Daniel Gall

List of Publications by Year
in descending order

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193 papers	9,267 citations	28242 55 h-index	51562 86 g-index
197 all docs	197 docs citations	197 times ranked	6181 citing authors

#	Article	IF	Citations
1	Correlating structure and orbital occupation with the stability and mechanical properties of 3d transition metal carbides. Journal of Alloys and Compounds, 2022, 891, 161866.	2.8	12
2	Effect of electronegativity on electron surface scattering in thin metal layers. Applied Physics Letters, 2022, 120, .	1.5	12
3	Epitaxial TiC (001) layers: Phase formation and physical properties vs C-to-Ti ratio. Acta Materialia, 2022, 226, 117643.	3.8	5
4	First-principles prediction of electron grain boundary scattering in fcc metals. Applied Physics Letters, 2022, 120, .	1.5	10
5	Electron Scattering at Surfaces and Grain Boundaries in Rh Layers. IEEE Transactions on Electron Devices, 2022, 69, 3854-3860.	1.6	6
6	Resistivity Scaling in Epitaxial CuAl₂(001) Layers. IEEE Transactions on Electron Devices, 2022, 69, 5110-5115.	1.6	5
7	Epitaxial growth of cubic WC (001) on MgO(001). Journal of Alloys and Compounds, 2021, 860, 158403.	2.8	7
8	Tunable Infrared Plasmonic Properties of Epitaxial Ti_{1â€“x}Mg_xN(001) Layers. ACS Applied Materials & Interfaces, 2021, 13, 22738-22748.	4.0	8
9	In Situ Transmission Electron Microscopy of High-Temperature Inconel-625 Corrosion by Molten Chloride Salts. Journal of the Electrochemical Society, 2021, 168, 051507.	1.3	6
10	Stability, and electronic and optical properties of ternary nitride phases of MgSnN2: A first-principles study. Journal of Physics and Chemistry of Solids, 2021, 153, 110011.	1.9	21
11	Resistivity scaling in epitaxial MAX-phase Ti4SiC3(0001) layers. Journal of Applied Physics, 2021, 130, .	1.1	8
12	Van der Waals epitaxy and remote epitaxy of LiNbO3 thin films by pulsed laser deposition. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2021, 39, .	0.9	11
13	Epitaxial MoC : Competition between cubic Î´-MoC (111) and hexagonal Î²-Mo2C(0001). Surface and Coatings Technology, 2021, 420, 127333.	2.2	6
14	Resistivity size effect in epitaxial iridium layers. Journal of Applied Physics, 2021, 130, .	1.1	16
15	Resistivity Size Effect in Epitaxial Rh(001) and Rh(111) Layers. IEEE Transactions on Electron Devices, 2021, 68, 257-263.	1.6	19
16	Interdiffusion reliability and resistivity scaling of intermetallic compounds as advanced interconnect materials. Journal of Applied Physics, 2021, 129, .	1.1	14
17	Materials for interconnects. MRS Bulletin, 2021, 46, 959-966.	1.7	33
18	A Reconfigurable Remotely Epitaxial VO₂ Electrical Heterostructure. Nano Letters, 2020, 20, 33-42.	4.5	33

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19	Defects in epitaxial Ru(0001) on Al2O3(0001): Dislocations, stacking faults, and deformation twins. Journal of Applied Physics, 2020, 128, 045304.	1.1	4
20	The Resistivity Bottleneck: The Search for New Interconnect Metals. , 2020, , .		2
21	Bandgap and strain engineering in epitaxial rocksalt structure (Ti_{0.5}Mg_{0.5})_{1â^'x}Al_xN(001) semiconductors. Journal of Materials Chemistry C, 2020, 8, 12677-12688.	2.7	6
22	Metal-insulator transitions in epitaxial rocksalt-structure <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mi>Cr</mml:mi><mml:mrow><mml:mn>1</mml:mn><mml:mo>â^'</mml:mo><mml:mi>x</mml:mi></mml:mrow></mml:msub><mml:mi mathvariant="normal">N</mml:mi><mml:mrow><mml:mn>1</mml:mn><mml:mo>â^'</mml:mo><mml:mi>x</mml:mi></mml:mrow></mml:mrow></mml:math> <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mi>Cr</mml:mi><mml:mrow><mml:mn>1</mml:mn><mml:mo>â^'</mml:mo><mml:mi>x</mml:mi></mml:mrow></mml:msub><mml:mi mathvariant="normal">O</mml:mi><mml:mi>x</mml:mi></mml:msub></mml:mrow></mml:mat. Physical Review B, 2020, 102, .	1.1	5
23	Thermal boundary conductance across epitaxial metal/sapphire interfaces. Physical Review B, 2020, 102, .	1.1	26
24	Epitaxial metals for interconnects beyond Cu. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2020, 38, .	0.9	29
25	Electronic, optical, and thermoelectric properties of sodium pnictogen chalcogenides: A first principles study. Computational Materials Science, 2020, 183, 109818.	1.4	21
26	Plasmonic and phononic properties of epitaxial conductive transition metal nitrides. Journal of Optics (United Kingdom), 2020, 22, 084001.	1.0	20
27	Band gap and electron transport in epitaxial cubic <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mi mathvariant="normal">C</mml:mi><mml:msub><mml:mi mathvariant="normal">r</mml:mi><mml:mrow><mml:mn>1</mml:mn><mml:mo>â^'</mml:mo><mml:mi>x</mml:mi></mml:mrow></mml:msub><mml:mi mathvariant="normal">A</mml:mi><mml:msub><mml:mi mathvariant="normal">l</mml:mi><mml:mi>x</mml:mi></mml:msub><mml:mi	1.1	11
28	Structural Stabilization and Piezoelectric Enhancement in Epitaxial (Ti_{1â^'}_xMg_x)_{0.25}Al_{0.75}N(0001) Layers. Advanced Functional Materials, 2020, 30, 2001915.	7.8	11
29	Electron scattering at Co(0001) surfaces: Effects of Ti and TiN capping layers. AIP Advances, 2020, 10, .	0.6	13
30	A chiral switchable photovoltaic ferroelectric 1D perovskite. Science Advances, 2020, 6, eaay4213.	4.7	119
31	The search for the most conductive metal for narrow interconnect lines. Journal of Applied Physics, 2020, 127, .	1.1	158
32	Narrow interconnects: The most conductive metals. , 2020, , .		9
33	Near-Zero Negative Real Permittivity in Far Ultraviolet: Extending Plasmonics and Photonics with B1-MoN_x. Journal of Physical Chemistry C, 2019, 123, 21120-21129.	1.5	10
34	Copper Interconnects: Surface State Engineering to Facilitate Specular Electron Scattering. IEEE Transactions on Electron Devices, 2019, 66, 2692-2698.	1.6	27
35	The Resistivity Size Effect in Epitaxial Nb(001) and Nb(011) Layers. IEEE Transactions on Electron Devices, 2019, 66, 3473-3478.	1.6	23
36	Resistivity scaling and electron surface scattering in epitaxial Co(0001) layers. Journal of Applied Physics, 2019, 125, .	1.1	36

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37	Electrochemical memristive devices based on submonolayer metal deposition. APL Materials, 2019, 7, 101121.	2.2	8
38	Improved optoelectronic properties in CdSexTe1â^'x through controlled composition and short-range order. Solar Energy, 2019, 194, 742-750.	2.9	19
39	Carrier lifetime enhancement in halide perovskite via remote epitaxy. Nature Communications, 2019, 10, 4145.	5.8	93
40	Electron Scattering at Epitaxial Ni(001) Surfaces. IEEE Transactions on Electron Devices, 2019, 66, 4326-4330.	1.6	19
41	Prediction of improved magnetization and stability in Fe16N2 through alloying. Journal of Applied Physics, 2019, 126, .	1.1	18
42	First principles investigation into the phase stability and enhanced hardness of TiN-ScN and TiN-YN alloys. Thin Solid Films, 2019, 688, 137284.	0.8	16
43	Resistivity and surface scattering of (0001) single crystal ruthenium thin films. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2019, 37, .	0.9	27
44	Conductive surface oxide on CrN(001) layers. Applied Physics Letters, 2019, 114, .	1.5	15
45	Fully strained epitaxial Ti1â^'Mg N(001) layers. Thin Solid Films, 2019, 688, 137165.	0.8	21
46	Unconventional superconductivity in 3d rocksalt transition metal carbides. Journal of Materials Chemistry C, 2019, 7, 12619-12632.	2.7	18
47	Valence electron concentration as an indicator for mechanical properties in rocksalt structure nitrides, carbides and carbonitrides. Acta Materialia, 2018, 152, 175-185.	3.8	178
48	The electrical resistivity of rough thin films: A model based on electron reflection at discrete step edges. Journal of Applied Physics, 2018, 123, .	1.1	44
49	Resistivity scaling due to electron surface scattering in thin metal layers. Physical Review B, 2018, 97, .	1.1	58
50	First-principles study of mechanical and magnetic properties of transition metal (M) nitrides in the cubic M4N structure. Journal of Physics and Chemistry of Solids, 2018, 120, 197-206.	1.9	41
51	A new semiconductor: Ti<inf>0.5</inf>Mg<inf>0.5</inf>N(001). , 2018, , .		1
52	Dynamical stabilization in delafossite nitrides for solar energy conversion. Journal of Materials Chemistry A, 2018, 6, 20852-20860.	5.2	19
53	The Resistivity Size Effect in Epitaxial Ru(0001) and Co(0001) Layers. , 2018, , .		15
54	Resistivity size effect in epitaxial Ru(0001) layers. Journal of Applied Physics, 2018, 124, .	1.1	59

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55	NiAl as a potential material for liner- and barrier-free interconnect in ultrasmall technology node. Applied Physics Letters, 2018, 113, .	1.5	26
56	Growth and properties of epitaxial Ti1â^'xMgxN(001) layers. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2018, 36, .	0.9	32
57	Metals for Low-Resistivity Interconnects. , 2018, , .		17
58	Validity and Application of the TCR Method to MOL contactS. , 2018, , .		2
59	A first-principles analysis of ballistic conductance, grain boundary scattering and vertical resistance in aluminum interconnects. AIP Advances, 2018, 8, 055127.	0.6	14
60	Energetics of point defects in rocksalt structure transition metal nitrides: Thermodynamic reasons for deviations from stoichiometry. Acta Materialia, 2018, 159, 77-88.	3.8	81
61	Validity and Application of the TCR Method to MOL contactS. , 2018, , .		1
62	Cation and anion vacancies in cubic molybdenum nitride. Journal of Alloys and Compounds, 2017, 705, 631-637.	2.8	33
63	Electronic and optical properties of rocksalt-phase tungsten nitride (B1-WN). Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2017, 35, .	0.9	15
64	Infrared Plasmonics with Conductive Ternary Nitrides. ACS Applied Materials & Interfaces, 2017, 9, 10825-10834.	4.0	42
65	The anisotropic size effect of the electrical resistivity of metal thin films: Tungsten. Journal of Applied Physics, 2017, 122, .	1.1	61
66	Surface roughness dependence of the electrical resistivity of W(001) layers. Journal of Applied Physics, 2017, 122, .	1.1	37
67	Phase stability and mechanical properties of Mo1-xNx with 0 â‰ x â‰ 1. Journal of Applied Physics, 2017, 122, .	1.1	39
68	Elastic constants of epitaxial cubic MoN (001) layers. Surface and Coatings Technology, 2017, 325, 572-578.	2.2	23
69	First-principles phase diagram calculations for the rocksalt-structure quasibinary systems TiNâ€“ZrN, TiNâ€“HfN and ZrNâ€“HfN. Journal of Physics Condensed Matter, 2017, 29, 035401.	0.7	33
70	Electron mean free path in elemental metals. Journal of Applied Physics, 2016, 119, .	1.1	630
71	Electron channeling in TiO₂coated Cu layers. Semiconductor Science and Technology, 2016, 31, 055005.	1.0	38
72	Cubic Î²-WN layers: Growth and properties vs N-to-W ratio. Surface and Coatings Technology, 2016, 304, 98-107.	2.2	46

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73	Reducing Grain-Boundary Resistivity of Copper Nanowires by Doping. Physical Review Applied, 2016, 5, .	1.5	48
74	Vacancy-induced mechanical stabilization of cubic tungsten nitride. Physical Review B, 2016, 94, .	1.1	70
75	Growth and mechanical properties of epitaxial NbN(001) films on MgO(001). Surface and Coatings Technology, 2016, 288, 105-114.	2.2	58
76	Optical and electron transport properties of rock-salt Sc1âˆ'xAlxN. Journal of Applied Physics, 2015, 118, .	1.1	36
77	Epitaxial growth of tungsten layers on MgO(001). Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2015, 33, .	0.9	32
78	Epitaxial growth and properties of cubic WN on MgO(001), MgO(111), and Al2O3(0001). Thin Solid Films, 2015, 590, 276-283.	0.8	36
79	Optical and transport measurement and first-principles determination of the ScN band gap. Physical Review B, 2015, 91, .	1.1	95
80	Microstructure and age hardening of C276 alloy coatings. Surface and Coatings Technology, 2015, 270, 299-304.	2.2	12
81	SiO₂ Free HfO₂ Gate Dielectrics by Physical Vapor Deposition. IEEE Transactions on Electron Devices, 2015, 62, 2878-2882.	1.6	12
82	Epitaxial NbC N1âˆ'(001) layers: Growth, mechanical properties, and electrical resistivity. Surface and Coatings Technology, 2015, 277, 136-143.	2.2	35
83	Calculated Resistances of Single Grain Boundaries in Copper. Physical Review Applied, 2014, 2, .	1.5	74
84	Ni doping on Cu surfaces: Reduced copper resistivity. Applied Physics Letters, 2014, 105, .	1.5	61
85	Electronic and bonding analysis of hardness in pyrite-type transition-metal pernitrides. Physical Review B, 2014, 90, .	1.1	108
86	First-principles investigation of the structural, mechanical and electronic properties of the NbO-structured 3d, 4d and 5d transition metal nitrides. Computational Materials Science, 2014, 84, 365-373.	1.4	78
87	Mechanical properties and electronic structure of anti-ReO3 structured cubic nitrides, M3N, of d block transition metals M: An ab initio study. Journal of Alloys and Compounds, 2014, 595, 80-86.	2.8	55
88	Sputter deposited NbC x N y films: Effect of nitrogen content on structure and mechanical and tribological properties. Surface and Coatings Technology, 2014, 258, 746-753.	2.2	34
89	Structural, mechanical and electronic properties of 3d transition metal nitrides in cubic zincblende, rocksalt and cesium chloride structures: a first-principles investigation. Journal of Physics Condensed Matter, 2014, 26, 025404.	0.7	86
90	Optical phonon modes in Al1âˆ'xScxN. Journal of Applied Physics, 2014, 115, .	1.1	32

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91	Effective electron mean free path in TiN(001). Journal of Applied Physics, 2013, 113, .	1.1	63
92	Structure zone model for extreme shadowing conditions. Thin Solid Films, 2013, 527, 158-163.	0.8	94
93	Bandgap in Al1â^'xScxN. Applied Physics Letters, 2013, 102, .	1.5	81
94	Epitaxial Ag(001) grown on MgO(001) and TiN(001): Twinning, surface morphology, and electron surface scattering. Journal of Applied Physics, 2012, 111, .	1.1	37
95	Biaxial texture development in aluminum nitride layers during off-axis sputter deposition. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2012, 30, .	0.9	25
96	CrNâ€“Ag nanocomposite coatings: Control of lubricant transport by diffusion barriers. Thin Solid Films, 2012, 524, 211-217.	0.8	28
97	Ag transport in CrNâ€“Ag nanocomposite coatings. Thin Solid Films, 2012, 520, 6774-6779.	0.8	33
98	Sculptured thin films: nanorods, nanopipes, nanosmiles. , 2011, , .		1
99	Variable-range hopping conduction in epitaxial CrN(001). Physical Review B, 2011, 83, .	1.1	74
100	Epitaxial TiN(001) wetting layer for growth of thin single-crystal Cu(001). Journal of Applied Physics, 2011, 110, .	1.1	37
101	Epitaxial suppression of the metal-insulator transition in CrN. Physical Review B, 2011, 84, .	1.1	53
102	Electron scattering at surfaces and grain boundaries in Cu thin films and wires. Physical Review B, 2011, 84, .	1.1	134
103	Surface mound formation during epitaxial growth of CrN(001). Thin Solid Films, 2010, 518, 3813-3818.	0.8	19
104	Structural characterization of a Cu/MgO(001) interface using CS-corrected HRTEM. Thin Solid Films, 2010, 519, 1662-1667.	0.8	26
105	CrNâ€“Ag nanocomposite coatings: Tribology at room temperature and during a temperature ramp. Surface and Coatings Technology, 2010, 204, 1388-1394.	2.2	74
106	Control of lubricant transport by a CrN diffusion barrier layer during high-temperature sliding of a CrNâ€“Ag composite coating. Surface and Coatings Technology, 2010, 205, 1350-1355.	2.2	42
107	CrNâ€“Ag nanocomposite coatings: High-temperature tribological response. Wear, 2010, 269, 125-131.	1.5	66
108	Nanorod PEM Fuel Cell Cathodes with Controlled Porosity. Journal of the Electrochemical Society, 2010, 157, B437.	1.3	20

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109	Sputter-Deposited Pt/CrN Nanoparticle PEM Fuel Cell Cathodes: Limited Proton Conductivity Through Electrode Dewetting. Journal of the Electrochemical Society, 2010, 157, B71.	1.3	24
110	Resistivity of thin Cu films coated with Ta, Ti, Ru, Al, and Pd barrier layers from first principles. Physical Review B, 2010, 81, .	1.1	62
111	CrN electronic structure and vibrational modes: An optical analysis. Physical Review B, 2010, 82, .	1.1	41
112	Effect of O2 adsorption on electron scattering at Cu(001) surfaces. Applied Physics Letters, 2010, 97, .	1.5	62
113	Power law scaling during physical vapor deposition under extreme shadowing conditions. Journal of Applied Physics, 2010, 107, .	1.1	26
114	Pore Formation by In Situ Etching of Nanorod PEM Fuel Cell Electrodes. Journal of the Electrochemical Society, 2010, 157, B113.	1.3	13
115	Selective Assembly of Multi-Component Nanosprings and Nanorods. Journal of Nanoscience and Nanotechnology, 2010, 10, 2252-2256.	0.9	0
116	MULTIWAVELENGTH OBSERVATIONS OF LS I +61Â° 303 WITH VERITAS,SWIFT, ANDRXTE. Astrophysical Journal, 2009, 700, 1034-1041.	1.6	34
117	Resistivity of thin Cu films with surface roughness. Physical Review B, 2009, 79, .	1.1	127
118	Specular electron scattering at single-crystal Cu(001) surfaces. Applied Physics Letters, 2009, 94, .	1.5	88
119	Anomalous scaling during glancing angle deposition. Applied Physics Letters, 2009, 95, .	1.5	22
120	Sputter-Deposited Pt PEM Fuel Cell Electrodes: Particles vs Layers. Journal of the Electrochemical Society, 2009, 156, B614.	1.3	53
121	Temperature-induced chaos during nanorod growth by physical vapor deposition. Journal of Applied Physics, 2009, 105, .	1.1	15
122	Can micro-compression testing provide stressâ€“strain data for thin films?. Thin Solid Films, 2009, 518, 1517-1521.	0.8	17
123	CrNâ€“Ag nanocomposite coatings: Effect of growth temperature on the microstructure. Surface and Coatings Technology, 2008, 203, 584-587.	2.2	50
124	Testing Thin Films by Microcompression: Benefits and Limits. BHM-Zeitschrift Fuer Rohstoffe Geotechnik Metallurgie Werkstoffe Maschinen-Und Anlagentechnik, 2008, 153, 257-262.	0.4	5
125	Twoâ€Component Nanorod Arrays by Glancingâ€Angle Deposition. Small, 2008, 4, 1351-1354.	5.2	33
126	Multi-component nanostructure design by atomic shadowing. Thin Solid Films, 2008, 517, 1214-1218.	0.8	38

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127	Development of two-level porosity during glancing angle deposition. Journal of Applied Physics, 2008, 103, .	1.1	44
128	Effect of swift heavy ion irradiation on the hardness of chromium nanorods. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2008, 26, 887-892.	0.9	13
129	Surface morphological evolution during annealing of epitaxial Cu(001) layers. Journal of Applied Physics, 2008, 104, .	1.1	23
130	Ta nanotubes grown by glancing angle deposition. Journal of Vacuum Science & Technology B, 2008, 26, 678-681.	1.3	18
131	The influence of surface roughness on electrical conductance of thin Cu films: An ab initio study. Journal of Applied Physics, 2008, 103, .	1.1	121
132	Competitive growth of Ta nanopillars during glancing angle deposition: Effect of surface diffusion. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2007, 25, 312-318.	0.9	49
133	Growth competition during glancing angle deposition of nanorod honeycomb arrays. Applied Physics Letters, 2007, 90, 093103.	1.5	65
134	Effects of compressive strains on electrical conductivities of a macroscale carbon nanotube block. Applied Physics Letters, 2007, 91, .	1.5	54
135	Electron scattering at single crystal Cu surfaces. Thin Solid Films, 2007, 516, 465-469.	0.8	57
136	Surface patterning by nanosphere lithography for layer growth with ordered pores. Thin Solid Films, 2007, 516, 433-437.	0.8	51
137	Electron Scattering in Narrow Metal Wires. , 2006, , .		2
138	Anisotropic broadening of Cu nanorods during glancing angle deposition. Applied Physics Letters, 2006, 89, 203121.	1.5	50
139	Nanospring Pressure Sensors Grown by Glancing Angle Deposition. Nano Letters, 2006, 6, 854-857.	4.5	123
140	Two-component nanopillar arrays grown by Glancing Angle Deposition. Thin Solid Films, 2006, 494, 234-239.	0.8	67
141	Growth of epitaxial CrN on MgO(001): Role of deposition angle on surface morphological evolution. Thin Solid Films, 2006, 494, 330-335.	0.8	41
142	The structure of Ta nanopillars grown by glancing angle deposition. Thin Solid Films, 2006, 515, 1223-1227.	0.8	59
143	Growth of epitaxial Cu on MgO(001) by magnetron sputter deposition. Thin Solid Films, 2006, 515, 1166-1170.	0.8	42
144	High-Temperature Tribological Behavior of CrN-Ag Self-lubricating Coatings. Advanced Engineering Materials, 2006, 8, 1125-1129.	1.6	81

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145	Branched Ta nanocolumns grown by glancing angle deposition. Applied Physics Letters, 2006, 88, 203117.	1.5	68
146	CrNâ€“Ag self-lubricating hard coatings. Surface and Coatings Technology, 2005, 200, 1495-1500.	2.2	144
147	Nucleation kinetics versus nitrogen partial pressure during homoepitaxial growth of stoichiometric TiN(001): A scanning tunneling microscopy study. Surface Science, 2005, 581, L122-127.	0.8	37
148	Surface morphological evolution of epitaxial CrN(001) layers. Journal of Applied Physics, 2005, 98, 054906.	1.1	24
149	Nanostaircases: An atomic shadowing instability during epitaxial CrN(001) layer growth. Applied Physics Letters, 2005, 87, 053107.	1.5	11
150	Growth of CoSi2 on Si(001) by reactive deposition epitaxy. Journal of Applied Physics, 2005, 97, 044909.	1.1	14
151	Epitaxial and polycrystalline HfNx (0.8â©½xâ©½1.5) layers on MgO(001): Film growth and physical properties. Journal of Applied Physics, 2005, 97, 083521.	1.1	95
152	Growth of Y-Shaped Nanorods through Physical Vapor Deposition. Nano Letters, 2005, 5, 2505-2508.	4.5	133
153	Nanostructured Transition-Metal Nitride Layers. Optical Science and Engineering, 2005, , .	0.1	1
154	Growth, surface morphology, and electrical resistivity of fully strained substoichiometric epitaxial TiNx (0.67â©½x<1.0) layers on MgO(001). Journal of Applied Physics, 2004, 95, 356-362.	1.1	118
155	Surface and bulk electronic structure ofScN(001)investigated by scanning tunneling microscopy/spectroscopy and optical absorption spectroscopy. Physical Review B, 2004, 70, .	1.1	118
156	Growth and physical properties of epitaxial HfN layers on MgO(001). Journal of Applied Physics, 2004, 96, 878-884.	1.1	83
157	Nucleation kinetics during homoepitaxial growth of TiN(001) by reactive magnetron sputtering. Physical Review B, 2004, 70, .	1.1	45
158	Pathways of atomistic processes on TiN(001) and (111) surfaces during film growth: anab initiostudy. Journal of Applied Physics, 2003, 93, 9086-9094.	1.1	318
159	Vacancy hardening in single-crystal TiNx(001) layers. Journal of Applied Physics, 2003, 93, 6025-6028.	1.1	146
160	Growth and physical properties of epitaxial CeN layers on MgO(001). Journal of Applied Physics, 2003, 94, 921-927.	1.1	31
161	Epitaxial Ti1-xWxN alloys grown on MgO(001) by ultrahigh vacuum reactive magnetron sputtering: Electronic properties and long-range cation ordering. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2003, 21, 140-146.	0.9	54
162	Size-Dependent Detachment-Limited Decay Kinetics of Two-Dimensional TiN Islands on TiN(111). Physical Review Letters, 2002, 89, 176102.	2.9	32

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163	Epitaxial growth of metastable Î´-TaN layers on MgO(001) using low-energy, high-flux ion irradiation during ultrahigh vacuum reactive magnetron sputtering. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2002, 20, 2007.	0.9	40
164	Carbon incorporation pathways and lattice sites in Si1â^'yCy alloys grown on Si(001) by molecular-beam epitaxy. Journal of Applied Physics, 2002, 91, 5716-5727.	1.1	12
165	Growth of single-crystal CrN on MgO(001): Effects of low-energy ion-irradiation on surface morphological evolution and physical properties. Journal of Applied Physics, 2002, 91, 3589-3597.	1.1	117
166	Band gap in epitaxial NaCl-structure CrN(001) layers. Journal of Applied Physics, 2002, 91, 5882-5886.	1.1	117
167	Development of preferred orientation in polycrystalline NaCl-structure Î´-TaN layers grown by reactive magnetron sputtering: Role of low-energy ion surface interactions. Journal of Applied Physics, 2002, 92, 5084-5093.	1.1	87
168	C lattice site distributions in metastable Ge1â^'yCy alloys grown on Ge(001) by molecular-beam epitaxy. Journal of Applied Physics, 2002, 91, 3644-3652.	1.1	13
169	Phase composition and microstructure of polycrystalline and epitaxial TaNx layers grown on oxidized Si(001) and MgO(001) by reactive magnetron sputter deposition. Thin Solid Films, 2002, 402, 172-182.	0.8	109
170	Phase stability, nitrogen vacancies, growth mode, and surface structure of ScN(001) under Sc-rich conditions. Journal of Crystal Growth, 2002, 242, 345-354.	0.7	42
171	Electronic structure of ScN determined using optical spectroscopy, photoemission, andab initiocalculations. Physical Review B, 2001, 63, .	1.1	139
172	Epitaxial NaCl structure Î´-TaNx(001): Electronic transport properties, elastic modulus, and hardness versus N/Ta ratio. Journal of Applied Physics, 2001, 90, 2879-2885.	1.1	88
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