

# Alexander A Demkov

## 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.

231  
papers

6,634  
citations

43  
h-index

74  
g-index

242  
ext. papers

7,339  
ext. citations

3.6  
avg, IF

5.96  
L-index

#	Paper	IF	Citations
231	Facile growth of epitaxial vanadium monoxide on SrTiO <sub>3</sub> via substrate oxygen scavenging. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , <b>2022</b> , 40, 013416	2.9	1
230	Extrinsic magnetoelectric effect at the BaTiO <sub>3</sub> /Ni interface. <i>Journal of Applied Physics</i> , <b>2022</b> , 131, 054101	1.5	1
229	Epitaxial growth by atomic layer deposition and properties of high-k barium strontium titanate on Zintl-templated Ge (001) substrates. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , <b>2022</b> , 40, 012401	2.9	1
228	Epitaxial growth of $\alpha$ -Ga <sub>2</sub> O <sub>3</sub> on SrTiO <sub>3</sub> (001) and SrTiO <sub>3</sub> -buffered Si (001) substrates by plasma-assisted molecular beam epitaxy. <i>Journal of Applied Physics</i> , <b>2022</b> , 131, 145702	2.5	1
227	Growth and Structure of Strong Pockels Material Strontium Barium Niobate on SrTiO <sub>3</sub> and Si by Molecular Beam Epitaxy. <i>Advanced Photonics Research</i> , <b>2021</b> , 2, 2170035	1.9	
226	Thick BaTiO Epitaxial Films Integrated on Si by RF Sputtering for Electro-Optic Modulators in Si Photonics. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2021</b> , 13, 51230-51244	9.5	3
225	Electro-optic response in epitaxially stabilized orthorhombic mm <sup>2</sup> BaTiO <sub>3</sub> . <i>Physical Review Materials</i> , <b>2021</b> , 5,	3.2	1
224	$\alpha$ -Ga <sub>2</sub> O <sub>3</sub> on Si (001) grown by plasma-assisted MBE with $\alpha$ -Al <sub>2</sub> O <sub>3</sub> (111) buffer layer: Structural characterization. <i>AIP Advances</i> , <b>2021</b> , 11, 045209	1.5	3
223	Epitaxial integration of BaTiO <sub>3</sub> on Si for electro-optic applications. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , <b>2021</b> , 39, 030804	2.9	4
222	Oxide-Based Optoelectronics. <i>Physica Status Solidi (B): Basic Research</i> , <b>2021</b> , 258, 2000497	1.3	2
221	Two-dimensional carrier gas at complex oxide interfaces: Control of functionality. <i>Journal of Applied Physics</i> , <b>2021</b> , 130, 024103	2.5	1
220	Pockels effect in low-temperature rhombohedral BaTiO <sub>3</sub> . <i>Physical Review B</i> , <b>2021</b> , 103,	3.3	2
219	Three-Dimensional Integration of Functional Oxides and Crystalline Silicon for Optical Neuromorphic Computing Using Nanometer-Scale Oxygen Scavenging Barriers. <i>ACS Applied Nano Materials</i> , <b>2021</b> , 4, 2153-2159	5.6	3
218	Materials for emergent silicon-integrated optical computing. <i>Journal of Applied Physics</i> , <b>2021</b> , 130, 070907	7.5	5
217	Growth and Structure of Strong Pockels Material Strontium Barium Niobate on SrTiO <sub>3</sub> and Si by Molecular Beam Epitaxy. <i>Advanced Photonics Research</i> , <b>2021</b> , 2, 2100111	1.9	0
216	Composition and annealing effects on the linear electro-optic response of solution-deposited barium strontium titanate. <i>Journal of the American Ceramic Society</i> , <b>2020</b> , 103, 5700-5705	3.8	5
215	Stoichiometry, band alignment, and electronic structure of Eu <sub>2</sub> O <sub>3</sub> thin films studied by direct and inverse photoemission: A reevaluation of the electronic band structure. <i>Journal of Applied Physics</i> , <b>2020</b> , 127, 074101	2.5	4

214	DealGrove-like thermal oxidation of Si (001) buried under a thin layer of SrTiO <sub>3</sub> . <i>Journal of Applied Physics</i> , <b>2020</b> , 127, 055302	2.5	2
213	Role of template layers for heteroepitaxial growth of lanthanum oxide on GaN(0001) via atomic layer deposition. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , <b>2020</b> , 38, 012403	2.9	1
212	Epitaxial integration of ferroelectric and conductive perovskites on silicon. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , <b>2020</b> , 38, 022403	2.9	3
211	Ferroelectric domain architecture and poling of BaTiO <sub>3</sub> on Si. <i>Physical Review Materials</i> , <b>2020</b> , 4,	3.2	10
210	First-Principles Modeling of Interface Effects in Oxides <b>2020</b> , 1119-1149		
209	Dielectric breakdown in epitaxial BaTiO <sub>3</sub> thin films. <i>Journal of Vacuum Science and Technology B: Nanotechnology and Microelectronics</i> , <b>2020</b> , 38, 044007	1.3	1
208	Preparation of clean MgO surface by oxygen plasma: Comparison with standard substrate cleaning procedures. <i>Journal of Vacuum Science and Technology B: Nanotechnology and Microelectronics</i> , <b>2020</b> , 38, 062201	1.3	2
207	Controlling spin-polarized carriers at the SrTiO <sub>3</sub> /EuO interface via the ferroelectric field effect. <i>Physical Review B</i> , <b>2020</b> , 102,	3.3	3
206	Design rules for strong electro-optic materials. <i>Npj Computational Materials</i> , <b>2020</b> , 6,	10.9	12
205	Epitaxial, electro-optically active barium titanate thin films on silicon by chemical solution deposition. <i>Journal of the American Ceramic Society</i> , <b>2020</b> , 103, 1209-1218	3.8	7
204	Monolithic integration of transition metal oxide multiple quantum wells on silicon (001). <i>Journal of Applied Physics</i> , <b>2019</b> , 125, 155302	2.5	5
203	Atomic layer deposition of epitaxial ferroelectric barium titanate on Si(001) for electronic and photonic applications. <i>Journal of Applied Physics</i> , <b>2019</b> , 126, 064101	2.5	12
202	Epitaxial BaSnO <sub>3</sub> and SrSnO <sub>3</sub> perovskite growth on SrTiO <sub>3</sub> (001) via atomic layer deposition. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , <b>2019</b> , 37, 050902	2.9	2
201	Ultra-Low-Power Tuning in Hybrid Barium Titanate/Silicon Nitride Electro-optic Devices on Silicon. <i>ACS Photonics</i> , <b>2019</b> , 6, 2677-2684	6.3	14
200	Band offset modulation in Si-EuO heterostructures via controlled interface formation. <i>Physical Review B</i> , <b>2019</b> , 100,	3.3	4
199	Growth of NbO <sub>2</sub> thin films on GaN(0001) by molecular beam epitaxy. <i>Thin Solid Films</i> , <b>2019</b> , 691, 137603	2.2	1
198	Rare-earth adatoms on GaN (0001). <i>Physical Review Materials</i> , <b>2019</b> , 3,	3.2	2
197	Designing near-infrared electro-optical devices from the SrTiO <sub>3</sub> /LaAlO <sub>3</sub> materials system. <i>Optical Materials Express</i> , <b>2019</b> , 9, 2982	2.6	5

196	Epitaxial Oxides on Glass: A Platform for Integrated Oxide Devices. <i>ACS Applied Nano Materials</i> , <b>2019</b> , 2, 7713-7718	5.6	4
195	First-Principles Modeling of Interface Effects in Oxides <b>2019</b> , 1-30		
194	Large Pockels effect in micro- and nanostructured barium titanate integrated on silicon. <i>Nature Materials</i> , <b>2019</b> , 18, 42-47	27	155
193	Theoretical investigation of the band alignment of graphene on a polar SrTiO <sub>3</sub> (111) surface. <i>Physical Review B</i> , <b>2018</b> , 97,	3.3	8
192	Surface structure analysis of Eu Zintl template on Ge(001). <i>Surface Science</i> , <b>2018</b> , 674, 94-102	1.8	7
191	Polarization retention in ultra-thin barium titanate films on Ge(001). <i>Applied Physics Letters</i> , <b>2018</b> , 112, 162901	3.4	3
190	Spin-polarized two-dimensional t <sub>2g</sub> electron gas: Ab initio study of EuO interface with oxygen-deficient SrTiO <sub>3</sub> . <i>Physical Review B</i> , <b>2018</b> , 97,	3.3	8
189	Crystalline SrZrO <sub>3</sub> deposition on Ge (001) by atomic layer deposition for high-k dielectric applications. <i>Journal of Applied Physics</i> , <b>2018</b> , 124, 044102	2.5	9
188	Quantum Confinement in Oxide Heterostructures: Room-Temperature Intersubband Absorption in SrTiO <sub>3</sub> /LaAlO <sub>3</sub> Multiple Quantum Wells. <i>ACS Nano</i> , <b>2018</b> , 12, 7682-7689	16.7	10
187	The MBE growth of arbitrarily thick SrTiO <sub>3</sub> /LaAlO <sub>3</sub> quantum well heterostructures for use in next-generation optoelectronic devices. <i>Journal of Applied Physics</i> , <b>2018</b> , 124, 015301	2.5	7
186	Strain enhancement of the electro-optical response in BaTiO <sub>3</sub> films integrated on Si(001). <i>Physical Review B</i> , <b>2018</b> , 98,	3.3	16
185	First-principles study of the linear electro-optical response in strained SrTiO <sub>3</sub> . <i>Physical Review Materials</i> , <b>2018</b> , 2,	3.2	10
184	Effect of SrTiO <sub>3</sub> oxygen vacancies on the conductivity of LaTiO <sub>3</sub> /SrTiO <sub>3</sub> heterostructures. <i>Journal of Applied Physics</i> , <b>2018</b> , 124, 185303	2.5	14
183	EuO epitaxy by oxygen scavenging on SrTiO <sub>3</sub> (001): Effect of SrTiO <sub>3</sub> thickness and temperature. <i>Journal of Applied Physics</i> , <b>2018</b> , 124, 235301	2.5	6
182	Piezoelectric modulation of nonlinear optical response in BaTiO <sub>3</sub> thin film. <i>Applied Physics Letters</i> , <b>2018</b> , 113, 132902	3.4	7
181	An EELS signal-from-background separation algorithm for spectral line-scan/image quantification. <i>Ultramicroscopy</i> , <b>2018</b> , 195, 25-31	3.1	6
180	Monolithic integration of patterned BaTiO <sub>3</sub> thin films on Ge wafers. <i>Journal of Vacuum Science and Technology B: Nanotechnology and Microelectronics</i> , <b>2018</b> , 36, 031206	1.3	4
179	Large positive linear magnetoresistance in the two-dimensional t electron gas at the EuO/SrTiO interface. <i>Scientific Reports</i> , <b>2018</b> , 8, 7721	4.9	31

178	Microstructure and ferroelectricity of BaTiO thin films on Si for integrated photonics. <i>Nanotechnology</i> , <b>2017</b> , 28, 075706	3.4	53
177	Zintl layer formation during perovskite atomic layer deposition on Ge (001). <i>Journal of Chemical Physics</i> , <b>2017</b> , 146, 052817	3.9	9
176	Ge(001) surface cleaning methods for device integration. <i>Applied Physics Reviews</i> , <b>2017</b> , 4, 021308	17.3	29
175	Effect of oxygen vacancies and strain on the phonon spectrum of HfO <sub>2</sub> thin films. <i>Journal of Applied Physics</i> , <b>2017</b> , 121, 224101	2.5	8
174	Scavenging of oxygen from SrTiO <sub>3</sub> during oxide thin film deposition and the formation of interfacial 2DEGs. <i>Journal of Applied Physics</i> , <b>2017</b> , 121, 105302	2.5	42
173	Recent studies of oxide-semiconductor heterostructures using aberration-corrected scanning transmission electron microscopy. <i>Journal of Materials Research</i> , <b>2017</b> , 32, 912-920	2.5	7
172	Temperature dependence of the morphology and electronic structure of ultrathin platinum on TiO <sub>2</sub> -terminated SrTiO <sub>3</sub> (001). <i>Journal of Vacuum Science and Technology B: Nanotechnology and Microelectronics</i> , <b>2017</b> , 35, 061203	1.3	1
171	Epitaxial growth of barium titanate thin films on germanium via atomic layer deposition. <i>Journal of Crystal Growth</i> , <b>2017</b> , 476, 6-11	1.6	12
170	Cubic crystalline erbium oxide growth on GaN(0001) by atomic layer deposition. <i>Journal of Applied Physics</i> , <b>2017</b> , 122, 215302	2.5	5
169	Orientation dependence of the work function for metal nanocrystals. <i>Journal of Chemical Physics</i> , <b>2017</b> , 147, 214301	3.9	10
168	Hexagonal to monoclinic phase transformation in Eu <sub>2</sub> O <sub>3</sub> thin films grown on GaN (0001). <i>Applied Physics Letters</i> , <b>2017</b> , 111, 142901	3.4	6
167	Integration of ferroelectric BaTiO <sub>3</sub> with Ge: The role of a SrTiO <sub>3</sub> buffer layer investigated using aberration-corrected STEM. <i>Applied Physics Letters</i> , <b>2017</b> , 110, 252901	3.4	5
166	Multi-layered NiO/NbO/NiO fast drift-free threshold switch with high I/I ratio for selector application. <i>Scientific Reports</i> , <b>2017</b> , 7, 4068	4.9	43
165	ELNES spectrum unmixing and mapping for oxide/oxide interfaces.. <i>Microscopy and Microanalysis</i> , <b>2017</b> , 23, 1588-1589	0.5	
164	Aberration-corrected STEM Imaging and EELS Mapping of BaTiO <sub>3</sub> /SrTiO <sub>3</sub> Interfacial Defects. <i>Microscopy and Microanalysis</i> , <b>2017</b> , 23, 1598-1599	0.5	
163	Theoretical study of negative optical mode splitting in LaAlO <sub>3</sub> . <i>Physical Review B</i> , <b>2016</b> , 93,	3.3	4
162	Contradictory nature of Co doping in ferroelectric BaTiO <sub>3</sub> . <i>Physical Review B</i> , <b>2016</b> , 94,	3.3	7
161	A Low-Leakage Epitaxial High- $\Gamma$ Gate Oxide for Germanium Metal-Oxide-Semiconductor Devices. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2016</b> , 8, 5416-23	9.5	7

160	ELNES analysis of $\text{Al}_2\text{O}_3/\text{SrTiO}_3$ and $\text{LaTiO}_3/\text{SrTiO}_3$ interfaces. <i>Microscopy and Microanalysis</i> , <b>2016</b> , 22, 1660-1661	0.5	
159	Characterization of a ferroelectric $\text{BaTiO}_3/\text{SrTiO}_3$ heterostructure with interface-induced polarization. <i>Microscopy and Microanalysis</i> , <b>2016</b> , 22, 1508-1509	0.5	
158	Monolithic integration of perovskites on Ge(001) by atomic layer deposition: a case study with $\text{SrHf}_{1-x}\text{Ti}_x\text{O}_3$ . <i>MRS Communications</i> , <b>2016</b> , 6, 125-132	2.7	13
157	Surface-hydrogen-induced metallization and rumpling in thin $\text{BaTiO}_3$ films. <i>Physical Review B</i> , <b>2016</b> , 94,	3.3	3
156	Mechanism of oxidation protection of the Si(001) surface by sub-monolayer Sr template. <i>Journal of Applied Physics</i> , <b>2016</b> , 120, 065301	2.5	14
155	Structural characterization of niobium oxide thin films grown on $\text{SrTiO}_3$ (111) and $(\text{La,Sr})(\text{Al,Ta})\text{O}_3$ (111) substrates. <i>Journal of Applied Physics</i> , <b>2016</b> , 120, 245302	2.5	10
154	Anti-phase boundaries at the $\text{SrTiO}_3/\text{Si}(001)$ interface studied using aberration-corrected scanning transmission electron microscopy. <i>Applied Physics Letters</i> , <b>2016</b> , 108, 091605	3.4	15
153	Spectral identification scheme for epitaxially grown single-phase niobium dioxide. <i>Journal of Applied Physics</i> , <b>2016</b> , 119, 095308	2.5	7
152	Theoretical modeling and experimental observations of the atomic layer deposition of SrO using a cyclopentadienyl Sr precursor. <i>Journal of Chemical Physics</i> , <b>2016</b> , 145, 064701	3.9	2
151	Spin-polarized, orbital-selected hole gas at the $\text{EuO}/\text{Pt}$ interface. <i>Journal of Applied Physics</i> , <b>2016</b> , 119, 095309	2.5	5
150	Spectrum and phase mapping across the epitaxial $\text{Al}_2\text{O}_3/\text{SrTiO}_3$ interface. <i>Applied Physics Letters</i> , <b>2016</b> , 108, 051606	3.4	7
149	Ferroelectric Oxides on Sili. <i>Materials and Energy</i> , <b>2016</b> , 403-454		1
148	Hydroxyapatite: Vibrational spectra and monoclinic to hexagonal phase transition. <i>Journal of Applied Physics</i> , <b>2015</b> , 117, 074701	2.5	13
147	Analysis of the Pockels effect in ferroelectric barium titanate thin films on Si(0 0 1). <i>Microelectronic Engineering</i> , <b>2015</b> , 147, 215-218	2.5	27
146	Localized states induced by an oxygen vacancy in rutile $\text{TiO}_2$ . <i>Journal of Applied Physics</i> , <b>2015</b> , 117, 225703	3.5	30
145	Quasi-two-dimensional electron gas at the epitaxial alumina/ $\text{SrTiO}_3$ interface: Control of oxygen vacancies. <i>Journal of Applied Physics</i> , <b>2015</b> , 117, 095303	2.5	34
144	Switchable conductivity at the ferroelectric interface: Nonpolar oxides. <i>Physical Review B</i> , <b>2015</b> , 91,	3.3	61
143	A silicon-based photocathode for water reduction with an epitaxial $\text{SrTiO}_3$ protection layer and a nanostructured catalyst. <i>Nature Nanotechnology</i> , <b>2015</b> , 10, 84-90	28.7	292

142	Final-state effect on x-ray photoelectron spectrum of nominally d1 and n-doped d0 transition-metal oxides. <i>Physical Review B</i> , <b>2015</b> , 92,	3.3	21
141	Quench dynamics of Anderson impurity model using configuration interaction method. <i>Physical Review B</i> , <b>2015</b> , 92,	3.3	6
140	Early stages of the Schottky barrier formation in submonolayer Pt on SrTiO <sub>3</sub> (001). <i>Physical Review B</i> , <b>2015</b> , 92,	3.3	3
139	Nature of the metal-insulator transition in NbO <sub>2</sub> . <i>Physical Review B</i> , <b>2015</b> , 91,	3.3	31
138	Atomic layer deposition of perovskite oxides and their epitaxial integration with Si, Ge, and other semiconductors. <i>Applied Physics Reviews</i> , <b>2015</b> , 2, 041301	17.3	64
137	Quasi-two-dimensional electron gas at the interface of $\gamma$ -Al <sub>2</sub> O <sub>3</sub> /SrTiO <sub>3</sub> heterostructures grown by atomic layer deposition. <i>Journal of Applied Physics</i> , <b>2015</b> , 118, 115303	2.5	22
136	Structure, thermodynamics, and crystallization of amorphous hafnia. <i>Journal of Applied Physics</i> , <b>2015</b> , 118, 124105	2.5	6
135	Investigation of Co-Doped BaTiO <sub>3</sub> by Atomic-Resolution EELS. <i>Microscopy and Microanalysis</i> , <b>2015</b> , 21, 2077-2078	0.5	
134	Oxygen Vacancies at the $\gamma$ -Al <sub>2</sub> O <sub>3</sub> /STO Heterointerface Grown by Atomic Layer Deposition. <i>Materials Research Society Symposia Proceedings</i> , <b>2015</b> , 1730, 14		
133	Characterization of Two-Dimensional Electron Gas at the $\gamma$ -Al <sub>2</sub> O <sub>3</sub> /SrTiO <sub>3</sub> Interface. <i>Microscopy and Microanalysis</i> , <b>2015</b> , 21, 1309-1310	0.5	
132	Cross-Sectional Characterization of SrTiO <sub>3</sub> /Si(001) Interfaces using Aberration-Corrected STEM. <i>Microscopy and Microanalysis</i> , <b>2015</b> , 21, 1305-1306	0.5	
131	Quantum confinement in transition metal oxide quantum wells. <i>Applied Physics Letters</i> , <b>2015</b> , 106, 192904	0.4	13
130	Integrated films of transition metal oxides for information technology. <i>Microelectronic Engineering</i> , <b>2015</b> , 147, 285-289	2.5	10
129	Atomic layer deposition of crystalline SrHfO <sub>3</sub> directly on Ge (001) for high-k dielectric applications. <i>Journal of Applied Physics</i> , <b>2015</b> , 117, 054101	2.5	39
128	Optical properties of transition metal oxide quantum wells. <i>Journal of Applied Physics</i> , <b>2015</b> , 117, 034304	2.5	10
127	Carrier density modulation in a germanium heterostructure by ferroelectric switching. <i>Nature Communications</i> , <b>2015</b> , 6, 6067	17.4	64
126	Structural, optical, and electrical properties of strained La-doped SrTiO <sub>3</sub> films. <i>Journal of Applied Physics</i> , <b>2014</b> , 116, 043705	2.5	48
125	Role of oxygen vacancies in room-temperature ferromagnetism in cobalt-substituted SrTiO <sub>3</sub> . <i>Physical Review B</i> , <b>2014</b> , 90,	3.3	12

124	Consequences of oxygen-vacancy correlations at the SrTiO <sub>3</sub> interface. <i>Physical Review Letters</i> , <b>2014</b> , 113, 157602	7.4	14
123	Highly controllable and stable quantized conductance and resistive switching mechanism in single-crystal TiO <sub>2</sub> resistive memory on silicon. <i>Nano Letters</i> , <b>2014</b> , 14, 4360-7	11.5	101
122	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> , <b>2014</b> , 32, 041506	2.9	11
121	Efficient and stable orbital-searching algorithm for the configuration interaction method and its application to quantum impurity problems. <i>Physical Review B</i> , <b>2014</b> , 90,	3.3	5
120	Epitaxy: A Chemical Route to Monolithic Integration of Crystalline Oxides on Semiconductors (Adv. Mater. Interfaces 8/2014). <i>Advanced Materials Interfaces</i> , <b>2014</b> , 1, n/a-n/a	4.6	1
119	Band alignment in visible-light photo-active CoO/SrTiO <sub>3</sub> (001) heterostructures. <i>Journal of Applied Physics</i> , <b>2014</b> , 116, 245305	2.5	10
118	A Chemical Route to Monolithic Integration of Crystalline Oxides on Semiconductors. <i>Advanced Materials Interfaces</i> , <b>2014</b> , 1, 1400081	4.6	38
117	Integration of Functional Oxides with Semiconductors <b>2014</b> ,		59
116	Epitaxial c-axis oriented BaTiO <sub>3</sub> thin films on SrTiO <sub>3</sub> -buffered Si(001) by atomic layer deposition. <i>Applied Physics Letters</i> , <b>2014</b> , 104, 082910	3.4	51
115	Electronic and optical properties of NbO <sub>2</sub> . <i>Journal of Applied Physics</i> , <b>2014</b> , 116, 213705	2.5	50
114	Epitaxy of polar semiconductor Co <sub>3</sub> O <sub>4</sub> (110): Growth, structure, and characterization. <i>Journal of Applied Physics</i> , <b>2014</b> , 115, 243708	2.5	19
113	Atomic and electronic structure of the ferroelectric BaTiO <sub>3</sub> /Ge(001) interface. <i>Applied Physics Letters</i> , <b>2014</b> , 104, 242908	3.4	40
112	Band gap of epitaxial in-plane-dimerized single-phase NbO <sub>2</sub> films. <i>Applied Physics Letters</i> , <b>2014</b> , 104, 092901	3.4	28
111	Incorporation of La in epitaxial SrTiO <sub>3</sub> thin films grown by atomic layer deposition on SrTiO <sub>3</sub> -buffered Si (001) substrates. <i>Journal of Applied Physics</i> , <b>2014</b> , 115, 224108	2.5	14
110	Oxygen and nitrogen diffusion in hafnium from first principles. <i>Applied Physics Letters</i> , <b>2014</b> , 104, 211909	3.4	6
109	Assessing hafnium on hafnia as an oxygen getter. <i>Journal of Applied Physics</i> , <b>2014</b> , 115, 183703	2.5	29
108	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> , <b>2014</b> , 89,	3.3	28
107	Critical Issues in Oxide-Semiconductor Heteroepitaxy <b>2014</b> , 25-44		0

106 Integration of Functional Oxides on SrTiO<sub>3</sub>/Si Pseudo-Substrates **2014**, 159-203

105 Growing SrTiO<sub>3</sub> on Si (001) by Molecular Beam Epitaxy **2014**, 115-158

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104 Switching of ferroelectric polarization in epitaxial BaTiO<sub>3</sub> films on silicon without a conducting bottom electrode. *Nature Nanotechnology*, **2013**, 8, 748-54

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103 Bandgap engineering in perovskite oxides: Al-doped SrTiO<sub>3</sub>. *Applied Physics Letters*, **2013**, 103, 142906

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102 First principles study of hydroxyapatite surface. *Journal of Chemical Physics*, **2013**, 139, 044714

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101 Electron correlation in oxygen vacancy in SrTiO<sub>3</sub>. *Physical Review Letters*, **2013**, 111, 217601

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100 Atomic layer deposition of photoactive CoO/SrTiO<sub>3</sub> and CoO/TiO<sub>2</sub> on Si(001) for visible light driven photoelectrochemical water oxidation. *Journal of Applied Physics*, **2013**, 114, 084901

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99 Epitaxial growth of LaAlO<sub>3</sub> on SrTiO<sub>3</sub>-buffered Si (001) substrates by atomic layer deposition. *Journal of Crystal Growth*, **2013**, 363, 150-157

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98 Metal-induced charge transfer, structural distortion, and orbital order in SrTiO<sub>3</sub> thin films. *Physical Review B*, **2013**, 87,

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