

# Yong-Wei Zhang

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/1079220/publications.pdf>

Version: 2024-02-01

515  
papers

34,546  
citations

4120

87  
h-index

4870

168  
g-index

521  
all docs

521  
docs citations

521  
times ranked

34875  
citing authors

#	ARTICLE	IF	CITATIONS
1	Recent progress on 2D materials-based artificial synapses. <i>Critical Reviews in Solid State and Materials Sciences</i> , 2022, 47, 665-690.	6.8	11
2	Simultaneously enhancing the strength and toughness of short fiber reinforced thermoplastic composites by fiber cross-linking. <i>Composites Science and Technology</i> , 2022, 217, 109076.	3.8	10
3	Supramolecular gating of guest release from cucurbit[7]uril using de novo design. <i>Npj Computational Materials</i> , 2022, 8, .	3.5	9
4	Visualizing crystal structure evolution of electrode materials upon doping and during charge/discharge cycles in lithium-ion batteries. <i>STAR Protocols</i> , 2022, 3, 101099.	0.5	1
5	Reply to: Detectivities of WS <sub>2</sub> /HfS <sub>2</sub> heterojunctions. <i>Nature Nanotechnology</i> , 2022, 17, 220-221.	15.6	5
6	Role of Ferroelectric In <sub>2</sub> Se <sub>3</sub> in Polysulfide Shuttling and Charging/Discharging Kinetics in Lithium/Sodium Sulfur Batteries. <i>ACS Applied Materials &amp; Interfaces</i> , 2022, 14, 16178-16184.	4.0	17
7	Quantitative study on the dynamics of melt pool and keyhole and their controlling factors in metal laser melting. <i>Additive Manufacturing</i> , 2022, 54, 102779.	1.7	6
8	Explore the full temperature-composition space of 20 quinary CCAs for FCC and BCC single-phases by an iterative machine learning CALPHAD method. <i>Acta Materialia</i> , 2022, 231, 117865.	3.8	5
9	Extraordinary Strain Hardening from Dislocation Loops in Defect-Free Al Nanocubes. <i>Nano Letters</i> , 2022, 22, 4036-4041.	4.5	0
10	Wafer-scale solution-processed 2D material analog resistive memory array for memory-based computing. <i>Nature Communications</i> , 2022, 13, .	5.8	60
11	Computational predictions of quantum thermal transport across nanoscale interfaces. <i>Nanoscale</i> , 2022, 14, 9209-9217.	2.8	7
12	A first-principles-based high fidelity, high throughput approach for the design of high entropy alloys. <i>Scientific Reports</i> , 2022, 12, .	1.6	12
13	Failure modes and mechanisms of layered h-BN under local energy injection. <i>Scientific Reports</i> , 2022, 12, .	1.6	1
14	Unravelling V <sub>6</sub> O <sub>13</sub> Diffusion Pathways <i>via</i> CO <sub>2</sub> Modification for High-Performance Zinc Ion Battery Cathode. <i>ACS Nano</i> , 2021, 15, 1273-1281.	7.3	67
15	Theoretical analysis of thermal boundary conductance of MoS <sub>2</sub> -SiO <sub>2</sub> and WS <sub>2</sub> -SiO <sub>2</sub> interface. <i>Nanotechnology</i> , 2021, 32, 135402.	1.3	4
16	Synergizing Cu dimers and N atoms in graphene towards an active catalyst for hydrogen evolution reaction. <i>Nanoscale Advances</i> , 2021, 3, 5332-5338.	2.2	1
17	Rapid Estimation of Binding Constants for Cucurbit[8]uril Ternary Complexes Using Electrochemistry. <i>Analytical Chemistry</i> , 2021, 93, 4223-4230.	3.2	6
18	Entropy-Driven Ultratough Blends from Brittle Polymers. <i>ACS Macro Letters</i> , 2021, 10, 406-411.	2.3	17

#	ARTICLE	IF	CITATIONS
19	Chemical-Affinity Disparity and Exclusivity Drive Atomic Segregation, Short-Range Ordering, and Cluster Formation in High-Entropy Alloys. <i>Acta Materialia</i> , 2021, 206, 116638.	3.8	45
20	Modified embedded-atom method potentials for the plasticity and fracture behaviors of unary fcc metals. <i>Physical Review B</i> , 2021, 103, .	1.1	5
21	Revealing high-fidelity phase selection rules for high entropy alloys: A combined CALPHAD and machine learning study. <i>Materials and Design</i> , 2021, 202, 109532.	3.3	51
22	The role of flexural coupling in heat dissipation from a two-dimensional layered material to its hexagonal boron nitride substrate. <i>2D Materials</i> , 2021, 8, 035032.	2.0	3
23	Simultaneously enhancing the ultimate strength and ductility of high-entropy alloys via short-range ordering. <i>Nature Communications</i> , 2021, 12, 4953.	5.8	116
24	Universal Zigzag Edge Reconstruction of an $I_{\pm}$ -Phase Puckered Monolayer and Its Resulting Robust Spatial Charge Separation. <i>Nano Letters</i> , 2021, 21, 8095-8102.	4.5	5
25	Solid-state self-template synthesis of Ta-doped $\text{Li}_2\text{ZnTi}_3\text{O}_8$ spheres for efficient and durable lithium storage. <i>IScience</i> , 2021, 24, 102991.	1.9	6
26	Mid-infrared modulators integrating silicon and black phosphorus photonics. <i>Materials Today Advances</i> , 2021, 12, 100170.	2.5	17
27	Atomistic-scale analysis of the deformation and failure of polypropylene composites reinforced by functionalized silica nanoparticles. <i>Scientific Reports</i> , 2021, 11, 23108.	1.6	4
28	Hall-Petch and inverse Hall-Petch relations in high-entropy $\text{CoNiFeAl}_x\text{Cu}_{1-x}$ alloys. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2020, 773, 138873.	2.6	93
29	An all-atom kinetic Monte Carlo model for chemical vapor deposition growth of graphene on $\text{Cu}(1\hat{1}\%1\hat{1}\%1)$ substrate. <i>Journal of Physics Condensed Matter</i> , 2020, 32, 155401.	0.7	11
30	Strain stabilized nickel hydroxide nanoribbons for efficient water splitting. <i>Energy and Environmental Science</i> , 2020, 13, 229-237.	15.6	78
31	Mechanical and failure behaviors of lattice-plate hybrid structures. <i>MRS Communications</i> , 2020, 10, 42-54.	0.8	2
32	Numerical investigation of erosion characteristics of multiple-particle impact on ductile material with patterned surfaces. <i>Powder Technology</i> , 2020, 362, 527-538.	2.1	10
33	How Does Nature Evade the "Larger is Weaker" Fate of Ultralong Silk $\beta$ -Sheet Nanocrystallites. <i>Nano Letters</i> , 2020, 20, 8516-8523.	4.5	14
34	Staggering transport of edge states and symmetry analysis of electronic and optical properties of stanene. <i>Nanoscale</i> , 2020, 12, 20890-20897.	2.8	2
35	Elastic properties of injection molded short glass fiber reinforced thermoplastic composites. <i>Composite Structures</i> , 2020, 254, 112850.	3.1	29
36	Remarkable Role of Grain Boundaries in the Thermal Transport Properties of Phosphorene. <i>ACS Omega</i> , 2020, 5, 17416-17422.	1.6	11

#	ARTICLE	IF	CITATIONS
37	Remarkably high thermal-driven MoS <sub>2</sub> grain boundary migration mobility and its implications on defect healing. <i>Nanoscale</i> , 2020, 12, 17746-17753.	2.8	6
38	Generalized small set of ordered structures method for the solid-solution phase of high-entropy alloys. <i>Physical Review B</i> , 2020, 102, .	1.1	10
39	Modified Timoshenko beam model for bending behaviors of layered materials and structures. <i>Extreme Mechanics Letters</i> , 2020, 39, 100799.	2.0	11
40	Three-terminal interface as a thermoelectric generator beyond the Seebeck effect. <i>Physical Review B</i> , 2020, 101, .	1.1	7
41	Etching mechanisms, kinetics, and pattern formation in multilayered WSe <sub>2</sub> . <i>Materials Today Advances</i> , 2020, 7, 100075.	2.5	4
42	Ultrasensitive and robust two-dimensional indium selenide flexible electronics and sensors for human motion detection. <i>Nano Energy</i> , 2020, 76, 105020.	8.2	28
43	Hardening in Au-Ag nanoboxes from stacking fault-dislocation interactions. <i>Nature Communications</i> , 2020, 11, 2923.	5.8	23
44	A supertough electro-tendon based on spider silk composites. <i>Nature Communications</i> , 2020, 11, 1332.	5.8	73
45	Effect of temperature on small-scale deformation of individual face-centered-cubic and body-centered-cubic phases of an Al <sub>0.7</sub> CoCrFeNi high-entropy alloy. <i>Materials and Design</i> , 2020, 191, 108611.	3.3	19
46	High oscillator strength interlayer excitons in two-dimensional heterostructures for mid-infrared photodetection. <i>Nature Nanotechnology</i> , 2020, 15, 675-682.	15.6	129
47	Neural network representation and optimization of thermoelectric states of multiple interacting quantum dots. <i>Physical Chemistry Chemical Physics</i> , 2020, 22, 16165-16173.	1.3	2
48	Shallow defects levels and extract detrapped charges to stabilize highly efficient and hysteresis-free perovskite photovoltaic devices. <i>Nano Energy</i> , 2020, 71, 104556.	8.2	51
49	Supramolecular Catalysis of <i>m</i> -Xylene Isomerization by Cucurbiturils: Transition State Stabilization, Vibrational Coupling, and Dynamic Binding Equilibrium. <i>Journal of Physical Chemistry C</i> , 2020, 124, 11469-11479.	1.5	11
50	Modelling of Defects and Failure in 2D Materials: Graphene and Beyond. , 2020, , 1869-1909.		1
51	Gate-tunable cross-plane heat dissipation in single-layer transition metal dichalcogenides. <i>Physical Review Research</i> , 2020, 2, .	1.3	4
52	Failure in Two-Dimensional Materials: Defect Sensitivity and Failure Criteria. <i>Journal of Applied Mechanics</i> , <i>Transactions ASME</i> , 2020, 87, .	1.1	24
53	First Demonstration of a Fully-Printed Mos2Rram on Flexible Substrate with Ultra-Low Switching Voltage and its Application as Electronic Synapse. , 2019, , .		8
54	Electronic-reconstruction-enhanced hydrogen evolution catalysis in oxide polymorphs. <i>Nature Communications</i> , 2019, 10, 3149.	5.8	42

#	ARTICLE	IF	CITATIONS
55	Thermal transport in graphene-based layered materials: An analytical model validated with extensive molecular dynamics simulations. <i>Carbon</i> , 2019, 155, 114-121.	5.4	19
56	Design of Phosphorene for Hydrogen Evolution Performance Comparable to Platinum. <i>Chemistry of Materials</i> , 2019, 31, 8948-8956.	3.2	66
57	Revealing the Grain Boundary Formation Mechanism and Kinetics during Polycrystalline MoS <sub>2</sub> Growth. <i>ACS Applied Materials &amp; Interfaces</i> , 2019, 11, 46090-46100.	4.0	37
58	A Fully Printed Flexible MoS <sub>2</sub> Memristive Artificial Synapse with Femtojoule Switching Energy. <i>Advanced Electronic Materials</i> , 2019, 5, 1900740.	2.6	123
59	Spontaneous directional motion of water molecules in single-walled carbon nanotubes with a stiffness gradient. <i>Nanoscale Advances</i> , 2019, 1, 1175-1180.	2.2	10
60	Ultrafast diffusive cross-sheet motion of lithium through antimonene with 2 + 1 dimensional kinetics. <i>Journal of Materials Chemistry A</i> , 2019, 7, 2901-2907.	5.2	19
61	The mechanical and thermal properties of MoS <sub>2</sub> /WSe <sub>2</sub> lateral heterostructures. <i>Physical Chemistry Chemical Physics</i> , 2019, 21, 15845-15853.	1.3	28
62	A molecular dynamics study of the mechanical properties of h-BCN monolayer using a modified Tersoff interatomic potential. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , 2019, 383, 2821-2827.	0.9	34
63	Artificial Synapses Based on Multiterminal Memtransistors for Neuromorphic Application. <i>Advanced Functional Materials</i> , 2019, 29, 1901106.	7.8	192
64	Metal-organic framework-derived hierarchical MoS <sub>2</sub> /CoS <sub>2</sub> nanotube arrays as pH-universal electrocatalysts for efficient hydrogen evolution. <i>Journal of Materials Chemistry A</i> , 2019, 7, 13339-13346.	5.2	133
65	Surface Reconstruction, Oxidation Mechanism, and Stability of Cd <sub>3</sub> As <sub>2</sub> . <i>Advanced Functional Materials</i> , 2019, 29, 1900965.	7.8	13
66	Atomistic modeling of nanoscale plasticity in high-entropy alloys. <i>Journal of Materials Research</i> , 2019, 34, 1509-1532.	1.2	36
67	Dynamics calibration of particle sandpile packing characteristics via discrete element method. <i>Powder Technology</i> , 2019, 347, 220-226.	2.1	19
68	Revealing the deformation twinning nucleation mechanism of BCC HEAs. <i>MRS Communications</i> , 2019, 9, 406-412.	0.8	17
69	Origin of ultrafast growth of monolayer WSe <sub>2</sub> via chemical vapor deposition. <i>Npj Computational Materials</i> , 2019, 5, .	3.5	28
70	A kinetic Monte Carlo model for the growth and etching of graphene during chemical vapor deposition. <i>Carbon</i> , 2019, 146, 399-405.	5.4	20
71	Defect Engineering of Oxygen-Deficient Manganese Oxide to Achieve High-Performing Aqueous Zinc Ion Battery. <i>Advanced Energy Materials</i> , 2019, 9, 1803815.	10.2	504
72	Strain and defect engineered monolayer Ni-MoS <sub>2</sub> for pH-universal hydrogen evolution catalysis. <i>Nanoscale</i> , 2019, 11, 18329-18337.	2.8	56

#	ARTICLE	IF	CITATIONS
73	Evolution of intrinsic vacancies and prolonged lifetimes of vacancy clusters in black phosphorene. <i>Nanoscale</i> , 2019, 11, 20987-20995.	2.8	10
74	Design of the Hybrid Metal-Organic Frameworks as Potential Supramolecular Piezo-/Ferroelectrics. <i>Journal of Physical Chemistry C</i> , 2019, 123, 3122-3129.	1.5	37
75	The effects of curvature on the thermal conduction of bent silicon nanowire. <i>Journal of Applied Physics</i> , 2019, 125, .	1.1	6
76	Unveiling the competitive role of etching in graphene growth during chemical vapor deposition. <i>2D Materials</i> , 2019, 6, 015031.	2.0	6
77	Discrete-Continuum Duality of Architected Materials: Failure, Flaws, and Fracture. <i>Advanced Functional Materials</i> , 2019, 29, 1806772.	7.8	26
78	Finite element analysis of anti-erosion characteristics of material with patterned surface impacted by particles. <i>Powder Technology</i> , 2019, 342, 193-203.	2.1	18
79	A Kinetic Monte Carlo Study for Mono- and Bi-layer Growth of MoS <sub>2</sub> during Chemical Vapor Deposition. <i>Wuli Huaxue Xuebao/ Acta Physico - Chimica Sinica</i> , 2019, 35, 1119-1127.	2.2	9
80	Direct n- to p-Type Channel Conversion in Monolayer/Few-Layer WS <sub>2</sub> Field-Effect Transistors by Atomic Nitrogen Treatment. <i>ACS Nano</i> , 2018, 12, 2506-2513.	7.3	107
81	Strength and buckling behavior of defective phosphorene nanotubes under axial compression. <i>Journal of Materials Science</i> , 2018, 53, 8355-8363.	1.7	6
82	Multiscale modeling of keratin, collagen, elastin and related human diseases: Perspectives from atomistic to coarse-grained molecular dynamics simulations. <i>Extreme Mechanics Letters</i> , 2018, 20, 112-124.	2.0	39
83	Kinetic theory for the formation of diamond nanothreads with desired configurations: a strain-temperature controlled phase diagram. <i>Nanoscale</i> , 2018, 10, 9664-9672.	2.8	13
84	Effects of graphene/BN encapsulation, surface functionalization and molecular adsorption on the electronic properties of layered InSe: a first-principles study. <i>Physical Chemistry Chemical Physics</i> , 2018, 20, 12939-12947.	1.3	27
85	Anisotropic Wetting Characteristics of Water Droplets on Phosphorene: Roles of Layer and Defect Engineering. <i>Journal of Physical Chemistry C</i> , 2018, 122, 4622-4627.	1.5	21
86	Anharmonic model for the elastic constants of bulk metallic glass across the glass transition. <i>Physical Review B</i> , 2018, 97, .	1.1	4
87	Temperature and strain-rate dependent mechanical properties of single-layer borophene. <i>Extreme Mechanics Letters</i> , 2018, 19, 39-45.	2.0	26
88	Large diffusion anisotropy and orientation sorting of phosphorene nanoflakes under a temperature gradient. <i>Nanoscale</i> , 2018, 10, 1660-1666.	2.8	14
89	Mechanical twinning in phosphorene. <i>Extreme Mechanics Letters</i> , 2018, 19, 15-19.	2.0	9
90	Thermal properties of transition-metal dichalcogenide. <i>Chinese Physics B</i> , 2018, 27, 034402.	0.7	17

#	ARTICLE	IF	CITATIONS
91	Effect of vacancies on the mechanical properties of phosphorene nanotubes. <i>Nanotechnology</i> , 2018, 29, 235707.	1.3	7
92	On the controllability of phase formation in rapid solidification of high entropy alloys. <i>Journal of Alloys and Compounds</i> , 2018, 748, 679-686.	2.8	27
93	A first-principles study on the adsorption of small molecules on antimonene: oxidation tendency and stability. <i>Journal of Materials Chemistry C</i> , 2018, 6, 4308-4317.	2.7	68
94	Large-Aperture and Grain-Boundary Engineering through Template-Assisted Metal Dewetting for Resonances in the Short Wave Infrared. <i>ACS Photonics</i> , 2018, 5, 511-519.	3.2	2
95	Synergetically understanding the interaction between nano/microspheres and peptide for controllable drug loading via experimental and theoretical approaches. <i>Materials Science and Engineering C</i> , 2018, 83, 169-176.	3.8	14
96	Exploring the charge localization and band gap opening of borophene: a first-principles study. <i>Nanoscale</i> , 2018, 10, 1403-1410.	2.8	77
97	Atomic-scale mechanisms of defect- and light-induced oxidation and degradation of InSe. <i>Journal of Materials Chemistry C</i> , 2018, 6, 518-525.	2.7	43
98	Phase field simulation of powder bed-based additive manufacturing. <i>Acta Materialia</i> , 2018, 144, 801-809.	3.8	127
99	Unusual phonon behavior and ultra-low thermal conductance of monolayer InSe. <i>Nanoscale</i> , 2018, 10, 480-487.	2.8	34
100	Aqueous and mechanical exfoliation, unique properties, and theoretical understanding of MoO <sub>3</sub> nanosheets made from free-standing $\pm$ -MoO <sub>3</sub> crystals: Raman mode softening and absorption edge blue shift. <i>Nano Research</i> , 2018, 11, 1193-1203.	5.8	24
101	Simultaneous edge and electronic control of MoS <sub>2</sub> nanosheets through Fe doping for an efficient oxygen evolution reaction. <i>Nanoscale</i> , 2018, 10, 20113-20119.	2.8	63
102	Highly Stable New Organic-Inorganic Hybrid 3D Perovskite CH <sub>3</sub> NH <sub>3</sub> PdI <sub>3</sub> and 2D Perovskite (CH <sub>3</sub> NH <sub>3</sub> ) <sub>3</sub> Pd <sub>2</sub> I <sub>7</sub> : DFT Analysis, Synthesis, Structure, Transition Behavior, and Physical Properties. <i>Journal of Physical Chemistry Letters</i> , 2018, 9, 5862-5872.	2.1	26
103	Design of phosphorene/graphene heterojunctions for high and tunable interfacial thermal conductance. <i>Nanoscale</i> , 2018, 10, 19854-19862.	2.8	38
104	A nanolattice-plate hybrid structure to achieve a nearly linear relation between stiffness/strength and density. <i>Materials and Design</i> , 2018, 160, 496-502.	3.3	7
105	Interfacial Thermal Conductance and Thermal Rectification of Hexagonal BC <sub>n</sub> N/Graphene In-Plane Heterojunctions. <i>Journal of Physical Chemistry C</i> , 2018, 122, 22783-22789.	1.5	42
106	Sub-10-nm suspended nano-web formation by direct laser writing. <i>Nano Futures</i> , 2018, 2, 025006.	1.0	26
107	Black Phosphorus Carbide as a Tunable Anisotropic Plasmonic Metasurface. <i>ACS Photonics</i> , 2018, 5, 3116-3123.	3.2	58
108	Boosted electrochemical properties from the surface engineering of ultrathin interlaced Ni(OH) <sub>2</sub> nanosheets with Co(OH) <sub>2</sub> quantum dot modification. <i>Nanoscale</i> , 2018, 10, 10554-10563.	2.8	44



#	ARTICLE	IF	CITATIONS
127	Thermal properties of two-dimensional materials. Chinese Physics B, 2017, 26, 034401.	0.7	63
128	Strain and water effects on the electronic structure and chemical activity of in-plane graphene/silicene heterostructure. Journal of Physics Condensed Matter, 2017, 29, 095302.	0.7	25
129	Few-layer Black Phosphorus Carbide Field-Effect Transistor via Carbon Doping. Advanced Materials, 2017, 29, 1700503.	11.1	133
130	Charge Transfer and Functionalization of Monolayer InSe by Physisorption of Small Molecules for Gas Sensing. Journal of Physical Chemistry C, 2017, 121, 10182-10193.	1.5	83
131	Electrostatic-Driven Exfoliation and Hybridization of 2D Nanomaterials. Advanced Materials, 2017, 29, 1700326.	11.1	68
132	Remarkable enhancement in failure stress and strain of penta-graphene via chemical functionalization. Nano Research, 2017, 10, 3865-3874.	5.8	24
133	Thermal stability and thermal conductivity of phosphorene in phosphorene/graphene van der Waals heterostructures. Physical Chemistry Chemical Physics, 2017, 19, 17180-17186.	1.3	37
134	Carbon nanoscroll-silk crystallite hybrid structures with controllable hydration and mechanical properties. Nanoscale, 2017, 9, 9181-9189.	2.8	21
135	MoS <sub>2</sub> -graphene in-plane contact for high interfacial thermal conduction. Nano Research, 2017, 10, 2944-2953.	5.8	59
136	Damping behavior investigation and optimization of the structural layout of load-bearing biological materials. International Journal of Mechanical Sciences, 2017, 120, 263-275.	3.6	17
137	Analyzing the Carrier Mobility in Transition-Metal Dichalcogenide MoS <sub>2</sub> Field-Effect Transistors. Advanced Functional Materials, 2017, 27, 1604093.	7.8	265
138	Al-Doped Black Phosphorus p-n Homojunction Diode for High Performance Photovoltaic. Advanced Functional Materials, 2017, 27, 1604638.	7.8	145
139	Tuning magnetoresistance in molybdenum disulphide and graphene using a molecular spin transition. Nature Communications, 2017, 8, 677.	5.8	20
140	Theoretical Studies on the Growth Mechanism of Chemical Vapor Deposition of Graphene on Metal Surface. , 2017, , 205-241.		0
141	Enhancing Multifunctionalities of Transition-Metal Dichalcogenide Monolayers via Cation Intercalation. ACS Nano, 2017, 11, 9390-9396.	7.3	35
142	Active Control of Microstructure in Powder-Bed Fusion Additive Manufacturing of Ti6Al4V. Advanced Engineering Materials, 2017, 19, 1700333.	1.6	13
143	Structure, Stability, and Kinetics of Vacancy Defects in Monolayer PtSe <sub>2</sub> : A First-Principles Study. ACS Omega, 2017, 2, 8640-8648.	1.6	40
144	Unusual Twisting Phonons and Breathing Modes in Tube-Terminated Phosphorene Nanoribbons and Their Effects on Thermal Conductivity. Advanced Functional Materials, 2017, 27, 1702776.	7.8	21

#	ARTICLE	IF	CITATIONS
145	Superior lattice thermal conductance of single-layer borophene. Npj 2D Materials and Applications, 2017, 1, .	3.9	70
146	Mechanical properties and failure behaviour of graphene/silicene/graphene heterostructures. Journal Physics D: Applied Physics, 2017, 50, 345302.	1.3	36
147	Thermoelectric properties of two-dimensional transition metal dichalcogenides. Journal of Materials Chemistry C, 2017, 5, 7684-7698.	2.7	204
148	Thermal conductivity of penta-graphene: The role of chemical functionalization. Computational Materials Science, 2017, 137, 195-200.	1.4	34
149	From two-dimensional nano-sheets to roll-up structures: expanding the family of nanoscroll. Nanotechnology, 2017, 28, 385704.	1.3	24
150	Tuning deep dopants to shallow ones in 2D semiconductors by substrate screening: The case of $X$ ( $X = \text{Cl}, \text{Br}, \text{I}$ ) in $\text{MoS}_2$ . Physical Review B, 2017, 95, .	1.1	18
151	Effect of edge passivation on the mechanical properties of phosphorene nanoribbons. Extreme Mechanics Letters, 2017, 14, 2-9.	2.0	10
152	Effect of chemical composition and affinity on the short- and medium-range order structures and mechanical properties of Zr-Ni-Al metallic glass. Journal of Non-Crystalline Solids, 2017, 456, 68-75.	1.5	20
153	Black Phosphorus $n$ -Type Field-Effect Transistor with Ultrahigh Electron Mobility via Aluminum Adatoms Doping. Small, 2017, 13, 1602909.	5.2	61
154	The role of $\text{H}_2\text{O}$ and $\text{O}_2$ molecules and phosphorus vacancies in the structure instability of phosphorene. 2D Materials, 2017, 4, 015010.	2.0	101
155	Recent Advances in the Study of Phosphorene and its Nanostructures. Critical Reviews in Solid State and Materials Sciences, 2017, 42, 1-82.	6.8	130
156	Surface-Charge-Mediated Formation of $\text{H}_2\text{TiO}_2$ @ $\text{Ni}(\text{OH})_2$ Heterostructures for High-Performance Supercapacitors. Advanced Materials, 2017, 29, 1604164.	11.1	203
157	Strain and defects engineering of phosphorene. , 2017, , .		1
158	Mechanical properties and fracture behaviour of defective phosphorene nanotubes under uniaxial tension. Journal Physics D: Applied Physics, 2017, 50, 485303.	1.3	6
159	Atomic vacancies significantly degrade the mechanical properties of phosphorene. Nanotechnology, 2016, 27, 315704.	1.3	54
160	Diamond Nanothread as a New Reinforcement for Nanocomposites. Advanced Functional Materials, 2016, 26, 5279-5283.	7.8	63
161	Thermal conduction across the one-dimensional interface between a $\text{MoS}_2$ monolayer and metal electrode. Nano Research, 2016, 9, 2372-2383.	5.8	35
162	Topological Defects at the Graphene/h-BN interface Abnormally Enhance Its Thermal Conductance. Nano Letters, 2016, 16, 4954-4959.	4.5	129

#	ARTICLE	IF	CITATIONS
163	Thermoelectric properties of phosphorene at the nanoscale. <i>Journal of Materials Research</i> , 2016, 31, 3179-3186.	1.2	23
164	Nanostructure Formation by controlled dewetting on patterned substrates: A combined theoretical, modeling and experimental study. <i>Scientific Reports</i> , 2016, 6, 32398.	1.6	20
165	Decoupled electron and phonon transports in hexagonal boron nitride-silicene bilayer heterostructure. <i>Journal of Applied Physics</i> , 2016, 119, .	1.1	29
166	Exploring Ag(111) Substrate for Epitaxially Growing Monolayer Stanene: A First-Principles Study. <i>Scientific Reports</i> , 2016, 6, 29107.	1.6	58
167	Protein viscosity, mineral fraction and staggered architecture cooperatively enable the fastest stress wave decay in load-bearing biological materials. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2016, 60, 339-355.	1.5	23
168	The Critical Role of Substrate in Stabilizing Phosphorene Nanoflake: A Theoretical Exploration. <i>Journal of the American Chemical Society</i> , 2016, 138, 4763-4771.	6.6	72
169	Modeling the Microstructure Evolution During Additive Manufacturing of Ti6Al4V: A Comparison Between Electron Beam Melting and Selective Laser Melting. <i>Jom</i> , 2016, 68, 1370-1375.	0.9	40
170	Transistors: Realization of Room-Temperature Phonon-Limited Carrier Transport in Monolayer MoS <sub>2</sub> by Dielectric and Carrier Screening ( <i>Adv. Mater.</i> 3/2016). <i>Advanced Materials</i> , 2016, 28, 546-546.	11.1	5
171	Adsorption and Conformational Evolution of Alpha-Helical BSA Segments on Graphene: A Molecular Dynamics Study. <i>International Journal of Applied Mechanics</i> , 2016, 08, 1650021.	1.3	11
172	Controlling of residual stress in additive manufacturing of Ti6Al4V by finite element modeling. <i>Additive Manufacturing</i> , 2016, 12, 231-239.	1.7	141
173	From brittle to ductile: a structure dependent ductility of diamond nanothread. <i>Nanoscale</i> , 2016, 8, 11177-11184.	2.8	84
174	Surface morphology and strain coupling effects on phonon transport in silicon nanowires. <i>Materials Today: Proceedings</i> , 2016, 3, 2759-2765.	0.9	5
175	Thermally induced failure mechanism transition and its correlation with short-range order evolution in metallic glasses. <i>Extreme Mechanics Letters</i> , 2016, 9, 215-225.	2.0	23
176	Substantial tensile ductility in sputtered Zr-Ni-Al nano-sized metallic glass. <i>Acta Materialia</i> , 2016, 118, 270-285.	3.8	52
177	Mechanical properties of phosphorene nanotubes: a density functional tight-binding study. <i>Nanotechnology</i> , 2016, 27, 395701.	1.3	40
178	Phonon transport in a one-dimensional harmonic chain with long-range interaction and mass disorder. <i>Physical Review E</i> , 2016, 94, 052123.	0.8	4
179	Nanotube-terminated zigzag edges of phosphorene formed by self-rolling reconstruction. <i>Nanoscale</i> , 2016, 8, 17940-17946.	2.8	39
180	Strain-Robust and Electric Field Tunable Band Alignments in van der Waals WSe <sub>2</sub> -Graphene Heterojunctions. <i>Journal of Physical Chemistry C</i> , 2016, 120, 22702-22709.	1.5	34

#	ARTICLE	IF	CITATIONS
181	Controlling the thermal conductance of $\text{graphene}$ interface with strain and structure engineering. <i>Physical Review B</i> , 2016, 93, .	4.8	18
182	Highly Itinerant Atomic Vacancies in Phosphorene. <i>Journal of the American Chemical Society</i> , 2016, 138, 10199-10206.	6.6	134
183	Quantum thermal transport in stanene. <i>Physical Review B</i> , 2016, 94, .	1.1	41
184	Modulating Carrier Density and Transport Properties of $\text{MoS}_2$ by Organic Molecular Doping and Defect Engineering. <i>Chemistry of Materials</i> , 2016, 28, 8611-8621.	3.2	105
185	$\text{Effect of spin-orbit coupling on formation of native defects in Weyl fermion semimetals: The case of } \text{TaAs}$		

#	ARTICLE	IF	CITATIONS
199	An experimental and theoretical investigation of the anisotropic branching in gold nanocrosses. <i>Nanoscale</i> , 2016, 8, 543-552.	2.8	90
200	Interfacial thermal conductance in graphene/MoS2 heterostructures. <i>Carbon</i> , 2016, 96, 888-896.	5.4	116
201	Robust Direct Bandgap Characteristics of One- and Two-Dimensional ReS2. <i>Scientific Reports</i> , 2015, 5, 13783.	1.6	68
202	A comparative density functional study on electrical properties of layered penta-graphene. <i>Journal of Applied Physics</i> , 2015, 118, .	1.1	54
203	Exciton-dominated Dielectric Function of Atomically Thin MoS2 Films. <i>Scientific Reports</i> , 2015, 5, 16996.	1.6	155
204	High aspect ratio 10-nm-scale nanoaperture arrays with template-guided metal dewetting. <i>Scientific Reports</i> , 2015, 5, 9654.	1.6	18
205	Molecular dynamics modelling of EGCG clusters on ceramide bilayers. <i>AIP Conference Proceedings</i> , 2015, , .	0.3	0
206	Molecular mobility on graphene nanoroads. <i>Scientific Reports</i> , 2015, 5, 12848.	1.6	9
207	Pulling out a peptide chain from $\beta$ -sheet crystallite: Propagation of instability of H-bonds under shear force. <i>Acta Mechanica Sinica/Lixue Xuebao</i> , 2015, 31, 416-424.	1.5	33
208	Phosphorene: Giant Phononic Anisotropy and Unusual Anharmonicity of Phosphorene: Interlayer Coupling and Strain Engineering (Adv. Funct. Mater. 15/2015). <i>Advanced Functional Materials</i> , 2015, 25, 2343-2343.	7.8	10
209	High-Performance Monolayer $WS_2$ Field-Effect Transistors on High- $\kappa$ Dielectrics. <i>Advanced Materials</i> , 2015, 27, 5230-5234.	11.1	218
210	Destabilization of Thiolated Gold Clusters for the Growth of Single-Crystalline Gold Nanoparticles and Their Self-Assembly for SERS Detection. <i>Particle and Particle Systems Characterization</i> , 2015, 32, 588-595.	1.2	7
211	Electronic Properties of Phosphorene/Graphene and Phosphorene/Hexagonal Boron Nitride Heterostructures. <i>Journal of Physical Chemistry C</i> , 2015, 119, 13929-13936.	1.5	295
212	The structure and elastic properties of phosphorene edges. <i>Nanotechnology</i> , 2015, 26, 235707.	1.3	60
213	An experimental and simulation study on build thickness dependent microstructure for electron beam melted Ti-6Al-4V. <i>Journal of Alloys and Compounds</i> , 2015, 646, 303-309.	2.8	105
214	Depth sensing-induced inelastic deformation at heterogeneous polymer surface. <i>Polymer</i> , 2015, 68, 11-16.	1.8	2
215	Mechanical properties and fracture behavior of single-layer phosphorene at finite temperatures. <i>Journal Physics D: Applied Physics</i> , 2015, 48, 395303.	1.3	103
216	Structures, mechanical properties and applications of silk fibroin materials. <i>Progress in Polymer Science</i> , 2015, 46, 86-110.	11.8	811

#	ARTICLE	IF	CITATIONS
217	On the relationship between the dynamic behavior and nanoscale staggered structure of the bone. <i>Journal of the Mechanics and Physics of Solids</i> , 2015, 78, 17-31.	2.3	27
218	Ultrafast and Directional Diffusion of Lithium in Phosphorene for High-Performance Lithium-Ion Battery. <i>Nano Letters</i> , 2015, 15, 1691-1697.	4.5	628
219	Giant Phononic Anisotropy and Unusual Anharmonicity of Phosphorene: Interlayer Coupling and Strain Engineering. <i>Advanced Functional Materials</i> , 2015, 25, 2230-2236.	7.8	198
220	Energetics, Charge Transfer, and Magnetism of Small Molecules Physisorbed on Phosphorene. <i>Journal of Physical Chemistry C</i> , 2015, 119, 3102-3110.	1.5	347
221	In-plane and cross-plane thermal conductivities of molybdenum disulfide. <i>Nanotechnology</i> , 2015, 26, 065703.	1.3	67
222	Effects of grain size, temperature and strain rate on the mechanical properties of polycrystalline graphene – A molecular dynamics study. <i>Carbon</i> , 2015, 85, 135-146.	5.4	136
223	Dopant chemical potential modulation on oxygen vacancies formation in In <sub>2</sub> O <sub>3</sub> : A comparative density functional study. <i>Chemical Physics Letters</i> , 2015, 621, 141-145.	1.2	6
224	Unique features of laterally aligned GeSi nanowires self-assembled on the vicinal Si (001) surface misoriented toward the [100] direction. <i>Nanoscale</i> , 2015, 7, 5835-5842.	2.8	8
225	Extended finite element method coupled with face-based strain smoothing technique for three-dimensional fracture problems. <i>International Journal for Numerical Methods in Engineering</i> , 2015, 102, 1894-1916.	1.5	17
226	Two-dimensional van der Waals C <sub>60</sub> molecular crystal. <i>Scientific Reports</i> , 2015, 5, 12221.	1.6	24
227	Manipulating the Thermal Conductivity of Monolayer MoS <sub>2</sub> via Lattice Defect and Strain Engineering. <i>Journal of Physical Chemistry C</i> , 2015, 119, 16358-16365.	1.5	161
228	Graphene-based thermal modulators. <i>Nano Research</i> , 2015, 8, 2755-2762.	5.8	29
229	The deformation and failure behaviour of phosphorene nanoribbons under uniaxial tensile strain. <i>2D Materials</i> , 2015, 2, 035007.	2.0	39
230	Surface-engineered nanoscale diamond films enable remarkable enhancement in thermal conductivity and anisotropy. <i>Carbon</i> , 2015, 94, 760-767.	5.4	15
231	Necking and notch strengthening in metallic glass with symmetric sharp-and-deep notches. <i>Scientific Reports</i> , 2015, 5, 10797.	1.6	68
232	An elastic model for bioinspired design of carbon nanotube bundles. <i>Acta Mechanica Sinica/Lixue Xuebao</i> , 2015, 31, 205-215.	1.5	13
233	Protein Induces Layer-by-Layer Exfoliation of Transition Metal Dichalcogenides. <i>Journal of the American Chemical Society</i> , 2015, 137, 6152-6155.	6.6	365
234	Strain effects on thermoelectric properties of two-dimensional materials. <i>Mechanics of Materials</i> , 2015, 91, 382-398.	1.7	137

#	ARTICLE	IF	CITATIONS
235	Tunable Mechanical and Thermal Properties of One-Dimensional Carbyne Chain: Phase Transition and Microscopic Dynamics. <i>Journal of Physical Chemistry C</i> , 2015, 119, 24156-24164.	1.5	57
236	Strain engineering on the thermal conductivity and heat flux of thermoelectric Bi <sub>2</sub> Te <sub>3</sub> nanofilm. <i>Nano Energy</i> , 2015, 17, 104-110.	8.2	40
237	Size Effect Suppresses Brittle Failure in Hollow Cu <sub>60</sub> Zr <sub>40</sub> Metallic Glass Nanolattices Deformed at Cryogenic Temperatures. <i>Nano Letters</i> , 2015, 15, 5673-5681.	4.5	77
238	An Anomalous Formation Pathway for Dislocation-Sulfur Vacancy Complexes in Polycrystalline Monolayer MoS <sub>2</sub> . <i>Nano Letters</i> , 2015, 15, 6855-6861.	4.5	90
239	Tuning the thermal conductivity of multi-layer graphene with interlayer bonding and tensile strain. <i>Applied Physics A: Materials Science and Processing</i> , 2015, 120, 1275-1281.	1.1	32
240	Peptide-Graphene Interactions Enhance the Mechanical Properties of Silk Fibroin. <i>ACS Applied Materials &amp; Interfaces</i> , 2015, 7, 21787-21796.	4.0	64
241	TIP-INDUCED PLASTIC DEFORMATION AT HETEROGENEOUS POLYMER SURFACE DURING ATOMIC FORCE MICROSCOPY SENSING. , 2015, , 129-130.		0
242	Modeling and control of remelting in high-energy beam additive manufacturing. <i>Additive Manufacturing</i> , 2015, 7, 57-63.	1.7	28
243	Band gap engineering of graphene with inter-layer embedded BN: From first principles calculations. <i>Diamond and Related Materials</i> , 2015, 54, 103-108.	1.8	9
244	Effect of air-borne particle-particle interaction on materials erosion. <i>Wear</i> , 2015, 322-323, 17-31.	1.5	33
245	Anisotropic charged impurity-limited carrier mobility in monolayer phosphorene. <i>Journal of Applied Physics</i> , 2014, 116, 214505.	1.1	33
246	Ductility enhancement in nanoglass: role of interaction stress between flow defects. <i>Philosophical Magazine Letters</i> , 2014, 94, 678-687.	0.5	27
247	Growing ordered and stable nanostructures on polyhedral nanocrystals. <i>Applied Physics Letters</i> , 2014, 105, 253101.	1.5	0
248	Composition and grain size effects on the structural and mechanical properties of CuZr nanoglasses. <i>Journal of Applied Physics</i> , 2014, 116, .	1.1	68
249	Phonon mean free path spectrum and thermal conductivity for Si <sub>1-x</sub> Gex nanowires. <i>Applied Physics Letters</i> , 2014, 104, .	1.5	46
250	Effect of aspect ratio on the mechanical properties of metallic glasses. <i>Scripta Materialia</i> , 2014, 93, 36-39.	2.6	47
251	Thermal transport behavior of polycrystalline graphene: A molecular dynamics study. <i>Journal of Applied Physics</i> , 2014, 116, .	1.1	28
252	Thermal transport along Bi <sub>2</sub> Te <sub>3</sub> topological insulator nanowires. <i>Applied Physics Letters</i> , 2014, 105, .	1.5	16

#	ARTICLE	IF	CITATIONS
253	Topological symmetry-induced width dependence of thermal conductance of edge-reconstructed graphene nanoribbons. <i>Journal Physics D: Applied Physics</i> , 2014, 47, 265303.	1.3	6
254	The mechanical properties of a nanoglass/metallic glass/nanoglass sandwich structure. <i>Scripta Materialia</i> , 2014, 83, 37-40.	2.6	36
255	Predicting shot peening coverage using multiphase computational fluid dynamics simulations. <i>Powder Technology</i> , 2014, 256, 100-112.	2.1	47
256	A numerical study on the effect of particle shape on the erosion of ductile materials. <i>Wear</i> , 2014, 313, 135-142.	1.5	75
257	Polarity-Reversed Robust Carrier Mobility in Monolayer MoS <sub>2</sub> Nanoribbons. <i>Journal of the American Chemical Society</i> , 2014, 136, 6269-6275.	6.6	761
258	Modulating the thermal conductivity of silicon nanowires via surface amorphization. <i>Science China Technological Sciences</i> , 2014, 57, 699-705.	2.0	11
259	Lattice vibrational modes and phonon thermal conductivity of monolayer MoS <sub>2</sub> . <i>Physical Review B</i> , 2014, 89, .	1.1	387
260	Molecular mobility on graphene nanoribbons. <i>Physical Chemistry Chemical Physics</i> , 2014, 16, 2129-2135.	1.3	7
261	Constructing metallic nanoroads on a MoS <sub>2</sub> monolayer via hydrogenation. <i>Nanoscale</i> , 2014, 6, 1691-1697.	2.8	48
262	Effect of impact angle and testing time on erosion of stainless steel at higher velocities. <i>Wear</i> , 2014, 321, 87-93.	1.5	80
263	Strong Thermal Transport Anisotropy and Strain Modulation in Single-Layer Phosphorene. <i>Journal of Physical Chemistry C</i> , 2014, 118, 25272-25277.	1.5	250
264	Cavitation in brittle metallic glasses – Effects of stress state and distributed weak zones. <i>International Journal of Solids and Structures</i> , 2014, 51, 4373-4385.	1.3	17
265	Towards intrinsic charge transport in monolayer molybdenum disulfide by defect and interface engineering. <i>Nature Communications</i> , 2014, 5, 5290.	5.8	563
266	Size and boundary scattering controlled contribution of spectral phonons to the thermal conductivity in graphene ribbons. <i>Journal of Applied Physics</i> , 2014, 115, .	1.1	28
267	Electronic Properties of Edge-Hydrogenated Phosphorene Nanoribbons: A First-Principles Study. <i>Journal of Physical Chemistry C</i> , 2014, 118, 22368-22372.	1.5	117
268	Wetting and spreading of long-chain ZDOL polymer nanodroplet on graphene-coated amorphous carbon. <i>Surface Science</i> , 2014, 630, 71-77.	0.8	2
269	Molecular Dynamics Simulations on the Frictional Behavior of a Perfluoropolyether Film Sandwiched between Diamond-like-Carbon Coatings. <i>Langmuir</i> , 2014, 30, 1573-1579.	1.6	21
270	A combined numerical–experimental study on the effect of surface evolution on the water–sand multiphase flow characteristics and the material erosion behavior. <i>Wear</i> , 2014, 319, 96-109.	1.5	85

#	ARTICLE	IF	CITATIONS
271	Ultra-strong collagen-mimic carbon nanotube bundles. <i>Carbon</i> , 2014, 77, 1040-1053.	5.4	30
272	Destabilization of Gold Clusters for Controlled Nanosynthesis: From Clusters to Polyhedra. <i>Advanced Materials</i> , 2014, 26, 3427-3432.	11.1	21
273	Convenient purification of gold clusters by co-precipitation for improved sensing of hydrogen peroxide, mercury ions and pesticides. <i>Chemical Communications</i> , 2014, 50, 5703.	2.2	78
274	Gapless $\text{MoS}_2$ nanoribbons possessing both massless Dirac and heavy fermions. <i>Physical Review B</i> , 2014, 89, .	10.9	109
275	Edge-Specific Au/Ag Functionalization-Induced Conductive Paths in Armchair $\text{MoS}_2$ Nanoribbons. <i>Chemistry of Materials</i> , 2014, 26, 5625-5631.	3.2	26
276	Effects of temperature and strain rate on the mechanical properties of silicene. <i>Journal of Applied Physics</i> , 2014, 115, .	1.1	100
277	Strain-tunable electronic and transport properties of $\text{MoS}_2$ nanotubes. <i>Nano Research</i> , 2014, 7, 518-527.	5.8	89
278	Extraordinary Photoluminescence and Strong Temperature/Angle-Dependent Raman Responses in Few-Layer Phosphorene. <i>ACS Nano</i> , 2014, 8, 9590-9596.	7.3	604
279	On the strength of $\beta$ -sheet crystallites of <i>Bombyx mori</i> silk fibroin. <i>Journal of the Royal Society Interface</i> , 2014, 11, 20140305.	1.5	146
280	Mechanisms of Failure in Nanoscale Metallic Glass. <i>Nano Letters</i> , 2014, 14, 5858-5864.	4.5	78
281	Is the failure of large-area polycrystalline graphene notch sensitive or insensitive?. <i>Carbon</i> , 2014, 72, 200-206.	5.4	45
282	Ab initio study on the effects of dopant defect cluster on the electronic properties of $\text{TiO}_2$ -based photocatalysts. <i>International Journal of Hydrogen Energy</i> , 2014, 39, 2049-2055.	3.8	17
283	Structure manipulation of graphene by hydrogenation. <i>Carbon</i> , 2014, 69, 86-91.	5.4	32
284	Nanoscale Transition Metal Dichalcogenides: Structures, Properties, and Applications. <i>Critical Reviews in Solid State and Materials Sciences</i> , 2014, 39, 319-367.	6.8	125
285	Thermal Conduction Across Graphene Cross-Linkers. <i>Journal of Physical Chemistry C</i> , 2014, 118, 12541-12547.	1.5	47
286	Hydrogenated Grain Boundaries Control the Strength and Ductility of Polycrystalline Graphene. <i>Journal of Physical Chemistry C</i> , 2014, 118, 13769-13774.	1.5	43
287	Polycrystal deformation in a discrete dislocation dynamics framework. <i>Acta Materialia</i> , 2014, 75, 92-105.	3.8	56
288	Slurry erosion characteristics and erosion mechanisms of stainless steel. <i>Tribology International</i> , 2014, 79, 1-7.	3.0	105

#	ARTICLE	IF	CITATIONS
289	On the notch sensitivity of CuZr nanoglass. <i>Journal of Applied Physics</i> , 2014, 115, .	1.1	20
290	Inverse Pseudo Hall-Petch Relation in Polycrystalline Graphene. <i>Scientific Reports</i> , 2014, 4, 5991.	1.6	79
291	On the failure load and mechanism of polycrystalline graphene by nanoindentation. <i>Scientific Reports</i> , 2014, 4, 7437.	1.6	58
292	Layer-dependent Band Alignment and Work Function of Few-Layer Phosphorene. <i>Scientific Reports</i> , 2014, 4, 6677.	1.6	731
293	Atomistic Molecular Dynamics Study of Structural and Thermomechanical Properties of Zdol Lubricants on Hydrogenated Diamond-Like Carbon. <i>IEEE Transactions on Magnetics</i> , 2013, 49, 5227-5235.	1.2	8
294	On the notch sensitivity of CuZr metallic glasses. <i>Applied Physics Letters</i> , 2013, 103, .	1.5	68
295	Tuning the thermal conductivity of silicene with tensile strain and isotopic doping: A molecular dynamics study. <i>Journal of Applied Physics</i> , 2013, 114, .	1.1	118
296	Phonon thermal conductivity of monolayer MoS <sub>2</sub> sheet and nanoribbons. <i>Applied Physics Letters</i> , 2013, 103, 133113.	1.5	167
297	Ab initio design of GaN-based photocatalyst: ZnO-codoped GaN nanotubes. <i>Journal of Power Sources</i> , 2013, 232, 323-331.	4.0	22
298	Superplastic nanocrystalline ceramics at room temperature and high strain rates. <i>Scripta Materialia</i> , 2013, 69, 525-528.	2.6	22
299	The Role of Surface Oxygen in the Growth of Large Single-Crystal Graphene on Copper. <i>Science</i> , 2013, 342, 720-723.	6.0	977
300	Anatomy of nanomaterial deformation: Grain boundary sliding, plasticity and cavitation in nanocrystalline Ni. <i>Acta Materialia</i> , 2013, 61, 5807-5820.	3.8	39
301	Effect of Rotational Degrees of Freedom on Molecular Mobility. <i>Journal of Physical Chemistry C</i> , 2013, 117, 6800-6806.	1.5	12
302	Microstructure versus Flaw: Mechanisms of Failure and Strength in Nanostructures. <i>Nano Letters</i> , 2013, 13, 5703-5709.	4.5	58
303	A transition from localized shear banding to homogeneous superplastic flow in nanoglass. <i>Applied Physics Letters</i> , 2013, 103, .	1.5	110
304	A modified Tersoff potential for pure and hydrogenated diamond-like carbon. <i>Computational Materials Science</i> , 2013, 67, 146-150.	1.4	55
305	Cavitation in materials with distributed weak zones: Implications on the origin of brittle fracture in metallic glasses. <i>Journal of the Mechanics and Physics of Solids</i> , 2013, 61, 1047-1064.	2.3	39
306	Shear bands mediate cavitation in brittle metallic glasses. <i>Scripta Materialia</i> , 2013, 68, 567-570.	2.6	38

#	ARTICLE	IF	CITATIONS
307	Effect of temperature on kinetic nanofriction of a Brownian adparticle. Chemical Physics Letters, 2013, 570, 70-74.	1.2	6
308	Nanostructure and surface effects on yield in Cu nanowires. Acta Materialia, 2013, 61, 1831-1842.	3.8	68
309	Quasiparticle band structures and optical properties of strained monolayer MoS <sub>2</sub> and WS <sub>2</sub> . Physical Review B, 2013, 87, .	1.1	764
310	Thermal conductivity of silicon nanowires: From fundamentals to phononic engineering. Physica Status Solidi - Rapid Research Letters, 2013, 7, 754-766.	1.2	59
311	Self-Assembly of Ordered Epitaxial Nanostructures on Polygonal Nanowires. Nano Letters, 2013, 13, 538-542.	4.5	8
312	A molecular dynamics investigation on mechanical properties of hydrogenated graphynes. Journal of Applied Physics, 2013, 114, .	1.1	22
313	pH-Dependent Evolution of Five-Star Gold Nanostructures: An Experimental and Computational Study. ACS Nano, 2013, 7, 2258-2265.	7.3	33
314	Atomistic Simulations on the Effect of a Physically Absorbed Graphene Nanoflake on Nanofriction. Journal of Computational and Theoretical Nanoscience, 2013, 10, 1104-1109.	0.4	1
315	Large-scale molecular dynamics simulations of wear in diamond-like carbon at the nanoscale. Applied Physics Letters, 2013, 103, .	1.5	59
316	Interior and Edge Elastic Waves in Graphene. Journal of Applied Mechanics, Transactions ASME, 2013, 80, .	1.1	2
317	Elastic Bounds of Bioinspired Nanocomposites. Journal of Applied Mechanics, Transactions ASME, 2013, 80, .	1.1	26
318	Strong ferromagnetism in hydrogenated monolayer MoS <sub>2</sub> tuned by strain. Physical Review B, 2013, 88, .	1.1	130
319	ELECTRONIC AND MAGNETIC PROPERTIES OF SILICENE AND SILICANE NANORIBBONS. International Journal of Computational Materials Science and Engineering, 2013, 02, 1350011.	0.5	3
320	Study of the Spreading of Perfluoropolyether Lubricants on a Diamond-Like Carbon Film. Tribology Transactions, 2013, 56, 255-267.	1.1	16
321	Sliding-induced non-uniform pre-tension governs robust and reversible adhesion: a revisit of adhesion mechanisms of geckos. Journal of the Royal Society Interface, 2012, 9, 283-291.	1.5	34
322	Effect of loading conditions on the dissociation behaviour of catch bond clusters. Journal of the Royal Society Interface, 2012, 9, 928-937.	1.5	23
323	Controlling the interface composition of core-shell and axial heterojunction nanowires. Journal of Applied Physics, 2012, 112, 064311.	1.1	7
324	A new approach to determine wedge-indented interfacial toughness in soft-film hard-substrate systems with application to low- $\kappa$ films on Si substrate. Journal of Materials Research, 2012, 27, 2872-2883.	1.2	0

#	ARTICLE	IF	CITATIONS
325	Thermal conductivity of fluorinated graphene: A non-equilibrium molecular dynamics study. <i>Chemical Physics Letters</i> , 2012, 552, 97-101.	1.2	77
326	Three-Dimensional Modeling of Heteroepitaxial Growth of Alloy Nanoislands. <i>Crystal Growth and Design</i> , 2012, 12, 4834-4843.	1.4	1
327	Breakup of spherical vesicles caused by spontaneous curvature change. <i>Acta Mechanica Sinica/Lixue Xuebao</i> , 2012, 28, 1545-1550.	1.5	2
328	Atomistic simulation study on key factors dominating dislocation nucleation from a crack tip in two FCC materials: Cu and Al. <i>International Journal of Solids and Structures</i> , 2012, 49, 3345-3354.	1.3	24
329	Lithiation-induced tensile stress and surface cracking in silicon thin film anode for rechargeable lithium battery. <i>Journal of Applied Physics</i> , 2012, 112, .	1.1	34
330	Epitaxy of Prestrained Graphene on a Si-Terminated SiC(0001) Surface. <i>Journal of Physical Chemistry C</i> , 2012, 116, 13928-13934.	1.5	2
331	Ordering of Epitaxial Quantum Dots on Nanomembranes. <i>ACS Nano</i> , 2012, 6, 3377-3382.	7.3	3
332	Nanotwins only. <i>Nature Nanotechnology</i> , 2012, 7, 551-552.	15.6	5
333	Direct influence of residual stress on the bending stiffness of cantilever beams. <i>Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences</i> , 2012, 468, 2595-2613.	1.0	14
334	GaN/ZnO superlattice nanowires as photocatalyst for hydrogen generation: A first-principles study on electronic and magnetic properties. <i>Nano Energy</i> , 2012, 1, 488-493.	8.2	60
335	The nature of the atomic-level structure in the Cu-Zr binary metallic glasses. <i>Intermetallics</i> , 2012, 26, 8-10.	1.8	17
336	Experiments and modeling of alloying in self-assembled quantum dots. <i>Current Opinion in Solid State and Materials Science</i> , 2012, 16, 64-70.	5.6	12
337	Kinetic nanofriction: a mechanism transition from quasi-continuous to ballistic-like Brownian regime. <i>Nanoscale Research Letters</i> , 2012, 7, 148.	3.1	28
338	Edge-dependent structural, electronic and magnetic properties of MoS <sub>2</sub> nanoribbons. <i>Journal of Materials Chemistry</i> , 2012, 22, 7280.	6.7	250
339	Hydrogen adsorption on and diffusion through MoS <sub>2</sub> monolayer: First-principles study. <i>International Journal of Hydrogen Energy</i> , 2012, 37, 14323-14328.	3.8	105
340	A stabilized finite element method for certified solution with bounds in static and frequency analyses of piezoelectric structures. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2012, 241-244, 65-81.	3.4	15
341	Electronic and Magnetic Properties of Graphene/Fluorographene Superlattices. <i>Journal of Physical Chemistry C</i> , 2012, 116, 18278-18283.	1.5	25
342	High pressure effect on phase transition behavior of lipid bilayers. <i>Physical Chemistry Chemical Physics</i> , 2012, 14, 5744.	1.3	13

#	ARTICLE	IF	CITATIONS
343	Size-Dependent Deformation of Nanocrystalline Pt Nanopillars. <i>Nano Letters</i> , 2012, 12, 6385-6392.	4.5	162
344	Strain-Controlled Switching of Hierarchically Wrinkled Surfaces between Superhydrophobicity and Superhydrophilicity. <i>Langmuir</i> , 2012, 28, 2753-2760.	1.6	41
345	Carbon isotope doping induced interfacial thermal resistance and thermal rectification in graphene. <i>Applied Physics Letters</i> , 2012, 100, .	1.5	80
346	Self-Assembly of Graphene Nanoribbons with Unsaturated Edges. <i>Materials Research Society Symposia Proceedings</i> , 2012, 1407, 125.	0.1	0
347	Imbricate Scales as a Design Construct for Microsystem Technologies. <i>Small</i> , 2012, 8, 901-906.	5.2	24
348	Stretchable Semiconductor Technologies with High Areal Coverages and Strain-Limiting Behavior: Demonstration in High-Efficiency Dual-Junction GaInP/GaAs Photovoltaics. <i>Small</i> , 2012, 8, 1851-1856.	5.2	97
349	On the characteristic length scales associated with plastic deformation in metallic glasses. <i>Applied Physics Letters</i> , 2012, 100, 201901.	1.5	25
350	Tuning the Electronic and Magnetic Properties of MoS <sub>2</sub> Nanoribbons by Strain Engineering. <i>Journal of Physical Chemistry C</i> , 2012, 116, 11752-11757.	1.5	212
351	Patterned graphene—a novel template for molecular packing. <i>Nanotechnology</i> , 2012, 23, 165303.	1.3	27
352	Nanowire Failure: Long = Brittle and Short = Ductile. <i>Nano Letters</i> , 2012, 12, 910-914.	4.5	104
353	A chemical route to control molecular mobility on graphene. <i>Physical Chemistry Chemical Physics</i> , 2012, 14, 10533.	1.3	12
354	First-principles study on hydrogen storage by graphitic carbon nitride nanotubes. <i>International Journal of Hydrogen Energy</i> , 2012, 37, 4170-4178.	3.8	96
355	Self-assembly of free-standing graphene nano-ribbons. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , 2012, 376, 973-977.	0.9	16
356	Study on the axial compression buckling behaviors of concentric multi-walled cylindrical shells filled with soft materials. <i>Journal of the Mechanics and Physics of Solids</i> , 2012, 60, 803-826.	2.3	14
357	Energy Dissipation Analysis of Defected Carbon Nanotube Oscillators. , 2012, , .		0
358	Ab Initio Study on the Size and Chirality Effects on the Encapsulation of Tetrafluorotetracyano-quinodimethane inside Carbon Nanotubes. <i>Journal of Physical Chemistry C</i> , 2011, 115, 5280-5285.	1.5	4
359	Effects of H-, N-, and (H, N)-Doping on the Photocatalytic Activity of TiO <sub>2</sub> . <i>Journal of Physical Chemistry C</i> , 2011, 115, 12224-12231.	1.5	144
360	ANALYTICAL SOLUTIONS OF POLYMERIC GEL STRUCTURES UNDER BUCKLING AND WRINKLE. <i>International Journal of Applied Mechanics</i> , 2011, 03, 235-257.	1.3	76

#	ARTICLE	IF	CITATIONS
361	Ab Initio Study on a Novel Photocatalyst: Functionalized Graphitic Carbon Nitride Nanotube. ACS Catalysis, 2011, 1, 99-104.	5.5	118
362	Epidermal Electronics. Science, 2011, 333, 838-843.	6.0	3,944
363	On optimal hierarchy of load-bearing biological materials. Proceedings of the Royal Society B: Biological Sciences, 2011, 278, 519-525.	1.2	183
364	Effects of grain size and temperature on mechanical and failure properties of ultrananocrystalline diamond. Diamond and Related Materials, 2011, 20, 1303-1309.	1.8	28
365	Translational dynamic friction analysis of double-walled carbon nanotubes. Molecular Simulation, 2011, 37, 84-89.	0.9	10
366	Molecular dynamics studies of short to medium range order in Cu <sub>64</sub> Zr <sub>36</sub> metallic glass. Journal of Alloys and Compounds, 2011, 509, 8319-8322.	2.8	29
367	Pattern formation and nonlinear evolution in alloy surfaces by ion-beam sputtering. Applied Physics Letters, 2011, 99, 083103.	1.5	10
368	A singular ES-FEM for plastic fracture mechanics. Computer Methods in Applied Mechanics and Engineering, 2011, 200, 2943-2955.	3.4	27
369	Deformation mechanisms, length scales and optimizing the mechanical properties of nanotwinned metals. Acta Materialia, 2011, 59, 6890-6900.	3.8	87
370	Graphene-based pressure nano-sensors. Journal of Molecular Modeling, 2011, 17, 2825-2830.	0.8	55
371	Metal-functionalized single-walled graphitic carbon nitride nanotubes: a first-principles study on magnetic property. Nanoscale Research Letters, 2011, 6, 97.	3.1	18
372	Anisotropic Growth of Titania onto Various Gold Nanostructures: Synthesis, Theoretical Understanding, and Optimization for Catalysis. Angewandte Chemie - International Edition, 2011, 50, 10140-10143.	7.2	139
373	A theoretical analysis of frictional and defect characteristics of graphene probed by a capped single-walled carbon nanotube. Carbon, 2011, 49, 3687-3697.	5.4	71
374	A theoretical analysis of the thermal conductivity of hydrogenated graphene. Carbon, 2011, 49, 4752-4759.	5.4	176
375	A singular cell-based smoothed radial point interpolation method for fracture problems. Computers and Structures, 2011, 89, 1378-1396.	2.4	47
376	A novel singular ES-FEM method for simulating singular stress fields near the crack tips for linear fracture problems. Engineering Fracture Mechanics, 2011, 78, 863-876.	2.0	74
377	A nonlinear characteristic regime of biomembrane force probe. Journal of Biomechanics, 2011, 44, 662-668.	0.9	3
378	Effect of sp <sup>3</sup> -hybridized defects on the oscillatory behavior of carbon nanotube oscillators. Physics Letters, Section A: General, Atomic and Solid State Physics, 2011, 375, 2400-2404.	0.9	7

#	ARTICLE	IF	CITATIONS
379	Coupled evolution of composition and morphology in a faceted three-dimensional quantum dot. <i>Physical Review B</i> , 2011, 84, .	1.1	15
380	Atomic Scale Fluctuations Govern Brittle Fracture and Cavitation Behavior in Metallic Glasses. <i>Physical Review Letters</i> , 2011, 107, 215501.	2.9	177
381	Instability analysis of a programmed hydrogel plate under swelling. <i>Journal of Applied Physics</i> , 2011, 109, 063527.	1.1	3
382	Interfacial properties and morphologies of graphene-graphane composite sheets. <i>Journal of Applied Physics</i> , 2011, 109, 054314.	1.1	25
383	Stretchability of encapsulated electronics. <i>Applied Physics Letters</i> , 2011, 99, 061911.	1.5	20
384	Influence of substrate on edge rippling in graphene sheets. <i>Modelling and Simulation in Materials Science and Engineering</i> , 2011, 19, 054007.	0.8	8
385	Study of Direct Nanoimprinting Processes by Molecular Dynamics Simulations. <i>Journal of Computational and Theoretical Nanoscience</i> , 2010, 7, 2144-2150.	0.4	0
386	Dislocation cross-slip in heteroepitaxial multilayer films. <i>Acta Materialia</i> , 2010, 58, 226-234.	3.8	14
387	Effects of crystal orientations of the facets on the structural stability of metallic Ni nanorods. <i>Journal of Nanoparticle Research</i> , 2010, 12, 795-800.	0.8	1
388	Comment on "A biomechanical model of artery buckling" published on <i>Journal of Biomechanics</i> (volume 40, issue 16, pages 3672-3678). <i>Journal of Biomechanics</i> , 2010, 43, 801-802.	0.9	4
389	Formation of gears through buckling multilayered film-hydrogel structures. <i>Thin Solid Films</i> , 2010, 518, 6048-6051.	0.8	5
390	On intrinsic brittleness and ductility of intergranular fracture along symmetrical tilt grain boundaries in copper. <i>Acta Materialia</i> , 2010, 58, 2293-2299.	3.8	69
391	A molecular dynamics study of the mechanical properties of hydrogen functionalized graphene. <i>Carbon</i> , 2010, 48, 898-904.	5.4	442
392	A theoretical analysis of the effect of a Stone-Thrower-Wales defect on the stability of carbon nanotube-based nanorings. <i>Carbon</i> , 2010, 48, 2225-2230.	5.4	4
393	Humidity-driven bifurcation in a hydrogel-actuated nanostructure: A three-dimensional computational analysis. <i>International Journal of Solids and Structures</i> , 2010, 47, 2034-2042.	1.3	7
394	Controllable magnetic property of SiC by anion-cation codoping. <i>Applied Physics Letters</i> , 2010, 96, .	1.5	27
395	Partial-epitaxial morphology of graphene nanoribbon on the Si-terminated SiC(0001) surfaces. <i>Physical Review B</i> , 2010, 81, .	1.1	12
396	Rotation-dependent epitaxial relations between graphene and the Si-terminated SiC substrate. <i>Physical Review B</i> , 2010, 82, .	1.1	8

#	ARTICLE	IF	CITATIONS
397	A NOVEL GENERAL FORMULATION FOR SINGULAR STRESS FIELD USING THE ES-FEM METHOD FOR THE ANALYSIS OF MIXED-MODE CRACKS. <i>International Journal of Computational Methods</i> , 2010, 07, 191-214.	0.8	40
398	Phase Diagrams for Multi-Component Membrane Vesicles: A Coarse-Grained Modeling Study. <i>Langmuir</i> , 2010, 26, 12659-12666.	1.6	19
399	Morphological Evolution and Ordered Quantum Structure Formation in Heteroepitaxial Core~Shell Nanowires. <i>ACS Nano</i> , 2010, 4, 4455-4462.	7.3	19
400	Spontaneous Curling of Graphene Sheets with Reconstructed Edges. <i>ACS Nano</i> , 2010, 4, 4840-4844.	7.3	84
401	Surface instability maps for soft materials. <i>Soft Matter</i> , 2010, 6, 5743.	1.2	35
402	Modeling and simulation of buckling of polymeric membrane thin film gel. <i>Computational Materials Science</i> , 2010, 49, S60-S64.	1.4	84
403	Mechanical properties of methyl functionalized graphene: a molecular dynamics study. <i>Nanotechnology</i> , 2010, 21, 115709.	1.3	116
404	Motion control in double-walled carbon nanotube systems using a Stone~Thrower~Wales defect cluster. <i>Journal Physics D: Applied Physics</i> , 2010, 43, 445404.	1.3	6
405	Mechanical Performance Study of Vascular Stent Using Computational Modeling and Simulation. <i>IFMBE Proceedings</i> , 2010, , 1443-1446.	0.2	0
406	Computational modeling for cell spreading on a substrate mediated by specific interactions, long-range recruiting interactions, and diffusion of binders. <i>Physical Review E</i> , 2009, 79, 061907.	0.8	22
407	Pressure-temperature phase diagram for shapes of vesicles: A coarse-grained molecular dynamics study. <i>Applied Physics Letters</i> , 2009, 95, 143104.	1.5	10
408	Instability pathways of hydrogel microlenses under concentrated loadings. <i>Journal of Applied Physics</i> , 2009, 106, 023536.	1.1	2
409	Extracting elastic properties and prestress of a cell using atomic force microscopy. <i>Journal of Materials Research</i> , 2009, 24, 1167-1171.	1.2	4
410	Spreading of an anchorage~dependent cell on a selectively ligand~coated substrate mediated by receptor~ligand binding. <i>Journal of Biomedical Materials Research - Part A</i> , 2009, 91A, 806-813.	2.1	1
411	Study of Materials Deformation in Nanometric Cutting by Large-scale Molecular Dynamics Simulations. <i>Nanoscale Research Letters</i> , 2009, 4, 444-451.	3.1	88
412	Optimized Structural Designs for Stretchable Silicon Integrated Circuits. <i>Small</i> , 2009, 5, 2841-2847.	5.2	153
413	A three-dimensional finite element analysis of interface delamination in a ductile film/hard substrate system induced by wedge indentation. <i>Engineering Fracture Mechanics</i> , 2009, 76, 2272-2280.	2.0	6
414	A computational modeling for micropipette-manipulated cell detachment from a substrate mediated by receptor~ligand binding. <i>Journal of the Mechanics and Physics of Solids</i> , 2009, 57, 205-220.	2.3	21

#	ARTICLE	IF	CITATIONS
415	Grain boundary finite length faceting. <i>Acta Materialia</i> , 2009, 57, 4278-4287.	3.8	29
416	Dislocation-twin interaction mechanisms for ultrahigh strength and ductility in nanotwinned metals. <i>Acta Materialia</i> , 2009, 57, 4508-4518.	3.8	192
417	Alignment Controlled Growth of Single-Walled Carbon Nanotubes on Quartz Substrates. <i>Nano Letters</i> , 2009, 9, 4311-4319.	4.5	125
418	Edge elastic properties of defect-free single-layer graphene sheets. <i>Applied Physics Letters</i> , 2009, 94, .	1.5	106
419	Temperature-dependent bending rigidity of graphene. <i>Applied Physics Letters</i> , 2009, 94, .	1.5	62
420	Mechanics of membrane instability in biological cells. <i>Applied Physics Letters</i> , 2009, 94, 163903.	1.5	4
421	Energetics and stability of C60 molecules encapsulated in carbon nanotubes. <i>Carbon</i> , 2008, 46, 649-655.	5.4	9
422	Testing the upper limit of InAs/GaAs self-organized quantum dots density by fast growth rate. <i>Superlattices and Microstructures</i> , 2008, 44, 420-424.	1.4	10
423	Edge-Stress-Induced Warping of Graphene Sheets and Nanoribbons. <i>Physical Review Letters</i> , 2008, 101, 245501.	2.9	321
424	Effect of defects on oscillation characteristics and instability of carbon nanotube-based oscillators. <i>Applied Physics Letters</i> , 2008, 93, .	1.5	28
425	Stress gradient enhanced plasticity in a monolithic bulk metallic glass. <i>Intermetallics</i> , 2008, 16, 1190-1198.	1.8	57
426	Effects of wetting and misfit strain on the pattern formation of heteroepitaxially grown thin films. <i>Computational Materials Science</i> , 2008, 44, 174-179.	1.4	12
427	Molecular dynamics simulations of the stability of and defects in ZnO nanosheets. <i>Computational Materials Science</i> , 2008, 44, 86-90.	1.4	3
428	Monodisperse silicananoparticles encapsulating upconversion fluorescent and superparamagnetic nanocrystals. <i>Chemical Communications</i> , 2008, , 694-696.	2.2	160
429	Low-Temperature Epitaxy of KTaO <sub>3</sub> and KNbO <sub>3</sub> Films. <i>Journal of the Electrochemical Society</i> , 2008, 155, D52.	1.3	13
430	Materials and noncoplanar mesh designs for integrated circuits with linear elastic responses to extreme mechanical deformations. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2008, 105, 18675-18680.	3.3	625
431	Three-dimensional analysis of the guided-assembled growth of heteroepitaxial islands on imperfectly pre-patterned surfaces. <i>Nanotechnology</i> , 2008, 19, 185302.	1.3	2
432	Formation of surface structures of a heteroepitaxial film via controlled nucleation and cooperative propagation. <i>Journal Physics D: Applied Physics</i> , 2008, 41, 225303.	1.3	0

#	ARTICLE	IF	CITATIONS
433	Computational analysis of adhesion force in the indentation of cells using atomic force microscopy. Physical Review E, 2008, 77, 021912.	0.8	14
434	Spontaneous generation and propagation of transverse coaxial traveling waves in multiwalled carbon nanotubes. Applied Physics Letters, 2008, 93, 013106.	1.5	5
435	Sustained surface wave propagation induced by surface diffusion driven by strain relaxation in a heteroepitaxial film. Applied Physics Letters, 2008, 92, 061913.	1.5	1
436	A Molecular Dynamics Study of the Effect of Voids on the Deformation Behavior of Nanocrystalline Copper. Journal of Nanomaterials, 2007, 2007, 1-6.	1.5	4
437	Saturated dot density of InAs/GaAs self-assembled quantum dots grown at high growth rate. Applied Physics Letters, 2007, 90, 161906.	1.5	13
438	Experimental and Numerical Study of the Effect of Viscoelasticity on Delamination in a Plastic IC Package. , 2007, , .		4
439	Phase diagrams for growing ordered heteroepitaxial quantum dots and quantum rings by surface prepatterning. Applied Physics Letters, 2007, 90, 071905.	1.5	10
440	Heteroepitaxial growth of quantum wire arrays through prepatterning substrate surfaces. Applied Physics Letters, 2007, 91, 093129.	1.5	0
441	Dislocation junctions as barriers to threading dislocation migration. Applied Physics Letters, 2007, 90, 011905.	1.5	6
442	Formation of surface structures during heteroepitaxial thin film growth on prepatterned substrates. Physical Review B, 2007, 76, .	1.1	14
443	A Study of the Effect of Viscoelasticity on Delamination in a Plastic IC Package Undergoing Leadfree Solder Reflow. , 2007, , .		0
444	Effects of membrane pre-stress and intrinsic viscoelasticity on nanoindentation of cells using AFM. Philosophical Magazine, 2007, 87, 3415-3435.	0.7	15
445	Morphological evolution of heteroepitaxial islands during Stranski-Krastonov growth. International Journal of Solids and Structures, 2007, 44, 1733-1744.	1.3	3
446	Finite element analysis of interface delamination and buckling in thin film systems by wedge indentation. Engineering Fracture Mechanics, 2007, 74, 1118-1125.	2.0	14
447	Simulations of the spreading of a vesicle on a substrate surface mediated by receptor-ligand binding. Journal of the Mechanics and Physics of Solids, 2007, 55, 1166-1181.	2.3	34
448	Studying Visco-Plasticity of Amorphous Polymers by Indentation Tests. , 2007, , 229-238.		0
449	Characterization of mechanical properties of polymers by nanoindentation tests. Philosophical Magazine, 2006, 86, 4487-4506.	0.7	24
450	Extracting the elastic and viscoelastic properties of a polymeric film using a sharp indentation relaxation test. Journal of Materials Research, 2006, 21, 2991-3000.	1.2	11

#	ARTICLE	IF	CITATIONS
451	Preparation, morphology and thermal/mechanical properties of epoxy/nanoclay composite. Composites Part A: Applied Science and Manufacturing, 2006, 37, 1890-1896.	3.8	204
452	Hydrothermal effects on the thermomechanical properties of high performance epoxy/clay nanocomposites. Polymer Engineering and Science, 2006, 46, 215-221.	1.5	42
453	Analysis of the oscillatory behavior of double-walled carbon nanotube-based oscillators. Carbon, 2006, 44, 27-36.	5.4	41
454	Level set simulation of dislocation dynamics in thin films. Acta Materialia, 2006, 54, 2371-2381.	3.8	20
455	Transition of 3D to 2D growth modes of InAs grown on GaAs. Applied Surface Science, 2006, 252, 3436-3440.	3.1	1
456	Atomistic simulations of mechanical deformation of high-angle and low-angle nanocrystalline copper at room temperature. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2006, 423, 97-101.	2.6	12
457	Effects of Si(001) surface amorphization on ErSi <sub>2</sub> thin film. Thin Solid Films, 2006, 504, 157-160.	0.8	9
458	Characterization of viscoelastic behaviour of a molding compound with application to delamination analysis in IC packages. , 2006, , .		12
459	Anisotropy effect on heteroepitaxial growth of self-assembled islands. Applied Physics Letters, 2006, 88, 041922.	1.5	10
460	A parametric study of a pressurized blister test for an elastic-plastic film-rigid substrate system. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2005, 390, 385-392.	2.6	6
461	Structures and stability of defect-free multiwalled carbon toroidal rings. Journal of Applied Physics, 2005, 98, 113522.	1.1	9
462	Surface stability and evolution of biaxially strained epitaxial thin films. Applied Physics Letters, 2005, 87, 121916.	1.5	7
463	Oscillatory behavior of gigahertz oscillators based on multiwalled carbon nanotubes. Journal of Applied Physics, 2005, 98, 014301.	1.1	46
464	Nanoindentation of Polymers with a Sharp Indenter. Journal of Materials Research, 2005, 20, 1597-1605.	1.2	57
465	Atomistic simulations of formation and stability of carbon nanorings. Physical Review B, 2005, 72, .	1.1	18
466	Oscillatory behavior of C60-nanotube oscillators: A molecular-dynamics study. Journal of Applied Physics, 2005, 97, 094313.	1.1	96
467	Optical properties of InAs/GaAs surface quantum dots. Applied Physics Letters, 2005, 86, 031914.	1.5	52
468	Atomistic Simulations of Uniaxial Tensile Behaviors of Single-walled Carbon Nanotubes. Molecular Simulation, 2004, 30, 543-547.	0.9	13

#	ARTICLE	IF	CITATIONS
469	Surface instability and evolution of nonlinear elastic heteroepitaxial thin-film structures. <i>Physical Review B</i> , 2004, 70, .	1.1	2
470	Extracting the mechanical properties of a viscoelastic polymeric film on a hard elastic substrate. <i>Journal of Materials Research</i> , 2004, 19, 3053-3061.	1.2	50
471	Tensile and bending properties of double-walled carbon nanotubes. <i>Journal Physics D: Applied Physics</i> , 2004, 37, 2358-2363.	1.3	33
472	Analysis of nanoindentation creep for polymeric materials. <i>Journal of Applied Physics</i> , 2004, 95, 3655-3666.	1.1	204
473	Molecular dynamics simulations of the preparation and deformation of nanocrystalline copper. <i>Acta Materialia</i> , 2004, 52, 5105-5114.	3.8	23
474	Molecular dynamics study of dislocation formation in a [001] face-centered-cubic epitaxial island under tensile stress. <i>Applied Physics Letters</i> , 2004, 84, 714-716.	1.5	2
475	Molecular dynamics simulations of bending behavior of tubular graphite cones. <i>Applied Physics Letters</i> , 2004, 85, 1778-1780.	1.5	12
476	Computer simulations of the Stranski-Krastanov growth of heteroepitaxial films with elastic anisotropy. <i>Surface Science</i> , 2003, 526, 375-382.	0.8	15
477	Morphological evolution driven by strain induced surface diffusion. <i>Thin Solid Films</i> , 2003, 424, 9-14.	0.8	18
478	Interface delamination in plastic IC packages induced by thermal loading and vapor pressure - a micromechanics model. <i>IEEE Transactions on Advanced Packaging</i> , 2003, 26, 1-9.	1.7	21
479	A three-dimensional concurrent atomistic/continuum analysis of an epitaxially strained island. <i>Journal of Applied Physics</i> , 2003, 94, 6350-6353.	1.1	8
480	Formation of self-assembled heteroepitaxial islands in elastically anisotropic films. <i>Physical Review B</i> , 2003, 67, .	1.1	23
481	Three-dimensional finite-element simulations of the self-organized growth of quantum dot superlattices. <i>Physical Review B</i> , 2003, 68, .	1.1	18
482	Coarsening kinetics of heteroepitaxial islands in nucleationless Stranski-Krastanov growth. <i>Physical Review B</i> , 2003, 68, .	1.1	40
483	Self-organized growth of three-dimensional quantum-dot superlattices. <i>Applied Physics Letters</i> , 2002, 80, 3910-3912.	1.5	15
484	DIRECTIONAL DEPENDENCE OF SURFACE MORPHOLOGICAL EVOLUTION OF HETEROEPITAXIAL FILMS. , 2002, , .		0
485	Dislocation dynamics of strain relaxation in epitaxial layers. <i>Journal of Applied Physics</i> , 2001, 89, 6069-6072.	1.1	3
486	Dislocation evolution in epitaxial multilayers and graded composition buffers. <i>Acta Materialia</i> , 2001, 49, 1599-1605.	3.8	8

#	ARTICLE	IF	CITATIONS
487	Interface delamination generated by indentation in thin film systems – a computational mechanics study. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2001, 319-321, 893-897.	2.6	15
488	Measuring interface parameters and toughness – a computational study. <i>Acta Materialia</i> , 2001, 49, 817-825.	3.8	20
489	Interface toughness under combined mode I, II and III loadings. <i>Scripta Materialia</i> , 2001, 44, 487-492.	2.6	3
490	Three-dimensional analysis of shape transitions in strained-heteroepitaxial islands. <i>Applied Physics Letters</i> , 2001, 78, 2706-2708.	1.5	39
491	Self-organization, shape transition, and stability of epitaxially strained islands. <i>Physical Review B</i> , 2000, 61, 10388-10392.	1.1	50
492	Effects of temperature and orientation on the stability of surfaces of stressed crystals. <i>Physical Review B</i> , 1999, 60, 13325-13327.	1.1	6
493	Vertical self-alignment of quantum dots in superlattice. <i>Applied Physics Letters</i> , 1999, 74, 1809-1811.	1.5	36
494	Three dimensional simulations of island formation in a coherent strained epitaxial film. <i>Thin Solid Films</i> , 1999, 357, 8-12.	0.8	9
495	Numerical simulations of island formation in a coherent strained epitaxial thin film system. <i>Journal of the Mechanics and Physics of Solids</i> , 1999, 47, 2273-2297.	2.3	87
496	Formation of epitaxially strained islands by controlled annealing. <i>Applied Physics Letters</i> , 1999, 75, 205-207.	1.5	15
497	Three Dimensional Finite Element Simulations of Vertical Dot Correlation in Quantum Dot Superlattice. <i>Materials Research Society Symposia Proceedings</i> , 1999, 571, 349.	0.1	0
498	Computer Simulations of the Self-Organized 3-D Islanding in Epitaxial Thin Film Systems. <i>Materials Research Society Symposia Proceedings</i> , 1999, 583, 9.	0.1	0
499	Three dimensional finite element analysis of the evolution of voids and thin films by strain and electromigration induced surface diffusion. <i>Journal of the Mechanics and Physics of Solids</i> , 1998, 47, 173-199.	2.3	49
500	Efficient Interfacial Design - A Multidisciplinary View. <i>Materials Research Society Symposia Proceedings</i> , 1998, 515, 3.	0.1	2
501	Finite element analysis of electromigration and stress in interconnects. , 1998, , .		2
502	A new N-body potential and its application. <i>Acta Mechanica Sinica/Lixue Xuebao</i> , 1996, 12, 358-367.	1.5	3
503	A unified model for dislocation nucleation, dislocation emission and dislocation free zone. <i>International Journal of Fracture</i> , 1996, 78, 227-239.	1.1	11
504	Lattice instability at a fast moving crack tip. <i>Journal of Applied Physics</i> , 1996, 80, 4332-4336.	1.1	2

#	ARTICLE	IF	CITATIONS
505	Molecular dynamics simulation of interaction of a dislocation array from a crack tip with grain boundaries. <i>Modelling and Simulation in Materials Science and Engineering</i> , 1996, 4, 231-244.	0.8	16
506	Molecular dynamics simulation of crack-tip processes in copper. <i>Acta Mechanica Sinica/Lixue Xuebao</i> , 1995, 11, 76-82.	1.5	6
507	Simulation of nucleation and emission of dislocations by molecular dynamics method. <i>Journal of Applied Physics</i> , 1995, 77, 2393-2399.	1.1	18
508	The effect of thermal activation on dislocation processes at an atomistic crack tip. <i>Journal Physics D: Applied Physics</i> , 1995, 28, 748-754.	1.3	18
509	On the unstable stacking criterion for ideal and cracked copper crystals. <i>Philosophical Magazine A: Physics of Condensed Matter, Structure, Defects and Mechanical Properties</i> , 1995, 72, 881-889.	0.8	2
510	Brittle and ductile fracture at the atomistic crack tip in copper crystals. <i>Scripta Metallurgica Et Materialia</i> , 1995, 33, 267-274.	1.0	18
511	The inhomogeneity of plastic deformation in ductile single crystals. <i>Modelling and Simulation in Materials Science and Engineering</i> , 1994, 2, 1171-1193.	0.8	3
512	Bending solution of high-order refined shear deformation theory for rectangular composite plates. <i>International Journal of Solids and Structures</i> , 1994, 31, 2491-2507.	1.3	11
513	An improved in-plane thermoelastic theory for laminated composite plates. <i>International Journal of Solids and Structures</i> , 1994, 31, 2867-2881.	1.3	2
514	Numerical Simulation of Stretchable and Foldable Silicon Integrated Circuits. <i>Advanced Materials Research</i> , 0, 74, 197-200.	0.3	0
515	Modeling and Analysis of the Geometry-Dependent Mechanical and Thermal Properties of Coiled Carbon Nanotubes. <i>Physica Status Solidi - Rapid Research Letters</i> , 0, , 2100360.	1.2	2