Ares J Rosakis

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/7448502/publications.pdf

Version: 2024-02-01

165	8,609	38660 50	46693 89
papers	citations	h-index	g-index

173	173	173	3297
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Cracks Faster than the Shear Wave Speed. Science, 1999, 284, 1337-1340.	6.0	465
2	A thermodynamic internal variable model for the partition of plastic work into heat and stored energy in metals. Journal of the Mechanics and Physics of Solids, 2000, 48, 581-607.	2.3	414
3	Quasi-static constitutive behavior of Zr41.25Ti13.75Ni10Cu12.5Be22.5 bulk amorphous alloys. Scripta Metallurgica Et Materialia, 1994, 30, 429-434.	1.0	388
4	Laboratory Earthquakes: The Sub-Rayleigh-to-Supershear Rupture Transition. Science, 2004, 303, 1859-1861.	6.0	315
5	The dynamic compressive behavior of beryllium bearing bulk metallic glasses. Journal of Materials Research, 1996, 11, 503-511.	1.2	310
6	On the strain and strain rate dependence of the fraction of plastic work converted to heat: an experimental study using high speed infrared detectors and the Kolsky bar. Mechanics of Materials, 1994, 17, 135-145.	1.7	296
7	Partition of plastic work into heat and stored energy in metals. Experimental Mechanics, 2000, 40, 113-123.	1.1	295
8	Dynamically propagating shear bands in impact-loaded prenotched platesâ€”I. Experimental investigations of temperature signatures and propagation speed. Journal of the Mechanics and Physics of Solids, 1996, 44, 981-1006.	2.3	246
9	How fast is rupture during an earthquake? New insights from the 1999 Turkey Earthquakes. Geophysical Research Letters, 2001, 28, 2723-2726.	1.5	246
10	On crack-tip stress state: An experimental evaluation of three-dimensional effects. International Journal of Solids and Structures, 1986, 22, 121-134.	1.3	218
11	Dynamically propagating shear bands in impact-loaded prenotched platesâ€”II. Numerical simulations. Journal of the Mechanics and Physics of Solids, 1996, 44, 1007-1032.	2.3	183
12	Intersonic shear cracks and fault ruptures. Advances in Physics, 2002, 51, 1189-1257.	35.9	175
13	On the temperature distribution at the vicinity of dynamically propagating cracks in 4340 steel. Journal of the Mechanics and Physics of Solids, 1991, 39, 385-415.	2.3	159
14	Dr. Bush writes a report: "science--the endless frontier". Science, 1976, 191, 41-47.	6.0	149
15	Mesh-free Galerkin simulations of dynamic shear band propagation and failure mode transition. International Journal of Solids and Structures, 2002, 39, 1213-1240.	1.3	149
16	A coherent gradient sensor for crack tip deformation measurements: analysis and experimental results. International Journal of Fracture, 1991, 48, 193-204.	1.1	140
17	Dynamic shear bands: an investigation using high speed optical and infrared diagnostics. Mechanics of Materials, 2001, 33, 371-402.	1.7	130
18	Quasi-static and dynamic crack growth along bimaterial interfaces: A note on crack-tip field measurements using coherent gradient sensing. Experimental Mechanics, 1991, 31, 243-251.	1.1	117

#	Article	IF	Citations
19	The determination of dynamic fracture toughness of AISI 4340 steel by the shadow spot method. Journal of the Mechanics and Physics of Solids, 1984, 32, 443-460.	2.3	112
20	Analysis of the optical method of caustics for dynamic crack propagation. Engineering Fracture Mechanics, 1980, 13, 331-347.	2.0	110
21	Shear dominated transonic interfacial crack growth in a bimaterial-I. Experimental observations. Journal of the Mechanics and Physics of Solids, 1995, 43, 169-179.	2.3	110
22	Optical mapping of crack tip deformations using the methods of transmission and reflection coherent gradient sensing: a study of crack tip K-dominance. International Journal of Fracture, 1991, 52, 91-117.	1.1	109
23	On the Stoney Formula for a Thin Film/Substrate System With Nonuniform Substrate Thickness. Journal of Applied Mechanics, Transactions ASME, 2007, 74, 1276-1281.	1.1	108
24	Dynamic fracture initiation and propagation in 4340 steel under impact loading. International Journal of Fracture, 1990, 43, 271-285.	1.1	103
25	A Micromechanics Based Constitutive Model for Brittle Failure at High Strain Rates. Journal of Applied Mechanics, Transactions ASME, 2012, 79, .	1.1	99
26	Highly transient elastodynamic crack growth in a bimaterial interface: Higher order asymptotic analysis and optical experiments. Journal of the Mechanics and Physics of Solids, 1993, 41, 1887-1954.	2.3	96
27	Intersonic crack propagation in bimaterial systems. Journal of the Mechanics and Physics of Solids, 1998, 46, 1789-1814.	2.3	96
28	Dynamic shear band propagation and micro-structure of adiabatic shear band. Computer Methods in Applied Mechanics and Engineering, 2001, 191, 73-92.	3.4	81
29	Subsonic and intersonic shear rupture of weak planes with a velocity weakening cohesive zone. Journal of Geophysical Research, 2002, 107, ESE 7-1.	3.3	81
30	Understanding dynamic friction through spontaneously evolving laboratory earthquakes. Nature Communications, 2017, 8, 15991.	5.8	79
31	Optical Measurement of the Plastic Strain Concentration at a Crack Tip in a Ductile Steel Plate. Journal of Engineering Materials and Technology, Transactions of the ASME, 1982, 104, 115-120.	0.8	73
32	Pulse-like and crack-like ruptures in experiments mimicking crustal earthquakes. Proceedings of the National Academy of Sciences of the United States of America, 2007, 104, 18931-18936.	3.3	71
33	Shear dominated transonic interfacial crack growth in a bimaterial I-II. Asymptotic fields and favorable velocity regimes. Journal of the Mechanics and Physics of Solids, 1995, 43, 189-206.	2.3	69
34	Modeling and simulation of intersonic crack growth. International Journal of Solids and Structures, 2004, 41, 1773-1799.	1.3	67
35	Dynamic failure mechanics. International Journal of Solids and Structures, 2000, 37, 331-348.	1.3	66
36	Experimental observations of intersonic crack growth in asymmetrically loaded unidirectional composite plates. Philosophical Magazine A: Physics of Condensed Matter, Structure, Defects and Mechanical Properties, 2001, 81, 571-595.	0.8	65

#	Article	IF	Citations
37	Three-Dimensional Effects Near a Crack Tip in a Ductile Three-Point Bend Specimen: Part Iâ€”A Numerical Investigation. Journal of Applied Mechanics, Transactions ASME, 1990, 57, 607-617.	1.1	62
38	Dynamic crack initiation and growth in thick unidirectional graphite/epoxy plates. Composites Science and Technology, 1997, 57, 55-65.	3.8	61
39	Impact failure characteristics in sandwich structures. International Journal of Solids and Structures, 2002, 39, 4215-4235.	1.3	61
40	On the Conversion of Plastic Work into Heat During High-Strain-Rate Deformation. AIP Conference Proceedings, 2002, , .	0.3	60
41	Self-Healing Pulse-Like Shear Ruptures in the Laboratory. Science, 2006, 313, 1765-1768.	6.0	59
42	Full field measurements of the dynamic deformation field around a growing adiabatic shear band at the tip of a dynamically loaded crack or notch. Journal of the Mechanics and Physics of Solids, 1994, 42, 1679-1697.	2.3	58
43	Intersonic shear crack growth along weak planes. Materials Research Innovations, 2000, 3, 236-243.	1.0	58
44	The Micromechanics of Westerley Granite at Large Compressive Loads. Pure and Applied Geophysics, 2011, 168, 2181-2198.	0.8	56
45	On the dynamic fracture of structural metals. International Journal of Fracture, 1985, 27, 169-186.	1.1	55
46	Analysis of the Optical Shadow Spot Method for a Tensile Crack in a Power-Law Hardening Material. Journal of Applied Mechanics, Transactions ASME, 1983, 50, 777-782.	1.1	54
47	Observations of transient high temperature vortical microstructures in solids during adiabatic shear banding. Physical Review E, 2001, 64, 036128.	0.8	54
48	Investigation of the mechanics of intersonic crack propagation along a bimaterial interface using coherent gradient sensing and photoelasticity. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 1997, 453, 2649-2667.	1.0	53
49	Full-field optical measurement of curvatures in ultra-thin-filmâ€“substrate systems in the range of geometrically nonlinear deformations. Journal of Applied Physics, 2001, 89, 6116-6129.	1.1	51
50	An experimental study of impact-induced failure events in homogeneous layered materials using dynamic photoelasticity and high-speed photography. Optics and Lasers in Engineering, 2003, 40, 263-288.	2.0	51
51	Experimental evidence that thrust earthquake ruptures might open faults. Nature, 2017, 545, 336-339.	13.7	51
52	On the method of caustics: An exact analysis based on geometrical optics. Journal of Elasticity, 1985, 15, 347-367.	0.9	49
53	Measurement of transient crack-tip deformation fields using the method of coherent gradient sensing. Journal of the Mechanics and Physics of Solids, 1992, 40, 339-372.	2.3	48
54	The effect of thin film/substrate radii on the Stoney formula for thin film/substrate subjected to nonuniform axisymmetric misfit strain and temperature. Journal of Mechanics of Materials and Structures, 2006, 1, 1041-1053.	0.4	46

#	Article	IF	Citations
55	Spatiotemporal properties of Sub-Rayleigh and supershear rupture velocity fields: Theory and experiments. Journal of the Mechanics and Physics of Solids, 2016, 93, 153-181.	2.3	46
56	Three-dimensional elastostatics of a layer and a layered medium. Journal of Elasticity, 1987, 18, 3-50.	0.9	44
57	A three-dimensional numerical investigation of fracture initiation by ductile failure mechanisms in a 4340 steel. International Journal of Fracture, 1992, 56, 1-24.	1.1	41
58	Impact failure characteristics in sandwich structures. Part II: Effects of impact speed and interfacial strength. International Journal of Solids and Structures, 2002, 39, 4237-4248.	1.3	41
59	Stresses in a Multilayer Thin Film/Substrate System Subjected to Nonuniform Temperature. Journal of Applied Mechanics, Transactions ASME, 2008, 75, .	1.1	41
60	On the Extent of Dominance of Asymptotic Elastodynamic Crack-Tip Fields: Part Iâ€"An Experimental Study Using Bifocal Caustics. Journal of Applied Mechanics, Transactions ASME, 1991, 58, 87-94.	1.1	37
61	Million frames per second infrared imaging system. Review of Scientific Instruments, 2000, 71, 3762.	0.6	36
62	Analysis of supershear transition regimes in rupture experiments: the effect of nucleation conditions and friction parameters. Geophysical Journal International, 2009, 177, 717-732.	1.0	36
63	Full-field Ultrahigh-speed Quantification of Dynamic Shear Ruptures Using Digital Image Correlation. Experimental Mechanics, 2019, 59, 551-582.	1.1	36
64	On the influence of fault bends on the growth of sub-Rayleigh and intersonic dynamic shear ruptures. Journal of Geophysical Research, 2003, 108, .	3.3	34
65	Non-uniform, axisymmetric misfit strain: in thin films bonded on plate substrates/substrate systems: the relation between non-uniform film stresses and system curvatures. Acta Mechanica Sinica/Lixue Xuebao, 2005, 21, 362-370.	1.5	34
66	Pulse-like and crack-like dynamic shear ruptures on frictional interfaces: experimental evidence, numerical modeling, and implications. International Journal of Fracture, 2010, 163, 27-39.	1.1	34
67	Analysis of coherent gradient sensing (CGS) by fourier optics. Optics and Lasers in Engineering, 1996, 25, 25-53.	2.0	30
68	Numerical modelling and experimental validation of dynamic fracture events along weak planes. Computer Methods in Applied Mechanics and Engineering, 2007, 196, 3833-3840.	3.4	30
69	A note on the asymptotic stress field of a non-uniformly propagating dynamic crack. International Journal of Fracture, 1991, 50, R39-R45.	1.1	29
70	Finite element simulations of dynamic shear rupture experiments and dynamic path selection along kinked and branched faults. Journal of Geophysical Research, 2009, 114, .	3.3	29
71	Anatomy of strike-slip fault tsunami genesis. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	3.3	29
72	The interpretation of optical caustics in the presence of dynamic non-uniform crack-tip motion histories: A study based on a higher order transient crack-tip expansion. International Journal of Solids and Structures, 1993, 30, 875-897.	1.3	28

#	Article	IF	Citations
73	Rupture modes in laboratory earthquakes: Effect of fault prestress and nucleation conditions. Journal of Geophysical Research, 2010, 115, .	3.3	28
74	On the Extent of Dominance of Asymptotic Elastodynamic Crack-Tip Fields: Part IIâ€"Numerical Investigation of Three-Dimensional and Transient Effects. Journal of Applied Mechanics, Transactions ASME, 1991, 58, 95-103.	1.1	25
75	On the dependence of the dynamic crack tip temperature fields in metals upon crack tip velocity and material parameters. Mechanics of Materials, 1993, 16, 337-350.	1.7	25
76	Impact Damage Visualization of Heterogeneous Two-layer Materials Subjected to Low-speed Impact. International Journal of Damage Mechanics, 2005, 14, 215-233.	2.4	25
77	Static Laboratory Earthquake Measurements with the Digital Image Correlation Method. Experimental Mechanics, 2015, 55, 77-94.	1.1	25
78	Dynamic measurement of the J integral in ductile metals: Comparison of experimental and numerical techniques. International Journal of Fracture, 1990, 42, 209-230.	1.1	24
79	On the higher order asymptotic analysis of a non-uniformly propagating dynamic crack along an arbitrary path. Journal of Elasticity, 1994, 35, 27-60.	0.9	24
80	An experimental study of dynamic delamination of thick fiber reinforced polymeric matrix composites. Experimental Mechanics, 1997, 37, 360-366.	1.1	24
81	Observing ideal â€œself-similarâ€•crack growth in experiments. Engineering Fracture Mechanics, 2006, 73, 2748-2755.	2.0	24
82	The Effect of Crack-Tip Plasticity on the Determination of Dynamic Stress-Intensity Factors by the Optical Method of Caustics. Journal of Applied Mechanics, Transactions ASME, 1981, 48, 302-308.	1.1	23
83	Three-Dimensional Effects Near a Crack Tip in a Ductile Three-Point Bend Specimen: Part IIâ€"An Experimental Investigation Using Interferometry and Caustics. Journal of Applied Mechanics, Transactions ASME, 1990, 57, 618-626.	1.1	23
84	Dynamic crack propagation in elastic-perfectly plastic solids under plane stress conditions. Journal of the Mechanics and Physics of Solids, 1991, 39, 683-722.	2.3	23
85	Extension of Stoneyâ€™s Formula to Arbitrary Temperature Distributions in Thin Film/Substrate Systems. Journal of Applied Mechanics, Transactions ASME, 2007, 74, 1225-1233.	1.1	23
86	An experimental study of the effect of offâ€fault damage on the velocity of a slip pulse. Journal of Geophysical Research, 2008, 113, .	3.3	23
87	Pressure shock fronts formed by ultra-fast shear cracks in viscoelastic materials. Nature Communications, 2018, 9, 4754.	5.8	23
88	Caustics By Reflection And Their Application To Elastic-Plastic And Dynamic Fracture Mechanics. Optical Engineering, 1988, 27, .	0.5	21
89	The effects of hyperbolic heat conduction around a dynamically propagating crack tip. Mechanics of Materials, 1993, 15, 263-278.	1.7	21
90	Recent Milestones in Unraveling the Full-Field Structure of Dynamic Shear Cracks and Fault Ruptures in Real-Time: From Photoelasticity to Ultrahigh-Speed Digital Image Correlation. Journal of Applied Mechanics, Transactions ASME, 2020, 87, .	1.1	21

#	Article	IF	Citations
91	A Finite Element Study of Stable Crack Growth Under Plane Stress Conditions: Part Iâ€"Elastic-Perfectly Plastic Solids. Journal of Applied Mechanics, Transactions ASME, 1987, 54, 838-845.	1.1	19
92	Effects of Off-fault Damage on Earthquake Rupture Propagation: Experimental Studies. Pure and Applied Geophysics, 2009, 166, 1629-1648.	0.8	19
93	A note on the measurement of K and J under small scale yielding conditions using the method of caustics. International Journal of Fracture, 1986, 30, R43-R48.	1.1	18
94	The screw dislocation problem in incompressible finite elastostatics: a discussion of nonlinear effects. Journal of Elasticity, 1988, 20, 3-40.	0.9	18
95	On the application of the optical method of caustics to the investigation of transient elastodynamic crack problems: Limitations of the classical interpretation. Optics and Lasers in Engineering, 1990, 13, 183-210.	2.0	18
96	On the sensitivity of coherent gradient sensing: Part IIâ€"An experimental investigation of accuracy in fracture mechanics applications. Optics and Lasers in Engineering, 1993, 18, 25-51.	2.0	18
97	A Comparison of X-Ray Microdiffraction and Coherent Gradient Sensing in Measuring Discontinuous Curvatures in Thin Film: Substrate Systems. Journal of Applied Mechanics, Transactions ASME, 2006, 73, 723-729.	1.1	18
98	Experimental investigation of strong ground motion due to thrust fault earthquakes. Journal of Geophysical Research: Solid Earth, 2014, 119, 1316-1336.	1.4	18
99	Spatiotemporal Properties of Subâ€Rayleigh and Supershear Ruptures Inferred From Fullâ€Field Dynamic Imaging of Laboratory Experiments. Journal of Geophysical Research: Solid Earth, 2020, 125, e2019JB018922.	1.4	18
100	Intermittent lab earthquakes in dynamically weakening fault gouge. Nature, 2022, 606, 922-929.	13.7	18
101	Examining the temporal evolution of hypervelocity impact phenomena via high-speed imaging and ultraviolet-visible emission spectroscopy. Journal of Applied Physics, 2014, 116, .	1.1	16
102	A Finite Element Study of Stable Crack Growth Under Plane Stress Conditions: Part IIâ€"Influence of Hardening. Journal of Applied Mechanics, Transactions ASME, 1987, 54, 846-853.	1.1	15
103	On the sensitivity of Coherent Gradient Sensing: Part Iâ€"A theoretical investigation of accuracy in fracture mechanics applications. Optics and Lasers in Engineering, 1992, 17, 83-101.	2.0	15
104	Intersonic crack propagation along interfaces: Experimental observations and analysis. Experimental Mechanics, 1998, 38, 218-225.	1.1	15
105	Dynamic path selection along branched faults: Experiments involving subâ€Rayleigh and supershear ruptures. Journal of Geophysical Research, 2009, 114, .	3.3	15
106	Illuminating the physics of dynamic friction through laboratory earthquakes on thrust faults. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 21095-21100.	3.3	15
107	Dynamic Failure Mechanisms in Beryllium-Bearing Bulk Metallic Glasses. Materials Research Society Symposia Proceedings, 1998, 554, 419.	0.1	14
108	Particle Velocimetry and Photoelasticity Applied to the Study of Dynamic Sliding Along Frictionally-Held Bimaterial Interfaces: Techniques and Feasibility. Experimental Mechanics, 2006, 46, 205-216.	1.1	14

#	Article	IF	Citations
109	Experimental investigation of converging shocks in water with various confinement materials. Shock Waves, 2010, 20, 395-408.	1.0	13
110	Enhanced Digital Image Correlation Analysis of Ruptures with Enforced Traction Continuity Conditions Across Interfaces. Applied Sciences (Switzerland), 2019, 9, 1625.	1.3	13
111	Dynamic rupture initiation and propagation in a fluid-injection laboratory setup with diagnostics across multiple temporal scales. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	3.3	12
112	Negative plastic flow and its prevention in elasto-plastic finite element computation. Finite Elements in Analysis and Design, 1990, 7, 181-191.	1.7	11
113	A finite element investigation of quasi-static and dynamic asymptotic crack-tip fields in hardening elastic-plastic solids under plane stress. International Journal of Fracture, 1992, 57, 291-308.	1.1	11
114	Determination of temperature field around a rapidly moving crack-tip in an elastic-plastic solid. International Journal of Heat and Mass Transfer, 1996, 39, 677-690.	2.5	11
115	Laboratory Earthquakes. International Journal of Fracture, 2006, 138, 211-218.	1.1	11
116	Spontaneous Mixed-Mode Fracture in Bonded Similar and Dissimilar Materials. Experimental Mechanics, 2006, 46, 163-171.	1.1	11
117	Experimental investigations of spontaneous bimaterial interfacial fractures. Journal of Mechanics of Materials and Structures, 2008, 3, 173-184.	0.4	11
118	Extension of the Coherent Gradient Sensor (CGS) to the Combined Measurement of In-Plane and Out-of-Plane Displacement Field Gradients. Experimental Mechanics, 2009, 49, 277-289.	1.1	11
119	A finite element investigation of quasi-static and dynamic asymptotic crack-tip fields in hardening elastic-plastic solids under plane stress. International Journal of Fracture, 1992, 58, 137-156.	1.1	10
120	In Situ Optical Investigations of Hypervelocity Impact Induced Dynamic Fracture. Experimental Mechanics, 2012, 52, 161-170.	1.1	10
121	Experimental Measurement of the Temperature Rise Generated During Dynamic Crack Growth in Metals. Applied Mechanics Reviews, 1990, 43, S260-S265.	4.5	9
122	Experimental validation of large-scale simulations of dynamic fracture along weak planes. International Journal of Impact Engineering, 2009, 36, 888-898.	2.4	9
123	The Conversion of Plastic Work to Heat Around a Dynamically Propagating Crack in Metals. Journal of the Mechanical Behavior of Materials, 1993, 4, 375-386.	0.7	8
124	Interaction of a Dynamic Rupture on a Fault Plane with Short Frictionless Fault Branches. Pure and Applied Geophysics, 2007, 164, 1881-1904.	0.8	8
125	Dynamics of Flexoelectric Materials: Subsonic, Intersonic, and Supersonic Ruptures and Mach Cone Formation. Journal of Applied Mechanics, Transactions ASME, 2020, 87, .	1.1	8
126	A point load in the interior of a thick plate. Computers and Structures, 1988, 29, 69-87.	2.4	7

#	Article	IF	Citations
127	Sliding along frictionally held incoherent interfaces in homogeneous systems subjected to dynamic shear loading: a photoelastic study. International Journal of Fracture, 2006, 140, 213-233.	1.1	7
128	On the Scale of the Nonlinear Effect in a Crack Problem. Journal of Applied Mechanics, Transactions ASME, 1986, 53, 545-549.	1.1	6
129	On the dynamic fracture of structural metals. , 1985, , 43-60.		6
130	Signature of transition to supershear rupture speed in the coseismic off-fault damage zone. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2021, 477, 20210364.	1.0	6
131	Supershear shock front contribution to the tsunami from the 2018 Mw 7.5 Palu, Indonesia earthquake. Geophysical Journal International, 2022, 230, 2089-2097.	1.0	6
132	A Travelâ€Time Path Calibration Strategy for Backâ€Projection of Large Earthquakes and Its Application and Validation Through the Segmented Superâ€Shear Rupture Imaging of the 2002 Mw 7.9 Denali Earthquake. Journal of Geophysical Research: Solid Earth, 2022, 127, .	1.4	6
133	Reexamination of Jumps Across Quasi-Statically Propagating Surfaces Under Generalized Plane Stress in Anisotropically Hardening Elastic-Plastic Solids. Journal of Applied Mechanics, Transactions ASME, 1987, 54, 519-524.	1.1	5
134	Pressure-Dependent, Infrared-Emitting Phenomenon in Hypervelocity Impact. Journal of Applied Mechanics, Transactions ASME, 2015, 82, .	1.1	5
135	Effects of Off-fault Damage on Earthquake Rupture Propagation: Experimental Studies. , 2009, , 1629-1648.		5
136	A boundary element formulation based on the three-dimensional elastostatic fundamental solution for the infinite layer: Part Iâ€"theoretical and numerical development. International Journal for Numerical Methods in Engineering, 1993, 36, 3097-3130.	1.5	4
137	Sliding of Frictionally Held Incoherent Interfaces Under Dynamic Shear Loading. , 2004, , 141.		4
138	Dynamic Fracture Properties of Titanium Alloys. Experimental Mechanics, 2006, 46, 399-406.	1.1	4
139	FORCE AT A POINT IN THE INTERIOR OF A THREE-DIMENSIONAL ELASTIC LAYER. Quarterly Journal of Mechanics and Applied Mathematics, 1988, 41, 83-95.	0.5	3
140	A Note on the Use of High-Speed Infrared Detectors for the Measurement of Temperature Fields at the Vicinity of Dynamically Growing Cracks in 4340 Steel. Journal of Applied Mechanics, Transactions ASME, 1992, 59, 450-452.	1.1	3
141	A boundary element formulation based on the three-dimensional elastostatic fundamental solution for the infinite layer: Part IIâ€"Three-dimensional examples. International Journal for Numerical Methods in Engineering, 1993, 36, 3131-3159.	1.5	3
142	Dynamics and Nearâ€Field Surface Motions of Transitioned Supershear Laboratory Earthquakes in Thrust Faults. Journal of Geophysical Research: Solid Earth, 2022, 127, .	1.4	3
143	Determination of the yield properties of thin films using enhanced coherent gradient sensing. Experimental Mechanics, 2001, 41, 403-411.	1.1	2
144	Laboratory earthquakes along faults with a low velocity zone: Directionality and pulse-like ruptures. Extreme Mechanics Letters, 2021, 46, 101321.	2.0	2

#	Article	IF	Citations
145	Measurement of Transient Crack Tip Fields Using the Coherent Gradient Sensor. , 1991, , 182-203.		2
146	Reply to comment on â€œHow fast is rupture during an earthquake? New insights from the 1999 Turkey earthquakesâ€• Geophysical Research Letters, 2002, 29, 84-1-84-2.	1.5	1
147	Impact Damage Visualization of Composite/Sandwich Structures Using High-Speed Optical Diagnostics. , 2002, , .		1
148	Laboratory earthquakes. , 2006, , 211-218.		1
149	Symposium on Failure Modes in Dynamic Fracture. Applied Mechanics Reviews, 1990, 43, S246-S246.	4.5	0
150	Full Field Measurements of Curvature using Coherent Gradient Sensing: Application to Thin Film Characterization. Materials Research Society Symposia Proceedings, 1997, 505, 15.	0.1	0
151	DYNAMIC SHEAR-DOMINATED, SUPERSONIC CRACK GROWTH IN BIMATERIAL AND LAYERED SYSTEMS AND ITS RELATIONSHIP TO EARTHQUAKE RUPTURE. Journal of the Mechanical Behavior of Materials, 2000, 11, 191-204.	0.7	0
152	Influence of Interfacial Mechanical Properties on the Impact Behaviors of Multi-Layered Materials. , 2002, , .		0
153	Dynamic Optical Investigations of Hypervelocity Impact Damage. , 2009, , .		0
154	Dynamic Optical Investigations of Hypervelocity Impact Damage. , 2009, , .		0
155	Feasibility of Non-Equilibrium Hypersonic Flow Measurements at the Small Particle Hypervelocity Impact Range. , 2012, , .		0
156	2018 Timoshenko Medal Acceptance Lecture: Academic Family. Journal of Applied Mechanics, Transactions ASME, 2019, 86, .	1.1	0
157	Evolution of dynamic shear strength of frictional interfaces during rapid normal stress variations. EPJ Web of Conferences, 2021, 250, 01016.	0.1	0
158	Dynamic Crack Growth along Interfaces. Solid Mechanics and Its Applications, 2002, , 261-270.	0.1	0
159	Real-Time Experimental Investigation on Dynamic Failure of Sandwich Structures and Layered Materials. , 2009, , 571-603.		0
160	Pulse-like and crack-like dynamic shear ruptures on frictional interfaces: experimental evidence, numerical modeling, and implications. IUTAM Symposium on Cellular, Molecular and Tissue Mechanics, 2010, , 281-293.	0.1	0
161	Boundary Integral Equation of a Three-dimensional Semi-infinite Crack. , 1988, , 159-168.		0
162	A Bifocal Arrangement for Reflected Caustics for the Investigation of the Domain of Dominance of Asymptotic Elastic Fields in Dynamic Fracture. , 1989, , 715-727.		0

#	Article	IF	Citations
163	Dynamic measurement of the J integral in ductile metals: Comparison of experimental and numerical techniques. , 1990, , 209-230.		0
164	Dynamically Growing Shear Bands in Metals: A Study of Transient Temperature and Deformation Fields. Solid Mechanics and Its Applications, 1997, , 141-150.	0.1	0
165	Optical Determination of the Intensity of Crack Tip Deformation in a Power-Law Hardening Material. , 1983, , 265-272.		0