

Timothy D Sands

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/2259572/publications.pdf>

Version: 2024-02-01

222
papers

11,468
citations

26567

56
h-index

33814

99
g-index

227
all docs

227
docs citations

227
times ranked

9041
citing authors

#	ARTICLE	IF	CITATIONS
1	Titanium nitride as a plasmonic material for visible and near-infrared wavelengths. <i>Optical Materials Express</i> , 2012, 2, 478.	1.6	567
2	Damage-free separation of GaN thin films from sapphire substrates. <i>Applied Physics Letters</i> , 1998, 72, 599-601.	1.5	410
3	Fatigue and retention in ferroelectric $\text{YBaCuO}/\text{PbZrTiO}/\text{YBaCuO}$ heterostructures. <i>Applied Physics Letters</i> , 1992, 61, 1537-1539.	1.5	369
4	Ferroelectric $\text{LaSrCoO}/\text{PbZrTiO}/\text{LaSrCoO}$ heterostructures on silicon via template growth. <i>Applied Physics Letters</i> , 1993, 63, 3592-3594.	1.5	351
5	Nanoscale design to enable the revolution in renewable energy. <i>Energy and Environmental Science</i> , 2009, 2, 559.	15.6	348
6	Equilibrium limits of coherency in strained nanowire heterostructures. <i>Journal of Applied Physics</i> , 2005, 97, 114325.	1.1	337
7	Fabrication of thin-film InGaN light-emitting diode membranes by laser lift-off. <i>Applied Physics Letters</i> , 1999, 75, 1360-1362.	1.5	326
8	Electrodeposition of Ordered Bi_2Te_3 Nanowire Arrays. <i>Journal of the American Chemical Society</i> , 2001, 123, 7160-7161.	6.6	298
9	Fabrication of High-Density, High Aspect Ratio, Large-Area Bismuth Telluride Nanowire Arrays by Electrodeposition into Porous Anodic Alumina Templates. <i>Advanced Materials</i> , 2002, 14, 665-667.	11.1	284
10	Insights into the Electrodeposition of Bi_2Te_3 . <i>Journal of the Electrochemical Society</i> , 2002, 149, C546.	1.3	228
11	Epitaxial growth of ferromagnetic ultrathin MnGa films with perpendicular magnetization on GaAs. <i>Applied Physics Letters</i> , 1993, 62, 1565-1567.	1.5	205
12	Epitaxial superlattices with titanium nitride as a plasmonic component for optical hyperbolic metamaterials. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2014, 111, 7546-7551.	3.3	198
13	$\text{In}_x\text{Ga}_{1-x}\text{N}$ light emitting diodes on Si substrates fabricated by Pd-In metal bonding and laser lift-off. <i>Applied Physics Letters</i> , 2000, 77, 2822-2824.	1.5	178
14	Structure of Bismuth Telluride Nanowire Arrays Fabricated by Electrodeposition into Porous Anodic Alumina Templates. <i>Chemistry of Materials</i> , 2003, 15, 335-339.	3.2	170
15	Oriented ferroelectric $\text{LaSrCoO}/\text{PbZrTiO}/\text{LaSrCoO}$ heterostructures on [001] Pt/SiO ₂ /Si substrates using a bismuth titanate template layer. <i>Applied Physics Letters</i> , 1994, 64, 2511-2513.	1.5	152
16	Direct Electrodeposition of Highly Dense 50 nm Bi_2Te_3 -ySey Nanowire Arrays. <i>Nano Letters</i> , 2003, 3, 973-977.	4.5	146
17	High-Density 40 nm Diameter Sb-Rich $\text{Bi}_2\text{Sb}_x\text{Te}_3$ Nanowire Arrays. <i>Advanced Materials</i> , 2003, 15, 1003-1006.	11.1	137
18	The Electrodeposition of High-Density, Ordered Arrays of $\text{Bi}_{1-x}\text{Sb}_x$ Nanowires. <i>Journal of the American Chemical Society</i> , 2003, 125, 2388-2389.	6.6	129

#	ARTICLE	IF	CITATIONS
19	Electronic structure, phonons, and thermal properties of ScN, ZrN, and HfN: A first-principles study. Journal of Applied Physics, 2010, 107, .	1.1	125
20	Effects of crystalline quality and electrode material on fatigue in Pb(Zr,Ti)O ₃ thin film capacitors. Applied Physics Letters, 1993, 63, 27-29.	1.5	124
21	Epitaxial ferromagnetic MnAl films on GaAs. Applied Physics Letters, 1990, 57, 2609-2611.	1.5	116
22	Heterogeneous integration of CdS filters with GaN LEDs for fluorescence detection microsystems. Sensors and Actuators A: Physical, 2004, 111, 1-7.	2.0	115
23	Thermal conductivity of (Zr,W)N/ScN metal/semiconductor multilayers and superlattices. Journal of Applied Physics, 2009, 105, .	1.1	114
24	Dislocation Filtering in GaN Nanostructures. Nano Letters, 2010, 10, 1568-1573.	4.5	110
25	Ferroelectric PbZr _{0.2} Ti _{0.8} O ₃ thin films on epitaxial YBaCuO. Applied Physics Letters, 1991, 59, 3542-3544.	1.5	108
26	Solid-phase regrowth of compound semiconductors by reaction-driven decomposition of intermediate phases. Journal of Materials Research, 1988, 3, 914-921.	1.2	107
27	A comparative study of phase stability and film morphology in thin film M/GaAs systems (M=Co, Rh, Ir.)	1.1	106
28	Structure and composition of Ni _x GaAs. Applied Physics Letters, 1986, 48, 402-404.	1.5	99
29	Faceted and Vertically Aligned GaN Nanorod Arrays Fabricated without Catalysts or Lithography. Nano Letters, 2005, 5, 1847-1851.	4.5	98
30	Stability and epitaxy of NiAl and related intermetallic films on III-V compound semiconductors. Applied Physics Letters, 1988, 52, 197-199.	1.5	96
31	Molecular beam epitaxial growth of ultrathin buried metal layers: (Al,Ga)As/NiAl/(Al,Ga)As heterostructures. Applied Physics Letters, 1988, 53, 1717-1719.	1.5	93
32	Thermoelectric properties of epitaxial ScN films deposited by reactive magnetron sputtering onto MgO(001) substrates. Journal of Applied Physics, 2013, 113, .	1.1	91
33	Van der Waals bonding of GaAs on Pd leads to a permanent, solid-phase epitaxial, metallurgical bond. Applied Physics Letters, 1991, 59, 3159-3161.	1.5	90
34	Effect of crystallographic orientation on ferroelectric properties of PbZr _{0.2} Ti _{0.8} O ₃ thin films. Applied Physics Letters, 1993, 63, 731-733.	1.5	89
35	Reduction of the energy gap pressure coefficient of GaN due to the constraining presence of the sapphire substrate. Journal of Applied Physics, 1999, 85, 2385-2389.	1.1	87
36	Laser-driven formation of a high-pressure phase in amorphous silica. Nature Materials, 2003, 2, 796-800.	13.3	86

#	ARTICLE	IF	CITATIONS
37	ErAs epitaxial layers buried in GaAs: Magnetotransport and spin-disorder scattering. <i>Physical Review Letters</i> , 1989, 62, 2309-2312.	2.9	82
38	GaN Nanorod Schottky and p-n Junction Diodes. <i>Nano Letters</i> , 2006, 6, 2893-2898.	4.5	79
39	Changing the academic culture: Valuing patents and commercialization toward tenure and career advancement. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2014, 111, 6542-6547.	3.3	79
40	Initial stages of the Pd-GaAs reaction: Formation and decomposition of ternary phases. <i>Thin Solid Films</i> , 1986, 136, 105-122.	0.8	78
41	Anisotropic Effects on the Thermoelectric Properties of Highly Oriented Electrodeposited Bi ₂ Te ₃ Films. <i>Scientific Reports</i> , 2016, 6, 19129.	1.6	76
42	Negative differential resistance in AlAs/NiAl/AlAs heterostructures: Evidence for size quantization in metals. <i>Applied Physics Letters</i> , 1988, 53, 2528-2530.	1.5	73
43	Electrodeposition of Bi _{1-x} Sb _x Films and 200-nm Wire Arrays from a Nonaqueous Solvent. <i>Chemistry of Materials</i> , 2003, 15, 1676-1681.	3.2	73
44	Thermal properties of electrodeposited bismuth telluride nanowires embedded in amorphous alumina. <i>Applied Physics Letters</i> , 2004, 85, 6001-6003.	1.5	73
45	Thermoelectric Transport in a ZrN/ScN Superlattice. <i>Journal of Electronic Materials</i> , 2009, 38, 960-963.	1.0	71
46	An investigation of a nonspiking Ohmic contact to n-GaAs using the Si/Pd system. <i>Journal of Materials Research</i> , 1988, 3, 922-930.	1.2	68
47	Epitaxial growth of GaAs/NiAl/GaAs heterostructures. <i>Applied Physics Letters</i> , 1988, 52, 1216-1218.	1.5	66
48	Cross-plane thermal conductivity of (Ti,W)N/(Al,Sc)N metal/semiconductor superlattices. <i>Physical Review B</i> , 2016, 93, .	1.1	64
49	The atomic structure of growth interfaces in Yb ₂ CuO thin films. <i>Journal of Materials Research</i> , 1991, 6, 2264-2271.	1.2	61
50	Dendrimer-assisted controlled growth of carbon nanotubes for enhanced thermal interface conductance. <i>Nanotechnology</i> , 2007, 18, 385303.	1.3	60
51	Thermal conductivity of bismuth telluride nanowire array-epoxy composite. <i>Applied Physics Letters</i> , 2009, 94, .	1.5	60
52	Surface outgrowth problem in c-axis oriented YBaCuO superconducting thin films. <i>Applied Physics Letters</i> , 1991, 58, 1557-1559.	1.5	59
53	Vertical single- and double-walled carbon nanotubes grown from modified porous anodic alumina templates. <i>Nanotechnology</i> , 2006, 17, 3925-3929.	1.3	59
54	Rocksalt nitride metal/semiconductor superlattices: A new class of artificially structured materials. <i>Applied Physics Reviews</i> , 2018, 5, 021101.	5.5	59

#	ARTICLE	IF	CITATIONS
55	Epitaxial CoGa and textured CoAs contacts on Ga ^{1-x} Al _x As fabricated by molecular beam epitaxy. Journal of Applied Physics, 1989, 65, 4753-4758.	1.1	58
56	Ferroelectric bismuth titanate/superconductor (YBaCuO) thin film heterostructures on silicon. Applied Physics Letters, 1991, 59, 1782-1784.	1.5	58
57	Microstructure of epitaxial La _{0.5} Sr _{0.5} CoO ₃ /ferroelectric Pb _{0.9} La _{0.1} (Zr _{0.2} Ti _{0.8}) _{0.975} O ₃ /La _{0.5} Sr _{0.5} CoO ₃ heterostructures on LaAlO ₃ . Applied Physics Letters, 1993, 63, 1628-1630.	1.5	58
58	Compound semiconductor contact metallurgy. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 1988, 1, 289-312.	1.7	57
59	Stable and shallow PdIn ohmic contacts on GaAs. Applied Physics Letters, 1990, 56, 2129-2131.	1.5	57
60	Structural and optical quality of GaN/metal/Si heterostructures fabricated by excimer laser lift-off. Applied Physics Letters, 1999, 75, 1887-1889.	1.5	57
61	Dislocation-pipe diffusion in nitride superlattices observed in direct atomic resolution. Scientific Reports, 2017, 7, 46092.	1.6	57
62	Compensation of native donor doping in ScN: Carrier concentration control and p-type ScN. Applied Physics Letters, 2017, 110, .	1.5	57
63	Phase formation in the PdInP system. Journal of Applied Physics, 1988, 64, 4909-4913.	1.1	54
64	Scaling of ferroelectric properties in La _{0.5} Sr _{0.5} CoO ₃ /Pb _{0.9} La _{0.1} (Zr _{0.2} Ti _{0.8}) _{0.975} O ₃ /La _{0.5} Sr _{0.5} CoO ₃ capacitors. Applied Physics Letters, 1994, 64, 1588-1590.	1.5	54
65	Integration of GaN thin films with dissimilar substrate materials by Pd-In metal bonding and laser lift-off. Journal of Electronic Materials, 1999, 28, 1409-1413.	1.0	54
66	NiInP reaction: Formation of amorphous and crystalline ternary phases. Applied Physics Letters, 1987, 50, 1346-1348.	1.5	53
67	Structural and chemical characterization of free-standing GaN films separated from sapphire substrates by laser lift-off. Applied Physics Letters, 2000, 77, 1819.	1.5	53
68	Epitaxial ferroelectric thin films for memory applications. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 1994, 22, 283-289.	1.7	52
69	Epitaxial ferroelectric (Pb _{1-x} La _x)(Zr _{1-x} Ti _x)O ₃ thin films on stainless steel by excimer laser liftoff. Applied Physics Letters, 2000, 76, 227-229.	1.5	52
70	TiN/(Al,Sc)N metal/dielectric superlattices and multilayers as hyperbolic metamaterials in the visible spectral range. Physical Review B, 2014, 90, .	1.1	52
71	Near surface defects formed during rapid thermal annealing of preamorphized and BF ₂ implanted silicon. Applied Physics Letters, 1984, 45, 982-984.	1.5	51
72	High resolution transmission electron microscopy study of Se implanted and annealed GaAs: Mechanisms of amorphization and recrystallization. Applied Physics Letters, 1984, 44, 623-625.	1.5	51

#	ARTICLE	IF	CITATIONS
73	Electro-optic properties of single crystalline ferroelectric thin films. Applied Physics Letters, 1993, 63, 596-598.	1.5	51
74	NiAl/n-GaAs Schottky diodes: Barrier height enhancement by high-temperature annealing. Applied Physics Letters, 1988, 52, 1338-1340.	1.5	49
75	Galvanomagnetic properties of epitaxial MnAl films on GaAs. Journal of Applied Physics, 1991, 69, 4689-4691.	1.1	49
76	Electronic structure, vibrational spectrum, and thermal properties of yttrium nitride: A first-principles study. Journal of Applied Physics, 2011, 109, 073720.	1.1	49
77	Electronic and optical properties of ScN and (Sc,Mn)N thin films deposited by reactive DC-magnetron sputtering. Journal of Applied Physics, 2013, 114, .	1.1	49
78	An investigation of the Pd/n-Ge nonspiking Ohmic contact to n-GaAs using transmission line measurement, Kelvin, and Cox and Strack structures. Journal of Applied Physics, 1991, 69, 4364-4372.	1.1	47
79	Machining of transparent materials using an IR and UV nanosecond pulsed laser. Applied Physics A: Materials Science and Processing, 2000, 71, 601-608.	1.1	47
80	Thermal conductivity of skutterudite thin films and superlattices. Applied Physics Letters, 2000, 77, 3854-3856.	1.5	46
81	Development of epitaxial Al _x Sc _{1-x} N for artificially structured metal/semiconductor superlattice metamaterials. Physica Status Solidi (B): Basic Research, 2015, 252, 251-259.	0.7	46
82	High Resolution Observations of Copper Vacancy Ordering in Chalcocite (Cu ₂ S) and the Transformation to Djurleite (Cu _{1.97} to 1.94S). Physica Status Solidi A, 1982, 72, 551-559.	1.7	43
83	Epitaxial MnGa/NiGa magnetic multilayers on GaAs. Applied Physics Letters, 1993, 63, 696-698.	1.5	43
84	Dendrimer-Templated Fe Nanoparticles for the Growth of Single-Wall Carbon Nanotubes by Plasma-Enhanced CVD. Journal of Physical Chemistry B, 2006, 110, 10636-10644.	1.2	43
85	Schottky barrier degradation of the W/GaAs system after high-temperature annealing. Journal of Applied Physics, 1986, 60, 3235-3242.	1.1	42
86	Pulsed laser deposition of skutterudite thin films. Journal of Applied Physics, 2001, 89, 3508-3513.	1.1	40
87	MBE growth of ferromagnetic metastable epitaxial MnAl thin films on AlAs/GaAs heterostructures. Journal of Crystal Growth, 1991, 111, 978-983.	0.7	38
88	Phonon wave effects in the thermal transport of epitaxial TiN/(Al,Sc)N metal/semiconductor superlattices. Journal of Applied Physics, 2017, 121, .	1.1	37
89	Template approaches to growth of oriented oxide heterostructures on SiO ₂ /Si. Journal of Electronic Materials, 1994, 23, 19-23.	1.0	36
90	Energy deposition at front and rear surfaces during picosecond laser interaction with fused silica. Applied Physics Letters, 2001, 78, 2840-2842.	1.5	36

#	ARTICLE	IF	CITATIONS
91	Highly ordered diamond and hybrid triangle-diamond patterns in porous anodic alumina thin films. Applied Physics Letters, 2008, 93, .	1.5	35
92	Temperature-dependent thermal and thermoelectric properties of n-type and p-type Sc ₂ S ₃ thin films. Journal of Applied Physics, 2015, 118, 044301.	1.1	35
93	Effect of deposition pressure on the microstructure and thermoelectric properties of epitaxial ScN(001) thin films sputtered onto MgO(001) substrates. Journal of Materials Research, 2015, 30, 626-634.	1.2	34
94	Lithography-Free in Situ Pd Contacts to Templated Single-Walled Carbon Nanotubes. Nano Letters, 2006, 6, 2712-2717.	4.5	31
95	Room temperature device performance of electrodeposited InSb nanowire field effect transistors. Applied Physics Letters, 2011, 98, .	1.5	31
96	Reaction of amorphous Ni ₂ W and Ni ₃ W films with substrate silicon. Journal of Applied Physics, 1984, 56, 2740-2745.	1.1	30
97	Enhancement of (In,Ga)N light-emitting diode performance by laser liftoff and transfer from sapphire to silicon. IEEE Photonics Technology Letters, 2002, 14, 1400-1402.	1.3	30
98	Dendrimer-assisted low-temperature growth of carbon nanotubes by plasma-enhanced chemical vapor deposition. Chemical Communications, 2006, , 2899.	2.2	30
99	High resolution structural characterization of the amorphous-crystalline interface in Se-implanted GaAs. Applied Physics Letters, 1984, 44, 874-876.	1.5	29
100	Ternary phases in the Pd-GaAs system: Implications for shallow contacts to GaAs. Materials Letters, 1985, 3, 409-413.	1.3	29
101	Magneto-transport in ultrathin ErAs epitaxial layers buried in GaAs. Surface Science, 1990, 228, 13-15.	0.8	28
102	Optical spectroscopy of GaN microcavities with thicknesses controlled using a plasma etchback. Applied Physics Letters, 2001, 79, 3029-3031.	1.5	28
103	Electrical properties of individual gold nanowires arrayed in a porous anodic alumina template. Physica Status Solidi (A) Applications and Materials Science, 2007, 204, 3152-3158.	0.8	28
104	First-principles analysis of ZrN/ScN metal/semiconductor superlattices for thermoelectric energy conversion. Journal of Applied Physics, 2011, 109, .	1.1	28
105	High resolution transmission electron microscopy of proton-implanted gallium arsenide. Applied Physics Letters, 1985, 47, 691-693.	1.5	27
106	Effects of KrF excimer laser irradiation on metal contacts to n-type and p-type GaN. Journal of Applied Physics, 2003, 94, 3529-3535.	1.1	27
107	Thermal stability of epitaxial cubic-TiN/(Al,Sc)N metal/semiconductor superlattices. Journal of Materials Science, 2015, 50, 3200-3206.	1.7	27
108	In/GaAs reaction: Effect of an intervening oxide layer. Applied Physics Letters, 1986, 49, 818-820.	1.5	26

#	ARTICLE	IF	CITATIONS
109	Epitaxial metal(NiAl)-semiconductor(III ^V) heterostructures by MBE. Surface Science, 1990, 228, 1-8.	0.8	26
110	Simple Ru electrode scheme for ferroelectric (Pb,La)(Zr,Ti)O ₃ capacitors directly on silicon. Journal of Applied Physics, 1998, 84, 1121-1125.	1.1	26
111	III-nitride nanopyramid light emitting diodes grown by organometallic vapor phase epitaxy. Journal of Applied Physics, 2010, 108, 044303.	1.1	26
112	Magnetic Manipulation and Optical Imaging of an Active Plasmonic Single-Particle Fe ²⁺ Au Nanorod. Langmuir, 2011, 27, 15292-15298.	1.6	25
113	Growth of TiN ^x -GaN metal/semiconductor multilayers by reactive pulsed laser deposition. Journal of Applied Physics, 2006, 100, 064901.	1.1	24
114	Microstructural evolution and thermal stability of HfN/ScN, ZrN/ScN, and Hf _{0.5} Zr _{0.5} N/ScN metal/semiconductor superlattices. Journal of Materials Science, 2016, 51, 8250-8258.	1.7	24
115	Decoupling the structural and magnetic phase transformations in magneto-optic MnBi thin films by the partial substitution of Cr for Mn. Applied Physics Letters, 1998, 72, 2337-2339.	1.5	23
116	Epitaxial growth of semiconducting LaVO ₃ thin films. Journal of Materials Research, 2000, 15, 1-3.	1.2	22
117	Toward surround gates on vertical single-walled carbon nanotube devices. Journal of Vacuum Science & Technology B, 2009, 27, 821.	1.3	22
118	Enhanced hardness in epitaxial TiAlScN alloy thin films and rocksalt TiN/(Al,Sc)N superlattices. Applied Physics Letters, 2014, 105, .	1.5	22
119	Tailoring of surface plasmon resonances in TiN/(Al _{0.72} Sc _{0.28})N multilayers by dielectric layer thickness variation. Journal of Materials Science, 2018, 53, 4001-4009.	1.7	22
120	Optical properties of metallic quantum wells. IEEE Journal of Quantum Electronics, 1992, 28, 1663-1669.	1.0	21
121	In-place fabrication of nanowire electrode arrays for vertical nanoelectronics on Si substrates. Journal of Vacuum Science & Technology B, 2007, 25, 343.	1.3	21
122	Controlled Decoration of Single-Walled Carbon Nanotubes with Pd Nanocubes. Journal of Physical Chemistry C, 2007, 111, 13756-13762.	1.5	21
123	Thermoelectric properties of HfN/ScN metal/semiconductor superlattices: a first-principles study. Journal of Physics Condensed Matter, 2012, 24, 415303.	0.7	21
124	Backside secondary ion mass spectrometry study of a Ge/Pd ohmic contact to InP. Applied Physics Letters, 1992, 60, 1123-1125.	1.5	20
125	Fluence effects on the magnetic properties of Fe ₈₁ B _{13.5} Si _{3.5} C ₂ metallic glass produced by pulsed laser deposition. Journal of Applied Physics, 1999, 85, 6652-6654.	1.1	20
126	Microfabrication using one-step LPCVD porous polysilicon films. Journal of Microelectromechanical Systems, 2003, 12, 418-424.	1.7	20

#	ARTICLE	IF	CITATIONS
127	Electrical properties of metal contacts on laser-irradiated n-type GaN. Applied Physics Letters, 2003, 82, 580-582.	1.5	20
128	Non-volatile memory characteristics of submicrometre Hall structures fabricated in epitaxial ferromagnetic MnAl films on GaAs. Electronics Letters, 1993, 29, 421.	0.5	19
129	Kinetics of the Pd/In thin-film bilayer reaction: Implications for transient-liquid-phase wafer bonding. Journal of Electronic Materials, 2001, 30, 1471-1475.	1.0	19
130	Modification of (Pb,La)(Zr,Ti)O ₃ thin films during pulsed laser liftoff from MgO substrates. Journal of Applied Physics, 2003, 94, 4047-4052.	1.1	19
131	Optimization of carbon nanotube synthesis from porous anodic Al-Fe-Al templates. Carbon, 2007, 45, 2290-2296.	5.4	19
132	Independently addressable fields of porous anodic alumina embedded in SiO ₂ on Si. Applied Physics Letters, 2008, 92, 013122.	1.5	19
133	Capacitance-voltage modeling of metal-ferroelectric-semiconductor capacitors based on epitaxial oxide heterostructures. Applied Physics Letters, 2011, 98, 102901.	1.5	19
134	Crystallographic relationships between GaAs, As and Ga ₂ O ₃ at the GaAs-thermal oxide interface. Materials Letters, 1985, 3, 247-250.	1.3	18
135	Electrical resistivity of thin epitaxial NiAl buried in (Al,Ga)As. Applied Physics Letters, 1989, 54, 2112-2114.	1.5	18
136	Chemical effects in ion mixing of a ternary system (metal-SiO ₂). Applied Physics Letters, 1987, 50, 571-573.	1.5	17
137	The Si/Pd(Si,Ge) ohmic contact on GaAs. Applied Physics Letters, 1992, 60, 3016-3018.	1.5	17
138	Organometallic vapor phase epitaxial growth of GaN on Zn-Al-Si substrates. Applied Physics Letters, 2008, 93, 023109.	1.5	17
139	Selective area epitaxy of GaAs through silicon dioxide windows by molecular beam epitaxy. Applied Physics Letters, 1986, 48, 142-144.	1.5	16
140	Correlation between solid-state reaction and electrical properties of the Rh/GaAs Schottky contact. Journal of Applied Physics, 1987, 61, 1099-1102.	1.1	16
141	Magnetic and magneto-optic properties of epitaxial ferromagnetic $\text{MnAl}/(\text{Al,Ga})\text{As}$ heterostructures. Applied Physics Letters, 1992, 60, 1393-1395.	1.5	16
142	High-T _c superconducting NbN films with low particulate density grown at 25 °C using pulsed laser deposition. Journal of Materials Research, 2001, 16, 1223-1226.	1.2	16
143	Cross-plane thermoelectric transport in p-type La _{0.67} Sr _{0.33} MnO ₃ /LaMnO ₃ oxide metal/semiconductor superlattices. Journal of Applied Physics, 2013, 113, 193702.	1.1	16
144	Thin film Y-Ba-Cu-O high superconductors: structure-property relationships. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 1992, 14, 188-213.	1.7	15

#	ARTICLE	IF	CITATIONS
145	Self-supporting nanowire arrays templated in sacrificial branched porous anodic alumina for thermoelectric devices. Applied Physics Letters, 2009, 95, .	1.5	15
146	Pseudomorphic stabilization of rocksalt GaN in TiN/GaN multilayers and superlattices. Physical Review B, 2009, 80, .	1.1	15
147	Understanding the Rocksalt-to-Wurtzite phase transformation through microstructural analysis of (Al,Sc)N epitaxial thin films. Applied Physics Letters, 2016, 109, .	1.5	15
148	Interfacial interactions of evaporated iridium thin films with (100) GaAs. Journal of Applied Physics, 1987, 62, 1815-1820.	1.1	14
149	Thermomechanical and Thermal Contact Characteristics of Bismuth Telluride Films Electrodeposited on Carbon Nanotube Arrays. Advanced Materials, 2009, 21, 4280-4283.	11.1	14
150	Electrodeposition of InSb branched nanowires: Controlled growth with structurally tailored properties. Journal of Applied Physics, 2014, 116, 083506.	1.1	14
151	Epitaxial $\text{In}_x\text{MnAl}/\text{NiAl}$ magnetic multilayers on AlAs/GaAs. Applied Physics Letters, 1993, 63, 839-841.	1.5	13
152	Bimodal spatial distribution of pores in anodically oxidized aluminum thin films. Journal of Applied Physics, 2000, 88, 6875-6880.	1.1	13
153	Epitaxial growth of skutterudite (CoSb_3) thin films on (001) InSb by pulsed laser deposition. Journal of Materials Research, 2001, 16, 2467-2470.	1.2	13
154	Templated synthesis of gold-iron alloy nanoparticles using pulsed laser deposition. Nanotechnology, 2006, 17, 5131-5135.	1.3	13
155	Vertical Carbon Nanotube Devices With Nanoscale Lengths Controlled Without Lithography. IEEE Nanotechnology Magazine, 2009, 8, 469-476.	1.1	13
156	Built-in Electric Field Minimization in (In, Ga)N Nanoheterostructures. Nano Letters, 2011, 11, 4515-4519.	4.5	13
157	Cross-plane electronic and thermal transport properties of p-type $\text{La}_{0.67}\text{Sr}_{0.33}\text{MnO}_3/\text{LaMnO}_3$ perovskite oxide metal/semiconductor superlattices. Journal of Applied Physics, 2012, 112, 063714.	1.1	13
158	A nanocapacitor with giant dielectric permittivity. Nanotechnology, 2006, 17, 2284-2288.	1.3	12
159	Preparation and Optical Characterization of Sol-Gel Deposited $\text{Pb}(\text{Zr}_{0.45}\text{Ti}_{0.55})\text{O}_3$ Films. Journal of Sol-Gel Science and Technology, 2000, 19, 157-162.	1.1	11
160	Effect of KOH treatment on the schottky barrier height and reverse leakage current in Pt/n-GaN. Journal of Electronic Materials, 2006, 35, 107-112.	1.0	11
161	Linear Coefficient of Thermal Expansion of Porous Anodic Alumina Thin Films from Atomic Force Microscopy. Nanoscale and Microscale Thermophysical Engineering, 2009, 13, 243-252.	1.4	11
162	Void-mediated coherency-strain relaxation and impediment of cubic-to-hexagonal transformation in epitaxial metastable metal/semiconductor $\text{TiN}/\text{Al}_x\text{Sc}_{1-x}\text{N}$ superlattices. Applied Physics Letters, 2016, 109, 161901.	0.9	11

#	ARTICLE	IF	CITATIONS
163	Effect of excimer laser annealing on the structural properties of silicon germanium films. Journal of Materials Research, 2004, 19, 3503-3511.	1.2	10
164	High-reflectivity Al-Pt nanostructured Ohmic contact to p-GaN. IEEE Transactions on Electron Devices, 2006, 53, 2448-2453.	1.6	10
165	Field emission from GaN and (Al,Ga)N/GaN nanorod heterostructures. Journal of Vacuum Science & Technology B, 2007, 25, L15.	1.3	10
166	GaN nanostructure design for optimal dislocation filtering. Journal of Applied Physics, 2010, 108, 074313.	1.1	10
167	Controlled Growth of Ordered Nanopore Arrays in GaN. Nano Letters, 2011, 11, 535-540.	4.5	10
168	Titanium nitride as a plasmonic material for visible and near-infrared wavelengths [erratum]. Optical Materials Express, 2013, 3, 1658.	1.6	10
169	Structure and properties of ferroelectric PbZr _{0.2} Ti _{0.8} O ₃ /YBa ₂ Cu ₃ O ₇ heterostructures. Journal of Electronic Materials, 1992, 21, 513-518.	1.0	9
170	MBE growth of ferromagnetic (Mn,Ni)Al thin films on AlAs/GaAs. Journal of Crystal Growth, 1993, 127, 650-654.	0.7	9
171	Epitaxial I_{II} , (Mn,Ni)Al/(Al,Ga)As heterostructures: Magnetic and magneto-optic properties. Journal of Applied Physics, 1993, 73, 6121-6123.	1.1	9
172	Magnetotransport properties of MBE-grown magnetic superlattices of Mn-based intermetallics on GaAs heterostructures. Solid-State Electronics, 1994, 37, 1031-1036.	0.8	9
173	Processing and morphology of permeable polycrystalline silicon thin films. Journal of Materials Research, 2002, 17, 2235-2242.	1.2	9
174	Ferroelectric field effect in epitaxial LaVO ₃ /(Ba,Sr)/TiO ₃ /(Pb,La)(Zr,Ti)O ₃ /(La,Sr)CoO ₃ heterostructures. Journal of Applied Physics, 2003, 93, 4761-4765.	1.1	9
175	Bulk-Like Laminated Nitride Metal/Semiconductor Superlattices for Thermoelectric Devices. Journal of Microelectromechanical Systems, 2014, 23, 672-680.	1.7	9
176	Interface morphology and phase distribution in the Cu _{2-x} S/CdS heterojunction: A transmission electron microscope investigation. Solar Energy Materials and Solar Cells, 1984, 10, 349-370.	0.4	8
177	Interface crystallography and stability in epitaxial metal (NiAl, CoAl)/III-V Semiconductor heterostructures. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 1990, 6, 147-157.	1.7	8
178	YBa ₂ Cu ₃ O _{7-x} films on flexible, partially stabilized zirconia substrates with fully stabilized zirconia buffer layers. Applied Physics Letters, 1991, 59, 1638-1640.	1.5	8
179	Microstructure of Epitaxial Ferroelectric YBa ₂ Cu ₃ O _{7-x} /Pb _{0.9} La _{0.1} (Zr _{0.2} Ti _{0.8}) _{0.975} O ₃ /YBa ₂ Cu ₃ O _{7-x} Heterostructures on LaAlO ₃ . Journal of the American Ceramic Society, 1993, 76, 3141-3143.	1.9	8
180	Electro-optic potassium-tantalate-niobate films prepared by pulsed laser deposition from segmented pellets. Journal of Materials Research, 1994, 9, 1272-1279.	1.2	8

#	ARTICLE	IF	CITATIONS
181	Magneto-optical properties of chromium-alloyed manganese bismuth thin films. Journal of Applied Physics, 1999, 86, 1596-1603.	1.1	8
182	Pulsed Laser Annealing of Silicon-Germanium Films. Materials Research Society Symposia Proceedings, 2002, 741, 421.	0.1	8
183	Capacitance-voltage characteristics of SrTiO ₃ /LaVO ₃ epitaxial heterostructures. Applied Physics Letters, 2010, 96, 212903.	1.5	8
184	Design of epitaxial Metal/AiAs/GaAs structures for enhancement of the schottky barrier height. Journal of Electronic Materials, 1991, 20, 881-884.	1.0	7
185	Dominant pinning mechanisms in YBa ₂ Cu ₃ O _{7-x} films on single and polycrystalline yttria stabilized zirconia substrates. Applied Physics Letters, 1992, 60, 1902-1904.	1.5	7
186	The extraordinary Hall effect in coherent epitaxial $\bar{\Gamma}_1$, (Mn,Ni)Al thin films on GaAs. Journal of Applied Physics, 1993, 73, 6399-6401.	1.1	7
187	Nanopatterned Contacts to GaN. Journal of Electronic Materials, 2007, 36, 359-367.	1.0	6
188	Electrical and optical characterization of back-to-back Schottky (Al,Ga)As/NiAl/(Al,Ga)As molecular beam epitaxially grown double-heterostructure diodes. Applied Physics Letters, 1990, 56, 1043-1045.	1.5	5
189	GaN microcavities formed by laser lift-off and plasma etching. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2002, 93, 98-101.	1.7	5
190	MBE growth of AlGaAs/NiAl/AlGaAs heterostructures: A novel epitaxial III-V semiconductor/metal system. Journal of Crystal Growth, 1989, 95, 425-426.	0.7	4
191	Effect of oxygen partial pressure during pulsed laser deposition on the orientation of CeO ₂ thin films grown on (100) silicon. Journal of Materials Research, 2003, 18, 1753-1756.	1.2	4
192	Free standing GaN nano membrane by laser lift-off method. Materials Research Society Symposia Proceedings, 2012, 1432, 53.	0.1	4
193	The influence of the sapphire substrate on the temperature dependence of the GaN bandgap. Materials Research Society Symposia Proceedings, 1999, 572, 289.	0.1	3
194	Comparative Study of the Crystallization Behavior of Fe-Cr-B-Si in Bulk and Thin Film Forms. Journal of Materials Synthesis and Processing, 2001, 9, 181-185.	0.3	3
195	The Use of Polyethyleneimine to Control the Growth-Front Morphology of Electrochemically Deposited Gold Nanowires for Engineered Nanogap Electrodes. Small, 2009, 5, 2387-2391.	5.2	3
196	Magnetotransport in magnetic epitaxial metal layers buried in (Ga,Al)As heterostructures (invited) (abstract). Journal of Applied Physics, 1991, 69, 6117-6117.	1.1	2
197	Comparison of the critical current anisotropy in epitaxial YBa ₂ Cu ₃ O _{7-x} films on (100) LaAlO ₃ and (100) yttria stabilized zirconia. Journal of Materials Research, 1994, 9, 270-274.	1.2	2
198	Magnetic properties of epitaxial MnAl/NiAl magnetic multilayers grown on GaAs heterostructures (invited). Journal of Applied Physics, 1994, 75, 6665-6669.	1.1	2

#	ARTICLE	IF	CITATIONS
199	Quantitative damage morphology analysis of laser-induced surface cracks in fused silica at 355 nm. , 1998, 3244, 348.		2
200	Discrete State Simulation of Electrical Conductivity and the Peltier Effect for Arbitrary Band Structures. Materials Research Society Symposia Proceedings, 2001, 691, 1.	0.1	2
201	Evaluation of (In,Ga)N Films as Optical Absorption Filters for Application in Integrated Fluorescence Detection Micro-Bioanalytical Systems. Materials Research Society Symposia Proceedings, 2001, 693, 1.	0.1	2
202	Excimer laser lift-off for packaging and integration of GaN-based light-emitting devices. , 2003, 4977, 587.		2
203	TiN/GaN Metal/Semiconductor Multilayer Nanocomposites Grown by Reactive Pulsed Laser Deposition. Materials Research Society Symposia Proceedings, 2005, 872, 1.	0.1	2
204	Metal Nitrides for Plasmonic Applications. , 2012, , .		2
205	Negative differential resistance in AlAs/NiAl/AlAs metal base quantum wells: toward a resonant tunneling transistor. IEEE Transactions on Electron Devices, 1988, 35, 2453-2454.	1.6	1
206	Negative transconductance in monocrystalline (Al,Ga)As/NiAl/(Al,Ga)As semiconductor/metal/semiconductor tunneling transistors. IEEE Transactions on Electron Devices, 1989, 36, 2620-2621.	1.6	1
207	Artificial in-plane ordering of textured YBa ₂ Cu ₃ O _{7-x} films deposited on polycrystalline yttria-stabilized zirconia substrates. Journal of Superconductivity and Novel Magnetism, 1992, 5, 533-537.	0.5	1
208	Epitaxial ferromagnetic MnGa/NiGa multilayers on GaAs. Journal of Magnetism and Magnetic Materials, 1993, 126, 313-315.	1.0	1
209	Nanoscale engineering of metal/semiconductor interfaces. Jom, 1993, 45, 61-64.	0.9	1
210	Electrodeposition of Bi ₂ Te ₃ Nanowire Composites. Materials Research Society Symposia Proceedings, 2000, 626, 1411.	0.1	1
211	<title>Optical properties of PbTiO ₃ films deposited by sol-gel process and pulsed laser deposition: a comparison</title>. , 2001, , .		1
212	InGaN/GaN Quantum Well Microcavities Formed by Laser Lift-Off and Plasma Etching. Physica Status Solidi (B): Basic Research, 2001, 228, 91-94.	0.7	1
213	Electrodeposition of Bi _{1-x} Sb _x Films and 200-nm Wire Arrays from a Nonaqueous Solvent.. ChemInform, 2003, 34, no.	0.1	1
214	A Coupled Cellular Automata Representation of Nanoscale Transport Across Semiconductor Interfaces. Materials Research Society Symposia Proceedings, 2003, 796, 85.	0.1	1
215	Pulsed selective epitaxial growth of hexagonal GaN microprisms. Journal of Crystal Growth, 2008, 310, 1107-1111.	0.7	1
216	Novel metal/semiconductor nanocomposite and superlattice materials and devices for thermoelectrics. , 2010, , .		1

#	ARTICLE	IF	CITATIONS
217	Electrodeposition of Indium Antimonide Nanowires in Porous Anodic Alumina Membranes. , 2010, , .		1
218	The Materials Science of "Permeable Polysilicon" Thin Films. Materials Research Society Symposia Proceedings, 2001, 687, 1.	0.1	0
219	Calculating Seebeck Coefficients for Arbitrary Temperature Gradients. Materials Research Society Symposia Proceedings, 2003, 793, 383.	0.1	0
220	Carbon Nanotube Interfaces for Magneto Thermoelectric Actuation. , 2010, , .		0
221	Effect of SrTiO ₃ thickness on the capacitance-voltage characteristics of (La,Sr)CoO ₃ /(Pb,La)(Zr,Ti)O ₃ /SrTiO ₃ /LaVO ₃ epitaxial heterostructures. Applied Physics A: Materials Science and Processing, 2012, 109, 285-289.	1.1	0
222	A Titanium Nitride based Metamaterial for Applications in the Visible. , 2013, , .		0