

Addis A Kidane

List of Publications by Year in descending order

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87
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1,510
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279798

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95
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docs citations

95
times ranked

1234
citing authors

#	ARTICLE	IF	CITATIONS
1	An experimental investigation concerning the effect of AFP defects on progressive damage in CFRP coupons. <i>Composite Structures</i> , 2022, 279, 114725.	5.8	7
2	Viscoelastic Behavior of Porcine Arterial Tissue: Experimental and Numerical Study. <i>Experimental Mechanics</i> , 2022, 62, 953-967.	2.0	2
3	In situ deformation characterization of density-graded foams in quasi-static and impact loading conditions. <i>International Journal of Impact Engineering</i> , 2021, 150, 103820.	5.0	22
4	Loading Rate Effects for Flaws Undergoing Mixed-Mode I/III Fracture. <i>Experimental Mechanics</i> , 2021, 61, 1291-1307.	2.0	1
5	Closed-form solution for shock wave propagation in density-graded cellular material under impact. <i>Theoretical and Applied Mechanics Letters</i> , 2021, 11, 100288.	2.8	7
6	Characterization of viscoelastic bending stiffness of uncured carbon-epoxy prepreg slit tape. <i>Composite Structures</i> , 2021, 275, 114295.	5.8	5
7	Determination of Mixed-Mode (I/III) Fracture of Polycarbonate. <i>Conference Proceedings of the Society for Experimental Mechanics</i> , 2021, , 77-83.	0.5	0
8	Characterization of Mode I and Mode II traction separation laws for cohesive separation of uncured thermoset tows. <i>International Journal of Fracture</i> , 2020, 221, 25-38.	2.2	9
9	Simulations and experiments for automated fiber placement of prepreg slit tape: Wrinkle formation and fundamental observations. <i>Composites Part B: Engineering</i> , 2020, 201, 108287.	12.0	22
10	A novel method to determine the mixed mode (I/III) dynamic fracture initiation toughness of materials. <i>International Journal of Fracture</i> , 2020, 224, 47-65.	2.2	6
11	Mixed Mode (Mode I/III) Dynamic Fracture Initiation Toughness of Aluminum Alloy. <i>Conference Proceedings of the Society for Experimental Mechanics</i> , 2020, , 59-64.	0.5	1
12	Dynamic Response of Layered Functionally Graded Polyurethane Foam with Nonlinear Density Variation. <i>Conference Proceedings of the Society for Experimental Mechanics</i> , 2020, , 25-30.	0.5	4
13	Radial and axial inertia stresses in high strain rate deformation of polymer foams. <i>International Journal of Mechanical Sciences</i> , 2020, 181, 105679.	6.7	10
14	Numerical and Experimental Investigation of Density Graded Foams Subjected to Impact Loading. <i>Conference Proceedings of the Society for Experimental Mechanics</i> , 2020, , 31-35.	0.5	4
15	Quantifying Wrinkling During Tow Placement on Curvilinear Paths. <i>Conference Proceedings of the Society for Experimental Mechanics</i> , 2020, , 9-12.	0.5	0
16	Characterizing fracture response of cracked transversely graded materials. <i>Composite Structures</i> , 2019, 229, 111439.	5.8	10
17	Experimental investigation of prepreg slit tape wrinkling during automated fiber placement process using StereoDIC. <i>Composites Part B: Engineering</i> , 2019, 160, 546-557.	12.0	37
18	Geometry factors for Mode I stress intensity factor of a cylindrical specimen with spiral crack subjected to torsion. <i>Engineering Fracture Mechanics</i> , 2019, 214, 79-94.	4.3	11

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19	Measured Surface Deformation and Strains in Thin Thermoplastic Prepreg Tapes Steered along Curved Paths without Adhesion Using StereoDIC. <i>Experimental Mechanics</i> , 2019, 59, 531-547.	2.0	13
20	Effect of Particle Mass Fraction on the Multiscale Dynamic Failure Behavior of Particulate Polymer Composites. <i>Experimental Mechanics</i> , 2019, 59, 599-609.	2.0	9
21	Weak-shock wave propagation in polymer-based particulate composites. <i>Journal of Applied Physics</i> , 2019, 125, .	2.5	7
22	Mode-I dynamic fracture initiation toughness using torsion load. <i>Engineering Fracture Mechanics</i> , 2019, 213, 53-71.	4.3	14
23	A Progression on the Determination of Dynamic Fracture Initiation Toughness Using Spiral Crack. <i>Conference Proceedings of the Society for Experimental Mechanics</i> , 2019, , 89-95.	0.5	5
24	On the Response of Polymer Bonded Explosives at Different Impact Velocities. <i>Conference Proceedings of the Society for Experimental Mechanics</i> , 2019, , 219-224.	0.5	1
25	Modification of Benthem Solution for Mode I Fracture of Cylinder with Spiral Crack Subjected to Torsion. <i>Conference Proceedings of the Society for Experimental Mechanics</i> , 2019, , 57-63.	0.5	5
26	Localized Microstructural Deformation Behavior of Dynamically Deformed Pure Magnesium. <i>Conference Proceedings of the Society for Experimental Mechanics</i> , 2019, , 225-228.	0.5	0
27	A multiscale experimental approach for correlating global and local deformation response in woven composites. <i>Composite Structures</i> , 2018, 194, 328-334.	5.8	18
28	Full Field Deformation Measurements in Tensile Kolsky Bar Experiments: Studies and Detailed Analysis of the Early Time History. <i>Journal of Dynamic Behavior of Materials</i> , 2018, 4, 95-113.	1.7	7
29	Experimental characterization of compaction wave propagation in cellular polymers. <i>International Journal of Solids and Structures</i> , 2018, 139-140, 270-282.	2.7	26
30	Effects of cell-wall instability and local failure on the response of closed-cell polymeric foams subjected to dynamic loading. <i>Mechanics of Materials</i> , 2018, 116, 67-76.	3.2	30
31	Thermomechanically Tunable Elastic Metamaterials With Compliant Porous Structures. <i>Journal of Engineering Materials and Technology, Transactions of the ASME</i> , 2018, 140, 021004.	1.4	8
32	Gradual damage evolution and propagation in quasi-isotropic CFRC under quasi-static loading. <i>Composite Structures</i> , 2018, 185, 186-192.	5.8	10
33	Multiscale deformation behavior of polymer bonded explosives subjected to intermediate velocity impact. <i>AIP Conference Proceedings</i> , 2018, , .	0.4	1
34	In-situ quantification of intra and intergranular deformation in pure magnesium using full-field measurements at low and high strain rates. <i>Mechanics of Materials</i> , 2018, 126, 36-46.	3.2	4
35	The Effect of Nano-Fillers on the In-Plane and Interlaminar Shear Properties of Carbon Fiber Reinforced Composite. <i>Journal of Dynamic Behavior of Materials</i> , 2018, 4, 296-307.	1.7	13
36	Hybrid Computational and Experimental Approach to Identify the Dynamic Initiation Fracture Toughness at High Loading Rate. <i>Conference Proceedings of the Society for Experimental Mechanics</i> , 2018, , 141-146.	0.5	7

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37	Impact Response of Density Graded Cellular Polymers. Conference Proceedings of the Society for Experimental Mechanics, 2018, , 17-23.	0.5	3
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	Effect of Nanodiamond (ND) Surface Functionalization on the Properties of ND/PEEK Composites. IEEE Transactions on Components, Packaging and Manufacturing Technology, 2017, , 1-13.	2.5	5
40	Analysis of dynamic bending test using ultra high speed DIC and the virtual fields method. International Journal of Impact Engineering, 2017, 110, 299-310.	5.0	30
41	Strain Rate Effects in Polymer Matrix Composites Under Shear Loading: A Critical Review. Journal of Dynamic Behavior of Materials, 2017, 3, 110-132.	1.7	13
42	Experimental characterization of meso-scale deformation mechanisms and the RVE size in plastically deformed carbon steel. Strain, 2017, 53, e12217.	2.4	15
43	Cross-property interaction between stiffness, damage and thermal conductivity in particulate nanocomposite. Polymer Testing, 2017, 64, 127-135.	4.8	4
44	Multiscale damage evolution in polymer bonded sugar under dynamic loading. Mechanics of Materials, 2017, 114, 97-106.	3.2	39
45	Effect of filler loading, geometry, dispersion and temperature on thermal conductivity of polymer nanocomposites. Polymer Testing, 2017, 57, 101-106.	4.8	126
46	Experimental determination of Representative Volume Element (RVE) size in woven composites. Optics and Lasers in Engineering, 2017, 90, 59-71.	3.8	46
47	Effect of Crystal Density on Dynamic Deformation Behavior of PBX. Conference Proceedings of the Society for Experimental Mechanics, 2017, , 87-92.	0.5	5
48	Determining the tensile response of materials at high temperature using DIC and the Virtual Fields Method. Optics and Lasers in Engineering, 2017, 91, 53-61.	3.8	37
49	A General Approach to Evaluate the Dynamic Fracture Toughness of Materials. Conference Proceedings of the Society for Experimental Mechanics, 2017, , 185-194.	0.5	8
50	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
51	Experimental Investigation of Compaction Wave Propagation in Cellular Polymers. Conference Proceedings of the Society for Experimental Mechanics, 2017, , 113-115.	0.5	3
52	Specimen Size Effect on Stress-Strain Response of Foams Under Direct-Impact. Conference Proceedings of the Society for Experimental Mechanics, 2017, , 253-261.	0.5	0
53	Note: Dynamic meso-scale full field surface deformation measurement of heterogeneous materials. Review of Scientific Instruments, 2016, 87, 036108.	1.3	16
54	Characterizing the constitutive response and energy absorption of rigid polymeric foams subjected to intermediate-velocity impact. Polymer Testing, 2016, 54, 48-58.	4.8	30

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55	Effect of specimen size, compressibility and inertia on the response of rigid polymer foams subjected to high velocity direct impact loading. International Journal of Impact Engineering, 2016, 98, 62-74.	5.0	46
56	Using Digital Image Correlation to Characterize Local Strains on Vascular Tissue Specimens. Journal of Visualized Experiments, 2016, , e53625.	0.3	7
57	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
58	Design optimization of continuously and discretely graded foam materials for efficient energy absorption. Materials and Design, 2016, 102, 151-161.	7.0	81
59	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
60	Investigation of the dynamic stress-strain response of compressible polymeric foam using a non-parametric analysis. International Journal of Impact Engineering, 2016, 91, 170-182.	5.0	83
61	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
62	Effect of Micro-Cracks on the Thermal Conductivity of Particulate Nanocomposite. Conference Proceedings of the Society for Experimental Mechanics, 2016, , 89-94.	0.5	4
63	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
64	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
65	Dynamic Flow Response of Rigid Polymer Foam Subjected to Direct Impact. Conference Proceedings of the Society for Experimental Mechanics, 2016, , 163-170.	0.5	1
66	The deformation and failure response of closed-cell PMDI foams subjected to dynamic impact loading. Polymer Testing, 2015, 44, 112-124.	4.8	28
67	On the effect of microstructure on the torsional response of AA7050-T7651 at elevated strain rates. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2015, 639, 280-287.	5.6	9
68	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
69	Through Thickness Elastic Profile Determination of Functionally Graded Materials. Experimental Mechanics, 2015, 55, 1427-1440.	2.0	12
70	Fracture Behavior of Prestressed Composites Subjected to Shock Loading: A DIC-Based Study. Experimental Mechanics, 2015, 55, 211-225.	2.0	30
71	On the Meso-Macro Scale Deformation of Low Carbon Steel. Conference Proceedings of the Society for Experimental Mechanics, 2015, , 409-414.	0.5	3
72	Fracture of Pre-stressed Woven Glass Fiber Composite Exposed to Shock Loading. Conference Proceedings of the Society for Experimental Mechanics, 2015, , 213-219.	0.5	1

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73	Through Thickness Fracture Behavior of Transversely Graded Ti/TiB Material. Conference Proceedings of the Society for Experimental Mechanics, 2015, , 51-56.	0.5	1
74	Modeling functionally graded materials containing multiple heterogeneities. Acta Mechanica, 2014, 225, 1931-1943.	2.1	12
75	Effect of elastic properties of material composition on the fracture response of transversely graded ceramic/metal material. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2014, 619, 281-289.	5.6	7
76	A DIC-based study of in-plane mechanical response and fracture of orthotropic carbon fiber reinforced composite. Composites Part B: Engineering, 2014, 66, 388-399.	12.0	65
77	A New Method for Dynamic Fracture Toughness Determination Using Torsion Hopkinson Pressure Bar. Conference Proceedings of the Society for Experimental Mechanics, 2014, , 307-312.	0.5	5
78	A New Approach to Determine the Quasi-Static and Dynamic Fracture Toughness of Engineering Materials. Conference Proceedings of the Society for Experimental Mechanics, 2013, , 545-551.	0.5	6
79	On the Failure and Fracture of Polymer Foam Containing Discontinuities. ISRN Materials Science, 2013, 2013, 1-9.	1.0	12
80	On the dynamically stored energy of cold work in pure single crystal and polycrystalline copper. Acta Materialia, 2012, 60, 3719-3728.	7.9	59
81	Verification and validation of the Optimal Transportation Meshfree (OTM) simulation of terminal ballistics. International Journal of Impact Engineering, 2012, 42, 25-36.	5.0	43
82	Dynamic curving cracks in functionally graded materials under thermo-mechanical loading. International Journal of Solids and Structures, 2012, 49, 1637-1655.	2.7	19
83	Rigorous model-based uncertainty quantification with application to terminal ballistics, part I: Systems with controllable inputs and small scatter. Journal of the Mechanics and Physics of Solids, 2012, 60, 983-1001.	4.8	24
84	Thermo-mechanical stress fields and strain energy associated with a mixed-mode propagating crack. Acta Mechanica, 2010, 215, 57-69.	2.1	14
85	Quasi-static and dynamic fracture initiation toughness of Ti/TiB layered functionally graded material under thermo-mechanical loading. Engineering Fracture Mechanics, 2010, 77, 479-491.	4.3	44
86	Mixed-mode dynamic crack propagation in graded materials under thermo-mechanical loading. Engineering Fracture Mechanics, 2010, 77, 2864-2880.	4.3	33
87	Dynamic constitutive behavior of Ti/TiB FGM under thermo-mechanical loading. Journal of Materials Science, 2008, 43, 2771-2777.	3.7	23