Optical Properties of the SiO <sub>x</sub> ( <i>x</i> Optics and Spectroscopy (English Translation of Optika i Spektroskopiya), <b>2020</b> , 128, 1577-1582	0.7	2
135	Impact of oxygen vacancy on the ferroelectric properties of lanthanum-doped hafnium oxide. <i>Applied Physics Letters</i> , <b>2020</b> , 117, 162901	3.4	10
134	Charge transport mechanism of high-resistive state in RRAM based on SiO <sub>x</sub> . <i>Applied Physics Letters</i> , <b>2019</b> , 114, 033503	3.4	16
133	Memristor effect in GeO[SiO <sub>2</sub> ] and GeO[SiO] solid alloys films. <i>Applied Physics Letters</i> , <b>2019</b> , 114, 233104	3.4	16
132	Structure of Hf <sub>0.9</sub> La <sub>0.1</sub> O <sub>2</sub> Ferroelectric Films Obtained by the Atomic Layer Deposition. <i>JETP Letters</i> , <b>2019</b> , 109, 116-120	1.2	3
131	All Nonmetal Resistive Random Access Memory. <i>Scientific Reports</i> , <b>2019</b> , 9, 6144	4.9	17
130	Mechanism of stress induced leakage current in Si <sub>3</sub> N <sub>4</sub> . <i>Materials Research Express</i> , <b>2019</b> , 6, 076401	1.7	1
129	Charge transport mechanism in periodic mesoporous organosilica low-k dielectric. <i>Applied Physics Letters</i> , <b>2019</b> , 115, 082904	3.4	9

128	Nanoscale potential fluctuations and electron percolation in silicon oxide (SiO <sub>x</sub> , x = 1.4, 1.6). <i>Materials Research Express</i> , <b>2019</b> , 6, 116409	1.7	1
127	Nanosized Potential Fluctuations in SiO <sub>x</sub> Synthesized by Plasma-Enhanced Chemical Vapor Deposition. <i>Physics of the Solid State</i> , <b>2019</b> , 61, 2560-2568	0.8	2
126	Atomic and Electronic Structures of a-SiN <sub>x</sub> :H. <i>Journal of Experimental and Theoretical Physics</i> , <b>2019</b> , 129, 924-934	1	4
125	Optical Properties of Nonstoichiometric Silicon Oxide SiO <sub>x</sub> (x Optics and Spectroscopy (English Translation of Optika i Spektroskopiya), <b>2019</b> , 127, 836-840	0.7	4
124	Charge transport mechanism in SiN <sub>x</sub> -based memristor. <i>Applied Physics Letters</i> , <b>2019</b> , 115, 253502	3.4	13
123	Identification of the nature of traps involved in the field cycling of Hf <sub>0.5</sub> Zr <sub>0.5</sub> O <sub>2</sub> -based ferroelectric thin films. <i>Acta Materialia</i> , <b>2019</b> , 166, 47-55	8.4	46
122	Multiphonon trap ionization transport in nonstoichiometric SiN <sub>x</sub> . <i>Materials Research Express</i> , <b>2019</b> , 6, 036304	1.7	3
121	Atomic and electronic structure of ferroelectric La-doped HfO <sub>2</sub> films. <i>Materials Research Express</i> , <b>2019</b> , 6, 036403	1.7	8
120	Electronic structure and charge transport in nonstoichiometric tantalum oxide. <i>Nanotechnology</i> , <b>2018</b> , 29, 264001	3.4	12
119	Electronic structure of stoichiometric and oxygen-deficient ferroelectric HfZrO. <i>Nanotechnology</i> , <b>2018</b> , 29, 194001	3.4	8
118	Charge Transport and the Nature of Traps in Oxygen Deficient Tantalum Oxide. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2018</b> , 10, 3769-3775	9.5	33
117	Electronic Structure of Oxygen Vacancies in the Orthorhombic Noncentrosymmetric Phase Hf <sub>0.5</sub> Zr <sub>0.5</sub> O <sub>2</sub> . <i>JETP Letters</i> , <b>2018</b> , 107, 55-60	1.2	8
116	Short-Range Order and Charge Transport in SiO <sub>x</sub> : Experiment and Numerical Simulation. <i>Technical Physics Letters</i> , <b>2018</b> , 44, 541-544	0.7	1
115	Optical Properties of Nonstoichiometric Tantalum Oxide TaO <sub>x</sub> (x Optics and Spectroscopy (English Translation of Optika i Spektroskopiya), <b>2018</b> , 124, 808-813	0.7	10
114	Nanoscale Potential Fluctuations in Zirconium Oxide and the Flash Memory Based on Electron and Hole Localization. <i>Advanced Electronic Materials</i> , <b>2018</b> , 4, 1700592	6.4	2
113	Nanoscale potential fluctuations in nonstoichiometric tantalum oxide. <i>Nanotechnology</i> , <b>2018</b> , 29, 4252024	3.4	5
112	Atomic and Electronic Structures of Metal-Rich Noncentrosymmetric ZrO <sub>x</sub> . <i>JETP Letters</i> , <b>2018</b> , 108, 226-230	1.2	2
111	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. <i>Physics of the Solid State</i> , <b>2018</b> , 60, 2050-2057	0.8	5

110	Electronic Structure of Amorphous SiOx with Variable Composition. <i>JETP Letters</i> , <b>2018</b> , 108, 127-131	1.2	2
109	Local Oscillations of Silicon-Silicon Bonds in Silicon Nitride. <i>Technical Physics Letters</i> , <b>2018</b> , 44, 424-427	0.7	6
108	Three-Dimensional Non-Linear Complex Model of Dynamic Memristor Switching. <i>ECS Transactions</i> , <b>2017</b> , 75, 95-104	1	5
107	Leakage Currents Mechanism in Thin Films of Ferroelectric Hf <sub>0.5</sub> Zr <sub>0.5</sub> O <sub>2</sub> . <i>ECS Transactions</i> , <b>2017</b> , 75, 123-129	1	6
106	Mechanism of charge transport of stress induced leakage current and trap nature in thermal oxide on silicon. <i>Journal of Physics: Conference Series</i> , <b>2017</b> , 864, 012003	0.3	1
105	Dispersion of the refractive index in high-k dielectrics. <i>Optics and Spectroscopy (English Translation of Optika i Spektroskopiya)</i> , <b>2017</b> , 123, 728-732	0.7	8
104	Optical Properties of TiO <sub>2</sub> Films Deposited by Reactive Electron Beam Sputtering. <i>Journal of Electronic Materials</i> , <b>2017</b> , 46, 6089-6095	1.9	30
103	Charge transport in thin hafnium and zirconium oxide films. <i>Optoelectronics, Instrumentation and Data Processing</i> , <b>2017</b> , 53, 184-189	0.6	14
102	Relaxation of the electric current in Si <sub>3</sub> N <sub>4</sub> : Experiment and numerical simulation. <i>Physics of the Solid State</i> , <b>2017</b> , 59, 47-52	0.8	1
101	Leakage currents mechanism in thin films of ferroelectric Hf <sub>0.5</sub> Zr <sub>0.5</sub> O <sub>2</sub> . <i>Journal of Physics: Conference Series</i> , <b>2017</b> , 864, 012002	0.3	1
100	Hot electrons in silicon oxide. <i>Uspekhi Fizicheskikh Nauk</i> , <b>2017</b> , 187, 971-979	0.5	
99	Oxygen Vacancy in Hafnia as a Blue Luminescence Center and a Trap of Charge Carriers. <i>Journal of Physical Chemistry C</i> , <b>2016</b> , 120, 19980-19986	3.8	32
98	Charge transport in thin layers of ferroelectric Hf <sub>0.5</sub> Zr <sub>0.5</sub> O <sub>2</sub> . <i>Russian Microelectronics</i> , <b>2016</b> , 45, 350-356	0.5	1
97	Si-Si bond as a deep trap for electrons and holes in silicon nitride. <i>JETP Letters</i> , <b>2016</b> , 103, 171-174	1.2	7
96	Electronic properties of hafnium oxide: A contribution from defects and traps. <i>Physics Reports</i> , <b>2016</b> , 613, 1-20	27.7	87
95	Multilayer graphene-based flash memory. <i>Russian Microelectronics</i> , <b>2016</b> , 45, 63-67	0.5	1
94	The charge transport mechanism and electron trap nature in thermal oxide on silicon. <i>Applied Physics Letters</i> , <b>2016</b> , 109, 052901	3.4	12
93	Nature of traps responsible for the memory effect in silicon nitride. <i>Applied Physics Letters</i> , <b>2016</b> , 109, 062904	3.4	29

92	Optical properties of nonstoichiometric ZrO <sub>x</sub> according to spectroellipsometry data. <i>Optics and Spectroscopy (English Translation of Optika i Spektroskopiya)</i> , <b>2016</b> , 121, 241-245	0.7	1
91	Silicon Nitride on Si: Electronic Structure for Flash Memory Devices. <i>Materials and Energy</i> , <b>2016</b> , 273-322		8
90	The atomic structure and chemical composition of HfO <sub>x</sub> (x Materials Research Express, <b>2016</b> , 3, 085008	1.7	7
89	Charge transport in amorphous Hf <sub>0.5</sub> Zr <sub>0.5</sub> O <sub>2</sub> . <i>Applied Physics Letters</i> , <b>2015</b> , 106, 102906	3.4	23
88	Origin of the blue luminescence band in zirconium oxide. <i>Physics of the Solid State</i> , <b>2015</b> , 57, 1347-1351	0.8	7
87	Nanoscale Potential Fluctuation in Non-Stoichiometric Hafnium Suboxides. <i>ECS Transactions</i> , <b>2015</b> , 69, 237-241	1	3
86	Charge transport mechanism in thin films of amorphous and ferroelectric Hf <sub>0.5</sub> Zr <sub>0.5</sub> O <sub>2</sub> . <i>JETP Letters</i> , <b>2015</b> , 102, 544-547	1.2	21
85	Cathodo- and photoluminescence increase in amorphous hafnium oxide under annealing in oxygen. <i>Journal of Experimental and Theoretical Physics</i> , <b>2015</b> , 120, 710-715	1	12
84	Electronic structure of silicon dioxide (a review). <i>Physics of the Solid State</i> , <b>2014</b> , 56, 207-222	0.8	79
83	Electronic structure of SiN <sub>x</sub> . <i>JETP Letters</i> , <b>2014</b> , 98, 709-712	1.2	6
82	The origin of 2.7 eV luminescence and 5.2 eV excitation band in hafnium oxide. <i>Applied Physics Letters</i> , <b>2014</b> , 104, 071904	3.4	34
81	Charge carrier transport mechanism in high- $\kappa$ dielectrics and their based resistive memory cells. <i>Optoelectronics, Instrumentation and Data Processing</i> , <b>2014</b> , 50, 310-314	0.6	3
80	Electronic Structure of Noncentrosymmetric HfGeO <sub>2</sub> with Oxygen Vacancy: Ab Initio Calculations and Comparison with Experiment. <i>Journal of Physical Chemistry C</i> , <b>2014</b> , 118, 3644-3650	3.8	20
79	The origin of 2.7 eV blue luminescence band in zirconium oxide. <i>Journal of Applied Physics</i> , <b>2014</b> , 116, 244109	2.5	29
78	Percolation conductivity in hafnium sub-oxides. <i>Applied Physics Letters</i> , <b>2014</b> , 105, 262903	3.4	13
77	Origin of traps and charge transport mechanism in hafnia. <i>Applied Physics Letters</i> , <b>2014</b> , 105, 222901	3.4	30
76	Transport mechanisms of electrons and holes in dielectric films. <i>Physics-USpekhi</i> , <b>2013</b> , 56, 999-1012	2.8	30
75	Atomic and electronic structures of lutetium oxide Lu <sub>2</sub> O <sub>3</sub> . <i>Journal of Experimental and Theoretical Physics</i> , <b>2013</b> , 116, 323-329	1	8

74	Evolution of the conductivity type in germania by varying the stoichiometry. <i>Applied Physics Letters</i> , <b>2013</b> , 103, 232904	3.4	3
73	Large-scale potential fluctuations caused by SiO <sub>x</sub> compositional inhomogeneity. <i>Physics of the Solid State</i> , <b>2012</b> , 54, 493-498	0.8	3
72	Enhancement of the electron-stimulated desorption from amorphous aluminum oxide films on silicon during an increase in the substrate temperature. <i>Technical Physics</i> , <b>2012</b> , 57, 693-696	0.5	
71	Mechanism of GeO <sub>2</sub> resistive switching based on the multi-phonon assisted tunneling between traps. <i>Applied Physics Letters</i> , <b>2012</b> , 100, 243506	3.4	49
70	Electronic structure of silicon nitride. <i>Physics-Uspokhi</i> , <b>2012</b> , 55, 498-507	2.8	30
69	Bipolar conductivity in nanocrystallized TiO <sub>2</sub> . <i>Applied Physics Letters</i> , <b>2012</b> , 101, 032101	3.4	8
68	Short-range order in amorphous SiO <sub>x</sub> by x ray photoelectron spectroscopy. <i>Journal of Applied Physics</i> , <b>2011</b> , 110, 014107	2.5	19
67	Atomic and Electronic Structures of Traps in Silicon Oxide and Silicon Oxynitride. <i>Critical Reviews in Solid State and Materials Sciences</i> , <b>2011</b> , 36, 129-147	10.1	13
66	Bipolar conductivity in amorphous HfO <sub>2</sub> . <i>Applied Physics Letters</i> , <b>2011</b> , 99, 072109	3.4	17
65	Electronic structure of Ta <sub>2</sub> O <sub>5</sub> with oxygen vacancy: ab initio calculations and comparison with experiment. <i>Journal of Applied Physics</i> , <b>2011</b> , 110, 024115	2.5	83
64	Quantum confinement and electron spin resonance characteristics in Si-implanted silicon oxide films. <i>Journal of Applied Physics</i> , <b>2011</b> , 109, 084502	2.5	5
63	Study of the atomic and electronic structures of amorphous silicon nitride and defects in it. <i>JETP Letters</i> , <b>2011</b> , 94, 202-205	1.2	6
62	Electronic structure of TiO <sub>2</sub> rutile with oxygen vacancies: Ab initio simulations and comparison with the experiment. <i>Journal of Experimental and Theoretical Physics</i> , <b>2011</b> , 112, 310-316	1	25
61	Wigner crystallization of electrons in deep traps in a two-dimensional dielectric. <i>Journal of Experimental and Theoretical Physics</i> , <b>2011</b> , 112, 479-481	1	2
60	Charge transport in dielectrics by tunneling between traps. <i>Journal of Experimental and Theoretical Physics</i> , <b>2011</b> , 112, 1026-1034	1	14
59	Ab initio simulation of the electronic structure of Ta <sub>2</sub> O <sub>5</sub> with oxygen vacancy and comparison with experiment. <i>Journal of Experimental and Theoretical Physics</i> , <b>2011</b> , 112, 1035-1041	1	13
58	Quantization of the electronic spectrum and localization of electrons and holes in silicon quantum dots. <i>Physics of the Solid State</i> , <b>2011</b> , 53, 860-863	0.8	4
57	Charge transport in dielectrics via tunneling between traps. <i>Journal of Applied Physics</i> , <b>2011</b> , 109, 093705.5	5.5	60

56	Electronic structure of silicon oxynitride: Ab-initio and experimental study, comparison with silicon nitride. <i>Journal of Applied Physics</i> , <b>2011</b> , 110, 114103	2.5	11
55	Application and electronic structure of high-permittivity dielectrics. <i>Physics-Uspekhi</i> , <b>2010</b> , 53, 561-575	2.8	46
54	Wigner crystallization due to electrons localized at deep traps in two-dimensional amorphous dielectric. <i>Applied Physics Letters</i> , <b>2010</b> , 96, 263510	3.4	5
53	Electronic structure of oxygen vacancy and poly-vacancy in $\alpha$ - and $\beta$ -Al <sub>2</sub> O <sub>3</sub> <b>2010</b> ,		2
52	Electronic structure of aluminum oxide: ab initio simulations of $\alpha$ - and $\beta$ -phases and comparison with experiment for amorphous films. <i>EPJ Applied Physics</i> , <b>2010</b> , 52, 30501	1.1	22
51	Electronic structure of silicon nitride according to ab initio quantum-chemical calculations and experimental data. <i>Journal of Experimental and Theoretical Physics</i> , <b>2010</b> , 111, 659-666	1	4
50	Electronic structure of an oxygen vacancy in Al <sub>2</sub> O <sub>3</sub> from the results of Ab Initio quantum-chemical calculations and photoluminescence experiments. <i>Journal of Experimental and Theoretical Physics</i> , <b>2010</b> , 111, 989-995	1	26
49	Oxygen deficiency defects in amorphous Al <sub>2</sub> O <sub>3</sub> . <i>Journal of Applied Physics</i> , <b>2010</b> , 108, 013501	2.5	88
48	Structure of silicon/oxide and nitride/oxide interfaces. <i>Physics-Uspekhi</i> , <b>2009</b> , 52, 869-877	2.8	16
47	Phonon-coupled trap-assisted charge injection in metal-nitride-oxide-silicon/silicon-oxide-nitride-oxide-silicon structures. <i>Journal of Applied Physics</i> , <b>2009</b> , 105, 123709	2.5	21
46	Multiphonon mechanism of the ionization of traps in Al <sub>2</sub> O <sub>3</sub> : Experiment and numerical simulation. <i>JETP Letters</i> , <b>2009</b> , 89, 506-509	1.2	15
45	Trap-assisted tunneling hole injection in SiO <sub>2</sub> : Experiment and theory. <i>Journal of Experimental and Theoretical Physics</i> , <b>2009</b> , 109, 786-793	1	15
44	Electronic structure of amorphous silicon oxynitride with different compositions. <i>Journal of Applied Physics</i> , <b>2009</b> , 105, 073706	2.5	13
43	Charge transport mechanism in amorphous alumina. <i>Applied Physics Letters</i> , <b>2009</b> , 94, 222904	3.4	56
42	Composition and structure of hafnia films on silicon. <i>Inorganic Materials</i> , <b>2008</b> , 44, 965-970	0.9	26
41	Atomic structure of the amorphous nonstoichiometric silicon oxides and nitrides. <i>Physics-Uspekhi</i> , <b>2008</b> , 51, 699-708	2.8	45
40	Electronic structure of $\beta$ -Al <sub>2</sub> O <sub>3</sub> : Ab initio simulations and comparison with experiment. <i>JETP Letters</i> , <b>2007</b> , 85, 165-168	1.2	64
39	Electronic band structure and effective masses of electrons and holes in the $\alpha$ - and $\beta$ -phases of silicon nitride. <i>Physics of the Solid State</i> , <b>2007</b> , 49, 1628-1632	0.8	30

38	Single band electronic conduction in hafnium oxide prepared by atomic layer deposition. <i>Microelectronics Reliability</i> , <b>2007</b> , 47, 36-40	1.2	8
37	Atomic and electronic structure of amorphous and crystalline hafnium oxide: X-ray photoelectron spectroscopy and density functional calculations. <i>Journal of Applied Physics</i> , <b>2007</b> , 101, 053704	2.5	66
36	The atomic and electron structure of ZrO <sub>2</sub> . <i>Journal of Experimental and Theoretical Physics</i> , <b>2006</b> , 102, 799-809	1	19
35	Electron and hole injection in metal-oxide-nitride-oxide-silicon structures. <i>Journal of Experimental and Theoretical Physics</i> , <b>2006</b> , 102, 810-820	1	16
34	Two-band conduction in TiO <sub>2</sub> . <i>Physics of the Solid State</i> , <b>2006</b> , 48, 224-228	0.8	16
33	A new memory element based on silicon nanoclusters in a ZrO <sub>2</sub> insulator with a high permittivity for electrically erasable read-only memory. <i>Semiconductors</i> , <b>2005</b> , 39, 716	0.7	6
32	Two-band conductivity of ZrO <sub>2</sub> synthesized by molecular beam epitaxy. <i>JETP Letters</i> , <b>2005</b> , 81, 587-589	1.2	9
31	Two-bands charge transport in silicon nitride due to phonon-assisted trap ionization. <i>Journal of Applied Physics</i> , <b>2004</b> , 96, 4293-4296	2.5	61
30	Short-range order, large-scale potential fluctuations, and photoluminescence in amorphous SiN <sub>x</sub> . <i>Journal of Experimental and Theoretical Physics</i> , <b>2004</b> , 98, 760-769	1	30
29	Interaction with charge carriers and the optical absorption spectrum of an associate formed by elementary defects (an oxygen vacancy and a silylene center) in SiO <sub>2</sub> . <i>Physics of the Solid State</i> , <b>2004</b> , 46, 2021-2025	0.8	1
28			
27	Bonding and band offset in N <sub>2</sub> O-grown oxynitride. <i>Journal of Vacuum Science &amp; Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena</i> , <b>2003</b> , 21, 241		22
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