Fm Andrade Pires

List of Publications by Citations

68 papers	1,461 citations	18 h-index	37 g-index
76 ext. papers	1,713 ext. citations	3.7 avg, IF	4.86 L-index

#	Paper	IF	Citations
68	Micromechanical analysis of polymer composites reinforced by unidirectional fibres: Part I – Constitutive modelling. *International Journal of Solids and Structures*, **2013**, 50, 1897-1905	3.1	150
67	Micromechanical analysis of polymer composites reinforced by unidirectional fibres: Part II – Micromechanical analyses. *International Journal of Solids and Structures*, **2013**, 50, 1906-1915	3.1	141
66	F-bar-based linear triangles and tetrahedra for finite strain analysis of nearly incompressible solids. Part I: formulation and benchmarking. *International Journal for Numerical Methods in Engineering*, **2005**, 62, 353-383	2.4	127
65	An extended GTN model for ductile fracture under high and low stress triaxiality. *International Journal of Plasticity*, **2014**, 54, 193-228	7.6	123
64	An assessment of isotropic constitutive models for ductile fracture under high and low stress triaxiality. *International Journal of Plasticity*, **2012**, 30-31, 81-115	7.6	115
63	The modelling of multi-fracturing solids and particulate media. *International Journal for Numerical Methods in Engineering*, **2004**, 60, 317-339	2.4	73
62	Numerical modelling of ductile plastic damage in bulk metal forming. *International Journal of Mechanical Sciences*, **2003**, 45, 273-294	5.5	63
61	Numerical simulation of the non-linear deformation of 5-harness satin weaves. *Computational Materials Science*, **2012**, 61, 116-126	3.2	54
60	On the finite element prediction of damage growth and fracture initiation in finitely deforming ductile materials. *Computer Methods in Applied Mechanics and Engineering*, **2004**, 193, 5223-5256	5.7	54
59	An assessment of the average nodal volume formulation for the analysis of nearly incompressible solids under finite strains. *Communications in Numerical Methods in Engineering*, **2004**, 20, 569-583		52
58	A Ductile Damage Nonlocal Model of Integral-type at Finite Strains: Formulation and Numerical Issues. *International Journal of Damage Mechanics*, **2011**, 20, 515-557	3	40
57	Determination of the size of the Representative Volume Element (RVE) for the simulation of heterogeneous polymers at finite strains. *Finite Elements in Analysis and Design*, **2016**, 119, 30-44	2.2	38
56	Finite element prediction of ductile fracture in sheet metal forming processes. *Journal of Materials Processing Technology*, **2006**, 177, 278-281	5.3	35
55	Assessment and comparison of non-local integral models for ductile damage. *International Journal of Damage Mechanics*, **2014**, 23, 261-296	3	22
54	A frictional mortar contact approach for the analysis of large inelastic deformation problems. *International Journal of Solids and Structures*, **2014**, 51, 1697-1715	3.1	21
53	Continuous-discontinuous formulation for ductile fracture. *International Journal of Material Forming*, **2011**, 4, 271-281	2	20
52	A mortar based approach for the enforcement of periodic boundary conditions on arbitrarily generated meshes. *Computer Methods in Applied Mechanics and Engineering*, **2014**, 274, 168-191	5.7	19

51	An adaptive sub-incremental strategy for the solution of homogenization-based multi-scale problems. *Computer Methods in Applied Mechanics and Engineering*, **2013**, 257, 164-182	5.7	19
50	Extending a radial point interpolation meshless method to non-local constitutive damage models. *Theoretical and Applied Fracture Mechanics*, **2016**, 85, 84-98	3.7	16
49	Evaluation of shear mechanisms and influence of the calibration point on the numerical results of the GTN model. *International Journal of Mechanical Sciences*, **2013**, 75, 407-422	5.5	15
48	Fibre steering for shear-loaded composite panels with cutouts. *Journal of Composite Materials*, **2014**, 48, 1917-1926	2.7	14
47	Analyzing the failure and damage of FRP composite laminates under high strain rates considering visco-plasticity. *Engineering Failure Analysis*, **2019**, 101, 257-273	3.2	13
46	Homogenization technique for heterogeneous composite materials using meshless methods. *Engineering Analysis With Boundary Elements*, **2018**, 92, 73-89	2.6	13
45	Intralaminar damage in polymer composites in the presence of finite fiber rotation: Part I Constitutive model. *Composite Structures*, **2016**, 151, 114-126	5.3	13
44	A comparison of shear mechanisms for the prediction of ductile failure under low stress triaxiality. *International Journal of Structural Integrity*, **2010**, 1, 314-331	1	13
43	Modelling of the post yield response of amorphous polymers under different stress states. *International Journal of Plasticity*, **2017**, 88, 159-187	7.6	12
42	Study of Tool Trajectory in Incremental Forming. *Advanced Materials Research*, **2012**, 472-475, 1586-1591	0.5	12
41	A meshless approach to non-local damage modelling of concrete. *Engineering Analysis With Boundary Elements*, **2017**, 79, 62-74	2.6	11
40	Finite element modeling of wear using the dissipated energy method coupled with a dual mortar contact formulation. *Computers and Structures*, **2017**, 191, 62-79	4.5	11
39	Predicting the mechanical behavior of amorphous polymeric materials under strain through multi-scale simulation. *Applied Surface Science*, **2014**, 306, 37-46	6.7	9
38	An elasto-viscoplastic constitutive model for polymers at finite strains: Formulation and computational aspects. *Computers and Structures*, **2016**, 166, 60-74	4.5	9
37	A note on the thermal effects upon a Gurson-type material model. *Continuum Mechanics and Thermodynamics*, **2016**, 28, 785-798	3.5	8
36	Prediction of Forming Limit Diagrams for Materials with HCP Structure. *Acta Metallurgica Sinica (English Letters)*, **2015**, 28, 1442-1451	2.5	8
35	Improvement of the numerical prediction of ductile failure with an integral nonlocal damage model. *International Journal of Material Forming*, **2009**, 2, 439-442	2	8
34	Microscale analysis of heterogeneous ductile materials with nonlocal damage models of integral type. *Computers and Structures*, **2018**, 201, 37-57	4.5	7

33	Numerical integration algorithm of a new model for metal plasticity and fracture including pressure and lode angle dependence. *International Journal of Material Forming*, **2009**, 2, 443-446	2	7
32	The role of elastic anisotropy on the macroscopic constitutive response and yield onset of cubic oligo- and polycrystals. *International Journal of Plasticity*, **2019**, 121, 153-200	7.6	6
31	A radial point interpolation meshless method extended with an elastic rate-independent continuum damage model for concrete materials. *Mechanics of Advanced Materials and Structures*, **2018**, 25, 855-867	1.8	6
30	A mixed parallel strategy for the solution of coupled multi-scale problems at finite strains. *Computational Mechanics*, **2018**, 61, 157-180	4	6
29	A meshless method in the non-local constitutive damage models. *Procedia Structural Integrity*, **2016** , 1, 226-233	1	6
28	Intralaminar damage in polymer composites in the presence of finite fiber rotation: Part II Numerical analysis and validation. *Composite Structures*, **2016**, 151, 127-141	5.3	5
27	Consistent tangent operators for implicit non-local models of integral type. *Computers and Structures*, **2014**, 141, 59-73	4.5	5
26	Analysis of a cylinder-to-flat contact problem at finite elasto-plastic strains. *Tribology International*, **2014**, 79, 92-98	4.9	5
25	Modeling the rheology of SR1500 and LY556 epoxies under manufacturer's recommended cure cycles after viscosimetry and rheometry characterization. *Polymer Engineering and Science*, **2014**, 54, 831-839	2.3	5
24	Representative contact element size determination for micromechanical contact analysis of self-affine topographies. *International Journal of Solids and Structures*, **2020**, 206, 262-281	3.1	5
23	Yield behaviour of high-density polyethylene: Experimental and numerical characterization. *Engineering Failure Analysis*, **2019**, 97, 331-353	3.2	5
22	Damage analysis of out of plane undulated fiber composites. *Composite Structures*, **2016**, 152, 464-476	5.3	4
21	Prediction of the yielding behaviour of ductile porous materials through computational homogenization. *Engineering Computations*, **2018**, 35, 604-621	1.4	4
20	Sheet metal formability evaluation using continuous damage mechanics. *International Journal of Material Forming*, **2009**, 2, 463-466	2	4
19	Mechanical response of three semi crystalline polymers under different stress states: Experimental investigation and modelling. *Polymer Testing*, **2020**, 81, 106156	4.5	4
18	On the efficient enforcement of uniform traction and mortar periodic boundary conditions in computational homogenisation. *Computer Methods in Applied Mechanics and Engineering*, **2021**, 384, 113930	5.7	4
17	Material homogenization technique for composites: A meshless formulation. *Science and Technology of Materials*, **2018**, 30, 50-59		3
16	Kinetic models for the SR1500 and LY556 epoxies under manufacturer recommended cure cycles. *European Polymer Journal*, **2013**, 49, 3328-3336	5.2	3

15	A Comparative Study of Failure with Incremental Forming. *Journal of Physics: Conference Series*, **2016**, 734, 032065	0.3	3
14	An assessment of multi-scale models based on second-order computational homogenisation. *Computers and Structures*, **2022**, 259, 106679	4.5	2
13	Numerical analysis of damage evolution for materials with tension-compression asymmetry. *Procedia Structural Integrity*, **2016**, 1, 273-280	1	2
12	Constitutive modelling of mechanically induced martensitic transformations. *Engineering Computations*, **2018**, 35, 772-799	1.4	1
11	Impact of the geometry of inclusions at the micro-scale on the overall stochastic properties. *Mechanics of Advanced Materials and Structures*, **2016**, 23, 117-127	1.8	1
10	Corrosion Behavior of the Friction Stir Welded AZ31 Magnesium Alloy. *Microscopy and Microanalysis* , **2015**, 21 Suppl 5, 33-4	0.5	1
9	Torsional fretting wear experimental analysis of a R3 offshore steel against a PC/ABS blend. *Tribology International*, **2020**, 143, 106090	4.9	1
8	Unlocking the Potential of Second-order Computational Homogenisation: An Overview of Distinct Formulations and a Guide for their Implementation. *Archives of Computational Methods in Engineering*,1	7.8	1
7	An adaptive multi-temperature isokinetic method for the RVE generation of particle reinforced heterogeneous materials, Part I: Theoretical formulation and computational framework. *Mechanics of Materials*, **2021**, 163, 104069	3.3	1
6	An efficient multiscale strategy to predict the evolution of the real contact area between rough surfaces. *Tribology International*, **2022**, 165, 107255	4.9	1
5	Formulation and numerical implementation of a variationally consistent multi-scale model based on second-order computational homogenisation at finite strains for quasi-static problems. *Computer Methods in Applied Mechanics and Engineering*, **2022**, 392, 114714	5.7	1
4	Adaptivity for clustering-based reduced-order modeling of localized history-dependent phenomena. *Computer Methods in Applied Mechanics and Engineering*, **2022**, 393, 114726	5.7	0
3	The impact of non-Gaussian height distributions on the statistics of isotropic random rough surfaces. *Tribology International*, **2022**, 107578	4.9	0
2	An adaptive multi-temperature isokinetic method for the RVE generation of particle reinforced heterogeneous materials, Part II: Numerical assessment and statistical analysis. *Mechanics of Materials*, **2022**, 165, 104068	3.3	
1	An invariant-based elasto-visco-plastic model for unidirectional polymer composites at finite strains. *International Journal of Solids and Structures*, **2021**, 236-237, 111292	3.1	