Takashi Suemasu

List of Publications by Year
in descending order

452 papers	8,456 citations	61857 43 h-index	110170 64 g-index
455 all docs	455 docs citations	455 times ranked	2081 citing authors

#	Article	IF	Citations
1	Optical and electrical properties of semiconducting BaSi2 thin films on Si substrates grown by molecular beam epitaxy. Thin Solid Films, 2006, 508, 363-366.	0.8	191
2	Room Temperature 1.6 Âµm Electroluminescence from a Si-Based Light Emitting Diode with Î²-FeSi2 Active Region. Japanese Journal of Applied Physics, 2000, 39, L1013-L1015.	0.8	190
3	Epitaxial Growth of Semiconducting BaSi2Films on Si(111) Substrates by Molecular Beam Epitaxy. Japanese Journal of Applied Physics, 2004, 43, L478-L481.	0.8	145
4	Investigation of grain boundaries in BaSi2 epitaxial films on Si(1 1 1) substrates using transmission electron microscopy and electron-beam-induced current technique. Journal of Crystal Growth, 2012, 348, 75-79.	0.7	133
5	Investigation of the energy band structure of orthorhombic BaSi2 by optical and electrical measurements and theoretical calculations. Applied Physics Letters, 2002, 81, 1032-1034.	1.5	124
6	Effect of amorphous Si capping layer on the hole transport properties of BaSi2 and improved conversion efficiency approaching 10% in p-BaSi2/n-Si solar cells. Applied Physics Letters, 2016, 109, .	1.5	109
7	Epitaxial Growth of Semiconducting BaSi2Thin Films on Si(111) Substrates by Reactive Deposition Epitaxy. Japanese Journal of Applied Physics, 2004, 43, 4155-4156.	0.8	107
8	Exploring the possibility of semiconducting BaSi₂for thin-film solar cell applications. Japanese Journal of Applied Physics, 2015, 54, 07JA01.	0.8	105
9	Optical Absorption Properties of BaSi₂ Epitaxial Films Grown on a Transparent Silicon-on-Insulator Substrate Using Molecular Beam Epitaxy. Japanese Journal of Applied Physics, 2011, 50, 068001.	0.8	102
10	Exploring the potential of semiconducting BaSi₂for thin-film solar cell applications. Journal Physics D: Applied Physics, 2017, 50, 023001.	1.3	99
11	Low-temperature (180â€‰Â°C) formation of large-grained Ge (111) thin film on insulator using accelerated metal-induced crystallization. Applied Physics Letters, 2014, 104, .	1.5	96
12	Formation of Î²-FeSi2Layers on Si(001) Substrates. Japanese Journal of Applied Physics, 1997, 36, 3620-3624.	0.8	92
13	High-Electrical-Conductivity Multilayer Graphene Formed by Layer Exchange with Controlled Thickness and Interlayer. Scientific Reports, 2019, 9, 4068.	1.6	89
14	Highly (111)-oriented Ge thin films on insulators formed by Al-induced crystallization. Applied Physics Letters, 2012, 101, 072106.	1.5	88
15	Investigation of the recombination mechanism of excess carriers in undoped BaSi2 films on silicon. Journal of Applied Physics, 2012, 112, .	1.1	84
16	Influence of grain size and surface condition on minority-carrier lifetime in undoped n-BaSi2 on Si(111). Journal of Applied Physics, 2014, 115, .	1.1	80
17	Influence of Si growth temperature for embedding Î²-FeSi2 and resultant strain in Î²-FeSi2 on light emission from p-Si/Î²-FeSi2â€‰particles/n-Si light-emitting diodes. Applied Physics Letters, 2001, 79, 1804-1806.	1.5	79
18	Perpendicular magnetic anisotropy of Mn4N films on MgO(001) and SrTiO3(001) substrates. Journal of Applied Physics, 2014, 115, .	1.1	77

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19	Optical Absorption Properties of BaSi₂Epitaxial Films Grown on a Transparent Silicon-on-Insulator Substrate Using Molecular Beam Epitaxy. Japanese Journal of Applied Physics, 2011, 50, 068001.	0.8	77
20	Determination of Bulk Minority-Carrier Lifetime in BaSi₂Earth-Abundant Absorber Films by Utilizing a Drastic Enhancement of Carrier Lifetime by Post-Growth Annealing. Applied Physics Express, 2013, 6, 112302.	1.1	75
21	Control of Electron and Hole Concentrations in Semiconducting Silicide BaSi₂with Impurities Grown by Molecular Beam Epitaxy. Applied Physics Express, 0, 1, 051403.	1.1	72
22	In-situ heavily p-type doping of over 1020â€‰cmâ^'3 in semiconducting BaSi2 thin films for solar cells applications. Applied Physics Letters, 2013, 102, .	1.5	72
23	Band Diagrams of BaSi2/Si Structure by Kelvin Probe and Current-Voltage Characteristics. Japanese Journal of Applied Physics, 2006, 45, L519-L521.	0.8	71
24	High-hole mobility polycrystalline Ge on an insulator formed by controlling precursor atomic density for solid-phase crystallization. Scientific Reports, 2017, 7, 16981.	1.6	71
25	p-BaSi2/n-Si heterojunction solar cells with conversion efficiency reaching 9.0%. Applied Physics Letters, 2016, 108, .	1.5	69
26	70â€‰Â°C synthesis of high-Sn content (25%) GeSn on insulator by Sn-induced crystallization of amorphous Ge. Applied Physics Letters, 2015, 106, .	1.5	64
27	Spin polarization of Fe4N thin films determined by point-contact Andreev reflection. Applied Physics Letters, 2009, 94, .	1.5	63
28	Negative differential resistance of metal (CoSi2)/insulator (CaF2) tripleâ€barrier resonant tunneling diode. Applied Physics Letters, 1993, 62, 300-302.	1.5	62
29	Optical Absorption Edge of Ternary Semiconducting Silicide Ba1-xSrxSi2. Japanese Journal of Applied Physics, 2006, 45, L390-L392.	0.8	62
30	Molecular beam epitaxy of BaSi2 thin films on Si(001) substrates. Journal of Crystal Growth, 2012, 345, 16-21.	0.7	61
31	Photoresponse Properties of Semiconducting BaSi₂Epitaxial Films Grown on Si(111) Substrates by Molecular Beam Epitaxy. Applied Physics Express, 0, 2, 021101.	1.1	58
32	Cubic Dominant GaN Growth on (001) GaAs Substrates by Hydride Vapor Phase Epitaxy. Japanese Journal of Applied Physics, 1997, 36, L1-L3.	0.8	56
33	Photoresponse Properties of Polycrystalline BaSi₂Films Grown on SiO₂Substrates Using (111)-Oriented Si Layers by an Aluminum-Induced Crystallization Method. Applied Physics Express, 0, 2, 051601.	1.1	55
34	Impact of Ba to Si deposition rate ratios during molecular beam epitaxy on carrier concentration and spectral response of BaSi2 epitaxial films. Journal of Applied Physics, 2018, 123, 045703.	1.1	55
35	Improving carrier mobility of polycrystalline Ge by Sn doping. Scientific Reports, 2018, 8, 14832.	1.6	51
36	Improved photoresponsivity of semiconducting BaSi₂ epitaxial films grown on a tunnel junction for thin-film solar cells. Applied Physics Letters, 2012, 100, 152114.	1.5	50

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37	Metal-induced layer exchange of group IV materials. Journal Physics D: Applied Physics, 2020, 53, 373002.	1.3	50
38	Aggregation of Monocrystalline Î²-FeSi 2 by Annealing and by Si Overlayer Growth. Japanese Journal of Applied Physics, 1997, 36, L1225-L1228.	0.8	49
39	Analysis of the electrical properties of Cr/n-BaSi2 Schottky junction and n-BaSi2/p-Si heterojunction diodes for solar cell applications. Journal of Applied Physics, 2014, 115, .	1.1	49
40	Large Current Driven Domain Wall Mobility and Gate Tuning of Coercivity in Ferrimagnetic Mn₄N Thin Films. Nano Letters, 2019, 19, 8716-8723.	4.5	48
41	Current-Driven Domain Wall Dynamics in Ferrimagnetic Nickel-Doped Mn₄N Films: Very Large Domain Wall Velocities and Reversal of Motion Direction across the Magnetic Compensation Point. Nano Letters, 2021, 21, 2580-2587.	4.5	48
42	Epitaxial growth of semiconducting Î²-FeSi2 and its application to light-emitting diodes. Thin Solid Films, 2004, 461, 209-218.	0.8	47
43	Operation of BaSi₂ homojunction solar cells on p⁺-Si(111) substrates and the effect of structure parameters on their performance. Applied Physics Express, 2019, 12, 041005.	1.1	47
44	Direct Growth of [100]-Oriented High-Quality Î²-FeSi2 Films on Si(001) Substrates by Molecular Beam Epitaxy. Japanese Journal of Applied Physics, 2001, 40, L1008-L1011.	0.8	45
45	Electrical characterization and conduction mechanism of impurity-doped BaSi2 films grown on Si(111) by molecular beam epitaxy. Thin Solid Films, 2012, 522, 95-99.	0.8	45
46	Fabrication and characterization of polycrystalline BaSi₂ by RF sputtering. Physica Status Solidi C: Current Topics in Solid State Physics, 2013, 10, 1759-1761.	0.8	45
47	Orientation Control of Large-Grained Si Films on Insulators by Thickness-Modulated Al-Induced Crystallization. Crystal Growth and Design, 2013, 13, 1767-1770.	1.4	44
48	Control of the Conduction Type of Nondoped High Mobility Î²-FeSi2 Films Grown from Si/Fe Multilayers by Change of Si/Fe Ratios. Japanese Journal of Applied Physics, 2000, 39, L789-L791.	0.8	42
49	p-BaSi2/n-Si heterojunction solar cells on Si(001) with conversion efficiency approaching 10%: comparison with Si(111). Applied Physics Express, 2018, 11, 062301.	1.1	42
50	Realization of single-phase BaSi₂films by vacuum evaporation with suitable optical properties and carrier lifetime for solar cell applications. Japanese Journal of Applied Physics, 2015, 54, 07JE02.	0.8	41
51	Molecular beam epitaxy of ferromagnetic Î³â€²-Fe4N thin films on LaAlO3(1 0 0), SrTiO3(1 0 0) and MgO(1 0 0) substrates. Journal of Crystal Growth, 2011, 322, 63-68.	0.7	40
52	Selective formation of large-grained, (100)- or (111)-oriented Si on glass by Al-induced layer exchange. Journal of Applied Physics, 2014, 115, .	1.1	40
53	Influence of air exposure duration and a-Si capping layer thickness on the performance of p-BaSi2/n-Si heterojunction solar cells. AIP Advances, 2016, 6, .	0.6	40
54	Sign of the spin-polarization in cobalt-iron nitride films determined by the anisotropic magnetoresistance effect. Journal of Applied Physics, 2014, 116, .	1.1	39

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55	Metal(CoSi2)/Insulator(CaF2) Resonant Tunneling Diode. Japanese Journal of Applied Physics, 1994, 33, 57-65.	0.8	38
56	Epitaxial Growth of Si-Based Ternary Alloy Semiconductor Ba1-xSrxSi2Films on Si(111) Substrates by Molecular Beam Epitaxy. Japanese Journal of Applied Physics, 2004, 43, L771-L773.	0.8	38
57	Growth of Siâˆ•Î²-FeSi2âˆ•Si double-heterostructures on Si(111) substrates by molecular-beam epitaxy and photoluminescence using time-resolved measurements. Journal of Applied Physics, 2004, 96, 2561-2565.	1.1	38
58	Reactive deposition epitaxial growth of Î²-FeSi2 layers on Si(001). Applied Surface Science, 1997, 117-118, 303-307.	3.1	37
59	Spin and orbital magnetic moments of molecular beam epitaxy Î³â€²-Fe4N films on LaAlO3(001) and MgO(001) substrates by x-ray magnetic circular dichroism. Applied Physics Letters, 2011, 98, .	1.5	36
60	Epitaxial growth and magnetic characterization of ferromagnetic Co4N thin films on SrTiO3(001) substrates by molecular beam epitaxy. Journal of Crystal Growth, 2011, 336, 40-43.	0.7	35
61	Perpendicular magnetic anisotropy in CoxMn4âˆ’xN (x = 0 and 0.2) epitaxial films and possibility of tetragonal Mn4N phase. AIP Advances, 2016, 6, .	0.6	34
62	Fabrication of n⁺-BaSi₂/p⁺-Si Tunnel Junction on Si(111) Surface by Molecular Beam Epitaxy for Photovoltaic Applications. Applied Physics Express, 2010, 3, 021301.	1.1	33
63	Epitaxial growth of ferromagnetic Fe3N films on Si(111) substrates by molecular beam epitaxy. Journal of Crystal Growth, 2007, 301-302, 597-601.	0.7	32
64	Structural control of organic solar cells based on nonplanar metallophthalocyanine/C60 heterojunctions using organic buffer layers. Organic Electronics, 2011, 12, 966-973.	1.4	32
65	Formation of polycrystalline BaSi2 films by radio-frequency magnetron sputtering for thin-film solar cell applications. Thin Solid Films, 2013, 534, 116-119.	0.8	32
66	Precipitation control and activation enhancement in boron-doped p+-BaSi2 films grown by molecular beam epitaxy. Applied Physics Letters, 2014, 104, .	1.5	32
67	Evaluation of band offset at amorphous-Si/BaSi2 interfaces by hard x-ray photoelectron spectroscopy. Journal of Applied Physics, 2016, 119, .	1.1	32
68	Optimum annealing condition for photoluminescence from Î²-FeSi2 balls grown by reactive deposition epitaxy and embedded in Si crystal. Journal of Luminescence, 2000, 87-89, 528-531.	1.5	31
69	Growth of Al-doped p-type <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si1.gif" display="inline" overflow="scroll"><mml:msub><mml:mrow><mml:mstyle mathvariant="normal"><mml:mi>BaSi</mml:mi></mml:mstyle></mml:mrow><mml:mrow><mml:mn>2</mml:mn></mml:mrow></mml:msub></mml:math> films by molecular beam epitaxy and the effect of high-temperature annealing on their electrical properties. Physics Procedia, 2011, 11, 27-30.	1.2	31
70	Fabrication and characterization of BaSi₂ epitaxial films over 1 Âµm in thickness on Si(111). Japanese Journal of Applied Physics, 2014, 53, 04ER04.	0.8	31
71	Fabrication of single-phase polycrystalline BaSi₂thin films on silicon substrates by vacuum evaporation for solar cell applications. Japanese Journal of Applied Physics, 2015, 54, 08KC03.	0.8	31
72	Structural and electrical characterizations of crack-free BaSi2 thin films fabricated by thermal evaporation. Thin Solid Films, 2015, 595, 68-72.	0.8	31

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73	Investigation of direct and indirect band gaps of [100]-oriented nearly strain-free Î²-FeSi2 films grown by molecular-beam epitaxy. Applied Physics Letters, 2002, 80, 556-558.	1.5	30
74	Growth and characterization of group-III impurity-doped semiconducting BaSi2 films grown by molecular beam epitaxy. Thin Solid Films, 2007, 515, 8242-8245.	0.8	30
75	On the Controlling Mechanism of Preferential Orientation of Polycrystalline-Silicon Thin Films Grown by Aluminum-Induced Crystallization. Applied Physics Express, 2010, 3, 095803.	1.1	30
76	Improved Surface Quality of the Metal-Induced Crystallized Ge Seed Layer and Its Influence on Subsequent Epitaxy. Crystal Growth and Design, 2015, 15, 1535-1539.	1.4	30
77	Simple way of finding Ba to Si deposition rate ratios for high photoresponsivity in BaSi₂ films by Raman spectroscopy. Applied Physics Express, 2019, 12, 055506.	1.1	30
78	Growth of Continuous and Highly (100)-Oriented Î²-FeSi 2 Films on Si(001) from Si/Fe Multilayers with SiO 2 Capping and Templates. Japanese Journal of Applied Physics, 1999, 38, L878-L881.	0.8	29
79	Improvement of the Electrical Properties of Î²-FeSi 2 Films on Si (001) by High-Temperature Annealing. Japanese Journal of Applied Physics, 2000, 39, L233-L236.	0.8	29
80	Room-temperature electroluminescence of a Si-based p-i-n diode with Î²-FeSi2 particles embedded in the intrinsic silicon. Journal of Applied Physics, 2005, 97, 043529.	1.1	29
81	Fabrication of (111)-oriented Si layers on SiO2 substrates by an aluminum-induced crystallization method and subsequent growth of semiconducting BaSi2 layers for photovoltaic application. Journal of Crystal Growth, 2009, 311, 3581-3586.	0.7	29
82	Evaluation of potential variations around grain boundaries in BaSi2 epitaxial films by Kelvin probe force microscopy. Applied Physics Letters, 2013, 103, .	1.5	29
83	Transistor action of metal (CoSi2)/insulator (CaF2) hot electron transistor structure. Electronics Letters, 1992, 28, 1002-1004.	0.5	28
84	Epitaxial growth and characterization of Si-based light-emitting Si/Î²-FeSi2 film/Si double heterostructures on Si(001) substrates by molecular beam epitaxy. Thin Solid Films, 2006, 508, 371-375.	0.8	28
85	Effects of deposition rate on the structure and electron density of evaporated BaSi2 films. Journal of Applied Physics, 2016, 120, 045103.	1.1	28
86	Polycrystalline thin-film transistors fabricated on high-mobility solid-phase-crystallized Ge on glass. Applied Physics Letters, 2019, 114, .	1.5	28
87	Dependence of photoluminescence from Î²-FeSi2 and induced deep levels in Si on the size of Î²-FeSi2 balls embedded in Si crystals. Thin Solid Films, 2001, 381, 209-213.	0.8	27
88	Optical properties ofÎ²â^'FeSi2under pressure. Physical Review B, 2002, 65, .	1.1	27
89	Growth of Epitaxial Î²-FeSi2Thin Film on Si(001) by Metal-Organic Chemical Vapor Deposition. Japanese Journal of Applied Physics, 2004, 43, L551-L553.	0.8	27
90	Fabrication of p-Si/Î²-FeSi2/n-Si Double-Heterostructure Light-Emitting Diode by Molecular Beam Epitaxy. Japanese Journal of Applied Physics, 2005, 44, 2483-2486.	0.8	27

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91	Photoresponse properties of Alâ^•n-Î²-FeSi2 Schottky diodes using Î²-FeSi2 single crystals. Applied Physics Letters, 2007, 91, 142114.	1.5	27
92	Photoluminescence decay time and electroluminescence of p-Siâ^•Î²-FeSi2â€‚particlesâ^•n-Si and p-Siâ^•Î²-FeSi2â€‚filmâ^•n-Si double-heterostructures light-emitting diodes grown by molecular-beam epitaxy. Journal of Applied Physics, 2007, 101, 124506.	1.1	27
93	Molecular beam epitaxy of band gap tunable ternary semiconducting silicides Ba1â^'xSrxSi2 for photovoltaic application. Journal of Crystal Growth, 2007, 301-302, 680-683.	0.7	27
94	p-Si/Î²-FeSi2/n-Si double-heterostructure light-emitting diodes achieving 1.6â€‚Î¼m electroluminescence of 0.4 mW at room temperature. Applied Physics Letters, 2009, 94, 213509.	1.5	27
95	Negative spin polarization at the Fermi level in Fe4N epitaxial films by spin-resolved photoelectron spectroscopy. Journal of Applied Physics, 2012, 112, .	1.1	27
96	Millimeter-sized magnetic domains in perpendicularly magnetized ferrimagnetic Mn₄N thin films grown on SrTiO₃. Japanese Journal of Applied Physics, 2018, 57, 120310.	0.8	27
97	Magnetic and magneto-transport properties of Mn4N thin films by Ni substitution and their possibility of magnetic compensation. Journal of Applied Physics, 2019, 125, .	1.1	27
98	Strong correlation between uniaxial magnetic anisotropic constant and in-plane tensile strain in Mn4N epitaxial films. AIP Advances, 2020, 10, .	0.6	27
99	Al- and Cu-doped <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si1.gif" display="inline" overflow="scroll"><mml:msub><mml:mrow><mml:mstyle mathvariant="normal"><mml:mi>BaSi</mml:mi></mml:mstyle></mml:mrow><mml:mrow><mml:mn>2</mml:mn></mml:mrow></mml:msub></mml:math> films on Si(111) substrate by molecular beam epitaxy and evaluation of depth profiles of Al and Cu atoms. Physics Procedia, 2011, 11, 11-14.	1.2	26
100	N-type doping of BaSi2 epitaxial films by phosphorus ion implantation and thermal annealing. Thin Solid Films, 2014, 557, 90-93.	0.8	26
101	Direct synthesis of multilayer graphene on an insulator by Ni-induced layer exchange growth of amorphous carbon. Applied Physics Letters, 2017, 110, .	1.5	26
102	High-quality multilayer graphene on an insulator formed by diffusion controlled Ni-induced layer exchange. Applied Physics Letters, 2017, 111, .	1.5	26
103	Spectroscopic evidence of photogenerated carrier separation by built-in electric field in Sb-doped n-BaSi₂/B-doped p-BaSi₂homojunction diodes. Japanese Journal of Applied Physics, 2018, 57, 050310.	0.8	26
104	Thermoelectric Inorganic SiGe Film Synthesized on Flexible Plastic Substrate. ACS Applied Energy Materials, 0, , .	2.5	26
105	Thick and Smooth Hexagonal GaN Growth on GaAs (111) Substrates at 1000Â°C with Halide Vapor Phase Epitaxy. Japanese Journal of Applied Physics, 1999, 38, L700-L702.	0.8	25
106	Growth and Characterization of Si-Based Light-Emitting Diode with Î²-FeSi2-Particles/Si Multilayered Active Region by Molecular Beam Epitaxy. Japanese Journal of Applied Physics, 2005, 44, 3951-3953.	0.8	25
107	Postannealing effects on undoped BaSi₂evaporated films grown on Si substrates. Japanese Journal of Applied Physics, 2017, 56, 05DB05.	0.8	25
108	Identification of Vibrational Modes in BaSi₂ Epitaxial Films by Infrared and Raman Spectroscopy. Defect and Diffusion Forum, 0, 386, 43-47.	0.4	25

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109	High hole mobility (â‰¥500 cm² V^{â^'1} s^{â^'1}) polycrystalline Ge films on GeO₂-coated glass and plastic substrates. Applied Physics Express, 2019, 12, 015508.	1.1	25
110	Improvement of 1.5 Âµm Photoluminescence from Reactive Deposition Epitaxy (RDE) Grown Î²-FeSi 2 Balls in Si by High Temperature Annealing. Japanese Journal of Applied Physics, 1999, 38, L620-L622.	0.8	24
111	Hole mobility of p-type Î²â€FeSi2 thin films grown from Siâ•Fe multilayers. Journal of Applied Physics, 2005, 97, 093716.	1.1	24
112	Effect of using a high-purity Fe source on the transport properties of p-type Î²-FeSi2 grown by molecular-beam epitaxy. Journal of Applied Physics, 2007, 102, 103706.	1.1	24
113	Fabrication of p-Si/Î²-FeSi2 balls/n-si structures by MBE and their electrical and optical properties. Journal of Luminescence, 1998, 80, 473-477.	1.5	23
114	X-ray magnetic circular dichroism of ferromagnetic Co4N epitaxial films on SrTiO3(001) substrates grown by molecular beam epitaxy. Applied Physics Letters, 2011, 99, 252501.	1.5	23
115	Potential variations around grain boundaries in impurity-doped BaSi2 epitaxial films evaluated by Kelvin probe force microscopy. Journal of Applied Physics, 2014, 116, .	1.1	23
116	Control of grain size and crystallinity of poly-Si films on quartz by Al-induced crystallization. CrystEngComm, 2017, 19, 2305-2311.	1.3	23
117	Advanced solid-phase crystallization for high-hole mobility (450) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 50 427 Td (cm²/s 2018, 11, 031302.	1.1	23
118	Metal Catalysts for Layer-Exchange Growth of Multilayer Graphene. ACS Applied Materials & Interfaces, 2018, 10, 41664-41669.	4.0	23
119	Magnetic reversal in rare-earth free Mn4â€‰â^'â€‰xNixN epitaxial films below and above Ni composition needed for magnetic compensation around room temperature. Journal of Applied Physics, 2020, 127, .	1.1	23
120	Strain effects on polycrystalline germanium thin films. Scientific Reports, 2021, 11, 8333.	1.6	23
121	Room temperature negative differential resistance of metal (CoSi2)/insulator (CaF2) resonant tunnelling diode. Electronics Letters, 1992, 28, 1432.	0.5	22
122	Energetic stability and magnetic moment of tri-, tetra-, and octa- ferromagnetic element nitrides predicted by first-principle calculations. Journal of Alloys and Compounds, 2014, 611, 440-445.	2.8	22
123	N-type doping of BaSi2 epitaxial films by arsenic ion implantation through a dose-dependent carrier generation mechanism. Thin Solid Films, 2014, 567, 105-108.	0.8	22
124	First-principles study of twin grain boundaries in epitaxial BaSi2 on Si(111). Journal of Applied Physics, 2016, 120, .	1.1	22
125	High-electron-mobility (370â€‰cm2/Vs) polycrystalline Ge on an insulator formed by As-doped solid-phase crystallization. Scientific Reports, 2019, 9, 16558.	1.6	22
126	Growth condition dependence of GaN crystal structure on (0 0 1)GaAs by hydride vapor-phase epitaxy. Journal of Crystal Growth, 1998, 189-190, 395-400.	0.7	21

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127	Dependence of crystal orientation in Al-induced crystallized poly-Si layers on SiO2 insertion layer thickness. Journal of Crystal Growth, 2012, 356, 65-69.	0.7	21
128	Lattice and grain-boundary diffusions of boron atoms in BaSi2 epitaxial films on Si(111). Journal of Applied Physics, 2013, 113, .	1.1	21
129	Vertically Aligned Ge Nanowires on Flexible Plastic Films Synthesized by (111)-Oriented Ge Seeded Vaporâ€“Liquidâ€“Solid Growth. ACS Applied Materials & Interfaces, 2015, 7, 18120-18124.	4.0	21
130	Photoresponse properties of BaSi₂film grown on Si (100) by vacuum evaporation. Materials Research Express, 2016, 3, 076204.	0.8	21
131	On the Mechanism of BaSi2 Thin Film Formation on Si Substrate by Vacuum Evaporation. Procedia Engineering, 2016, 141, 23-26.	1.2	21
132	Epitaxial growth and magnetic properties of Fe 4â^' x Mn x N thin films grown on MgO(0â€¯0â€¯1) substrates by molecular beam epitaxy. Journal of Crystal Growth, 2018, 489, 20-23.	0.7	21
133	Recent Progress Toward Realization of Highâ€Efficiency BaSi₂ Solar Cells: Thinâ€Film Deposition Techniques and Passivation of Defects. Physica Status Solidi (A) Applications and Materials Science, 2022, 219, 2100593.	0.8	21
134	Record-High Hole Mobility Germanium on Flexible Plastic with Controlled Interfacial Reaction. ACS Applied Electronic Materials, 2022, 4, 269-275.	2.0	21
135	Donor and Acceptor Levels in Undoped Î²-FeSi2 Films Grown on Si (001) Substrates. Japanese Journal of Applied Physics, 2001, 40, L249-L251.	0.8	20
136	Epitaxial growth of Fe3Si/CaF2/Si(111) hybrid structures by molecular beam epitaxy. Thin Solid Films, 2006, 508, 78-81.	0.8	20
137	Direct synthesis of highly textured Ge on flexible polyimide films by metal-induced crystallization. Applied Physics Letters, 2014, 104, .	1.5	20
138	Evaluation of minority carrier diffusion length of undoped n-BaSi₂epitaxial thin films on Si(001) substrates by electron-beam-induced-current technique. Japanese Journal of Applied Physics, 2014, 53, 078004.	0.8	20
139	Measurement of valence-band offset at native oxide/BaSi2 interfaces by hard x-ray photoelectron spectroscopy. Journal of Applied Physics, 2016, 119, .	1.1	20
140	Simple Vacuum Evaporation Route to BaSi2 Thin Films for Solar Cell Applications. Procedia Engineering, 2016, 141, 27-31.	1.2	20
141	Negative anisotropic magnetoresistance resulting from minority spin transport in NixFe4â^'xN (xâ€‰=â€‰1 and 3) epitaxial films. Journal of Applied Physics, 2017, 121, .	1.1	20
142	Significant photoresponsivity enhancement of polycrystalline BaSi₂ films formed on heated Si(111) substrates by sputtering. Applied Physics Express, 2018, 11, 071401.	1.1	20
143	Detection of local vibrational modes induced by intrinsic defects in undoped BaSi2 light absorber layers using Raman spectroscopy. Journal of Applied Physics, 2018, 124, 025301.	1.1	20
144	Marked enhancement of the photoresponsivity and minority-carrier lifetime of <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mi>BaS</mml:mi><mml:msub><mml:mi mathvariant="normal">i</mml:mi><mml:mn>2</mml:mn></mml:msub></mml:mrow></mml:math> passivated with atomic hydrogen. Physical Review Materials, 2019, 3, .	0.9	20

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145	X-ray magnetic circular dichroism for Co_xFe_{4â^'}_xN (xâ€‰=â€‰0, 3, 4) films grown by molecular beam epitaxy. Journal of Applied Physics, 2014, 115, 17C712.	1.1	19
146	Formation of BaSi2 heterojunction solar cells using transparent MoOx hole transport layers. Applied Physics Letters, 2015, 106, .	1.5	19
147	Effect of p-BaSi₂layer thickness on the solar cell performance of p-BaSi₂/n-Si heterojunction solar cells. Japanese Journal of Applied Physics, 2017, 56, 05DB03.	0.8	19
148	Transport properties of n- and p-type polycrystalline BaSi2. Thin Solid Films, 2018, 661, 7-15.	0.8	19
149	Low-Temperature (400 Â°C) Synthesis of Multilayer Graphene by Metal-Assisted Sputtering Deposition. ACS Omega, 2019, 4, 6677-6680.	1.6	19
150	Sb-doped crystallization of densified precursor for n-type polycrystalline Ge on an insulator with high carrier mobility. Applied Physics Letters, 2019, 114, .	1.5	19
151	350 Â°C synthesis of high-quality multilayer graphene on an insulator using Ni-induced layer exchange. Applied Physics Express, 2020, 13, 055502.	1.1	19
152	Solar cells based on n+-AZO/p-BaSi2 heterojunction: Advanced opto-electrical modelling and experimental demonstration. Solar Energy Materials and Solar Cells, 2021, 230, 111181.	3.0	19
153	Epitaxial growth and luminescence characterization of Si/Î²-FeSi2/Si multilayered structures by molecular beam epitaxy. Journal of Crystal Growth, 2007, 301-302, 676-679.	0.7	18
154	Improved Room-Temperature 1.6 Âµm Electroluminescence fromp-Si/Î²-FeSi₂/n-Si Double Heterostructures Light-Emitting Diodes. Applied Physics Express, 0, 1, 021403.	1.1	18
155	Photoresponse properties of BaSi2 epitaxial films grown on the tunnel junction for high-efficiency thin-film solar cells. Thin Solid Films, 2011, 519, 8501-8504.	0.8	18
156	Molecular Beam Epitaxy of BaSi$_{2}$ Films with Grain Size over 4 mum on Si(111). Japanese Journal of Applied Physics, 2012, 51, 098003.	0.8	18
157	Molecular beam epitaxy of boron doped p-type BaSi2 epitaxial films on Si(111) substrates for thin-film solar cells. Journal of Crystal Growth, 2013, 378, 201-204.	0.7	18
158	Local electronic states of Fe4N films revealed by x-ray absorption spectroscopy and x-ray magnetic circular dichroism. Journal of Applied Physics, 2015, 117, .	1.1	18
159	Low temperature synthesis of highly oriented p-type Si1-xGex (x: 0â€“1) on an insulator by Al-induced layer exchange. Journal of Applied Physics, 2017, 122, .	1.1	18
160	Molecular beam epitaxy growth of Mn4â^'Ni N thin films on MgO(0â€¯0â€¯1) substrates and their magnetic properties. Journal of Crystal Growth, 2019, 507, 163-167.	0.7	18
161	Manipulation of saturation magnetization and perpendicular magnetic anisotropy in epitaxial <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mi mathvariant="normal">C</mml:mi><mml:msub><mml:mi mathvariant="normal">o</mml:mi><mml:mi>x</mml:mi></mml:msub><mml:mi mathvariant="normal">M</mml:mi><mml:msub><mml:mi	1.1	18
162	Present Status of Rare-earth Free Ferrimagnet Mn₄N and Future Prospects of Mn₄N-based Compensated Ferrimagnets. Journal of the Physical Society of Japan, 2021, 90, 081010.	0.7	18

#	Article	IF	Citations
163	Influence of Î²-FeSi2 particle size and Si growth rate on 1.5 Î¼m photoluminescence from Si/Î²-FeSi2-particles/Si structures grown by molecular-beam epitaxy. Journal of Applied Physics, 2004, 95, 5483-5486.	1.1	17
164	Lifetime and diffusion length of photogenerated minority carriers in single-crystalline n-type Î²-FeSi2 bulk. Applied Physics Letters, 2008, 92, 192114.	1.5	17
165	Growth of ferromagnetic Fe4N epitaxial layers and a-axis-oriented Fe4N/MgO/Fe magnetic tunnel junction on MgO(0 0 1) substrates using molecular beam epitaxy. Journal of Crystal Growth, 2009, 311, 1616-1619.	0.7	17
166	Negative Anisotropic Magnetoresistance in Î³'-Fe₄N Epitaxial Films on SrTiO₃(001) Grown by Molecular Beam Epitaxy. Japanese Journal of Applied Physics, 2012, 51, 068001.	0.8	17
167	Double-Layered Ge Thin Films on Insulators Formed by an Al-Induced Layer-Exchange Process. Crystal Growth and Design, 2013, 13, 3908-3912.	1.4	17
168	Large-Grained Polycrystalline (111) Ge Films on Insulators by Thickness-Controlled Al-Induced Crystallization. ECS Journal of Solid State Science and Technology, 2013, 2, Q195-Q199.	0.9	17
169	Orientation control of Ge thin films by underlayer-selected Al-induced crystallization. CrystEngComm, 2014, 16, 2578.	1.3	17
170	80 Â°C synthesis of thermoelectric nanocrystalline Ge film on flexible plastic substrate by Zn-induced layer exchange. Applied Physics Express, 2019, 12, 055501.	1.1	17
171	Magnetic compensation at two different composition ratios in rare-earth-free <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mi>Mn</mml:mi><mml:mrow><mml:mn>4</mml:mn mathvariant="normal">N</mml:mi></mml:mrow></mml:math> ferrimagnetic films. Physical Review Materials, 2020, 4, .	0.9	17
172	Time-Resolved Photoluminescence Study of Si/Î²-FeSi2/Si Structures Grown by Molecular Beam Epitaxy. Japanese Journal of Applied Physics, 2004, 43, L930-L933.	0.8	16
173	Effects of Sr addition on crystallinity and optical absorption edges in ternary semiconducting silicide Ba1â^'xSrxSi2. Thin Solid Films, 2007, 515, 8216-8218.	0.8	16
174	Evaluation of minority-carrier diffusion length in n-type Î²-FeSi2 single crystals by electron-beam-induced current. Applied Physics Letters, 2008, 92, 042117.	1.5	16
175	Temperature dependent Al-induced crystallization of amorphous Ge thin films on SiO2 substrates. Journal of Crystal Growth, 2013, 372, 189-192.	0.7	16
176	Mechanism of strain relaxation in BaSi₂ epitaxial films on Si(111) substrates during postâ€growth annealing and application for film exfoliation. Physica Status Solidi C: Current Topics in Solid State Physics, 2013, 10, 1677-1680.	0.8	16
177	Photoresponse properties of undoped BaSi₂epitaxial layers on n⁺-BaSi₂/p⁺-Si(001) by molecular beam epitaxy. Japanese Journal of Applied Physics, 2014, 53, 058007.	0.8	16
178	Growth promotion of Al-induced crystallized Ge films on insulators by insertion of a Ge membrane below the Al layer. Thin Solid Films, 2014, 557, 143-146.	0.8	16
179	Epitaxial growth and magnetic properties of NixFe4-xN (xâ€‰=â€‰0, 1, 3, and 4) films on SrTiO3(001) substrates. Journal of Applied Physics, 2016, 120, .	1.1	16
180	Silver-induced layer exchange for polycrystalline germanium on a flexible plastic substrate. Journal of Applied Physics, 2017, 122, .	1.1	16

#	Article	IF	Citations
181	Three-step growth of highly photoresponsive BaSi2 light absorbing layers with uniform Ba to Si atomic ratios. Journal of Applied Physics, 2019, 126, .	1.1	16
182	Photoluminescence from Reactive Deposition Epitaxy (RDE) Grown Î²-FeSi 2 Balls Embedded in Si Crystals. Japanese Journal of Applied Physics, 1998, 37, L1513-L1516.	0.8	15
183	Epitaxy of Orthorhombic BaSi$_{2}$ with Preferential In-Plane Crystal Orientation on Si(001): Effects of Vicinal Substrate and Annealing Temperature. Japanese Journal of Applied Physics, 2012, 51, 095501.	0.8	15
184	Structural study on phosphorus doping of BaSi2 epitaxial films by ion implantation. Thin Solid Films, 2013, 534, 470-473.	0.8	15
185	Fabrication and characterizations of phosphorusâ€doped nâ€type BaSi₂ epitaxial films grown by molecular beam epitaxy. Physica Status Solidi C: Current Topics in Solid State Physics, 2013, 10, 1753-1755.	0.8	15
186	Hard x-ray photoelectron spectroscopy study on valence band structure of semiconducting BaSi2. Journal of Applied Physics, 2013, 114, 123702.	1.1	15
187	Solid-phase crystallization of densified amorphous GeSn leading to high hole mobility (540â€‰cm2/V s). Applied Physics Letters, 2019, 114, .	1.5	15
188	Annealing temperature dependence of EL properties of Si/Î²-FeSi2/Si(111) double-heterostructures light-emitting diodes. Thin Solid Films, 2006, 508, 376-379.	0.8	14
189	Effect of oxygen incorporation in the Mg2Si lattice on its conductivity type â€“ A possible reason of the p-type conductivity of postannealed Mg2Si thin film. Journal of Alloys and Compounds, 2016, 676, 91-95.	2.8	14
190	Orientation control of intermediate-composition SiGe on insulator by low-temperature Al-induced crystallization. Scripta Materialia, 2016, 122, 86-88.	2.6	14
191	Enhanced spectral response of semiconducting BaSi 2 films by oxygen incorporation. Thin Solid Films, 2017, 629, 17-21.	0.8	14
192	Magnetic domain walls in nanostrips of single-crystalline Fe4N(001) thin films with fourfold in-plane magnetic anisotropy. Journal of Applied Physics, 2017, 121, .	1.1	14
193	Improvement of Regrown Interface in InP Organo-Metallic Vapor Phase Epitaxy. Japanese Journal of Applied Physics, 1991, 30, L672-L674.	0.8	13
194	Growth of thick and pure cubic GaN on (001) GaAs by halide VPE. Journal of Crystal Growth, 1999, 198-199, 1056-1060.	0.7	13
195	Growth of Mn doped epitaxial Î²-FeSi 2 films on Si(001) substrates by reactive deposition epitaxy. Thin Solid Films, 2000, 369, 253-256.	0.8	13
196	Room-temperature ferromagnetism in Cr-doped GaN films grown by MOMBE on GaAs(111)A substrates. Physica Status Solidi C: Current Topics in Solid State Physics, 2003, 0, 2860-2863.	0.8	13
197	Epitaxial Growth of Ferromagnetic Fe3Si Films on CaF2/Si(111) by Molecular Beam Epitaxy. Japanese Journal of Applied Physics, 2005, 44, L715-L717.	0.8	13
198	Fabrication and Currentâ€“Voltage Characteristics of Fe3Si/CaF2/Fe3Si Magnetic Tunnel Junction. Japanese Journal of Applied Physics, 2008, 47, 6310-6311.	0.8	13

#	Article	IF	Citations
199	CaF2/Fe3Si/CaF2Ferromagnetic Resonant Tunneling Diodes on Si(111) by Molecular Beam Epitaxy. Applied Physics Express, 2009, 2, 063006.	1.1	13
200	Molecular beam epitaxy of Co Fe4â^'N (0.4<x<2.9) thin films on SrTiO3(001) substrates. Journal of Crystal Growth, 2012, 357, 53-57.	0.7	13
201	Growth of tr6-CaSi₂ thin films on Si(111) substrates. Japanese Journal of Applied Physics, 2018, 57, 120313.	0.8	13
202	High-hole mobility Si1-Ge (0.1 â‰ x â‰ 1) on an insulator formed by advanced solid-phase crystallization. Journal of Alloys and Compounds, 2018, 766, 417-420.	2.8	13
203	Investigation of defect levels in BaSi₂ epitaxial films by photoluminescence and the effect of atomic hydrogen passivation. Journal of Physics Communications, 2019, 3, 075005.	0.5	13
204	Zn-induced layer exchange of p- and n-type nanocrystalline SiGe layers for flexible thermoelectrics. Applied Physics Letters, 2020, 116, .	1.5	13
205	Atomic hydrogen passivation for photoresponsivity enhancement of boron-doped p-BaSi2 films and performance improvement of boron-doped p-BaSi2/n-Si heterojunction solar cells. Journal of Applied Physics, 2020, 127, .	1.1	13
206	Formation of high-photoresponsivity BaSi₂ films on glass substrate by radio-frequency sputtering for solar cell applications. Journal Physics D: Applied Physics, 2021, 54, 135106.	1.3	13
207	Preferred site occupation of <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mn>3</mml:mn><mml:mi>d</mml:mi></mml:mrow></mml:r atoms in <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mi>Ni</mml:mi><mml:mi>x</mml:mi></mml:msub><mml:msub><mml: mathvariant="normal">F</mml:mi><mml:msub><mml:mi	0.9	13
208	Theoretical and measured characteristics of metal (CoSi/sub 2/)-insulator(CaF/sub 2/) resonant tunneling transistors and the influence of parasitic elements. IEEE Transactions on Electron Devices, 1995, 42, 2203-2210.	1.6	12
209	Influence of boron-doped Si cap layer on the photoluminescence of Î²-FeSi2 particles embedded in Si matrix. Journal of Applied Physics, 2003, 94, 1518-1520.	1.1	12
210	Preparation of Î²-FeSi2 substrates by molten salt method. Thin Solid Films, 2007, 515, 8268-8271.	0.8	12
211	Polarized Raman spectra of BaSi₂epitaxial film grown by molecular beam epitaxy. Japanese Journal of Applied Physics, 2017, 56, 05DD02.	0.8	12
212	Investigation of electrically active defects in undoped BaSi2 light absorber layers using deep-level transient spectroscopy. Japanese Journal of Applied Physics, 2018, 57, 075801.	0.8	12
213	Perpendicular magnetic anisotropy in ferrimagnetic Mn4N films grown on (LaAlO3)0.3(Sr2TaAlO6)0.7(0Â0Â1) substrates by molecular beam epitaxy. Journal of Crystal Growth, 2020, 535, 125566.	0.7	12
214	Fabrication of heterojunction crystalline Si solar cells with BaSi₂ thin films prepared by a two-step evaporation method. Japanese Journal of Applied Physics, 2021, 60, 105503.	0.8	12
215	Silicon meets group-II metals in energy and electronic applicationsâ€"How to handle reactive sources for high-quality films and bulk crystals. Journal of Applied Physics, 2022, 131, .	1.1	12
216	Epitaxial growth and electrical conductance of metal(CoSi2)/insulator(CaF2) nanometer-thick layered structures on Si (111). Journal of Electronic Materials, 1992, 21, 783-789.	1.0	11

#	Article	IF	Citations
217	Influence of As Autodoping from GaAs Substrates on Thick Cubic GaN Growth by Halide Vapor Phase Epitaxy. Japanese Journal of Applied Physics, 1998, 37, L568-L570.	0.8	11
218	Minority-carrier diffusion length, minority-carrier lifetime, and photoresponsivity of Î²-FeSi2 layers grown by molecular-beam epitaxy. Journal of Applied Physics, 2011, 109, 123502.	1.1	11
219	Structural Study of BF₂ Ion Implantation and Post Annealing of BaSi₂ Epitaxial Films. Japanese Journal of Applied Physics, 2011, 50, 121202.	0.8	11
220	Electronic structures and magnetic moments of Co3FeN thin films grown by molecular beam epitaxy. Applied Physics Letters, 2013, 103, .	1.5	11
221	Characterization of defect levels in undoped n-BaSi₂epitaxial films on Si(111) by deep-level transient spectroscopy. Japanese Journal of Applied Physics, 2015, 54, 07JE01.	0.8	11
222	Reduction in interface defect density in p-BaSi₂/n-Si heterojunction solar cells by a modified pretreatment of the Si substrate. Japanese Journal of Applied Physics, 2018, 57, 025501.	0.8	11
223	Fabrication of ordered Feâ€“Ni nitride film with equiatomic Fe/Ni ratio. Japanese Journal of Applied Physics, 2018, 57, 058004.	0.8	11
224	Transition from minority to majority spin transport in iron-manganese nitride Fe4â^'xMnxN films with increasing x. Journal of Applied Physics, 2018, 124, .	1.1	11
225	Impact of deposition pressure and two-step growth technique on the photoresponsivity enhancement of polycrystalline BaSi₂ films formed by sputtering. Applied Physics Express, 2019, 12, 021004.	1.1	11
226	Quantum Interference of Electron Wave in Metal $f (CoSi_{2})/Insulator (CaF_{2})$ Resonant Tunneling Hot Electron Transistor Structure. Japanese Journal of Applied Physics, 1994, 33, L1762-L1765.	0.8	10
227	Epitaxial Growth and Magnetic Properties of Ferromagnetic Fe3N on Si(111) by Molecular Beam Epitaxy Using AlN/3C-SiC Intermediate Layers. Japanese Journal of Applied Physics, 2006, 45, L705-L707.	0.8	10
228	Epitaxial Growth and Magnetic Properties of Fe3Si/CaF2/Fe3Si Tunnel Junction Structures on CaF2/Si(111). Japanese Journal of Applied Physics, 2007, 46, L904-L906.	0.8	10
229	Enhanced Room-Temperature 1.6 Âµm Electroluminescence from Si-Based Double-Heterostructure Light-Emitting Diodes Using Iron Disilicide. Japanese Journal of Applied Physics, 2010, 49, 04DG16.	0.8	10
230	Self-organization of Ge(111)/Al/glass structures through layer exchange in metal-induced crystallization. CrystEngComm, 2014, 16, 9590-9595.	1.3	10
231	Influence of Substrate on Crystal Orientation of Large-Grained Si Thin Films Formed by Metal-Induced Crystallization. International Journal of Photoenergy, 2015, 2015, 1-7.	1.4	10
232	Growth and magnetic properties of epitaxial Fe4N films on insulators possessing lattice spacing close to Si(001) plane. Journal of Crystal Growth, 2016, 455, 66-70.	0.7	10
233	Donor and acceptor levels in impurity-doped semiconducting BaSi₂ thin films for solar-cell application. Physica Status Solidi (A) Applications and Materials Science, 2017, 214, 1700019.	0.8	10
234	Multilayer graphene on insulator formed by Co-induced layer exchange. Japanese Journal of Applied Physics, 2017, 56, 05DE03.	0.8	10

#	Article	IF	Citations
235	Temperature independent, wide modulation of anomalous Hall effect by Mn doping in Fe_{4â^'} _x Mn _x N pseudo-single-crystal films. Japanese Journal of Applied Physics, 2018, 57, 120305.	0.8	10
236	Improving the photoresponse spectra of BaSi2 layers by capping with hydrogenated amorphous Si layers prepared by radio-frequency hydrogen plasma. AIP Advances, 2018, 8, 055306.	0.6	10
237	Effects of lattice parameter manipulations on electronic and optical properties of BaSi2. Thin Solid Films, 2019, 686, 137436.	0.8	10
238	High photoresponsivity in a GaAs film synthesized on glass using a pseudo-single-crystal Ge seed layer. Applied Physics Letters, 2019, 114, .	1.5	10
239	Multilayer Graphene Battery Anodes on Plastic Sheets for Flexible Electronics. ACS Applied Energy Materials, 2020, 3, 8410-8414.	2.5	10
240	Thickness-dependent thermoelectric properties of Si1â^'xGex films formed by Al-induced layer exchange. Journal of Applied Physics, 2021, 129, .	1.1	10
241	High thermoelectric power factors in polycrystalline germanium thin films. Applied Physics Letters, 2021, 119, .	1.5	10
242	Zn_{1â€“x}Ge_xO_y Passivating Interlayers for BaSi₂ Thin-Film Solar Cells. ACS Applied Materials & Interfaces, 2022, 14, 13828-13835.	4.0	10
243	COMPARISON OF DONOR AND ACCEPTOR LEVELS IN UNDOPED, HIGH QUALITY Î²-FeSi2 FILMS GROWN BY MBE AND MULTI-LAYER METHOD. International Journal of Modern Physics B, 2002, 16, 4314-4317.	1.0	9
244	Molecular Beam Epitaxy of Highly [100]-Oriented Î²-FeSi2Films on Lattice-Matched Strained-Si(001) Surface Using Si0.7Ge0.3Layers. Japanese Journal of Applied Physics, 2004, 43, L957-L959.	0.8	9
245	Influence of AlN Growth Conditions on the Polarity of GaN Grown on AlN/Si(111) by Metalorganic Molecular Beam Epitaxy. Japanese Journal of Applied Physics, 2004, 43, L151-L153.	0.8	9
246	Epitaxial growth of Fe3Si/CaF2/Fe3Si magnetic tunnel junction structures on CaF2/Si(111) by molecular beam epitaxy. Thin Solid Films, 2007, 515, 8254-8258.	0.8	9
247	Growth of highly oriented crystalline Îµ-Fe/AlN/Fe3N trilayer structures on Si(1 1 1) substrates by molecular beam epitaxy. Journal of Crystal Growth, 2007, 309, 25-29.	0.7	9
248	Semiconductor(BaSi2)/metal(CoSi2) Schottky-barrier structures epitaxially grown on Si(111) substrates by molecular beam epitaxy. Journal of Crystal Growth, 2008, 310, 1250-1255.	0.7	9
249	Room-Temperature 1.6 Âµm Electroluminescence fromp⁺-Si/Î²-FeSi₂/n⁺-Si Diodes on Si(001) without High-Temperature Annealing. Applied Physics Express, 0, 1, 051405.	1.1	9
250	Growth of manganese silicide layers on Si substrates using MnCl₂ source. Physica Status Solidi (A) Applications and Materials Science, 2009, 206, 233-237.	0.8	9
251	Room temperature magnetoresistance in Fe₃Si/CaF₂/Fe₃Si MTJ epitaxially grown on Si(111). Journal of Physics: Conference Series, 2011, 266, 012088.	0.3	9
252	Lattice and grain-boundary diffusions of impurity atoms in BaSi2 epitaxial layers grown by molecular beam epitaxy. Journal of Crystal Growth, 2013, 378, 189-192.	0.7	9

#	Article	IF	Citations
253	On the growth mechanism of polycrystalline silicon thin film by Al-induced layer exchange process. Journal of Crystal Growth, 2013, 362, 16-19.	0.7	9
254	Diffusion coefficients of impurity atoms in BaSi2epitaxial films grown by molecular beam epitaxy. Japanese Journal of Applied Physics, 2014, 53, 04ER02.	0.8	9
255	Effects of flexible substrate thickness on Al-induced crystallization of amorphous Ge thin films. Thin Solid Films, 2015, 583, 221-225.	0.8	9
256	Boron-doped p-BaSi2/n-Si solar cells formed on textured n-Si(0 0 1) with a pyramid structure consisting of {1 1 1} facets. Journal of Crystal Growth, 2017, 475, 186-191.	0.7	9
257	Nanoscale measurement of giant saturation magnetization in Î±â€³-Fe16N2 by electron energy-loss magnetic chiral dichroism. Ultramicroscopy, 2019, 203, 37-43.	0.8	9
258	Thin-film thermoelectric generator based on polycrystalline SiGe formed by Ag-induced layer exchange. Applied Physics Letters, 2020, 117, .	1.5	9
259	Hydrogen states in hydrogen-passivated semiconducting barium disilicide measured via muon spin rotation. Japanese Journal of Applied Physics, 2020, 59, 071004.	0.8	9
260	Solar cell operation of sputter-deposited n-BaSi₂/p-Si heterojunction diodes and characterization of defects by deep-level transient spectroscopy. Applied Physics Express, 2021, 14, 051010.	1.1	9
261	Negative Anisotropic Magnetoresistance in Î³'-Fe₄N Epitaxial Films on SrTiO₃(001) Grown by Molecular Beam Epitaxy. Japanese Journal of Applied Physics, 2012, 51, 068001.	0.8	9
262	Transition metal nitrides and their mixed crystals for spintronics. Nanotechnology, 2022, 33, 062001.	1.3	9
263	Disagreement between Magnetic and Magneto-Optical Properties in Cr-doped GaN Films on Si(111) Substrates Grown by Metal Organic Molecular Beam Epitaxy. Japanese Journal of Applied Physics, 2004, 43, L1312-L1314.	0.8	8
264	Growth of Nitride-Based Fe3N/AlN/Fe4N Magnetic Tunnel Junction Structures on Si(111) Substrates. Japanese Journal of Applied Physics, 2007, 46, L892-L894.	0.8	8
265	Epitaxial Growth and Photoresponse Properties of BaSi2Layers toward Si-Based High-Efficiency Solar Cells. Japanese Journal of Applied Physics, 2010, 49, 04DP05.	0.8	8
266	Improved Reproducibility in CaF₂/Fe₃Si/CaF₂ Ferromagnetic Resonant Tunneling Diodes on Si(111) Substrates by Selected-Area Molecular Beam Epitaxy. Japanese Journal of Applied Physics, 2010, 49, 060212.	0.8	8
267	Potential variation around grain boundaries in BaSi2 films grown on multicrystalline silicon evaluated using Kelvin probe force microscopy. Journal of Applied Physics, 2014, 116, .	1.1	8
268	Effect of BaSi₂template growth duration on the generation of defects and performance of p-BaSi₂/n-Si heterojunction solar cells. Japanese Journal of Applied Physics, 2018, 57, 042301.	0.8	8
269	Investigation of native defects in BaSi₂ epitaxial films by electron paramagnetic resonance. Applied Physics Express, 2019, 12, 061005.	1.1	8
270	Significant enhancement of photoresponsivity in As-doped n-BaSi₂epitaxial films by atomic hydrogen passivation. Applied Physics Express, 2020, 13, 051001.	1.1	8

#	Article	IF	Citations
271	Improved thermoelectric performance of flexible p-type SiGe films by B-doped Al-induced layer exchange. Journal Physics D: Applied Physics, 2020, 53, 075105.	1.3	8
272	Mechanisms of carrier lifetime enhancement and conductivity-type switching on hydrogen-incorporated arsenic-doped BaSi2. Thin Solid Films, 2021, 724, 138629.	0.8	8
273	Effect of post-annealing on the significant photoresponsivity enhancement of BaSi₂ epitaxial films on Si(111). Applied Physics Express, 2021, 14, 021003.	1.1	8
274	Impact of radio-frequency power on the photoresponsivity enhancement of BaSi₂ films formed by sputtering. Applied Physics Express, 2020, 13, 085511.	1.1	8
275	Sn Concentration Effects on Polycrystalline GeSn Thin Film Transistors. IEEE Electron Device Letters, 2021, 42, 1735-1738.	2.2	8
276	Metal (CoSi$_{f 2}$)/Insulator (CaF$_{f 2}$) Hot Electron Transistor Fabricated by Electron-Beam Lithography on a Si Substrate. Japanese Journal of Applied Physics, 1995, 34, L1254-L1256.	0.8	7
277	Growth parameter dependence of HVPE GaN and polarity and crystal quality of the grown layers. Journal of Crystal Growth, 2002, 237-239, 1089-1093.	0.7	7
278	Impact of amorphous Ge thin layer at the amorphous Si/Al interface on Al-induced crystallization. Journal of Crystal Growth, 2010, 312, 3257-3260.	0.7	7
279	Impact of Thin Island-Like BaSi2Template on the Formation of n+-BaSi2/p+-Si Tunnel Junction on Si(111) Surface by Molecular Beam Epitaxy. Japanese Journal of Applied Physics, 2010, 49, 068001.	0.8	7
280	Al-induced crystallization of amorphous Ge thin films on conducting layer coated glass substrates. Japanese Journal of Applied Physics, 2014, 53, 04EH01.	0.8	7
281	Structural characterization of polycrystalline Ge thin films on insulators formed by diffusion-enhanced Al-induced layer exchange. Japanese Journal of Applied Physics, 2014, 53, 04EH03.	0.8	7
282	Large-grained (111)-oriented Si/Al/SiO2 structures formed by diffusion-controlled Al-induced layer exchange. Thin Solid Films, 2014, 557, 147-150.	0.8	7
283	MÃ¶ssbauer study on epitaxial CoxFe4â^'xN films grown by molecular beam epitaxy. Journal of Applied Physics, 2015, 117, .	1.1	7
284	Effects of Al grain size on metal-induced layer exchange growth of amorphous Ge thin film on glass substrate. Thin Solid Films, 2017, 626, 190-193.	0.8	7
285	Minority-carrier lifetime and photoresponse properties of B-doped p-BaSi₂, a potential light absorber for solar cells. Japanese Journal of Applied Physics, 2017, 56, 05DB01.	0.8	7
286	Growth of BaSi2 continuous films on Ge(111) by molecular beam epitaxy and fabrication of p-BaSi2/n-Ge heterojunction solar cells. Japanese Journal of Applied Physics, 2017, 56, 05DB02.	0.8	7
287	Impact of Amorphous-C/Ni Multilayers on Ni-Induced Layer Exchange for Multilayer Graphene on Insulators. ACS Omega, 2019, 4, 14251-14254.	1.6	7
288	Correlation of native defects between epitaxial films and polycrystalline BaSi₂ bulks based on photoluminescence spectra. Applied Physics Express, 2019, 12, 111001.	1.1	7

#	Article	IF	Citations
289	Modeling the effects of defect parameters on the performance of a p-BaSi2/n-Si heterojunction solar cell. Solar Energy Materials and Solar Cells, 2020, 205, 110244.	3.0	7
290	Influence of Ba-to-Si deposition rate ratios on the electrical and optical properties of B-doped BaSi2 epitaxial films. Japanese Journal of Applied Physics, 2020, 59, SFFA04.	0.8	7
291	Fabrication of As-doped n-type BaSi2 epitaxial films grown by molecular beam epitaxy. Japanese Journal of Applied Physics, 2020, 59, SFFA01.	0.8	7
292	Point defects in BaSi2 thin films for photovoltaic applications studied by positron annihilation spectroscopy. Journal of Applied Physics, 2020, 127, .	1.1	7
293	Low thermal conductivity of complex thermoelectric barium silicide film epitaxially grown on Si. Applied Physics Letters, 2021, 119, .	1.5	7
294	High-temperature post-annealing effect on the surface morphology and photoresponse and electrical properties of B-doped BaSi2 films grown by molecular beam epitaxy under various Ba-to-Si deposition rate ratios. Journal of Crystal Growth, 2022, 578, 126429.	0.7	7
295	Ferrimagneticâ€“ferromagnetic phase transition in Mn₄N films favored by non-magnetic In doping. Journal Physics D: Applied Physics, 2022, 55, 115003.	1.3	7
296	High electron mobility in randomly oriented polycrystalline BaSi₂ films formed through radio-frequency sputtering. AIP Advances, 2022, 12, 045120.	0.6	7
297	Epitaxial growth of a metal(CoSi2)/insulator(CaF2) nanometerâ€thick heterostructure and its application to quantumâ€effect devices. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 1995, 13, 623-628.	0.9	6
298	Superiority of an AlN Intermediate Layer for Heteroepitaxy of Hexagonal GaN. Japanese Journal of Applied Physics, 2000, 39, 4869-4874.	0.8	6
299	Sb Surfactant Effect on Defect Evolution in Compressively Strained In0.80Ga0.20As Quantum Well on InP Grown by Metalorganic Vapor Phase Epitaxy. Applied Physics Express, 2008, 1, 111202.	1.1	6
300	Growth of Ca-Germanide and Ca-Silicide Crystals by Mechanical Alloying. E-Journal of Surface Science and Nanotechnology, 2009, 7, 129-133.	0.1	6
301	Transfer-free synthesis of highly ordered Ge nanowire arrays on glass substrates. Applied Physics Letters, 2015, 107, 133102.	1.5	6
302	Control of electrical properties of BaSi2 thin films by alkali-metal doping using alkali-metal fluorides. Thin Solid Films, 2016, 603, 218-223.	0.8	6
303	Fe-induced layer exchange of multilayer graphene for rechargeable battery anodes. Applied Physics Express, 2020, 13, 025501.	1.1	6
304	Drastic enhancement of photoresponsivity in C-doped BaSi2 films formed by radio-frequency sputtering. Japanese Journal of Applied Physics, 2020, 59, SFFA06.	0.8	6
305	Epitaxial growth of BaSi2 thin films by co-sputtering of Ba and Si for solar cell applications. Applied Physics Express, 2021, 14, 065501.	1.1	6
306	Synthesis and magnetic properties of tetragonally ordered Fe2Ni2N alloy using topotactic nitriding reaction. Journal of Alloys and Compounds, 2021, 885, 161122.	2.8	6

#	Article	IF	Citations
307	Growth conditions for high-photoresponsivity randomly oriented polycrystalline BaSi₂ films by radio-frequency sputtering: Comparison with BaSi₂ epitaxial films. Applied Physics Express, 2022, 15, 025502.	1.1	6
308	Flexible Thermoelectric Generator Based on Polycrystalline SiGe Thin Films. Materials, 2022, 15, 608.	1.3	6
309	Multiple Negative Differential Resistance due to Quantum Interference of Hot Electron Waves in Metal (CoSi2)/Insulator (CaF2) Heterostructures and Influence of Parasitic Circuit Elements. Japanese Journal of Applied Physics, 1995, 34, 4481-4484.	0.8	5
310	Room-temperature observation of multiple negative differential resistance in a metal (CoSi2)/insulator (CaF2) quantum interference transistor structure. Physica B: Condensed Matter, 1996, 227, 213-215.	1.3	5
311	Conduction type and defect levels of Î²-FeSi2 films grown by MBE with different Si/Fe ratios. Materials Science in Semiconductor Processing, 2003, 6, 307-309.	1.9	5
312	Cr concentration dependence of magnetic and electrical properties of Cr-doped GaN films on Si (111) by MOMBE. Physica Status Solidi C: Current Topics in Solid State Physics, 2005, 2, 2488-2491.	0.8	5
313	Magneto-Optical Studies of Ferromagnetic Cr-Doped GaN Films Grown by Molecular Beam Epitaxy. Japanese Journal of Applied Physics, 2005, 44, 6510-6512.	0.8	5
314	Temperature dependence of electroluminescence from Si-based light emitting diodes with Î²-FeSi2 particles active region. Journal of Luminescence, 2006, 118, 330-334.	1.5	5
315	Temperature dependence of electroluminescence from silicon p-i-n light-emitting diodes. Journal of Applied Physics, 2006, 100, 023506.	1.1	5
316	Investigation of current injection in Î²-FeSi2/Si double-heterostructures light-emitting diodes by molecular beam epitaxy. Thin Solid Films, 2007, 515, 8136-8139.	0.8	5
317	Formation of large-grain-sized BaSi2 epitaxial layers grown on Si(111) by molecular beam epitaxy. Journal of Crystal Growth, 2013, 378, 193-197.	0.7	5
318	Epitaxial growth of ferromagnetic CoxFe4â^'xN thin films on SrTiO3 (001) and magneticproperties. Journal of Crystal Growth, 2013, 378, 342-346.	0.7	5
319	Cross-sectional potential profile across a BaSi2pn junction by Kelvin probe force microscopy. Japanese Journal of Applied Physics, 2015, 54, 030306.	0.8	5
320	Effect of interlayer on silver-induced layer exchange crystallization of amorphous germanium thin film on insulator. Japanese Journal of Applied Physics, 2017, 56, 05DE04.	0.8	5
321	Growth of BaSi₂film on Ge(100) by vacuum evaporation and its photoresponse properties. Japanese Journal of Applied Physics, 2017, 56, 05DB06.	0.8	5
322	Growth and fluorination of CaSi₂ thin film. Japanese Journal of Applied Physics, 2020, 59, SFFC02.	0.8	5
323	Effects of boron and hydrogen doping on the enhancement of photoresponsivity and photoluminescence of BaSi₂ epitaxial films. Japanese Journal of Applied Physics, 2020, 59, SFFA08.	0.8	5
324	Comparison of C doping technique between SiC and C targets for high-photoresponsivity BaSi₂ films by radio-frequency sputtering. Japanese Journal of Applied Physics, 2021, 60, 058001.	0.8	5

#	Article	IF	Citations
325	Composition dependent properties of p- and n-type polycrystalline group-IV alloy thin films. Journal of Alloys and Compounds, 2021, 887, 161306.	2.8	5
326	Fabrication of <i>L</i>1₀-FeNi films by denitriding FeNiN films. Journal of the Magnetics Society of Japan, 2019, 43, 79-83.	0.5	5
327	In situObservation of Polycrystalline Silicon Thin Films Grown Using Aluminum-Doped Zinc Oxide on Glass Substrate by the Aluminum-Induced Crystallization. Japanese Journal of Applied Physics, 2011, 50, 04DP02.	0.8	5
328	Molecular beam epitaxial growth and magneto-transport properties of Mn4â^'In N films on SrTiO3(001) and MgO(001) substrates. Journal of Crystal Growth, 2022, 582, 126525.	0.7	5
329	Improvement of Organometallic Vapor Phase Epitaxy Regrown GaInAs/InP Heterointerface by Surface Treatment. Japanese Journal of Applied Physics, 1991, 30, L1702-L1704.	0.8	4
330	Thermal Enhancement of 1.6 Âµm Electroluminescence from a Si-Based Light-Emitting Diode with Î²-FeSi2Active Region. Japanese Journal of Applied Physics, 2004, 43, L1492-L1494.	0.8	4
331	Wet Chemical Etching and X-ray Photoelectron Spectroscopy Analysis of BaSi₂Epitaxial Films Grown by Molecular Beam Epitaxy. Japanese Journal of Applied Physics, 2009, 48, 106507.	0.8	4
332	Large photoresponsivity in semiconducting BaSi2 epitaxial films grown on Si(001) substrates by molecular beam epitaxy. Journal of Crystal Growth, 2013, 378, 198-200.	0.7	4
333	Controlling magnetic domain wall positions with an external magnetic field and a low spin-polarized current in chamfered L-shaped ferromagnetic thin ribbons. Journal Physics D: Applied Physics, 2016, 49, 385002.	1.3	4
334	Highly oriented epitaxial (Î±â€²â€²+Î±â€²)-Fe16N2 films on Î±-Fe(001) buffered MgAl2O4(001) substrates and their magnetization. Journal of Crystal Growth, 2017, 468, 691-695.	0.7	4
335	Structural characterization and magnetic properties of L10-MnAl films grown on different underlayers by molecular beam epitaxy. Journal of Crystal Growth, 2018, 486, 19-23.	0.7	4
336	Solid-phase crystallization of gallium arsenide thin films on insulators. Materials Science in Semiconductor Processing, 2021, 124, 105623.	1.9	4
337	Energetic evaluation of possible interstitial compound formation of BaSi₂with 2p-, 3s-, and 3d-elements using first-principle calculations. Japanese Journal of Applied Physics, 2015, 54, 07JE03.	0.8	4
338	Effects of Ba-to-Si deposition rate ratios on the electrical and photoresponse properties of arsenic-doped n-type BaSi2 films. Thin Solid Films, 2021, 738, 138969.	0.8	4
339	Dependence of GaN MOMBE growth on nitrogen source: ECR plasma gun structure and monomethyl-hydrazine. Journal of Crystal Growth, 1998, 189-190, 380-384.	0.7	3
340	Comparison between monomethyl hydrazine and ECR plasma activated nitrogen as a nitrogen source for CBE growth of GaN. Journal of Crystal Growth, 1998, 188, 81-85.	0.7	3
341	Magnetotransport Properties of a Single-Crystalline Î²-FeSi 2 Layer Grown on Si(001) Substrate by Reactive Deposition Epitaxy. Japanese Journal of Applied Physics, 1998, 37, L333-L335.	0.8	3
342	Thick GaN Growth on GaAs(111) Substratres at 1000 Â°C with HVPE. Physica Status Solidi A, 1999, 176, 421-424.	1.7	3

#	Article	IF	Citations
343	CBE growth of GaN on GaAs(001) and (111)B substrates using monomethylhydrazine. Journal of Crystal Growth, 2000, 209, 373-377.	0.7	3
344	Optical Absorption Spectra of ?-FeSi2 under Pressure. Physica Status Solidi (B): Basic Research, 2001, 223, 259-263.	0.7	3
345	Horizontal growth of epitaxial (100) Î²-FeSi2 templates by metalâ€“organic chemical vapor deposition. Journal of Crystal Growth, 2006, 287, 694-697.	0.7	3
346	Epitaxial growth of ferromagnetic Fe₄N thin films on SrTiO₃(001) substrates by molecular beam epitaxy. Journal of Physics: Conference Series, 2011, 266, 012091.	0.3	3
347	Formation of poly-Si layer on AZO/<mml:math altimg="si1.gif" display="inline" overflow="scroll" xmlns:xocs="http://www.elsevier.com/xml/xocs/dtd" xmlns:xs="http://www.w3.org/2001/XMLSchema" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xmlns="http://www.elsevier.com/xml/ja/dtd" xmlns:ja="http://www.elsevier.com/xml/ja/dtd" xmlns:mml="http://www.w3.org/1998/Math/MathML" xmlns:tb="http://www.elsevier.com/xml/common/table/dtd" xmlns:sb="http://www.elsevier.com/xml/common/struct-bib/dtd" xmlns:ce="http://... Physics Procedia,	1.2	3
348	Molecular Beam Epitaxy of Cu-Doped BaSi₂ Films on Si(111) Substrate and Evaluation & Qualification of Depth Profiles of Cu Atoms for the Formation of Efficient Solar Cells. Advanced Materials Research, 0, 326, 139-143.	0.3	3
349	Possibility of spin-polarized electric current through Mn-, Fe-, Co-, or Ni-doped BaSi2 predicted by their calculated densities of states. Journal of Magnetism and Magnetic Materials, 2013, 344, 25-29.	1.0	3
350	Evaluation of diffusion coefficients of nâ€type impurities in MBEâ€grown BaSi₂ epitaxial layers. Physica Status Solidi C: Current Topics in Solid State Physics, 2013, 10, 1762-1764.	0.8	3
351	Possibility of Si-based new material for thin-film solar cell applications. Journal of Physics: Conference Series, 2015, 596, 012005.	0.3	3
352	Fabrication of L-shaped Fe4N ferromagnetic narrow wires and position control of magnetic domain wall with magnetic field. Japanese Journal of Applied Physics, 2015, 54, 028003.	0.8	3
353	Donor and acceptor energy levels in impurity Sb-, In-, Ag- and Cu-doped semiconducting BaSi2 thin films for device applications. Energy Procedia, 2017, 124, 612-620.	1.8	3
354	Decrease in electrical contact resistance of Sb-doped n⁺-BaSi₂layers and spectral response of an Sb-doped n⁺-BaSi₂/undoped BaSi₂structure for solar cells. Japanese Journal of Applied Physics, 2018, 57, 031202.	0.8	3
355	Minority carrier lifetime of Ge film epitaxial grown on a large-grain seed layer on glass. Thin Solid Films, 2019, 681, 98-102.	0.8	3
356	Formation of poly-crystalline BaSi2 thin films by pulsed laser deposition for solar cell applications. Materials Letters, 2020, 260, 126936.	1.3	3
357	Influence of grain boundaries on the properties of polycrystalline germanium. Journal of Applied Physics, 2020, 128, .	1.1	3
358	Improving photoresponsivity in GaAs film grown on Al-induced-crystallized Ge on an insulator. AIP Advances, 2020, 10, 015153.	0.6	3
359	Fabrication of high-photoresponsivity BaSi₂films formed on conductive layers by radio-frequency sputtering. Applied Physics Express, 2020, 13, 075506.	1.1	3
360	Effects of molecular beam epitaxy growth conditions on grain size and lattice strain in a-axis-oriented BaSi₂ films. Japanese Journal of Applied Physics, 2020, 59, SFFA09.	0.8	3

#	Article	IF	Citations
361	Solidâ€phase crystallization of GeSn thin films on GeO 2 â€coated glass. Physica Status Solidi - Rapid Research Letters, 0, , 2100509.	1.2	3
362	Three-Dimensionally Orientation-Controlled Ge Rods on an Insulator Formed by Low-Temperature Ni-Induced Lateral Crystallization. Crystal Growth and Design, 2022, 22, 1123-1129.	1.4	3
363	Machine learning of fake micrographs for automated analysis of crystal growth process. Science and Technology of Advanced Materials Methods, 2022, 2, 213-221.	0.4	3
364	ç'°å¢ƒã«å„ªã—ã„å…‰åŠå°Žä½“Î²-FeSi2ã®ç¾¤çŠ¶ã•å°†æ¥å±•æœ›. Materia Japan, 2002, 41, 342-347.	0.1	2
365	Reflection and absorption spectra of Î²-FeSi2 under pressure. Thin Solid Films, 2004, 461, 171-173.	0.8	2
366	Reactive Ion Etching of Î²-FeSi2with Inductively Coupled Plasma. Japanese Journal of Applied Physics, 2006, 45, L569-L571.	0.8	2
367	Molecular beam epitaxy of semiconductor (BaSi2)/metal (CoSi2) hybrid structures on Si(111) substrates for photovoltaic application. Applied Surface Science, 2008, 254, 7963-7967.	3.1	2
368	Fabrication of BaSi2 films on transparent CaF2 (111) substrates by molecular beam epitaxy for optical characterization. Physics Procedia, 2011, 11, 189-192.	1.2	2
369	Dependence of Resonant Voltage on Quantum-Well Width in CaF$_{2}$/Fe$_{3}$Si/CaF$_{2}$ Resonant Tunneling Diodes. Japanese Journal of Applied Physics, 2011, 50, 108002.	0.8	2
370	Realization of Large-Domain Barium Disilicide Epitaxial Thin Film by Introduction of Miscut to Si(111) Substrate. Japanese Journal of Applied Physics, 2012, 51, 10NB06.	0.8	2
371	Effect of atomic-hydrogen irradiation on reduction of residual carrier concentration in Î²-FeSi2 films grown on Si substrates by atomic-hydrogen-assisted molecular beam epitaxy. Journal of Crystal Growth, 2013, 378, 365-367.	0.7	2
372	Stability of cross-shaped electron beam in a vacuum magnetic sensor with a p-Si field emitter tip. Vacuum, 2019, 168, 108858.	1.6	2
373	Grain size dependent photoresponsivity in GaAs films formed on glass with Ge seed layers. Scientific Reports, 2021, 11, 10159.	1.6	2
374	Underlayer Selection to Improve the Performance of Polycrystalline Ge Thin Film Transistors. ECS Transactions, 2020, 98, 423-427.	0.3	2
375	Four-step heating process for solid-phase crystallization of Ge leading to high carrier mobility. Applied Physics Express, 2020, 13, 101005.	1.1	2
376	Epitaxy of Orthorhombic BaSi2with Preferential In-Plane Crystal Orientation on Si(001): Effects of Vicinal Substrate and Annealing Temperature. Japanese Journal of Applied Physics, 2012, 51, 095501.	0.8	2
377	Structural Study of BF2Ion Implantation and Post Annealing of BaSi2Epitaxial Films. Japanese Journal of Applied Physics, 2011, 50, 121202.	0.8	2
378	Molecular Beam Epitaxy of BaSi2Films with Grain Size over 4 Âµm on Si(111). Japanese Journal of Applied Physics, 2012, 51, 098003.	0.8	2

#	Article	IF	Citations
379	Polarity of Hexagonal GaN Grown on GaAs (111)A and (111)B Surfaces by HVPE and Movpe. Materials Research Society Symposia Proceedings, 2000, 639, 1181.	0.1	1
380	Optimum thermal-cleaning condition of GaAs surface with a superior arsenic source: trisdimethylamino-arsine. Journal of Crystal Growth, 2000, 209, 267-271.	0.7	1
381	Improvement of luminescence from Î²-FeSi2 particles embedded in silicon, with high temperature silicon buffer layer. Journal of Crystal Growth, 2006, 290, 176-179.	0.7	1
382	Inductively coupled plasma-reactive ion etching for Î²-FeSi2 film. Thin Solid Films, 2007, 515, 8166-8168.	0.8	1
383	Evaluation of minority carrier lifetime in BaSi<inf>2</inf> as a novel material for earth-abundant high efficiency thin film solar cells. , 2010, , .		1
384	Fabrication of Fe3Si/CaF2 heterostructures ferromagnetic resonant tunneling diode by selected-area molecular beam epitaxy. Thin Solid Films, 2011, 519, 8509-8511.	0.8	1
385	Metalorganic chemical vapor deposition of Î²-FeSi2 on Î²-FeSi2 seed crystals formed on Si substrates. Thin Solid Films, 2011, 519, 8473-8476.	0.8	1
386	Magnetoresistance characteristics of <mml:math altimg="si1.gif" display="inline" overflow="scroll" xmlns:xocs="http://www.elsevier.com/xml/xocs/dtd" xmlns:xs="http://www.w3.org/2001/XMLSchema" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xmlns="http://www.elsevier.com/xml/ja/dtd" xmlns:ja="http://www.elsevier.com/xml/ja/dtd" xmlns:mml="http://www.w3.org/1998/Math/MathML" xmlns:tb="http://www.elsevier.com/xml/common/table/dtd" xmlns:sb="http://www.elsevier.com/xml/common/struct-bib/dtd" xmlns:ce="ht. Physics Procedia, 2011,	1.2	1
387	In situObservation of Polycrystalline Silicon Thin Films Grown Using Aluminum-Doped Zinc Oxide on Glass Substrate by the Aluminum-Induced Crystallization. Japanese Journal of Applied Physics, 2011, 50, 04DP02.	0.8	1
388	Effect of Solid-Phase-Epitaxy Si Layers on Suppression of Sb Diffusion from Sb-Doped n⁺-BaSi₂/p⁺-Si Tunnel Junction to Undoped BaSi₂ Overlayers. Japanese Journal of Applied Physics, 2012, 51, 04DP01.	0.8	1
389	Local structure around Sr in semiconducting BaSrSi2 studied using extended x-ray absorption fine structures. Physics Procedia, 2012, 23, 53-56.	1.2	1
390	Investigation of the tunneling properties and surface morphologies of BaSi2 /Si tunnel junctions for BaSi2 solar cell applications. Physica Status Solidi C: Current Topics in Solid State Physics, 2013, 10, 1765-1768.	0.8	1
391	Fabrication of BaSi2 films on (111)-oriented Si layers formed by inverted Al-induced crystallization method on glass structure. Physica Status Solidi C: Current Topics in Solid State Physics, 2013, 10, 1769-1772.	0.8	1
392	Epitaxial growth of BaSi2films with large grains using vicinal Si(111) substrates. Physica Status Solidi C: Current Topics in Solid State Physics, 2013, 10, 1756-1758.	0.8	1
393	Toward Si-based high-efficiency thin-film solar cells using semiconducting BaSi2. IOP Conference Series: Materials Science and Engineering, 2014, 54, 012009.	0.3	1
394	Fabrication and characterization of BaSi2 films on Ge(111) substrates by molecular beam epitaxy. , 2015, , .		1
395	Effect of Diffusion Control Layer on Reverse Al-Induced Layer Exchange Process for High-Quality Ge/Al/Glass Structure. Journal of Electronic Materials, 2015, 44, 1377-1381.	1.0	1
396	Electrical detection of magnetic domain wall in Fe4N nanostrip by negative anisotropic magnetoresistance effect. Journal of Applied Physics, 2016, 120, .	1.1	1

#	Article	IF	Citations
397	Sn-inserted Al-induced layer exchange for large-grained GeSn thin films on insulator. Thin Solid Films, 2016, 616, 316-319.	0.8	1
398	Photoresponse measurement of highly oriented BaSi<inf>2</inf> films on Ge(111) using solid phase epitaxy templates. , 2016, , .		1
399	Fabrication of SrGe2 thin films on Ge (100), (110), and (111) substrates. Nanoscale Research Letters, 2018, 13, 22.	3.1	1
400	Impact of the carbon membrane inserted below Ni in the layer exchange of multilayer graphene. CrystEngComm, 2020, 22, 3106-3109.	1.3	1
401	Effect of Solid-Phase-Epitaxy Si Layers on Suppression of Sb Diffusion from Sb-Doped n⁺-BaSi₂/p⁺-Si Tunnel Junction to Undoped BaSi₂Overlayers. Japanese Journal of Applied Physics, 2012, 51, 04DP01.	0.8	1
402	Realization of Large-Domain Barium Disilicide Epitaxial Thin Film by Introduction of Miscut to Si(111) Substrate. Japanese Journal of Applied Physics, 2012, 51, 10NB06.	0.8	1
403	Hydrogen impurities in p-type semiconductors, GeS and GeTe. Journal of Applied Physics, 2021, 130, 195701.	1.1	1
404	Improvement Of Regrown Hetero-interface In n-GaInAs/i-InP/n-GaInAs Tunneling Diode. , 0, , .		0
405	Negative, Different ial Resistance in Metal(CoSi/sub 2/)/Insulator(CaF/sub 2/) Resonant Tunneling Diode. , 0, , .		0
406	Negative differential resistance in metal (CoSi/sub 2/)/insulator (CaF/sub 2/) resonant tunneling diode. IEEE Transactions on Electron Devices, 1992, 39, 2644.	1.6	0
407	Metal/insulator heterostructure quantum effect device. , 0, , .		0
408	Transfer efficiency of hot electrons in a metal(CoSi2)/insulator(CaF2) quantum interference transistor. Surface Science, 1996, 361-362, 209-212.	0.8	0
409	Si Molecular Beam Epitaxial Growth over an Atomic-Layer Boron Adsorbed Si(001) Substrate and Its Electrical Properties. Japanese Journal of Applied Physics, 1997, 36, 7146-7151.	0.8	0
410	Tolerance of GaAs as an original substrate for HVPE growth of free standing GaN. Physica Status Solidi A, 2004, 201, 2782-2785.	1.7	0
411	Growth and characterization of Si-based light-emitting diode with Î²-FeSi/sub 2/ active region by molecular beam epitaxy. , 0, , .		0
412	Epitaxial Growth and Luminescence Characterization of Si-based Double Heterostructures Light-emitting Diodes with Iron Disilicide Active Region. Materials Research Society Symposia Proceedings, 2006, 958, 1.	0.1	0
413	Crystal Growth of Î²-FeSi2 Thin Film on (100), (110) and (111) Plane of Si and Yittria-stabilized Zirconia Substrates. Materials Research Society Symposia Proceedings, 2006, 980, 47.	0.1	0
414	Semiconducting silicide photonic devices. Proceedings of SPIE, 2007, , .	0.8	0

#	Article	IF	Citations
415	Luminescence characterization and room-temperature 1.6 μm electroluminescence in si/β-fesi₂/si double heterostructures on si(001) by molecular beam epitaxy. , 2007, , .		0
416	Enhanced Hole Mobility in p-type ÃŸ-FeSi<inf>2</inf> Films Grown by Molecular Beam Epitaxy Using High-Purity Fe Source. , 2007, , .		0
417	0.1-mW p-Si/β-FeSi<inf>2</inf>/n-Si double heterostructures light-emitting diodes operating at 1.6 μm at room temperature. , 2008, , .		0
418	Photoresponse properties of BaSi<inf>2</inf> films on N⁺-BaSi<inf>2</inf>/P⁺-Si tunnel junction for high efficiency thin film solar cells. , 2010, , .		0
419	Molecular beam epitaxy of <mml:math altimg="si1.gif" display="inline" overflow="scroll" xmlns:xocs="http://www.elsevier.com/xml/xocs/dtd" xmlns:xs="http://www.w3.org/2001/XMLSchema" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xmlns="http://www.elsevier.com/xml/ja/dtd" xmlns:ja="http://www.elsevier.com/xml/ja/dtd" xmlns:mml="http://www.w3.org/1998/Math/MathML" xmlns:tb="http://www.elsevier.com/xml/common/table/dtd" xmlns:sb="http://www.elsevier.com/xml/common/struct-bib/dtd" xmlns:ce="http://www.el. Physics	1.2	0
420	Molecular beam epitaxy of <mml:math altimg="si1.gif" display="inline" overflow="scroll" xmlns:xocs="http://www.elsevier.com/xml/xocs/dtd" xmlns:xs="http://www.w3.org/2001/XMLSchema" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xmlns="http://www.elsevier.com/xml/ja/dtd" xmlns:ja="http://www.elsevier.com/xml/ja/dtd" xmlns:mml="http://www.w3.org/1998/Math/MathML" xmlns:tb="http://www.elsevier.com/xml/common/table/dtd" xmlns:sb="http://www.elsevier.com/xml/common/struct-bib/dtd" xmlns:ce="http://www.el. Physics	1.2	0
421	Molecular beam epitaxy of <mml:math altimg="si1.gif" display="inline" overflow="scroll" xmlns:xocs="http://www.elsevier.com/xml/xocs/dtd" xmlns:xs="http://www.w3.org/2001/XMLSchema" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xmlns="http://www.elsevier.com/xml/ja/dtd" xmlns:ja="http://www.elsevier.com/xml/ja/dtd" xmlns:mml="http://www.w3.org/1998/Math/MathML" xmlns:tb="http://www.elsevier.com/xml/common/table/dtd" xmlns:sb="http://www.elsevier.com/xml/common/struct-bib/dtd" xmlns:ce="http://www.el. Physics	1.2	0
422	Effect of Introducing Î²-FeSi2Template Layers on Defect Density and Minority Carrier Diffusion Length in Si Region near p-Î²-FeSi2/n-Si Heterointerface. Japanese Journal of Applied Physics, 2011, 50, 041303.	0.8	0
423	Drastic reduction of crystallization time during Al-induced crystallizaion of amorphous Si by Ge adlayer. , 2011, , .		0
424	Improved internal quantum efficiency in high-quality BaSi<inf>2</inf> films grown by molecular beam epitaxy. , 2012, , .		0
425	Investigation of the carrier recombination process in undoped barium disilicide epitaxial films. , 2012, , .		0
426	Characterization of grain boundary properties in BaSi2 epitaxial films on Si(111) and Si(001) by Kelvin probe force microscopy. , 2013, , .		0
427	Improvement of excess-carrier lifetime in BaSi<inf>2</inf> epitaxial films by post-growth annealing. , 2013, , .		0
428	Enhanced p-type conductivity and band gap narrowing in heavily B-doped p-BaSi<inf>2</inf> films grown by molecular beam epitaxy. , 2013, , .		0
429	Effect of Ge/Al thickness on Al-induced crystallization of amorphous Ge layers on glass substrates. Physica Status Solidi C: Current Topics in Solid State Physics, 2013, 10, 1781-1784.	0.8	0
430	Fabrication of n⁺â€BaSi₂/p⁺â€Si tunnel junction on Si(001) surface for characterization of photoresponse properties of BaSi₂epitaxial films. Physica Status Solidi C: Current Topics in Solid State Physics, 2013, 10, 1773-1776.	0.8	0
431	Electrical and optical characterizations of an n-BaSi<inf>2</inf>/p-Si hetero-junction for solar cell applications. , 2014, , .		0
432	Engineering of p-n junction for high efficiency semiconducting BaSi2 based thin film solar cells. , 2014, , .		0

#	Article	IF	Citations
433	Si-based new material for high-efficiency thin film solar cells. , 2014, , .		0
434	Control of domain wall position in L-shaped Fe<inf>4</inf>N negatively spin polarized ferromagnetic nanowire. , 2015, , .		0
435	Control of the electrical properties of BaSi<inf>2</inf> evaporated films for solar cell applications. , 2016, , .		0
436	Band alignments at native oxide/BaSi<inf>2</inf> and amorphous-Si/BaSi<inf>2</inf> interfaces measured by hard x-ray photoelectron spectroscopy. , 2016, , .		0
437	Recent progress in BaSi<inf>2</inf> solar cells. , 2016, , .		0
438	Fabrication and characterizations of nitrogen-doped BaSi2 epitaxial films grown by molecular beam epitaxy. Journal of Crystal Growth, 2017, 471, 37-41.	0.7	0
439	GRAIN EFFECT IN THE CARRIER MOBILITY OF BaSi2 NANOFILMS. , 2017, , 38-41.		0
440	Demonstration of BaSi <inf>2</inf> pn homojunction solar cells and improvement of photoresponsivity of BaSi <inf>2</inf> absorbers by Ba/Si deposition rate ratio. , 2018, , .		0
441	Deep level transient spectroscopy characterization of BaSi<inf>2</inf> light absorbers. , 2018, , .		0
442	Investigation of p-BaSi<inf>2</inf>/n-Si heterojunction solar cells on Si(001) and comparison to those on Si(111). , 2018, , .		0
443	Study of a reversible resistive switching mechanism in bismuth titanate deposited by electron cyclotron resonance sputtering. Japanese Journal of Applied Physics, 2019, 58, 045502.	0.8	0
444	Expansion of Solid-phase Interactions between Carbon and Metals: Layer Exchange for Multilayer Graphene on Insulator. , 2019, , .		0
445	Significant improvement on electrical properties of BaSi2 due to atomic H passivation by radio-frequency plasma. , 2019, , .		0
446	Effects of sputtering pressure and temperature of ITO electrodes on the performance of p-BaSi₂/n-Si heterojunction solar cells. Japanese Journal of Applied Physics, 2020, 59, SFFA07.	0.8	0
447	Ecologically Friendly Metal-Silicide Semiconductor Reserch. Fabrication of .BETA.-FeSi2 Spheres Embedded in Si by Molecular Beam Epitaxy and Enhancement of the Infrared Photoluminescence by High Temperature Annealing.. The Review of Laser Engineering, 2000, 28, 99-102.	0.0	0
448	Structure Analysis of FeSi₂ Embeded in Si by Transmission Electron Microscopy;. Materia Japan, 2001, 40, 1013-1013.	0.1	0
449	Effect of Introducing Î²-FeSi₂Template Layers on Defect Density and Minority Carrier Diffusion Length in Si Region near p-Î²-FeSi₂/n-Si Heterointerface. Japanese Journal of Applied Physics, 2011, 50, 041303.	0.8	0
450	Dependence of Resonant Voltage on Quantum-Well Width in CaF2/Fe3Si/CaF2Resonant Tunneling Diodes. Japanese Journal of Applied Physics, 2011, 50, 108002.	0.8	0

#	Article	IF	Citations
451	Investigation of surface potential distributions of phosphorus-doped n-BaSi2thin-films by kelvin probe force microscopy. , 0, , .		0
452	Removal of Ge Islands in al-induced layer-exchanged Ge thin films on glass substrates by selective etching technique. , 0, , .		0