Anagh Bhaumik

List of Publications by Year
in descending order

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385 papers	12,814 citations	28190 55 h-index	31759 101 g-index
392 all docs	392 docs citations	392 times ranked	9392 citing authors

#	Article	IF	Citations
1	Pulsed-laser evaporation technique for deposition of thin films: Physics and theoretical model. Physical Review B, 1990, 41, 8843-8859.	1.1	897
2	Domain epitaxy: A unified paradigm for thin film growth. Journal of Applied Physics, 2003, 93, 278-285.	1.1	515
3	Optical and structural properties of epitaxial MgxZn1â^'xO alloys. Applied Physics Letters, 1999, 75, 3327-3329.	1.5	378
4	Excitonic structure and absorption coefficient measurements of ZnO single crystal epitaxial films deposited by pulsed laser deposition. Journal of Applied Physics, 1999, 85, 7884-7887.	1.1	337
5	Zn0.9Co0.1O-based diluted magnetic semiconducting thin films. Applied Physics Letters, 2004, 84, 5255-5257.	1.5	301
6	Epitaxial growth of TiN films on (100) silicon substrates by laser physical vapor deposition. Applied Physics Letters, 1992, 61, 1290-1292.	1.5	275
7	Electrical properties of transparent and conducting Ga doped ZnO. Journal of Applied Physics, 2006, 100, 033713.	1.1	259
8	Metallic conductivity and metal-semiconductor transition in Ga-doped ZnO. Applied Physics Letters, 2006, 88, 032106.	1.5	248
9	Theoretical model for deposition of superconducting thin films using pulsed laser evaporation technique. Journal of Applied Physics, 1990, 68, 233-247.	1.1	227
10	Defects and interfaces in epitaxial ZnO/Î±-Al2O3 and AlN/ZnO/Î±-Al2O3 heterostructures. Journal of Applied Physics, 1998, 84, 2597-2601.	1.1	205
11	Refractive indices and absorption coefficients of MgxZn1â^'xO alloys. Applied Physics Letters, 2000, 76, 979-981.	1.5	191
12	Formation of thin superconducting films by the laser processing method. Applied Physics Letters, 1987, 51, 1845-1847.	1.5	189
13	Insituprocessing of epitaxial Yâ€Baâ€Cuâ€O highTcsuperconducting films on (100)â€‰SrTiO3and (100)â€‰YSâ€ZrO2substrates at 500â€“650â€‰Â°C. Applied Physics Letters, 1989, 54, 2271-2273.	1.5	169
14	Interface structures during solidâ€phaseâ€epitaxial growth in ion implanted semiconductors and a crystallization model. Journal of Applied Physics, 1982, 53, 8607-8614.	1.1	163
15	Laser Method for Synthesis and Processing of Continuous Diamond Films on Nondiamond Substrates. Science, 1991, 252, 416-418.	6.0	161
16	Epitaxial growth in largeâ€latticeâ€mismatch systems. Journal of Applied Physics, 1994, 75, 860-871.	1.1	146
17	Laser Annealing of Ion-Implanted Semiconductors. Science, 1979, 204, 461-468.	6.0	144
18	Epitaxial growth of AlN thin films on silicon (111) substrates by pulsed laser deposition. Journal of Applied Physics, 1995, 77, 4724-4728.	1.1	144

#	Article	IF	Citations
19	High quality epitaxial aluminum nitride layers on sapphire by pulsed laser deposition. Applied Physics Letters, 1995, 67, 1549-1551.	1.5	141
20	Gallium-doped zinc oxide films as transparent electrodes for organic solar cell applications. Journal of Applied Physics, 2007, 102, .	1.1	140
21	Effect of Li doping in NiO thin films on its transparent and conducting properties and its application in heteroepitaxial p-n junctions. Journal of Applied Physics, 2010, 108, .	1.1	138
22	Novel phase of carbon, ferromagnetism, and conversion into diamond. Journal of Applied Physics, 2015, 118, .	1.1	133
23	Epitaxial growth and properties of MoOx(2<x<2.75) films. Journal of Applied Physics, 2005, 97, 083539.	1.1	132
24	Grain size effect on deformation twinning and detwinning. Journal of Materials Science, 2013, 48, 4467-4475.	1.7	132
25	Semiconductor-metal transition characteristics of VO2 thin films grown on c- and r-sapphire substrates. Journal of Applied Physics, 2010, 107, .	1.1	124
26	A novel method for simulating laser-solid interactions in semiconductors and layered structures. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 1989, 3, 217-230.	1.7	123
27	Subsurface heating effects during pulsed laser evaporation of materials. Applied Physics Letters, 1990, 57, 2022-2024.	1.5	123
28	Thinâ€film deposition by a new laser ablation and plasma hybrid technique. Applied Physics Letters, 1989, 54, 2455-2457.	1.5	121
29	Structural characteristics of AlN films deposited by pulsed laser deposition and reactive magnetron sputtering: A comparative study. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 1998, 16, 2804-2815.	0.9	114
30	Effect of the chemical nature of transitionâ€metal substrates on chemicalâ€vapor deposition of diamond. Journal of Applied Physics, 1993, 74, 4168-4173.	1.1	105
31	Twinning partial multiplication at grain boundary in nanocrystalline fcc metals. Applied Physics Letters, 2009, 95, .	1.5	104
32	Effects of pulsed rubyâ€laser annealing on As and Sb implanted silicon. Journal of Applied Physics, 1979, 50, 3261-3273.	1.1	95
33	Rectifying electrical characteristics of La0.7Sr0.3MnO3/ZnO heterostructure. Applied Physics Letters, 2003, 83, 1773-1775.	1.5	91
34	Pulsed laser melting of amorphous silicon layers. Applied Physics Letters, 1984, 44, 35-37.	1.5	90
35	Enhancement of nucleation and adhesion of diamond films on copper, stainless steel, and silicon substrates. Journal of Applied Physics, 1992, 71, 966-971.	1.1	90
36	Characteristics of titanium nitride films grown by pulsed laser deposition. Journal of Materials Research, 1996, 11, 1458-1469.	1.2	90

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37	Pulsed-Laser Melting of Amorphous Silicon: Time-Resolved Measurements and Model Calculations. Physical Review Letters, 1984, 52, 561-564.	2.9	88
38	Dislocations, twins, and grain boundaries in CVD diamond thin films: Atomic structure and properties. Journal of Materials Research, 1990, 5, 2414-2423.	1.2	85
39	Superhard diamondlike carbon: preparation, theory, and properties. International Materials Reviews, 2000, 45, 133-164.	9.4	85
40	Interface instability and cell formation in ionâ€implanted and laserâ€annealed silicon. Journal of Applied Physics, 1981, 52, 1289-1293.	1.1	84
41	Strain-induced tuning of metalâ€“insulator transition in NdNiO3. Applied Physics Letters, 2002, 80, 4039-4041.	1.5	75
42	Atomic structure of dislocations in silicon, germanium and diamond. Philosophical Magazine A: Physics of Condensed Matter, Structure, Defects and Mechanical Properties, 1990, 61, 873-891.	0.8	72
43	Semiconductor to metal transition characteristics of VO2 thin films grown epitaxially on Si (001). Applied Physics Letters, 2009, 95, .	1.5	72
44	Mechanism of combustion synthesis of silicon carbide. Journal of Applied Physics, 1994, 75, 7252-7257.	1.1	71
45	Bulk nucleation and amorphous phase formation in highly undercooled molten silicon. Applied Physics Letters, 1984, 44, 770-772.	1.5	69
46	Enhanced photoconductivity of ZnO films Co-doped with nitrogen and tellurium. Applied Physics Letters, 2005, 86, 211918.	1.5	66
47	Role of interfacial transition layers in VO2/Al2O3 heterostructures. Journal of Applied Physics, 2011, 110, .	1.1	66
48	Significant enhancement of optical absorption through nano-structuring of copper based oxide semiconductors: possible future materials for solar energy applications. Physical Chemistry Chemical Physics, 2014, 16, 11054-11066.	1.3	64
49	Mechanism for grain size softening in nanocrystalline Zn. Applied Physics Letters, 2002, 81, 2241-2243.	1.5	63
50	Lowâ€temperature processing of titanium nitride films by laser physical vapor deposition. Applied Physics Letters, 1989, 54, 1519-1521.	1.5	61
51	Discovery of High-Temperature Superconductivity (T_c = 55 K) in B-Doped Q-Carbon. ACS Nano, 2017, 11, 11915-11922.	7.3	60
52	Insitusingle chamber laser processing of YBa2Cu3O7â˜Îsuperconducting thin films on Siâ€‰(100) with yttriaâ€stabilized zirconia buffer layers. Applied Physics Letters, 1990, 57, 1578-1580.	1.5	59
53	Progress in Q-carbon and related materials with extraordinary properties. Materials Research Letters, 2018, 6, 353-364.	4.1	59
54	Self-climb of dislocation loops in magnesium oxide. Philosophical Magazine and Journal, 1972, 26, 1179-1190.	1.8	58

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55	Atomic structure of dislocations and dipoles in silicon. Philosophical Magazine A: Physics of Condensed Matter, Structure, Defects and Mechanical Properties, 1987, 56, 625-639.	0.8	56
56	Strain relief mechanisms and the nature of dislocations in GaAs/Si heterostructures. Journal of Applied Physics, 1989, 66, 2376-2380.	1.1	56
57	Diamond-ceramic composite tool coatings. Journal of Materials Research, 1994, 9, 2850-2867.	1.2	55
58	Conversion of p to n-type reduced graphene oxide by laser annealing at room temperature and pressure. Journal of Applied Physics, 2017, 121, .	1.1	55
59	Control of surface particle density in pulsed laser deposition of superconducting YBa2Cu3O7and diamondlike carbon thin films. Applied Physics Letters, 1992, 61, 483-485.	1.5	53
60	Phase transformation and impurity redistribution during pulsed laser irradiation of amorphous silicon layers. Journal of Applied Physics, 1984, 56, 1821-1830.	1.1	51
61	Formation of epitaxial and textured platinum films on ceramicsâ€(100) MgO single crystals by pulsed laser deposition. Applied Physics Letters, 1994, 64, 2093-2095.	1.5	51
62	High-Temperature Superconductivity in Boron-Doped Q-Carbon. ACS Nano, 2017, 11, 5351-5357.	7.3	49
63	Microstructure and properties of YBa2Cu3O9â^Î´superconductors with transitions at 90 and near 290 K. Applied Physics Letters, 1987, 51, 940-942.	1.5	48
64	Microstructural and compositional variations in laserâ€deposited superconducting thin films. Applied Physics Letters, 1988, 53, 1013-1015.	1.5	48
65	Epitaxial growth of ZnO films on Si(111). Journal of Materials Research, 2002, 17, 2480-2483.	1.2	48
66	Room-Temperature Ferromagnetism and Extraordinary Hall Effect in Nanostructured Q-Carbon: Implications for Potential Spintronic Devices. ACS Applied Nano Materials, 2018, 1, 807-819.	2.4	46
67	Effect of processing geometry in oxygen incorporation andinsituformation of YBa2Cu3O7superconducting thin films by pulsed laser evaporation technique. Applied Physics Letters, 1989, 55, 2351-2353.	1.5	45
68	Atomic structure and energy of grain boundaries in silicon, germanium and diamond. The Philosophical Magazine: Physics of Condensed Matter B, Statistical Mechanics, Electronic, Optical and Magnetic Properties, 1991, 63, 1181-1192.	0.6	45
69	Characteristics of stacking faults in AlN thin films. Journal of Applied Physics, 1997, 82, 4296-4299.	1.1	45
70	Research Update: Direct conversion of amorphous carbon into diamond at ambient pressures and temperatures in air. APL Materials, 2015, 3, .	2.2	45
71	Self-assembled epitaxial and polycrystalline magnetic nickel nanocrystallites. Applied Physics Letters, 2001, 79, 2817-2819.	1.5	44
72	Microstructure and electrical property correlations in Ga:ZnO transparent conducting thin films. Journal of Applied Physics, 2006, 100, 093519.	1.1	44

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73	Atomistic study of dislocation nucleation in Ge/(001)Si heterostructuses. Philosophical Magazine A: Physics of Condensed Matter, Structure, Defects and Mechanical Properties, 1995, 72, 281-295.	0.8	43
74	The Inverse Hall-Petch Effectâ€"Fact or Artifact?. Materials Research Society Symposia Proceedings, 2000, 634, 511.	0.1	43
75	Magnetic properties of self-assembled nanoscale La2/3Ca1/3MnO3 particles in an alumina matrix. Applied Physics Letters, 2001, 79, 1327-1329.	1.5	43
76	Structure-magnetic property correlations in the epitaxial FePt system. Applied Physics Letters, 2008, 92, .	1.5	43
77	Properties of YBa2Cu3AgxO7â˜Î´composite superconductors. Journal of Applied Physics, 1989, 66, 5935-5939.	1.1	42
78	Z-contrast imaging of dislocation cores at the GaAs/Si interface. Applied Physics Letters, 2002, 81, 2728-2730.	1.5	40
79	Copper diffusion characteristics in single-crystal and polycrystalline TaN. Applied Physics Letters, 2002, 81, 1453-1455.	1.5	40
80	Synthesis of diamond nanostructures from carbon nanotube and formation of diamond-CNT hybrid structures. Carbon, 2019, 150, 388-395.	5.4	40
81	Silicon oxidation and Siâ€“SiO₂ interface of thin oxides. Journal of Materials Research, 1987, 2, 216-221.	1.2	39
82	Superconducting YBa2Cu3O7â˜Î´thin films on Siâ€‰(100) substrates with CoSi2buffer layers by aninsitupulsed laser evaporation method. Applied Physics Letters, 1991, 59, 1785-1787.	1.5	39
83	Defect dependent ferromagnetism in MgO doped with Ni and Co. Applied Physics Letters, 2008, 93, .	1.5	39
84	Observation of room temperature ferromagnetism in Ga:ZnO: A transition metal free transparent ferromagnetic conductor. Applied Physics Letters, 2008, 93, .	1.5	37
85	Growth of ceramic thin films on Si(100) using anin situlaser deposition technique. Journal of Applied Physics, 1991, 69, 8358-8362.	1.1	36
86	Mechanical properties of nanocrystalline and epitaxial TiN films on (100) silicon. Journal of Materials Research, 2001, 16, 2733-2738.	1.2	36
87	Epitaxial integration of dilute magnetic semiconductor Sr3SnO with Si (001). Applied Physics Letters, 2013, 103, .	1.5	36
88	A microstructural approach toward the effect of thickness on semiconductor-to-metal transition characteristics of VO2 epilayers. Journal of Applied Physics, 2014, 115, .	1.1	36
89	Q-carbon harder than diamond. MRS Communications, 2018, 8, 428-436.	0.8	36
90	Epitaxial growth of TaN thin films on Si(100) and Si(111) using a TiN buffer layer. Applied Physics Letters, 2002, 80, 2323-2325.	1.5	35

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91	Electron field emission from Q-carbon. Diamond and Related Materials, 2018, 86, 71-78.	1.8	35
92	Preparation of Pb(Zr0.54Ti0.46)O3thin films on (100)Si using textured YBa2Cu3O7â˜Î´and yttriaâ€stabilized zirconia buffer layers by laser physical vapor deposition technique. Applied Physics Letters, 1993, 63, 30-32.	1.5	34
93	Evidence for topological surface states in epitaxial Bi 2 Se 3 thin film grown by pulsed laser deposition through magneto-transport measurements. Current Opinion in Solid State and Materials Science, 2014, 18, 279-285.	5.6	34
94	Research Update: Direct conversion of h-BN into pure c-BN at ambient temperatures and pressures in air. APL Materials, 2016, 4, .	2.2	34
95	Enhanced mechanical properties of Q-carbon nanocomposites by nanosecond pulsed laser annealing. Nanotechnology, 2018, 29, 45LT02.	1.3	34
96	Laserâ€enhanced synthesis and processing of diamond films from liquid hydrocarbons. Journal of Applied Physics, 1993, 73, 4351-4356.	1.1	33
97	Pulsed laser deposition and characterization of epitaxial Cu/TiN/Si(100) heterostructures. Applied Physics Letters, 1994, 65, 2565-2567.	1.5	33
98	The role of Ag in the pulsed laser growth of YBCO thin films. Journal of Applied Physics, 1999, 85, 6636-6641.	1.1	33
99	Inâ€situpatterned laser deposition of highâ€TcYâ€Baâ€Cuâ€O superconducting thin films. Journal of Applied Physics, 1990, 67, 3448-3451.	1.1	32
100	Synthesis and atomic-level characterization of Ni nanoparticles in Al2O3 matrix. Applied Physics Letters, 2002, 81, 4204-4206.	1.5	32
101	Effect of microstructure on diffusion of copper in TiN films. Journal of Applied Physics, 2003, 93, 5210-5214.	1.1	32
102	Large-area diamond thin film on Q-carbon coated crystalline sapphire by HFCVD. Journal of Crystal Growth, 2018, 504, 17-25.	0.7	32
103	Electron mobility modulation in graphene oxide by controlling carbon melt lifetime. Carbon, 2020, 170, 327-337.	5.4	32
104	Electrostatic measurement of plasma plume characteristics in pulsed laser evaporated carbon. Journal of Applied Physics, 1999, 86, 2865-2871.	1.1	31
105	Ultrafast switching in wetting properties of TiO2/YSZ/Si(001) epitaxial heterostructures induced by laser irradiation. Journal of Applied Physics, 2013, 113, 063706.	1.1	31
106	Macroscopic Twinning Strain in Nanocrystalline Cu. Materials Research Letters, 2014, 2, 63-69.	4.1	31
107	Direct conversion of h-BN into c-BN and formation of epitaxial c-BN/diamond heterostructures. Journal of Applied Physics, 2016, 119, .	1.1	31
108	Direct conversion of carbon nanofibers and nanotubes into diamond nanofibers and the subsequent growth of large-sized diamonds. Nanoscale, 2019, 11, 2238-2248.	2.8	31

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109	Synthesis of superconducting YBa2Cu3O7â^Î´thin films on nickelâ€based superalloy usinginsitupulsed laser deposition. Applied Physics Letters, 1990, 57, 2594-2596.	1.5	30
110	Integration of Pb(Zr0.52Ti0.48)O3 epilayers with Si by domain epitaxy. Applied Physics Letters, 2000, 76, 1458-1460.	1.5	30
111	Deformation twin formed by self-thickening, cross-slip mechanism in nanocrystalline Ni. Applied Physics Letters, 2008, 93, .	1.5	30
112	Tunable charge states of nitrogen-vacancy centers in diamond for ultrafast quantum devices. Carbon, 2019, 142, 662-672.	5.4	30
113	Optical properties of amorphous silicon and silicon dioxide. Journal of Applied Physics, 1986, 60, 1139-1146.	1.1	29
114	Superconducting thin films of Yâ€Baâ€Cuâ€O prepared by metalorganic chemical vapor deposition. Journal of Applied Physics, 1990, 67, 1562-1565.	1.1	29
115	Low resistivity copper germanide on (100) Si for contacts and interconnections. Applied Physics Letters, 1996, 69, 3560-3562.	1.5	29
116	Domain epitaxy in TiO2/Î±-Al2O3 thin film heterostructures with Ti2O3 transient layer. Applied Physics Letters, 2012, 100, .	1.5	29
117	Enhanced photocatalytic efficiency in zirconia buffered n-NiO/p-NiO single crystalline heterostructures by nanosecond laser treatment. Journal of Applied Physics, 2013, 113, .	1.1	29
118	Undercooling driven growth of Q-carbon, diamond, and graphite. MRS Communications, 2018, 8, 533-540.	0.8	29
119	Nature of epitaxial growth of highâ€Tclaserâ€deposited Yâ€Baâ€Cuâ€O films on (100) strontium titanate substrates. Journal of Applied Physics, 1990, 67, 3785-3790.	1.1	28
120	Laser patterning of diamond films. Journal of Applied Physics, 1992, 71, 3795-3801.	1.1	28
121	Oxygen vacancy enhanced room-temperature ferromagnetism in Sr3SnO/c-YSZ/Si (001) heterostructures. MRS Communications, 2014, 4, 7-13.	0.8	28
122	Electrical Transition in Isostructural VO2 Thin-Film Heterostructures. Scientific Reports, 2019, 9, 3009.	1.6	28
123	Structural Evolution of Q-Carbon and Nanodiamonds. Jom, 2018, 70, 450-455.	0.9	27
124	Vacancy-Driven Robust Metallicity of Structurally Pinned Monoclinic Epitaxial VO₂ Thin Films. ACS Applied Materials & Interfaces, 2019, 11, 3547-3554.	4.0	27
125	Nature of interfaces and oxidation processes in Ge+â€implanted Si. Journal of Applied Physics, 1989, 65, 4028-4032.	1.1	26
126	Atomic structure, electrical properties, and infrared range optical properties of diamondlike carbon films containing foreign atoms prepared by pulsed laser deposition. Journal of Materials Research, 2000, 15, 633-641.	1.2	26

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127	Quantum confinement of E1 and E2 transitions in Ge quantum dots embedded in an Al2O3 or an AlN matrix. Applied Physics Letters, 2000, 76, 43-45.	1.5	26
128	Misfit dislocations in low-temperature grown Ge/Si heterostructures. Philosophical Magazine A: Physics of Condensed Matter, Structure, Defects and Mechanical Properties, 1995, 71, 537-551.	0.8	25
129	Insituprocessing of textured superconducting thin film of Bi(â€Pb)â€Caâ€Srâ€Cuâ€O by excimer laser ablation. Applied Physics Letters, 1990, 56, 2034-2036.	1.5	24
130	Nucleation and growth of diamond films on aluminum nitride coated nickel. Applied Physics Letters, 1995, 67, 1322-1324.	1.5	24
131	Epitaxial GaN on Si(111): Process control of SiNx interlayer formation. Applied Physics Letters, 2004, 85, 133-135.	1.5	24
132	Singleâ€chamber,insituprocessing of superconducting YBa2Cu3O7â˜Îthin films on stainless steel with yttriaâ€stabilized zirconia buffer layer. Journal of Applied Physics, 1991, 69, 2410-2413.	1.1	23
133	Pulsed laser deposition of epitaxial Si/TiN/Si(100) heterostructures. Applied Physics Letters, 1994, 64, 1236-1238.	1.5	23
134	Room-temperature ferromagnetism in epitaxial titanium nitride thin films. Acta Materialia, 2019, 166, 221-230.	3.8	23
135	Nonequilibrium Structural Evolution of Q-Carbon and Interfaces. ACS Applied Materials & Interfaces, 2020, 12, 1330-1338.	4.0	23
136	Nucleation and growth of diamond on FeSi2/Si substrates by hot filament chemical vapor deposition. Journal of Applied Physics, 1992, 71, 4944-4948.	1.1	22
137	Role of twin boundaries in semiconductor to metal transition characteristics of VO2 films. Applied Physics Letters, 2010, 97, .	1.5	22
138	Alloying effect on grain-size dependent deformation twinning in nanocrystalline Cuâ€“Zn alloys. Philosophical Magazine, 2015, 95, 301-310.	0.7	22
139	Q-carbon discovery and formation of single-crystal diamond nano- and microneedles and thin films. Materials Research Letters, 2016, 4, 118-126.	4.1	22
140	A novel high-temperature carbon-based superconductor: B-doped Q-carbon. Journal of Applied Physics, 2017, 122, .	1.1	22
141	Novel synthesis and properties of pure and NV-doped nanodiamonds and other nanostructures. Materials Research Letters, 2017, 5, 242-250.	4.1	22
142	The elastic field associated with a square dislocation loop in a twoâ€phase medium. Journal of Applied Physics, 1987, 62, 1698-1703.	1.1	21
143	Size and Interface Control of Novel Nanocrystalline Materials Using Pulsed Laser Deposition. Journal of Nanoparticle Research, 2000, 2, 91-96.	0.8	21
144	Laser-ablated plasma for deposition of ZnO thin films on various substrates. Science and Technology of Advanced Materials, 2001, 2, 517-523.	2.8	21

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145	Wafer scale integration of reduced graphene oxide by novel laser processing at room temperature in air. Journal of Applied Physics, 2016, 120, .	1.1	21
146	Synthesis of multifunctional microdiamonds on stainless steel substrates by chemical vapor deposition. Carbon, 2021, 171, 739-749.	5.4	21
147	Epitaxial VO2/Cr2O3/sapphire heterostructure for multifunctional applications. Applied Physics Letters, 2011, 98, .	1.5	20
148	Scale-up of Qâ€‘carbon and nanodiamonds by pulsed laser annealing. Diamond and Related Materials, 2019, 99, 107531.	1.8	20
149	Effect of free surface and interface on thermal annealing of dislocation loops in silicon. Journal of Applied Physics, 1987, 62, 1694-1697.	1.1	19
150	Synthesis of diamond films on Hastelloy. Journal of Materials Research, 1992, 7, 2785-2790.	1.2	19
151	Enhancement in critical current density of Y1Ba2Cu3O7âˆ'Î´thin films on hastelloy with TiN buffer layers. Applied Physics Letters, 1992, 61, 976-978.	1.5	19
152	Laser processing of BN and AIN films. Journal of Electronic Materials, 1996, 25, 143-149.	1.0	19
153	Room temperature ferromagnetism in epitaxial Cr2O3 thin films grown on r-sapphire. Journal of Applied Physics, 2015, 117, 193907.	1.1	19
154	Stability of electron field emission in Q-carbon. MRS Communications, 2018, 8, 1343-1351.	0.8	19
155	Diamond film growth by HFCVD on Q-carbon seeded substrate. Carbon, 2019, 141, 182-189.	5.4	19
156	Role of Q-carbon in nucleation and formation of continuous diamond film. Carbon, 2021, 176, 558-568.	5.4	19
157	Optical properties of silicon related insulators. Journal of Applied Physics, 1987, 61, 2017-2021.	1.1	18
158	Characterization of the interface between Ge+â€implanted crystalline silicon and its thermally grown oxide by spectroscopic ellipsometry. Journal of Applied Physics, 1990, 67, 599-603.	1.1	18
159	Reduced Graphene Oxide/Amorphous Carbon Pâ€“N Junctions: Nanosecond Laser Patterning. ACS Applied Materials & Interfaces, 2019, 11, 24318-24330.	4.0	18
160	Laser surface modification of metal-coated ceramics. Journal of Materials Research, 1988, 3, 1119-1126.	1.2	17
161	Origin of room-temperature ferromagnetism in cobalt-doped ZnO. Journal of Electronic Materials, 2004, 33, 1298-1302.	1.0	17
162	High temperature superconductivity in distinct phases of amorphous B-doped Q-carbon. Journal of Applied Physics, 2018, 123, .	1.1	17

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163	Fabrication of ultrahard Q-carbon nanocoatings on AISI 304 and 316 stainless steels and subsequent formation of high-quality diamond films. Diamond and Related Materials, 2020, 104, 107742.	1.8	17
164	Structural evolution of laser-irradiated ultrananocrystalline diamond/amorphous carbon composite films prepared by coaxial arc plasma. Applied Physics Express, 2020, 13, 105503.	1.1	17
165	Modelling of microstructural features in Y-Ba-Cu-O superconductors. Philosophical Magazine A: Physics of Condensed Matter, Structure, Defects and Mechanical Properties, 1989, 59, 917-937.	0.8	16
166	Role ofinsiturapid isothermal processing in the solid phase epitaxial growth of IIâ€A fluoride films on (100) and (111)â€‰InP. Applied Physics Letters, 1990, 56, 247-249.	1.5	16
167	Aluminum nitride buffer layer for diamond film growth. Journal of Materials Research, 1996, 11, 1810-1818.	1.2	16
168	Growth of single crystal MgO on TiN/Si heterostructure by pulsed laser deposition. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 1999, 17, 3393-3396.	0.9	16
169	Ohmic contact to p-type GaAs using Cu3Ge. Applied Physics Letters, 1999, 75, 3953-3955.	1.5	16
170	Effect of chamber pressure and atmosphere on the microstructure and nanomechanical properties of amorphous carbon films prepared by pulsed laser deposition. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2001, 19, 311-316.	0.9	16
171	Grain size effect on twin density in as-deposited nanocrystalline Cu film. Philosophical Magazine, 2013, 93, 4355-4363.	0.7	16
172	Electrical and microstructural characteristics of Ge/Cu ohmic contacts to n-type GaAs. Journal of Materials Research, 1997, 12, 2325-2331.	1.2	15
173	Structural and magnetoresistance properties of La2/3Ca1/3MnO3 thin films on buffered silicon substrates. Applied Physics Letters, 2001, 78, 1098-1100.	1.5	15
174	Growth of biepitaxial zinc oxide thin films on silicon (100) using yttria-stabilized zirconia buffer layer. Applied Physics Letters, 2008, 93, 251905.	1.5	15
175	Non-equilibrium processing of ferromagnetic heavily reduced graphene oxide. Carbon, 2019, 153, 663-673.	5.4	15
176	Nucleation of a 60Â° glide dislocation in two-dimensional or three-dimensional growth of epilayers. Journal of Electronic Materials, 1991, 20, 767-774.	1.0	14
177	Fabrication of Niâ€“Al thin films by the pulsed laser deposition technique. Journal of Materials Research, 1992, 7, 2639-2642.	1.2	14
178	Growth, characterization, and electrical properties of PbZr_{0.52}Ti_{0.48}O₃ thin films on buffered silicon substrates using pulsed laser deposition. Journal of Materials Research, 2003, 18, 111-114.	1.2	14
179	Novel Methods of Forming Self-Assembled Nanostructured Materials: Ni Nanodots in Al₂O₃ and TiN Matrices. Journal of Nanoscience and Nanotechnology, 2004, 4, 726-732.	0.9	14
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