

# Chunyu Li

## List of Publications by Citations

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68

papers

7,098

citations

32

h-index

71

g-index

71

ext. papers

7,710

ext. citations

4.7

avg, IF

6.29

L-index

#	Paper	IF	Citations
68	Nanocomposites in context. <i>Composites Science and Technology</i> , <b>2005</b> , 65, 491-516	8.6	1273
67	A structural mechanics approach for the analysis of carbon nanotubes. <i>International Journal of Solids and Structures</i> , <b>2003</b> , 40, 2487-2499	3.1	1050
66	Sensors and actuators based on carbon nanotubes and their composites: A review. <i>Composites Science and Technology</i> , <b>2008</b> , 68, 1227-1249	8.6	750
65	Dominant role of tunneling resistance in the electrical conductivity of carbon nanotube-based composites. <i>Applied Physics Letters</i> , <b>2007</b> , 91, 223114	3.4	518
64	Single-walled carbon nanotubes as ultrahigh frequency nanomechanical resonators. <i>Physical Review B</i> , <b>2003</b> , 68,	3.3	238
63	Vibrational behaviors of multiwalled-carbon-nanotube-based nanomechanical resonators. <i>Applied Physics Letters</i> , <b>2004</b> , 84, 121-123	3.4	212
62	Molecular dynamics predictions of thermal and mechanical properties of thermoset polymer EPON862/DETDA. <i>Polymer</i> , <b>2011</b> , 52, 2920-2928	3.9	191
61	Mass detection using carbon nanotube-based nanomechanical resonators. <i>Applied Physics Letters</i> , <b>2004</b> , 84, 5246-5248	3.4	177
60	Effect of nanotube waviness on the electrical conductivity of carbon nanotube-based composites. <i>Composites Science and Technology</i> , <b>2008</b> , 68, 1445-1452	8.6	171
59	Molecular simulations of crosslinking process of thermosetting polymers. <i>Polymer</i> , <b>2010</b> , 51, 6058-6070	3.9	170
58	Modeling of damage sensing in fiber composites using carbon nanotube networks. <i>Composites Science and Technology</i> , <b>2008</b> , 68, 3373-3379	8.6	147
57	Antiplane Crack Problem in Functionally Graded Piezoelectric Materials. <i>Journal of Applied Mechanics, Transactions ASME</i> , <b>2002</b> , 69, 481-488	2.7	146
56	Multiscale modeling of compressive behavior of carbon nanotube/polymer composites. <i>Composites Science and Technology</i> , <b>2006</b> , 66, 2409-2414	8.6	141
55	Modeling of elastic buckling of carbon nanotubes by molecular structural mechanics approach. <i>Mechanics of Materials</i> , <b>2004</b> , 36, 1047-1055	3.3	138
54	Molecular scale simulations on thermoset polymers: A review. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , <b>2015</b> , 53, 103-122	2.6	121
53	Nanolithography. Large-scale nanoshaping of ultrasmooth 3D crystalline metallic structures. <i>Science</i> , <b>2014</b> , 346, 1352-6	33.3	113
52	Molecular dynamics simulations and experimental studies of the thermomechanical response of an epoxy thermoset polymer. <i>Polymer</i> , <b>2012</b> , 53, 4222-4230	3.9	104

51	Multiscale modeling of carbon nanotube reinforced polymer composites. <i>Journal of Nanoscience and Nanotechnology</i> , <b>2003</b> , 3, 423-30	1.3	99
50	Atomistic simulations on multilayer graphene reinforced epoxy composites. <i>Composites Part A: Applied Science and Manufacturing</i> , <b>2012</b> , 43, 1293-1300	8.4	87
49	Elastic properties of single-walled carbon nanotubes in transverse directions. <i>Physical Review B</i> , <b>2004</b> , 69,	3.3	87
48	A hyper-viscoelastic constitutive model for polyurea. <i>Materials Letters</i> , <b>2009</b> , 63, 877-880	3.3	75
47	Continuum percolation of nanocomposites with fillers of arbitrary shapes. <i>Applied Physics Letters</i> , <b>2007</b> , 90, 174108	3.4	71
46	Yoffe-type moving crack in a functionally graded piezoelectric material. <i>Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences</i> , <b>2002</b> , 458, 381-399	2.4	59
45	Dynamic behavior of a cylindrical crack in a functionally graded interlayer under torsional loading. <i>International Journal of Solids and Structures</i> , <b>2001</b> , 38, 7473-7485	3.1	54
44	Axial and radial thermal expansions of single-walled carbon nanotubes. <i>Physical Review B</i> , <b>2005</b> , 71,	3.3	53
43	Material property prediction of thermoset polymers by molecular dynamics simulations. <i>Acta Mechanica</i> , <b>2014</b> , 225, 1187-1196	2.1	46
42	Dynamic stress intensity factor of a cylindrical interface crack with a functionally graded interlayer. <i>Mechanics of Materials</i> , <b>2001</b> , 33, 325-333	3.3	45
41	Electrical anisotropy in multiscale nanotube/fiber hybrid composites. <i>Applied Physics Letters</i> , <b>2009</b> , 95, 073111	3.4	41
40	Prediction of the chemical and thermal shrinkage in a thermoset polymer. <i>Composites Part A: Applied Science and Manufacturing</i> , <b>2014</b> , 66, 35-43	8.4	40
39	Failure of carbon nanotube/polymer composites and the effect of nanotube waviness. <i>Composites Part A: Applied Science and Manufacturing</i> , <b>2009</b> , 40, 1580-1586	8.4	39
38	A direct electrifying algorithm for backbone identification. <i>Journal of Physics A: Mathematical and Theoretical</i> , <b>2007</b> , 40, 14679-14686	2	36
37	Elastic wave velocities in single-walled carbon nanotubes. <i>Physical Review B</i> , <b>2006</b> , 73,	3.3	34
36	Cohesive energy density and solubility parameter evolution during the curing of thermoset. <i>Polymer</i> , <b>2018</b> , 135, 162-170	3.9	32
35	Theoretical studies on the charge-induced failure of single-walled carbon nanotubes. <i>Carbon</i> , <b>2007</b> , 45, 922-930	10.4	30
34	Effect of Thickness on the Thermo-Mechanical Response of Free-Standing Thermoset Nanofilms from Molecular Dynamics. <i>Macromolecules</i> , <b>2011</b> , 44, 9448-9454	5.5	29

33	Atomistic Modeling of Carbon Nanotube-based Mechanical Sensors. <i>Journal of Intelligent Material Systems and Structures</i> , <b>2006</b> , 17, 247-254	2.3	29
32	Effects of water on epoxy cure kinetics and glass transition temperature utilizing molecular dynamics simulations. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , <b>2017</b> , 55, 1150-1159	2.6	27
31	Charge-induced strains in single-walled carbon nanotubes. <i>Nanotechnology</i> , <b>2006</b> , 17, 4624-8	3.4	27
30	Electrical conductivities of composites with aligned carbon nanotubes. <i>Journal of Nanoscience and Nanotechnology</i> , <b>2009</b> , 9, 2518-24	1.3	26
29	Stress intensity factors for functionally graded solid cylinders. <i>Engineering Fracture Mechanics</i> , <b>1999</b> , 63, 735-749	4.2	26
28	Modeling of heat capacities of multi-walled carbon nanotubes by molecular structural mechanics. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2005</b> , 409, 140-144	5.3	25
27	Evolution of network topology of bifunctional epoxy thermosets during cure and its relationship to thermo-mechanical properties: A molecular dynamics study. <i>Polymer</i> , <b>2015</b> , 75, 151-160	3.9	24
26	Molecular dynamics simulations on cyclic deformation of an epoxy thermoset. <i>Polymer</i> , <b>2013</b> , 54, 881-890	3.9	24
25	Electrostatic charge distribution on single-walled carbon nanotubes. <i>Applied Physics Letters</i> , <b>2006</b> , 89, 063103	3.4	24
24	Quantized molecular structural mechanics modeling for studying the specific heat of single-walled carbon nanotubes. <i>Physical Review B</i> , <b>2005</b> , 71,	3.3	23
23	Multiple isoparametric finite element method for nonhomogeneous media. <i>Mechanics Research Communications</i> , <b>2000</b> , 27, 137-142	2.2	23
22	Free volume evolution in the process of epoxy curing and its effect on mechanical properties. <i>Polymer</i> , <b>2016</b> , 97, 456-464	3.9	22
21	Dynamic Fracture Analysis for a Penny-Shaped Crack in an FGM Interlayer between Dissimilar Half Spaces. <i>Mathematics and Mechanics of Solids</i> , <b>2002</b> , 7, 149-163	2.3	22
20	Hotspot formation due to shock-induced pore collapse in 1,3,5,7-tetranitro-1,3,5,7-tetrazoctane (HMX): Role of pore shape and shock strength in collapse mechanism and temperature. <i>Journal of Applied Physics</i> , <b>2020</b> , 127, 175902	2.5	20
19	Modeling of carbon nanotube clamping in tensile tests. <i>Composites Science and Technology</i> , <b>2005</b> , 65, 2407-2415	8.6	19
18	Prediction of PEKK properties related to crystallization by molecular dynamics simulations with a united-atom model. <i>Polymer</i> , <b>2019</b> , 174, 25-32	3.9	14
17	Molecular modeling of the microstructure evolution during carbon fiber processing. <i>Journal of Chemical Physics</i> , <b>2017</b> , 147, 224705	3.9	13
16	Crystalline and pseudo-crystalline phases of polyacrylonitrile from molecular dynamics: Implications for carbon fiber precursors. <i>Polymer</i> , <b>2018</b> , 155, 13-26	3.9	12

15	PRECISE DETERMINATION OF BACKBONE STRUCTURE AND CONDUCTIVITY OF 3D PERCOLATION NETWORKS BY THE DIRECT ELECTRIFYING ALGORITHM. <i>International Journal of Modern Physics C</i> , <b>2009</b> , 20, 423-433	1.1	11
14	Uncertainties in the predictions of thermo-physical properties of thermoplastic polymers via molecular dynamics. <i>Modelling and Simulation in Materials Science and Engineering</i> , <b>2018</b> , 26, 065007	2	11
13	Internally circumferentially cracked cylinders with functionally graded material properties. <i>International Journal of Pressure Vessels and Piping</i> , <b>1998</b> , 75, 499-507	2.4	10
12	Engineering curvature in graphene ribbons using ultrathin polymer films. <i>Nano Letters</i> , <b>2014</b> , 14, 7085-9	11.5	9
11	A continuum mechanics model of multi-buckling in graphene substrate systems with randomly distributed debonding. <i>International Journal of Solids and Structures</i> , <b>2016</b> , 97-98, 510-519	3.1	8
10	A Hotspot's Better Half: Non-Equilibrium Intra-Molecular Strain in Shock Physics. <i>Journal of Physical Chemistry Letters</i> , <b>2021</b> , 12, 2756-2762	6.4	7
9	Synthesis and Characterization of Polystyrene-Poly(arylene ether sulfone)-Polystyrene Triblock Copolymer for Proton Exchange Membrane Applications. <i>Journal of Nanoscience and Nanotechnology</i> , <b>2006</b> , 6, 3594-3598	1.3	5
8	Modeling of Carbon Nanotubes and Their Composites <b>2006</b> , 55-65		5
7	Chemistry Under Shock Conditions. <i>Annual Review of Materials Research</i> , <b>2021</b> , 51, 101-130	12.8	5
6	Mechanically induced amorphization of small molecule organic crystals. <i>Modelling and Simulation in Materials Science and Engineering</i> , <b>2019</b> , 27, 074005	2	3
5	Coarse-grained molecular dynamics modeling of reaction-induced phase separation. <i>Polymer</i> , <b>2018</b> , 149, 30-38	3.9	2
4	Carbon-Nanotube-Based Composites and Damage Sensing <b>2010</b> , 159-281		2
3	Static and dynamic properties of single-walled boron nitride nanotubes. <i>Journal of Nanoscience and Nanotechnology</i> , <b>2006</b> , 6, 54-60	1.3	2
2	Shock-induced hotspot formation in amorphous and crystalline 1,3,5,7-tetranitro-1,3,5,7-tetrazoctane (HMX): A molecular dynamics comparative study. <i>Journal of Applied Physics</i> , <b>2021</b> , 130, 055902	2.5	1
1	Novel Mode of Noncrystallographic Branching in the Initial Stages of Polymer Fibril Growth. <i>Physical Review Letters</i> , <b>2020</b> , 125, 247801	7.4	0