

Alexander A Demkov

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231
papers

6,634
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74
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242
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7,339
ext. citations

3.6
avg, IF

5.96
L-index

#	Paper	IF	Citations
231	Electronic structure approach for complex silicas. <i>Physical Review B</i> , 1995 , 52, 1618-1630	3.3	334
230	A silicon-based photocathode for water reduction with an epitaxial SrTiO ₃ protection layer and a nanostructured catalyst. <i>Nature Nanotechnology</i> , 2015 , 10, 84-90	28.7	292
229	Wide-band-gap Si in open fourfold-coordinated clathrate structures. <i>Physical Review B</i> , 1994 , 49, 8048-8053	3.3	243
228	Further developments in the local-orbital density-functional-theory tight-binding method. <i>Physical Review B</i> , 2001 , 64,	3.3	222
227	Switching of ferroelectric polarization in epitaxial BaTiO ₃ films on silicon without a conducting bottom electrode. <i>Nature Nanotechnology</i> , 2013 , 8, 748-54	28.7	184
226	Advances and applications in the FIREBALL ab initio tight-binding molecular-dynamics formalism. <i>Physica Status Solidi (B): Basic Research</i> , 2011 , 248, 1989-2007	1.3	169
225	Charge origin and localization at the n-type SrTiO ₃ /LaAlO ₃ interface. <i>Physical Review B</i> , 2008 , 78,	3.3	169
224	Large Pockels effect in micro- and nanostructured barium titanate integrated on silicon. <i>Nature Materials</i> , 2019 , 18, 42-47	27	155
223	Theoretical investigation of random Si-C alloys. <i>Physical Review B</i> , 1993 , 48, 2207-2214	3.3	144
222	Two-dimensional growth of high-quality strontium titanate thin films on Si. <i>Journal of Applied Physics</i> , 2003 , 93, 4521-4525	2.5	134
221	Fermi level pinning by defects in HfO ₂ -metal gate stacks. <i>Applied Physics Letters</i> , 2007 , 91, 132912	3.4	125
220	Electronic structure of oxygen vacancies in SrTiO ₃ and LaAlO ₃ . <i>Physical Review B</i> , 2012 , 86,	3.3	121
219	Atomic and electronic structure of the Si/SrTiO ₃ interface. <i>Physical Review B</i> , 2003 , 68,	3.3	121
218	Highly controllable and stable quantized conductance and resistive switching mechanism in single-crystal TiO ₂ resistive memory on silicon. <i>Nano Letters</i> , 2014 , 14, 4360-7	11.5	101
217	Theoretical study of the insulator/insulator interface: Band alignment at the SiO ₂ /HfO ₂ junction. <i>Physical Review B</i> , 2007 , 75,	3.3	92
216	Optical properties of bulk and thin-film SrTiO ₃ on Si and Pt. <i>Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena</i> , 2000 , 18, 2242		92
215	The interface of epitaxial SrTiO ₃ on silicon: in situ and ex situ studies. <i>Applied Physics Letters</i> , 2003 , 82, 203-205	3.4	90

214	Monoclinic to tetragonal transformations in hafnia and zirconia: A combined calorimetric and density functional study. <i>Physical Review B</i> , 2009 , 80,	3-3	89
213	Electron correlation in oxygen vacancy in SrTiO ₃ . <i>Physical Review Letters</i> , 2013 , 111, 217601	7-4	88
212	Growth Study and Theoretical Investigation of the Ultrathin Oxide SiO ₂ /Bi Heterojunction. <i>Physical Review Letters</i> , 1999 , 83, 2038-2041	7-4	88
211	Magnetoelectric coupling and electric control of magnetization in ferromagnet/ferroelectric/normal-metal superlattices. <i>Physical Review B</i> , 2009 , 80,	3-3	86
210	Theoretical investigation of alkali-metal doping in Si clathrates. <i>Physical Review B</i> , 1994 , 50, 17001-17008,	3	82
209	Complex band structure and the band alignment problem at the Si/high-k dielectric interface. <i>Physical Review B</i> , 2005 , 71,	3-3	70
208	Interfacial magnetoelectric coupling in tricomponent superlattices. <i>Physical Review B</i> , 2010 , 81,	3-3	66
207	Atomic layer deposition of perovskite oxides and their epitaxial integration with Si, Ge, and other semiconductors. <i>Applied Physics Reviews</i> , 2015 , 2, 041301	17-3	64
206	Carrier density modulation in a germanium heterostructure by ferroelectric switching. <i>Nature Communications</i> , 2015 , 6, 6067	17-4	64
205	Electronic structure of (LaNiO ₃) ₂ /(LaAlO ₃) _N heterostructures grown along [111]. <i>Physical Review B</i> , 2012 , 85,	3-3	63
204	Strain-driven spin-state transition and superexchange interaction in LaCoO ₃ : Ab initio study. <i>Physical Review B</i> , 2012 , 86,	3-3	62
203	First-principles study of the biomineral hydroxyapatite. <i>Physical Review B</i> , 2011 , 84,	3-3	62
202	Switchable conductivity at the ferroelectric interface: Nonpolar oxides. <i>Physical Review B</i> , 2015 , 91,	3-3	61
201	Absence of critical thickness in an ultrathin improper ferroelectric film. <i>Physical Review Letters</i> , 2009 , 102, 107601	7-4	61
200	Integration of Functional Oxides with Semiconductors 2014 ,		59
199	Epitaxial integration of ferromagnetic correlated oxide LaCoO ₃ with Si (100). <i>Applied Physics Letters</i> , 2011 , 98, 053104	3-4	57
198	Inelastic resonant tunneling in C ₆₀ molecular junctions. <i>Physical Review B</i> , 2007 , 75,	3-3	57
197	Thermodynamic stability and band alignment at a metal/high-k dielectric interface. <i>Physical Review B</i> , 2006 , 74,	3-3	55

196	Microstructure and ferroelectricity of BaTiO thin films on Si for integrated photonics. <i>Nanotechnology</i> , 2017 , 28, 075706	3.4	53
195	Epitaxial c-axis oriented BaTiO ₃ thin films on SrTiO ₃ -buffered Si(001) by atomic layer deposition. <i>Applied Physics Letters</i> , 2014 , 104, 082910	3.4	51
194	Electronic and optical properties of NbO ₂ . <i>Journal of Applied Physics</i> , 2014 , 116, 213705	2.5	50
193	Structural, optical, and electrical properties of strained La-doped SrTiO ₃ films. <i>Journal of Applied Physics</i> , 2014 , 116, 043705	2.5	48
192	Strain relaxation in single crystal SrTiO ₃ grown on Si (001) by molecular beam epitaxy. <i>Journal of Applied Physics</i> , 2012 , 111, 064112	2.5	46
191	The application of approximate density functionals to complex systems. <i>International Journal of Quantum Chemistry</i> , 1998 , 69, 327-340	2.1	46
190	Energetics and electronic structure of the hypothetical cubic zincblende form of GeC. <i>Modelling and Simulation in Materials Science and Engineering</i> , 1993 , 1, 741-754	2	45
189	Orbital ordering under reduced symmetry in transition metal perovskites: Oxygen vacancy in SrTiO ₃ . <i>Physical Review B</i> , 2012 , 86,	3.3	44
188	Multi-layered NiO/NbO/NiO fast drift-free threshold switch with high I/I ratio for selector application. <i>Scientific Reports</i> , 2017 , 7, 4068	4.9	43
187	Scavenging of oxygen from SrTiO ₃ during oxide thin film deposition and the formation of interfacial 2DEGs. <i>Journal of Applied Physics</i> , 2017 , 121, 105302	2.5	42
186	Lattice distortion effects on topological phases in (LaNiO ₃) ₂ /(LaAlO ₃) _N heterostructures grown along the [111] direction. <i>Physical Review B</i> , 2013 , 88,	3.3	41
185	Temperature-dependent ²³ Na Knight shifts and sharply peaked structure in the electronic densities of states of Na-Si clathrates. <i>Physical Review B</i> , 1998 , 57, 4172-4179	3.3	41
184	Atomic and electronic structure of the ferroelectric BaTiO ₃ /Ge(001) interface. <i>Applied Physics Letters</i> , 2014 , 104, 242908	3.4	40
183	Atomic layer deposition of crystalline SrHfO ₃ directly on Ge (001) for high-k dielectric applications. <i>Journal of Applied Physics</i> , 2015 , 117, 054101	2.5	39
182	A Chemical Route to Monolithic Integration of Crystalline Oxides on Semiconductors. <i>Advanced Materials Interfaces</i> , 2014 , 1, 1400081	4.6	38
181	Epitaxial strontium titanate films grown by atomic layer deposition on SrTiO ₃ -buffered Si(001) substrates. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 2013 , 31, 01A136	2.9	38
180	Expanded-volume phases of silicon: Zeolites without oxygen. <i>Physical Review B</i> , 1996 , 53, 11288-11291	3.3	38
179	Theoretical investigation of PtSi surface energies and work functions. <i>Physical Review B</i> , 2006 , 73,	3.3	37

178	Preparation of a clean Ge(001) surface using oxygen plasma cleaning. <i>Journal of Vacuum Science and Technology B: Nanotechnology and Microelectronics</i> , 2013 , 31, 031201	1.3	35
177	Band alignment and electronic structure of the anatase TiO ₂ /SrTiO ₃ (001) heterostructure integrated on Si(001). <i>Physical Review B</i> , 2012 , 86,	3.3	35
176	Quasi-two-dimensional electron gas at the epitaxial alumina/SrTiO ₃ interface: Control of oxygen vacancies. <i>Journal of Applied Physics</i> , 2015 , 117, 095303	2.5	34
175	Hafnia: Energetics of thin films and nanoparticles. <i>Journal of Applied Physics</i> , 2010 , 107, 123514	2.5	33
174	First-principles study of polar LaAlO (001) surface stabilization by point defects. <i>Physical Review B</i> , 2011 , 84,	3.3	33
173	Effects of aluminum incorporation on band alignment at the SiO ₂ /HfO ₂ interface. <i>Physical Review B</i> , 2008 , 77,	3.3	33
172	Nature of the metal-insulator transition in NbO ₂ . <i>Physical Review B</i> , 2015 , 91,	3.3	31
171	Electronic, optical, and surface properties of PtSi thin films. <i>Physical Review B</i> , 2008 , 78,	3.3	31
170	Large positive linear magnetoresistance in the two-dimensional t electron gas at the EuO/SrTiO interface. <i>Scientific Reports</i> , 2018 , 8, 7721	4.9	31
169	Localized states induced by an oxygen vacancy in rutile TiO ₂ . <i>Journal of Applied Physics</i> , 2015 , 117, 225703	3.5	30
168	Combined experimental and theoretical study of thin hafnia films. <i>Physical Review B</i> , 2008 , 78,	3.3	30
167	Electronic structure of black sodalite. <i>Physical Review B</i> , 1998 , 57, 15129-15139	3.3	30
166	Ge(001) surface cleaning methods for device integration. <i>Applied Physics Reviews</i> , 2017 , 4, 021308	17.3	29
165	First principles study of hydroxyapatite surface. <i>Journal of Chemical Physics</i> , 2013 , 139, 044714	3.9	29
164	Assessing hafnium on hafnia as an oxygen getter. <i>Journal of Applied Physics</i> , 2014 , 115, 183703	2.5	29
163	Surface electronic structure for various surface preparations of Nb-doped SrTiO ₃ (001). <i>Journal of Applied Physics</i> , 2013 , 114, 103710	2.5	29
162	Extended Frenkel pairs and band alignment at metal-oxide interfaces. <i>Physical Review B</i> , 2009 , 79,	3.3	29
161	Band gap of epitaxial in-plane-dimerized single-phase NbO ₂ films. <i>Applied Physics Letters</i> , 2014 , 104, 092901	3.4	28

160	Critical differences in the surface electronic structure of Ge(001) and Si(001): Ab initio theory and angle-resolved photoemission spectroscopy. <i>Physical Review B</i> , 2014 , 89,	3.3	28
159	Analysis of the Pockels effect in ferroelectric barium titanate thin films on Si(0 0 1). <i>Microelectronic Engineering</i> , 2015 , 147, 215-218	2.5	27
158	Epitaxial growth of LaAlO ₃ on SrTiO ₃ -buffered Si (001) substrates by atomic layer deposition. <i>Journal of Crystal Growth</i> , 2013 , 363, 150-157	1.6	27
157	Theory of the Sr-induced reconstruction of the Si (001) surface. <i>Journal of Applied Physics</i> , 2008 , 103, 103710	2.5	27
156	Difficulties of the microscopic theory of leakage current through ultra-thin oxide barriers: point defects. <i>Physica Status Solidi (B): Basic Research</i> , 2003 , 239, 48-58	1.3	27
155	Theoretical and experimental investigation of ultrathin oxynitrides and the role of nitrogen at the SiBiO ₂ interface. <i>Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena</i> , 2000 , 18, 2388		26
154	Atomic layer deposition of photoactive CoO/SrTiO ₃ and CoO/TiO ₂ on Si(001) for visible light driven photoelectrochemical water oxidation. <i>Journal of Applied Physics</i> , 2013 , 114, 084901	2.5	25
153	Quasi-two-dimensional electron gas at the interface of Al ₂ O ₃ /SrTiO ₃ heterostructures grown by atomic layer deposition. <i>Journal of Applied Physics</i> , 2015 , 118, 115303	2.5	22
152	Oxygen vacancy-mediated room-temperature ferromagnetism in insulating cobalt-substituted SrTiO ₃ epitaxially integrated with silicon. <i>Physical Review B</i> , 2013 , 87,	3.3	22
151	Spin-polarized two-dimensional electron gas through electrostatic doping in LaAlO ₃ /EuO heterostructures. <i>Physical Review B</i> , 2010 , 82,	3.3	22
150	Final-state effect on x-ray photoelectron spectrum of nominally d1 and n-doped d0 transition-metal oxides. <i>Physical Review B</i> , 2015 , 92,	3.3	21
149	Efficient variational approach to the impurity problem and its application to the dynamical mean-field theory. <i>Physical Review B</i> , 2013 , 88,	3.3	21
148	Theoretical predictions of expanded-volume phases of GaAs. <i>Physical Review B</i> , 1997 , 55, 6904-6913	3.3	21
147	Electronic structure, elastic properties, surface energies, and work functions of NiGe and PtGe within the framework of density-functional theory for various surface terminations. <i>Physical Review B</i> , 2007 , 75,	3.3	21
146	Using Zintl-Klemm intermetallics in oxide-semiconductor heteroepitaxy. <i>Applied Physics Letters</i> , 2012 , 100, 071602	3.4	20
145	Epitaxy of polar semiconductor Co ₃ O ₄ (110): Growth, structure, and characterization. <i>Journal of Applied Physics</i> , 2014 , 115, 243708	2.5	19
144	Band alignment at the SiO ₂ /HfO ₂ interface: Group IIIA versus group IIIB metal dopants. <i>Physical Review B</i> , 2011 , 84,	3.3	19
143	Growth of epitaxial oxides on silicon using atomic layer deposition: Crystallization and annealing of TiO ₂ on SrTiO ₃ -buffered Si(001). <i>Journal of Vacuum Science and Technology B: Nanotechnology and Microelectronics</i> , 2012 , 30, 04E111	1.3	19

142	Steps on the (001) SrTiO ₃ surface. <i>Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena</i> , 2002 , 20, 1664		19
141	Charge transfer in Sr Zintl template on Si(001). <i>Applied Physics Letters</i> , 2013 , 102, 031604	3.4	18
140	Bandgap engineering in perovskite oxides: Al-doped SrTiO ₃ . <i>Applied Physics Letters</i> , 2013 , 103, 142906	3.4	17
139	Ab initio calculations of surface phase diagrams of silica polymorphs. <i>Physical Review B</i> , 2005 , 71,	3.3	17
138	Strain enhancement of the electro-optical response in BaTiO ₃ films integrated on Si(001). <i>Physical Review B</i> , 2018 , 98,	3.3	16
137	(Invited) Monolithic Integration of Oxides on Semiconductors. <i>ECS Transactions</i> , 2013 , 54, 255-269	1	16
136	Model simulations of zeolite supralattices: Semiconductor Si clusters in sodalite. <i>Physical Review B</i> , 1997 , 56, 10497-10504	3.3	15
135	Anti-phase boundaries at the SrTiO ₃ /Si(001) interface studied using aberration-corrected scanning transmission electron microscopy. <i>Applied Physics Letters</i> , 2016 , 108, 091605	3.4	15
134	Ultra-Low-Power Tuning in Hybrid Barium Titanate/Silicon Nitride Electro-optic Devices on Silicon. <i>ACS Photonics</i> , 2019 , 6, 2677-2684	6.3	14
133	Consequences of oxygen-vacancy correlations at the SrTiO ₃ interface. <i>Physical Review Letters</i> , 2014 , 113, 157602	7.4	14
132	Incorporation of La in epitaxial SrTiO ₃ thin films grown by atomic layer deposition on SrTiO ₃ -buffered Si (001) substrates. <i>Journal of Applied Physics</i> , 2014 , 115, 224108	2.5	14
131	Theory of zeolite supralattices: Se in zeolite Linde type A. <i>Journal of Physics Condensed Matter</i> , 2001 , 13, 10433-10457	1.8	14
130	Mechanism of oxidation protection of the Si(001) surface by sub-monolayer Sr template. <i>Journal of Applied Physics</i> , 2016 , 120, 065301	2.5	14
129	Effect of SrTiO ₃ oxygen vacancies on the conductivity of LaTiO ₃ /SrTiO ₃ heterostructures. <i>Journal of Applied Physics</i> , 2018 , 124, 185303	2.5	14
128	Hydroxyapatite: Vibrational spectra and monoclinic to hexagonal phase transition. <i>Journal of Applied Physics</i> , 2015 , 117, 074701	2.5	13
127	Quantum confinement in transition metal oxide quantum wells. <i>Applied Physics Letters</i> , 2015 , 106, 192902	3.4	13
126	Monolithic integration of perovskites on Ge(001) by atomic layer deposition: a case study with SrHf _x Ti _{1-x} O ₃ . <i>MRS Communications</i> , 2016 , 6, 125-132	2.7	13
125	Atomic layer deposition of epitaxial ferroelectric barium titanate on Si(001) for electronic and photonic applications. <i>Journal of Applied Physics</i> , 2019 , 126, 064101	2.5	12

124	Role of oxygen vacancies in room-temperature ferromagnetism in cobalt-substituted SrTiO ₃ . <i>Physical Review B</i> , 2014 , 90,	3.3	12
123	Epitaxial growth of barium titanate thin films on germanium via atomic layer deposition. <i>Journal of Crystal Growth</i> , 2017 , 476, 6-11	1.6	12
122	Voltage-controlled ferromagnetism and magnetoresistance in LaCoO ₃ /SrTiO ₃ heterostructures. <i>Journal of Applied Physics</i> , 2013 , 114, 183909	2.5	12
121	Strain-induced ferromagnetism in LaCoO ₃ : Theory and growth on Si (100). <i>Microelectronic Engineering</i> , 2011 , 88, 1444-1447	2.5	12
120	Theoretical study of graphitic analogues of simple semiconductors. <i>Modelling and Simulation in Materials Science and Engineering</i> , 1999 , 7, 929-938	2	12
119	Recent Developments in the Theory of Supralattices. <i>Chemistry of Materials</i> , 1996 , 8, 1793-1806	9.6	12
118	Design rules for strong electro-optic materials. <i>Npj Computational Materials</i> , 2020 , 6,	10.9	12
117	Monolithic integration of rare-earth oxides and semiconductors for on-silicon technology. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 2014 , 32, 041506	2.9	11
116	Metal-induced charge transfer, structural distortion, and orbital order in SrTiO ₃ thin films. <i>Physical Review B</i> , 2013 , 87,	3.3	11
115	Ab initio study of atomic structure and Schottky barrier height at the GaAs/Ni _{0.5} Pt _{0.5} Ge interface. <i>Physical Review B</i> , 2008 , 77,	3.3	11
114	Quantum Confinement in Oxide Heterostructures: Room-Temperature Intersubband Absorption in SrTiO/LaAlO Multiple Quantum Wells. <i>ACS Nano</i> , 2018 , 12, 7682-7689	16.7	10
113	Orientation dependence of the work function for metal nanocrystals. <i>Journal of Chemical Physics</i> , 2017 , 147, 214301	3.9	10
112	Integrated films of transition metal oxides for information technology. <i>Microelectronic Engineering</i> , 2015 , 147, 285-289	2.5	10
111	Optical properties of transition metal oxide quantum wells. <i>Journal of Applied Physics</i> , 2015 , 117, 034304.5	4.5	10
110	Band alignment in visible-light photo-active CoO/SrTiO ₃ (001) heterostructures. <i>Journal of Applied Physics</i> , 2014 , 116, 245305	2.5	10
109	Wetting at the BaTiO ₃ /Pt interface. <i>Journal of Applied Physics</i> , 2013 , 113, 184102	2.5	10
108	Band engineering in silicide alloys. <i>Physical Review B</i> , 2012 , 85,	3.3	10
107	First-principles study of Zintl aluminide SrAl ₂ . <i>Physical Review B</i> , 2012 , 85,	3.3	10

106	Spin-filtering multiferroic-semiconductor heterojunctions. <i>Applied Physics Letters</i> , 2007 , 91, 202910	3.4	10
105	Displacement of surface arsenic atoms by insertion of oxygen atoms into As ₂ S ₃ backbonds. <i>Journal of Chemical Physics</i> , 2003 , 119, 9191-9198	3.9	10
104	Theoretical investigation of the initial reaction of the NO decomposition on the Si (100) (2 \times 1) reconstructed surface. <i>Journal of Chemical Physics</i> , 2000 , 113, 8237-8248	3.9	10
103	First-principles study of the linear electro-optical response in strained SrTiO ₃ . <i>Physical Review Materials</i> , 2018 , 2,	3.2	10
102	Ferroelectric domain architecture and poling of BaTiO ₃ on Si. <i>Physical Review Materials</i> , 2020 , 4,	3.2	10
101	Structural characterization of niobium oxide thin films grown on SrTiO ₃ (111) and (La,Sr)(Al,Ta)O ₃ (111) substrates. <i>Journal of Applied Physics</i> , 2016 , 120, 245302	2.5	10
100	Zintl layer formation during perovskite atomic layer deposition on Ge (001). <i>Journal of Chemical Physics</i> , 2017 , 146, 052817	3.9	9
99	Crystalline SrZrO ₃ deposition on Ge (001) by atomic layer deposition for high-k dielectric applications. <i>Journal of Applied Physics</i> , 2018 , 124, 044102	2.5	9
98	Effect of oxygen vacancies and strain on the phonon spectrum of HfO ₂ thin films. <i>Journal of Applied Physics</i> , 2017 , 121, 224101	2.5	8
97	Theoretical investigation of the band alignment of graphene on a polar SrTiO ₃ (111) surface. <i>Physical Review B</i> , 2018 , 97,	3.3	8
96	Spin-polarized two-dimensional t _{2g} electron gas: Ab initio study of EuO interface with oxygen-deficient SrTiO ₃ . <i>Physical Review B</i> , 2018 , 97,	3.3	8
95	First-principles study of the growth thermodynamics of Pt on SrTiO ₃ (001). <i>Journal of Vacuum Science and Technology B: Nanotechnology and Microelectronics</i> , 2012 , 30, 04E108	1.3	8
94	Recent studies of oxide-semiconductor heterostructures using aberration-corrected scanning transmission electron microscopy. <i>Journal of Materials Research</i> , 2017 , 32, 912-920	2.5	7
93	Surface structure analysis of Eu Zintl template on Ge(001). <i>Surface Science</i> , 2018 , 674, 94-102	1.8	7
92	Contradictory nature of Co doping in ferroelectric BaTiO ₃ . <i>Physical Review B</i> , 2016 , 94,	3.3	7
91	A Low-Leakage Epitaxial High- κ Gate Oxide for Germanium Metal-Oxide-Semiconductor Devices. <i>ACS Applied Materials & Interfaces</i> , 2016 , 8, 5416-23	9.5	7
90	The MBE growth of arbitrarily thick SrTiO ₃ /LaAlO ₃ quantum well heterostructures for use in next-generation optoelectronic devices. <i>Journal of Applied Physics</i> , 2018 , 124, 015301	2.5	7
89	Spectral identification scheme for epitaxially grown single-phase niobium dioxide. <i>Journal of Applied Physics</i> , 2016 , 119, 095308	2.5	7

88	Spectrum and phase mapping across the epitaxial $\text{BaTiO}_3/\text{SrTiO}_3$ interface. <i>Applied Physics Letters</i> , 2016 , 108, 051606	3.4	7
87	Epitaxial, electro-optically active barium titanate thin films on silicon by chemical solution deposition. <i>Journal of the American Ceramic Society</i> , 2020 , 103, 1209-1218	3.8	7
86	Piezoelectric modulation of nonlinear optical response in BaTiO_3 thin film. <i>Applied Physics Letters</i> , 2018 , 113, 132902	3.4	7
85	Hexagonal to monoclinic phase transformation in Eu_2O_3 thin films grown on GaN (0001). <i>Applied Physics Letters</i> , 2017 , 111, 142901	3.4	6
84	Quench dynamics of Anderson impurity model using configuration interaction method. <i>Physical Review B</i> , 2015 , 92,	3.3	6
83	Structure, thermodynamics, and crystallization of amorphous hafnia. <i>Journal of Applied Physics</i> , 2015 , 118, 124105	2.5	6
82	Oxygen and nitrogen diffusion in hafnium from first principles. <i>Applied Physics Letters</i> , 2014 , 104, 211909	3.4	6
81	Combined in-situ photoemission spectroscopy and density functional theory of the Sr Zintl template for oxide heteroepitaxy on Si(001). <i>Journal of Vacuum Science and Technology B: Nanotechnology and Microelectronics</i> , 2013 , 31, 04D107	1.3	6
80	Schottky barrier at the AlN/metal junction. <i>Journal of Applied Physics</i> , 2013 , 113, 013707	2.5	6
79	Work function engineering in silicides: Chlorine doping in NiSi. <i>Journal of Applied Physics</i> , 2011 , 109, 083703	3.0	6
78	Density functional theory of high-k dielectric gate stacks. <i>Microelectronics Reliability</i> , 2007 , 47, 686-693	1.2	6
77	EuO epitaxy by oxygen scavenging on SrTiO_3 (001): Effect of SrTiO_3 thickness and temperature. <i>Journal of Applied Physics</i> , 2018 , 124, 235301	2.5	6
76	An EELS signal-from-background separation algorithm for spectral line-scan/image quantification. <i>Ultramicroscopy</i> , 2018 , 195, 25-31	3.1	6
75	Monolithic integration of transition metal oxide multiple quantum wells on silicon (001). <i>Journal of Applied Physics</i> , 2019 , 125, 155302	2.5	5
74	Composition and annealing effects on the linear electro-optic response of solution-deposited barium strontium titanate. <i>Journal of the American Ceramic Society</i> , 2020 , 103, 5700-5705	3.8	5
73	Efficient and stable orbital-searching algorithm for the configuration interaction method and its application to quantum impurity problems. <i>Physical Review B</i> , 2014 , 90,	3.3	5
72	Cubic crystalline erbium oxide growth on GaN(0001) by atomic layer deposition. <i>Journal of Applied Physics</i> , 2017 , 122, 215302	2.5	5
71	Integration of ferroelectric BaTiO_3 with Ge: The role of a SrTiO_3 buffer layer investigated using aberration-corrected STEM. <i>Applied Physics Letters</i> , 2017 , 110, 252901	3.4	5

70	Emerging physics of oxide heterostructures. <i>Physica Status Solidi (B): Basic Research</i> , 2011 , 248, 2076-2081	3	5
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