JosÃ© Otero

List of Publications by Year
in descending order

64	1,067	393982	433756
papers	citations	19 h-index	31 g-index

64	64	64	590
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	An analytical and numerical approach for calculating effective material coefficients of piezoelectric fiber composites. International Journal of Solids and Structures, 2005, 42, 5692-5714.	1.3	199
2	Homogenization of magneto-electro-elastic multilaminated materials. Quarterly Journal of Mechanics and Applied Mathematics, 2008, 61, 311-332.	0.5	78
3	Asymptotic homogenization of laminated piezocomposite materials. International Journal of Solids and Structures, 1998, 35, 527-541.	1.3	71
4	Finite element and asymptotic homogenization methods applied to smart composite materials. Computational Mechanics, 2003, 33, 61-67.	2.2	50
5	Different approaches for calculating the effective elastic properties in composite materials under imperfect contact adherence. Composite Structures, 2013, 99, 264-275.	3.1	40
6	A recursive asymptotic homogenization scheme for multi-phase fibrous elastic composites. Mechanics of Materials, 2005, 37, 1119-1131.	1.7	31
7	On the effective behavior of viscoelastic composites in three dimensions. International Journal of Engineering Science, 2020, 157, 103377.	2.7	31
8	Dispersion relations for SH wave in magneto-electro-elastic heterostructures. International Journal of Solids and Structures, 2008, 45, 5356-5367.	1.3	29
9	Effective elastic shear stiffness of a periodic fibrous composite with non-uniform imperfect contact between the matrix and the fibers. International Journal of Solids and Structures, 2014, 51, 1253-1262.	1.3	29
10	Semi-analytical method for computing effective properties in elastic composite under imperfect contact. International Journal of Solids and Structures, 2013, 50, 609-622.	1.3	28
11	Dynamical behavior of a layered piezocomposite using the asymptotic homogenization method. Mechanics of Materials, 2005, 37, 33-44.	1.7	27
12	Homogenization and effective properties of periodic thermomagnetoelectroelastic composites. Journal of Mechanics of Materials and Structures, 2009, 4, 819-836.	0.4	25
13	Computation of the relaxation effective moduli for fibrous viscoelastic composites using the asymptotic homogenization method. International Journal of Solids and Structures, 2020, 190, 281-290.	1.3	25
14	Wave propagation in layered piezoelectric structures. Journal of Applied Physics, 1998, 83, 4652-4659.	1.1	24
15	Numerical and analytical analyses for active fiber composite piezoelectric composite materials. Journal of Intelligent Material Systems and Structures, 2015, 26, 101-118.	1.4	23
16	Effective properties of periodic fibrous electro-elastic composites with mechanic imperfect contact condition. International Journal of Mechanical Sciences, 2013, 73, 1-13.	3.6	22
17	Homogenization of heterogeneous piezoelectric medium. Mechanics Research Communications, 1997, 24, 75-84.	1.0	21
18	Interfacial waves between two piezoelectric half-spaces with electro-mechanical imperfect interface. Philosophical Magazine Letters, 2012, 92, 534-540.	0.5	21

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19	Interphase effect on the effective magneto-electro-elastic properties for three-phase fiber-reinforced composites by a semi-analytical approach. International Journal of Engineering Science, 2020, 154, 103310.	2.7	21
20	Constant mass model for the liquid-solid phase transition on a one-dimensional Stefan problem: Transient and steady state regimes. International Journal of Thermal Sciences, 2017, 118, 40-52.	2.6	20
21	Interfacial waves between piezoelectric and piezomagnetic half-spaces with magneto-electro-mechanical imperfect interface. Philosophical Magazine Letters, 2013, 93, 413-421.	0.5	19
22	Asymptotic and numerical homogenization methods applied to fibrous viscoelastic composites using Pronyâ€™sÂseries. Acta Mechanica, 2020, 231, 2761-2771.	1.1	19
23	Interfacial waves between two magneto-electro-elastic half-spaces with magneto-electro-mechanical imperfect interface. Philosophical Magazine Letters, 2014, 94, 629-638.	0.5	18
24	Analysis of fibrous elastic composites with nonuniform imperfect adhesion. Acta Mechanica, 2016, 227, 57-73.	1.1	16
25	Modeling the release of curcumin from microparticles of poly(hydroxybutyrate) [PHB]. International Journal of Biological Macromolecules, 2020, 144, 47-52.	3.6	15
26	Shear horizontal wave in multilayered piezoelectric structures: Effect of frequency, incidence angle and constructive parameters. International Journal of Solids and Structures, 2011, 48, 2941-2947.	1.3	14
27	Presence of Stark ladders in scattering of shear horizontal piezoelectric waves. Journal of Applied Physics, 2004, 96, 1178-1185.	1.1	12
28	Computation of effective properties in elastic composites under imperfect contact with different inclusion shapes. Mathematical Methods in the Applied Sciences, 2017, 40, 3290-3310.	1.2	12
29	Wave propagation in a piezoelectric layer. Journal of Applied Physics, 1997, 81, 7242-7247.	1.1	11
30	Fundamental incorporation of the density change during melting of a confined phase change material. Journal of Applied Physics, 2018, 123, 085105.	1.1	11
31	Dispersion relations for SH waves on a magnetoelectroelastic heterostructure with imperfect interfaces. Journal of Mechanics of Materials and Structures, 2011, 6, 969-993.	0.4	11
32	Dynamic homogenization for composites with embedded multioriented ellipsoidal inclusions. International Journal of Solids and Structures, 2015, 69-70, 121-130.	1.3	9
33	Effects of Pressure-Induced Density Changes in the Thermal Energy Absorbed by a Micro-Encapsulated Phase-Change Material. Molecules, 2019, 24, 1254.	1.7	8
34	Thermal expansion effects on the one-dimensional liquid-solid phase transition in high temperature phase change materials. AIP Advances, 2019, 9, 025125.	0.6	8
35	Computation of Effective Elastic Properties Using a Three-Dimensional Semi-Analytical Approach for Transversely Isotropic Nanocomposites. Applied Sciences (Switzerland), 2021, 11, 1867.	1.3	6
36	Non parabolic interface motion for the 1-D Stefan problem: Dirichlet boundary conditions. Thermal Science, 2017, 21, 2327-2336.	0.5	6

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37	Phase Velocity Method for Guided Wave Measurements in Composite Plates. Physics Procedia, 2015, 63, 54-60.	1.2	5
38	On the warping of the extreme ends of a beam under flexural oscillations. Journal of Sound and Vibration, 2018, 435, 234-245.	2.1	5
39	Effective behavior of long and short fiber-reinforced viscoelastic composites. Applications in Engineering Science, 2021, 6, 100037.	0.5	5
40	Micromechanical analysis of fibrous piezoelectric composites with imperfectly bonded adherence. Archive of Applied Mechanics, 2014, 84, 1565-1582.	1.2	4
41	Static effective characteristics in piezoelectric composite materials. Mathematical Methods in the Applied Sciences, 2017, 40, 3249-3264.	1.2	4
42	Viscoelastic effective properties for composites with rectangular cross-section fibers using the asymptotic homogenization method. Advanced Structured Materials, 2018, , 203-222.	0.3	4
43	Non-parabolic interface motion for the one-dimensional Stefan problem: Neumann boundary conditions. Thermal Science, 2017, 21, 2699-2708.	0.5	4
44	Asymptotic homogenization approach applied to Cosserat heterogeneous media. , 2022, , 459-491.		4
45	Microâ€“macro asymptotic approach applied to heterogeneous elastic micropolar media. Analysis of some examples. International Journal of Solids and Structures, 2022, 239-240, 111444.	1.3	4
46	Effects of Volume Changes on the Thermal Performance of PCM Layers Subjected to Oscillations of the Ambient Temperature: Transient and Steady Periodic Regimes. Molecules, 2022, 27, 2158.	1.7	3
47	Semi-analytical finite elements methods for dispersion curves using higher order elements for long range ultrasonic testing. , 2009, , .		2
48	Further understanding of doorway states in elastic systems. Journal of the Acoustical Society of America, 2017, 142, 646-652.	0.5	2
49	Interfacial waves in an A/B/A piezoelectric structure with electro-mechanical imperfect interfaces. Journal of Mechanics of Materials and Structures, 2017, 12, 457-470.	0.4	2
50	Unit Cell Models of Viscoelastic Fibrous Composites for Numerical Computation of Effective Properties. Advanced Structured Materials, 2018, , 69-82.	0.3	2
51	The mechanical response of thermoplastic polyethylene monoliths containing longitudinal microcapillaries. International Journal of Material Forming, 2018, 11, 135-147.	0.9	2
52	Effects of Total Thermal Balance on the Thermal Energy Absorbed or Released by a High-Temperature Phase Change Material. Molecules, 2021, 26, 365.	1.7	2
53	Energy localization in optical systems showing electromagnetic Wannier ladder resonances. Superlattices and Microstructures, 2016, 100, 799-807.	1.4	1
54	A solution for the local plane strain problems using elliptic integrals of Cauchy type. Mathematical Methods in the Applied Sciences, 2017, 40, 2660-2685.	1.2	1

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55	An approach for modeling non-ageing linear viscoelastic composites with general periodicity. Composite Structures, 2019, 223, 110927.	3.1	1
56	A solution for antiplaneâ€strain local problems using elliptic integrals of Cauchy type. Mathematical Methods in the Applied Sciences, 2017, 40, 5177-5192.	1.2	0
57	Multifractal spectra of extended states with gate tunable Rashba spin-orbit interaction in two-dimensional electron systems. AIP Advances, 2019, 9, 095003.	0.6	0
58	Thermo-elastic model for the prediction of thermodynamic properties of high temperature phase change materials under confinement: Isobaric and isochoric regimes. AIP Advances, 2020, 10, 045329.	0.6	0
59	Complex Fourier series expansion for the liquid-solid phase transition in PCM layers: transient and steady state periodic regimes. E3S Web of Conferences, 2021, 294, 05001.	0.2	0
60	Semi-Analytical Method for Computing Effective Thermoelastic Properties in Fiber-Reinforced Composite Materials. Applied Sciences (Switzerland), 2021, 11, 5354.	1.3	0
61	Shear vertical waves in laminated coupled electro-mechanic materials with imperfect contact conditions at the interfaces. Journal of Mechanics of Materials and Structures, 2021, 16, 123-137.	0.4	0
62	Effective Elastic Properties Using Maxwellâ€™s Approach for Transversely Isotropic Composites. Advanced Structured Materials, 2019, , 183-210.	0.3	0
63	Finite size corrections on the estimation of the effective diffusion coefficients through the dynamical behavior of the diffusion zone during gaseous nitriding of pure iron. Thermal Science and Engineering Progress, 2021, 28, 101096.	1.3	0
64	Thermophysical Characterization of Paraffin Wax Based on Mass-Accommodation Methods Applied to a Cylindrical Thermal Energy-Storage Unit. Molecules, 2022, 27, 1189.	1.7	0