Nuwan Dewapriya

List of Publications by Year
in descending order

26 papers	744 citations	567281 15 h-index	677142 22 g-index
26 all docs	26 docs citations	26 times ranked	592 citing authors

#	Article	IF	Citations
1	Quantum and classical molecular dynamics simulations of shocked polyurea and polyurethane. Computational Materials Science, 2022, 203, 111166.	3.0	10
2	Molecular dynamics study on the shock induced spallation of polyethylene. Journal of Applied Physics, 2022, 131, .	2.5	9
3	Molecular dynamics study of the penetration resistance of multilayer polymer/ceramic nanocomposites under supersonic projectile impacts. Extreme Mechanics Letters, 2021, 44, 101238.	4.1	23
4	Molecular Dynamics Simulations of Shock Propagation and Spallation in Amorphous Polymers. Journal of Applied Mechanics, Transactions ASME, 2021, 88, .	2.2	17
5	Energy absorption mechanisms of nanoscopic multilayer structures under ballistic impact loading. Computational Materials Science, 2021, 195, 110504.	3.0	29
6	Molecular-level investigation on the spallation of polyurea. MRS Communications, 2021, 11, 532-538.	1.8	4
7	Molecular dynamics study of the mechanical behaviour of ultrathin polymerâ€"metal multilayers under extreme dynamic conditions. Computational Materials Science, 2020, 184, 109951.	3.0	18
8	Characterizing fracture stress of defective graphene samples using shallow and deep artificial neural networks. Carbon, 2020, 163, 425-440.	10.3	29
9	Mechanical properties of two-dimensional materials: atomistic modeling and future directions. , 2020, , 9-35.		4
10	Superior Dynamic Penetration Resistance of Nanoscale Multilayer Polymer/Metal Films. Journal of Applied Mechanics, Transactions ASME, 2020, 87, .	2.2	15
11	Comprehensive molecular dynamics studies of the ballistic resistance of multilayer graphene-polymer composite. Computational Materials Science, 2019, 170, 109171.	3.0	40
12	Atomistic modelling of crack-inclusion interaction in graphene. Engineering Fracture Mechanics, 2018, 195, 92-103.	4.3	13
13	Tailoring fracture strength of graphene. Computational Materials Science, 2018, 141, 114-121.	3.0	33
14	MD Simulation of Elastic Field at an Inhomogeneity in Graphene. , 2018, , .		0
15	Atomistic and continuum modelling of stress field at an inhomogeneity in graphene. Materials and Design, 2018, 160, 718-730.	7.0	8
16	Atomistic Modelling of Nanoindentation of Multilayered Graphene-Reinforced Nanocomposites. , 2018, , 39-70.		3
17	Atomistic modeling of out-of-plane deformation of a propagating Griffith crack in graphene. Acta Mechanica, 2017, 228, 3063-3075.	2.1	20
18	Molecular dynamics study of the reinforcement effect of graphene in multilayered polymer nanocomposites. Materials and Design, 2017, 124, 47-57.	7.0	85

#	Article	IF	Citations
19	Atomistic simulations of nanoscale crack-vacancy interaction in graphene. Carbon, 2017, 125, 113-131.	10.3	28
20	Development of a homogenous nonlinear spring model characterizing the interfacial adhesion properties of graphene with surface defects. Composites Part B: Engineering, 2016, 98, 339-349.	12.0	14
21	Influence of hydrogen functionalization on the fracture strength of graphene and the interfacial properties of grapheneâ€"polymer nanocomposite. Carbon, 2015, 93, 830-842.	10.3	34
22	Size dependency and potential field influence on deriving mechanical properties of carbon nanotubes using molecular dynamics. Theoretical and Applied Mechanics Letters, 2015, 5, 167-172.	2.8	49
23	Effects of free edges and vacancy defects on the mechanical properties of graphene. , 2014, , .		5
24	Atomistic and continuum modelling of temperature-dependent fracture of graphene. International Journal of Fracture, 2014, 187, 199-212.	2.2	106
25	Molecular Dynamics Simulations and Continuum Modeling of Temperature and Strain Rate Dependent Fracture Strength of Graphene With Vacancy Defects. Journal of Applied Mechanics, Transactions ASME, 2014, 81, .	2.2	72
26	Influence of temperature and free edges on the mechanical properties of graphene. Modelling and Simulation in Materials Science and Engineering, 2013, 21, 065017.	2.0	76