Jun Lu

List of Publications by Year
in descending order

128	21,335	71061 41	14736 127
papers	citations	h-index	g-index

129	129	129	16319
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Outâ€Ofâ€Plane Ordered Laminate Borides and Their 2D Tiâ€Based Derivative from Chemical Exfoliation. Advanced Materials, 2021, 33, e2008361.	11.1	14
2	A general Lewis acidic etching route for preparing MXenes with enhanced electrochemical performance in non-aqueous electrolyte. Nature Materials, 2020, 19, 894-899.	13.3	870
3	Theoretical stability, thin film synthesis and transport properties of the Mo_{n +1}GaC_n MAX phase. Physica Status Solidi - Rapid Research Letters, 2015, 9, 197-201.	1.2	28
4	Experimental and theoretical characterization of ordered MAX phases Mo2TiAlC2 and Mo2Ti2AlC3. Journal of Applied Physics, 2015, 118, .	1.1	217
5	Cu diffusion in single-crystal and polycrystalline TiN barrier layers: A high-resolution experimental study supported by first-principles calculations. Journal of Applied Physics, 2015, 118, .	1.1	36
6	Synthesis and characterization of Zr2Al3C4 thin films. Thin Solid Films, 2015, 595, 142-147.	0.8	10
7	Mechanism of Formation of the Thermoelectric Layered Cobaltate Ca₃Co₄O₉ by Annealing of CaOâ€“CoO Thin Films. Advanced Electronic Materials, 2015, 1, 1400022.	2.6	31
8	Structure and bonding in amorphous iron carbide thin films. Journal of Physics Condensed Matter, 2015, 27, 045002.	0.7	71
9	Morphology effects on exchange anisotropy in Coâ€“CoO nanocomposite films. Thin Solid Films, 2015, 576, 11-18.	0.8	10
10	Stabilization of wurtzite Sc0.4Al0.6N in pseudomorphic epitaxial Sc Al1â^'N/In Al1â^'N superlattices. Acta Materialia, 2015, 94, 101-110.	3.8	19
11	Two-Dimensional, Ordered, Double Transition Metals Carbides (MXenes). ACS Nano, 2015, 9, 9507-9516.	7.3	1,395
12	Stability of 10B4C thin films under neutron radiation. Radiation Physics and Chemistry, 2015, 113, 14-19.	1.4	53
13	Novel hard, tough HfAlSiN multilayers, defined by alternating Si bond structure, deposited using modulated high-flux, low-energy ion irradiation of the growing film. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2015, 33, .	0.9	7
14	Synthesis of two-dimensional molybdenum carbide, Mo 2 C, from the gallium based atomic laminate Mo 2 Ga 2 C. Scripta Materialia, 2015, 108, 147-150.	2.6	329
15	Characterization of magnetron sputtered Crâ€“B and Crâ€“Bâ€“C thin films for electrical contact applications. Surface and Coatings Technology, 2015, 266, 167-176.	2.2	40
16	Mo2TiAlC2: A new ordered layered ternary carbide. Scripta Materialia, 2015, 101, 5-7.	2.6	153
17	Synthesis and characterization of magnetic (Cr0.5Mn0.5)2GaC thin films. Journal of Materials Science, 2015, 50, 4495-4502.	1.7	55
18	Stoichiometric, epitaxial ZrB2 thin films with low oxygen-content deposited by magnetron sputtering from a compound target: Effects of deposition temperature and sputtering power. Journal of Crystal Growth, 2015, 430, 55-62.	0.7	33

#	Article	IF	Citations
19	Model for electron-beam-induced crystallization of amorphous Meâ€“Siâ€“C (Me = Nb or Zr) thin films. Journal of Materials Research, 2014, 29, 2854-2862.	1.2	8
20	Cathodoluminescence characterization of ZnO nanorods synthesized by chemical solution and of its conversion to ellipsoidal morphology. Journal of Materials Research, 2014, 29, 2425-2431.	1.2	3
21	Crystallization characteristics and chemical bonding properties of nickel carbide thin film nanocomposites. Journal of Physics Condensed Matter, 2014, 26, 415501.	0.7	104
22	Decoration of ZnO Nanorods with Coral Reefs like NiO Nanostructures by the Hydrothermal Growth Method and Their Luminescence Study. Materials, 2014, 7, 430-440.	1.3	15
23	Reactive sputtering of Î´-ZrH2 thin films by high power impulse magnetron sputtering and direct current magnetron sputtering. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2014, 32, .	0.9	7
24	Novel strategy for low-temperature, high-rate growth of dense, hard, and stress-free refractory ceramic thin films. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2014, 32, .	0.9	45
25	Thermal stability and mechanical properties of amorphous coatings in the Ti-B-Si-Al-N system grown by cathodic arc evaporation from TiB2, Ti33Al67, and Ti85Si15 cathodes. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2014, 32, .	0.9	9
26	Epitaxial growth of Î³-Al2O3 on Ti2AlC(0001) by reactive high-power impulse magnetron sputtering. AIP Advances, 2014, 4, 017138.	0.6	4
27	Magnetron sputtering of epitaxial Zr<scp>B</scp>₂ thin films on 4<scp>H</scp>â€<scp>S</scp>i<scp>C</scp>(0001) and Si(111). Physica Status Solidi (A) Applications and Materials Science, 2014, 211, 636-640.	0.8	22
28	Superhard NbB2â‹ thin films deposited by dc magnetron sputtering. Surface and Coatings Technology, 2014, 257, 295-300.	2.2	50
29	Direct current magnetron sputtered ZrB2 thin films on 4H-SiC(0001) and Si(100). Thin Solid Films, 2014, 550, 285-290.	0.8	35
30	Atomic layer deposition of Zr<scp>O</scp>₂ for grapheneâ€based multilayer structures: In situ and ex situ characterization of growth process. Physica Status Solidi (A) Applications and Materials Science, 2014, 211, 397-402.	0.8	8
31	Holmium and titanium oxide nanolaminates by atomic layer deposition. Thin Solid Films, 2014, 565, 165-171.	0.8	10
32	Transparent Conductive Two-Dimensional Titanium Carbide Epitaxial Thin Films. Chemistry of Materials, 2014, 26, 2374-2381.	3.2	1,173
33	Synthesis, structural characterization and photocatalytic application of ZnO@ZnS coreâ€“shell nanoparticles. RSC Advances, 2014, 4, 36940-36950.	1.7	117
34	Magnetron sputtered gadolinia-doped ceria diffusion barriers for metal-supported solid oxide fuel cells. Journal of Power Sources, 2014, 267, 452-458.	4.0	34
35	Comparative study of ZnO nanorods and thin films for chemical and biosensing applications and the development of ZnO nanorods based potentiometric strontium ion sensor. Applied Surface Science, 2013, 268, 37-43.	3.1	31
36	New Two-Dimensional Niobium and Vanadium Carbides as Promising Materials for Li-Ion Batteries. Journal of the American Chemical Society, 2013, 135, 15966-15969.	6.6	1,609

#	Article	IF	Citations
37	Control of crystallinity in sputtered Crâ€“Tiâ€“C films. Acta Materialia, 2013, 61, 6352-6361.	3.8	17
38	Atomic layer deposition of high-k dielectrics on carbon nanoparticles. Thin Solid Films, 2013, 538, 16-20.	0.8	5
39	Crystallization of NiSi_x in a Body-Centered Cubic Structure during Solid-State Reaction between an Ultrathin Ni Film and Si(001) Substrate at 150â€“350 Â°C. Crystal Growth and Design, 2013, 13, 1801-1806.	1.4	7
40	Well aligned ZnO nanorods growth on the gold coated glass substrate by aqueous chemical growth method using seed layer of Fe3O4 and Co3O4 nanoparticles. Journal of Crystal Growth, 2013, 368, 39-46.	0.7	7
41	Strontium Diffusion in Magnetron Sputtered Gadoliniaâ€Doped Ceria Thin Film Barrier Coatings for Solid Oxide Fuel Cells. Advanced Energy Materials, 2013, 3, 923-929.	10.2	25
42	Nanoscale piezoelectric response of ZnO nanowires measured using a nanoindentation technique. Physical Chemistry Chemical Physics, 2013, 15, 11113.	1.3	55
43	Phase stability and initial low-temperature oxidation mechanism of Ti2AlC thin films. Journal of the European Ceramic Society, 2013, 33, 375-382.	2.8	45
44	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.	1.2	32
45	Beam-induced crystallization of amorphous Meâ€“Siâ€“C (Me = Nb or Zr) thin films during transmission electron microscopy. MRS Communications, 2013, 3, 151-155.	0.8	11
46	Two-Dimensional Transition Metal Carbides. ACS Nano, 2012, 6, 1322-1331.	7.3	3,453
47	Electronic structure and chemical bonding of amorphous chromium carbide thin films. Journal of Physics Condensed Matter, 2012, 24, 225004.	0.7	38
48	Discovery of the Ternary Nanolaminated Compound<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mi>Nb</mml:mi><mml:mn>2</mml:mn></mml:msub><mml:mi>GeC</mml:mi></mml:math>by a Systematic Theoretical-Experimental Approach. Physical Review Letters, 2012, 109, 035502.	2.9	73
49	Metal versus rare-gas ion irradiation during Ti1â^'xAlxN film growth by hybrid high power pulsed magnetron/dc magnetron co-sputtering using synchronized pulsed substrate bias. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2012, 30, .	0.9	98
50	Comment on â€œ<scp><scp>Ti</scp></scp>₅<scp><scp>Al</scp></scp>₂<scp><scp>C</scp></scp>₃: A New Ternary Carbide Belonging to <scp>MAX</scp> Phases in the <scp><scp>Ti</scp></scp>â€“<scp><scp>Al</scp></scp>â€“<scp><scp>C</scp></scp> Systemâ€. Journal of the American Ceramic Society, 2012, 95, 3352-3354.	1.9	12
51	Phase transformations in face centered cubic (Al0.32Cr0.68)2O3 thin films. Surface and Coatings Technology, 2012, 206, 3216-3222.	2.2	37
52	Atomic layer deposition of Ru films from bis(2,5-dimethylpyrrolyl)ruthenium and oxygen. Thin Solid Films, 2012, 520, 2756-2763.	0.8	27
53	Structure of a new bulk Ti5Al2C3 MAX phase produced by the topotactic transformation of Ti2AlC. Journal of the European Ceramic Society, 2012, 32, 3485-3491.	2.8	58
54	Thermal Stability and Dopant Segregation for Schottky Diodes With Ultrathin Epitaxial $hbox{NiSi}_{2 - y}$. IEEE Electron Device Letters, 2011, 32, 1029-1031.	2.2	10

#	Article	IF	Citations
55	Synthesis of a new nanocrystalline titanium aluminum fluoride phase by reaction of Ti2AlC with hydrofluoric acid. RSC Advances, 2011, 1, 1493.	1.7	49
56	Single nanowire-based UV photodetectors for fast switching. Nanoscale Research Letters, 2011, 6, 348.	3.1	54
57	On the Topotactic Transformation of <scp><scp>Ti₂AlC</scp></scp> into a <scp><scp>Tiâ€“Câ€“Oâ€“F</scp></scp> Cubic Phase by Heating in Molten Lithium Fluoride in Air. Journal of the American Ceramic Society, 2011, 94, 4556-4561.	1.9	91
58	Step-flow growth of nanolaminate Ti3SiC2 epitaxial layers on 4H-SiC(0 0 0 1). Scripta Materialia, 2011, 64, 1141-1144.	2.6	16
59	High-temperature stability of Î±-Ta4AlC3. Materials Research Bulletin, 2011, 46, 1088-1091.	2.7	12
60	On Different Process Schemes for MOSFETs With a Controllable NiSi-Based Metallic Source/Drain. IEEE Transactions on Electron Devices, 2011, 58, 1898-1906.	1.6	19
61	Twoâ€Dimensional Nanocrystals Produced by Exfoliation of Ti₃AlC₂. Advanced Materials, 2011, 23, 4248-4253.	11.1	7,931
62	Atomic layer deposition of ferromagnetic cobalt doped titanium oxide thin films. Thin Solid Films, 2011, 519, 3318-3324.	0.8	18
63	Atomic Layer Deposition of Ruthenium Films on Strontium Titanate. Journal of Nanoscience and Nanotechnology, 2011, 11, 8378-8382.	0.9	1
64	Anomalously high thermoelectric power factor in epitaxial ScN thin films. Applied Physics Letters, 2011, 99, .	1.5	84
65	Phase-stabilization and substrate effects on nucleation and growth of (Ti,V)n+1GeCn thin films. Journal of Applied Physics, 2011, 110, .	1.1	20
66	Epitaxy of Ultrathin NiSi2 Films with Predetermined Thickness. Electrochemical and Solid-State Letters, 2011, 14, H268.	2.2	21
67	Structure and morphology of Ru films grown by atomic layer deposition from 1-ethyl-1â€™-methyl-ruthenocene. Journal of Crystal Growth, 2010, 312, 2025-2032.	0.7	24
68	Atomic layer deposition of high capacitance density Ta2O5â€“ZrO2 based dielectrics for metalâ€“insulatorâ€“metal structures. Microelectronic Engineering, 2010, 87, 144-149.	1.1	33
69	Carbide and nanocomposite thin films in the Tiâ€“Ptâ€“C system. Thin Solid Films, 2010, 518, 5104-5109.	0.8	18
70	Investigation of ZrO[sub 2]â€“Gd[sub 2]O[sub 3] Based High-k Materials as Capacitor Dielectrics. Journal of the Electrochemical Society, 2010, 157, G202.	1.3	17
71	On Epitaxy of Ultrathin Ni[sub 1â^'x]Pt[sub x] Silicide Films on Si(001). Electrochemical and Solid-State Letters, 2010, 13, H360.	2.2	12
72	Surface-energy triggered phase formation and epitaxy in nanometer-thick Ni1â^'xPtx silicide films. Applied Physics Letters, 2010, 96, .	1.5	51

#	Article	IF	Citations
73	Growth and Structure of ZnO Nanorods on a Sub-Micrometer Glass Pipette and Their Application as Intracellular Potentiometric Selective Ion Sensors. Materials, 2010, 3, 4657-4667.	1.3	21
74	The reagent-free, microwave-assisted purification of carbon nanotubes. New Journal of Chemistry, 2010, 34, 2275.	1.4	19
75	Hybrid bioinorganic insulin amyloid fibrils. Chemical Communications, 2010, 46, 4157.	2.2	19
76	Deposition of Ti-Si-C-Ag Nanocomposite Coatings as Electrical Contact Material. , 2010, , .		1
77	Fully Depleted UTB and Trigate N-Channel MOSFETs Featuring Low-Temperature PtSi Schottky-Barrier Contacts With Dopant Segregation. IEEE Electron Device Letters, 2009, 30, 541-543.	2.2	16
78	Metallic Ir, IrO₂ and Pt Nanotubes and Fibers by Electrospinning and Atomic Layer Deposition. Nanoscience and Nanotechnology Letters, 2009, 1, 218-223.	0.4	9
79	Atomic layer deposition of titanium dioxide nanostructures using carbon nanosheets as a template. Journal of Crystal Growth, 2009, 311, 373-377.	0.7	20
80	Self-Supported Three-Dimensional Nanoelectrodes for Microbattery Applications. Nano Letters, 2009, 9, 3230-3233.	4.5	226
81	Template-based multiwalled TiO2/iron oxides nanotubes: Structure and magnetic properties. Journal of Applied Physics, 2009, 106, 084313.	1.1	11
82	The Atomic Layer Deposition of HfO₂ and ZrO₂ using Advanced Metallocene Precursors and H₂O as the Oxygen Source. Chemical Vapor Deposition, 2008, 14, 358-365.	1.4	51
83	Performance Fluctuation of FinFETs With Schottky Barrier Source/Drain. IEEE Electron Device Letters, 2008, 29, 506-508.	2.2	21
84	Advanced cyclopentadienyl precursors for atomic layer deposition of ZrO2 thin films. Journal of Materials Chemistry, 2008, 18, 3385.	6.7	38
85	Generation of Oxide Nanopatterns by Combining Self-Assembly of S-Layer Proteins and Area-Selective Atomic Layer Deposition. Journal of the American Chemical Society, 2008, 130, 16908-16913.	6.6	47
86	The effect of aluminum oxide incorporation on the material and electrical properties of hafnium oxide on Ge. Applied Physics Letters, 2008, 93, .	1.5	12
87	SB-MOSFETs in UTB-SOI Featuring PtSi Source/Drain With Dopant Segregation. IEEE Electron Device Letters, 2008, 29, 125-127.	2.2	37
88	Structural properties of epitaxial Î³-Al2O3 (111) thin films on 4H-SiC (0001). Applied Physics Letters, 2007, 90, 061916.	1.5	15
89	Engineering epitaxial Î³-Al2O3 gate dielectric films on 4H-SiC. Journal of Applied Physics, 2007, 102, 104112.	1.1	21
90	A low valent metalorganic precursor for the growth of tungsten nitride thin films by atomic layer deposition. Journal of Materials Chemistry, 2007, 17, 1109.	6.7	26

#	Article	IF	Citations
91	Exploitation of atomic layer deposition for nanostructured materials. Materials Science and Engineering C, 2007, 27, 1504-1508.	3.8	67
92	Atomic layer deposition of ZrO2 and HfO2 on deep trenched and planar silicon. Microelectronic Engineering, 2007, 84, 2010-2013.	1.1	32
93	High boron incorporation in selective epitaxial growth of SiGe layers. Journal of Materials Science: Materials in Electronics, 2007, 18, 747-751.	1.1	11
94	Electrically robust ultralong nanowires of NiSi, Ni2Si, and Ni31Si12. Applied Physics Letters, 2006, 88, 043104.	1.5	21
95	HfO[sub 2] Films Grown by ALD Using Cyclopentadienyl-Type Precursors and H[sub 2]O or O[sub 3] as Oxygen Source. Journal of the Electrochemical Society, 2006, 153, F39.	1.3	37
96	Formation of one-dimensional MgH2 nano-structures by hydrogen induced disproportionation. Journal of Alloys and Compounds, 2006, 426, 357-362.	2.8	36
97	Precursor-dependent structural and electrical characteristics of atomic layer deposited films: Case study on titanium oxide. Materials Science in Semiconductor Processing, 2006, 9, 1084-1089.	1.9	12
98	Optimization of an industrial DC magnetron sputtering process for graded composition solar thermal absorbing layer. Solar Energy Materials and Solar Cells, 2006, 90, 308-328.	3.0	16
99	Effect of preparation conditions on properties of atomic layer deposited TiO2 films in Moâ€“TiO2â€“Al stacks. Thin Solid Films, 2006, 510, 39-47.	0.8	16
100	Growth of SnO2 thin films by atomic layer deposition and chemical vapour deposition: A comparative study. Thin Solid Films, 2006, 514, 63-68.	0.8	94
101	A novel self-aligned process for platinum silicide nanowires. Microelectronic Engineering, 2006, 83, 2107-2111.	1.1	15
102	Investigation of TiW Contacts to 4H-SiC Bipolar Junction Devices. Materials Science Forum, 2006, 527-529, 887-890.	0.3	2
103	Structural and Morphological Properties of Ultrathin HfO₂ Dielectrics on 4H-SiC (0001). Materials Science Forum, 2006, 527-529, 1075-1078.	0.3	4
104	Epitaxy of copper on Î±-Al2O3(001) by atomic layer deposition. Journal of Crystal Growth, 2005, 276, 102-110.	0.7	9
105	Engineering structure and properties of hafnium oxide films by atomic layer deposition temperature. Thin Solid Films, 2005, 479, 1-11.	0.8	36
106	Atomic layer deposition of hafnium dioxide thin films from hafnium tetrakis(dimethylamide) and water. Thin Solid Films, 2005, 491, 328-338.	0.8	76
107	Atomic Layer Deposition and Characterization of HfO[sub 2] Films on Noble Metal Film Substrates. Journal of the Electrochemical Society, 2005, 152, F75.	1.3	19
108	Fabrication of High-Aspect-Ratio Prussian Blue Nanotubes Using a Porous Alumina Template. Nano Letters, 2005, 5, 1603-1606.	4.5	119

#	Article	IF	Citations
109	Effect of selected atomic layer deposition parameters on the structure and dielectric properties of hafnium oxide films. Journal of Applied Physics, 2004, 96, 5298-5307.	1.1	64
110	Epitaxial Colossal Magnetoresistive/Ferroelectric Heterostructures on Si. Integrated Ferroelectrics, 2004, 67, 69-76.	0.3	3
111	Properties of HfO[sub 2] Thin Films Grown by ALD from Hafnium tetrakis(ethylmethylamide) and Water. Journal of the Electrochemical Society, 2004, 151, F189.	1.3	60
112	Surface-enhanced Raman scattering from analytes adsorbed on gold nanoparticles inside polymer beads. Journal of Raman Spectroscopy, 2004, 35, 826-834.	1.2	17
113	Photoelectrochemical study of sputtered nitrogen-doped titanium dioxide thin films in aqueous electrolyte. Solar Energy Materials and Solar Cells, 2004, 84, 145-157.	3.0	74
114	Photoelectrochemical Study of Nitrogen-Doped Titanium Dioxide for Water Oxidation. Journal of Physical Chemistry B, 2004, 108, 5995-6003.	1.2	290
115	Structure, Composition, and Morphology of Photoelectrochemically Active TiO2-xNxThin Films Deposited by Reactive DC Magnetron Sputtering. Journal of Physical Chemistry B, 2004, 108, 20193-20198.	1.2	113
116	Size-Distribution and Emission Spectroscopy of W Nanoparticles Generated by Laser-Assisted CVD for Different WF6/H2/Ar Mixtures. Journal of Physical Chemistry B, 2003, 107, 11615-11621.	1.2	13
117	Role of hydrogen for the elastic properties of alumina thin films. Applied Physics Letters, 2002, 80, 1144-1146.	1.5	68
118	Properties of hafnium oxide films grown by atomic layer deposition from hafnium tetraiodide and oxygen. Journal of Applied Physics, 2002, 92, 5698-5703.	1.1	63
119	Hafnium tetraiodide and oxygen as precursors for atomic layer deposition of hafnium oxide thin films. Thin Solid Films, 2002, 418, 69-72.	0.8	20
120	Epitaxial growth of TiO2 films in a hydroxyl-free atomic layer deposition process. Journal of Crystal Growth, 2002, 235, 293-299.	0.7	43
121	Electrical and optical properties of sputter deposited tin doped indium oxide thin films with silver additive. Thin Solid Films, 2001, 392, 305-310.	0.8	24
122	Deposition of Epitaxial Titanium Carbide Films on MgO(001) and 6Hâ€“SiC(0001) by Coevaporation of Ti and C60. Journal of Materials Research, 1999, 14, 1589-1596.	1.2	10
123	Deposition of transition metal carbide superlattices using C60 as a carbon source. Applied Physics Letters, 1998, 73, 2754-2756.	1.5	7
124	TEM investigation of halide CVD grown Bi2Sr2CaCu2O8 + x films. Journal of Alloys and Compounds, 1997, 251, 134-137.	2.8	6
125	Chemical vapour deposition of Cu2O on MgO(100) from CuI and N2O: aspects of epitaxy. Journal of Crystal Growth, 1995, 151, 305-311.	0.7	15
126	C49/C54 phase transformation during chemical vapor deposition of TiSi2. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 1994, 12, 161-168.	0.9	10

#	Article	IF	Citations
127	TEM investigation of CVD graphite on nickel. Thin Solid Films, 1994, 252, 19-25.	0.8	30
128	An electron microscopy study of worn ceramic surfaces. Tribology International, 1993, 26, 369-381.	3.0	36