Fernando M F SimÃµes

List of Publications by Year
in descending order

39 papers	820 citations	567144 15 h-index	501076 28 g-index
40 all docs	40 docs citations	40 times ranked	567 citing authors

#	Article	IF	Citations
1	A study of static and kinetic friction. International Journal of Engineering Science, 1990, 28, 29-92.	2.7	187
2	Dynamics of beams on non-uniform nonlinear foundations subjected to moving loads. Computers and Structures, 2015, 148, 26-34.	2.4	63
3	A framework for deformation, generalized diffusion, mass transfer and growth in multi-species multi-phase biological tissues. European Journal of Mechanics, A/Solids, 2005, 24, 757-781.	2.1	61
4	Universal analytical solution of the steady-state response of an infinite beam on a Pasternak elastic foundation under moving load. International Journal of Solids and Structures, 2018, 132-133, 245-263.	1.3	44
5	Instability and ill-posedness in some friction problems. International Journal of Engineering Science, 1998, 36, 1265-1293.	2.7	42
6	Finite element simulations of a hip joint with femoroacetabular impingement. Computer Methods in Biomechanics and Biomedical Engineering, 2014, 17, 1275-1284.	0.9	39
7	Articular cartilage with intra- and extrafibrillar waters: a chemo-mechanical model. Mechanics of Materials, 2004, 36, 515-541.	1.7	34
8	Finite element dynamic analysis of finite beams on a bilinear foundation under a moving load. Journal of Sound and Vibration, 2015, 346, 328-344.	2.1	34
9	Finite element dynamic analysis of beams on nonlinear elastic foundations under a moving oscillator. European Journal of Mechanics, A/Solids, 2018, 68, 9-24.	2.1	30
10	Dynamics of a beam on a bilinear elastic foundation under harmonic moving load. Acta Mechanica, 2018, 229, 4141-4165.	1.1	30
11	Vibrations of cracked beams: Discrete mass and stiffness models. Computers and Structures, 2016, 168, 68-77.	2.4	27
12	Dissipative graph solutions for a 2 degree-of-freedom quasistatic frictional contact problem. International Journal of Engineering Science, 1995, 33, 1959-1986.	2.7	20
13	Finite element modeling of a rail resting on a Winkler-Coulomb foundation and subjected to a moving concentrated load. International Journal of Mechanical Sciences, 2018, 140, 432-445.	3.6	20
14	A note on the dissipation due to generalized diffusion with electro-chemo-mechanical couplings in heteroionic clays. European Journal of Mechanics, A/Solids, 2004, 23, 763-782.	2.1	17
15	Instabilities in elasticâ€“plastic fluid-saturated porous media: harmonic wave versus acceleration wave analyses. International Journal of Solids and Structures, 1999, 36, 1277-1295.	1.3	16
16	Growth and decay of acceleration waves in non-associative elastic-plastic fluid-saturated porous media. International Journal of Solids and Structures, 1997, 34, 1583-1608.	1.3	15
17	Critical velocities of a beam on nonlinear elastic foundation under harmonic moving load. Procedia Engineering, 2017, 199, 2585-2590.	1.2	15
18	Effects of the pH on the mechanical behavior of articular cartilage and corneal stroma. International Journal of Solids and Structures, 2010, 47, 2201-2214.	1.3	14

#	ARTICLE	IF	CITATIONS
19	Moving loads on beams on Winkler foundations with passive frictional damping devices. Engineering Structures, 2017, 152, 211-225.	2.6	12
20	Biomechanical Aspects of Soft Tissues. , 0, , .		12
21	Effects of pH on transport properties of articular cartilages. Biomechanics and Modeling in Mechanobiology, 2010, 9, 45-63.	1.4	11
22	A true PML approach for steady-state vibration analysis of an elastically supported beam under moving load by a DLSFEM formulation. Computers and Structures, 2020, 239, 106295.	2.4	11
23	Mechanical effects of ionic replacements in articular cartilage. Part I: The constitutive model. Biomechanics and Modeling in Mechanobiology, 2005, 4, 63-80.	1.4	10
24	Articular cartilage with intra- and extrafibrillar waters â€“ mass transfer and generalized diffusion. European Journal of Mechanics, A/Solids, 2007, 26, 759-788.	2.1	10
25	Surface boundary conditions trigger flutter instability in non-associative elastic-plastic solids. International Journal of Solids and Structures, 1995, 32, 2155-2190.	1.3	8
26	Articular cartilage with intra and extrafibrillar waters â€“ Simulations of mechanical and chemical loadings by the finite element method. Computer Methods in Applied Mechanics and Engineering, 2008, 197, 4840-4857.	3.4	7
27	Mechanical effects of ionic replacements in articular cartilage. Part II: Simulations of successive substitutions of NaCl and CaCl2. Biomechanics and Modeling in Mechanobiology, 2005, 4, 81-99.	1.4	6
28	DLSFEMâ€“PML formulation for the steady-state response of a taut string on visco-elastic support under moving load. Meccanica, 2020, 55, 765-790.	1.2	6
29	Flutter instability in a non-associative elasticâ€“plastic layer: analytical versus finite element results. International Journal of Engineering Science, 2005, 43, 189-208.	2.7	3
30	Elastic-growing tissues: A growth rate law that satisfies the dissipation inequality. Mechanics of Materials, 2010, 42, 782-796.	1.7	3
31	Complementarity eigenvalue problems for nonlinear matrix pencils. Applied Mathematics and Computation, 2017, 312, 134-148.	1.4	3
32	Physical and Geometrical Nonlinear Dynamic Analysis of Beams on Foundations under Moving Loads. Journal of Engineering Mechanics - ASCE, 2020, 146, 04019114.	1.6	3
33	Buckling of unilaterally constrained columns by complementarity eigenvalue analyses. International Journal of Solids and Structures, 2017, 106-107, 46-55.	1.3	2
34	Finite element steady state solution of a beam on a frictionally damped foundation under a moving load. International Journal of Non-Linear Mechanics, 2019, 117, 103247.	1.4	2
35	Assessing the â€œ(in)stability of quasi-static pathsâ€. International Journal of Engineering Science, 2012, 55, 18-34.	2.7	1
36	A thermodynamically consistent growth law for collagen fiber reinforced tissues in a mixture context. Mechanics of Materials, 2014, 76, 45-63.	1.7	1

#	Article	IF	Citations
37	Finite element analyses of femoroacetabular impingement before and after hip arthroscopy. Bio-Medical Materials and Engineering, 2015, 26, 193-206.	0.4	1
38	Potential of neural networks for maximum displacement predictions in railway beams on frictionally damped foundations. Avances En Ciencias E IngenierÃas, 2019, 11, .	0.1	0
39	A Chemo-Mechanical Model for Articular Cartilage. , 2005, , 167-172.		0