

# Shan Jiang

## List of Publications by Year in descending order

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39  
papers

570  
citations

687363

13  
h-index

642732

23  
g-index

39  
all docs

39  
docs citations

39  
times ranked

658  
citing authors

#	ARTICLE	IF	CITATIONS
1	4D printing of a self-morphing polymer driven by a swellable guest medium. <i>Soft Matter</i> , 2018, 14, 765-772.	2.7	77
2	Atomistic study of the mechanical response of copper nanowires under torsion. <i>Journal Physics D: Applied Physics</i> , 2009, 42, 135408.	2.8	57
3	A generalized crystal-cutting method for modeling arbitrarily oriented crystals in 3D periodic simulation cells with applications to crystal-crystal interfaces. <i>Computer Physics Communications</i> , 2016, 207, 232-242.	7.5	52
4	Molecular dynamics study of neck growth in laser sintering of hollow silver nanoparticles with different heating rates. <i>Journal Physics D: Applied Physics</i> , 2013, 46, 335302.	2.8	51
5	Ultrafast laser-induced premelting and structural transformation of gold nanorod. <i>Journal of Applied Physics</i> , 2013, 113, .	2.5	31
6	In situ failure investigation and time-dependent damage test for columnar jointed basalt at the Baihetan left dam foundation. <i>Bulletin of Engineering Geology and the Environment</i> , 2019, 78, 3875-3890.	3.5	30
7	Melting and solidification behavior of Cu/Al and Ti/Al bimetallic core/shell nanoparticles during additive manufacturing by molecular dynamics simulation. <i>Journal of Nanoparticle Research</i> , 2018, 20, 1.	1.9	28
8	Multiscale simulation of the responses of discrete nanostructures to extreme loading conditions based on the material point method. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2015, 297, 219-238.	6.6	22
9	Loading path effect on the mechanical behaviour and fivefold twinning of copper nanowires. <i>Journal Physics D: Applied Physics</i> , 2010, 43, 335402.	2.8	20
10	A particle-based multiscale simulation procedure within the material point method framework. <i>Computational Particle Mechanics</i> , 2014, 1, 147-158.	3.0	20
11	Size effects on the impact response of copper nanobeams. <i>Journal of Applied Physics</i> , 2012, 111, .	2.5	18
12	Molecular Dynamics Simulations of Shock Wave Propagation through the Crystal-Melt Interface of (100)-Oriented Nitromethane. <i>Journal of Physical Chemistry C</i> , 2016, 120, 22989-23000.	3.1	13
13	Hierarchical multiscale simulations of crystalline $\hat{\gamma}$ -octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine ( $\hat{\gamma}$ -HMX): Generalized interpolation material point method simulations of brittle fracture using an elastodamage model derived from molecular dynamics. <i>International Journal of Damage Mechanics</i> , 2017, 26, 293-313.	4.2	13
14	Deformation and Stability of Copper Nanowires under Bending. <i>International Journal for Multiscale Computational Engineering</i> , 2009, 7, 205-215.	1.2	13
15	A multiscale material point method for impact simulation. <i>Theoretical and Applied Mechanics Letters</i> , 2012, 2, 051003.	2.8	12
16	Formation of quasi-icosahedral structures with multi-conjoint fivefold deformation twins in fivefold twinned metallic nanowires. <i>Applied Physics Letters</i> , 2013, 103, .	3.3	11
17	Size effects on the wave propagation and deformation pattern in copper nanobars under symmetric longitudinal impact loading. <i>Journal Physics D: Applied Physics</i> , 2012, 45, 475305.	2.8	10
18	Mesoscale study of particle sedimentation with inertia effect using dissipative particle dynamics. <i>Microfluidics and Nanofluidics</i> , 2015, 18, 1309-1315.	2.2	10

#	ARTICLE	IF	CITATIONS
19	Study on the fully coupled thermodynamic fluid-structure interaction with the material point method. <i>Computational Particle Mechanics</i> , 2020, 7, 225-240.	3.0	9
20	IMPACT-INDUCED BENDING RESPONSE OF SINGLE CRYSTAL AND FIVE-FOLD TWINNED NANOWIRES. <i>International Journal for Multiscale Computational Engineering</i> , 2013, 11, 1-16.	1.2	8
21	Mechanically Guided Assembly of Monolithic Three-Dimensional Structures from Elastomer Composites. <i>ACS Applied Materials &amp; Interfaces</i> , 2018, 10, 44716-44721.	8.0	7
22	Molecular dynamics study of temperature and heating rate-dependent sintering of titanium nanoparticles and its influence on the sequent tension tests of the formed particle-chain products. <i>Journal of Nanoparticle Research</i> , 2020, 22, 1.	1.9	7
23	The Inverse Hall-Petch effect on the impact response of single crystal copper. <i>Acta Mechanica Sinica/Lixue Xuebao</i> , 2012, 28, 1042-1048.	3.4	6
24	Effects of copper nanoparticle inclusions on pressure-induced fluid-polycrystalline structural transitions in krypton. <i>Journal of Applied Physics</i> , 2014, 116, .	2.5	6
25	Energy-conserving dissipative particle dynamics simulation of macromolecular solution flow in micro-channel under thermal convection. <i>Engineering Analysis With Boundary Elements</i> , 2019, 102, 21-28.	3.7	5
26	Investigation of the mechanical responses of copper nanowires based on molecular dynamics and coarse-grained molecular dynamics. <i>Computational Particle Mechanics</i> , 2019, 6, 177-190.	3.0	5
27	Molecular dynamics study of anisotropic shock responses in oriented $\pm$ -quartz single crystal. <i>Journal of Materials Science</i> , 2022, 57, 6688-6705.	3.7	5
28	Atomic-level study of a thickness-dependent phase change in gold thin films heated by an ultrafast laser. <i>Applied Optics</i> , 2012, 51, 5946.	1.8	4
29	A study on the dynamic behavior of macromolecular suspension flow in micro-channel under thermal gradient using energy-conserving dissipative particle dynamics simulation. <i>Microfluidics and Nanofluidics</i> , 2020, 24, 1.	2.2	4
30	Simulation of hard-soft material interaction under impact loading employing the material point method. <i>Science China Technological Sciences</i> , 2015, 58, 763-768.	4.0	3
31	Application of Cocrystallization for the Separation of <i>C</i> -Ethylresorcin[6]arene from <i>C</i> -Ethylresorcin[4]arene. <i>Crystal Growth and Design</i> , 2017, 17, 4060-4063.	3.0	3
32	A study on the oil transport in piston skirt-cylinder liner under fully flooded conditions using improved SPH simulations. <i>Engineering Analysis With Boundary Elements</i> , 2019, 109, 176-186.	3.7	3
33	Sintered Ti/Al core/shell nanoparticles: computational investigation of the effects of core volume fraction, heating rate, and room-temperature relaxation on tensile properties. <i>Journal Physics D: Applied Physics</i> , 2022, 55, 025302.	2.8	3
34	Tribo-induced photoluminescent behavior of graphene and YSZ:Er/graphene composite films. <i>RSC Advances</i> , 2018, 8, 1436-1442.	3.6	2
35	Physical characteristics of nanoscale titanium-aluminum alloy powder during 3D printing laser sintering process " A molecular dynamics study. , 2018, , .		1
36	Molecular Dynamics Study of Melting Behavior of Planar Stacked Ti-Al Core-Shell Nanoparticles. <i>Journal of Composites Science</i> , 2022, 6, 126.	3.0	1

#	ARTICLE	IF	CITATIONS
37	Concurrent material point method and molecular dynamics approach for simulating transient responses. AIP Conference Proceedings, 2017, , .	0.4	0
38	Physical characteristics of nanoscale niobium-zirconium alloy powder during 3D printing laser sintering process " A molecular dynamics study. , 2018, , .		0
39	Recent findings about combined size and rate effects on material properties. WIT Transactions on the Built Environment, 2012, , .	0.0	0