Suraj Ravindran

List of Publications by Year in descending order

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42 papers

464 citations

687363 13 h-index 752698 20 g-index

48 all docs 48 docs citations

times ranked

48

356 citing authors

#	Article	IF	Citations
1	Experimental determination of Representative Volume Element (RVE) size in woven composites. Optics and Lasers in Engineering, 2017, 90, 59-71.	3.8	46
2	Local Deformation and Failure Mechanisms of Polymer Bonded Energetic Materials Subjected to High Strain Rate Loading. Journal of Dynamic Behavior of Materials, 2016, 2, 146-156.	1.7	45
3	Multiscale damage evolution in polymer bonded sugar under dynamic loading. Mechanics of Materials, 2017, 114, 97-106.	3.2	39
4	Meso-scale strain localization and failure response of an orthotropic woven glass–fiber reinforced composite. Composites Part B: Engineering, 2015, 78, 308-318.	12.0	37
5	Effects of cell-wall instability and local failure on the response of closed-cell polymeric foams subjected to dynamic loading. Mechanics of Materials, 2018, 116, 67-76.	3.2	30
6	Experimental characterization of compaction wave propagation in cellular polymers. International Journal of Solids and Structures, 2018, 139-140, 270-282.	2.7	26
7	Fracture mechanism and toughness of a rolled magnesium alloy under dynamic loading. Acta Materialia, 2021, 202, 350-365.	7.9	22
8	In situ deformation characterization of density-graded foams in quasi-static and impact loading conditions. International Journal of Impact Engineering, 2021, 150, 103820.	5.0	22
9	A multiscale experimental approach for correlating global and local deformation response in woven composites. Composite Structures, 2018, 194, 328-334.	5.8	18
10	Note: Dynamic meso-scale full field surface deformation measurement of heterogeneous materials. Review of Scientific Instruments, 2016, 87, 036108.	1.3	16
11	Meso-scale study of non-linear tensile response and fiber trellising mechanisms in woven composites. Journal of Reinforced Plastics and Composites, 2016, 35, 986-995.	3.1	16
12	Mode-I behavior of adhesively bonded composite joints at high loading rates. Composites Science and Technology, 2020, 198, 108310.	7.8	16
13	Experimental characterization of mesoâ€scale deformation mechanisms and the RVE size in plastically deformed carbon steel. Strain, 2017, 53, e12217.	2.4	15
14	The Effect of Nano-Fillers on the In-Plane and Interlaminar Shear Properties of Carbon Fiber Reinforced Composite. Journal of Dynamic Behavior of Materials, 2018, 4, 296-307.	1.7	13
15	Dynamic Strength of Copper at High Pressures Using Pressure Shear Plate Experiments. Journal of Dynamic Behavior of Materials, 2021, 7, 248-261.	1.7	13
16	Gradual damage evolution and propagation in quasi-isotropic CFRC under quasi-static loading. Composite Structures, 2018, 185, 186-192.	5.8	10
17	Using Digital Image Correlation to Characterize Local Strains on Vascular Tissue Specimens. Journal of Visualized Experiments, 2016, , e53625.	0.3	7
18	Weak-shock wave propagation in polymer-based particulate composites. Journal of Applied Physics, 2019, 125, .	2.5	7

#	Article	IF	CITATIONS
19	Probing the properties and mechanisms of failure waves in soda-lime glass. Journal of Applied Physics, 2021, 129, .	2.5	6
20	Effect of Crystal Density on Dynamic Deformation Behavior of PBX. Conference Proceedings of the Society for Experimental Mechanics, 2017, , 87-92.	0.5	5
21	Meso-scale Deformation Mechanisms of Polymer Bonded Energetic Materials Under Dynamic Loading. Conference Proceedings of the Society for Experimental Mechanics, 2016, , 451-456.	0.5	5
22	Dynamic Strength of Iron at High Pressures and Strain Rates. Physical Review Letters, 2022, 128, 015705.	7.8	5
23	Optimal Sensor Placement for Damage Detection: Role of Global Search. , 2007, , .		4
24	Generalized linear prediction method in phase-shifting interferometry in the presence of noise. Optics and Lasers in Engineering, 2007, 45, 766-772.	3.8	4
25	In-situ quantification of intra and intergranular deformation in pure magnesium using full-field measurements at low and high strain rates. Mechanics of Materials, 2018, 126, 36-46.	3.2	4
26	Strength of magnesium at high pressures and strain rates. Extreme Mechanics Letters, 2020, 41, 101044.	4.1	4
27	Shock structure and spall behavior of porous aluminum. AIP Conference Proceedings, 2020, , .	0.4	3
28	On the Meso-Macro Scale Deformation of Low Carbon Steel. Conference Proceedings of the Society for Experimental Mechanics, 2015, , 409-414.	0.5	3
29	Experimental Study of Residual Plastic Strain and Damages Development in Carbon Fiber Composite. Conference Proceedings of the Society for Experimental Mechanics, 2017, , 31-36.	0.5	3
30	Experimental Investigation of Compaction Wave Propagation in Cellular Polymers. Conference Proceedings of the Society for Experimental Mechanics, 2017, , 113-115.	0.5	3
31	Impact Response of Density Graded Cellular Polymers. Conference Proceedings of the Society for Experimental Mechanics, 2018, , 17-23.	0.5	3
32	An investigation of shock-induced phase transition in soda-lime glass. Journal of Applied Physics, 2022, 131, .	2.5	3
33	Meso-Scale Deformation Behavior of Polymer Bonded Energetic Material Under Quasi-Static Compression. Conference Proceedings of the Society for Experimental Mechanics, 2016, , 345-350.	0.5	2
34	On the Mechanical Response of Polymer Fiber Composites Reinforced with Nanoparticles. Conference Proceedings of the Society for Experimental Mechanics, 2016, , 125-130.	0.5	1
35	Multiscale deformation behavior of polymer bonded explosives subjected to intermediate velocity impact. AIP Conference Proceedings, 2018, , .	0.4	1
36	On the Response of Polymer Bonded Explosives at Different Impact Velocities. Conference Proceedings of the Society for Experimental Mechanics, 2019, , 219-224.	0.5	1

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37	Pressure-shear plate impact experiments of magnesium at high pressures. AIP Conference Proceedings, 2020, , .	0.4	О
38	Compaction Wave Characteristics of Polymeric Foams Under Dynamic Loading. Conference Proceedings of the Society for Experimental Mechanics, 2018, , 175-180.	0.5	0
39	Free-Edge Strain Localization of Cross-Ply Laminates with Different Lamina Arrangements. , 0, , .		O
40	Localized Microstructural Deformation Behavior of Dynamically Deformed Pure Magnesium. Conference Proceedings of the Society for Experimental Mechanics, 2019, , 225-228.	0.5	0
41	Pressure-shear plate impact experiments at very high pressures. AIP Conference Proceedings, 2020, , .	0.4	O
42	Optimal Sensor Placement for Damage Detection: Role of Global Search. Database and Expert Systems Applications (DEXA), Proceedings of the International Workshop on, 2007, , .	0.0	0