Jin Zou

List of Publications by Year
in descending order

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717	39,869	2423	4535
papers	citations	97 h-index	171 g-index

735	735	735	33929
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Anatase TiO2 single crystals with a large percentage of reactive facets. Nature, 2008, 453, 638-641.	13.7	3,753
2	Advanced Thermoelectric Design: From Materials and Structures to Devices. Chemical Reviews, 2020, 120, 7399-7515.	23.0	1,248
3	Solvothermal Synthesis and Photoreactivity of Anatase TiO₂ Nanosheets with Dominant {001} Facets. Journal of the American Chemical Society, 2009, 131, 4078-4083.	6.6	1,237
4	A Heterostructure Coupling of Exfoliated Niâ€“Fe Hydroxide Nanosheet and Defective Graphene as a Bifunctional Electrocatalyst for Overall Water Splitting. Advanced Materials, 2017, 29, 1700017.	11.1	845
5	Boron nitride nanotubes: Pronounced resistance to oxidation. Applied Physics Letters, 2004, 84, 2430-2432.	1.5	785
6	Nanostructured thermoelectric materials: Current research and future challenge. Progress in Natural Science: Materials International, 2012, 22, 535-549.	1.8	630
7	High Performance Thermoelectric Materials: Progress and Their Applications. Advanced Energy Materials, 2018, 8, 1701797.	10.2	548
8	High-performance SnSe thermoelectric materials: Progress and future challenge. Progress in Materials Science, 2018, 97, 283-346.	16.0	419
9	Flexible Thermoelectric Materials and Generators: Challenges and Innovations. Advanced Materials, 2019, 31, e1807916.	11.1	419
10	Enhanced Hydrogen Storage Kinetics and Stability by Synergistic Effects of in Situ Formed CeH_{2.73} and Ni in CeH_{2.73}-MgH₂-Ni Nanocomposites. Journal of Physical Chemistry C, 2014, 118, 7808-7820.	1.5	384
11	Manipulating surface states in topological insulator nanoribbons. Nature Nanotechnology, 2011, 6, 216-221.	15.6	382
12	Realizing zT of 2.3 in Ge_{1â^'_x}_ySb_xIn_yTe via Reducing the Phaseâ€Transition Temperature and Introducing Resonant Energy Doping. Advanced Materials, 2018, 30, 1705942.	11.1	316
13	Ecoâ€Friendly SnTe Thermoelectric Materials: Progress and Future Challenges. Advanced Functional Materials, 2017, 27, 1703278.	7.8	312
14	n-Type Bi₂Te_{3â€“x}Se_x Nanoplates with Enhanced Thermoelectric Efficiency Driven by Wide-Frequency Phonon Scatterings and Synergistic Carrier Scatterings. ACS Nano, 2016, 10, 4719-4727.	7.3	303
15	Twin-Free Uniform Epitaxial GaAs Nanowires Grown by a Two-Temperature Process. Nano Letters, 2007, 7, 921-926.	4.5	297
16	Indium Selenides: Structural Characteristics, Synthesis and Their Thermoelectric Performances. Small, 2014, 10, 2747-2765.	5.2	278
17	Tunable Ambipolar Polarization-Sensitive Photodetectors Based on High-Anisotropy ReSe₂ Nanosheets. ACS Nano, 2016, 10, 8067-8077.	7.3	276
18	IIIâ€“V semiconductor nanowires for optoelectronic device applications. Progress in Quantum Electronics, 2011, 35, 23-75.	3.5	256

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19	Effects of interdiffusion on the luminescence of InGaAs/GaAs quantum dots. Applied Physics Letters, 1996, 69, 1888-1890.	1.5	253
20	Carrier Lifetime and Mobility Enhancement in Nearly Defect-Free Coreâ"Shell Nanowires Measured Using Time-Resolved Terahertz Spectroscopy. Nano Letters, 2009, 9, 3349-3353.	4.5	253
21	Î±-MoO₃ Nanobelts: A High Performance Cathode Material for Lithium Ion Batteries. Journal of Physical Chemistry C, 2010, 114, 21868-21872.	1.5	248
22	Graphene Flash Memory. ACS Nano, 2011, 5, 7812-7817.	7.3	232
23	Influence of Nanowire Density on the Shape and Optical Properties of Ternary InGaAs Nanowires. Nano Letters, 2006, 6, 599-604.	4.5	222
24	High-performance thermoelectric Cu2Se nanoplates through nanostructure engineering. Nano Energy, 2015, 16, 367-374.	8.2	218
25	Arrayed Van Der Waals Broadband Detectors for Dualâ€Band Detection. Advanced Materials, 2017, 29, 1604439.	11.1	218
26	Activated boron nitride as an effective adsorbent for metal ions and organic pollutants. Scientific Reports, 2013, 3, 3208.	1.6	203
27	Enhanced Thermoelectric Performance of Nanostructured Bi₂Te₃ through Significant Phonon Scattering. ACS Applied Materials & Interfaces, 2015, 7, 23694-23699.	4.0	200
28	Strong Phononâ€"Phonon Interactions Securing Extraordinary Thermoelectric Ge_{1â€"x}Sb_xTe with Zn-Alloying-Induced Band Alignment. Journal of the American Chemical Society, 2019, 141, 1742-1748.	6.6	199
29	Thermoelectric GeTe with Diverse Degrees of Freedom Having Secured Superhigh Performance. Advanced Materials, 2019, 31, e1807071.	11.1	197
30	Novel Boron Nitride Hollow Nanoribbons. ACS Nano, 2008, 2, 2183-2191.	7.3	192
31	Synthesis, growth mechanism and thermal stability of copper nanoparticles encapsulated by multi-layer graphene. Carbon, 2012, 50, 2119-2125.	5.4	192
32	Cheap and scalable synthesis of Î±-Fe2O3 multi-shelled hollow spheres as high-performance anode materials for lithium ion batteries. Chemical Communications, 2013, 49, 8695.	2.2	192
33	Fabrication of Tiâ€"Al Micro/ Nanometerâ€Sized Porous Alloys through the Kirkendall Effect. Advanced Materials, 2007, 19, 2102-2106.	11.1	183
34	Structural Evolution in a Hydrothermal Reaction between Nb2O5and NaOH Solution:Â From Nb2O5Grains to Microporous Na2Nb2O6Â·2/3H2O Fibers and NaNbO3Cubes. Journal of the American Chemical Society, 2006, 128, 2373-2384.	6.6	182
35	2D Porous TiO₂ Singleâ€Crystalline Nanostructure Demonstrating High Photoâ€Electrochemical Water Splitting Performance. Advanced Materials, 2018, 30, e1705666.	11.1	176
36	Nanoparticles Mimicking Viral Surface Topography for Enhanced Cellular Delivery. Advanced Materials, 2013, 25, 6233-6237.	11.1	174

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37	Weak Anti-localization and Quantum Oscillations of Surface States in Topological Insulator Bi2Se2Te. Scientific Reports, 2012, 2, 726.	1.6	172
38	Carrier Dynamics and Quantum Confinement in type II ZB-WZ InP Nanowire Homostructures. Nano Letters, 2009, 9, 648-654.	4.5	168
39	Anomalous and Highly Efficient InAs Nanowire Phototransistors Based on Majority Carrier Transport at Room Temperature. Advanced Materials, 2014, 26, 8203-8209.	11.1	168
40	Promising and Ecoâ€Friendly Cu₂Xâ€Based Thermoelectric Materials: Progress and Applications. Advanced Materials, 2020, 32, e1905703.	11.1	165
41	Combination of nanosizing and interfacial effect: Future perspective for designing Mg-based nanomaterials for hydrogen storage. Renewable and Sustainable Energy Reviews, 2015, 44, 289-303.	8.2	164
42	Arrays of Planar Vacancies in Superior Thermoelectric Ge_{1â^'}_x_{â^'}_yCd_xBi_yTe with Band Convergence. Advanced Energy Materials, 2018, 8, 1801837.	1.3	161
43	Conducting polymer-based flexible thermoelectric materials and devices: From mechanisms to applications. Progress in Materials Science, 2021, 121, 100840.	16.0	160
44	Wafer-scale two-dimensional ferromagnetic Fe3GeTe2 thin films grown by molecular beam epitaxy. Npj 2D Materials and Applications, 2017, 1, .	3.9	157
45	Lithiumâ€Catalyzed Dehydrogenation of Ammonia Borane within Mesoporous Carbon Framework for Chemical Hydrogen Storage. Advanced Functional Materials, 2009, 19, 265-271.	7.8	156
46	Highâ€Performance Thermoelectric SnSe: Aqueous Synthesis, Innovations, and Challenges. Advanced Science, 2020, 7, 1902923.	5.6	156
47	High-Performance PEDOT:PSS Flexible Thermoelectric Materials and Their Devices by Triple Post-Treatments. Chemistry of Materials, 2019, 31, 5238-5244.	3.2	153
48	High Thermoelectric Performance in pâ€type Polycrystalline Cdâ€doped SnSe Achieved by a Combination of Cation Vacancies and Localized Lattice Engineering. Advanced Energy Materials, 2019, 9, 1803242.	10.2	150
49	Zeeman splitting and dynamical mass generation in Dirac semimetal ZrTe5. Nature Communications, 2016, 7, 12516.	5.8	149
50	Arrayed van der Waals Vertical Heterostructures Based on 2D GaSe Grown by Molecular Beam Epitaxy. Nano Letters, 2015, 15, 3571-3577.	4.5	146
51	Hierarchical Structures of Singleâ€Crystalline Anatase TiO₂ Nanosheets Dominated by {001} Facets. Chemistry - A European Journal, 2011, 17, 1423-1427.	1.7	143
52	Achieving zT > 2 in pâ€Type AgSbTe_{2â^'}_xSe_x Alloys via Exploring the Extra Light Valence Band and Introducing Dense Stacking Faults. Advanced Energy Materials, 2018, 8, 1702333.	10.2	143
53	Fiber-based thermoelectrics for solid, portable, and wearable electronics. Energy and Environmental Science, 2021, 14, 729-764.	15.6	143
54	Electric-field-controlled ferromagnetism in high-Curie-temperature Mn0.05Ge0.95 quantumÂdots. Nature Materials, 2010, 9, 337-344.	13.3	142

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55	Polycrystalline SnSe with Extraordinary Thermoelectric Property via Nanoporous Design. ACS Nano, 2018, 12, 11417-11425.	7.3	141
56	High activity electrocatalysts from metalâ€“organic framework-carbon nanotube templates for the oxygen reduction reaction. Carbon, 2015, 82, 417-424.	5.4	140
57	Rashba Effect Maximizes Thermoelectric Performance of GeTe Derivatives. Joule, 2020, 4, 2030-2043.	11.7	138
58	Ternary MOF-on-MOF heterostructures with controllable architectural and compositional complexity via multiple selective assembly. Nature Communications, 2020, 11, 4971.	5.8	138
59	Establishing the Golden Range of Seebeck Coefficient for Maximizing Thermoelectric Performance. Journal of the American Chemical Society, 2020, 142, 2672-2681.	6.6	137
60	Growth Mechanism of Truncated Triangular IIIâ€“V Nanowires. Small, 2007, 3, 389-393.	5.2	136
61	Fabrication of uniform anatase TiO2 particles exposed by {001} facets. Chemical Communications, 2010, 46, 6608.	2.2	134
62	Oxygen-vacancy ordering in lanthanide-doped ceria: Dopant-type dependence and structure model. Physical Review B, 2008, 77, .	1.1	133
63	Metallic and Carbon Nanotube-Catalyzed Coupling of Hydrogenation in Magnesium. Journal of the American Chemical Society, 2007, 129, 15650-15654.	6.6	131
64	Revisiting the precipitation sequence in Alâ€“Znâ€“Mg-based alloys by high-resolution transmission electron microscopy. Scripta Materialia, 2010, 63, 1061-1064.	2.6	128
65	Unexpected Benefits of Rapid Growth Rate for IIIâ^'V Nanowires. Nano Letters, 2009, 9, 695-701.	4.5	126
66	Epitaxial growth of Bi2Se3 topological insulator thin films on Si (111). Journal of Applied Physics, 2011, 109, .	1.1	126
67	Gate-Controlled Surface Conduction in Na-Doped Bi₂Te₃ Topological Insulator Nanoplates. Nano Letters, 2012, 12, 1170-1175.	4.5	126
68	Landau level splitting in Cd3As2 under high magnetic fields. Nature Communications, 2015, 6, 7779.	5.8	126
69	Boosting the thermoelectric performance of p-type heavily Cu-doped polycrystalline SnSe via inducing intensive crystal imperfections and defect phonon scattering. Chemical Science, 2018, 9, 7376-7389.	3.7	125
70	Na-Doped p-Type ZnO Microwires. Journal of the American Chemical Society, 2010, 132, 2498-2499.	6.6	122
71	Chemical activation of boron nitride fibers for improved cationic dye removal performance. Journal of Materials Chemistry A, 2015, 3, 8185-8193.	5.2	121
72	Flameâ€Synthesized Ceriaâ€Supported Copper Dimers for Preferential Oxidation of CO. Advanced Functional Materials, 2009, 19, 369-377.	7.8	120

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73	High tensile-strength and ductile titanium matrix composites strengthened by TiB nanowires. Scripta Materialia, 2017, 141, 133-137.	2.6	120
74	Realizing High Thermoelectric Performance in nâ€Type Highly Distorted Sbâ€Doped SnSe Microplates via Tuning High Electron Concentration and Inducing Intensive Crystal Defects. Advanced Energy Materials, 2018, 8, 1800775.	10.2	120
75	Oxygen vacancy ordering in heavily rare-earth-doped ceria. Applied Physics Letters, 2006, 89, 171911.	1.5	119
76	Damage to epitaxial GaN layers by silicon implantation. Applied Physics Letters, 1996, 69, 2364-2366.	1.5	118
77	Highâ€Content, Wellâ€Dispersed Î³â€Fe₂O₃ Nanoparticles Encapsulated in Macroporous Silica with Superior Arsenic Removal Performance. Advanced Functional Materials, 2014, 24, 1354-1363.	7.8	118
78	Microstructures and electrolytic properties of yttrium-doped ceria electrolytes: Dopant concentration and grain size dependences. Acta Materialia, 2006, 54, 3737-3746.	3.8	117
79	Ecoâ€Friendly Higher Manganese Silicide Thermoelectric Materials: Progress and Future Challenges. Advanced Energy Materials, 2018, 8, 1800056.	10.2	116
80	Realizing high thermoelectric properties of SnTe via synergistic band engineering and structure engineering. Nano Energy, 2019, 65, 104056.	8.2	116
81	Metal Nanodot Memory by Self-Assembled Block Copolymer Lift-Off. Nano Letters, 2010, 10, 224-229.	4.5	114
82	Super Deformability and Youngâ€™s Modulus of GaAs Nanowires. Advanced Materials, 2011, 23, 1356-1360.	11.1	114
83	Fundamental and progress of Bi ₂ Te ₃ -based thermoelectric materials. Chinese Physics B, 2018, 27, 048403.	0.7	114
84	Room-temperature chiral charge pumping in Dirac semimetals. Nature Communications, 2017, 8, 13741.	5.8	113
85	n-type Bi-doped PbTe Nanocubes with Enhanced Thermoelectric Performance. Nano Energy, 2017, 31, 105-112.	8.2	113
86	Novel B-site ordered double perovskite Ba₂Bi_{0.1}Sc_{0.2}Co_{1.7}O_{6â^'x}for highly efficient oxygen reduction reaction. Energy and Environmental Science, 2011, 4, 872-875.	15.6	112
87	Investigating the origin of Fermi level pinning in Ge Schottky junctions using epitaxially grown ultrathin MgO films. Applied Physics Letters, 2010, 96, .	1.5	111
88	Nearly intrinsic exciton lifetimes in single twin-free GaAsâ^•AlGaAs core-shell nanowire heterostructures. Applied Physics Letters, 2008, 93, .	1.5	109
89	Anatase TiO₂ Crystal Facet Growth: Mechanistic Role of Hydrofluoric Acid and Photoelectrocatalytic Activity. ACS Applied Materials & Interfaces, 2011, 3, 2472-2478.	4.0	108
90	Enhanced thermoelectric properties of nanostructured n-type Bi2Te3 by suppressing Te vacancy through non-equilibrium fast reaction. Chemical Engineering Journal, 2020, 391, 123513.	6.6	108

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91	Electrical and structural analysis of high-dose Si implantation in GaN. Applied Physics Letters, 1997, 70, 2729-2731.	1.5	107
92	Toward an indexing approach to evaluate fly ashes for geopolymer manufacture. Cement and Concrete Research, 2016, 85, 163-173.	4.6	107
93	Bi x Sb 2â^'x Te 3 nanoplates with enhanced thermoelectric performance due to sufficiently decoupled electronic transport properties and strong wide-frequency phonon scatterings. Nano Energy, 2016, 20, 144-155.	8.2	107
94	A General Singleâ€Source Route for the Preparation of Hollow Nanoporous Metal Oxide Structures. Angewandte Chemie - International Edition, 2009, 48, 7048-7051.	7.2	106
95	Bi0.5Sb1.5Te3/PEDOT:PSS-based flexible thermoelectric film and device. Chemical Engineering Journal, 2020, 397, 125360.	6.6	104
96	Computer-aided design of high-efficiency GeTe-based thermoelectric devices. Energy and Environmental Science, 2020, 13, 1856-1864.	15.6	103
97	Microstructures of phases in indented silicon: A high resolution characterization. Applied Physics Letters, 2003, 82, 874-876.	1.5	101
98	Direct Measure of Strain and Electronic Structure in GaAs/GaP Coreâ^'Shell Nanowires. Nano Letters, 2010, 10, 880-886.	4.5	101
99	Achieving high Figure of Merit in p-type polycrystalline Sn0.98Se via self-doping and anisotropy-strengthening. Energy Storage Materials, 2018, 10, 130-138.	9.5	101
100	Thermoelectrics for medical applications: Progress, challenges, and perspectives. Chemical Engineering Journal, 2022, 437, 135268.	6.6	101
101	Structural characteristics of GaSbâ•GaAs nanowire heterostructures grown by metal-organic chemical vapor deposition. Applied Physics Letters, 2006, 89, 231917.	1.5	99
102	The effect of V/III ratio and catalyst particle size on the crystal structure and optical properties of InP nanowires. Nanotechnology, 2009, 20, 225606.	1.3	99
103	Porous FeAl intermetallics fabricated by elemental powder reactive synthesis. Intermetallics, 2009, 17, 1041-1046.	1.8	98
104	High Purity GaAs Nanowires Free of Planar Defects: Growth and Characterization. Advanced Functional Materials, 2008, 18, 3794-3800.	7.8	97
105	ZnS Branched Architectures as Optoelectronic Devices and Field Emitters. Advanced Materials, 2010, 22, 2376-2380.	11.1	96
106	Mg-Based Nanocomposites with High Capacity and Fast Kinetics for Hydrogen Storage. Journal of Physical Chemistry B, 2006, 110, 11697-11703.	1.2	95
107	Green Synthesis of Hexagonal-Shaped WO₃Â·0.33H₂O Nanodiscs Composed of Nanosheets. Crystal Growth and Design, 2008, 8, 3993-3998.	1.4	94
108	Enhancing the thermoelectric performance of SnSe_{1â^'x}Te_x nanoplates through band engineering. Journal of Materials Chemistry A, 2017, 5, 10713-10721.	5.2	94

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109	Novel Growth Phenomena Observed in Axial InAs/GaAs Nanowire Heterostructures. Small, 2007, 3, 1873-1877.	5.2	93
110	Wearable fiber-based thermoelectrics from materials to applications. Nano Energy, 2021, 81, 105684.	8.2	92
111	Effects of the Al content on pore structures of porous Tiâ€“Al alloys. Intermetallics, 2008, 16, 327-332.	1.8	91
112	Te-Doped Cu₂Se nanoplates with a high average thermoelectric figure of merit. Journal of Materials Chemistry A, 2016, 4, 9213-9219.	5.2	91
113	High Porosity in Nanostructured n-Type Bi₂Te₃ Obtaining Ultralow Lattice Thermal Conductivity. ACS Applied Materials & Interfaces, 2019, 11, 31237-31244.	4.0	91
114	Nature of heterointerfaces in GaAs/InAs and InAs/GaAs axial nanowire heterostructures. Applied Physics Letters, 2008, 93, .	1.5	90
115	Rationally designed functional macroporous materials as new adsorbents for efficient phosphorus removal. Journal of Materials Chemistry, 2012, 22, 9983.	6.7	90
116	An Aâ€Siteâ€Deficient Perovskite offers High Activity and Stability for Lowâ€Temperature Solidâ€Oxide Fuel Cells. ChemSusChem, 2013, 6, 2249-2254.	3.6	90
117	Express penetration of hydrogen on Mg(10Íž13) along the close-packed-planes. Scientific Reports, 2015, 5, 10776.	1.6	89
118	Site-specific growth of MOF-on-MOF heterostructures with controllable nano-architectures: beyond the combination of MOF analogues. Chemical Science, 2020, 11, 3680-3686.	3.7	89
119	Impacts of Cu deficiency on the thermoelectric properties of Cu2â^'XSe nanoplates. Acta Materialia, 2016, 113, 140-146.	3.8	87
120	Nanoscratch-induced phase transformation of monocrystalline Si. Scripta Materialia, 2010, 63, 847-850.	2.6	86
121	A novel quaternary equiatomic Ti-Zr-Nb-Ta medium entropy alloy (MEA). Intermetallics, 2018, 101, 39-43.	1.8	86
122	Nanoscale pores plus precipitates rendering high-performance thermoelectric SnTe1-xSex with refined band structures. Nano Energy, 2019, 60, 1-7.	8.2	86
123	Epitaxial growth of high mobility Bi2Se3 thin films on CdS. Applied Physics Letters, 2011, 98, 242102.	1.5	85
124	Ultrafine porous boron nitride nanofibers synthesized via a freeze-drying and pyrolysis process and their adsorption properties. RSC Advances, 2016, 6, 1253-1259.	1.7	84
125	Lattice damage produced in GaN by swift heavy ions. Journal of Applied Physics, 2004, 95, 5360-5365.	1.1	82
126	A Solvothermal Synthetic Environmental Design for Highâ€Performance SnSeâ€Based Thermoelectric Materials. Advanced Energy Materials, 2022, 12, .	10.2	82

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127	Destabilization of Mgâ€“H bonding through nano-interfacial confinement by unsaturated carbon for hydrogen desorption from MgH2. Physical Chemistry Chemical Physics, 2013, 15, 5814.	1.3	80
128	In-doped Bi2Se3 hierarchical nanostructures as anode materials for Li-ion batteries. Journal of Materials Chemistry A, 2014, 2, 7109.	5.2	80
129	Characteristics of silicon substrates fabricated using nanogrinding and chemo-mechanical-grinding. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2008, 479, 373-379.	2.6	79
130	Phase Separation Induced by Au Catalysts in Ternary InGaAs Nanowires. Nano Letters, 2013, 13, 643-650.	4.5	79
131	Structure and Fieldâ€Emission Properties of Subâ€Micrometerâ€Sized Tungstenâ€Whisker Arrays Fabricated by Vapor Deposition. Advanced Materials, 2009, 21, 2387-2392.	11.1	77
132	Thermoelectric Coolers: Progress, Challenges, and Opportunities. Small Methods, 2022, 6, e2101235.	4.6	77
133	Annealing of ion implanted gallium nitride. Applied Physics Letters, 1998, 72, 1190-1192.	1.5	75
134	Superplasticity and superplastic forming ability of a Zrâ€“Tiâ€“Niâ€“Cuâ€“Be bulk metallic glass in the supercooled liquid region. Journal of Non-Crystalline Solids, 2005, 351, 209-217.	1.5	75
135	Depth profiling of GaN by cathodoluminescence microanalysis. Applied Physics Letters, 1999, 74, 1114-1116.	1.5	73
136	Hard-Sphere Packing and Icosahedral Assembly in the Formation of Mesoporous Materials. Journal of the American Chemical Society, 2007, 129, 9044-9048.	6.6	73
137	Photocatalytic water oxidation on F, N co-doped TiO2 with dominant exposed {001} facets under visible light. Chemical Communications, 2011, 47, 11742.	2.2	73
138	Rational structural design and manipulation advance SnSe thermoelectrics. Materials Horizons, 2020, 7, 3065-3096.	6.4	73
139	Ion-beam-induced dissociation and bubble formation in GaN. Applied Physics Letters, 2000, 77, 3577-3579.	1.5	72
140	Siliceous Nanopods from a Compromised Dualâ€Templating Approach. Angewandte Chemie - International Edition, 2007, 46, 8579-8582.	7.2	72
141	Formation of porous Niâ€“Al intermetallics through pressureless reaction synthesis. Journal of Alloys and Compounds, 2009, 484, 907-913.	2.8	72
142	Ion-beam-induced porosity of GaN. Applied Physics Letters, 2000, 77, 1455-1457.	1.5	71
143	Crystal symmetry induced structure and bonding manipulation boosting thermoelectric performance of GeTe. Nano Energy, 2020, 73, 104740.	8.2	71
144	Misfit dislocations and critical thickness in InGaAs/GaAs heterostructure systems. Journal of Applied Physics, 1993, 73, 619-626.	1.1	70

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145	Enhancing thermoelectric performance of Bi₂Te₃-based nanostructures through rational structure design. Nanoscale, 2016, 8, 8681-8686.	2.8	70
146	Supra-Assembly of Siliceous Vesicles. Journal of the American Chemical Society, 2006, 128, 15992-15993.	6.6	68
147	Ultrahigh conductivity in Weyl semimetal NbAs nanobelts. Nature Materials, 2019, 18, 482-488.	13.3	68
148	Distinct Photocurrent Response of Individual GaAs Nanowires Induced by n-Type Doping. ACS Nano, 2012, 6, 6005-6013.	7.3	66
149	Ion damage buildup and amorphization processes in AlxGa1â^'xAs. Journal of Applied Physics, 1995, 77, 87-94.	1.1	65
150	Design of nanostructured ceria-based solid electrolytes for development of IT-SOFC. Journal of Solid State Electrochemistry, 2008, 12, 841-849.	1.2	65
151	Metallic Ni nanocatalyst in situ formed from a metalâ€“organic-framework by mechanochemical reaction for hydrogen storage in magnesium. Journal of Materials Chemistry A, 2015, 3, 8294-8299.	5.2	65
152	Composition and its impact on shape evolution in dislocated Ge(Si)/Si islands. Applied Physics Letters, 2000, 77, 1304-1306.	1.5	63
153	Defect-Free <110> Zinc-Blende Structured InAs Nanowires Catalyzed by Palladium. Nano Letters, 2012, 12, 5744-5749.	4.5	62
154	Direct structural evidences of Mn11Ge8 and Mn5Ge2 clusters in Ge0.96Mn0.04 thin films. Applied Physics Letters, 2008, 92, .	1.5	61
155	Effect of a High Density of Stacking Faults on the Youngâ€™s Modulus of GaAs Nanowires. Nano Letters, 2016, 16, 1911-1916.	4.5	61
156	Ag doping induced abnormal lattice thermal conductivity in Cu₂Se. Journal of Materials Chemistry C, 2018, 6, 13225-13231.	2.7	61
157	Silicon-induced oriented ZnS nanobelts for hydrogen sensitivity. Nanotechnology, 2008, 19, 055710.	1.3	60
158	Hydrogenation/dehydrogenation in MgH2-activated carbon composites prepared by ball milling. International Journal of Hydrogen Energy, 2012, 37, 7579-7585.	3.8	60
159	Plastic Deformation through Dislocation Saturation in Ultrasmall Pt Nanocrystals and Its in Situ Atomistic Mechanisms. Nano Letters, 2017, 17, 4733-4739.	4.5	60
160	Nitrogen doping in ion-exchangeable layered tantalate towards visible-light induced water oxidation. Chemical Communications, 2011, 47, 6293.	2.2	59
161	T-Shaped Bi₂Te₃â€“Te Heteronanojunctions: Epitaxial Growth, Structural Modeling, and Thermoelectric Properties. Journal of Physical Chemistry C, 2013, 117, 12458-12464.	1.5	59
162	Self-ion-induced swelling of germanium. Nuclear Instruments & Methods in Physics Research B, 2001, 175-177, 193-196.	0.6	58

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163	Ion-beam-produced damage and its stability in AlN films. Journal of Applied Physics, 2002, 92, 3554-3558.	1.1	58
164	Superior electrical properties of crystalline Er2O3 films epitaxially grown on Si substrates. Applied Physics Letters, 2006, 88, 222902.	1.5	58
165	Compositional and structural characteristics of nano-sized domains in gadolinium-doped ceria. Solid State Ionics, 2008, 179, 827-831.	1.3	58
166	Catalytic De/Hydrogenation in Mg by Coâ€Doped Ni and VO_x on Active Carbon: Extremely Fast Kinetics at Low Temperatures and High Hydrogen Capacity. Advanced Energy Materials, 2011, 1, 387-393.	10.2	58
167	In situ observation of stress induced grain boundary migration in nanocrystalline gold. Scripta Materialia, 2017, 134, 95-99.	2.6	58
168	Enhanced Thermoelectric Performance of Ultrathin Bi₂Se₃ Nanosheets through Thickness Control. Advanced Electronic Materials, 2015, 1, 1500025.	2.6	57
169	Magnetotransport Properties of Cd₃As₂ Nanostructures. ACS Nano, 2015, 9, 8843-8850.	7.3	57
170	High-efficiency thermocells driven by thermo-electrochemical processes. Trends in Chemistry, 2021, 3, 561-574.	4.4	57
171	Computation-guided design of high-performance flexible thermoelectric modules for sunlight-to-electricity conversion. Energy and Environmental Science, 2020, 13, 3480-3488.	15.6	57
172	Mechanical properties of single crystal tungsten microwhiskers characterized by nanoindentation. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2009, 523, 193-198.	2.6	56
173	Bandgap engineering and manipulating electronic and optical properties of ZnO nanowires by uniaxial strain. Nanoscale, 2014, 6, 4936-4941.	2.8	55
174	Surfactantâ€free Fabrication of Fullerene C₆₀ Nanotubules Under Shear. Angewandte Chemie - International Edition, 2017, 56, 8398-8401.	7.2	55
175	Compositional design of strong and ductile (tensile) Ti-Zr-Nb-Ta medium entropy alloys (MEAs) using the atomic mismatch approach. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2019, 742, 762-772.	2.6	55
176	Dynamic annealing in III-nitrides under ion bombardment. Journal of Applied Physics, 2004, 95, 3048-3054.	1.1	54
177	Rational Design of Bi₂Te₃ Polycrystalline Whiskers for Thermoelectric Applications. ACS Applied Materials & Interfaces, 2015, 7, 989-995.	4.0	54
178	Sn buffered by shape memory effect of NiTi alloys as high-performance anodes for lithium ion batteries. Acta Materialia, 2012, 60, 4695-4703.	3.8	53
179	Capacity-controllable Li-rich cathode materials for lithium-ion batteries. Nano Energy, 2014, 6, 92-102.	8.2	53
180	Controllable Growth of Vertical Heterostructure GaTe_xSe_{1â€“x}/Si by Molecular Beam Epitaxy. ACS Nano, 2015, 9, 8592-8598.	7.3	53

#	Article	IF	Citations
181	Growth temperature and V/III ratio effects on the morphology and crystal structure of InP nanowires. Journal Physics D: Applied Physics, 2010, 43, 445402.	1.3	52
182	Understanding the stepwise capacity increase of high energy low-Co Li-rich cathode materials for lithium ion batteries. Journal of Materials Chemistry A, 2014, 2, 18767-18774.	5.2	52
183	Evolution of Epitaxial InAs Nanowires on GaAs (111)B. Small, 2009, 5, 366-369.	5.2	51
184	Limit of<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mi>z</mml:mi><mml:mi>T</mml:mi></mml:mrow></mml:ma in rocksalt structured chalcogenides by band convergence. Physical Review B, 2016, 94, .	1.1	51
185	Nano-scale dislocations induced by self-vacancy engineering yielding extraordinary n-type thermoelectric Pb0.96-yInySe. Nano Energy, 2018, 50, 785-793.	8.2	51
186	Dimerlike positional correlation and resonant transmission of electromagnetic waves in aperiodic dielectric multilayers. Physical Review B, 2004, 69, .	1.1	50
187	Growth of Magnetic Yardâ€Class Shaped Boron Nitride Nanotubes with Periodic Iron Nanoparticles. Advanced Functional Materials, 2007, 17, 3371-3376.	7.8	50
188	High-quality Bi2Te3 thin films grown on mica substrates for potential optoelectronic applications. Applied Physics Letters, 2013, 103, .	1.5	50
189	In situ preparation of TiB nanowires for high-performance Ti metal matrix nanocomposites. Journal of Alloys and Compounds, 2018, 735, 2640-2645.	2.8	50
190	Proximity-induced surface superconductivity in Dirac semimetal Cd3As2. Nature Communications, 2019, 10, 2217.	5.8	50
191	Dynamics of Strongly Degenerate Electronâ^'Hole Plasmas and Excitons in Single InP Nanowires. Nano Letters, 2007, 7, 3383-3387.	4.5	49
192	Direct evidence of dopant segregation in Gd-doped ceria. Applied Physics Letters, 2011, 98, .	1.5	49
193	Effect of Al content on porous Niâ€“Al alloys. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2011, 528, 4849-4855.	2.6	49
194	Growth, Cathodoluminescence and Field Emission of ZnS Tetrapod Treeâ€like Heterostructures. Advanced Functional Materials, 2008, 18, 3063-3069.	7.8	48
195	Nanoscratch-induced deformation of single crystal silicon. Journal of Vacuum Science & Technology B, 2009, 27, 1374-1377.	1.3	48
196	Self-Healing of Fractured GaAs Nanowires. Nano Letters, 2011, 11, 1546-1549.	4.5	48
197	Defects clustering and ordering in di- and trivalently doped ceria. Materials Research Bulletin, 2013, 48, 807-812.	2.7	48
198	Field Emission and Cathodoluminescence of ZnS Hexagonal Pyramids of Zinc Blende Structured Single Crystals. Advanced Functional Materials, 2009, 19, 484-490.	7.8	47

#	Article	IF	Citations
199	TEM and XPS analysis of CaxCe1-xO2-y (x=0.05â€“0.5) as electrolyte materials for solid oxide fuel cells. Acta Materialia, 2009, 57, 722-731.	3.8	47
200	Antiphotocorrosive photocatalysts containing CdS nanoparticles and exfoliated TiO₂ nanosheets. Journal of Materials Research, 2010, 25, 182-188.	1.2	46
201	Lattice Distortion Oriented Angular Self-Assembly of Monolayer Titania Sheets. Journal of the American Chemical Society, 2011, 133, 695-697.	6.6	46
202	A scalable colloidal approach to prepare hematite films for efficient solar water splitting. Physical Chemistry Chemical Physics, 2013, 15, 12314.	1.3	46
203	Optimization of sodium hydroxide for securing high thermoelectric performance in polycrystalline Sn_{1 â^' x}Se via anisotropy and vacancy synergy. InformaÄnÃ-MateriÃ¡ly, 2020, 2, 1201-1215.	8.5	46
204	Oxidation behavior of porous NiAl prepared through reactive synthesis. Materials Chemistry and Physics, 2010, 122, 417-423.	2.0	45
205	Strengthening Brittle Semiconductor Nanowires through Stacking Faults: Insights from in Situ Mechanical Testing. Nano Letters, 2013, 13, 4369-4373.	4.5	45
206	Synthesis of Silica Vesicles with Controlled Entrance Size for High Loading, Sustained Release, and Cellular Delivery of Therapeutical Proteins. Small, 2014, 10, 5068-5076.	5.2	45
207	Inâ€...Situ Observation of Dynamic Galvanic Replacement Reactions in Twinned Metallic Nanowires by Liquid Cell Transmission Electron Microscopy. Angewandte Chemie - International Edition, 2019, 58, 18627-18633.	7.2	45
208	Ultrasensitive Mid-wavelength Infrared Photodetection Based on a Single InAs Nanowire. ACS Nano, 2019, 13, 3492-3499.	7.3	45
209	Atomistic structure of monocrystalline silicon in surface nano-modification. Nanotechnology, 2004, 15, 104-107.	1.3	44
210	Separation of top and bottom surface conduction in Bi2Te3thin films. Nanotechnology, 2013, 24, 015705.	1.3	44
211	Laser Engineered Graphene Paper for Mass Spectrometry Imaging. Scientific Reports, 2013, 3, 1415.	1.6	44
212	Determination of Youngâ€™s Modulus of Ultrathin Nanomaterials. Nano Letters, 2015, 15, 5279-5283.	4.5	44
213	Laser irradiated vortex fluidic mediated synthesis of luminescent carbon nanodots under continuous flow. Reaction Chemistry and Engineering, 2018, 3, 164-170.	1.9	44
214	Reactive synthesis of microporous titanium-aluminide membranes. Materials Letters, 2009, 63, 22-24.	1.3	43
215	Formation of Hierarchical InAs Nanoringâ€‰/â€‰GaAs Nanowire Heterostructures. Angewandte Chemie - International Edition, 2009, 48, 780-783.	7.2	43
216	Super Large Sn_{1â€“x}Se Single Crystals with Excellent Thermoelectric Performance. ACS Applied Materials & Interfaces, 2019, 11, 8051-8059.	4.0	43

#	Article	IF	Citations
217	Microstructure and properties of Cuâ€“Fe deformation processed in-situ composite. Vacuum, 2019, 167, 54-58.	1.6	43
218	Enhancing Thermoelectric Properties of InTe Nanoprecipitate-Embedded Sn_{1â€“x}In_xTe Microcrystals through Anharmonicity and Strain Engineering. ACS Applied Energy Materials, 2019, 2, 2965-2971.	2.5	43
219	Electron Tomography: A Unique Tool Solving Intricate Hollow Nanostructures. Advanced Materials, 2019, 31, e1801564.	11.1	43
220	Versatile Vanadium Doping Induces High Thermoelectric Performance in GeTe via Band Alignment and Structural Modulation. Advanced Energy Materials, 2021, 11, 2100544.	10.2	43
221	A game-changing design of low-cost, large-size porous cocatalysts decorated by ultra-small photocatalysts for highly efficient hydrogen evolution. Applied Catalysis B: Environmental, 2021, 286, 119923.	10.8	43
222	Defect-Free GaAs/AlGaAs Coreâ€“Shell Nanowires on Si Substrates. Crystal Growth and Design, 2011, 11, 3109-3114.	1.4	42
223	Present status and future prospect of design of Ptâ€“cerium oxide electrodes for fuel cell applications. Progress in Natural Science: Materials International, 2012, 22, 561-571.	1.8	42
224	Self-Assembly and Cathodoluminescence of Microbelts from Cu-Doped Boron Nitride Nanotubes. ACS Nano, 2008, 2, 1523-1532.	7.3	41
225	The corrosion behavior of porous Ni3Al intermetallic materials in strong alkali solution. Intermetallics, 2011, 19, 1759-1765.	1.8	41
226	Scalable Growth of High Mobility Dirac Semimetal Cd₃As₂ Microbelts. Nano Letters, 2015, 15, 5830-5834.	4.5	41
227	Wafer-scale arrayed p-n junctions based on few-layer epitaxial GaTe. Nano Research, 2015, 8, 3332-3341.	5.8	41
228	Thermal Reductive Perforation of Graphene Cathode for Highâ€Performance Aluminumâ€Ion Batteries. Advanced Functional Materials, 2021, 31, 2010569.	7.8	41
229	Optimizing Electronic Quality Factor toward Highâ€Performance Ge_{1â^’}_x_{â^’}_yTa_xSb_yTe Thermoelectrics: The Role of Transition Metal Doping. Advanced Materials, 2021, 33, e2102575.	1.1	41
230	Polarity-driven Nonuniform Composition in InGaAs Nanowires. Nano Letters, 2013, 13, 5085-5089.	4.5	40
231	Novel impurity-free interdiffusion in GaAs/AlGaAs quantum wells by anodization and rapid thermal annealing. Applied Physics Letters, 1997, 70, 1269-1271.	1.5	39
232	Structural disorder in ion-implanted AlxGa1â^’xN. Applied Physics Letters, 2002, 80, 787-789.	1.5	39
233	Effect of over-doped yttrium on the microstructure, mechanical properties and thermal properties of a Zr-based metallic glass. Acta Materialia, 2006, 54, 3627-3635.	3.8	39
234	Formation mechanism of nanocrystalline high-pressure phases in silicon during nanogrinding. Nanotechnology, 2007, 18, 465705.	1.3	39

#	Article	IF	Citations
235	Evolution of InAs branches in InAsâˆ•GaAs nanowire heterostructures. Applied Physics Letters, 2007, 91, 133115.	1.5	39
236	Effect of Ag micro-alloying on the microstructure and properties of Cuâ€“14Fe in situ composite. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2010, 527, 4953-4958.	2.6	39
237	Field emitters: ultrathin BN nanosheets protruded from BN fibers. Journal of Materials Chemistry, 2011, 21, 1191-1195.	6.7	39
238	Anelastic Behavior in GaAs Semiconductor Nanowires. Nano Letters, 2013, 13, 3169-3172.	4.5	39
239	Hollow Carbon Nanospheres with Extremely Small Size as Anode Material in Lithium-Ion Batteries with Outstanding Cycling Stability. Journal of Physical Chemistry C, 2016, 120, 3139-3144.	1.5	39
240	Two-dimensional ferromagnetic superlattices. National Science Review, 2020, 7, 745-754.	4.6	39
241	Efficient production of ZnO nanowires by a ball milling and annealing method. Nanotechnology, 2007, 18, 175604.	1.3	38
242	A structure model of nano-sized domain in Gd-doped ceria. Solid State Ionics, 2009, 180, 1414-1420.	1.3	38
243	Novel growth and properties of GaAs nanowires on Si substrates. Nanotechnology, 2010, 21, 035604.	1.3	38
244	A novel bottom-up solvothermal synthesis of carbon nanosheets. Journal of Materials Chemistry A, 2014, 2, 2390.	5.2	38
245	The effects of ion mass, energy, dose, flux and irradiation temperature on implantation disorder in GaN. Nuclear Instruments & Methods in Physics Research B, 2001, 178, 209-213.	0.6	37
246	Dislocation-induced spatial ordering of InAs quantum dots: Effects on optical properties. Journal of Applied Physics, 2002, 91, 5826-5830.	1.1	37
247	Thermal stability of ion-implanted ZnO. Applied Physics Letters, 2005, 87, 231912.	1.5	37
248	A formation mechanism of oxygen vacancies in a MnO2 monolayer: a DFT + U study. Physical Chemistry Chemical Physics, 2011, 13, 11325.	1.3	37
249	Structure and quality controlled growth of InAs nanowires through catalyst engineering. Nano Research, 2014, 7, 1640-1649.	5.8	37
250	Observations of a Metalâ€“Insulator Transition and Strong Surface States in Bi_{2â€“x}Sb_xSe₃ Thin Films. Advanced Materials, 2014, 26, 7110-7115.	11.1	37
251	Catalyst Orientation-Induced Growth of Defect-Free Zinc-Blende Structured âŸ¨001Ì…âŸ© InAs Nanowires. Nano Letters, 2015, 15, 876-882.	4.5	37
252	Flower-like C@SnO X @C hollow nanostructures with enhanced electrochemical properties for lithium storage. Nano Research, 2017, 10, 2966-2976.	5.8	37

#	Article	IF	Citations
253	Self-Assembly Growth of In-Rich InGaAs Coreâ€“Shell Structured Nanowires with Remarkable Near-Infrared Photoresponsivity. Nano Letters, 2017, 17, 7824-7830.	4.5	37
254	Compositional and valent state inhomogeneities and ordering of oxygen vacancies in terbium-doped ceria. Journal of Applied Physics, 2007, 101, 113528.	1.1	36
255	Polarity driven formation of InAs/GaAs hierarchical nanowire heterostructures. Applied Physics Letters, 2008, 93, 201908.	1.5	36
256	Highly Thiolated Dendritic Mesoporous Silica Nanoparticles with High-Content Gold as Nanozymes: The Nano-Gold Size Matters. ACS Applied Materials & Interfaces, 2019, 11, 13264-13272.	4.0	36
257	Blistering of H-implanted GaN. Journal of Applied Physics, 2002, 91, 3928-3930.	1.1	35
258	Evidence of Intragranular Segregation of Dopant Cations in Heavily Yttrium-Doped Ceria. Electrochemical and Solid-State Letters, 2007, 10, P1.	2.2	35
259	Mn-rich clusters in GeMn magnetic semiconductors: Structural evolution and magnetic property. Journal of Alloys and Compounds, 2010, 508, 273-277.	2.8	35
260	High-Density, Defect-Free, and Taper-Restrained Epitaxial GaAs Nanowires Induced from Annealed Au Thin Films. Crystal Growth and Design, 2012, 12, 2018-2022.	1.4	35
261	Temperature-dependent chemical state of the nickel catalyst for the growth of carbon nanofibers. Carbon, 2016, 96, 904-910.	5.4	35
262	Room-Temperature Electric-Field Controlled Ferromagnetism in Mn0.05Ge0.95 Quantum Dots. ACS Nano, 2010, 4, 4948-4954.	7.3	34
263	Ordered structures of defect clusters in gadolinium-doped ceria. Journal of Chemical Physics, 2011, 134, 224708.	1.2	34
264	Characterization of porous Ni3Al electrode for hydrogen evolution in strong alkali solution. Materials Chemistry and Physics, 2013, 141, 553-561.	2.0	34
265	Single-crystalline spherical Î²-Ga2O3 particles: Synthesis, N-doping and photoluminescence properties. Journal of Luminescence, 2013, 140, 30-37.	1.5	34
266	Quality of epitaxial InAs nanowires controlled by catalyst size in molecular beam epitaxy. Applied Physics Letters, 2013, 103, .	1.5	34
267	The stability of hydrogen evolution activity and corrosion behavior of porous Ni3Alâ€“Mo electrode in alkaline solution during long-term electrolysis. Energy, 2014, 67, 19-26.	4.5	34
268	Disordering and anomalous surface erosion of GaN during ion bombardment at elevated temperatures. Applied Physics Letters, 2001, 78, 1373-1375.	1.5	33
269	Amorphous structures induced in monocrystalline silicon by mechanical loading. Applied Physics Letters, 2004, 85, 932-934.	1.5	33
270	Nature of interfacial defects and their roles in strain relaxation at highly lattice mismatched 3C-SiC/Si (001) interface. Journal of Applied Physics, 2009, 106, .	1.1	33

#	Article	IF	Citations
271	Thin boron nitride nanotubes with exceptionally high strength and toughness. Nanoscale, 2013, 5, 4840.	2.8	33
272	ZnS nanowires and their coaxial lateral nanowire heterostructures with BN. Applied Physics Letters, 2007, 90, 103117.	1.5	32
273	An improved loop test for experimentally approaching the intrinsic strength of alumina nanoscale whiskers. Nanotechnology, 2013, 24, 285703.	1.3	32
274	Ionic Conductivities and Microstructures of Ytterbium-Doped Ceria. Journal of the Electrochemical Society, 2007, 154, B180.	1.3	31
275	Synthesis of single-crystalline tungsten nanowires by nickel-catalyzed vapor-phase method at 850Â°C. Journal of Crystal Growth, 2007, 306, 433-436.	0.7	31
276	MnGe magnetic nanocolumns and nanowells. Nanotechnology, 2010, 21, 255602.	1.3	31
277	Effect of nickel diffusion on the microstructure of Gd-doped ceria (GDC) electrolyte film supported by Niâ€“GDC cermet anode. Solid State Ionics, 2010, 181, 646-652.	1.3	31
278	Growth and properties of IIIâ€“V compound semiconductor heterostructure nanowires. Semiconductor Science and Technology, 2011, 26, 014035.	1.0	31
279	Taper-Free and Vertically Oriented Ge Nanowires on Ge/Si Substrates Grown by a Two-Temperature Process. Crystal Growth and Design, 2012, 12, 135-141.	1.4	31
280	Fabrication of a nano-structured Pt-loaded cerium oxide nanowire and its anode performance in the methanol electro-oxidation reaction. Journal of Materials Chemistry A, 2013, 1, 6262.	5.2	31
281	A new crystal: layer-structured rhombohedral In3Se4. CrystEngComm, 2014, 16, 393-398.	1.3	31
282	High Thermoelectric Performance in Sintered Octahedron-Shaped Sn(CdIn)_xTe_{1+2x} Microcrystals. ACS Applied Materials & Interfaces, 2018, 10, 38944-38952.	4.0	31
283	Superstructured Macroporous Carbon Rods Composed of Defective Graphitic Nanosheets for Efficient Oxygen Reduction Reaction. Advanced Science, 2021, 8, e2100120.	5.6	31
284	Ge/Si interdiffusion in the GeSi dots and wetting layers. Journal of Applied Physics, 2001, 90, 4290-4292.	1.1	30
285	Evolution of Wurtzite Structured GaAs Shells Around InAs Nanowire Cores. Nanoscale Research Letters, 2009, 4, 846-849.	3.1	30
286	Mutual Diffusion Occurring at the Interface between La_{0.6}Sr_{0.4}Co_{0.8}Fe_{0.2}O₃ Cathode and Gd-doped Ceria Electrolyte during IT-SOFC Cell Preparation. ACS Applied Materials & Interfaces, 2011, 3, 2772-2778.	4.0	30
287	High Curie Temperature Bi_{1.85}Mn_{0.15}Te₃ Nanoplates. Journal of the American Chemical Society, 2012, 134, 18920-18923.	6.6	30
288	Characterization of the porous Ni3Alâ€“Mo electrodes during hydrogen generation from alkaline water electrolysis. Energy, 2013, 63, 216-224.	4.5	30

#	Article	IF	Citations
289	Orientation Dependence of Electromechanical Characteristics of Defect-free InAs Nanowires. Nano Letters, 2016, 16, 1787-1793.	4.5	30
290	Anodic-oxide-induced interdiffusion in GaAs/AlGaAs quantum wells. Journal of Applied Physics, 1998, 83, 1305-1311.	1.1	29
291	Glass-forming ability and thermal stability of a new bulk metallic glass in the quaternary Zrâ€“Cuâ€“Niâ€“Al system. Journal of Non-Crystalline Solids, 2005, 351, 2519-2523.	1.5	29
292	Enhanced glass-forming ability of a Zr-based bulk metallic glass with yttrium doping. Journal of Non-Crystalline Solids, 2006, 352, 3109-3112.	1.5	29
293	Microstructural characterization of terbium-doped ceria. Materials Research Bulletin, 2007, 42, 943-949.	2.7	29
294	Mn behavior in Ge0.96Mn0.04 magnetic thin films grown on Si. Journal of Applied Physics, 2008, 103, .	1.1	29
295	Cerium-Reduction-Induced Defects Clustering, Ordering, and Associated Microstructure Evolution in Yttrium-Doped Ceria. Journal of Physical Chemistry C, 2012, 116, 5435-5443.	1.5	29
296	Optimization of ionic conductivity in solid electrolytes through dopant-dependent defect cluster analysis. Physical Chemistry Chemical Physics, 2012, 14, 8369.	1.3	29
297	Correlation between Multiple Growth Stages and Photocatalysis of SrTiO₃ Nanocrystals. Journal of Physical Chemistry C, 2015, 119, 3530-3537.	1.5	29
298	In Situ TEM Observation of Crystal Structure Transformation in InAs Nanowires on Atomic Scale. Nano Letters, 2018, 18, 6597-6603.	4.5	29
299	Kinetic condition driven phase and vacancy enhancing thermoelectric performance of low-cost and eco-friendly Cu_{2â^'x}S. Journal of Materials Chemistry C, 2019, 7, 5366-5373.	2.7	29
300	Two-dimensional flexible thermoelectric devices: Using modeling to deliver optimal capability. Applied Physics Reviews, 2021, 8, .	5.5	29
301	Influence of nitriding gases on the growth of boron nitride nanotubes. Journal of Materials Science, 2007, 42, 4025-4030.	1.7	28
302	Development of a new graded-porosity FeAl alloy by elemental reactive synthesis. Desalination, 2009, 249, 29-33.	4.0	28
303	Effects of annealing and substrate orientation on epitaxial growth of GaAs on Si. Journal of Applied Physics, 2009, 106, .	1.1	28
304	Grain boundary's conductivity in heavily yttrium doped ceria. Solid State Ionics, 2012, 222-223, 31-37.	1.3	28
305	Protein Therapy: Synthesis of Silica Vesicles with Controlled Entrance Size for High Loading, Sustained Release, and Cellular Delivery of Therapeutical Proteins (Small 24/2014). Small, 2014, 10, 4986-4986.	5.2	28
306	Safety evaluation of graphene oxide-based magnetic nanocomposites as MRI contrast agents and drug delivery vehicles. RSC Advances, 2014, 4, 50464-50477.	1.7	28

#	Article	IF	Citations
307	Synthesis and magnetic properties of Fe3Câ€“C coreâ€“shell nanoparticles. Nanotechnology, 2015, 26, 085601.	1.3	28
308	Mechanically Driven Grain Boundary Formation in Nickel Nanowires. ACS Nano, 2017, 11, 12500-12508.	7.3	28
309	Laser-Ablated Vortex Fluidic-Mediated Synthesis of Superparamagnetic Magnetite Nanoparticles in Water Under Flow. ACS Omega, 2018, 3, 11172-11178.	1.6	28
310	Solvothermal synthesis of high-purity porous Cu1.7Se approaching low lattice thermal conductivity. Chemical Engineering Journal, 2019, 375, 121996.	6.6	28
311	Effects of interdiffusion on the band alignment of GeSi dots. Applied Physics Letters, 2001, 79, 1980-1982.	1.5	27
312	Structure Transition from Hexagonal Mesostructured Rodlike Silica to Multilamellar Vesicles. Langmuir, 2008, 24, 5038-5043.	1.6	27
313	Wurtzite P-Doped GaN Triangular Microtubes as Field Emitters. Journal of Physical Chemistry C, 2010, 114, 9627-9633.	1.5	27
314	Metallic and Ionic Fe Induced Growth of Siâ^'SiO_x Coreâ^'Shell Nanowires. Journal of Physical Chemistry C, 2010, 114, 15370-15376.	1.5	27
315	The creep behaviour of poly(vinylidene fluoride)/â€œbud-branchedâ€•nanotubes nanocomposites. Composites Science and Technology, 2012, 72, 1656-1664.	3.8	27
316	Effect of directional solidification rate on the microstructure and properties of deformation-processed Cuâ€“7Crâ€“0.1Ag in situ composites. Journal of Alloys and Compounds, 2014, 612, 221-226.	2.8	27
317	Critical thickness determination of InxGa1-xAs/GaAs strained-layer system by transmission electron microscopy. Journal of Electronic Materials, 1991, 20, 855-859.	1.0	26
318	Nature of Planar Defects in Ion-Implanted GaN. Electrochemical and Solid-State Letters, 2003, 6, G34.	2.2	26
319	Growth of single-crystalline, atomically smooth MgO films on Ge(001) by molecular beam epitaxy. Journal of Crystal Growth, 2009, 312, 44-47.	0.7	26
320	Tortuosity factor for porous FeAl intermetallics fabricated by reactive synthesis. Transactions of Nonferrous Metals Society of China, 2012, 22, 2179-2183.	1.7	26
321	Atomic-scale observation of parallel development of super elasticity and reversible plasticity in GaAs nanowires. Applied Physics Letters, 2014, 104, .	1.5	26
322	High performance UV light photodetectors based on Sn-nanodot-embedded SnO₂ nanobelts. Journal of Materials Chemistry C, 2015, 3, 5253-5258.	2.7	26
323	Alternative mechanism for misfit dislocation generation during high-temperature Ge(Si)/Si (001) island growth. Applied Physics Letters, 2002, 81, 1996-1998.	1.5	25
324	Atomic configurations of dislocation core and twin boundaries in3Câ^'SiCstudied by high-resolution electron microscopy. Physical Review B, 2007, 75, .	1.1	25

#	Article	IF	Citations
325	Structural phase transformation through defect cluster growth in Gd-doped ceria. Physical Review B, 2011, 84, .	1.1	25
326	Mutual Diffusion and Microstructure Evolution at the Electrolyteâ"Anode Interface in Intermediate Temperature Solid Oxide Fuel Cell. Journal of Physical Chemistry C, 2011, 115, 6877-6885.	1.5	25
327	Dislocation Associated Incubational Domain Formation in Lightly Gadolinium-Doped Ceria. Microscopy and Microanalysis, 2011, 17, 49-53.	0.2	25
328	Quantum Capacitance in Topological Insulators. Scientific Reports, 2012, 2, 669.	1.6	25
329	Fabrication of tungsten carbideâ€"vanadium carbide coreâ€"shell structure powders and their application as an inhibitor for the sintering of cemented carbides. Scripta Materialia, 2012, 67, 826-829.	2.6	25
330	Pore structure control for porous FeAl intermetallics. Intermetallics, 2013, 32, 423-428.	1.8	25
331	Anisotropic Electrical Properties from Vaporâ€"Solidâ€"Solid Grown Bi₂Se₃ Nanoribbons and Nanowires. Journal of Physical Chemistry C, 2014, 118, 20620-20626.	1.5	25
332	Theoretical and experimental study of highly textured GaAs on silicon using a graphene buffer layer. Journal of Crystal Growth, 2015, 425, 268-273.	0.7	25
333	Ni-induced stepwise capacity increase in Ni-poor Li-rich cathode materials for high performance lithium ion batteries. Nano Research, 2015, 8, 808-820.	5.8	25
334	Outstanding thermoelectric properties of solvothermal-synthesized Sn_{1â"3x}In_xAg_{2x}Te micro-crystals through defect engineering and band tuning. Journal of Materials Chemistry A, 2020, 8, 3978-3987.	5.2	25
335	Adatom condensation and quantum dot sizes in InGaAs/GaAs (001). Applied Physics Letters, 2000, 76, 1558-1560.	1.5	24
336	Implantation-produced structural damage in InxGa1â"xN. Applied Physics Letters, 2001, 79, 602-604.	1.5	24
337	Solving Complex Concentric Circular Mesostructures by Using Electron Tomography. Angewandte Chemie - International Edition, 2008, 47, 6670-6673.	7.2	24
338	Microstructural Characteristics of SDC Electrolyte Film Supported by Niâ€"SDC Cermet Anode. Journal of the Electrochemical Society, 2009, 156, B825.	1.3	24
339	Structural characteristics and high-temperature oxidation behavior of porous Feâ€"40Âat.%Al alloy. Journal of Materials Science, 2009, 44, 4413-4421.	1.7	24
340	Oxygen vacancy induced structural variations of exfoliated monolayerMnO2sheets. Physical Review B, 2010, 81, .	1.1	24
341	Influence of Ag micro-alloying on the microstructure and properties of Cuâ€"7Cr in situ composite. Journal of Alloys and Compounds, 2010, 500, L22-L25.	2.8	24
342	A systematic study of long-range ordered 3D-SBA-15 materials by electron tomography. New Journal of Chemistry, 2011, 35, 2456.	1.4	24

#	Article	IF	Citations
343	In situ atomistic deformation mechanisms of twin-structured nanocrystal Pt. Scripta Materialia, 2018, 147, 103-107.	2.6	24
344	{111} defects in 1-MeV-silicon-ion-implanted silicon. Physical Review B, 1995, 52, 17223-17230.	1.1	23
345	Role of implantation-induced defects on the response time of semiconductor saturable absorbers. Applied Physics Letters, 1999, 75, 1437-1439.	1.5	23
346	Multilayered carbon films for tribological applications. Diamond and Related Materials, 2003, 12, 178-184.	1.8	23
347	Vertically standing Ge nanowires on GaAs(110) substrates. Nanotechnology, 2008, 19, 125602.	1.3	23
348	Effect of Grain Growth on Densification and Conductivity of Caâ€Ðoped CeO₂ Electrolyte. Journal of the American Ceramic Society, 2009, 92, 2745-2750.	1.9	23
349	Quality Control of GaAs Nanowire Structures by Limiting As Flux in Molecular Beam Epitaxy. Journal of Physical Chemistry C, 2015, 119, 20721-20727.	1.5	23
350	Morphology and Texture Engineering Enhancing Thermoelectric Performance of Solvothermal Synthesized Ultralarge SnS Microcrystal. ACS Applied Energy Materials, 2020, 3, 2192-2199.	2.5	23
351	Achieving enhanced thermoelectric performance of Ca1â^'xâ^'yLaxSryMnO3 via synergistic carrier concentration optimization and chemical bond engineering. Chemical Engineering Journal, 2021, 408, 127364.	6.6	23
352	Annealing effects on the microstructure of Ge/Si(001) quantum dots. Applied Physics Letters, 2001, 79, 1258-1260.	1.5	22
353	Electronâ€Tomography Determination of the Packing Structure of Macroporous Ordered Siliceous Foams Assembled From Vesicles. Small, 2009, 5, 377-382.	5.2	22
354	Transition between amorphous and crystalline phases of SiC deposited on Si substrate using H3SiCH3. Journal of Crystal Growth, 2009, 311, 4442-4446.	0.7	22
355	Effect of preheating treatment at 575 Â°C of green compacts on porous NiAl. Journal of Alloys and Compounds, 2010, 492, 219-225.	2.8	22
356	Novel C/Cu sheath/core nanostructures synthesized via low-temperature MOCVD. Nanotechnology, 2011, 22, 405704.	1.3	22
357	Au impact on GaAs epitaxial growth on GaAs (111)B substrates in molecular beam epitaxy. Applied Physics Letters, 2013, 102, .	1.5	22
358	Morphological control of SnTe nanostructures by tuning catalyst composition. Nano Research, 2015, 8, 3011-3019.	5.8	22
359	Achieving high thermoelectric performance of Ni/Cu modified Bi0.5Sb1.5Te3 composites by a facile electroless plating. Materials Today Energy, 2018, 9, 383-390.	2.5	22
360	Theoretical consideration of misfit dislocation nucleation by partial dislocations in [001] strainedâ€layer heterostructures. Journal of Applied Physics, 1993, 74, 925-930.	1.1	21

#	Article	IF	Citations
361	Theoretical consideration of equilibrium dissociation geometries of 60Â° misfit dislocations in single semiconductor heterostructures. Journal of Applied Physics, 1995, 77, 2448-2453.	1.1	21
362	Extracting composition and alloying information of coherent Ge(Si)/Si(001) islands from [001] on-zone bright-field diffraction contrast images. Journal of Applied Physics, 2001, 90, 2725-2729.	1.1	21
363	Effect of ion species on implantation-produced disorder in GaN at liquid nitrogen temperature. Nuclear Instruments & Methods in Physics Research B, 2002, 190, 782-786.	0.6	21
364	Effect of heating rate on pore structure of porous FeAl material. Powder Metallurgy, 2008, 51, 171-175.	0.9	21
365	Indentation-induced delamination of plasma-enhanced chemical vapor deposition silicon nitride film on gallium arsenide substrate. Journal of Materials Research, 2013, 28, 1047-1055.	1.2	21
366	Thermal stability and oxidation of layer-structured rhombohedral In3Se4 nanostructures. Applied Physics Letters, 2013, 103, .	1.5	21
367	Bismuth-induced phase control of GaAs nanowires grown by molecular beam epitaxy. Applied Physics Letters, 2014, 105, 162102.	1.5	21
368	Organic Fluorescent Dyes Supported on Activated Boron Nitride: A Promising Blue Light Excited Phosphors for High-Performance White Light-Emitting Diodes. Scientific Reports, 2015, 5, 8492.	1.6	21
369	Planar Vacancies in Sn_{1â€“x}Bi_xTe Nanoribbons. ACS Nano, 2016, 10, 5507-5515.	7.3	21
370	Enhanced mechanical properties and oxidation resistance of tungsten carbide-cobalt cemented carbides with aluminum nitride additions. Ceramics International, 2017, 43, 6603-6606.	2.3	21
371	Signature of quantum Griffiths singularity state in a layered quasi-one-dimensional superconductor. Nature Communications, 2018, 9, 4656.	5.8	21
372	Enhancing thermoelectric performance of (Cu1-xAgx)2Se via CuAgSe secondary phase and porous design. Sustainable Materials and Technologies, 2018, 17, e00076.	1.7	21
373	Vortex fluidic mediated transformation of graphite into highly conducting graphene scrolls. Nanoscale Advances, 2019, 1, 2495-2501.	2.2	21
374	Surface-States-Modulated High-Performance InAs Nanowire Phototransistor. Journal of Physical Chemistry Letters, 2020, 11, 6413-6419.	2.1	21
375	In situliquid cell transmission electron microscopy guiding the design of large-sized cocatalysts coupled with ultra-small photocatalysts for highly efficient energy harvesting. Journal of Materials Chemistry A, 2021, 9, 13056-13064.	5.2	21
376	Structural Evolution of Highâ€Performance Mnâ€Alloyed Thermoelectric Materials: A Case Study of SnTe. Small, 2021, 17, e2100525.	5.2	21
377	Nucleation of semicircular misfit dislocation loops from the epitaxial surface of strainedâ€layer heterostructures. Journal of Applied Physics, 1996, 79, 7632-7635.	1.1	20
378	Epitaxially grown GaAsN random laser. Journal of Applied Physics, 2003, 93, 5855-5858.	1.1	20

#	Article	IF	Citations
379	Determination of a misfit dislocation complex in SiGe/Si heterostructures by image deconvolution technique in HREM. Ultramicroscopy, 2004, 98, 259-264.	0.8	20
380	Epitaxial orientation of Mg2Si(110) thin film on Si(111) substrate. Journal of Applied Physics, 2007, 102, 126102.	1.1	20
381	Effects of dopant concentration and calcination temperature on the microstructure of Ca-doped ceria nanopowders. Journal of the European Ceramic Society, 2008, 28, 2709-2716.	2.8	20
382	Temperature influence on sintering with concurrent crystallization behavior in Ti-based metallic glassy powders. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2010, 527, 2662-2668.	2.6	20
383	Catalytically enhanced dehydrogenation of MgH2 by activated carbon supported Pdâ€“VOx (x=2.38) nanocatalyst. International Journal of Hydrogen Energy, 2012, 37, 13393-13399.	3.8	20
384	Paramagnetic Cu-doped Bi2Te3 nanoplates. Applied Physics Letters, 2014, 104, 053105.	1.5	20
385	Thermal Stability and Properties of Deformation-Processed Cu-Fe In Situ Composites. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2015, 46, 2255-2261.	1.1	20
386	Growth of III-V semiconductor nanowires and their heterostructures. Science China Materials, 2016, 59, 51-91.	3.5	20
387	Crystal-phase control of GaAsâ€“GaAsSb coreâ€“shell/axial nanowire heterostructures by a two-step growth method. Journal of Materials Chemistry C, 2018, 6, 6726-6732.	2.7	20
388	Hierarchical Structuring to Break the Amorphous Limit of Lattice Thermal Conductivity in High-Performance SnTe-Based Thermoelectrics. ACS Applied Materials & Interfaces, 2020, 12, 36370-36379.	4.0	20
389	High strength and ductility of titanium matrix composites by nanoscale design in selective laser melting. Journal of Materials Science and Technology, 2022, 118, 114-127.	5.6	20
390	Optical transition in infrared photodetector based on V-groove Al0.5Ga0.5As/GaAs multiple quantum wire. Journal of Applied Physics, 2001, 89, 2351-2356.	1.1	19
391	Microstructure of MmM5/Mg multi-layer hydrogen storage films prepared by magnetron sputtering. Microscopy Research and Technique, 2004, 64, 323-329.	1.2	19
392	Microstructure of MmM5/Mg multi-layer films prepared by magnetron sputtering. Journal of Alloys and Compounds, 2005, 404-406, 485-489.	2.8	19
393	Zinc sulfide nanowire arrays on silicon wafers for field emitters. Nanotechnology, 2010, 21, 065701.	1.3	19
394	The preparation, structures, and properties of poly(vinylidene fluoride)/multiwall carbon nanotubes nanocomposites. Journal of Applied Polymer Science, 2012, 125, E592.	1.3	19
395	Vapor-phase synthesis, growth mechanism and thickness-independent elastic modulus of single-crystal tungsten nanobelts. Nanotechnology, 2013, 24, 505705.	1.3	19
396	Mechanical properties of porous Feâ€“Al intermetallics. Powder Metallurgy, 2015, 58, 197-201.	0.9	19

#	Article	IF	Citations
397	Chemoselective and Continuous Flow Hydrogenations in Thin Films Using a Palladium Nanoparticle Catalyst Embedded in Cellulose Paper. ACS Applied Bio Materials, 2019, 2, 488-494.	2.3	19
398	Effects of anodic oxide induced intermixing on the structural and optical properties of quantum wire structure grown on nonplanar GaAs substrate. Journal of Applied Physics, 1996, 80, 5014-5020.	1.1	18
399	Microstructural Inhomogeneity in Holmium-Doped Ceria and Its Influence on the Ionic Conduction. Journal of the Electrochemical Society, 2007, 154, B616.	1.3	18
400	Catalytic growth of metallic tungsten whiskers based on the vaporâ€“solidâ€“solid mechanism. Nanotechnology, 2008, 19, 345604.	1.3	18
401	Long wavelength emissions of periodic yard-glass shaped boron nitride nanotubes. Applied Physics Letters, 2009, 94, 023105.	1.5	18
402	Twoâ€probe electrical measurements in transmission electron microscopesâ€”Behavioral control of tungsten microwires. Microscopy Research and Technique, 2009, 72, 93-100.	1.2	18
403	Mn behaviors in Mn-implanted ZnO. Acta Materialia, 2009, 57, 2291-2299.	3.8	18
404	Helical Growth of Aluminum Nitride: New Insights into Its Growth Habit from Nanostructures to Single Crystals. Scientific Reports, 2015, 5, 10087.	1.6	18
405	Spontaneous formation of coreâ€“shell GaAsP nanowires and their enhanced electrical conductivity. Journal of Materials Chemistry C, 2015, 3, 1745-1750.	2.7	18
406	Deformation mechanisms of bent Si nanowires governed by the sign and magnitude of strain. Applied Physics Letters, 2016, 108, 151903.	1.5	18
407	Direct observation of structural transitions in the phase change material Ge₂Sb₂Te₅. Journal of Materials Chemistry C, 2016, 4, 9303-9309.	2.7	18
408	Inverted vortex fluidic exfoliation and scrolling of hexagonal-boron nitride. RSC Advances, 2019, 9, 22074-22079.	1.7	18
409	Real-time observation of the thermally-induced phase transformation in GeTe and its thermal expansion properties. Acta Materialia, 2019, 165, 327-335.	3.8	18
410	Preferred orientation in carbon films induced by energetic condensation. Nuclear Instruments & Methods in Physics Research B, 1996, 119, 587-590.	0.6	17
411	Distinguishing glide and shuffle types for 60Â° dislocation in semicoductors by field-emission HREM image processing. Ultramicroscopy, 2000, 85, 131-139.	0.8	17
412	Coherent magnetic semiconductor nanodot arrays. Nanoscale Research Letters, 2011, 6, 134.	3.1	17
413	Quantitative study of GaAs nanowires catalyzed by Au film of different thicknesses. Nanoscale Research Letters, 2012, 7, 589.	3.1	17
414	Formation of coupled three-dimensional GeSi quantum dot crystals. Applied Physics Letters, 2012, 100, .	1.5	17

#	Article	IF	Citations
415	Toughening and reinforcement of poly(vinylidene fluoride) nanocomposites with â€œbud-branchedâ€• nanotubes. Composites Science and Technology, 2012, 72, 263-268.	3.8	17
416	Poly(vinylidene fluoride)/halloysite nanotubes nanocomposites: The structures, properties, and tensile fracture behaviors. Journal of Applied Polymer Science, 2013, 128, 869-878.	1.3	17
417	Trifold Tellurium One-Dimensional Nanostructures and Their Formation Mechanism. Crystal Growth and Design, 2013, 13, 4796-4802.	1.4	17
418	Observation of enhanced carrier transport properties of Si âŸ¨100âŸ©-oriented whiskers under uniaxial strains. Applied Physics Letters, 2014, 104, .	1.5	17
419	Controlled synthesis and optical properties of Cu/C core/shell nanoparticles. Journal of Nanoparticle Research, 2014, 16, 1.	0.8	17
420	Superconductivity and magnetotransport of single-crystalline NbSe₂nanoplates grown by chemical vapour deposition. Nanoscale, 2017, 9, 16591-16595.	2.8	17
421	Compositional Varied Coreâ€“Shell InGaP Nanowires Grown by Metalâ€“Organic Chemical Vapor Deposition. Nano Letters, 2019, 19, 3782-3788.	4.5	17
422	Equilibrium dissociation configuration of misfit dislocations in low strained In0.1Ga0.9As/GaAs single heterostructures. Applied Physics Letters, 1993, 63, 2222-2224.	1.5	16
423	Ion damage buildup and amorphization processes in GaAsâ€“AlxGa1â^'xAs multilayers. Journal of Applied Physics, 1996, 80, 2691-2701.	1.1	16
424	Evolution of Helical Mesostructures. Chemistry - A European Journal, 2010, 16, 1629-1637.	1.7	16
425	CdS/CdSe lateral heterostructure nanobelts by a two-step physical vapor transport method. Nanotechnology, 2010, 21, 145602.	1.3	16
426	Nanodomain formation and distribution in Gd-doped ceria. Materials Research Bulletin, 2012, 47, 763-767.	2.7	16
427	Lattice bending in monocrystalline GaAs induced by nanoscratching. Materials Letters, 2012, 80, 187-190.	1.3	16
428	Confinement of Chemisorbed Phosphates in a Controlled Nanospace with Threeâ€Dimensional Mesostructures. Chemistry - A European Journal, 2013, 19, 5578-5585.	1.7	16
429	Phase Control and Formation Mechanism of New-Phase Layer-Structured Rhombohedral In₃Se₄ Hierarchical Nanostructures. Crystal Growth and Design, 2013, 13, 5092-5099.	1.4	16
430	Catalyst size dependent growth of Pd-catalyzed one-dimensional InAs nanostructures. Applied Physics Letters, 2013, 102, 203108.	1.5	16
431	Ni₃C-assisted growth of carbon nanofibres 300 Â°C by thermal CVD. Nanotechnology, 2014, 25, 325602.	1.3	16
432	Controlling the crystal phase and structural quality of epitaxial InAs nanowires by tuning V/III ratio in molecular beam epitaxy. Acta Materialia, 2015, 92, 25-32.	3.8	16

#	Article	IF	Citations
433	Atomic disorders in layer structured topological insulator SnBi2Te4 nanoplates. Nano Research, 2018, 11, 696-706.	5.8	16
434	Inclusion Characterization and Formation Mechanisms in Spring Steel Deoxidized by Silicon. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2019, 50, 732-747.	1.0	16
435	Thickness-Controlled Three-Dimensional Dirac Semimetal for Scalable High-Performance Terahertz Optoelectronics. ACS Photonics, 2021, 8, 1689-1697.	3.2	16
436	The effect of rare earth element doping on thermoelectric properties of GeTe. Chemical Engineering Journal, 2022, 446, 137278.	6.6	16
437	The application of the cathodic arc to plasma assisted chemical vapor deposition of carbon. Journal of Applied Physics, 1996, 79, 1563-1568.	1.1	15
438	Polycrystallization and surface erosion of amorphous GaN during elevated temperature ion bombardment. Journal of Applied Physics, 2000, 88, 5493-5495.	1.1	15
439	High-dose ion implantation into GaN. Nuclear Instruments & Methods in Physics Research B, 2001, 175-177, 214-218.	0.6	15
440	Unusual corrugated nanowires of zinc oxide. Journal of Crystal Growth, 2008, 310, 3139-3143.	0.7	15
441	Crystallographically driven Au catalyst movement during growth of InAs/GaAs axial nanowire heterostructures. Journal of Applied Physics, 2009, 105, 073503.	1.1	15
442	Diffusion and segregation along grain boundary at the electrolyteâ€“anode interface in IT-SOFC. Solid State Ionics, 2011, 191, 55-60.	1.3	15
443	Single crystal titanateâ€“zirconate nanoleaf: Synthesis, growth mechanism and enhanced photocatalytic hydrogen evolution properties. CrystEngComm, 2012, 14, 1874.	1.3	15
444	In₃Se₄ and S-doped In₃Se₄ nano/micro-structures as new anode materials for Li-ion batteries. Journal of Materials Chemistry A, 2015, 3, 7560-7567.	5.2	15
445	Surface-energy engineered Bi-doped SnTe nanoribbons with weak antilocalization effect and linear magnetoresistance. Nanoscale, 2016, 8, 19383-19389.	2.8	15
446	Microstructure and Strengthening Model of Cuâ€“Fe In-Situ Composites. Materials, 2020, 13, 3464.	1.3	15
447	An electron diffraction and microscopy investigation of quasi-periodic Ta-Al superlattices. The Philosophical Magazine: Physics of Condensed Matter B, Statistical Mechanics, Electronic, Optical and Magnetic Properties, 1992, 66, 229-237.	0.6	14
448	Dislocation-induced changes in quantum dots: Step alignment and radiative emission. Applied Physics Letters, 1999, 74, 2301-2303.	1.5	14
449	Atomic composition profile change of SiGe islands during Si capping. Applied Physics Letters, 2006, 89, 103108.	1.5	14
450	Tadpole shaped Ge0.96Mn0.04 magnetic semiconductors grown on Si. Applied Physics Letters, 2010, 96, 051905.	1.5	14

#	Article	IF	Citations
451	Extensive Inspection of an Unconventional Mesoporous Silica Material at All Length-Scales. Chemistry of Materials, 2011, 23, 229-238.	3.2	14
452	Impact of growth parameters on the morphology and microstructure of epitaxial GaAs nanowires grown by molecular beam epitaxy. Journal of Alloys and Compounds, 2013, 580, 82-87.	2.8	14
453	Microstructural and Chemical Characterization of Ordered Structure in Yttrium Doped Ceria. Microscopy and Microanalysis, 2013, 19, 102-110.	0.2	14
454	Defect-free thin InAs nanowires grown using molecular beam epitaxy. Nanoscale, 2016, 8, 1401-1406.	2.8	14
455	Light-Induced Positive and Negative Photoconductances of InAs Nanowires toward Rewritable Nonvolatile Memory. ACS Applied Electronic Materials, 2019, 1, 1825-1831.	2.0	14
456	Improved mechanical property of nanolaminated graphene (reduced graphene oxide)/Alâ€“Mgâ€“Si composite rendered by facilitated ageing process. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2020, 787, 139541.	2.6	14
457	In-situ observation of cooperative grain boundary sliding and migration in the nano-twinned nanocrystalline-Au thin-films. Scripta Materialia, 2020, 180, 97-102.	2.6	14
458	Misfit dislocations generated from inhomogeneous sources and their critical thicknesses in a InGaAs/GaAs heterostructure grown by molecular beam epitaxy. Applied Physics Letters, 1997, 70, 3134-3136.	1.5	13
459	Comparison between Y-doped ceria and Ho-doped ceria: Electrical conduction and microstructures. Renewable Energy, 2008, 33, 197-200.	4.3	13
460	Effects of Al content on porous Feâ€“Al alloys. Powder Metallurgy, 2009, 52, 158-163.	0.9	13
461	Aluminum induced in situ crystallization of amorphous SiC. Applied Physics Letters, 2009, 94, .	1.5	13
462	Fabrication and visible emission of single-crystal diameter-modulated gallium phosphide nanochains. Journal of Applied Physics, 2010, 107, 124321.	1.1	13
463	Synthesis of High-Curie-Temperature Fe_{0.02}Ge_{0.98} Quantum Dots. Journal of the American Chemical Society, 2010, 132, 11425-11427.	6.6	13
464	Transmission electron microscopy characterization of the deformation of CdZnTe single crystals induced by nanoscratching. Scripta Materialia, 2011, 65, 392-395.	2.6	13
465	Taper-free and kinked germanium nanowires grown on silicon via purging and the two-temperature process. Nanotechnology, 2012, 23, 115603.	1.3	13
466	Highly Ordered Cubic Mesoporous Materials with the Same Symmetry but Tunable Pore Structures. Langmuir, 2012, 28, 16382-16392.	1.6	13
467	Microstructure and Properties of a Deformation-Processed Cu-Cr-Ag In Situ Composite by Directional Solidification. Journal of Materials Engineering and Performance, 2013, 22, 3723-3727.	1.2	13
468	Reveal the size effect on the plasticity of ultra-small sized Ag nanowires with in situ atomic-scale microscopy. Journal of Alloys and Compounds, 2016, 676, 377-382.	2.8	13

#	Article	IF	Citations
469	Co-doped Sb₂Te₃paramagnetic nanoplates. Journal of Materials Chemistry C, 2016, 4, 521-525.	2.7	13
470	Atomic Insights into Phase Evolution in Ternary Transitionâ€Metal Dichalcogenides Nanostructures. Small, 2018, 14, e1800780.	5.2	13
471	Understanding the Formation and Evolution of Oxide Inclusions in Si-Deoxidized Spring Steel. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2019, 50, 1862-1877.	1.0	13
472	Understanding the structural evolution of Au/WO2.7 compounds in hydrogen atmosphere by atomic scale in situ environmental TEM. Nano Research, 2020, 13, 3019-3024.	5.8	13
473	High-tensile-strength and ductile novel Ti-Fe-N-B alloys reinforced with TiB nanowires. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2017, 708, 285-290.	2.6	13
474	Twin structures, transformation and symmetry of superconducting Y1Ba2Cu3O7â€“x, observed by transmission electron microscopy. Philosophical Magazine Letters, 1988, 57, 157-163.	0.5	12
475	Lomerâ€“Cottrell misfit dislocations in [001] In0.2Ga0.8As/GaAs single heterostructures. Applied Physics Letters, 1996, 69, 1083-1085.	1.5	12
476	Synthesis and characterization of TiO2-incorporated silica foams. Journal of Materials Science, 2009, 44, 6484-6489.	1.7	12
477	Microstructures and mechanical properties of Ce1â^'xCaxO2â^'y (x=0.05, 0.1, 0.2) with different sintering temperatures. Journal of the European Ceramic Society, 2010, 30, 669-675.	2.8	12
478	Criterion to control self-propagation high temperature synthesis for porous Tiâ€“Al intermetallics. Powder Metallurgy, 2011, 54, 404-407.	0.9	12
479	Large-scale synthesis of tungsten single-crystal microtubes via vapor-deposition process. Journal of Crystal Growth, 2011, 316, 137-144.	0.7	12
480	Cr metal thin film memory. Journal of Applied Physics, 2011, 110, .	1.1	12
481	Precursor flow rate manipulation for the controlled fabrication of twin-free GaAs nanowires on silicon substrates. Nanotechnology, 2012, 23, 415702.	1.3	12
482	Unequal P Distribution in Nanowires and the Planar Layer during GaAsP Growth on GaAs {111}_B by Metalâ€“Organic Chemical Vapor Deposition. Journal of Physical Chemistry C, 2013, 117, 19234-19238.	1.5	12
483	Polarity driven simultaneous growth of free-standing and lateral GaAsP epitaxial nanowires on GaAs (001) substrate. Applied Physics Letters, 2013, 103, .	1.5	12
484	Surfactantâ€free Fabrication of Fullerene C₆₀ Nanotubules Under Shear. Angewandte Chemie, 2017, 129, 8518-8521.	1.6	12
485	A thermodynamic structural model of graphene oxide. Journal of Applied Physics, 2017, 122, .	1.1	12
486	TiB Nanowhisker Reinforced Titanium Matrix Composite with Improved Hardness for Biomedical Applications. Nanomaterials, 2020, 10, 2480.	1.9	12

#	Article	IF	Citations
487	Rare-Earth Nd Inducing Record-High Thermoelectric Performance of (GeTe) ₈₅ (AgSbTe) Tj ETQq1 1 0.784314 rgBT /Over	4.7	12
488	Temperatureâ€dependent generation of misfit dislocations in In0.2Ga0.8As/GaAs single heterostructures. Applied Physics Letters, 1996, 68, 673-674.	1.5	11
489	Metalorganic chemical vapor deposition of GaAsN epilayers: microstructures and optical properties. Journal of Crystal Growth, 2004, 264, 92-97.	0.7	11
490	Formation and growth mechanism of tungsten oxide microtubules. Chemical Physics Letters, 2006, 427, 350-355.	1.2	11
491	Microstructural characterization of Ce1â^'xTbxO2â^'Î´ (0.60â‰¤xâ‰¤0.90) sintered samples. Materials Research Bulletin, 2008, 43, 759-764.	2.7	11
492	Growth of single-crystalline tungsten nanowires by an alloy-catalyzed method at 850 Â°C. Journal of Materials Research, 2008, 23, 72-77.	1.2	11
493	Superstructure formation and variation in Niâ€“GDC cermet anodes in SOFC. Physical Chemistry Chemical Physics, 2011, 13, 9685.	1.3	11
494	Growth and optical properties of stacked-pyramid zinc sulfide architectures. CrystEngComm, 2011, 13, 5885.	1.3	11
495	Thin-walled Bâ€“Câ€“N ternary microtubes: from synthesis to electrical, cathodoluminescence and field-emission properties. Journal of Materials Chemistry, 2012, 22, 8134.	6.7	11
496	A focused review on nanoscratching-induced deformation of monocrystalline silicon. International Journal of Surface Science and Engineering, 2013, 7, 51.	0.4	11
497	Mirror-twin induced bicrystalline InAs nanoleaves. Nano Research, 2016, 9, 766-773.	5.8	11
498	Phase purification of GaAs nanowires by prolonging the growth duration in MBE. Journal of Materials Chemistry C, 2017, 5, 5257-5262.	2.7	11
499	Advances in conducting polymer-based thermoelectric materials and devices. , 0, , .		11
500	Transmission electron microscopy characterization of secondary defects created by MeV Si, Ge, and Sn implantation in silicon. Journal of Applied Physics, 2000, 88, 1312-1318.	1.1	10
501	Cooling rate dependent as-cast microstructure and mechanical properties of Zr-based metallic glasses. Journal of Materials Science, 2007, 42, 4233-4239.	1.7	10
502	Compositional dependence of electrical conductivity of Ce1â^'xTbxO2â^'Î´ (0â©½xâ©½1). Renewable Energy, 2008, 33, 331-335.	4.3	10
503	Contribution of electron precession to the study of perovskites displaying small symmetry departures from the ideal cubic ABO₃ perovskite: applications to the LaGaO₃ and LSGM perovskites. Journal of Microscopy, 2008, 232, 7-26.	0.8	10
504	Crystallographically oriented Zn nanocrystals formed in ZnO by Mn+-implantation. Applied Physics Letters, 2008, 93, 131919.	1.5	10

#	Article	IF	Citations
505	Effect of Mn concentration and growth temperature on nanostructures and magnetic properties of Ge1â^'xMnx grown on Si. Journal of Crystal Growth, 2010, 312, 3034-3039.	0.7	10
506	Effect of cooling rate on microstructure and deformation behavior of Ti-based metallic glassy/crystalline powders. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2010, 527, 5750-5754.	2.6	10
507	Sulfur-doped gallium phosphide nanowires and their optoelectronic properties. Nanotechnology, 2010, 21, 375701.	1.3	10
508	Amorphous SiOx nanowires catalyzed by metallic Ge for optoelectronic applications. Journal of Alloys and Compounds, 2011, 509, 3978-3984.	2.8	10
509	Thermally oxidized formation of new Ge dots over as-grown Ge dots in the Si capping layer. Journal of Applied Physics, 2011, 110, .	1.1	10
510	Behavior of Au-Si droplets in Si(001) at high temperatures. Applied Physics Letters, 2012, 101, 053104.	1.5	10
511	Attraction of semiconductor nanowires: An in situ observation. Acta Materialia, 2013, 61, 7166-7172.	3.8	10
512	Synthesis and hydrogen absorption of high-specific-surface ultrafine theta-Al2O3 nanowires. Journal of Crystal Growth, 2013, 382, 52-55.	0.7	10
513	Long wavelength emissions of Se4+-doped In2O3hierarchical nanostructures. Journal of Materials Chemistry C, 2014, 2, 6529.	2.7	10
514	Effect of Alternating Magnetic Field on the Microstructure and Solute Distribution of Cu–14Fe Composites. Materials Transactions, 2015, 56, 2058-2062.	0.4	10
515	Defect-free zinc-blende structured InAs nanowires realized by in situ two V/III ratio growth in molecular beam epitaxy. Nanoscale, 2015, 7, 12592-12597.	2.8	10
516	Research Update: Strain and composition effects on ferromagnetism of Mn0.05Ge0.95 quantum dots. APL Materials, 2016, 4, .	2.2	10
517	Growth of Catalyst-Free Epitaxial InAs Nanowires on Si Wafers Using Metallic Masks. Nano Letters, 2016, 16, 4189-4193.	4.5	10
518	Unexpected formation of a hierarchical structure in ternary InGaAs nanowires via â€œone-potâ€•growth. Nanoscale, 2017, 9, 16960-16967.	2.8	10
519	Epitaxial GaAs/AlGaAs coreâ€“multishell nanowires with enhanced photoluminescence lifetime. Nanoscale, 2019, 11, 6859-6865.	2.8	10
520	Vapour-solid growth of MoxW1-xTe2 nanobelts by a facile chemical vapour deposition method. Journal of Alloys and Compounds, 2019, 777, 926-930.	2.8	10
521	High-quality epitaxial wurtzite structured InAs nanosheets grown in MBE. Nanoscale, 2020, 12, 271-276.	2.8	10
522	Synthesis of thermoelectric materials. , 2021, , 73-103.		10

#	Article	IF	Citations
523	Misfit dislocations lying along ã€˜100ã€‰ in [001] GaAs/In0.25Ga0.75As/GaAs quantum well heterostructures. Applied Physics Letters, 1994, 65, 1647-1649.	1.5	9
524	Strain and defect microstructure in ion-irradiated GeSi/Si strained layers as a function of annealing temperature. Applied Physics Letters, 1998, 73, 838-840.	1.5	9
525	Island shape instabilities and surfactant-like effects in the growth of InGaAs/GaAs quantum dots. Thin Solid Films, 1999, 357, 40-45.	0.8	9
526	Transmission electron microscopy investigation of substitution reactions from carbon nanotube template to silicon carbide nanowires. New Journal of Physics, 2007, 9, 137-137.	1.2	9
527	Formation of planar defects over GeSi islands in Si capping layer grown at low temperature. Journal of Applied Physics, 2009, 105, .	1.1	9
528	The diffusions and associated interfacial layer formation between thin film electrolyte and cermet anode in IT-SOFC. Journal of Alloys and Compounds, 2011, 509, 9679-9684.	2.8	9
529	An unexpected plasticization phenomenon and a constant of the change rate of viscoelastic properties for polymers during nanoindentation test. Journal of Applied Polymer Science, 2011, 122, 885-890.	1.3	9
530	Texture evolution in an electrodeposited nanocrystalline Niâ€“Fe alloy during growth-plane rolling and cross-section rolling. Scripta Materialia, 2012, 67, 483-486.	2.6	9
531	Microanalysis of a Grain Boundaryâ€™s Blocking Effect in Lanthanum Silicate Electrolyte for Intermediate-Temperature Solid Oxide Fuel Cells. ACS Applied Materials & Interfaces, 2013, 5, 5307-5313.	4.0	9
532	Nanowires: Anomalous and Highly Efficient InAs Nanowire Phototransistors Based on Majority Carrier Transport at Room Temperature (Adv. Mater. 48/2014). Advanced Materials, 2014, 26, 8232-8232.	11.1	9
533	Continuous flow synthesis of phosphate binding h-BN@magnetite hybrid material. RSC Advances, 2018, 8, 40829-40835.	1.7	9
534	In situ atomic scale mechanisms of strain-induced twin boundary shear to high angle grain boundary in nanocrystalline Pt. Ultramicroscopy, 2018, 195, 69-73.	0.8	9
535	Ultrahigh Aspect Ratio TiB Nanowhisker-Reinforced Titanium Matrix Composites as Lightweight and Low-Cost Replacements for Superalloys. ACS Applied Nano Materials, 2020, 3, 8208-8215.	2.4	9
536	In situ TEM observation of the vaporâ€“solidâ€“solid growth of <001Ì„> InAs nanowires. Nanoscale, 2020, 12, 11711-11717.	2.8	9
537	Optimal array alignment to deliver high performance in flexible conducting polymerâ€based thermoelectric devices. Journal of Materials Science and Technology, 2022, 124, 252-259.	5.6	9
538	Microstructural observations of Ta/Al superlattices by TEM. Physica Status Solidi A, 1992, 130, 373-381.	1.7	8
539	Cooling rate effects on the microstructure and phase formation in Zr51Cu20.7Ni12Al16.3bulk metallic glass. Science and Technology of Advanced Materials, 2006, 7, 806-811.	2.8	8
540	A TEM study on the crystallization behavior of an yttrium-doped Zr-based bulk metallic glass. Intermetallics, 2007, 15, 961-967.	1.8	8

#	Article	IF	Citations
541	Synthesis of tungsten oxide tapered needles with nanotips. Journal of Crystal Growth, 2007, 303, 574-579.	0.7	8
542	Space-charge trap mediated conductance blockade in tunnel junctions with half-metallic electrodes. Applied Physics Letters, 2008, 93, 192507.	1.5	8
543	High quality InAs quantum dots grown on patterned Si with a GaAs buffer layer. Nanotechnology, 2009, 20, 305301.	1.3	8
544	Vertically oriented epitaxial germanium nanowires on silicon substrates using thin germanium buffer layers. Nanotechnology, 2010, 21, 295602.	1.3	8
545	Solving hierarchical helical mesostructures by electron tomography. Chemical Communications, 2010, 46, 1688.	2.2	8
546	Two types of diffusions at the cathode/electrolyte interface in IT-SOFCs. Journal of Solid State Chemistry, 2011, 184, 2458-2461.	1.4	8
547	Structural evolution of GeMn/Ge superlattices grown by molecular beam epitaxy under different growth conditions. Nanoscale Research Letters, 2011, 6, 624.	3.1	8
548	Variation of exciton emissions of ZnO whiskers reversibly tuned by axial tensile strain. Optics Express, 2014, 22, 4000.	1.7	8
549	Effectively restricting MnSi precipitates for simultaneously enhancing the Seebeck coefficient and electrical conductivity in higher manganese silicide. Journal of Materials Chemistry C, 2019, 7, 7212-7218.	2.7	8
550	Correlation Between Microstructural Architecture and Mechanical Behavior of Single-Walled Carbon Nanotube-Aluminum Composites. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2020, 51, 545-551.	1.1	8
551	Misfit-dislocation generation by dissociated dislocations in quantum-well heterostructures. Physical Review B, 1994, 49, 8086-8095.	1.1	7
552	A new type of dissociated misfit dislocation in [001] ZnTe/GaAs strained-layer heterostructures. Applied Physics Letters, 1998, 72, 2424-2426.	1.5	7
553	Mn distribution behaviors and magnetic properties of GeMn films grown on Si (001) substrates. Journal of Crystal Growth, 2009, 311, 2147-2150.	0.7	7
554	Growth of single-crystal W whiskers during humid H2/N2 reduction of Ni, Feâ€“Ni, and Coâ€“Ni doped tungsten oxide. Journal of Alloys and Compounds, 2009, 482, 61-66.	2.8	7
555	BN-coated Ca_{1â^’x}Sr_xS:Eu solid-solution nanowires with tunable red light emission. Nanotechnology, 2013, 24, 405701.	1.3	7
556	Effects of growth rate on InP nanowires morphology and crystal structure. Journal of Crystal Growth, 2013, 383, 100-105.	0.7	7
557	Direct realizing the growth direction of epitaxial nanowires by electron microscopy. Science China Materials, 2015, 58, 433-440.	3.5	7
558	Influence of substrate orientation on the structural quality of GaAs nanowires in molecular beam epitaxy. Nanotechnology, 2015, 26, 255601.	1.3	7

#	Article	IF	Citations
559	Influences of Alternating Magnetic Fieldson the Growth Behavior and Distribution of the Primary Fe Phasein Cu-14Fe Alloys during the Solidification Process. Metals, 2018, 8, 571.	1.0	7
560	Formation Mechanism of Al2O3-Containing Inclusions in Al-Deoxidized Spring Steel. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2019, 50, 2205-2220.	1.0	7
561	A new indium selenide phase: controllable synthesis, phase transformation and photoluminescence properties. Journal of Materials Chemistry C, 2019, 7, 13573-13584.	2.7	7
562	Enhanced Damping Capacity in Graphene-Al Nanolaminated Composite Pillars Under Compression Cyclic Loading. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2020, 51, 1463-1468.	1.1	7
563	Tuning 2D magnetism in Fe3+XGeTe2 films by element doping. National Science Review, 2022, 9, .	4.6	7
564	Continuous flow fabrication of green graphene oxide in aqueous hydrogen peroxide. Nanoscale Advances, 2022, 4, 3121-3130.	2.2	7
565	Growth direction dependence on strain relief by misfit dislocations in strained-layer heterostructures. Thin Solid Films, 1993, 235, 6-9.	0.8	6
566	Investigation of oval defects in InGaAs/GaAs strained-layer heterostructures using cathodoluminescence and wavelength dispersive spectroscopy. Applied Physics Letters, 1998, 73, 3899-3901.	1.5	6
567	The effect of Cu addition and milling contaminations on the microstructure evolution of ball milled Alâ€“Pb alloy during sintering. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2006, 434, 352-359.	2.6	6
568	Synthesis and Microstructural Characterization of Ce_{1â^'<I>x</I>}Tb_{<I>x</I>}O_{2â^'<I>Î´</I>} (0 â‰ <I>x</I> â‰ 1) Nano-Powders. Journal of Nanoscience and Nanotechnology, 2007, 7, 2521-2525.	0.9	6
569	Effect of MgO in ZnO films grown on nitrided sapphires. Journal of Crystal Growth, 2007, 305, 74-77.	0.7	6
570	Room temperature Si Î´-growth on Ge incorporating high-K dielectric for metal oxide semiconductor applications. Applied Physics Letters, 2008, 93, .	1.5	6
571	Visible-light photoresponsive heterojunctions of (Nbâ€“Tiâ€“Si) and (Bi/Bi-O) nanoparticles. Electrochemistry Communications, 2009, 11, 509-514.	2.3	6
572	Synthesis and characterization of porous Feâ€“25 wt.% Al alloy with controllable pore structure. Powder Metallurgy and Metal Ceramics, 2010, 49, 183-192.	0.4	6
573	Microstructural and chemical aspects of working-temperature aged Ca-doped CeO2. Journal of the European Ceramic Society, 2010, 30, 2505-2513.	2.8	6
574	Microworms self-assembled by boron nitride horns for optoelectronic applications. Chemical Engineering Journal, 2010, 165, 714-719.	6.6	6
575	Tunable electric and magnetic resonances in multilayered metal/dielectric nanoplates at optical frequencies. Journal Physics D: Applied Physics, 2010, 43, 345102.	1.3	6
576	Crystalline structures and misfit strain inside Er silicide nanocrystals self-assembled on Si(001) substrates. Nanotechnology, 2011, 22, 245707.	1.3	6

#	Article	IF	Citations
577	Poly(vinylidene Fluoride)/Microcrystalline Cellulose Nanocomposites with Enhanced Compatibility and Properties. Key Engineering Materials, 0, 471-472, 355-360.	0.4	6
578	Electric-field controlled ferromagnetism in MnGe magnetic quantum dots. Nano Reviews, 2011, 2, 5896.	3.7	6
579	Superlattice of FexGe1â^'xnanodots and nanolayers for spintronics application. Nanotechnology, 2014, 25, 505702.	1.3	6
580	New Insight into Ordered Cage-Type Mesostructures and Their Pore Size Determination by Electron Tomography. Langmuir, 2015, 31, 2545-2553.	1.6	6
581	Fabrication of individual carbon nanotubes and their arrays in a transmission electron microscope. Carbon, 2016, 100, 435-440.	5.4	6
582	Strain Gradient Modulated Exciton Evolution and Emission in ZnO Fibers. Scientific Reports, 2017, 7, 40658.	1.6	6
583	Influences on Distribution of Solute Atoms in Cu-8Fe Alloy Solidification Process Under Rotating Magnetic Field. Metals and Materials International, 2018, 24, 1275-1284.	1.8	6
584	Free-Standing InAs Nanobelts Driven by Polarity in MBE. ACS Applied Materials & Interfaces, 2019, 11, 44609-44616.	4.0	6
585	Effects of C Addition on the Microstructures of As-Cast Cuâ€“Feâ€“P Alloys. Materials, 2019, 12, 2772.	1.3	6
586	Au-catalysed free-standing wurtzite structured InAs nanosheets grown by molecular beam epitaxy. Nano Research, 2019, 12, 2718-2722.	5.8	6
587	Crowding-out effect strategy using AgCl for realizing a super low lattice thermal conductivity of SnTe. Sustainable Materials and Technologies, 2020, 25, e00183.	1.7	6
588	Anomalous Photoelectrical Properties through Strain Engineering Based on a Single Bent InAsSb Nanowire. ACS Applied Materials & Interfaces, 2021, 13, 5691-5698.	4.0	6
589	High shear in situ exfoliation of 2D gallium oxide sheets from centrifugally derived thin films of liquid gallium. Nanoscale Advances, 2021, 3, 5785-5792.	2.2	6
590	A transmission electron microscopy study on metastable phases in the Li2O-TiO2 system. The Philosophical Magazine: Physics of Condensed Matter B, Statistical Mechanics, Electronic, Optical and Magnetic Properties, 1988, 57, 103-110.	0.6	5
591	The geometry of misfit dislocations with respect to the strained interface in [001] In0.1Ga0.9As/GaAs single heterostructures. Journal of Applied Physics, 1994, 75, 7317-7322.	1.1	5
592	Glide of Misfit Dislocations through Multi-Layer Heterostructures. Physica Status Solidi A, 1994, 145, 133-143.	1.7	5
593	Shape preservation of self-assembled SiGe quantum rings during Si capping. Nanotechnology, 2007, 18, 115708.	1.3	5
594	The stability of faceted SiGe quantum dots capped with a thin Si layer. Nanotechnology, 2007, 18, 025404.	1.3	5

#	Article	IF	Citations
595	Compositional design and microstructure analysis of Zr-based bulk metallic glasses. Transactions of Nonferrous Metals Society of China, 2007, 17, 1433-1440.	1.7	5
596	Metastable nanocrystallization behavior of Ti-based metallic glassy powders during post-heating. Scripta Materialia, 2010, 63, 764-767.	2.6	5
597	Hot-Filament-Assisted Growth of Straight SiO_x Nanowires for Optoelectronic Application. Journal of Physical Chemistry C, 2013, 117, 14354-14361.	1.5	5
598	Synergistic synthesis of quasi-monocrystal CdS nanoboxes with high-energy facets. Journal of Materials Chemistry A, 2015, 3, 23106-23112.	5.2	5
599	Intercalation-Induced Disintegrated Layer-By-Layer Growth of Ultrathin Ternary Mo(Te_{1â€“x}S_x)₂ Plates. ACS Applied Materials & Interfaces, 2020, 12, 30980-30989.	4.0	5
600	Interfacial properties and their impact on the tensile behavior of nanolaminated single-walled carbon nanotube-aluminum composite. Materialia, 2020, 12, 100797.	1.3	5
601	Comments on "Characterization of the Fe-Al Interfacial Layer in a Commercial Hot-dip Galvanized Coating".. ISIJ International, 1998, 38, 506-507.	0.6	5
602	Achieving Highâ€Performance Ge_{0.92}Bi_{0.08}Te Thermoelectrics via LaB₆â€Alloyingâ€Induced Band Engineering and Multiâ€Scale Structure Manipulation. Small, 2022, 18, e2105923.	5.2	5
603	Precise determination of the periodicity for Mo/Si and W/C metallic multilayers by electron and xâ€ray diffraction. Journal of Applied Physics, 1995, 77, 167-171.	1.1	4
604	New crystalline phases formed in a slowly-cooled Zr-based metallic glass. Journal of Alloys and Compounds, 2007, 433, 120-124.	2.8	4
605	Nanowires for optoelectronic device applications. Physica Status Solidi C: Current Topics in Solid State Physics, 2009, 6, 2678-2682.	0.8	4
606	Congenerous and heterogeneous brazing of porous FeAl intermetallics. Powder Metallurgy, 2011, 54, 142-147.	0.9	4
607	Growth and properties of IIIâ€“V compound semiconductor heterostructure nanowires. Semiconductor Science and Technology, 2012, 27, 059501.	1.0	4
608	Preferential nucleation and growth of InAs/GaAs(001) quantum dots on defected sites by droplet epitaxy. Scripta Materialia, 2013, 69, 638-641.	2.6	4
609	Microstructure evolution of yttria-doped ceria in reducing atmosphere. Renewable Energy, 2013, 50, 494-497.	4.3	4
610	Elemental diffusion during the droplet epitaxy growth of In(Ga)As/GaAs(001) quantum dots by metal-organic chemical vapor deposition. Applied Physics Letters, 2014, 104, .	1.5	4
611	Temperature-dependent side-facets of GaAs nanopillars. Semiconductor Science and Technology, 2016, 31, 094004.	1.0	4
612	Reducing electric current and energy consumption of spark plasma sintering via punch configuration design. Ceramics International, 2017, 43, 17225-17228.	2.3	4

#	Article	IF	Citations
613	Formation of GaAs/GaSb Core-Shell Heterostructured Nanowires Grown by Molecular-Beam Epitaxy. Crystals, 2017, 7, 94.	1.0	4
614	High-Performance Thermoelectric Materials for Solar Energy Application. , 2018, , 3-38.		4
615	Effect of Carbon on the Microstructure of a Cu-Fe Alloy. Solid State Phenomena, 2018, 279, 49-54.	0.3	4
616	The effect of Sn addition on GaAs nanowire grown by vaporâ€“liquidâ€“solid growth mechanism. Nanotechnology, 2018, 29, 465601.	1.3	4
617	Effect of Sn Addition on Epitaxial GaAs Nanowire Grown at Different Temperatures in Metalâ€“Organic Chemical Vapor Deposition. Crystal Growth and Design, 2019, 19, 5314-5319.	1.4	4
618	Understanding the Effect of Catalyst Size on the Epitaxial Growth of Hierarchical Structured InGaP Nanowires. Nano Letters, 2019, 19, 8262-8269.	4.5	4
619	Inâ€…Situ Observation of Dynamic Galvanic Replacement Reactions in Twinned Metallic Nanowires by Liquid Cell Transmission Electron Microscopy. Angewandte Chemie, 2019, 131, 18800-18806.	1.6	4
620	TiB reinforced lattice structures produced by laser powder bed fusion with high elastic admissible strain. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2022, 845, 143249.	2.6	4
621	Diffraction Behaviour of Three-Component Fibonacci Ta/Al Multilayer Films. Journal of Applied Crystallography, 1997, 30, 114-117.	1.9	3
622	Carrier transfer between V-grooved quantum wire and vertical quantum well. Physics Letters, Section A: General, Atomic and Solid State Physics, 2001, 280, 77-80.	0.9	3
623	Enhanced optical properties of the GaAsN/GaAs quantum-well structure by the insertion of InAs monolayers. Applied Physics Letters, 2004, 84, 2536-2538.	1.5	3
624	Deep void formation mechanism in Si(100) during its carbonization reaction with C2H2. Thin Solid Films, 2007, 515, 6824-6826.	0.8	3
625	Facile Synthesis and Characterization of Potassium-Doped MnO2 Nanowires. Journal of Nanoscience and Nanotechnology, 2008, 8, 2011-2015.	0.9	3
626	Direct-current-induced transformation at the interface between platinum anode and holmium-doped ceria electrolyte. Journal of Applied Physics, 2009, 105, .	1.1	3
627	III-V compound semiconductor nanowires. , 2009, , .		3
628	Composition and Strain Measurements of Ge(Si)/Si(001) Islands by HRTEM. Journal of Nanoscience and Nanotechnology, 2009, 9, 2753-2757.	0.9	3
629	Temperature and Bias-Assisted Transport Properties of LSMO/AlO/CoFeB Magnetic Tunnel Junction. IEEE Transactions on Magnetics, 2010, 46, 2383-2386.	1.2	3
630	Thickness dependence of magnetic and transport properties in organic-CoFe discontinuous multilayers. Journal of Applied Physics, 2010, 107, 09E307.	1.1	3

#	Article	IF	Citations
631	Increase the Mechanical Performance of Polyvinylidene Fluoride (PVDF). Advanced Materials Research, 0, 393-395, 144-148.	0.3	3
632	Fabrication of crystal Î±-Si₃N₄/Siâ€“SiO_xcoreâ€“shell/Auâ€“SiO_xpeapod-like axial double heterostructures for optoelectronic applications. Nanotechnology, 2012, 23, 305603.	3.8	3
633	Rheological Behaviors of Poly(Vinylidene Fluoride)/â€œBud-Branchedâ€•Nanotubes Nanocomposites. Journal of Macromolecular Science - Physics, 2012, 51, 1498-1508.	0.4	3
634	Can misfit dislocations be located above the interface of InAs/GaAs (001) epitaxial quantum dots?. Nanoscale Research Letters, 2012, 7, 486.	3.1	3
635	Au-catalyzed and catalyst-free growth of one-dimensional Bi<inf>2</inf>Se<inf>3</inf> nanostructures. , 2014, , .		3
636	Selectively grown GaAs nanodisks on Si(100) by molecular beam epitaxy. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2014, 32, 02C111.	0.6	3
637	Morphology and Microstructure of InAs Nanowires on GaAs Substrates Grown by Molecular Beam Epitaxy. Chinese Physics Letters, 2014, 31, 098101.	1.3	3
638	Evolution of morphology and microstructure of GaAs/GaSb nanowire heterostructures. Nanoscale Research Letters, 2015, 10, 108.	3.1	3
639	Effects of an Alternating Magnetic Field/Ag Multi-Alloying Combined Solidification Process on Cuâ€“14Fe Alloy. Materials, 2018, 11, 2501.	1.3	3
640	Ge_xSi_{1â^'x} virtual-layer enhanced ferromagnetism in self-assembled Mn_{0.06}Ge_{0.94} quantum dots grown on Si wafers by molecular beam epitaxy. Nanoscale, 2020, 12, 3997-4004.	2.8	3
641	Photoelectronic Properties of End-bonded InAsSb Nanowire Array Detector under Weak Light. Nanoscale Research Letters, 2021, 16, 13.	3.1	3
642	Inhomogeneous sources of misfit dislocation generation in In xGa1â^' xAs/GaAs strained-layer heterostructures grown by molecular beam epitaxy. Micron, 1997, 28, 309-312.	1.1	2
643	Investigation of threading dislocation blocking in strained-layer InGaAs/GaAs heterostructures using scanning cathodoluminescence microscopy. Journal of Applied Physics, 2000, 88, 1307-1311.	1.1	2
644	Optical properties of arsenic ions implanted GaAs/AlGaAs V-grooved quantum wires. Journal of Applied Physics, 2000, 88, 2519-2522.	1.1	2
645	[001] zone-axis bright-field diffraction contrast from coherent Ge(Si) islands on Si(001). Ultramicroscopy, 2004, 98, 239-247.	0.8	2
646	III-V nanowires for optoelectronics. , 2006, , .		2
647	Nanomechanical Properties and Nanostructure of CMG and CMP Machined Si Substrates. Key Engineering Materials, 0, 381-382, 525-528.	0.4	2
648	Deformation of Monocrystalline Silicon under Nanoscratching. Advanced Materials Research, 2008, 41-42, 15-19.	0.3	2

#	Article	IF	Citations
649	Growth of ZnS heterostructures for optoelectronic applications. , 2010, , .		2
650	Probing the valence band structure of wurtzite InP nanowires by photoluminescence excitation spectroscopy. , 2011, , .		2
651	Microstructures of YBa1.85Eu0.15Cu3O7â^' superconducting films grown on SrTiO3 and YSZ substrates. Journal of Crystal Growth, 2011, 318, 580-585.	0.7	2
652	Incubational domain characterization in lightly doped ceria. Journal of Solid State Chemistry, 2012, 192, 28-33.	1.4	2
653	MBE Growth and Characterization of Strained HgTe (111) Films on CdTe/GaAs. Chinese Physics Letters, 2020, 37, 038101.	1.3	2
654	Determination of Al compositional profiles across AlAs/GaAs heterostructural interface at sub-nanometer spatial resolution by thickness fringe imaging. Scripta Materialia, 2002, 47, 279-283.	2.6	1
655	Structural, electrical, and optical analysis of ion implanted semi-insulating InP. Journal of Applied Physics, 2004, 95, 477-482.	1.1	1
656	Towards p-type doping of ZnO by ion implantation. , 2005, , .		1
657	Relationship between Microstructure and Ionic Conductivity in Ytterbium Doped Ceria. , 0, , .		1
658	Nano-structure design of doped ceria solid electrolytes for intermediate temperature operation of solid oxide fuel cell. Transactions of the Materials Research Society of Japan, 2010, 35, 431-441.	0.2	1
659	Effect of Nano-Filler Network on the Rheological Behaviours of Poly(vinylidene fluoride) Nanocomposites. Advanced Materials Research, 0, 328-330, 1232-1238.	0.3	1
660	III-V COMPOUND SEMICONDUCTOR NANOWIRES FOR OPTOELECTRONIC DEVICE APPLICATIONS. International Journal of High Speed Electronics and Systems, 2011, 20, 131-141.	0.3	1
661	Growth and characterization of compound semiconductor nanowires on Si. , 2011, , .		1
662	Unequal P distribution in nanowires and the layer during the growth of GaAsP nanowires on GaAs. , 2012, , .		1
663	Nanoparticles: Nanoparticles Mimicking Viral Surface Topography for Enhanced Cellular Delivery (Adv. Mater. 43/2013). Advanced Materials, 2013, 25, 6232-6232.	11.1	1
664	The Research on Ni-Based Ammonia Decomposition Catalyst. Applied Mechanics and Materials, 0, 644-650, 5364-5367.	0.2	1
665	Growth and memory effect of Er-stabilized Î²-MnO2 films grown on Si substrates. Materials Research Express, 2014, 1, 036302.	0.8	1
666	Advances in functional materials. Materials Technology, 2015, 30, A1-A1.	1.5	1

#	Article	IF	Citations
667	Effects of Initial Texture on Rolling Texture and Property of Electrodeposited Nickel Plate. Journal of Computational and Theoretical Nanoscience, 2015, 12, 2643-2647.	0.4	1
668	Hollow Nanostructures: Electron Tomography: A Unique Tool Solving Intricate Hollow Nanostructures (Adv. Mater. 38/2019). Advanced Materials, 2019, 31, 1970272.	11.1	1
669	Thermo-Responsive Nanomaterials for Thermoelectric Generation. Springer Series in Materials Science, 2020, , 269-293.	0.4	1
670	Microstructure and Electrical Resistivity of In Situ Cu-Fe Microcomposites. Journal of Materials Engineering and Performance, 0, , 1.	1.2	1
671	Defects formed during 1 MeV Si ion-irradiation of GeSi/Si strained-layer heterostructures at elevated temperatures. Nuclear Instruments & Methods in Physics Research B, 1999, 148, 206-210.	0.6	0
672	<title>Microstructure and optical properties of Ge(Si) dots grown on Si</title>. , 2002, , .		0
673	Grain-Size Dependence of Electrolytic Properties in 25 at.% Yttrium Doped Ceria Solid Electrolytes. , 0, , .		0
674	Synthesis of Silicon Carbide Nanowires on Carbon Nanotube Template. , 2006, , .		0
675	Investigation of SiO₂-SiC Interface by High-Resolution Transmission Electron Microscope. Materials Science Forum, 2006, 527-529, 975-978.	0.3	0
676	Growth Mechanism of Truncated Triangular GaAs Nanowires. , 2006, , .		0
677	Structural Materials for NEMS/MEMS Devices. , 2006, , .		0
678	Understanding the kink formation in GaAs/InAs heterostructural nanowires. , 2006, , .		0
679	Failure and Formation of Axial Nanowire Heterostructures in Vapor-Liquid-Solid Growth. Materials Research Society Symposia Proceedings, 2007, 1058, 1.	0.1	0
680	III-V compound semiconductor nanowires for optoelectronic applications. , 2007, , .		0
681	Optical properties of single InP and GaAs nanowire heterostructures. , 2008, , .		0
682	Coreâ€“shell double phase crystal in an yttrium-containing Zr-based bulk metallic glass. Journal of Alloys and Compounds, 2008, 461, 97-101.	2.8	0
683	Growth behavior of epitaxial semiconductor axial nanowire heterostructures. Optoelectronic and Microelectronic Materials and Devices (COMMAD), Conference on, 2008, , .	0.0	0
684	Growth, Structural and Optical Properties of High Quality GaAs Nanowires for Optoelectronics. , 2008, , .		0

#	Article	IF	Citations
685	Subsurface Structures of Monocrystalline Silicon Generated by Nanogrinding. Key Engineering Materials, 2008, 389-390, 465-468.	0.4	0
686	Epitaxy of III-V semiconductor nanowires towards optoelectronic devices. , 2009, , .		0
687	Effect of the crystal structure on the optical properties of InP nanowires. , 2009, , .		0
688	The Raman and IR spectroscopy study on the transition metal in ZnO. , 2009, , .		0
689	Fermi level depinning of Ge Schottky contacts using single crystalline MgO. , 2009, , .		0
690	NITRIDATION OF SILICON WITH AMMONIA AND NITROGEN. International Journal of Nanoscience, 2010, 09, 169-174.	0.4	0
691	Improvement of morphology, structure, and optical properties of GaAs nanowires grown on Si substrates. , 2010, , .		0
692	Effect of high temperature post-annealing on sidewalls of GaAs NWs grown by MOCVD. , 2010, , .		0
693	InP/InGaAs coreshell nanowire heterostructures: Growth and characterisation. , 2010, , .		0
694	Au-catalyzed InP nanowires: The influence of growth temperature and V/III ratio. , 2010, , .		0
695	Structural and optical characterization of vertical GaAs/GaP core-shell nanowires grown on Si substrates. , 2010, , .		0
696	Growth of GaAs nanowires using different Au catalysts. , 2010, , .		0
697	ZnS nanostructures for field emitters. , 2010, , .		0
698	Direct Measure of Strain and Electronic Structure in GaAsâˆ•GaP Core-Shell Nanowires. , 2011, , .		0
699	Enhanced physical compatibility in manganite/cuprate multilayer with high-quality interface. Thin Solid Films, 2011, 519, 8338-8342.	0.8	0
700	Compound semiconductor nanowires for optoelectronic device applications. , 2011, , .		0
701	Structural characteristics of GeMn diluted magnetic semiconductor nanostructures. , 2012, , .		0
702	Nano-structure design of doped ceria solid electrolytes for intermediate temperature operation of solid oxide fuel cell. Transactions of the Materials Research Society of Japan, 2012, 20thAnniv, 5-15.	0.2	0

#	Article	IF	Citations
703	Effects of Au catalyst on GaAs (111)<inf>B</inf> surface during annealing. , 2012, , .		0
704	Shell formation in InGaAs nanowires driven by lattice latching and polarity effect. , 2012, , .		0
705	Growth of defect-free InAs nanowires using Pd catalyst. , 2012, , .		0
706	Microstructure and Properties of Deformation-Processed Cuâ€“Cr In Situ Composites. Advanced Materials Research, 2013, 690-693, 329-333.	0.3	0
707	Palladium Catalyzed Defect-free <110> Zinc-Blende Structured InAs Nanowires. Materials Research Society Symposia Proceedings, 2013, 1551, 95-99.	0.1	0
708	Differences in crystallisation behaviours during cooling and post-heating processes of Ti based metallic powders. Powder Metallurgy, 2013, 56, 32-37.	0.9	0
709	Effect of V/III ratio on the structural quality of InAs nanowires. , 2014, , .		0
710	The Research on Thermal Residual Stress of SiC_p/Al Composites. Advanced Materials Research, 2014, 852, 127-131.	0.3	0
711	Evolution of thin protecting Si-layer on Mn0.5Si0.5 layer at low temperatures. Applied Surface Science, 2015, 333, 54-58.	3.1	0
712	Ultra-large elongation and dislocation behavior of nano-sized tantalum single crystals. AIP Advances, 2017, 7, 045218.	0.6	0
713	The Study of Atmospheric Pressure CVD Growth Process of MoxW1-xTe2 Nanobelts for Tuneable Chemical Composition. IOP Conference Series: Materials Science and Engineering, 2019, 678, 012149.	0.3	0
714	Axiotaxy driven growth of belt-shaped InAs nanowires in molecular beam epitaxy. Nano Research, 2021, 14, 2330.	5.8	0
715	10.4028/0-87849-364-6.465. , 0, , .		0
716	Nano-structure Analysis of Interface in Anode Supported Gd-doped Ceria Thin Film Electrolyte. Transactions of the Materials Research Society of Japan, 2012, 37, 389-392.	0.2	0
717	Ge1â€“x Mnx-Diluted Magnetic Semiconductor Nanostructures for Spintronics. , 2012, , 693-731.		0