Luis Filipe F Menezes

List of Publications by Year
in descending order

123 papers	2,901 citations	201385 27 h-index	197535 49 g-index
124 all docs	124 docs citations	124 times ranked	1716 citing authors

#	Article	IF	Citations
1	Three-dimensional numerical simulation of the deep-drawing process using solid finite elements. Journal of Materials Processing Technology, 2000, 97, 100-106.	3.1	231
2	Material parameters identification: Gradient-based, genetic and hybrid optimization algorithms. Computational Materials Science, 2008, 44, 339-346.	1.4	172
3	Study on the influence of work-hardening modeling in springback prediction. International Journal of Plasticity, 2007, 23, 516-543.	4.1	147
4	Ultra-microhardness testing procedure with Vickers indenter. Surface and Coatings Technology, 2002, 149, 27-35.	2.2	141
5	Influence of process parameters on the deep drawing of stainless steel. Finite Elements in Analysis and Design, 2007, 43, 1062-1067.	1.7	129
6	Algorithms and Strategies for Treatment of Large Deformation Frictional Contact in the Numerical Simulation of Deep Drawing Process. Archives of Computational Methods in Engineering, 2008, 15, 113-162.	6.0	113
7	Three-dimensional numerical simulation of Vickers indentation tests. International Journal of Solids and Structures, 2006, 43, 784-806.	1.3	107
8	A new approach for reverse analyses in depth-sensing indentation using numerical simulation. Acta Materialia, 2007, 55, 69-81.	3.8	99
9	Experimental and numerical studies on the warm deep drawing of an Alâ€“Mg alloy. International Journal of Mechanical Sciences, 2015, 93, 59-72.	3.6	78
10	On the determination of the Youngâ€™s modulus of thin films using indentation tests. International Journal of Solids and Structures, 2007, 44, 8313-8334.	1.3	76
11	Modelling of anisotropic work-hardening behaviour of metallic materials subjected to strain-path changes. Computational Materials Science, 2005, 32, 301-315.	1.4	74
12	Numerical study of the plastic behaviour in tension of welds in high strength steels. International Journal of Plasticity, 2004, 20, 1-18.	4.1	71
13	Experimental study of friction in sheet metal forming. Wear, 2011, 271, 1651-1657.	1.5	70
14	Effect of anisotropy on the deep-drawing of mild steel and dual-phase steel tailor-welded blanks. Journal of Materials Processing Technology, 2007, 184, 288-293.	3.1	62
15	Influence of the temperature on residual stresses and springback effect in an aluminium alloy. International Journal of Mechanical Sciences, 2010, 52, 1094-1100.	3.6	58
16	Deep drawing of aluminiumâ€“steel tailor-welded blanks. Materials & Design, 2008, 29, 154-160.	5.1	56
17	Influence of the plastic anisotropy modelling in the reverse deep drawing process simulation. Materials & Design, 2014, 60, 368-379.	5.1	50
18	Piobertâ€“LÃ¼ders plateau and Portevinâ€“Le Chatelier effect in an Alâ€“Mg alloy in simple shear. Mechanics Research Communications, 2013, 48, 1-7.	1.0	49

#	Article	IF	Citations
19	Applying Nagata patches to smooth discretized surfaces used in 3D frictional contact problems. Computer Methods in Applied Mechanics and Engineering, 2014, 271, 296-320.	3.4	39
20	Influence of boundary conditions on the prediction of springback and wrinkling in sheet metal forming. International Journal of Mechanical Sciences, 2017, 122, 244-254.	3.6	35
21	The influence of the HAZ softening on the mechanical behaviour of welded joints containing cracks in the weld metal. Engineering Fracture Mechanics, 2004, 71, 2053-2064.	2.0	32
22	Improvement of a frictional contact algorithm for strongly curved contact problems. International Journal for Numerical Methods in Engineering, 2003, 58, 2083-2101.	1.5	30
23	Modeling of tensionâ€“compression asymmetry and orthotropy on metallic materials: Numerical implementation and validation. International Journal of Mechanical Sciences, 2016, 114, 217-232.	3.6	30
24	Thermal residual stresses in particle-reinforced viscoplastic metal matrix composites. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 1993, 167, 97-105.	2.6	29
25	Influence of Vickers tip imperfection on depth sensing indentation tests. International Journal of Solids and Structures, 2007, 44, 2732-2747.	1.3	29
26	Occurence of strain path changes in a two-stage deep drawing process. Journal of Materials Processing Technology, 2010, 210, 226-232.	3.1	29
27	Evaluation of strain and stress states in the single point incremental forming process. International Journal of Advanced Manufacturing Technology, 2016, 85, 521-534.	1.5	29
28	Experimental and numerical study of reverse re-drawing of anisotropic sheet metals. Journal of Materials Processing Technology, 2002, 125-126, 764-771.	3.1	28
29	A new staggered algorithm for thermomechanical coupled problems. International Journal of Solids and Structures, 2017, 122-123, 42-58.	1.3	28
30	Automatic correction of the time step in implicit simulations of the stamping process. Finite Elements in Analysis and Design, 2004, 40, 1995-2010.	1.7	26
31	Trimming of 3D solid finite element meshes using parametric surfaces: Application to sheet metal forming. Finite Elements in Analysis and Design, 2006, 42, 1053-1060.	1.7	26
32	Mechanical characterization and constitutive parameter identification of anisotropic tubular materials for hydroforming applications. International Journal of Mechanical Sciences, 2015, 104, 91-103.	3.6	26
33	Numerical simulation and analysis on the deep drawing of LPG bottles. Journal of Materials Processing Technology, 2008, 200, 416-423.	3.1	24
34	Numerical analysis of different heating systems for warm sheet metal forming. International Journal of Advanced Manufacturing Technology, 2016, 83, 897-909.	1.5	24
35	Blank design for deep drawn parts using parametric NURBS surfaces. Journal of Materials Processing Technology, 2009, 209, 2402-2411.	3.1	23
36	Numerical study of springback using the split-ring test for an AA5754 aluminum alloy. Finite Elements in Analysis and Design, 2010, 46, 751-759.	1.7	23

#	Article	IF	Citations
37	Nagata patch interpolation using surface normal vectors evaluated from the IGES file. Finite Elements in Analysis and Design, 2013, 72, 35-46.	1.7	22
38	Numerical and experimental analysis of wrinkling during the cup drawing of an AA5042 aluminium alloy. International Journal of Material Forming, 2017, 10, 125-138.	0.9	22
39	A model for coated surface hardness. Surface and Coatings Technology, 2000, 131, 457-461.	2.2	21
40	Improving Nagata patch interpolation applied for tool surface description in sheet metal forming simulation. CAD Computer Aided Design, 2013, 45, 639-656.	1.4	19
41	Numerical analysis on the elastic deformation of the tools in sheet metal forming processes. International Journal of Solids and Structures, 2016, 100-101, 270-285.	1.3	19
42	Numerical determination of the influence of the cooling rate and reinforcement volume fraction on the levels of residual stresses in Alâ€“SiC composites. Computational Materials Science, 2001, 21, 26-36.	1.4	18
43	Numerical aspects of finite element simulations of residual stresses in metal matrix composites. International Journal for Numerical Methods in Engineering, 2001, 50, 629-644.	1.5	18
44	Improving Computational Performance through HPC Techniques: case study using DD3IMP in-house code. , 2011, , .		18
45	A deformation based blank design method for formed parts. International Journal of Mechanics and Materials in Design, 2009, 5, 303-314.	1.7	17
46	Numerical study on the influence of initial anisotropy on optimal blank shape. Finite Elements in Analysis and Design, 2009, 45, 71-80.	1.7	17
47	Influence of the characteristics of the experimental data set used to identify anisotropy parameters. Simulation Modelling Practice and Theory, 2015, 53, 15-44.	2.2	17
48	A contact smoothing method for arbitrary surface meshes using Nagata patches. Computer Methods in Applied Mechanics and Engineering, 2016, 299, 283-315.	3.4	17
49	Numerical optimization strategies for springback compensation in sheet metal forming. , 2017, , 51-82.		16
50	Detailed experimental and numerical analysis of a cylindrical cup deep drawing: Pros and cons of using solid-shell elements. International Journal of Material Forming, 2018, 11, 357-373.	0.9	16
51	Numerical simulation of tensile tests of prestrained sheets. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 1999, 264, 130-138.	2.6	15
52	A benchmark for validation of numerical results in sheet metal forming. Journal of Materials Processing Technology, 2004, 155-156, 1980-1985.	3.1	15
53	Study on springback in deep drawn tailor welded blanks. International Journal of Material Forming, 2009, 2, 829-832.	0.9	15
54	A multi-step analysis for determining admissible blank-holder forces in deep-drawing operations. Materials & Design, 2010, 31, 1475-1481.	5.1	15

#	Article	IF	Citations
55	Thermo-mechanical finite element analysis of the AA5086 alloy under warm forming conditions. International Journal of Solids and Structures, 2018, 151, 99-117.	1.3	14
56	Experimental and numerical analysis of the heat generated by plastic deformation in quasi-static uniaxial tensile tests. Mechanics of Materials, 2020, 146, 103398.	1.7	14
57	The coated surface hardness: a kinematic model. Thin Solid Films, 1998, 335, 153-159.	0.8	13
58	Sensitivity study on some parameters in blank design. Materials & Design, 2009, 30, 1223-1230.	5.1	13
59	Numerical modeling of the thermal contact in metal forming processes. International Journal of Advanced Manufacturing Technology, 2016, 87, 1797-1811.	1.5	12
60	Work Hardening Models and the Numerical Simulation of the Deep Drawing Process. Materials Science Forum, 2004, 455-456, 717-722.	0.3	11
61	Constitutive parameter identification of CB2001 yield function and its experimental verification using tube hydroforming tests. International Journal of Mechanical Sciences, 2020, 185, 105868.	3.6	11
62	Non-uniform deformation after prestrain. European Journal of Mechanics, A/Solids, 2000, 19, 209-221.	2.1	10
63	The punch speed influence on warm forming and springback of two Al-Mg-Si alloys. Journal of Manufacturing Processes, 2019, 38, 266-278.	2.8	10
64	Stochastic analysis of a deep drawing process using finite element simulations. International Journal of Material Forming, 2009, 2, 347-350.	0.9	9
65	Study on the effect of tension-compression asymmetry on the cylindrical cup forming of an AA2090-T3 alloy. International Journal of Solids and Structures, 2018, 151, 135-144.	1.3	9
66	Towards standard benchmarks and reference data for validation and improvement of numerical simulation in sheet metal forming. Journal of Materials Processing Technology, 2002, 125-126, 798-805.	3.1	8
67	Study on the Influence of the Refinement of a 3-D Finite Element Mesh in Springback Evaluation of Plane-Strain Channel Sections. AIP Conference Proceedings, 2007, , .	0.3	8
68	Modelling the effect of HAZ undermatching on the crack-tip stress distribution in idealized welds. International Journal of Mechanical Sciences, 2004, 46, 1481-1488.	3.6	7
69	Influence of draw restraining force on the springback in advanced high strength steels. International Journal of Material Forming, 2008, 1, 177-180.	0.9	7
70	Numerical study of springback using the split-ring test: influence of the clearance between the die and the punch. International Journal of Material Forming, 2018, 11, 325-337.	0.9	7
71	Effect of the Substrate Thermal Expansion Coefficient on the Thermal Residual Stresses in W-Si-N Sputtered Films. Key Engineering Materials, 2002, 230-232, 513-516.	0.4	6
72	Drawbeads: to Be or Not to Be. AIP Conference Proceedings, 2005, , .	0.3	6

#	Article	IF	Citations
73	Influence of the Weld on the Mechanical Behaviour of Tailor Welded Blanks. Materials Science Forum, 2006, 514-516, 1493-1500.	0.3	6
74	Reverse analysis in depth-sensing indentation for evaluation of the Young's modulus of thin films. Philosophical Magazine, 2008, 88, 313-325.	0.7	6
75	Young's modulus of thin films using depth-sensing indentation. Philosophical Magazine Letters, 2010, 90, 9-22.	0.5	6
76	A kinematic and incremental integration model for the micromechanical numerical analysis of dual-phase materials. Computational Materials Science, 2002, 25, 237-245.	1.4	5
77	Springback Evaluation with Several Phenomenological Yield Criteria. Materials Science Forum, 2004, 455-456, 732-736.	0.3	5
78	Application of the Incremental Volumetric Remapping Method in the Simulation of Multi-Step Deep Drawing Processes. AIP Conference Proceedings, 2005, , .	0.3	5
79	Optimization of the Phenomenological Constitutive Models Parameters Using Genetic Algorithms. , 2007, , 35-54.		5
80	Lightweight metal alloy tailor welded blanks. , 2011, , 97-117.		5
81	Cazacu and Barlat Criterion Identification Using the Cylindrical Cup Deep Drawing Test and the Coupled Artificial Neural Networks â€“ Genetic Algorithm Method. Key Engineering Materials, 2012, 504-506, 637-642.	0.4	5
82	Earing Prediction in Drawing and Ironing Processes Using an Advanced Yield Criterion. Key Engineering Materials, 0, 554-557, 2266-2276.	0.4	5
83	Trimming of 3D solid finite element meshes: sheet metal forming tests and applications. Engineering With Computers, 2015, 31, 237-257.	3.5	5
84	On the evaluation of the ductility of thin films. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2002, 337, 97-103.	2.6	4
85	Numerical analysis of large deformation processes at elevated temperatures. Computer Methods in Applied Mechanics and Engineering, 2006, 195, 3947-3959.	3.4	4
86	Local Interpolation for Tools Surface Description. , 2010, , .		4
87	Sensitivity Analysis of Process Parameters in the Drawing and Ironing Processes. Key Engineering Materials, 0, 554-557, 2256-2265.	0.4	4
88	Numerical Study of the Influence of Imperfection of the Tip of a Vickers Indenter on Ultramicrohardness Test Results. Key Engineering Materials, 2002, 230-232, 525-528.	0.4	3
89	Numerical Simulation of Ultramicrohardness Tests in Thin Films. Materials Science Forum, 2004, 455-456, 694-698.	0.3	3
90	Prediction of wrinkling and springback in sheet metal forming. MATEC Web of Conferences, 2016, 80, 03005.	0.1	3

#	Article	IF	Citations
91	The role of tension-compression asymmetry of the plastic flow on ductility and damage accumulation of porous polycrystals. CiÃªncia & Tecnologia Dos Materiais, 2017, 29, e234-e238.	0.5	3
92	Study on the influence of the yield surface shape in the hole expansion test. IOP Conference Series: Materials Science and Engineering, 2020, 967, 012085.	0.3	3
93	Comparison of Experimental and Simulated Results for a Mild Steel and a Dual-Phase Steel Deformed under Tension and Deep-Drawing. Key Engineering Materials, 2002, 230-232, 549-554.	0.4	2
94	Large Deformation Processes on AA1050-O Aluminium at Elevated Temperatures. Materials Science Forum, 2004, 455-456, 723-727.	0.3	2
95	Local bifurcation and instability theory applied to formability analysis. International Journal of Material Forming, 2011, 4, 347-356.	0.9	2
96	Finite Element Analysis of the Amontons-Coulombâ€™s Model using Local and Global Friction Tests. AIP Conference Proceedings, 2011, , .	0.3	2
97	Study on the influence of orthotropy and tensionâ€“compression asymmetry of metal sheets in springback and formability predictions. Journal of Physics: Conference Series, 2018, 1063, 012053.	0.3	2
98	Thermomechanical analysis of the draw bead test. Advances in Materials and Processing Technologies, 2019, 5, 401-417.	0.8	2
99	Reverse Deep Drawing: Experimental and Numerical Simulation Results. Key Engineering Materials, 2002, 230-232, 541-544.	0.4	1
100	Numerical Analysis on the Effects of the Friction Coefficient on the Deep Drawing of a Rail. Materials Science Forum, 2004, 455-456, 737-741.	0.3	1
101	Study on the Influence of the Work Hardening Models Constitutive Parameters Identification in the Springback Prediction. AIP Conference Proceedings, 2005, , .	0.3	1
102	Kinematic Hardening: Characterization, Modeling and Impact on Springback Prediction. AIP Conference Proceedings, 2007, , .	0.3	1
103	Incremental Volumetric Remapping Method: Analysis and Error Evaluation. AIP Conference Proceedings, 2007, , .	0.3	1
104	Local Bifurcation and Instability Theory Applied to Formability Analysis. , 2010, , .		1
105	Finite Element Analysis on the Influence of Material Mechanical Properties in Local Contact Conditions. International Journal of Material Forming, 2010, 3, 139-142.	0.9	1
106	Thermal Residual Stresses in Aluminium Matrix Composites. Advanced Structured Materials, 2010, , 33-62.	0.3	1
107	Pre-strain effect on springback of 2D draw bending. International Journal of Materials Engineering Innovation, 2013, 4, 187.	0.2	1
108	Applying Nagata Patches in the Description of Smooth Tool Surfaces Used in Sheet Metal Forming Simulations. Key Engineering Materials, 0, 554-557, 2277-2284.	0.4	1

#	Article	IF	Citations
109	Tension-compression asymmetry modelling: strategies for anisotropy parameters identification.. MATEC Web of Conferences, 2016, 80, 05002.	0.1	1
110	Incremental volumetric and Dual Kriging remapping methods. Finite Elements in Analysis and Design, 2018, 139, 35-48.	1.7	1
111	The influence of warm forming conditions on the natural aging and springback of a 6016-T4 aluminum alloy. IOP Conference Series: Materials Science and Engineering, 2018, 418, 012020.	0.3	1
112	Influence of the characteristics of the 3D FE mesh on the evolution of variables used to characterize the stress state. AIP Conference Proceedings, 2019, , .	0.3	1
113	Positron studies in polycrystalline deformed copper. Crystal Research and Technology, 1987, 22, K185-K190.	0.6	0
114	Influence of Plastic Deformation of the Heat Affected Zone on the Mechanical Behaviour of Welds in High Strength Steels. Key Engineering Materials, 2003, 233-236, 791-796.	0.4	0
115	An Investigation of the Influence of Strength Mis-Matching and HAZ Width on the Fracture Behaviour of Welds with Cracks in the WM/HAZ Interface. Materials Science Forum, 2004, 455-456, 685-689.	0.3	0
116	Evolutional Friction Law in the Numerical Simulation of the Deep Drawing of a Rail. Materials Science Forum, 2006, 514-516, 1443-1447.	0.3	0
117	Strain and Stress Distribution in Vickers Indentation of Coated Materials. Materials Science Forum, 2006, 514-516, 1472-1476.	0.3	0
118	Influence of Drawbeads in Deep-Drawing of Plane-Strain Channel Sections: Experimental and FE Analysis. AIP Conference Proceedings, 2007, , .	0.3	0
119	Finite element analysis of the influence of the restraining force in the draw bend test. International Journal of Material Forming, 2010, 3, 143-146.	0.9	0
120	Automatic correction of the time step in implicit simulations of thermomechanical problems. MATEC Web of Conferences, 2016, 80, 07002.	0.1	0
121	On the impact of modelling tension-compression asymmetry on earing and thickness predictions. Advances in Materials and Processing Technologies, 2019, 5, 445-460.	0.8	0
122	The role of viscoelasticity in the mechanical modelling of rubbers. AIP Conference Proceedings, 2019, , .	0.3	0
123	Evaluating the influence of the deformation of the forming tools in the thickness distribution along the wall of a cylindrical cup. IOP Conference Series: Materials Science and Engineering, 2022, 1238, 012079.	0.3	0