Jose Fernandez-Saez

List of Publications by Year
in descending order

72	2,532	236833	206029
papers	citations	25 h-index	48 g-index

72	72	72	1451
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Bending of Eulerâ€“Bernoulli beams using Eringenâ€™s integral formulation: A paradox resolved. International Journal of Engineering Science, 2016, 99, 107-116.	2.7	358
2	Natural frequencies for bending vibrations of Timoshenko cracked beams. Journal of Sound and Vibration, 2006, 290, 640-653.	2.1	163
3	Vibrations of Bernoulli-Euler beams using the two-phase nonlocal elasticity theory. International Journal of Engineering Science, 2017, 119, 232-248.	2.7	153
4	APPROXIMATE CALCULATION OF THE FUNDAMENTAL FREQUENCY FOR BENDING VIBRATIONS OF CRACKED BEAMS. Journal of Sound and Vibration, 1999, 225, 345-352.	2.1	123
5	Improvement of chatter stability in boring operations with passive vibration absorbers. International Journal of Mechanical Sciences, 2010, 52, 1376-1384.	3.6	111
6	Bending vibrations of rotating nonuniform nanocantilevers using the Eringen nonlocal elasticity theory. Composite Structures, 2012, 94, 2990-3001.	3.1	107
7	Statistical analysis of the mechanical properties of composite materials. Composites Part B: Engineering, 2000, 31, 375-381.	5.9	98
8	Free transverse vibrations of cracked nanobeams using a nonlocal elasticity model. Journal of Applied Physics, 2009, 105, .	1.1	98
9	On the consistency of the nonlocal strain gradient elasticity. International Journal of Engineering Science, 2019, 138, 65-81.	2.7	78
10	A constitutive model for analyzing martensite formation in austenitic steels deforming at high strain rates. International Journal of Plasticity, 2012, 29, 77-101.	4.1	75
11	Determination of dynamic fracture-initiation toughness using three-point bending tests in a modified Hopkinson pressure bar. Experimental Mechanics, 2003, 43, 379-386.	1.1	62
12	Optimization of passive vibration absorbers to reduce chatter in boring. Mechanical Systems and Signal Processing, 2013, 41, 691-704.	4.4	60
13	FUNDAMENTAL FREQUENCY OF CRACKED BEAMS IN BENDING VIBRATIONS: AN ANALYTICAL APPROACH. Journal of Sound and Vibration, 2002, 256, 17-31.	2.1	59
14	An implicit consistent algorithm for the integration of thermoviscoplastic constitutive equations in adiabatic conditions and finite deformations. International Journal of Solids and Structures, 2006, 43, 1594-1612.	1.3	58
15	Identification of the critical wavelength responsible for the fragmentation of ductile rings expanding at very high strain rates. Journal of the Mechanics and Physics of Solids, 2013, 61, 1357-1376.	2.3	41
16	A new 2D discrete model applied to dynamic crack propagation in brittle materials. International Journal of Solids and Structures, 2014, 51, 3787-3797.	1.3	32
17	An analysis of Gurson model with parameters dependent on triaxiality based on unitary cells. European Journal of Mechanics, A/Solids, 2009, 28, 417-427.	2.1	31
18	On the interplay between strain rate and strain rate sensitivity on flow localization in the dynamic expansion of ductile rings. International Journal of Solids and Structures, 2012, 49, 481-491.	1.3	31

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19	The role of constitutive relation in the stability of hyper-elastic spherical membranes subjected to dynamic inflation. International Journal of Engineering Science, 2015, 93, 31-45.	2.7	29
20	Mass detection in nanobeams from bending resonant frequency shifts. Mechanical Systems and Signal Processing, 2019, 116, 261-276.	4.4	29
21	A theoretical analysis of the free axial vibration of non-local rods with fractional continuum mechanics. Meccanica, 2015, 50, 2309-2323.	1.2	28
22	Resonator-based detection in nanorods. Mechanical Systems and Signal Processing, 2017, 93, 645-660.	4.4	28
23	Non-standard and constitutive boundary conditions in nonlocal strain gradient elasticity. Meccanica, 2020, 55, 469-479.	1.2	28
24	Torsion of cracked nanorods using a nonlocal elasticity model. Journal Physics D: Applied Physics, 2014, 47, 115304.	1.3	27
25	A modified Gurson model to account for the influence of the Lode parameter at high triaxialities. European Journal of Mechanics, A/Solids, 2016, 56, 31-44.	2.1	27
26	Axisymmetric free vibration of closed thin spherical nano-shell. Composite Structures, 2013, 104, 154-161.	3.1	26
27	Dynamic recrystallization and adiabatic shear localization. Mechanics of Materials, 2015, 81, 41-55.	1.7	25
28	Transverse free vibration of resonant nanoplate mass sensors: Identification of an attached point mass. International Journal of Mechanical Sciences, 2019, 150, 217-225.	3.6	25
29	Dynamic necking in materials with strain induced martensitic transformation. Journal of the Mechanics and Physics of Solids, 2014, 64, 316-337.	2.3	24
30	On the complete extinction of selected imperfection wavelengths in dynamically expanded ductile rings. Mechanics of Materials, 2013, 60, 107-120.	1.7	23
31	Unique determination of a single crack in a uniform simply supported beam in bending vibration. Journal of Sound and Vibration, 2016, 371, 94-109.	2.1	22
32	The critical neck spacing in ductile plates subjected to dynamic biaxial loading: On the interplay between loading path and inertia effects. International Journal of Solids and Structures, 2017, 108, 74-84.	1.3	22
33	Propagation of solitons in a two-dimensional nonlinear square lattice. International Journal of Non-Linear Mechanics, 2018, 106, 188-204.	1.4	22
34	Consistent integration of the constitutive equations of Gurson materials under adiabatic conditions. Computer Methods in Applied Mechanics and Engineering, 2008, 197, 1280-1295.	3.4	20
35	Hearing distributed mass in nanobeam resonators. International Journal of Solids and Structures, 2020, 193-194, 568-592.	1.3	20
36	Crack identification in non-uniform rods by two frequency data. International Journal of Solids and Structures, 2015, 75-76, 61-80.	1.3	19

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37	Collective behaviour and spacing of necks in ductile plates subjected to dynamic biaxial loading. Journal of the Mechanics and Physics of Solids, 2015, 85, 245-269.	2.3	19
38	Nonlinear continuum models for the dynamic behavior of 1D microstructured solids. International Journal of Solids and Structures, 2017, 117, 111-122.	1.3	19
39	Three-dimensional effects on the dynamic fracture determination of Al 7075-T651 using TPB specimens. International Journal of Solids and Structures, 2008, 45, 2203-2219.	1.3	18
40	Some aspects of damage and failure mechanisms at high strain-rate and elevated temperatures of particulate magnesium matrix composites. Composites Part B: Engineering, 2003, 34, 551-560.	5.9	17
41	Identification of two cracks in a rod by minimal resonant and antiresonant frequency data. Mechanical Systems and Signal Processing, 2015, 60-61, 1-13.	4.4	17
42	Crack-front propagation during three-point-bending tests of polymethyl-methacrylate beams. Polymer Testing, 2010, 29, 113-118.	2.3	16
43	The full nonlinear crack detection problem in uniform vibrating rods. Journal of Sound and Vibration, 2015, 339, 99-111.	2.1	16
44	Recovering added mass in nanoresonator sensors from finite axial eigenfrequency data. Mechanical Systems and Signal Processing, 2019, 130, 122-151.	4.4	16
45	Statistical distribution of the estimator of Weibull modulus. Journal of Materials Science Letters, 2001, 20, 847-849.	0.5	15
46	Some applications of BurzyÅ„ski yield condition in metal plasticity. Materials & Design, 2011, 32, 628-635.	5.1	15
47	An analysis of microstructural and thermal softening effects in dynamic necking. Mechanics of Materials, 2015, 80, 298-310.	1.7	15
48	A 2D discrete model with a bilinear softening constitutive law applied to dynamic crack propagation problems. International Journal of Fracture, 2016, 197, 81-97.	1.1	13
49	Identification of two cracks with different severity in beams and rods from minimal frequency data. JVC/Journal of Vibration and Control, 2016, 22, 3102-3117.	1.5	12
50	Identification of an open crack in a beam with variable profile by two resonant frequencies. JVC/Journal of Vibration and Control, 2018, 24, 839-859.	1.5	12
51	Nonstandard continualization of 1D lattice with next-nearest interactions. Low order ODEs and enhanced prediction of the dispersive behavior. Mechanics of Advanced Materials and Structures, 2022, 29, 923-932.	1.5	12
52	On the estimation of percentiles of the Weibull distribution. Journal of Materials Science Letters, 1999, 18, 1441-1443.	0.5	11
53	Estimating lower-bound fracture parameters for brittle materials. Journal of Materials Science Letters, 1993, 12, 1493-1496.	0.5	11
54	Axisymmetric free vibration of closed thin spherical nanoshells with bending effects. JVC/Journal of Vibration and Control, 2016, 22, 3789-3806.	1.5	10

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55	First-Order Solutions for the Buckling Loads of Euler-Bernoulli Weakened Columns. Journal of Engineering Mechanics - ASCE, 2010, 136, 674-679.	1.6	8
56	A Note on the Use of Approximate Solutions for the Bending Vibrations of Simply Supported Cracked Beams. Journal of Vibration and Acoustics, Transactions of the ASME, 2010, 132, .	1.0	8
57	Mixed Mode Crack Propagation in Polymers Using a Discrete Lattice Method. Polymers, 2021, 13, 1290.	2.0	8
58	First order solutions for the buckling loads of weakened Timoshenko columns. Computers and Mathematics With Applications, 2012, 64, 2395-2407.	1.4	7
59	One-dimensional dispersion phenomena in terms of fractional media. European Physical Journal Plus, 2016, 131, 1.	1.2	7
60	Point mass identification in rectangular plates from minimal natural frequency data. Mechanical Systems and Signal Processing, 2016, 80, 245-261.	4.4	7
61	Crack identification in elastically restrained vibrating rods. International Journal of Non-Linear Mechanics, 2017, 94, 257-267.	1.4	7
62	General expressions for the stress intensity factor of a one-point bend beam. Engineering Fracture Mechanics, 2007, 74, 373-385.	2.0	6
63	Identification of general added mass distribution in nanorods from two-spectra finite data. Mechanical Systems and Signal Processing, 2019, 134, 106286.	4.4	6
64	Reproducing the nonlinear dynamic behavior of a structured beam with a generalized continuum model. Journal of Sound and Vibration, 2018, 420, 296-314.	2.1	5
65	The Î»-Curves Method for crack identification in beams. Procedia Engineering, 2017, 199, 1964-1969.	1.2	3
66	Generalized continuum model for the analysis of nonlinear vibrations of taut strings with microstructure. International Journal of Solids and Structures, 2019, 164, 157-167.	1.3	3
67	Eco-localization of a prey in a spider orb web. JVC/Journal of Vibration and Control, 0, , 107754632199354.	1.5	3
68	On the Mechanism of Bandgap Formation in Beams With Periodic Arrangement of Beam-Like Resonators. Journal of Vibration and Acoustics, Transactions of the ASME, 2019, 141, .	1.0	3
69	Determination of the dynamic stress intensity factor of a specimen under one-point bending from the measurement of the load-point displacement. European Physical Journal Special Topics, 2006, 134, 827-832.	0.2	2
70	Exact Eigensolutions for a Family of Nonuniform Rods With End Point Masses. Journal of Vibration and Acoustics, Transactions of the ASME, 2017, 139, .	1.0	1
71	Monitoring mass changes using nanoresonator sensors. Procedia Structural Integrity, 2019, 17, 98-104.	0.3	1
72	Determination of Dynamic Fracture-Initiation Toughness Using Three-Point Bending Tests in a Modified Hopkinson Pressure Bar. Experimental Mechanics, 2003, 43, 379-386.	1.1	1