Lisheng Liu

List of Publications by Year
in descending order

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		516215	414034
88	1,295	16	32
papers	citations	h-index	g-index

91	91	91	1244
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	A modified rate-dependent peridynamic model with rotation effect for dynamic mechanical behavior of ceramic materials. Computer Methods in Applied Mechanics and Engineering, 2022, 388, 114246.	3.4	8
2	The Shock Response and Spall Mechanism of Mgâ€“Alâ€“Zn Alloy: Molecular Dynamics Study. Acta Mechanica Solida Sinica, 2022, 35, 495-503.	1.0	9
3	A Strong Two-Dimensional Semiconductor I-B₄C with High Carrier Mobility. Journal of Physical Chemistry C, 2022, 126, 6036-6046.	1.5	2
4	Analytical Solution of Thermoâ€“Mechanical Properties of Functionally Graded Materials by Asymptotic Homogenization Method. Materials, 2022, 15, 3073.	1.3	3
5	Multiphase large-eddy simulations of human cough jet development and expiratory droplet dispersion. Journal of Fluid Mechanics, 2022, 942, .	1.4	7
6	Updated Lagrangian particle hydrodynamics (ULPH) modeling of solid object water entry problems. Computational Mechanics, 2021, 67, 1685-1703.	2.2	13
7	First-Principles Predicting Improved Ductility of Boron Carbide through Element Doping. Journal of Physical Chemistry C, 2021, 125, 11591-11603.	1.5	7
8	Crack Growth Simulation of Functionally Graded Materials Based on Improved Bond-Based Peridynamic Model. Materials, 2021, 14, 3032.	1.3	2
9	An analysis of flexoelectric coupling associated electroelastic fields in functionally graded semiconductor nanobeams. Journal of Applied Physics, 2021, 130, .	1.1	15
10	The formation mechanisms of amorphous bands of boron carbide nanopillars under uniaxial compressions and their effects on mechanical properties from molecular dynamics simulation. Computational Materials Science, 2021, 199, 110708.	1.4	4
11	Local amorphization in boron carbide at finite temperature: Strategies toward improved ductility. Physical Review B, 2021, 104, .	1.1	7
12	A Magneto-Hyperelastic Model for Silicone Rubber-Based Isotropic Magnetorheological Elastomer under Quasi-Static Compressive Loading. Polymers, 2020, 12, 2435.	2.0	7
13	A Peridynamic Computational Scheme for Thermoelectric Fields. Materials, 2020, 13, 2546.	1.3	4
14	Peridynamics Model with Surface Correction Near Insulated Cracks for Transient Heat Conduction in Functionally Graded Materials. Materials, 2020, 13, 1340.	1.3	10
15	A Rate-Dependent Peridynamic Model for the Dynamic Behavior of Ceramic Materials. CMES - Computer Modeling in Engineering and Sciences, 2020, 124, 151-178.	0.8	11
16	Effects of water on the mechanical properties of silica glass using molecular dynamics. Acta Materialia, 2019, 178, 36-44.	3.8	27
17	An immersed transitional interface finite element method for fluid interacting with rigid/deformable solid. Engineering Applications of Computational Fluid Mechanics, 2019, 13, 337-358.	1.5	11
18	First-principles study of mechanical, electronic properties and anisotropic deformation mechanisms of TiB under uniaxial compressions. Applied Physics A: Materials Science and Processing, 2019, 125, 1.	1.1	5

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19	Effect of valve lesion on venous valve cycle: A modified immersed finite element modeling. PLoS ONE, 2019, 14, e0213012.	1.1	9
20	Effect of twin boundary on the initial yield behavior of magnesium nanopillars under compression: molecular dynamics simulations. Materials Research Express, 2018, 5, 026513.	0.8	2
21	A non-ordinary state-based peridynamics modeling of fractures in quasi-brittle materials. International Journal of Impact Engineering, 2018, 111, 130-146.	2.4	87
22	First-Principles Study on the Tensile Properties and Failure Mechanism of the CoSb3/Ti Interface. Journal of Electronic Materials, 2018, 47, 3210-3217.	1.0	3
23	Damage of Hygrothermally Conditioned Carbon Epoxy Composites under High-Velocity Impact. Materials, 2018, 11, 2525.	1.3	7
24	The Effects of Carbon Content on the Anisotropic Deformation Mechanism of Boron Carbide. Materials, 2018, 11, 1861.	1.3	7
25	A Dynamic Model of Drag Force for Catalytic Micromotors Based on Navierâ€“Stokes Equations. Micromachines, 2018, 9, 459.	1.4	5
26	Numerical analysis on the flowâ€“compaction behavior and the effect of interface permeability in thick composite plates during autoclave processing. Journal of Materials Science, 2018, 53, 14412-14422.	1.7	7
27	Mechanism for amorphization of boron carbide under complex stress conditions. Materials Research Express, 2018, 5, 055204.	0.8	14
28	Peridynamic simulation of transient heat conduction problems in functionally gradient materials with cracks. Journal of Thermal Stresses, 2017, 40, 1484-1501.	1.1	19
29	First-Principles Study on Lattice Structures and Bonding Character of CoSb3/Ti Interface. Journal of Electronic Materials, 2017, 46, 2929-2935.	1.0	1
30	Experimental and Numerical Investigation of the Effect of Standing People on Dynamic Properties of a Beam-Like Bridge. Mathematical Problems in Engineering, 2017, 2017, 1-14.	0.6	0
31	Peridynamic Formulation for Coupled Thermoelectric Phenomena. Advances in Materials Science and Engineering, 2017, 2017, 1-10.	1.0	5
32	How to Make a Fast, Efficient Bubble-Driven Micromotor: A Mechanical View. Micromachines, 2017, 8, 267.	1.4	42
33	A Viscosity-Based Model for Bubble-Propelled Catalytic Micromotors. Micromachines, 2017, 8, 198.	1.4	13
34	An improved charge transfer ionic-embedded atom method potential for aluminum/alumina interface system based on damped shifted force method. Computational Materials Science, 2016, 115, 60-71.	1.4	1
35	Dynamic response of symmetrical and asymmetrical sandwich plates with shear thickening fluid core subjected to penetration loading. Materials and Design, 2016, 94, 105-110.	3.3	38
36	Influence of Nanopores on the Tensile/Compressive Mechanical Behavior of Crystalline CoSb3: A Molecular Dynamics Study. Journal of Electronic Materials, 2015, 44, 1477-1482.	1.0	6

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37	Simulation and Design of Vehicle Exhaust Power Generation Systems: The Interaction Between the Heat Exchanger and the Thermoelectric Modules. Journal of Electronic Materials, 2015, 44, 1822-1833.	1.0	12
38	Molecular dynamics simulations of the microstructure of the aluminum/alumina interfacial layer. Applied Surface Science, 2015, 324, 538-546.	3.1	17
39	Peridynamics simulations of geomaterial fragmentation by impulse loads. International Journal for Numerical and Analytical Methods in Geomechanics, 2015, 39, 1304-1330.	1.7	96
40	Effects of Van der Waals Bonding on the Compressive Mechanical Behavior of Bulk Bi2Te3: A Molecular Dynamics Study. Journal of Electronic Materials, 2015, 44, 1668-1673.	1.0	9
41	Effects of Nanoparticle Size on the Thermoelectric and Mechanical Properties of Skutterudite Nanocomposites. Journal of Electronic Materials, 2014, 43, 2115-2120.	1.0	14
42	Effects of Synthesis Temperature on the Microstructure and Thermoelectric Properties of Te-Se Codoped Skutterudites. Journal of Electronic Materials, 2014, 43, 1662-1667.	1.0	6
43	Vacancy and Temperature Effects on Mechanical Properties of Single-Crystal Bulk Mg2Si: A Molecular Dynamics Study. Journal of Electronic Materials, 2014, 43, 1668-1673.	1.0	2
44	Molecular Dynamics Study of Mechanical Properties of Î²-Zn4Sb3 Nanowires: Temperature, Strain Rate, and Size Effect. Journal of Electronic Materials, 2014, 43, 1533-1538.	1.0	0
45	Use of Molecular Dynamics Simulations to Study the Effects of Nanopores and Vacancies on the Mechanical Properties of Bi2Te3. Journal of Electronic Materials, 2014, 43, 1824-1828.	1.0	3
46	Thermoelectric Performance of Multiple-Doped Co4Sb12â^'xâ^'yâ^'z Ge x Te y S z Skutterudite Compounds. Journal of Electronic Materials, 2013, 42, 1454-1457.	1.0	3
47	Molecular Dynamics Simulation on Mechanics of Mg2Si Nanofilm. Journal of Electronic Materials, 2013, 42, 1458-1462.	1.0	2
48	Effects of Disordered Atoms and Nanopores on Mechanical Properties of Î²-Zn4Sb3: a Molecular Dynamics Study. Journal of Electronic Materials, 2013, 42, 1514-1521.	1.0	6
49	Lattice thermal conductivity prediction of nanoporous Î²-Zn4Sb3: A nonequilibrium molecular dynamics simulation. Materials Letters, 2013, 107, 348-350.	1.3	2
50	A Finite Temperature Multiscale Interphase Zone Model and Simulations of Fracture. Journal of Engineering Materials and Technology, Transactions of the ASME, 2012, 134, .	0.8	13
51	The influence of Zn vacancy on thermal conductivity of Î²-Zn4Sb3: A molecular dynamics study. , 2012, , .		0
52	Benificial effect of Se substitution on thermoelectric properties in Co4Sb12-x-yTexSey skutt. , 2012, , .		0
53	Synthesis and high temperature transport properties of Te-doped skutterudite compounds. Journal of Materials Science: Materials in Electronics, 2012, 23, 1817-1822.	1.1	34
54	Beneficial effect of Se substitution on thermoelectric properties of Co4Sb11.9â^'xTexSe0.1 skutterudites. Journal of Solid State Chemistry, 2012, 193, 8-12.	1.4	25

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55	The influence of Zn vacancy on thermal conductivity of Î²-Zn4Sb3: A molecular dynamics study. Journal of Solid State Chemistry, 2012, 193, 76-82.	1.4	12
56	Study of interatomic potential and thermal structural properties of Î²-Zn4Sb3. Materials Research Bulletin, 2012, 47, 3558-3567.	2.7	10
57	Thermoelectric Properties of Trisubstituted Skutterudite Co4Sb11Ge1â^'xâ^'y Te x Se y Compounds. Journal of Electronic Materials, 2012, 41, 1120-1124.	1.0	9
58	Molecular Dynamics Simulation of the Mechanical Properties of Single-Crystal Bulk Mg2Si. Journal of Electronic Materials, 2012, 41, 1465-1469.	1.0	45
59	Residual Strength Degradation of CoSb3 Skutterudite Compounds Under Low-Cycle Fatigue Loading. Journal of Electronic Materials, 2012, 41, 1487-1492.	1.0	4
60	Molecular Dynamics Study of the Mechanical Properties of Single-Crystal Bulk Î²-Zn4Sb3: Vacancy and Temperature Effects. Journal of Electronic Materials, 2012, 41, 1470-1475.	1.0	4
61	Effects of Se substitution on the thermoelectric performance of n-type Co4Sb11.3Te0.7â^'Se skutterudites. Materials Research Bulletin, 2012, 47, 1670-1673.	2.7	13
62	Enhanced thermoelectric performance in sulfur-doped Co4Sb11.9â^'xTexS0.1 skutterudites. Materials Letters, 2012, 79, 69-71.	1.3	5
63	Enhanced thermoelectric and mechanical properties of Te-substituted skutterudite via nano-TiN dispersion. Scripta Materialia, 2012, 67, 372-375.	2.6	43
64	Numerical simulation on the interface debonding in solid propellant under large deformation by a cohesive zone model. International Journal of Materials and Product Technology, 2011, 42, 98.	0.1	7
65	Numerical simulation on the impact resistance of functionally graded materials. International Journal of Materials and Product Technology, 2011, 42, 87.	0.1	2
66	Sonochemical synthesis and optical properties of amorphous ZnO nanowires. Journal of Nanoparticle Research, 2011, 13, 4511-4518.	0.8	10
67	Room-temperature ferromagnetism of diamagnetically-doped ZnO aligned nanorods fabricated by vapor reaction. Applied Physics A: Materials Science and Processing, 2011, 102, 367-371.	1.1	12
68	Molecular Dynamics Study of the Structural and Mechanical Properties of Skutterudite CoSb3: Surface Effect. Journal of Electronic Materials, 2011, 40, 489-492.	1.0	4
69	Effects of Double Substitution with Ge and Te on Thermoelectric Properties of a Skutterudite Compound. Journal of Electronic Materials, 2011, 40, 932-936.	1.0	12
70	Electronic Structures and Transport Properties of RFe4Sb12 (RÂ=ÂNa, Ca, Nd, Yb, Sn, In). Journal of Electronic Materials, 2011, 40, 974-979.	1.0	9
71	Molecular Dynamics Study of the Mechanical Behavior of Zn4Sb3 Nanofilms. Journal of Electronic Materials, 2011, 40, 1158-1164.	1.0	9
72	Electronic structure and transport properties of single and double filled CoSb3 with atoms Ba, Yb and In. Journal of Applied Physics, 2011, 109, 113723.	1.1	18

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73	Molecular dynamics study on the mechanical characteristics of Al-terminated Al/α-Al<SUB align="right">2O<SUB align="right">3 interface under tensile loading. International Journal of Materials and Product Technology, 2011, 42, 74.	0.1	2
74	Low-Cycle Fatigue Properties of CoSb3-Based Skutterudite Compounds. Journal of Electronic Materials, 2010, 39, 2029-2033.	1.0	10
75	Electronic Structures and Transport Properties of Single-Filled CoSb3. Journal of Electronic Materials, 2010, 39, 1832-1836.	1.0	16
76	Enhanced Interatomic Potential for Skutterudite CoSb3 in Molecular Dynamics Simulations. Journal of Electronic Materials, 2010, 39, 1714-1718.	1.0	16
77	Molecular dynamics study of mechanical properties of bismuth telluride nanofilm. Physica B: Condensed Matter, 2010, 405, 3190-3194.	1.3	27
78	Molecular dynamics study on thermo-mechanical properties of bismuth telluride bulk. Computational Materials Science, 2010, 48, 343-348.	1.4	23
79	The dynamic properties of SiCp/Al composites fabricated by spark plasma sintering with powders prepared by mechanical alloying process. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2009, 527, 218-224.	2.6	48
80	Molecular Dynamics Simulation on Mechanics of Skutterudite CoSb3 Nanowire. Journal of Electronic Materials, 2009, 38, 1189-1193.	1.0	2
81	Effect of Cyclic Thermal Loading on the Microstructure and Thermoelectric Properties of CoSb3. Journal of Electronic Materials, 2009, 38, 1200-1205.	1.0	11
82	Modeling of skutterudite CoSb3 with molecular dynamics method. Computational Materials Science, 2009, 44, 1390-1396.	1.4	11
83	Enhanced Thermoelectric Performance in Barium and Indium Double-Filled Skutterudite Bulk Materials via Orbital Hybridization Induced by Indium Filler. Journal of the American Chemical Society, 2009, 131, 3713-3720.	6.6	212
84	The mechanical properties of skutterudite CoAs3 by molecular dynamics (MD) simulation. Journal Wuhan University of Technology, Materials Science Edition, 2008, 23, 415-418.	0.4	2
85	Shear stress in MR fluid with small shear deformation in bctlattic structure. Journal Wuhan University of Technology, Materials Science Edition, 2008, 23, 532-535.	0.4	0
86	Effect of fabrication process on the microstructure and dynamic compressive properties of SiCp/Al composites fabricated by spark plasma sintering. Materials Letters, 2008, 62, 443-446.	1.3	19
87	One Dimension Analytical Model of Normal Ballistic Impact on Ceramicâ•Metal Gradient Armor. AIP Conference Proceedings, 2008, , .	0.3	4
88	The effect of ceramicâ•metal gradient armor's components characteristic on its impact-resistant characteristic. AIP Conference Proceedings, 2008, , .	0.3	1