Chunhui Yang

List of Publications by Year
in descending order

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107	2,440	218381	223531
papers	citations	26 h-index	46 g-index

107	107	107	2510
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Recent developments in finite element analysis for laminated composite plates. Composite Structures, 2009, 88, 147-157.	3.1	347
2	Quantitative assessment of through-thickness crack size based on Lamb wave scattering in aluminium plates. NDT and E International, 2008, 41, 59-68.	1.7	141
3	Effect of Covalent Functionalization on Thermal Transport across Grapheneâ€“Polymer Interfaces. Journal of Physical Chemistry C, 2015, 119, 12731-12738.	1.5	126
4	Effect of non-covalent functionalisation on thermal and mechanical properties of graphene-polymer nanocomposites. Carbon, 2016, 102, 311-318.	5.4	108
5	Some Aspects of Thermal Transport across the Interface between Graphene and Epoxy in Nanocomposites. ACS Applied Materials & Interfaces, 2016, 8, 8272-8279.	4.0	106
6	Some aspects of numerical simulation for Lamb wave propagation in composite laminates. Composite Structures, 2006, 75, 267-275.	3.1	104
7	Geometrical effects on residual stresses in 7050-T7451 aluminum alloy rods subject to laser shock peening. Journal of Materials Processing Technology, 2008, 201, 303-309.	3.1	89
8	Assessment of delamination in composite beams using shear horizontal (SH) wave mode. Composites Science and Technology, 2007, 67, 244-251.	3.8	66
9	Material Anisotropy in Additively Manufactured Polymers and Polymer Composites: A Review. Polymers, 2021, 13, 3368.	2.0	59
10	Mechanical behaviours of green hybrid fibre-reinforced cementitious composites. Construction and Building Materials, 2015, 95, 152-163.	3.2	51
11	A molecular dynamics study on thermal and mechanical properties of grapheneâ€“paraffin nanocomposites. RSC Advances, 2015, 5, 82638-82644.	1.7	48
12	Fabrication and characterization of functionally graded synthetic graphite/phenolic nanocomposites. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2012, 545, 123-131.	2.6	46
13	Flexible integrated metallic glass-based sandwich electrodes for high-performance wearable all-solid-state supercapacitors. Applied Materials Today, 2020, 19, 100539.	2.3	45
14	Modelling of lightning strike damage to CFRP composites with an advanced protection system. Part I: Thermalâ€“electrical transition. Composite Structures, 2017, 165, 83-90.	3.1	44
15	Effects of pores on shear bands in metallic glasses: A molecular dynamics study. Computational Materials Science, 2010, 50, 211-217.	1.4	42
16	Effect of residual stress on the bending of aluminium. Journal of Materials Processing Technology, 2012, 212, 877-883.	3.1	42
17	Graphene helicoid as novel nanospring. Carbon, 2017, 120, 258-264.	5.4	42
18	Interfacial Thermal Conductance and Thermal Rectification of Hexagonal BC_nN/Graphene In-Plane Heterojunctions. Journal of Physical Chemistry C, 2018, 122, 22783-22789.	1.5	42

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19	Recent Advances of Finite Elements for Laminated Composite Plates. Recent Patents on Engineering, 2008, 2, 36-46.	0.3	38
20	Modeling of Advanced High Strength Steels with the realistic microstructureâ€“strength relationships. Computational Materials Science, 2009, 45, 860-866.	1.4	38
21	The effect of laser power density on the fatigue life of laserâ€shockâ€peened 7050 aluminium alloy. Fatigue and Fracture of Engineering Materials and Structures, 2007, 30, 1110-1124.	1.7	37
22	Investigation of cell shape effect on the mechanical behaviour of open-cell metal foams. Computational Materials Science, 2012, 55, 1-9.	1.4	34
23	Effects of quenching rate on amorphous structures of Cu46Zr54 metallic glass. Journal of Materials Processing Technology, 2009, 209, 4601-4606.	3.1	32
24	Multiscale modelling of multiple-cracking tensile fracture behaviour of engineered cementitious composites. Engineering Fracture Mechanics, 2016, 160, 52-66.	2.0	32
25	Formation of carbon nanoscrolls from graphene nanoribbons: A molecular dynamics study. Computational Materials Science, 2015, 96, 300-305.	1.4	31
26	Experimental and numerical study of hat shaped CFRP structures under quasi-static axial crushing. Composite Structures, 2020, 249, 112465.	3.1	30
27	Functionally graded carbon nanofiber/phenolic nanocomposites and their mechanical properties. Composites Part A: Applied Science and Manufacturing, 2013, 54, 124-134.	3.8	27
28	Breakdown of Hooke's law at the nanoscale â€“ 2D material-based nanosprings. Nanoscale, 2018, 10, 18961-18968.	2.8	27
29	Preparation and properties of composition-controlled carbon nanofiber/phenolic nanocomposites. Composites Part B: Engineering, 2013, 52, 120-126.	5.9	25
30	Graphene Helicoid: Distinct Properties Promote Application of Graphene Related Materials in Thermal Management. Journal of Physical Chemistry C, 2018, 122, 7605-7612.	1.5	25
31	Numerical modeling of interactions between a macro-crack and a cluster of micro-defects. Engineering Fracture Mechanics, 2004, 71, 193-217.	2.0	23
32	Effect of compositional gradient on thermal behavior of synthetic graphiteâ€“phenolic nanocomposites. Journal of Thermal Analysis and Calorimetry, 2012, 109, 1169-1176.	2.0	22
33	Hierarchical development of training database for artificial neural network-based damage identification. Composite Structures, 2006, 76, 224-233.	3.1	20
34	Recent advances in experimental studies of the mechanical behaviour of natural fibreâ€reinforced cementitious composites. Structural Concrete, 2016, 17, 564-575.	1.5	20
35	Length-scale-dependent nanoindentation creep behaviour of Ti/Al multilayers by magnetron sputtering. Materials Characterization, 2018, 139, 165-175.	1.9	20
36	Nickel Phosphides Electrodeposited on TiO₂ Nanotube Arrays as Electrocatalysts for Hydrogen Evolution. ACS Applied Nano Materials, 2021, 4, 4542-4551.	2.4	19

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37	A novel carbon nanofibre/phenolic nanocomposite coated polymer system for tailoring thermal behaviour. Composites Part A: Applied Science and Manufacturing, 2013, 46, 80-88.	3.8	17
38	Morphological and mechanical properties of graphene-reinforced PMMA nanocomposites using a multiscale analysis. Computational Materials Science, 2018, 150, 107-120.	1.4	17
39	Strain gradients in Cuâ€“Fe thin films and multilayers during micropillar compression. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2016, 651, 146-154.	2.6	15
40	Electrochemical fabrication and modelling of mechanical behavior of a tri-layer polymer actuator. Materials Chemistry and Physics, 2011, 125, 113-117.	2.0	14
41	Extrinsic size effect in microcompression of polycrystalline Cu/Fe multilayers. Scripta Materialia, 2013, 69, 626-629.	2.6	14
42	An Inverse Analysis-Based Optimal Selection of Cohesive Zone Model for Metallic Materials. International Journal of Applied Mechanics, 2018, 10, 1850015.	1.3	14
43	A family of simple and robust finite elements for linear and geometrically nonlinear analysis of laminated composite plates. Composite Structures, 2006, 75, 545-552.	3.1	13
44	Numerical modelling of mechanical behaviour of aluminium foam using a representative volume element method. International Journal of Mechanical Sciences, 2016, 118, 155-165.	3.6	13
45	Application of Non-Symmetric Bending Principles on Modelling Fatigue Crack Behaviour and Vibration of a Cracked Rotor. Applied Sciences (Switzerland), 2020, 10, 717.	1.3	13
46	Investigation on springback behaviours of hexagonal close-packed sheet metals. Applied Mathematical Modelling, 2021, 92, 149-175.	2.2	13
47	Modeling of voids/cracks and their interactions. Theoretical and Applied Fracture Mechanics, 2002, 38, 81-101.	2.1	12
48	The effect of skin passing on the material behavior of metal strip in pure bending and tension. AIP Conference Proceedings, 2010, , .	0.3	12
49	Fabrication, modelling and evaluation of microstructured materials in a digital framework. Computational Materials Science, 2014, 81, 89-97.	1.4	12
50	A study on atomic diffusion behaviours in an Al-Mg compound casting process. AIP Advances, 2015, 5, .	0.6	12
51	Investigation of effective material properties in composites with internal defect or reinforcement particles. International Journal of Solids and Structures, 2005, 42, 6141-6165.	1.3	11
52	Influences of impact scenarios and vehicle front-end design on head injury risk of motorcyclist. Accident Analysis and Prevention, 2020, 145, 105697.	3.0	11
53	Effects of Tensionâ€“Compression Asymmetry on Bending of Steels. Applied Sciences (Switzerland), 2020, 10, 3339.	1.3	11
54	Effects of mechanical properties on the contact profile in Berkovich nanoindentation of elastoplastic materials. Journal of Materials Research, 2012, 27, 313-319.	1.2	9

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55	Thermal shock fracture mechanics analysis of a semi-infinite medium based on the dual-phase-lag heat conduction model. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2015, 471, 20140595.	1.0	9
56	Plastic behaviour of high-strength lightweight Al/Ti multilayered films. Journal of Materials Science, 2017, 52, 13956-13965.	1.7	9
57	Vibration Analysis of a Cracked Rotor with an Unbalance Influenced Breathing Mechanism. International Journal of Mechanical Engineering and Robotics Research, 2017, 6, 22-29.	0.7	9
58	Numerical Simulations on Warm Forming of Stainless Steel with TRIP-Effect. , 2010, , .		8
59	Ultra-high specific strength and deformation behavior of nanostructured Ti/Al multilayers. Journal Physics D: Applied Physics, 2017, 50, 365302.	1.3	8
60	Comparative study on plasticity and fracture behaviour of Ti/Al multilayers. Tribology International, 2018, 126, 344-351.	3.0	8
61	Evaluation of effective material properties of composite materials using special FEM. Journal of Materials Processing Technology, 2003, 140, 185-190.	3.1	7
62	Functionally graded carbon nanofiber-phenolic nanocomposites for sudden temperature change applications. Polymer, 2013, 54, 3940-3948.	1.8	7
63	A multi-material topology optimization with temperature-dependent thermoelastic properties. Engineering Optimization, 2022, 54, 2140-2155.	1.5	7
64	Multiscale Particle-In-Cell Modelling for Advanced High Strength Steels. Advanced Materials Research, 0, 32, 285-288.	0.3	6
65	Analytic Study on Pure Bending of Metal Sheets. , 2011, , .		6
66	A STUDY ON MECHANICAL BEHAVIOR OF FUNCTIONALLY-GRADED CARBON NANOTUBE-REINFORCED NANOCOMPOSITES. International Journal of Computational Methods, 2014, 11, 1344003.	0.8	6
67	Effect of Pore Size on Mechanical Properties of Titanium Foams. Materials Science Forum, 2010, 654-656, 827-830.	0.3	5
68	Mechanical Behavior of Nano-crystalline Metallic Thin Films and Multilayers Under Microcompression. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2015, 46, 1405-1412.	1.1	5
69	A study on motorcyclist head reponses during impact against front end of vehicle. International Journal of Crashworthiness, 2020, , 1-13.	1.1	5
70	Impact Response and Energy Absorption of Aluminium Foam-Filled Tubes. Applied Mechanics and Materials, 2012, 152-154, 436-439.	0.2	4
71	A Study on Bending Behaviours of Aluminium Foam-Filled Tubes. Applied Mechanics and Materials, 0, 620, 413-416.	0.2	4
72	Detection of small cracks and cavities using laser diffraction. Optical Engineering, 2002, 41, 1295.	0.5	3

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73	Numerical Simulation of High Speed Single-Grain Cutting Using a Coupled FE-SPH Approach. Applied Mechanics and Materials, 2013, 483, 3-8.	0.2	3
74	A theoretical study of the structureâ€“property relations in ultra-fine metallic materials with fractal microstructures. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2013, 559, 543-548.	2.6	3
75	Numerical investigation on press forming of self-lubricating spherical plain bearings. International Journal of Materials and Product Technology, 2013, 47, 46.	0.1	3
76	Effective Models of PZT Actuators for Numerical Simulation of Elastic Wave Propagation. Applied Mechanics and Materials, 2014, 553, 705-710.	0.2	3
77	A theoretical study on pure bending of hexagonal close-packed metal sheet. AIP Conference Proceedings, 2018, , .	0.3	3
78	Fabrication and Characterisation of Nano-Additive Reinforced Polymeric Composites. Lecture Notes in Civil Engineering, 2020, , 131-140.	0.3	3
79	Synthesis, Characterization and Analytical Modelling of Mechanical Behavior of a Conducting Polymer Actuator. Materials Science Forum, 2010, 654-656, 2467-2470.	0.3	2
80	Coupled FE-SPH Simulation of a High-Speed Grinding Process Using a Multiple-Grain Model. Advanced Materials Research, 2014, 989-994, 3248-3251.	0.3	2
81	Nanoscale variation in energy dissipation in austenitic shape memory alloys in ultimate loading cycles. Journal of Intelligent Material Systems and Structures, 2015, 26, 2411-2417.	1.4	2
82	Cellular Automata Simulation on Dynamic Recrystallization of TA16 Alloy during Hot Deformation. Materials Science Forum, 2016, 849, 245-250.	0.3	2
83	The application of general self-consistent model on mechanical behaviour of fibre-reinforced cementitious composites. Construction and Building Materials, 2017, 146, 114-121.	3.2	2
84	Finite element modelling of chain-die forming for ultra-high strength steel. AIP Conference Proceedings, 2017, , .	0.3	2
85	A New Solution Method for Homogenization of Effective Properties of Electromagnetic Honeycombs. Key Engineering Materials, 0, 443, 551-556.	0.4	1
86	Analytical Solutions and Finite Element Modelling of Deep Drawing Process for Cylindrical Metal Cups. Key Engineering Materials, 2010, 443, 104-109.	0.4	1
87	Design and construction of a micropump for drug delivery applications. , 2010, , .		1
88	Digital Material Representation and Testing of Metal Foams. Applied Mechanics and Materials, 2014, 553, 54-59.	0.2	1
89	Finite Element Analysis of Residual Stresses in Metallic Coatings through a Compound Casting. Applied Mechanics and Materials, 2014, 553, 48-53.	0.2	1
90	Effects of the Junction Functionality and Chain Entanglements in Chemomechanical Behavior of Polyelectrolyte Gels. Advances in Condensed Matter Physics, 2015, 2015, 1-10.	0.4	1

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91	Numerical Investigation on Mechanical Behaviour of Closed-cell Aluminium Foams Using a Representative Volume Element Method. MATEC Web of Conferences, 2016, 65, 03003.	0.1	1
92	Hypothesis on Phase Transition Nucleation and Propagation in Polycrystalline NiTi shape Memory Alloys under Nanoscale Compressive Loading. Materials Today: Proceedings, 2016, 3, 708-714.	0.9	1
93	Numerical simulation on chain-die forming of an AHSS top-hat section. AIP Conference Proceedings, 2018, , .	0.3	1
94	A Machine Learning Model for Predicting Noise Limits of Motor Vehicles in UNECE R51 Regulations. Applied Sciences (Switzerland), 2020, 10, 8092.	1.3	1
95	Location dependence of breathing mechanism for a slant crack in a shaft. Fatigue and Fracture of Engineering Materials and Structures, 2020, 43, 2515-2526.	1.7	1
96	Special membrane elements with internal defects. , 2001, , 554-558.		1
97	Effects of Elliptical Crack Shape Ratio on Transverse Trajectory of a Cracked Shaft. Mechanisms and Machine Science, 2019, , 275-284.	0.3	1
98	On the Effective Mechanical Properties of Fluid-Saturated Composites: A Homogenization Approach. Materials Science Forum, 2010, 654-656, 2273-2276.	0.3	0
99	Review of Approximate Analyses of Sheet Forming Processes. , 2011, , .		0
100	A Theoretical Study on Bending Behaviour of Conducting Polymer Actuator. Applied Mechanics and Materials, 2014, 553, 551-556.	0.2	0
101	Metamaterials and Smart Structures in a Big Data Era. Advances in Materials Science and Engineering, 2017, 2017, 1-1.	1.0	0
102	Case Studies on Chain-die Forming for AHSS. Journal of Physics: Conference Series, 2018, 1063, 012174.	0.3	0
103	A new method to get initial guess configuration for multi-step sheet metal forming simulations. International Journal of Advanced Manufacturing Technology, 2020, 110, 2651-2668.	1.5	0
104	NUMERICAL INVESTIGATION OF ELASTIC WAVE PROPAGATION IN FUNCTIONALLY GRADED MATERIALS. Proceedings of International Structural Engineering and Construction, 2015, 2, .	0.1	0
105	Effect of Unbalanced Force on the Crack Breathing Mechanism. International Journal of Mechanical Engineering and Robotics Research, 2016, 7, 174-178.	0.7	0
106	Influences of Angular Position of Unbalanced Force on Crack Breathing Mechanism. Mechanisms and Machine Science, 2019, , 263-274.	0.3	0
107	Numerical Synthesis of Stephenson Six-Bar Mechanism Using a CAD Geometric Approach. Mechanisms and Machine Science, 2019, , 95-102.	0.3	0