Per Persson

List of Publications by Year
in descending order

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237 papers	12,225 citations	28274 55 h-index	30922 102 g-index
242 all docs	242 docs citations	242 times ranked	8840 citing authors

#	Article	IF	Citations
1	Impact of in situ NH3 pre-treatment of LPCVD SiN passivation on GaN HEMT performance. Semiconductor Science and Technology, 2022, 37, 035011.	2.0	8
2	MXene-based symmetric supercapacitors with high voltage and high energy density. Materials Reports Energy, 2022, 2, 100078.	3.2	10
3	Electron-phonon coupling and quantum correction to topological magnetoconductivity in <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mi>Bi</mml:mi><mml:mn>2</mml:mn></mml:msub></mml:mrow></mml:math> Physical Review B, 2022, 105, .	3.2	12
4	Epitaxial Growth of CaMnO_{3â€“y} Films on LaAlO₃(112Â¯0) by Pulsed Direct Current Reactive Magnetron Sputtering. Physica Status Solidi - Rapid Research Letters, 2022, 16, .	2.4	3
5	On the polarity determination and polarity inversion in nitrogen-polar group III-nitride layers grown on SiC. Journal of Applied Physics, 2022, 131, .	2.5	5
6	Effect of vacancies on the electrochemical behavior of Mo-based MXenes in aqueous supercapacitors. Journal of Power Sources, 2022, 525, 231064.	7.8	13
7	High-Entropy Laminate Metal Carbide (MAX Phase) and Its Two-Dimensional Derivative MXene. Chemistry of Materials, 2022, 34, 2098-2106.	6.7	60
8	Synthesis, characterization, and magnetic properties of rare earth containing Mo_{4/3}RE_{2/3}AlB₂ i-MAB phases. Materials Research Letters, 2022, 10, 295-300.	8.7	3
9	Colorless-to-colorful switching of electrochromic MXene by reversible ion insertion. Nano Research, 2022, 15, 3587-3593.	10.4	16
10	Mg-doping and free-hole properties of hot-wall MOCVD GaN. Journal of Applied Physics, 2022, 131, .	2.5	14
11	Epitaxial growth of Î²-Ga2O3 by hot-wall MOCVD. AIP Advances, 2022, 12, .	1.3	17
12	MXene//MnO₂ Asymmetric Supercapacitors with High Voltages and High Energy Densities. Batteries and Supercaps, 2022, 5, .	4.7	4
13	On the nature of planar defects in transition metal diboride line compounds. Materialia, 2022, 24, 101478.	2.7	4
14	Cerium Oxide Nanoparticles with Entrapped Gadolinium for High T₁ Relaxivity and ROS-Scavenging Purposes. ACS Omega, 2022, 7, 21337-21345.	3.5	7
15	Solidâ€State Janus Nanoprecipitation Enables Amorphousâ€Like Heat Conduction in Crystalline Mg₃Sb₂â€Based Thermoelectric Materials. Advanced Science, 2022, 9, .	11.2	12
16	Age hardening in superhard ZrB2-rich Zr1-xTaxBy thin films. Scripta Materialia, 2021, 191, 120-125.	5.2	28
17	Where is the unpaired transition metal in substoichiometric diboride line compounds?. Acta Materialia, 2021, 204, 116510.	7.9	21
18	Tailored synthesis approach of (Mo_{2/3}Y_{1/3})₂AlC i-MAX and its two-dimensional derivative Mo_{1.33}CT_z MXene: enhancing the yield, quality, and performance in supercapacitor applications. Nanoscale, 2021, 13, 311-319.	5.6	22

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19	Halogenated Ti₃C₂ MXenes with Electrochemically Active Terminals for High-Performance Zinc Ion Batteries. ACS Nano, 2021, 15, 1077-1085.	14.6	183
20	Ultrafast, One-Step, Salt-Solution-Based Acoustic Synthesis of Ti₃C₂ MXene. ACS Nano, 2021, 15, 4287-4293.	14.6	103
21	On the origin of kinking in layered crystalline solids. Materials Today, 2021, 43, 45-52.	14.2	28
22	Exploring MXenes and their MAX phase precursors by electron microscopy. Materials Today Advances, 2021, 9, 100123.	5.2	26
23	In-situ growth of cerium nanoparticles for chrome-free, corrosion resistant anodic coatings. Surface and Coatings Technology, 2021, 410, 126958.	4.8	8
24	In situ He+ irradiation of the double solid solution (Ti0.5,Zr0.5)2(Al0.5,Sn0.5)C MAX phase: Defect evolution in the 350â€“800 Â°C temperature range. Acta Materialia, 2021, 206, 116606.	7.9	9
25	Synthesis and Characterisation of Nanocomposite Mo-Fe-B Thin Films Deposited by Magnetron Sputtering. Materials, 2021, 14, 1739.	2.9	4
26	Material proposal for 2D indium oxide. Applied Surface Science, 2021, 548, 149275.	6.1	50
27	Deposition of MAX phase-containing thin films from a (Ti,Zr)2AlC compound target. Applied Surface Science, 2021, 551, 149370.	6.1	10
28	Electrochemical Lithium Storage Performance of Molten Salt Derived V2SnC MAX Phase. Nano-Micro Letters, 2021, 13, 158.	27.0	23
29	Boridene: Two-dimensional Mo _{4/3} B _{2-x} with ordered metal vacancies obtained by chemical exfoliation. Science, 2021, 373, 801-805.	12.6	126
30	Outâ€Ofâ€Plane Ordered Laminate Borides and Their 2D Tiâ€Based Derivative from Chemical Exfoliation. Advanced Materials, 2021, 33, e2008361.	21.0	14
31	Near-room temperature ferromagnetic behavior of single-atom-thick 2D iron in nanolaminated ternary MAX phases. Applied Physics Reviews, 2021, 8, .	11.3	14
32	Enhanced supercapacitive performance of Mo1.33C MXene based asymmetric supercapacitors in lithium chloride electrolyte. Energy Storage Materials, 2021, 41, 203-208.	18.0	30
33	Improved charge storage performance of a layered Mo_{1.33}C MXene/MoS₂/graphene nanocomposite. Nanoscale Advances, 2021, 3, 6689-6695.	4.6	2
34	Flexible Freeâ€Standing MoO₃/Ti₃C₂T_z MXene Composite Films with High Gravimetric and Volumetric Capacities. Advanced Science, 2021, 8, 2003656.	11.2	59
35	Origin of layer decoupling in ordered multilayer graphene grown by high-temperature sublimation on C-face 4H-SiC. APL Materials, 2020, 8, .	5.1	4
36	Multielemental singleâ€“atom-thick A layers in nanolaminated V ₂ (Sn, A) C () Tj ETQq0 0 0 rgBT /Overlock 1 Sciences of the United States of America, 2020, 117, 820-825.	7.1	84

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37	Ta-based 413 and 211 MAX phase solid solutions with Hf and Nb. Journal of the European Ceramic Society, 2020, 40, 1829-1838.	5.7	31
38	Microwave-Induced Structural Ordering of Resilient Nanostructured L1₀-FePt Catalysts for Oxygen Reduction Reaction. ACS Applied Energy Materials, 2020, 3, 9785-9791.	5.1	4
39	Theoretical Prediction and Synthesis of a Family of Atomic Laminate Metal Borides with In-Plane Chemical Ordering. Journal of the American Chemical Society, 2020, 142, 18583-18591.	13.7	55
40	Improving the high-temperature oxidation resistance of TiB2 thin films by alloying with Al. Acta Materialia, 2020, 196, 677-689.	7.9	65
41	X-ray Photoelectron Spectroscopy of Ti₃AlC₂, Ti₃C₂T_z, and TiC Provides Evidence for the Electrostatic Interaction between Laminated Layers in MAX-Phase Materials. Journal of Physical Chemistry C, 2020, 124, 27732-27742.	3.1	71
42	Self-organized columnar Zr0.7Ta0.3B1.5 core/shell-nanostructure thin films. Surface and Coatings Technology, 2020, 401, 126237.	4.8	15
43	High-Selectivity Growth of GaN Nanorod Arrays by Liquid-Target Magnetron Sputter Epitaxy. Coatings, 2020, 10, 719.	2.6	1
44	Microstructure and materials properties of understoichiometric TiBx thin films grown by HiPIMS. Surface and Coatings Technology, 2020, 404, 126537.	4.8	33
45	Tactile sensory coding and learning with bio-inspired optoelectronic spiking afferent nerves. Nature Communications, 2020, 11, 1369.	12.8	141
46	A flexible semitransparent photovoltaic supercapacitor based on water-processed MXene electrodes. Journal of Materials Chemistry A, 2020, 8, 5467-5475.	10.3	79
47	How Much Oxygen Can a MXene Surface Take Before It Breaks?. Advanced Functional Materials, 2020, 30, 1909005.	14.9	111
48	The influence of pressure and magnetic field on the deposition of epitaxial TiBx thin films from DC magnetron sputtering. Vacuum, 2020, 177, 109355.	3.5	14
49	A general Lewis acidic etching route for preparing MXenes with enhanced electrochemical performance in non-aqueous electrolyte. Nature Materials, 2020, 19, 894-899.	27.5	870
50	The effects of microstructure, Nb content and secondary Ruddlesdenâ€“Popper phase on thermoelectric properties in perovskite CaMn_{1â^'x}Nb_xO₃ (x) Tj ETQq0 0 0 rgBT /Overlock		
51	Single-Atom-Thick Active Layers Realized in Nanolaminated Ti₃(Al_xCu_{1â€“x})C₂ and Its Artificial Enzyme Behavior. ACS Nano, 2019, 13, 9198-9205.	14.6	59
52	Ti_{n+1}C_n MXenes with fully saturated and thermally stable Cl terminations. Nanoscale Advances, 2019, 1, 3680-3685.	4.6	81
53	Synthesis of (V_{2/3}Sc_{1/3})₂AlC i-MAX phase and V_{2â^'x}C MXene scrolls. Nanoscale, 2019, 11, 14720-14726.	5.6	52
54	Synthesis of MAX phases Nb₂CuC and Ti₂(Al_{0.1}Cu_{0.9})N by A-site replacement reaction in molten salts. Materials Research Letters, 2019, 7, 510-516.	8.7	58

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55	Theoretical Analysis, Synthesis, and Characterization of 2D W_{1.33}C (MXene) with Ordered Vacancies. ACS Applied Nano Materials, 2019, 2, 6209-6219.	5.0	37
56	Two-Dimensional Hydroxyl-Functionalized and Carbon-Deficient Scandium Carbide, ScC_xOH, a Direct Band Gap Semiconductor. ACS Nano, 2019, 13, 1195-1203.	14.6	30
57	Electronic and optical characterization of 2D Ti₂C and Nb₂C (MXene) thin films. Journal of Physics Condensed Matter, 2019, 31, 165301.	1.8	74
58	Polymer-MXene composite films formed by MXene-facilitated electrochemical polymerization for flexible solid-state microsupercapacitors. Nano Energy, 2019, 60, 734-742.	16.0	124
59	Element Replacement Approach by Reaction with Lewis Acidic Molten Salts to Synthesize Nanolaminated MAX Phases and MXenes. Journal of the American Chemical Society, 2019, 141, 4730-4737.	13.7	811
60	Influence of the Al concentration in Ti-Al-B coatings on microstructure and mechanical properties using combinatorial sputtering from a segmented TiB2/AlB2 target. Surface and Coatings Technology, 2019, 364, 89-98.	4.8	24
61	Slot-Die-Printed Two-Dimensional ZrS₃ Charge Transport Layer for Perovskite Light-Emitting Diodes. ACS Applied Materials & Interfaces, 2019, 11, 48021-48028.	8.0	13
62	2D Transition Metal Carbides (MXenes) for Carbon Capture. Advanced Materials, 2019, 31, e1805472.	21.0	184
63	Synthesis and characterization of (Ti1-Al)B2+ thin films from combinatorial magnetron sputtering. Thin Solid Films, 2019, 669, 181-187.	1.8	24
64	MXene Surface Chemistry. , 2019, , 125-136.		2
65	Tailoring Structure, Composition, and Energy Storage Properties of MXenes from Selective Etching of Inâ€Plane, Chemically Ordered MAX Phases. Small, 2018, 14, e1703676.	10.0	174
66	Wâ€Based Atomic Laminates and Their 2D Derivative W_{1.33}C MXene with Vacancy Ordering. Advanced Materials, 2018, 30, e1706409.	21.0	240
67	Site-controlled growth of GaN nanorod arrays by magnetron sputter epitaxy. Thin Solid Films, 2018, 660, 950-955.	1.8	7
68	Self-Healing in Carbon Nitride Evidenced As Material Inflation and Superlubric Behavior. ACS Applied Materials & Interfaces, 2018, 10, 16238-16243.	8.0	51
69	Single Cr atom catalytic growth of graphene. Nano Research, 2018, 11, 2405-2411.	10.4	41
70	On the organization and thermal behavior of functional groups on Ti ₃ C ₂ MXene surfaces in vacuum. 2D Materials, 2018, 5, 015002.	4.4	219
71	Highâ€Performance Ultrathin Flexible Solidâ€State Supercapacitors Based on Solution Processable Mo_{1.33}C MXene and PEDOT:PSS. Advanced Functional Materials, 2018, 28, 1703808.	14.9	196
72	Sodium hydroxide and vacuum annealing modifications of the surface terminations of a Ti₃C₂(MXene) epitaxial thin film. RSC Advances, 2018, 8, 36785-36790.	3.6	49

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73	Etching behaviors of tunneling magnetoresistive (TMR) materials by ion beam etching system. Materials Today: Proceedings, 2018, 5, 15186-15191.	1.8	1
74	Self-structuring in Zr1â˜'xAlxN films as a function of composition and growth temperature. Scientific Reports, 2018, 8, 16327.	3.3	9
75	Thermal Stress Evaluation of Tunneling Magnetoresistive Structures in Data Storage Devices. IEEE Magnetics Letters, 2018, 9, 1-4.	1.1	2
76	On the Structural Stability of MXene and the Role of Transition Metal Adatoms. Nanoscale, 2018, 10, 10850-10855.	5.6	71
77	Sequential magnetic switching in Fe/MgO(001) superlattices. Physical Review B, 2018, 97, .	3.2	5
78	Synthesis of Two-Dimensional Nb_{1.33}C (MXene) with Randomly Distributed Vacancies by Etching of the Quaternary Solid Solution (Nb_{2/3}Sc_{1/3})₂AlC MAX Phase. ACS Applied Nano Materials, 2018, 1, 2455-2460.	5.0	154
79	Effects of N2 Partial Pressure on Growth, Structure, and Optical Properties of GaN Nanorods Deposited by Liquid-Target Reactive Magnetron Sputter Epitaxy. Nanomaterials, 2018, 8, 223.	4.1	8
80	Resolving the debated atomic structure of the metastable cubic <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mi>Si</mml:mi><mml:msub><mml:mi mathvariant="normal">N</mml:mi><mml:mi>x</mml:mi></mml:msub></mml:mrow></mml:math> tissue phase in nanocomposites with TiN. Physical Review Materials, 2018, 2, .	2.4	0
81	Graphene on graphene formation from PMMA residues during annealing. Vacuum, 2017, 137, 191-194.	3.5	6
82	Layered ternary M_{n+1}AX_n phases and their 2D derivative MXene: an overview from a thin-film perspective. Journal Physics D: Applied Physics, 2017, 50, 113001.	2.8	216
83	Coreâ€"shell formation in self-induced InAlN nanorods. Nanotechnology, 2017, 28, 115602.	2.6	4
84	Strategies to initiate and control the nucleation behavior of bimetallic nanoparticles. Nanoscale, 2017, 9, 8149-8156.	5.6	18
85	Two-dimensional Mo1.33C MXene with divacancy ordering prepared from parent 3D laminate with in-plane chemical ordering. Nature Communications, 2017, 8, 14949.	12.8	525
86	Direct observation of spinodal decomposition phenomena in InAlN alloys during in-situ STEM heating. Scientific Reports, 2017, 7, 44390.	3.3	20
87	Synthesis and characterisation of Mo-B-C thin films deposited by non-reactive DC magnetron sputtering. Surface and Coatings Technology, 2017, 309, 506-515.	4.8	20
88	Selective-area growth of single-crystal wurtzite GaN nanorods on SiOx/Si(001) substrates by reactive magnetron sputter epitaxy exhibiting single-mode lasing. Scientific Reports, 2017, 7, 12701.	3.3	14
89	Phase formation of nanolaminated Mo₂AuC and Mo₂(Au_{1â˜'x}Ga_x)₂C by a substitutional reaction within Au-capped Mo₂GaC and Mo₂Ga₂C thin films. Nanoscale, 2017, 9, 17681-17687.	5.6	43
90	Age hardening in (Ti 1â˜'x Al x)B 2+Î" thin films. Scripta Materialia, 2017, 127, 122-126.	5.2	38

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91	Magnetron Sputter Epitaxy of High-Quality GaN Nanorods on Functional and Cost-Effective Templates/Substrates. Energies, 2017, 10, 1322.	3.1	18
92	Influence of pulse frequency and bias on microstructure and mechanical properties of TiB2 coatings deposited by high power impulse magnetron sputtering. Surface and Coatings Technology, 2016, 304, 203-210.	4.8	61
93	Synthesis and characterization of MoB2â¯x thin films grown by nonreactive DC magnetron sputtering. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2016, 34, .	2.1	32
94	Correlative theoretical and experimental investigation of the formation of AlYB14 and competing phases. Journal of Applied Physics, 2016, 119, .	2.5	6
95	A study of formation and growth of the anodised surface layer on cast Al-Si alloys based on different analytical techniques. Materials and Design, 2016, 101, 254-262.	7.0	36
96	Synthesis of MAX Phases in the Hfâ€“Alâ€“C System. Inorganic Chemistry, 2016, 55, 10922-10927.	4.0	57
97	Strongly polarized quantum-dot-like light emitters embedded in GaAs/GaNAs core/shell nanowires. Nanoscale, 2016, 8, 15939-15947.	5.6	22
98	Atomically resolved microscopy of ion implantation induced dislocation loops in 4H-SiC. Materials Letters, 2016, 181, 325-327.	2.6	12
99	Thermoelectric Properties of Solutionâ€Processed nâ€Doped Ladderâ€Type Conducting Polymers. Advanced Materials, 2016, 28, 10764-10771.	21.0	245
100	Nucleation and core-shell formation mechanism of self-induced InxAl1â¯xN core-shell nanorods grown on sapphire substrates by magnetron sputter epitaxy. Vacuum, 2016, 131, 39-43.	3.5	9
101	Properties of ScxAl1-xN (xÂ=Â0.27) thin films on sapphire and silicon substrates upon high temperature loading. Microsystem Technologies, 2016, 22, 1679-1689.	2.0	19
102	Interface controlled microstructure evolution in nanolayered thin films. Scripta Materialia, 2016, 123, 13-16.	5.2	9
103	Ab initio calculations and experimental study of piezoelectric Y In1â¯N thin films deposited using reactive magnetron sputter epitaxy. Acta Materialia, 2016, 105, 199-206.	7.9	20
104	Residue reduction and intersurface interaction on single graphene sheets. Carbon, 2016, 100, 345-350.	10.3	8
105	Room-temperature mobility above 2200â€‰cm2/VÂ·s of two-dimensional electron gas in a sharp-interface AlGaN/GaN heterostructure. Applied Physics Letters, 2015, 106, .	3.3	43
106	Structural and compositional evolutions of In_xAl_{1â¯x}N coreâ€“shell nanorods grown on Si(111) substrates by reactive magnetron sputter epitaxy. Nanotechnology, 2015, 26, 215602.	2.6	20
107	Structure and properties of Crâ€“C/Ag films deposited by magnetron sputtering. Surface and Coatings Technology, 2015, 281, 184-192.	4.8	20
108	Liquid-target reactive magnetron sputter epitaxy of High quality GaN(0001Ì„) nanorods on Si(111). Materials Science in Semiconductor Processing, 2015, 39, 702-710.	4.0	22

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109	Stabilization of wurtzite Sc0.4Al0.6N in pseudomorphic epitaxial Sc Al1â˜'N/In Al1â˜'N superlattices. Acta Materialia, 2015, 94, 101-110.	7.9	19
110	Atomically Resolved Structural and Chemical Investigation of Single MXene Sheets. Nano Letters, 2015, 15, 4955-4960.	9.1	415
111	Effects of Polytypism on Optical Properties and Band Structure of Individual Ga(N)P Nanowires from Correlative Spatially Resolved Structural and Optical Studies. Nano Letters, 2015, 15, 4052-4058.	9.1	19
112	Structural properties and dielectric function of graphene grown by high-temperature sublimation on 4H-SiC(000-1). Journal of Applied Physics, 2015, 117, .	2.5	16
113	Correlation between switching to n-type conductivity and structural defects in highly Mg-doped InN. Applied Physics Letters, 2015, 106, 232102.	3.3	7
114	Curved-Lattice Epitaxial Growth of In_xAl_{1â€“x}N Nanospirals with Tailored Chirality. Nano Letters, 2015, 15, 294-300.	9.1	19
115	Nanostructuring and coherency strain in multicomponent hard coatings. APL Materials, 2014, 2, 116104.	5.1	6
116	Stress evolution during growth of GaN (0001)/Al₂O₃(0001) by reactive dc magnetron sputter epitaxy. Journal Physics D: Applied Physics, 2014, 47, 145301.	2.8	11
117	Superhard NbB2â˜' thin films deposited by dc magnetron sputtering. Surface and Coatings Technology, 2014, 257, 295-300.	4.8	50
118	Assessing structural, free-charge carrier, and phonon properties of mixed-phase epitaxial films: The case of InN. Physical Review B, 2014, 90, .	3.2	15
119	Synthesis and characterization of arc deposited magnetic (Cr,Mn)₂AlC MAX phase films. Physica Status Solidi - Rapid Research Letters, 2014, 8, 420-423.	2.4	83
120	Excitons and biexcitons in InGaN quantum dot like localization centers. Nanotechnology, 2014, 25, 495702.	2.6	6
121	A Nanolaminated Magnetic Phase: Mn₂GaC. Materials Research Letters, 2014, 2, 89-93.	8.7	128
122	Characterization of InGaN/GaN quantum well growth using monochromated valence electron energy loss spectroscopy. Journal of Applied Physics, 2014, 115, 034302.	2.5	3
123	Optical properties of CuCdTeO thin films sputtered from CdTe-CuO composite targets. Thin Solid Films, 2014, 571, 706-711.	1.8	7
124	Structural and magnetic properties of (Cr1â˜'x Mn x)5Al8 solid solution and structural relation to hexagonal nanolaminates. Journal of Materials Science, 2014, 49, 7099-7104.	3.7	6
125	Origin of Strong Photoluminescence Polarization in GaNP Nanowires. Nano Letters, 2014, 14, 5264-5269.	9.1	22
126	Oxygen incorporation in Ti2AlC thin films studied by electron energy loss spectroscopy and ab initio calculations. Journal of Materials Science, 2013, 48, 3686-3691.	3.7	17

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127	Synthesis andab initiocalculations of nanolaminated (Cr,Mn)<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>AlC compounds. Physical Review B, 2013, 87, .	3.2	93
128	In situ transmission electron microscopy studies of the kinetics of Pt-Mo alloy diffusion in ZrB2 thin films. Applied Physics Letters, 2013, 103, .	3.3	9
129	Thermal stability of Al1â^'xInxN (0001) throughout the compositional range as investigated during in situ thermal annealing in a scanning transmission electron microscope. Acta Materialia, 2013, 61, 4683-4688.	7.9	12
130	AuAl2 and PtAl2 as potential plasmonic materials. Journal of Alloys and Compounds, 2013, 577, 581-586.	5.5	26
131	Magnetic Self-Organized Atomic Laminate from First Principles and Thin Film Synthesis. Physical Review Letters, 2013, 110, 195502.	7.8	146
132	Phase stability of Cr_{n+ 1}GaC_n MAX phases from first principles and Cr₂GaC thinâ€film synthesis using magnetron sputtering from elemental targets. Physica Status Solidi - Rapid Research Letters, 2013, 7, 971-974.	2.4	32
133	Self-organization during growth of ZrN/SiNx multilayers by epitaxial lateral overgrowth. Journal of Applied Physics, 2013, 114, 224302.	2.5	11
134	Nucleation of single GaN nanorods with diameters smaller than 35â€‰nm by molecular beam epitaxy. Applied Physics Letters, 2013, 103, .	3.3	6
135	Kinetics of Ga droplet decay on thin carbon films. Applied Physics Letters, 2013, 102, .	3.3	9
136	Microstructure and dielectric properties of piezoelectric magnetron sputtered w-ScxAl1â^'xN thin films. Journal of Applied Physics, 2012, 111, .	2.5	93
137	Room-temperature heteroepitaxy of single-phase Al1â^'xInxN films with full composition range on isostructural wurtzite templates. Thin Solid Films, 2012, 524, 113-120.	1.8	24
138	InGaN quantum dot formation mechanism on hexagonal GaN/InGaN/GaN pyramids. Nanotechnology, 2012, 23, 305708.	2.6	26
139	Y_xAl_{1â^'x}N thin films. Journal Physics D: Applied Physics, 2012, 45, 422001.	2.8	42
140	Substrate orientation effects on the nucleation and growth of the Mn+1AXn phase Ti2AlC. Journal of Applied Physics, 2011, 109, 014903.	2.5	18
141	Two-domain formation during the epitaxial growth of GaN (0001) on c-plane Al2O3 (0001) by high power impulse magnetron sputtering. Journal of Applied Physics, 2011, 110, .	2.5	18
142	Standardâ€free composition measurements of Al_x In_{1â€“x}N by lowâ€loss electron energy loss spectroscopy. Physica Status Solidi - Rapid Research Letters, 2011, 5, 50-52.	2.4	15
143	Epitaxial CVD growth of sp²â€hybridized boron nitride using aluminum nitride as buffer layer. Physica Status Solidi - Rapid Research Letters, 2011, 5, 397-399.	2.4	44
144	Face-centered cubic (Al1â^'xCrx)2O3. Thin Solid Films, 2011, 519, 2426-2429.	1.8	60

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145	Ti2Al(O,N) formation by solid-state reaction between substoichiometric TiN thin films and Al2O3 (0001) substrates. Thin Solid Films, 2011, 519, 2421-2425.	1.8	13
146	Effect of strain on low-loss electron energy loss spectra of group-III nitrides. Physical Review B, 2011, 84, .	3.2	26
147	Influence of ultrasound and cathode rotation on formation of intrinsic stress in Ni films during electrodeposition. Transactions of the Institute of Metal Finishing, 2011, 89, 137-142.	1.3	7
148	Spontaneous Formation of AlInN Coreâ€“Shell Nanorod Arrays by Ultrahigh-Vacuum Magnetron Sputter Epitaxy. Applied Physics Express, 2011, 4, 115002.	2.4	15
149	Electronic-grade GaN(0001)/Al2O3(0001) grown by reactive DC-magnetron sputter epitaxy using a liquid Ga target. Applied Physics Letters, 2011, 98, .	3.3	52
150	Sputter deposition from a Ti2AlC target: Process characterization and conditions for growth of Ti2AlC. Thin Solid Films, 2010, 518, 1621-1626.	1.8	77
151	Wurtzite structure Sc1â^'xAlxN solid solution films grown by reactive magnetron sputter epitaxy: Structural characterization and first-principles calculations. Journal of Applied Physics, 2010, 107, .	2.5	122
152	Effects of volume mismatch and electronic structure on the decomposition of ScAlN and TiAlN solid solutions. Physical Review B, 2010, 81, .	3.2	37
153	Nanoscale precipitation patterns in carbonâ€“nickel nanocomposite thin films: Period and tilt control via ion energy and deposition angle. Journal of Applied Physics, 2010, 108, 043503.	2.5	18
154	Evidence for ligand hydrolysis and Fe(III) reduction in the dissolution of goethite by desferrioxamine-B. Geochimica Et Cosmochimica Acta, 2010, 74, 6706-6720.	3.9	28
155	Formation of the<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:mi>M</mml:mi><mml:mi>A</mml:mi><mml:mi>X</mml:mi></mml:mrow></mml:math>-phase oxycarbide<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow><mml:mtext>Ti</mml:mtext></mml:mrow><mml:mn>2</mml:mn></mml:msub> Physical Review B, 2009, 80, .	3.2	35
156	AlGaN Multiple Quantum Wells and AlN Grown in a Hot-wall MOCVD for Deep UV Applications. ECS Transactions, 2009, 25, 837-844.	0.5	1
157	The influence of substrate temperature and Al mobility on the microstructural evolution of magnetron sputtered ternary Tiâ€“Alâ€“N thin films. Journal of Applied Physics, 2009, 106, .	2.5	15
158	Aligned AlN nanowires by self-organized vaporâ€“solid growth. Nanotechnology, 2009, 20, 495304.	2.6	41
159	Two Dimensional X-Ray Diffraction Mapping of Basal Plane Orientation on SiC Substrates. Materials Science Forum, 2009, 615-617, 275-278.	0.3	2
160	Role of impurities and dislocations for the unintentional n-type conductivity in InN. Physica B: Condensed Matter, 2009, 404, 4476-4481.	2.7	15
161	Microstructural characterization of the toolâ€“chip interface enabled by focused ion beam and analytical electron microscopy. Wear, 2009, 266, 1237-1240.	3.1	12
162	Free electron behavior in InN: On the role of dislocations and surface electron accumulation. Applied Physics Letters, 2009, 94, 022109.	3.3	41

#	Article	IF	Citations
163	Trimming of aqueous chemically grown ZnO nanorods into ZnO nanotubes and their comparative optical properties. Applied Physics Letters, 2009, 95, 073114.	3.3	52
164	On the origin of a third spectral component of C1s XPS-spectra for nc-TiC/a-C nanocomposite thin films. Surface and Coatings Technology, 2008, 202, 3563-3570.	4.8	160
165	Effects of ion-assisted growth on the layer definition in Cr/Sc multilayers. Thin Solid Films, 2008, 516, 982-990.	1.8	12
166	Unravelling the free electron behavior in InN. Optoelectronic and Microelectronic Materials and Devices (COMMAD), Conference on, 2008, , .	0.0	0
167	Oxygen incorporation in Ti2AlC thin films. Applied Physics Letters, 2008, 92, .	3.3	53
168	A solid phase reaction between TiCx thin films and Al2O3 substrates. Journal of Applied Physics, 2008, 103, .	2.5	21
169	Thermal decomposition products in arc evaporated TiAlN/TiN multilayers. Applied Physics Letters, 2008, 93, .	3.3	74
170	Oriented graphite layer formation in Ti/C and TiC/C multilayers deposited by high current pulsed cathodic arc. Journal of Applied Physics, 2008, 104, .	2.5	2
171	Growth and characterization of TiN/SiN(001) superlattice films. Journal of Materials Research, 2007, 22, 3255-3264.	2.6	49
172	Deposition of epitaxial Ti2AlC thin films by pulsed cathodic arc. Journal of Applied Physics, 2007, 101, 056101.	2.5	62
173	Epitaxial Ti2AlN(0001) thin film deposition by dual-target reactive magnetron sputtering. Acta Materialia, 2007, 55, 4401-4407.	7.9	52
174	Optical observation of discrete well width fluctuations in wide band gap III-nitride quantum wells. Physica Status Solidi (B): Basic Research, 2007, 244, 1727-1734.	1.5	6
175	Influence of Gas Entry Point on Plasma Chemistry, Ion Energy and Deposited Alumina Thin Films in Filtered Cathodic Arc. Plasma Chemistry and Plasma Processing, 2007, 27, 599-608.	2.4	2
176	Phase tailoring of Ta thin films by highly ionized pulsed magnetron sputtering. Thin Solid Films, 2007, 515, 3434-3438.	1.8	104
177	Influence of Well-Width Fluctuations on the Electronic Structure of GaN/AlxGa1-xN Multiquantum Wells with Graded Interfaces. Acta Physica Polonica A, 2007, 112, 395-400.	0.5	3
178	Stress reduction in nanocomposite coatings consisting of hexagonal and cubic boron nitride. Surface and Coatings Technology, 2006, 200, 6459-6464.	4.8	20
179	Interface engineered ultrashort period Cr-Ti multilayers as high reflectance mirrors and polarizers for soft x rays of lambda = 274 nm wavelength. Applied Optics, 2006, 45, 137.	2.1	18
180	An ATR-FTIR spectroscopic study of the competitive adsorption between oxalate and malonate at the waterâ€“goethite interface. Journal of Colloid and Interface Science, 2006, 294, 31-37.	9.4	47

#	Article	IF	Citations
181	Deposition and characterization of ternary thin films within the Tiâ€“Alâ€“C system by DC magnetron sputtering. Journal of Crystal Growth, 2006, 291, 290-300.	1.5	212
182	Investigation of high power impulse magnetron sputtering pretreated interfaces for adhesion enhancement of hard coatings on steel. Surface and Coatings Technology, 2006, 200, 6495-6499.	4.8	131
183	Thermal stability of Alâ€“Crâ€“N hard coatings. Scripta Materialia, 2006, 54, 1847-1851.	5.2	224
184	Ostwald ripening of interstitial-type dislocation loops in 4H-silicon carbide. Journal of Applied Physics, 2006, 100, 053521.	2.5	13
185	Superior material properties of AlN on vicinal 4H-SiC. Journal of Applied Physics, 2006, 100, 036105.	2.5	3
186	Epitaxial growth and orientation of AlN thin films on Si(001) substrates deposited by reactive magnetron sputtering. Journal of Applied Physics, 2006, 100, 123514.	2.5	16
187	Properties of nonpolar a-plane GaN films grown by HVPE with AlN buffers. Journal of Crystal Growth, 2005, 281, 55-61.	1.5	66
188	Experimental studies of complex crater formation under cluster implantation of solids. European Physical Journal D, 2005, 36, 79-88.	1.3	19
189	Nonpolara-plane HVPE GaN: growth and in-plane anisotropic properties. Physica Status Solidi C: Current Topics in Solid State Physics, 2005, 2, 2027-2031.	0.8	12
190	High quality 6H-SiC (0001) homoepitaxial layers as substrate surface for growth of AlN epitaxial layers. Physica Status Solidi C: Current Topics in Solid State Physics, 2005, 2, 2109-2112.	0.8	1
191	SiC and III-Nitride Growth in Hot-Wall CVD Reactor. Materials Science Forum, 2005, 483-485, 61-66.	0.3	8
192	Structural, electrical, and mechanical properties of nc-TiCâ•a-SiC nanocomposite thin films. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 2005, 23, 2486.	1.6	69
193	Magnetron sputter epitaxy of wurtzite Al1â^'xInxN(0.1<x<0.9) by dual reactive dc magnetron sputter deposition. Journal of Applied Physics, 2005, 97, 083503.	2.5	45
194	Characterization of Er/O-doped Si-LEDs with Low Thermal Quenching. Materials Research Society Symposia Proceedings, 2005, 866, 113.	0.1	3
195	Adsorption of oxalate and malonate at the water-goethite interface: Molecular surface speciation from IR spectroscopy. Geochimica Et Cosmochimica Acta, 2005, 69, 541-552.	3.9	152
196	Ion-assisted physical vapor deposition for enhanced film properties on nonflat surfaces. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2005, 23, 278-280.	2.1	211
197	The effect of carbon and germanium on phase transformation of nickel on Si1â^'xâ^'yGexCy epitaxial layers. Journal of Applied Physics, 2004, 95, 2397-2402.	2.5	34
198	Growth of Ti3SiC2 thin films by elemental target magnetron sputtering. Journal of Applied Physics, 2004, 96, 4817-4826.	2.5	158

#	Article	IF	Citations
199	Sublimation epitaxy of AlN on SiC: growth morphology and structural features. Journal of Crystal Growth, 2004, 273, 161-166.	1.5	10
200	Growth of high quality epitaxial Si1â^'xâ^'yGexCy layers by using chemical vapor deposition. Applied Surface Science, 2004, 224, 46-50.	6.1	3
201	Mn+1AXnphases in theTiâ^'Siâ^'Csystem studied by thin-film synthesis andab initiocalculations. Physical Review B, 2004, 70, .	3.2	212
202	Acoustic streaming enhanced electrodeposition of nickel. Chemical Physics Letters, 2003, 368, 732-737.	2.6	27
203	Electrochemically deposited nickel membranes; processâ€“microstructureâ€“property relationships. Surface and Coatings Technology, 2003, 172, 79-89.	4.8	9
204	Epitaxial Growth of AlN Layers on SiC Substrates in a Hot-Wall MOCVD System. Physica Status Solidi C: Current Topics in Solid State Physics, 2003, 0, 205-208.	0.8	1
205	Selective Epitaxy of Si[sub 1â^'x]Ge[sub x] Layers for Complementary Metal Oxide Semiconductor Applications. Journal of the Electrochemical Society, 2003, 150, G253.	2.9	11
206	Dislocation loop evolution in ion implanted 4Hâ€“SiC. Journal of Applied Physics, 2003, 93, 9395-9397.	2.5	20
207	Implanted p+n-Junctions in Silicon Carbide. AIP Conference Proceedings, 2003, , .	0.4	0
208	Misfit defect formation in thick GaN layers grown on sapphire by hydride vapor phase epitaxy. Applied Physics Letters, 2002, 80, 1550-1552.	3.3	13
209	Magnetron sputtered epitaxial single-phase Ti3SiC2 thin films. Applied Physics Letters, 2002, 81, 835-837.	3.3	157
210	On the nature of ion implantation induced dislocation loops in 4H-silicon carbide. Journal of Applied Physics, 2002, 92, 2501-2505.	2.5	47
211	Pulsed low-energy ion-assisted growth of epitaxial aluminum nitride layer on 6H-silicon carbide by reactive magnetron sputtering. Journal of Applied Physics, 2002, 91, 3551-3555.	2.5	7
212	Structural defects in electrically degraded 4H-SiC p+/nâ^'/n+ diodes. Applied Physics Letters, 2002, 80, 4852-4854.	3.3	69
213	Ion implantation of silicon carbide. Nuclear Instruments & Methods in Physics Research B, 2002, 186, 186-194.	1.4	52
214	Nanopipes in Thick GaN Films Grown at High Growth Rate. Physica Status Solidi A, 2002, 194, 532-535.	1.7	5
215	Influence of gate metal film growth parameters on the properties of gas sensitive field-effect devices. Thin Solid Films, 2002, 409, 233-242.	1.8	24
216	Solubility limit and precipitate formation in Al-doped 4H-SiC epitaxial material. Applied Physics Letters, 2001, 79, 2016-2018.	3.3	43

#	Article	IF	Citations
217	Elimination of nonuniformities in thick GaN films using metalorganic chemical vapor deposited GaN templates. Journal of Applied Physics, 2001, 90, 6011-6016.	2.5	15
218	Time-dependent surface speciation of oxalate at the water-boehmite (Î³-AlOOH) interface: implications for dissolution. Geochimica Et Cosmochimica Acta, 2001, 65, 4481-4492.	3.9	76
219	Defect and stress relaxation in HVPE-GaN films using high temperature reactively sputtered AlN buffer. Journal of Crystal Growth, 2001, 230, 381-386.	1.5	31
220	Precipitate Formation in Heavily Al-Doped 4H-SiC Layers. Materials Science Forum, 2001, 353-356, 583-586.	0.3	3
221	Growth Evolution of Dislocation Loops in Ion Implanted 4H-SiC. Materials Science Forum, 2001, 353-356, 315-318.	0.3	4
222	Doping of Silicon Carbide by Ion Implantation. Materials Science Forum, 2001, 353-356, 549-554.	0.3	23
223	Structural Defects in Ion Implanted 4H-SiC Epilayers. Materials Research Society Symposia Proceedings, 2000, 640, 1.	0.1	2
224	Electron Irradiation of 4H SiC by TEM: An Optical Study. Materials Research Society Symposia Proceedings, 2000, 640, 1.	0.1	0
225	Luminescence and microstructure of Er/O co-doped Si structures grown by MBE using Er and SiO evaporation. Materials Science in Semiconductor Processing, 2000, 3, 523-528.	4.0	7
226	Enhanced quality of epitaxial AlN thin films on 6Hâ€“SiC by ultra-high-vacuum ion-assisted reactive dc magnetron sputter deposition. Applied Physics Letters, 2000, 76, 170-172.	3.3	27
227	Microstructural, Optical and Electronic Investigation of Anodized 4H-SiC. Materials Science Forum, 2000, 338-342, 537-540.	0.3	6
228	Low-Energy-Ion-Assisted Reactive Sputter Deposition of Epitaxial AlN Thin Films on 6H-SiC. Materials Science Forum, 2000, 338-342, 1519-1522.	0.3	3
229	Damage Evolution in Al-implanted 4H SiC. Materials Science Forum, 2000, 338-342, 869-872.	0.3	12
230	Interface structure of hydride vapor phase epitaxial GaN grown with high-temperature reactively sputtered AlN buffer. Applied Physics Letters, 2000, 76, 1860-1862.	3.3	32
231	Effect of Si doping of metalorganic chemical vapor deposition-GaN templates on the defect arrangement in hydride vapor phase epitaxy-GaN overgrown layers. Journal of Applied Physics, 2000, 88, 5729-5732.	2.5	8
232	Microstructural and infrared optical properties of electrochemically etched highly doped 4Hâ€“SiC. Journal of Applied Physics, 2000, 87, 8497-8503.	2.5	31
233	Boron implantation and epitaxial regrowth studies of 6H SiC. Journal of Electronic Materials, 1998, 27, 833-837.	2.2	4
234	Transmission Electron Microscopy Investigation of Defects in B-Implanted 6H-SiC. Materials Science Forum, 1998, 264-268, 413-416.	0.3	10

#	Article	IF	Citations
235	Growth of High Quality AlN Epitaxial Films by Hot-Wall Chemical Vapour Deposition. Materials Science Forum, 1998, 264-268, 1133-1136.	0.3	1
236	Competitive surface complexation of o-phthalate and phosphate on goethite (Î±-FeOOH) particles. Geochimica Et Cosmochimica Acta, 1996, 60, 4385-4395.	3.9	95
237	Synthesis and characterization of Ti-Si-C compounds for electrical contact applications. , 0, , .		1