

Nilanjan Mitra

List of Publications by Year in descending order

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papers

843
citations

567281

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59
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59
times ranked

674
citing authors

#	ARTICLE	IF	CITATIONS
1	Evaluation, Calibration, and Verification of a Reinforced Concrete Beam-Column Joint Model. <i>Journal of Structural Engineering</i> , 2007, 133, 105-120.	3.4	130
2	A methodology for improving shear performance of marine grade sandwich composites: Sandwich composite panel with shear key. <i>Composite Structures</i> , 2010, 92, 1065-1072.	5.8	52
3	A metastable phase of shocked bulk single crystal copper: an atomistic simulation study. <i>Scientific Reports</i> , 2017, 7, 7337.	3.3	46
4	Interface fracture of sandwich composites: Influence of MWCNT sonicated epoxy resin. <i>Composites Science and Technology</i> , 2014, 101, 94-101.	7.8	43
5	Evolution of dislocation mechanisms in single-crystal Cu under shock loading in different directions. <i>Modelling and Simulation in Materials Science and Engineering</i> , 2017, 25, 025013.	2.0	35
6	On shock response of nano-void closed/open cell copper material: Non-equilibrium molecular dynamic simulations. <i>Journal of Applied Physics</i> , 2014, 115, .	2.5	33
7	Shock induced deformation response of single crystal copper: Effect of crystallographic orientation. <i>Computational Materials Science</i> , 2017, 135, 141-151.	3.0	31
8	Compression twinning and structural phase transformation of single crystal titanium under uniaxial compressive strain conditions: Comparison of inter-atomic potentials. <i>Computational Materials Science</i> , 2017, 126, 228-237.	3.0	30
9	Molecular dynamics investigation of c-axis deformation of single crystal Ti under uniaxial stress conditions: Evolution of compression twinning and dislocations. <i>Computational Materials Science</i> , 2018, 141, 19-29.	3.0	30
10	Improvement in tensile and flexural ductility with the addition of different types of polypropylene fibers in cementitious composites. <i>Construction and Building Materials</i> , 2018, 180, 405-411.	7.2	30
11	Shock induced phase transition of water: Molecular dynamics investigation. <i>Physics of Fluids</i> , 2016, 28, .	4.0	26
12	Non-contact near-field underwater explosion induced shock-wave loading of submerged rigid structures: Nonlinear compressibility effects in fluid structure interaction. <i>Journal of Applied Physics</i> , 2012, 112, 024911.	2.5	25
13	Influence of aggregate size on flexural fatigue response of concrete. <i>Construction and Building Materials</i> , 2019, 229, 116922.	7.2	25
14	Cavitation in epoxies under composite-like stress states. <i>Composites Part A: Applied Science and Manufacturing</i> , 2018, 106, 52-58.	7.6	22
15	Twinning, phase transformation and dislocation evolution in single crystal titanium under uniaxial strain conditions: A molecular dynamics study. <i>Computational Materials Science</i> , 2020, 172, 109325.	3.0	18
16	Evolution of tension twinning in single crystal Ti under compressive uniaxial strain conditions. <i>Computational Materials Science</i> , 2018, 141, 302-312.	3.0	16
17	Probabilistic model for failure initiation of reinforced concrete interior beam-column connections subjected to seismic loading. <i>Engineering Structures</i> , 2011, 33, 154-162.	5.3	15
18	Thermal conductivity of cement paste: Influence of macro-porosity. <i>Cement and Concrete Research</i> , 2021, 143, 106385.	11.0	15

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19	Prediction of performance of exterior beam-column connections with headed bars subject to load reversal. <i>Engineering Structures</i> , 2012, 41, 209-217.	5.3	14
20	Underwater explosion induced shock loading of structures: Influence of water depth, salinity and temperature. <i>Ocean Engineering</i> , 2016, 126, 22-28.	4.3	14
21	Molecular level deformation mechanism of ettringite. <i>Cement and Concrete Research</i> , 2019, 124, 105836.	11.0	12
22	Intermolecular dynamics of ultraconfined interlayer water in tobermorite: influence on mechanical performance. <i>Physical Chemistry Chemical Physics</i> , 2019, 21, 11416-11423.	2.8	12
23	Gypsum under tensile loading: A molecular dynamics study. <i>Construction and Building Materials</i> , 2019, 201, 1-10.	7.2	12
24	On core compressibility of sandwich composite panels subjected to intense underwater shock loads. <i>Journal of Applied Physics</i> , 2014, 115, .	2.5	10
25	Shock compression of polyvinyl chloride. <i>Journal of Applied Physics</i> , 2016, 119, .	2.5	10
26	Multiscale Estimation of Elastic Constants of Hydrated Cement. <i>Journal of Engineering Mechanics - ASCE</i> , 2019, 145, .	2.9	10
27	Intermolecular Dynamics of Water: Suitability of Reactive Interatomic Potential. <i>Journal of Physical Chemistry B</i> , 2019, 123, 6529-6535.	2.6	9
28	Epoxy Resin (DGEBA/TETA) Exposed to Water: a Spectroscopic Investigation to Determine Water-Epoxy Interactions. <i>Journal of Infrared, Millimeter, and Terahertz Waves</i> , 2021, 42, 558-571.	2.2	9
29	Mixed-mode fracture of sandwich composites: Performance improvement with multiwalled carbon nanotube sonicated resin. <i>Journal of Sandwich Structures and Materials</i> , 2018, 20, 379-395.	3.5	8
30	Role of confined interstitial water in compressive response of calcium sulfate (CaSO ₄ .n) Tj ETQq0 0 0 rgBT /Overlock,10 Tf 5Q 302 Td (H	2.9	8
31	Influence of polyester microfiber reinforcement on flexural fatigue characteristics of concrete. <i>Road Materials and Pavement Design</i> , 2021, 22, 2866-2882.	4.0	8
32	Compressive response of tricalcium aluminate crystal: Molecular dynamics investigations. <i>Construction and Building Materials</i> , 2019, 224, 188-197.	7.2	7
33	Terahertz spectroscopy of diglycidylether of bisphenol A: Experimental investigations and density functional theory based simulations. <i>Journal of Molecular Structure</i> , 2019, 1184, 114-122.	3.6	7
34	An atomistic study of phase transition in cubic diamond Si single crystal subjected to static compression. <i>Computational Materials Science</i> , 2019, 156, 232-240.	3.0	7
35	Interfacial delamination in glass-fiber/polymer-foam-core sandwich composites using singlemode“multimode”singlemode optical fiber sensors: Identification based on experimental investigation. <i>Journal of Sandwich Structures and Materials</i> , 2020, 22, 40-54.	3.5	7
36	Morphological changes in epoxy resin (DGEBA/TETA) exposed to low temperatures. <i>Journal of Adhesion Science and Technology</i> , 2020, 34, 2262-2273.	2.6	6

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37	Molecular mechanisms of tricalcium aluminate under tensile loads. Computational Materials Science, 2018, 154, 547-556.	3.0	5
38	Molecular deformation response of portlandite under compressive loading. Construction and Building Materials, 2021, 274, 122020.	7.2	5
39	High-temperature and high-pressure plastic phase of ice at the boundary of liquid water and ice VII. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2022, 478, .	2.1	5
40	Shock-Induced phase transition of single crystal copper. AIP Conference Proceedings, 2017, , .	0.4	4
41	High temperatureâ€“high pressure phase transformation of Cu. Computational Materials Science, 2019, 170, 109154.	3.0	4
42	Interfacial delamination crack profile estimation in polymer foam-cored sandwich composites. Engineering Structures, 2019, 189, 635-643.	5.3	4
43	Microstructural Response of Shock-Loaded Concrete, Mortar, and Cementitious Composite Materials in a Shock Tube Setup. Journal of Materials in Civil Engineering, 2019, 31, .	2.9	4
44	{101 ₁ ,2} twinning in single-crystal titanium under shock loading. Philosophical Magazine, 2021, 101, 836-850.	1.6	4
45	Underwater oblique shock wave reflection. Physical Review Fluids, 2018, 3, .	2.5	4
46	Comparison of Mechanical Performance and Life Cycle Cost of Natural and Synthetic Fiber-Reinforced Cementitious Composites. Journal of Materials in Civil Engineering, 2020, 32, 04020150.	2.9	3
47	Headed Reinforcement Applications for Reinforced Concrete Beam-Column Connections. , 2009, , .		2
48	Stretchâ€“induced helix to extended coil transition of crystalline $\hat{1}\pm$ phase isotactic polypropylene: A molecular dynamics study. Polymer Crystallization, 2020, 3, e10143.	0.8	2
49	Failure Initiation of Reinforced-Concrete Beam-Column Connections â€” Binomial Logistic Regression Based Probabilistic Model. Advances in Structural Engineering, 2012, 15, 121-137.	2.4	1
50	Estimation of Elastic Parameters of Sandwich Composite Plates Using a Gradient Based Finite Element Model Updating Approach. , 2016, , .		1
51	Identification of molecular vibrations associated with tacticity in polypropylene: Density functional theoryâ€“based simulations. Journal of Polymer Science, Part B: Polymer Physics, 2019, 57, 1378-1385.	2.1	1
52	Influence of Surface Morphology of Fibers on the Tensile and Flexural Ductility of Polypropylene-Reinforced Cementitious Composites. Journal of Materials in Civil Engineering, 2020, 32, 04020042.	2.9	1
53	Evolution of microstructural deformation mechanisms under equal-channel angular extrusion loading conditions: a molecular dynamics case study of single crystal titanium. Philosophical Magazine, 2021, 101, 435-449.	1.6	1
54	Twinning assisted $\hat{1}\pm$ to $\hat{1}\%$ phase transformation in titanium single crystal. AIP Conference Proceedings, 2017, , .	0.4	0

#	ARTICLE	IF	CITATIONS
55	Terahertz Spectroscopy of Adhesive material under various climatic conditions. , 2019, , .		0
56	Pedestrian injury severity in the event of a collision with a truck: are energy absorbing adaptive deformable fronts suitable. International Journal of Vehicle Safety, 2018, 10, 235.	0.2	0
57	Mitigation of Mechanical Property Degradation of Epoxy Resin Subjected to UV with Addition of Different Nanofillers. , 0, , .		0
58	Epoxy Resin (DGEBA/TETA) Under Extreme Environment. , 0, , .		0
59	Construction Practices of Short Paneled Concrete Pavements (SPCP) for High Volume Roads. , 0, , .		0