Chee How Wong

List of Publications by Year
in descending order

99 papers	3,508 citations	136950 32 h-index	144013 57 g-index
99 all docs	99 docs citations	99 times ranked	2833 citing authors

#	Article	IF	Citations
1	On the study of elastic and plastic properties of multi-walled carbon nanotubes under axial tension using molecular dynamics simulation. Acta Materialia, 2004, 52, 2521-2527.	7.9	345
2	Nanomechanics of single and multiwalled carbon nanotubes. Physical Review B, 2004, 69, .	3.2	298
3	Mechanical design and optimization of capacitive micromachined switch. Sensors and Actuators A: Physical, 2001, 93, 273-285.	4.1	198
4	A numerical investigation on the physical mechanisms of single track defects in selective laser melting. International Journal of Heat and Mass Transfer, 2018, 126, 957-968.	4.8	169
5	Additive manufacturing of NiTi shape memory alloys using pre-mixed powders. Journal of Materials Processing Technology, 2019, 271, 152-161.	6.3	141
6	Practical support structures for selective laser melting. Journal of Materials Processing Technology, 2016, 238, 474-484.	6.3	138
7	Thermal stability of single and multi-walled carbon nanotubes. Physical Review B, 2005, 71, .	3.2	130
8	Additive manufacturing process monitoring and control by non-destructive testing techniques: challenges and in-process monitoring. Virtual and Physical Prototyping, 2018, 13, 39-48.	10.4	126
9	An Overview of 3-D Printing in Manufacturing, Aerospace, and Automotive Industries. IEEE Potentials, 2016, 35, 18-22.	0.3	96
10	Tensile and compressive properties of carbon nanotube bundles. Acta Materialia, 2006, 54, 225-231.	7.9	88
11	Performance evaluation of microbial fuel cell by artificial intelligence methods. Expert Systems With Applications, 2014, 41, 1389-1399.	7.6	83
12	Buckling properties of carbon nanotube bundles. Applied Physics Letters, 2005, 87, 041901.	3.3	79
13	On the study of keyhole-mode melting in selective laser melting process. International Journal of Thermal Sciences, 2019, 145, 105992.	4.9	72
14	Applications of non-destructive testing techniques for post-process control of additively manufactured parts. Virtual and Physical Prototyping, 2017, 12, 301-321.	10.4	60
15	Temperature, defect and size effect on the elastic properties of imperfectly straight carbon nanotubes by using molecular dynamics simulation. Computational Materials Science, 2013, 71, 184-191.	3.0	54
16	A Computational Study on Porosity Evolution in Parts Produced by Selective Laser Melting. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2018, 49, 3663-3673.	2.2	48
17	Measurement of properties of graphene sheets subjected to drilling operation using computer simulation. Measurement: Journal of the International Measurement Confederation, 2014, 50, 50-62.	5.0	47
18	Structural properties of ZrxCu90â^'xAl10 metallic glasses investigated by molecular dynamics simulations. Journal of Alloys and Compounds, 2012, 510, 107-113.	5.5	44

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19	Nanomechanics of free form and water submerged single layer graphene sheet under axial tension by using molecular dynamics simulation. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2012, 556, 420-428.	5.6	44
20	Lubricant evolution and depletion under laser heating: a molecular dynamics study. Soft Matter, 2012, 8, 5649.	2.7	42
21	Short-to-medium range order of Alâ€“Mg metallic glasses studied by molecular dynamics simulations. Journal of Alloys and Compounds, 2011, 509, 10222-10229.	5.5	39
22	Predicting the mechanical characteristics of hydrogen functionalized graphene sheets using artificial neural network approach. Journal of Nanostructure in Chemistry, 2013, 3, 1.	9.1	38
23	Properties of selective laser melted spodumene glass-ceramic. Journal of the European Ceramic Society, 2017, 37, 4147-4154.	5.7	38
24	Nanomechanics of single walled carbon nanotube with water interactions under axial tension by using molecular dynamics simulation. Computational Materials Science, 2013, 79, 519-526.	3.0	36
25	Transport characteristics of water molecules in carbon nanotubes investigated by using molecular dynamics simulation. Computational Materials Science, 2014, 89, 36-44.	3.0	36
26	Elastic properties of imperfect single-walled carbon nanotubes under axial tension. Computational Materials Science, 2010, 49, 143-147.	3.0	35
27	Optical in-situ monitoring and correlation of density and mechanical properties of stainless steel parts produced by selective laser melting process based on varied energy density. Journal of Materials Processing Technology, 2019, 271, 520-531.	6.3	35
28	Atomic simulation of melting and surface segregation of ternary Fe-Ni-Cr nanoparticles. Applied Surface Science, 2019, 465, 871-879.	6.1	35
29	A generalized heat transfer model for thin film bearings at head-disk interface. Applied Physics Letters, 2008, 92, .	3.3	34
30	Discontinuity of overhanging melt track in selective laser melting process. International Journal of Heat and Mass Transfer, 2020, 162, 120284.	4.8	34
31	Low Flying-Height Slider With High Thermal Actuation Efficiency and Small Flying-Height Modulation Caused by Disk Waviness. IEEE Transactions on Magnetics, 2008, 44, 145-150.	2.1	33
32	Compressive characteristics of single walled carbon nanotube with water interactions investigated by using molecular dynamics simulation. Physics Letters, Section A: General, Atomic and Solid State Physics, 2014, 378, 570-576.	2.1	33
33	Torsional Characteristics of SingleWalled Carbon Nanotube with Water Interactions by Using Molecular Dynamics Simulation. Nano-Micro Letters, 2014, 6, 268-279.	27.0	32
34	Estimation of mechanical properties of nanomaterials using artificial intelligence methods. Applied Physics A: Materials Science and Processing, 2014, 116, 1099-1107.	2.3	31
35	Nanomechanics of imperfectly straight single walled carbon nanotubes under axial compression by using molecular dynamics simulation. Computational Materials Science, 2012, 53, 268-277.	3.0	30
36	Twisting effects of carbon nanotube bundles subjected to axial compression and tension. Journal of Applied Physics, 2006, 99, 114312.	2.5	29

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37	Molecular Dynamics Simulation of Lubricant Redistribution and Transfer at Near-Contact Head-Disk Interface. Tribology Letters, 2011, 43, 89-99.	2.6	28
38	Towards fly- and lubricant-contact recording. Journal of Magnetism and Magnetic Materials, 2008, 320, 3183-3188.	2.3	27
39	Interpenetrating networks in Zrâ€“Cuâ€“Al and Zrâ€“Cu metallic glasses. Intermetallics, 2012, 22, 13-16.	3.9	27
40	Shear deformation characteristics of single walled carbon nanotube with water interactions by using molecular dynamics simulation. Physica E: Low-Dimensional Systems and Nanostructures, 2013, 54, 206-213.	2.7	27
41	An integrated computational approach for determining the elastic properties of boron nitride nanotubes. International Journal of Mechanics and Materials in Design, 2015, 11, 1-14.	3.0	27
42	Combined CI-MD approach in formulation of engineering moduli of single layer graphene sheet. Simulation Modelling Practice and Theory, 2014, 48, 93-111.	3.8	26
43	A molecular dynamics based artificial intelligence approach for characterizing thermal transport in nanoscale material. Thermochimica Acta, 2014, 594, 39-49.	2.7	26
44	Formation of chemical short range order and its influences on the dynamic/mechanical heterogeneity in amorphous Zrâ€“Cuâ€“Ag alloys: A molecular dynamics study. Intermetallics, 2016, 70, 61-67.	3.9	26
45	An embedded simulation approach for modeling the thermal conductivity of 2D nanoscale material. Simulation Modelling Practice and Theory, 2014, 44, 1-13.	3.8	25
46	A molecular dynamics simulation study of solid-like and liquid-like networks in Zr 46 Cu 46 Al 8 metallic glass. Journal of Non-Crystalline Solids, 2015, 422, 39-45.	3.1	24
47	Depletion kinetics of perfluoropolyether films with functional end groups using molecular dynamics simulation. Polymer, 2013, 54, 6008-6018.	3.8	22
48	Nanomechanics of Nonideal Single- and Double-Walled Carbon Nanotubes. Journal of Nanomaterials, 2012, 2012, 1-9.	2.7	21
49	Kinetics of lubricant desorption and decomposition under heat treatment: a molecular dynamics study. Soft Matter, 2013, 9, 700-708.	2.7	21
50	Identification and evaluation of defects in selective laser melted 316L stainless steel parts via in-situ monitoring and micro computed tomography. Additive Manufacturing, 2020, 35, 101287.	3.0	21
51	Electrical characterisation of RF capacitive microswitch. Sensors and Actuators A: Physical, 2003, 102, 296-310.	4.1	17
52	Effects of temperature dependent air properties on the performances of a thermal actuated slider. Tribology International, 2009, 42, 902-910.	5.9	17
53	Molecular dynamics simulation studies of mechanical properties of different carbon nanotube systems. Molecular Simulation, 2016, 42, 1274-1280.	2.0	17
54	Study of the Spreading of Perfluoropolyether Lubricants on a Diamond-Like Carbon Film. Tribology Transactions, 2013, 56, 255-267.	2.0	16

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55	Study and modeling of melt pool evolution in selective laser melting process of SS316L. MRS Communications, 2018, 8, 1178-1183.	1.8	16
56	Effect of atomic-level stresses on local dynamic and mechanical properties in CuxZr100â^'x metallic glasses: A molecular dynamics study. Intermetallics, 2015, 58, 50-55.	3.9	15
57	A finite-difference solution of boron/epoxy composite plate with an internal hole subjected to uniform tension/displacements using displacement potential approach. International Journal of Mechanical Sciences, 2012, 58, 1-12.	6.7	13
58	A Study on the Influence of Scanning Strategies on the Levelness of the Melt Track in Selective Laser Melting Process of Stainless Steel Powder. Jom, 2018, 70, 2082-2087.	1.9	13
59	Experimental studies on the properties of selectively laser melted alumina-spodumene composite. Ceramics International, 2018, 44, 19008-19015.	4.8	13
60	Detection and classification of hostâ€“guest interactions using Î²-cyclodextrin-decorated carbon nanotube-based chemiresistors. Current Applied Physics, 2014, 14, 1649-1658.	2.4	12
61	Molecular dynamics studies of lubricant depletion under moving laser heating: Effects of laser power and film thickness. Tribology International, 2015, 92, 38-46.	5.9	10
62	AN AB INITIO MOLECULAR DYNAMICS STUDY ON THE SOLVATION OF FORMATE ION AND FORMIC ACID IN WATER. Journal of Theoretical and Computational Chemistry, 2012, 11, 1019-1032.	1.8	9
63	Different icosahedra in metallic glasses: Stability and response to shear transformation. Scripta Materialia, 2012, 66, 610-613.	5.2	9
64	Molecular Dynamics Simulation of Thermal-Induced Local Heating and Depletion of Ultrathin Perfluoropolyether Lubricant Under Moving Laser Heating. Tribology Letters, 2014, 55, 303-313.	2.6	9
65	Effect of environment humidity and temperature on stationary and transient flying responses of air bearing slider. Tribology International, 2009, 42, 1125-1131.	5.9	8
66	Thickness, chirality and pattern dependence of elastic properties of hydrogen functionalized graphene. Computational Materials Science, 2014, 92, 192-198.	3.0	8
67	Effect of channel length on the electrical response of carbon nanotube field-effect transistors to deoxyribonucleic acid hybridization. Beilstein Journal of Nanotechnology, 2014, 5, 2081-2091.	2.8	7
68	Application of artificial intelligence technique for modelling elastic properties of 2D nanoscale material. Molecular Simulation, 2015, 41, 1143-1152.	2.0	7
69	Hydrogen transportation properties in carbon nano-scroll investigated by using molecular dynamics simulations. Computational Materials Science, 2015, 102, 7-13.	3.0	7
70	Study of the Thermal Decomposition of PFPEs Lubricants on a Thin DLC Film Using Finitely Extensible Nonlinear Elastic Potential Based Molecular Dynamics Simulation. Journal of Nanotechnology, 2014, 2014, 1-15.	3.4	6
71	Lubricant depletion due to moving laser heating: A molecular dynamics simulation study. Tribology International, 2014, 80, 41-48.	5.9	6
72	Epigallocatechin gallate decorated carbon nanotube chemiresistors for ultrasensitive glucose detection. Organic Electronics, 2016, 28, 210-216.	2.6	6

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73	Density characteristics of laser-sintered three-dimensional printing parts investigated by using an integrated finite element analysisâ€“based evolutionary algorithm approach. Proceedings of the Institution of Mechanical Engineers, Part B: Journal of Engineering Manufacture, 2016, 230, 100-110.	2.4	6
74	Dynamics of Fly-Contact Head Disk Interface. IEEE Transactions on Magnetics, 2008, 44, 3683-3686.	2.1	5
75	Finite-Difference Solution of a Both-End-Fixed Orthotropic Composite Beam under Uniformly Distributed Loading Using Displacement Potential Function Formulation. Journal of Engineering Mechanics - ASCE, 2011, 137, 258-267.	2.9	5
76	A Numerical Solution of a One End Fixed Glass/Epoxy Plate Having a Circular Cutout Subjected to a Uniform Shear Using Displacement Potential Approach. Mechanics of Advanced Materials and Structures, 2013, 20, 297-308.	2.6	5
77	Molecular dynamics study of ultrathin lubricant films with functional end groups: Thermal-induced desorption and decomposition. Computational Materials Science, 2014, 93, 11-14.	3.0	5
78	Mechanical properties of bundled carbon nanoscroll. Mechanics of Materials, 2015, 87, 1-10.	3.2	5
79	Tensile loading characteristics of free-form and water submerged single layer graphene sheet. , 2012, , .		4
80	Compressive strength of porous 3D printed spodumene. Procedia Engineering, 2017, 216, 28-42.	1.2	4
81	Selective Laser Melting: On the Study of Microstructure of K220. , 2014, , .		4
82	Molecular Study of Dynamic Behavior between Head and Ultrathin Lubricant Film. Journal of Advanced Mechanical Design, Systems and Manufacturing, 2010, 4, 56-60.	0.7	3
83	Effects of environmental temperature and humidity on thermal flying height adjustment. Microsystem Technologies, 2010, 16, 49-55.	2.0	3
84	Effect of Tire Material on the Prediction of Optimum Tire-Tread Sections. International Journal for Computational Methods in Engineering Science and Mechanics, 2011, 12, 290-302.	2.1	3
85	Investigation of mechanical strength of 2D nanoscale structures using a molecular dynamics based computational intelligence approach. International Journal of Modern Physics B, 2015, 29, 1450242.	2.0	3
86	On the Study of Machining Characteristics of 2-D Nanoscale Material. Nanoscience and Nanotechnology Letters, 2014, 6, 1079-1086.	0.4	3
87	Evolution of Diffusion-Related Degradation of Polymeric Lubricant Under Laser Heating: A Molecular Dynamics Study. IEEE Transactions on Magnetics, 2014, 50, 1-9.	2.1	2
88	Equipment Qualification. , 2017, , 139-157.		2
89	Quality Management Framework in Additive Manufacturing. , 2017, , 213-239.		2
90	Selective Laser Melting of Metal Powders Studied by Molecular Dynamics Simulation. , 2014, , .		2

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91	Flying Stability Study of a Thermal Actuated Slider. , 2006, , .		1
92	Non-Twisted and Twisted CNT Bundles under Axial Tensile and Compressive Loads. Solid State Phenomena, 2007, 121-123, 1415-1418.	0.3	1
93	Torsional Characteristics of Single Walled Carbon Nanotube with Water Interactions by Using Molecular Dynamics Simulation. Nano-Micro Letters, 2014, 6, 268.	27.0	1
94	Micromachined capacitive switches at microwave frequencies. , 2000, , .		0
95	<title>Characterization of high-isolation rf capacitive microswitches</title>. , 2001, 4586, 440.		0
96	A method to study the cooling effect of the thermal actuator. Journal of Applied Physics, 2008, 103, .	2.5	0
97	Molecular Dynamics Simulation of Lubricant Depletion Instability under Laser Heating. Defect and Diffusion Forum, 0, 362, 23-28.	0.4	0
98	Effect of temperature and thickness of graphene on the hydrogen storage properties. , 2015, , .		0
99	Laser-induced depletion of ultrathin PFPE lubricants using a quantitative coarse-grained model. Journal of Molecular Modeling, 2020, 26, 115.	1.8	0