Alexander A Demkov

List of Publications by Year
in descending order

240 papers	7,965 citations	53660 45 h-index	62479 80 g-index
242 all docs	242 docs citations	242 times ranked	8007 citing authors

#	Article	IF	Citations
1	A silicon-based photocathode for water reduction with an epitaxial SrTiO3 protection layer and a nanostructured catalyst. Nature Nanotechnology, 2015, 10, 84-90.	15.6	353
2	Electronic structure approach for complex silicas. Physical Review B, 1995, 52, 1618-1630.	1.1	349
3	Large Pockels effect in micro- and nanostructured barium titanate integrated on silicon. Nature Materials, 2019, 18, 42-47.	13.3	311
4	Wide-band-gap Si in open fourfold-coordinated clathrate structures. Physical Review B, 1994, 49, 8048-8053.	1.1	258
5	Further developments in the local-orbital density-functional-theory tight-binding method. Physical Review B, 2001, 64, .	1.1	232
6	Switching of ferroelectric polarization in epitaxial BaTiO3 films on silicon without a conducting bottom electrode. Nature Nanotechnology, 2013, 8, 748-754.	15.6	218
7	Advances and applications in the F<scp>IREBALL</scp>ab initio tightâ€binding molecularâ€dynamics formalism. Physica Status Solidi (B): Basic Research, 2011, 248, 1989-2007.	0.7	207
8	Charge origin and localization at the<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mi>n</mml:mi></mml:math>-type<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow><mml:mtext>SrTiO</mml:mtext></mml:mrow><mml:mn>3</mml:mn></mml:m Physical Review B, 2008, 78, .	1.1	189
9	Theoretical investigation of random Si-C alloys. Physical Review B, 1993, 48, 2207-2214.	1.1	150
10	Electronic structure of oxygen vacancies in<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mrow><mml:mi mathvariant="normal">SrTiO</mml:mi></mml:mrow><mml:mn>3</mml:mn></mml:msub></mml:math>and<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mrow><mml:mi mathvariant="normal">LaAlO</mml:mi></mml:mrow><mml:mn>3</mml:mn></mml:msub></mml:math>. Physical Review B, 2012, 86, .	1.1	146
11	Fermi level pinning by defects in HfO2-metal gate stacks. Applied Physics Letters, 2007, 91, .	1.5	144
12	Two-dimensional growth of high-quality strontium titanate thin films on Si. Journal of Applied Physics, 2003, 93, 4521-4525.	1.1	143
13	Atomic and electronic structure of theSi/SrTiO3interface. Physical Review B, 2003, 68, .	1.1	129
14	Highly Controllable and Stable Quantized Conductance and Resistive Switching Mechanism in Single-Crystal TiO₂ Resistive Memory on Silicon. Nano Letters, 2014, 14, 4360-4367.	4.5	121
15	Monoclinic to tetragonal transformations in hafnia and zirconia: A combined calorimetric and density functional study. Physical Review B, 2009, 80, .	1.1	109
16	Optical properties of bulk and thin-film SrTiO[sub 3] on Si and Pt. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 2000, 18, 2242.	1.6	106
17	Electron Correlation in Oxygen Vacancy in<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mi>SrTiO</mml:mi><mml:mn>3</mml:mn></mml:msub></mml:math>. Physical Review Letters, 2013, 111, 217601.	2.9	104
18	Theoretical study of the insulator/insulator interface: Band alignment at theSiO2âˆ•HfO2junction. Physical Review B, 2007, 75, .	1.1	99

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19	Growth Study and Theoretical Investigation of the Ultrathin OxideSiO2â^'SiHeterojunction. Physical Review Letters, 1999, 83, 2038-2041.	2.9	97
20	The interface of epitaxial SrTiO3 on silicon: in situ and ex situ studies. Applied Physics Letters, 2003, 82, 203-205.	1.5	93
21	Magnetoelectric coupling and electric control of magnetization in ferromagnet/ferroelectric/normal-metal superlattices. Physical Review B, 2009, 80, .	1.1	92
22	First-principles study of the biomineral hydroxyapatite. Physical Review B, 2011, 84, .	1.1	91
23	Theoretical investigation of alkali-metal doping in Si clathrates. Physical Review B, 1994, 50, 17001-17008.	1.1	88
24	Switchable conductivity at the ferroelectric interface: Nonpolar oxides. Physical Review B, 2015, 91, .	1.1	78
25	Atomic layer deposition of perovskite oxides and their epitaxial integration with Si, Ge, and other semiconductors. Applied Physics Reviews, 2015, 2, .	5.5	76
26	Microstructure and ferroelectricity of BaTiO₃ thin films on Si for integrated photonics. Nanotechnology, 2017, 28, 075706.	1.3	76
27	Carrier density modulation in a germanium heterostructure by ferroelectric switching. Nature Communications, 2015, 6, 6067.	5.8	75
28	Complex band structure and the band alignment problem at the Siâ€“high-kdielectric interface. Physical Review B, 2005, 71, .	1.1	73
29	Strain-driven spin-state transition and superexchange interaction in LaCoO<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mrow /><mml:mn>3</mml:mn></mml:msub></mml:math>:<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:mi>A</mml:mi><mml:mi>b</mml:mi></mml:mrow></mml:math> initio study. Physical Review B, 2012, 86, .	1.1	72
30	Electronic structure of (LaNiO<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mrow /><mml:mn>2</mml:mn></mml:msub></mml:math>/(LaAlO<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mrow /><mml:mn>3</mml:mn></mml:msub></mml:math>)₂ superlattices. Physical Review B, 2011, 84, .	1.1	71
31	Absence of Critical Thickness in an Ultrathin Improper Ferroelectric Film. Physical Review Letters, 2009, 102, 107601.	2.9	70
32	Interfacial magnetoelectric coupling in tricomponent superlattices. Physical Review B, 2010, 81, .	1.1	69
33	Integration of Functional Oxides with Semiconductors. , 2014, , .		69
34	Electronic and optical properties of NbO2. Journal of Applied Physics, 2014, 116, .	1.1	67
35	Epitaxial integration of ferromagnetic correlated oxide LaCoO3 with Si (100). Applied Physics Letters, 2011, 98, .	1.5	64
36	Thermodynamic stability and band alignment at a metalâ€“high-kdielectric interface. Physical Review B, 2006, 74, .	1.1	60

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37	Epitaxial c-axis oriented BaTiO3 thin films on SrTiO3-buffered Si(001) by atomic layer deposition. Applied Physics Letters, 2014, 104, .	1.5	59
38	Multi-layered NiOy/NbOx/NiOy fast drift-free threshold switch with high Ion/Ioff ratio for selector application. Scientific Reports, 2017, 7, 4068.	1.6	59
39	Inelastic resonant tunneling in<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mi mathvariant="normal">C</mml:mi><mml:mn>60</mml:mn></mml:msub></mml:math>molecular junctions. Physical Review B, 2007, 75, .	1.1	57
40	Structural, optical, and electrical properties of strained La-doped SrTiO3 films. Journal of Applied Physics, 2014, 116, .	1.1	53
41	Scavenging of oxygen from SrTiO3 during oxide thin film deposition and the formation of interfacial 2DEGs. Journal of Applied Physics, 2017, 121, .	1.1	50
42	Orbital ordering under reduced symmetry in transition metal perovskites: Oxygen vacancy in SrTiO<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mrow /><mml:mn>3</mml:mn></mml:msub></mml:math>. Physical Review B, 2012, 86, .	1.1	49
43	Strain relaxation in single crystal SrTiO3 grown on Si (001) by molecular beam epitaxy. Journal of Applied Physics, 2012, 111, .	1.1	48
44	Energetics and electronic structure of the hypothetical cubic zincblende form of GeC. Modelling and Simulation in Materials Science and Engineering, 1993, 1, 741-754.	0.8	47
45	Nature of the metal-insulator transition in<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mi>Nb</mml:mi><mml:msub><mml:mi mathvariant="normal">O</mml:mi><mml:mn>2</mml:mn></mml:msub></mml:mrow></mml:math>. Physical Review B, 2015, 91, .	1.1	47
46	The application of approximate density functionals to complex systems. International Journal of Quantum Chemistry, 1998, 69, 327-340.	1.0	46
47	Lattice distortion effects on topological phases in (LaNiO<mml:math) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 50 367 Td (xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mrow		

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55	Band alignment and electronic structure of the anatase TiO<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mrow /><mml:mn>2</mml:mn></mml:msub></mml:math>/SrTiO<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mrow /><mml:mn>3</mml:mn></mml:msub></mml:math>(001) heterostructure integrated on Si(001). Physical Review B, 2012, 86, .	1.1	40
56	First principles study of hydroxyapatite surface. Journal of Chemical Physics, 2013, 139, 044714.	1.2	40
57	A Chemical Route to Monolithic Integration of Crystalline Oxides on Semiconductors. Advanced Materials Interfaces, 2014, 1, 1400081.	1.9	40
58	Band gap of epitaxial in-plane-dimerized single-phase NbO₂films. Applied Physics Letters, 2014, 104, 092901.	1.5	40
59	Large positive linear magnetoresistance in the two-dimensional t 2g electron gas at the EuO/SrTiO3 interface. Scientific Reports, 2018, 8, 7721.	1.6	40
60	Effects of aluminum incorporation on band alignment at the<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:mi mathvariant="normal">Si</mml:mi><mml:msub><mml:mi mathvariant="normal">O</mml:mi><mml:mn>2</mml:mn></mml:msub><mml:mo>â^•</mml:mo><mml:mi mathvariant="normal">Hf</mml:mi><mml:msub><mml:mi mathvariant="normal">O</mml:mi><mml:mn>2</mml:mn></mml:msub></mml:mrow></mml:math>interface.	1.1	38
61	Preparation of a clean Ge(001) surface using oxygen plasma cleaning. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2013, 31, .	0.6	37
62	Assessing hafnium on hafnia as an oxygen getter. Journal of Applied Physics, 2014, 115, .	1.1	37
63	Quasi-two-dimensional electron gas at the epitaxial alumina/SrTiO3 interface: Control of oxygen vacancies. Journal of Applied Physics, 2015, 117, .	1.1	37
64	Ultra-Low-Power Tuning in Hybrid Barium Titanateâ€“Silicon Nitride Electro-optic Devices on Silicon. ACS Photonics, 2019, 6, 2677-2684.	3.2	37
65	Hafnia: Energetics of thin films and nanoparticles. Journal of Applied Physics, 2010, 107, .	1.1	36
66	First-principles study of polar LaAlO (001) surface stabilization by point defects. Physical Review B, 2011, 84, .	1.1	34
67	Analysis of the Pockels effect in ferroelectric barium titanate thin films on Si(0 0 1). Microelectronic Engineering, 2015, 147, 215-218.	1.1	34
68	Localized states induced by an oxygen vacancy in rutile TiO2. Journal of Applied Physics, 2015, 117, .	1.1	34
69	Electronic structure of black sodalite. Physical Review B, 1998, 57, 15129-15139.	1.1	33
70	Electronic, optical, and surface properties of PtSi thin films. Physical Review B, 2008, 78, .	1.1	33
71	Surface electronic structure for various surface preparations of Nb-doped SrTiO₃ (001). Journal of Applied Physics, 2013, 114, 103710.	1.1	33
72	Efficient variational approach to the impurity problem and its application to the dynamical mean-field theory. Physical Review B, 2013, 88, .	1.1	33

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73	Combined experimental and theoretical study of thin hafnia films. Physical Review B, 2008, 78, .	1.1	32
74	Extended Frenkel pairs and band alignment at metal-oxide interfaces. Physical Review B, 2009, 79, .	1.1	31
75	Epitaxial growth of LaAlO3 on SrTiO3-buffered Si (001) substrates by atomic layer deposition. Journal of Crystal Growth, 2013, 363, 150-157.	0.7	31
76	Critical differences in the surface electronic structure of Ge(001) and Si(001):Ab initiotheory and angle-resolved photoemission spectroscopy. Physical Review B, 2014, 89, .	1.1	31
77	Theoretical and experimental investigation of ultrathin oxynitrides and the role of nitrogen at the Siâ€“SiO[sub 2] interface. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 2000, 18, 2388.	1.6	30
78	Quasi-two-dimensional electron gas at the interface of Î³-Al2O3/SrTiO3 heterostructures grown by atomic layer deposition. Journal of Applied Physics, 2015, 118, .	1.1	30
79	Atomic layer deposition of photoactive CoO/SrTiO3 and CoO/TiO2 on Si(001) for visible light driven photoelectrochemical water oxidation. Journal of Applied Physics, 2013, 114, .	1.1	29
80	Final-state effect on x-ray photoelectron spectrum of nominally<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msup><mml:mi>d</mml:mi><mml:mn>1</mml:mn></mml:msup></mml:m xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mi>n</mml:mi></mml:math>-doped<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msup><mml:mi>d</mml:mi><mml:mn>0</mml:mn></mml:msup></mml:m oxides. Physical Review B, 2015, 92, .	1.1	29
81	Difficulties of the microscopic theory of leakage current through ultra-thin oxide barriers: point defects. Physica Status Solidi (B): Basic Research, 2003, 239, 48-58.	0.7	28
82	Theory of the Sr-induced reconstruction of the Si (001) surface. Journal of Applied Physics, 2008, 103, 103710.	1.1	28
83	Spin-polarized two-dimensional electron gas through electrostatic doping in<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow><mml:mtext>LaAlO</mml:mtext></mml:mrow><mml:mn>3</mml:mn></mml:m Physical Review B, 2010, 82, .	1.1	27
84	Epitaxy of polar semiconductor Co3O4 (110): Growth, structure, and characterization. Journal of Applied Physics, 2014, 115, .	1.1	27
85	Design rules for strong electro-optic materials. Npj Computational Materials, 2020, 6, .	3.5	27
86	Materials for emergent silicon-integrated optical computing. Journal of Applied Physics, 2021, 130, 070907.	1.1	27
87	Oxygen vacancy-mediated room-temperature ferromagnetism in insulating cobalt-substituted SrTiO<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mrow /><mml:mn>3</mml:mn></mml:msub></mml:math>epitaxially integrated with silicon. Physical Review B, 2013, 87, .	1.1	26
88	Epitaxial integration of BaTiO3 on Si for electro-optic applications. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2021, 39, .	0.9	25
89	Electronic structure, elastic properties, surface energies, and work functions ofNiGeandPtGewithin the framework of density-functional theory for various surface terminations. Physical Review B, 2007, 75, .	1.1	23
90	Using Zintl-Klemm intermetallics in oxide-semiconductor heteroepitaxy. Applied Physics Letters, 2012, 100, .	1.5	23

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91	Î²-Ga2O3 on Si (001) grown by plasma-assisted MBE with Î³-Al2O3 (111) buffer layer: Structural characterization. AIP Advances, 2021, 11, .	0.6	23
92	Theoretical predictions of expanded-volume phases of GaAs. Physical Review B, 1997, 55, 6904-6913.	1.1	22
93	Bandgap engineering in perovskite oxides: Al-doped SrTiO3. Applied Physics Letters, 2013, 103, .	1.5	22
94	Effect of SrTiO₃ oxygen vacancies on the conductivity of LaTiO₃/SrTiO₃ heterostructures. Journal of Applied Physics, 2018, 124, 185303.	1.1	22
95	Orientation dependence of the work function for metal nanocrystals. Journal of Chemical Physics, 2017, 147, 214301.	1.2	21
96	Strain enhancement of the electro-optical response in <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mi>BaTi</mml:mi><mml:msub><mml:mi mathvariant="normal">O</mml:mi><mml:mn>3</mml:mn></mml:msub></mml:mrow></mml:math> films integrated on <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mi>Si</mml:mi><mml:mo>(</mml:mo><mml:mn>001</mml: Physical Review B, 2018, 98, .	1.1	21
97	Steps on the (001) SrTiO[sub 3] surface. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 2002, 20, 1664.	1.6	20
98	Ferroelectric domain architecture and poling of <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mi>BaTiO</mml:mi><mml:mn>3</mml:mn></mml:msub></m on Si. Physical Review Materials, 2020, 4, .	1.9	20
99	Thick BaTiO₃ Epitaxial Films Integrated on Si by RF Sputtering for Electro-Optic Modulators in Si Photonics. ACS Applied Materials & Interfaces, 2021, 13, 51230-51244.	4.0	20
100	Band alignment at the SiO<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mrow /><mml:mn>2</mml:mn></mml:msub></mml:math>/HfO<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mrow /><mml:mn>2</mml:mn></mml:msub></mml:math>interface: Group IIIA versus group IIIB metal dopants. Physical Review B, 2011, 84, .	1.1	19
101	Growth of epitaxial oxides on silicon using atomic layer deposition: Crystallization and annealing of TiO2 on SrTiO3-buffered Si(001). Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2012, 30, 04E111.	0.6	19
102	Charge transfer in Sr Zintl template on Si(001). Applied Physics Letters, 2013, 102, 031604.	1.5	19
103	Atomic layer deposition of epitaxial ferroelectric barium titanate on Si(001) for electronic and photonic applications. Journal of Applied Physics, 2019, 126, .	1.1	19
104	Ab initiocalculations of surface phase diagrams of silica polymorphs. Physical Review B, 2005, 71, .	1.1	17
105	(Invited) Monolithic Integration of Oxides on Semiconductors. ECS Transactions, 2013, 54, 255-269.	0.3	17
106	Quantum confinement in transition metal oxide quantum wells. Applied Physics Letters, 2015, 106, .	1.5	17
107	Mechanism of oxidation protection of the Si(001) surface by sub-monolayer Sr template. Journal of Applied Physics, 2016, 120, .	1.1	17
108	Epitaxial, electroâ€optically active barium titanate thin films on silicon by chemical solution deposition. Journal of the American Ceramic Society, 2020, 103, 1209-1218.	1.9	17

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109	Consequences of Oxygen-Vacancy Correlations at the<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow><mml:mi>SrTiO</mml:mi></mml:mrow><mml:mrow><mml:mn>3</mml:mn></ Physical Review Letters, 2014, 113, 157602.	2.9	16
110	Structural characterization of niobium oxide thin films grown on SrTiO3(111) and (La,Sr)(Al,Ta)O3(111) substrates. Journal of Applied Physics, 2016, 120, 245302.	1.1	16
111	Anti-phase boundaries at the SrTiO3/Si(001) interface studied using aberration-corrected scanning transmission electron microscopy. Applied Physics Letters, 2016, 108, .	1.5	16
112	Model simulations of zeolite supralattices:â€ƒSemiconductor Si clusters in sodalite. Physical Review B, 1997, 56, 10497-10504.	1.1	15
113	Strain-induced ferromagnetism in LaCoO3: Theory and growth on Si (100). Microelectronic Engineering, 2011, 88, 1444-1447.	1.1	15
114	Incorporation of La in epitaxial SrTiO3 thin films grown by atomic layer deposition on SrTiO3-buffered Si (001) substrates. Journal of Applied Physics, 2014, 115, .	1.1	15
115	Monolithic integration of rare-earth oxides and semiconductors for on-silicon technology. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2014, 32, .	0.9	15
116	Hydroxyapatite: Vibrational spectra and monoclinic to hexagonal phase transition. Journal of Applied Physics, 2015, 117, 074701.	1.1	15
117	Quantum Confinement in Oxide Heterostructures: Room-Temperature Intersubband Absorption in SrTiO₃/LaAlO₃ Multiple Quantum Wells. ACS Nano, 2018, 12, 7682-7689.	7.3	15
118	Theory of zeolite supralattices: Se in zeolite Linde type A. Journal of Physics Condensed Matter, 2001, 13, 10433-10457.	0.7	14
119	Role of oxygen vacancies in room-temperature ferromagnetism in cobalt-substituted<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mi>SrTiO</mml:mi><mml:mn>3</mml:mn></ 1.1 14 Physical Review B, 2014, 90, .
120	First-principles study of the linear electro-optical response in strained<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mi>SrTi</mml:mi><mml:msub><mml:mi mathvariant="normal">O</mml:mi><mml:mn>3</mml:mn></mml:msub></mml:mrow></mml:math>. Physical Review Materials, 2018, 2, .	0.9	14
121	Theoretical study of graphitic analogues of simple semiconductors. Modelling and Simulation in Materials Science and Engineering, 1999, 7, 929-938.	0.8	13
122	Voltage-controlled ferromagnetism and magnetoresistance in LaCoO3/SrTiO3 heterostructures. Journal of Applied Physics, 2013, 114, .	1.1	13
123	Monolithic integration of perovskites on Ge(001) by atomic layer deposition: a case study with SrHfxTi1-xO3. MRS Communications, 2016, 6, 125-132.	0.8	13
124	Epitaxial growth of barium titanate thin films on germanium via atomic layer deposition. Journal of Crystal Growth, 2017, 476, 6-11.	0.7	13
125	Piezoelectric modulation of nonlinear optical response in BaTiO3 thin film. Applied Physics Letters, 2018, 113, 132902.	1.5	13
126	Recent Developments in the Theory of Supralattices. Chemistry of Materials, 1996, 8, 1793-1806.	3.2	12

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127	Metal-induced charge transfer, structural distortion, and orbital order in SrTiO<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mrow /><mml:mn>3</mml:mn></mml:msub></mml:math>thin films. Physical Review B, 2013, 87, .	1.1	12
128	Structure, thermodynamics, and crystallization of amorphous hafnia. Journal of Applied Physics, 2015, 118, .	1.1	12
129	Integrated films of transition metal oxides for information technology. Microelectronic Engineering, 2015, 147, 285-289.	1.1	12
130	Optical properties of transition metal oxide quantum wells. Journal of Applied Physics, 2015, 117, .	1.1	12
131	Ab initiostudy of atomic structure and Schottky barrier height at the<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:mtext>GaAs</mml:mtext><mml:mo>/</mml:mo><mml:msub><mml:mrow><mml:mtext>Ni</mml:mtext></mml:mrow> Physical Review B, 2008, 77, .	1.1	11
132	First-principles study of Zintl aluminide SrAl2. Physical Review B, 2012, 85, .	1.1	11
133	Spectral identification scheme for epitaxially grown single-phase niobium dioxide. Journal of Applied Physics, 2016, 119, .	1.1	11
134	Zintl layer formation during perovskite atomic layer deposition on Ge (001). Journal of Chemical Physics, 2017, 146, 052817.	1.2	11
135	Theoretical investigation of the band alignment of graphene on a polar <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mi>SrTi</mml:mi><mml:msub><mml:mi mathvariant="normal">O</mml:mi><mml:mn>3</mml:mn></mml:msub></mml:mrow></mml:math> (111) surface. Physical Review B, 2018, 97, .	1.1	11
136	Pockels effect in low-temperature rhombohedral <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mi>BaTi</mml:mi><mml:msub><mml:mi mathvariant="normal">O</mml:mi><mml:mn>3</mml:mn></mml:msub></mml:mrow></mml:math>. Physical Review B, 2021, 103, .	1.1	11
137	Theoretical investigation of the initial reaction of the NO decomposition on the Si (100) (2Ã—1) reconstructed surface. Journal of Chemical Physics, 2000, 113, 8237-8248.	1.2	10
138	Displacement of surface arsenic atoms by insertion of oxygen atoms into Asâ€“Ga backbonds. Journal of Chemical Physics, 2003, 119, 9191-9198.	1.2	10
139	Spin-filtering multiferroic-semiconductor heterojunctions. Applied Physics Letters, 2007, 91, 202910.	1.5	10
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