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

times ranked

242

8840 citing authors

#	Article	IF	CITATIONS
1	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
2	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
3	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
4	Atomically Resolved Structural and Chemical Investigation of Single MXene Sheets. Nano Letters, 2015, 15, 4955-4960.	9.1	415
5	Thermoelectric Properties of Solutionâ€Processed nâ€Doped Ladderâ€Type Conducting Polymers. Advanced Materials, 2016, 28, 10764-10771.	21.0	245
6	Wâ€Based Atomic Laminates and Their 2D Derivative W _{1.33} C MXene with Vacancy Ordering. Advanced Materials, 2018, 30, e1706409.	21.0	240
7	Thermal stability of Al–Cr–N hard coatings. Scripta Materialia, 2006, 54, 1847-1851.	5.2	224
8	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
9	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
10	Mn+1AXnphases in theTiâ^'Siâ^'Csystem studied by thin-film synthesis andab initiocalculations. Physical Review B, 2004, 70, .	3.2	212
11	Deposition and characterization of ternary thin films within the Ti–Al–C system by DC magnetron sputtering. Journal of Crystal Growth, 2006, 291, 290-300.	1.5	212
12	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
13	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
14	2D Transition Metal Carbides (MXenes) for Carbon Capture. Advanced Materials, 2019, 31, e1805472.	21.0	184
15	Halogenated Ti ₃ C ₂ MXenes with Electrochemically Active Terminals for High-Performance Zinc Ion Batteries. ACS Nano, 2021, 15, 1077-1085.	14.6	183
16	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
17	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
18	Growth of Ti3SiC2 thin films by elemental target magnetron sputtering. Journal of Applied Physics, 2004, 96, 4817-4826.	2.5	158

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19	Magnetron sputtered epitaxial single-phase Ti3SiC2 thin films. Applied Physics Letters, 2002, 81, 835-837.	3.3	157
20	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}) ₂ AlC MAX Phase. ACS Applied Nano Materials, 2018, 1, 2455-2460.	5.0	154
21	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
22	Magnetic Self-Organized Atomic Laminate from First Principles and Thin Film Synthesis. Physical Review Letters, 2013, 110, 195502.	7.8	146
23	Tactile sensory coding and learning with bio-inspired optoelectronic spiking afferent nerves. Nature Communications, 2020, 11, 1369.	12.8	141
24	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
25	A Nanolaminated Magnetic Phase: Mn ₂ GaC. Materials Research Letters, 2014, 2, 89-93.	8.7	128
26	Boridene: Two-dimensional Mo $\langle sub \rangle 4/3 \langle sub \rangle B \langle sub \rangle 2-x \langle sub \rangle$ with ordered metal vacancies obtained by chemical exfoliation. Science, 2021, 373, 801-805.	12.6	126
27	Polymer-MXene composite films formed by MXene-facilitated electrochemical polymerization for flexible solid-state microsupercapacitors. Nano Energy, 2019, 60, 734-742.	16.0	124
28	Wurtzite structure $Sc1\hat{a}^{2}$ 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
29	How Much Oxygen Can a MXene Surface Take Before It Breaks?. Advanced Functional Materials, 2020, 30, 1909005.	14.9	111
30	Phase tailoring of Ta thin films by highly ionized pulsed magnetron sputtering. Thin Solid Films, 2007, 515, 3434-3438.	1.8	104
31	Ultrafast, One-Step, Salt-Solution-Based Acoustic Synthesis of Ti ₃ C ₂ MXene. ACS Nano, 2021, 15, 4287-4293.	14.6	103
32	Competitive surface complexation of o-phthalate and phosphate on goethite (α-FeOOH) particles. Geochimica Et Cosmochimica Acta, 1996, 60, 4385-4395.	3.9	95
33	Microstructure and dielectric properties of piezoelectric magnetron sputtered w-ScxAl1â^'xN thin films. Journal of Applied Physics, 2012, 111, .	2.5	93
34	Synthesis and <i>ab initio</i> calculations of nanolaminated (Cr,Mn) <mml:math display="inline" xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mrow></mml:mrow><mml:mn>2</mml:mn></mml:msub></mml:math> AlC compounds. Physical Review B, 2013, 87, .	3.2	93
35	Multielemental single–atom-thick <i>A</i> layers in nanolaminated V ₂ (Sn, <i>A</i>) C () Tj ETÇ Sciences of the United States of America, 2020, 117, 820-825.	0q1 1 0.78 7.1	4314 rgBT /C 84
36	Synthesis and characterization of arc deposited magnetic (Cr,Mn) < sub>2 < /sub>AIC MAX phase films. Physica Status Solidi - Rapid Research Letters, 2014, 8, 420-423.	2.4	83

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37	Ti _{n+1} C _n MXenes with fully saturated and thermally stable Cl terminations. Nanoscale Advances, 2019, 1, 3680-3685.	4.6	81
38	A flexible semitransparent photovoltaic supercapacitor based on water-processed MXene electrodes. Journal of Materials Chemistry A, 2020, 8, 5467-5475.	10.3	79
39	Sputter deposition from a Ti2AlC target: Process characterization and conditions for growth of Ti2AlC. Thin Solid Films, 2010, 518, 1621-1626.	1.8	77
40	Time-dependent surface speciation of oxalate at the water-boehmite (Î ³ -AlOOH) interface: implications for dissolution. Geochimica Et Cosmochimica Acta, 2001, 65, 4481-4492.	3.9	76
41	Thermal decomposition products in arc evaporated TiAlN/TiN multilayers. Applied Physics Letters, 2008, 93, .	3.3	74
42	Electronic and optical characterization of 2D Ti ₂ C and Nb ₂ C (MXene) thin films. Journal of Physics Condensed Matter, 2019, 31, 165301.	1.8	74
43	On the Structural Stability of MXene and the Role of Transition Metal Adatoms. Nanoscale, 2018, 10, 10850-10855.	5.6	71
44	X-ray Photoelectron Spectroscopy of Ti ₃ AlC ₂ , Ti ₃ C ₂ Ti _{>} AlC ₃ Goldent Electrostatic Interaction between Laminated Layers in MAX-Phase Materials. Journal of Physical Chemistry C, 2020, 124, 27732-27742.	3.1	71
45	Structural defects in electrically degraded 4H-SiC p+/nâ^'/n+ diodes. Applied Physics Letters, 2002, 80, 4852-4854.	3.3	69
46	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
47	Properties of nonpolar a-plane GaN films grown by HVPE with AlN buffers. Journal of Crystal Growth, 2005, 281, 55-61.	1.5	66
48	Improving the high-temperature oxidation resistance of TiB2 thin films by alloying with Al. Acta Materialia, 2020, 196, 677-689.	7.9	65
49	Deposition of epitaxial Ti2AlC thin films by pulsed cathodic arc. Journal of Applied Physics, 2007, 101, 056101.	2.5	62
50	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
51	Face-centered cubic (Al1â^'xCrx)2O3. Thin Solid Films, 2011, 519, 2426-2429.	1.8	60
52	High-Entropy Laminate Metal Carbide (MAX Phase) and Its Two-Dimensional Derivative MXene. Chemistry of Materials, 2022, 34, 2098-2106.	6.7	60
53	Single-Atom-Thick Active Layers Realized in Nanolaminated Ti ₃ (Al _{<i>x</i>} Cu _{1â€"<i>x</i>})C ₂ and Its Artificial Enzyme Behavior. ACS Nano, 2019, 13, 9198-9205.	14.6	59
54	Flexible Freeâ€Standing MoO ₃ /Ti ₃ C ₂ T <i>>_z</i> MXene Composite Films with High Gravimetric and Volumetric Capacities. Advanced Science, 2021, 8, 2003656.	11.2	59

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55	Synthesis of MAX phases Nb ₂ CuC and Ti ₂ (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
56	Synthesis of MAX Phases in the Hf–Al–C System. Inorganic Chemistry, 2016, 55, 10922-10927.	4.0	57
57	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
58	Oxygen incorporation in Ti2AlC thin films. Applied Physics Letters, 2008, 92, .	3.3	53
59	lon implantation of silicon carbide. Nuclear Instruments & Methods in Physics Research B, 2002, 186, 186-194.	1.4	52
60	Epitaxial Ti2AlN(0001) thin film deposition by dual-target reactive magnetron sputtering. Acta Materialia, 2007, 55, 4401-4407.	7.9	52
61	Trimming of aqueous chemically grown ZnO nanorods into ZnO nanotubes and their comparative optical properties. Applied Physics Letters, 2009, 95, 073114.	3.3	52
62	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
63	Synthesis of (V _{2/3} Sc _{1/3}) ₂ AlC i-MAX phase and V _{2â^2x} C MXene scrolls. Nanoscale, 2019, 11, 14720-14726.	5.6	52
64	Self-Healing in Carbon Nitride Evidenced As Material Inflation and Superlubric Behavior. ACS Applied Materials & Samp; Interfaces, 2018, 10, 16238-16243.	8.0	51
65	Superhard NbB2â° thin films deposited by dc magnetron sputtering. Surface and Coatings Technology, 2014, 257, 295-300.	4.8	50
66	Material proposal for 2D indium oxide. Applied Surface Science, 2021, 548, 149275.	6.1	50
67	Growth and characterization of TiN/SiN(001) superlattice films. Journal of Materials Research, 2007, 22, 3255-3264.	2.6	49
68	Sodium hydroxide and vacuum annealing modifications of the surface terminations of a Ti ₃ C ₂ (MXene) epitaxial thin film. RSC Advances, 2018, 8, 36785-36790.	3.6	49
69	On the nature of ion implantation induced dislocation loops in 4H-silicon carbide. Journal of Applied Physics, 2002, 92, 2501-2505.	2.5	47
70	An ATR-FTIR spectroscopic study of the competitive adsorption between oxalate and malonate at the water–goethite interface. Journal of Colloid and Interface Science, 2006, 294, 31-37.	9.4	47
71	Magnetron sputter epitaxy of wurtzite Al $1\hat{a}$ °xInxN(0.1 <x<0.9) 083503.<="" 2005,="" 97,="" applied="" by="" dc="" deposition.="" dual="" journal="" magnetron="" of="" physics,="" reactive="" sputter="" td=""><td>2.5</td><td>45</td></x<0.9)>	2.5	45
72	Epitaxial CVD growth of sp ² â€hybridized boron nitride using aluminum nitride as buffer layer. Physica Status Solidi - Rapid Research Letters, 2011, 5, 397-399.	2.4	44

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73	Solubility limit and precipitate formation in Al-doped 4H-SiC epitaxial material. Applied Physics Letters, 2001, 79, 2016-2018.	3.3	43
74	Room-temperature mobility above 2200 cm2/V·s of two-dimensional electron gas in a sharp-interface AlGaN/GaN heterostructure. Applied Physics Letters, 2015, 106, .	3.3	43
75	Phase formation of nanolaminated Mo ₂ AuC and Mo ₂ C by a substitutional reaction within Au-capped Mo ₂ GaC and Mo ₂ Ga ₂ C thin films. Nanoscale, 2017. 9. 17681-17687.	5.6	43
76	Y _x Al _{1â^'x} N thin films. Journal Physics D: Applied Physics, 2012, 45, 422001.	2.8	42
77	Aligned AlN nanowires by self-organized vapor–solid growth. Nanotechnology, 2009, 20, 495304.	2.6	41
78	Free electron behavior in InN: On the role of dislocations and surface electron accumulation. Applied Physics Letters, 2009, 94, 022109.	3.3	41
79	Single Cr atom catalytic growth of graphene. Nano Research, 2018, 11, 2405-2411.	10.4	41
80	Age hardening in (Ti 1â^'x Al x)B 2+Î" thin films. Scripta Materialia, 2017, 127, 122-126.	5 . 2	38
81	Effects of volume mismatch and electronic structure on the decomposition of ScAlN and TiAlN solid solutions. Physical Review B, 2010, 81 , .	3.2	37
82	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
83	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
84	Formation of the <mml:math display="inline" xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mi>><mml:mi> (mml:mi> (mml:mi) (mml:mi> (mm</mml:mi></mml:mi></mml:math>	3.2	35
85	Physical Review B, 2009, 80, . 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
86	Microstructure and materials properties of understoichiometric TiBx thin films grown by HiPIMS. Surface and Coatings Technology, 2020, 404, 126537.	4.8	33
87	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
88	Phase stability of Cr _{<i>n+</i> 1} GaC <i>_n</i> MAX phases from first principles and Cr ₂ GaC thinâ€film synthesis using magnetron sputtering from elemental targets. Physica Status Solidi - Rapid Research Letters, 2013, 7, 971-974.	2.4	32
89	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
90	Microstructural and infrared optical properties of electrochemically etched highly doped 4H–SiC. Journal of Applied Physics, 2000, 87, 8497-8503.	2.5	31

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91	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
92	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
93	Two-Dimensional Hydroxyl-Functionalized and Carbon-Deficient Scandium Carbide, ScC _{<i>x</i>} OH, a Direct Band Gap Semiconductor. ACS Nano, 2019, 13, 1195-1203.	14.6	30
94	Enhanced supercapacitive performance of Mo1.33C MXene based asymmetric supercapacitors in lithium chloride electrolyte. Energy Storage Materials, 2021, 41, 203-208.	18.0	30
95	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
96	Age hardening in superhard ZrB2-rich Zr1-xTaxBy thin films. Scripta Materialia, 2021, 191, 120-125.	5.2	28
97	On the origin of kinking in layered crystalline solids. Materials Today, 2021, 43, 45-52.	14.2	28
98	Enhanced quality of epitaxial AlN thin films on 6H–SiC by ultra-high-vacuum ion-assisted reactive dc magnetron sputter deposition. Applied Physics Letters, 2000, 76, 170-172.	3.3	27
99	Acoustic streaming enhanced electrodeposition of nickel. Chemical Physics Letters, 2003, 368, 732-737.	2.6	27
100	Effect of strain on low-loss electron energy loss spectra of group-III nitrides. Physical Review B, 2011, 84, .	3.2	26
101	InGaN quantum dot formation mechanism on hexagonal GaN/InGaN/GaN pyramids. Nanotechnology, 2012, 23, 305708.	2.6	26
102	AuAl2 and PtAl2 as potential plasmonic materials. Journal of Alloys and Compounds, 2013, 577, 581-586.	5.5	26
103	Exploring MXenes and their MAX phase precursors by electron microscopy. Materials Today Advances, 2021, 9, 100123.	5.2	26
104	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
105	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
106	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
107	Synthesis and characterization of (Ti1-Al)B2+ thin films from combinatorial magnetron sputtering. Thin Solid Films, 2019, 669, 181-187.	1.8	24
108	Doping of Silicon Carbide by Ion Implantation. Materials Science Forum, 2001, 353-356, 549-554.	0.3	23

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109	Electrochemical Lithium Storage Performance of Molten Salt Derived V2SnC MAX Phase. Nano-Micro Letters, 2021, 13, 158.	27.0	23
110	Origin of Strong Photoluminescence Polarization in GaNP Nanowires. Nano Letters, 2014, 14, 5264-5269.	9.1	22
111	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
112	Strongly polarized quantum-dot-like light emitters embedded in GaAs/GaNAs core/shell nanowires. Nanoscale, 2016, 8, 15939-15947.	5.6	22
113	Tailored synthesis approach of (Mo _{2/3} Y _{1/3}) ₂ AIC <i>iits two-dimensional derivative Mo_{1.33}CT_z MXene: enhancing the yield, quality, and performance in supercapacitor applications. Nanoscale, 2021, 13, 311-319.</i>	5.6	22
114	A solid phase reaction between TiCx thin films and Al2O3 substrates. Journal of Applied Physics, 2008, 103, .	2.5	21
115	Where is the unpaired transition metal in substoichiometric diboride line compounds?. Acta Materialia, 2021, 204, 116510.	7.9	21
116	Dislocation loop evolution in ion implanted 4H–SiC. Journal of Applied Physics, 2003, 93, 9395-9397.	2.5	20
117	Stress reduction in nanocomposite coatings consisting of hexagonal and cubic boron nitride. Surface and Coatings Technology, 2006, 200, 6459-6464.	4.8	20
118	Structural and compositional evolutions of In _{<i>x</i>} Al _{1â^'<i>x</i>} N coreâ€"shell nanorods grown on Si(111) substrates by reactive magnetron sputter epitaxy. Nanotechnology, 2015, 26, 215602.	2.6	20
119	Structure and properties of Cr–C/Ag films deposited by magnetron sputtering. Surface and Coatings Technology, 2015, 281, 184-192.	4.8	20
120	Ab initio calculations and experimental study of piezoelectric Y $\ln 1\hat{a}$ °N thin films deposited using reactive magnetron sputter epitaxy. Acta Materialia, 2016, 105, 199-206.	7.9	20
121	Direct observation of spinodal decomposition phenomena in InAlN alloys during in-situ STEM heating. Scientific Reports, 2017, 7, 44390.	3.3	20
122	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
123	Experimental studies of complex crater formation under cluster implantation of solids. European Physical Journal D, 2005, 36, 79-88.	1.3	19
124	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
125	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
126	Curved-Lattice Epitaxial Growth of In _{<i>x</i>} Al _{1–<i>x</i>} N Nanospirals with Tailored Chirality. Nano Letters, 2015, 15, 294-300.	9.1	19

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127	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
128	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
129	Nanoscale precipitation patterns in carbon–nickel nanocomposite thin films: Period and tilt control via ion energy and deposition angle. Journal of Applied Physics, 2010, 108, 043503.	2.5	18
130	Substrate orientation effects on the nucleation and growth of the Mn+1AXn phase Ti2AlC. Journal of Applied Physics, 2011, 109, 014903.	2.5	18
131	Two-domain formation during the epitaxial growth of GaN (0001) on $\langle i \rangle c \langle j \rangle$ -plane Al2O3 (0001) by high power impulse magnetron sputtering. Journal of Applied Physics, 2011, 110, .	2.5	18
132	Strategies to initiate and control the nucleation behavior of bimetallic nanoparticles. Nanoscale, 2017, 9, 8149-8156.	5.6	18
133	Magnetron Sputter Epitaxy of High-Quality GaN Nanorods on Functional and Cost-Effective Templates/Substrates. Energies, 2017, 10, 1322.	3.1	18
134	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
135	Epitaxial growth of $\langle i \rangle \hat{l}^2 \langle i \rangle$ -Ga2O3 by hot-wall MOCVD. AIP Advances, 2022, 12, .	1.3	17
136	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
137	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
138	Colorless-to-colorful switching of electrochromic MXene by reversible ion insertion. Nano Research, 2022, 15, 3587-3593.	10.4	16
139	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
140	The influence of substrate temperature and Al mobility on the microstructural evolution of magnetron sputtered ternary Tiâ \in "Alâ \in "N thin films. Journal of Applied Physics, 2009, 106, .	2.5	15
141	Role of impurities and dislocations for the unintentional n-type conductivity in InN. Physica B: Condensed Matter, 2009, 404, 4476-4481.	2.7	15
142	Standardâ€free composition measurements of Al <i>_{×(sub>< i> In_{1â€"<i>×<!-- i-->< sub>N by lowâ€loss electron energy loss spectroscopy. Physica Status Solidi - Rapid Research Letters, 2011, 5, 50-52.</i>}}</i>	2.4	15
143	Spontaneous Formation of AllnN Core–Shell Nanorod Arrays by Ultrahigh-Vacuum Magnetron Sputter Epitaxy. Applied Physics Express, 2011, 4, 115002.	2.4	15
144	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

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145	Self-organized columnar Zr0.7Ta0.3B1.5 core/shell-nanostructure thin films. Surface and Coatings Technology, 2020, 401, 126237.	4.8	15
146	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
147	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
148	Outâ€Ofâ€Plane Ordered Laminate Borides and Their 2D Tiâ€Based Derivative from Chemical Exfoliation. Advanced Materials, 2021, 33, e2008361.	21.0	14
149	Near-room temperature ferromagnetic behavior of single-atom-thick 2D iron in nanolaminated ternary MAX phases. Applied Physics Reviews, 2021, 8, .	11.3	14
150	Mg-doping and free-hole properties of hot-wall MOCVD GaN. Journal of Applied Physics, 2022, 131, .	2.5	14
151	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
152	Ostwald ripening of interstitial-type dislocation loops in 4H-silicon carbide. Journal of Applied Physics, 2006, 100, 053521.	2.5	13
153	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
154	Slot-Die-Printed Two-Dimensional ZrS ₃ Charge Transport Layer for Perovskite Light-Emitting Diodes. ACS Applied Materials & Samp; Interfaces, 2019, 11, 48021-48028.	8.0	13
155	Effect of vacancies on the electrochemical behavior of Mo-based MXenes in aqueous supercapacitors. Journal of Power Sources, 2022, 525, 231064.	7.8	13
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