Pedro A Prates

List of Publications by Year
in descending order

52 papers	664 citations	623188 14 h-index	642321 23 g-index
52 all docs	52 docs citations	52 times ranked	381 citing authors

#	Article	IF	Citations
1	Fatigue crack growth modelling based on CTOD for the 7050â€T6 alloy. Fatigue and Fracture of Engineering Materials and Structures, 2017, 40, 1309-1320.	1.7	51
2	New methodology of fatigue life evaluation for multiaxially loaded notched components based on two uniaxial strain-controlled tests. International Journal of Fatigue, 2018, 111, 308-320.	2.8	49
3	Rapid assessment of multiaxial fatigue lifetime in notched components using an averaged strain energy density approach. International Journal of Fatigue, 2019, 124, 89-98.	2.8	42
4	Fatigue crack growth in the 2050-T8 aluminium alloy. International Journal of Fatigue, 2018, 115, 79-88.	2.8	41
5	Fatigue crack growth versus plastic CTOD in the 304L stainless steel. Engineering Fracture Mechanics, 2019, 214, 487-503.	2.0	34
6	A new strategy for the simultaneous identification of constitutive laws parameters of metal sheets using a single test. Computational Materials Science, 2014, 85, 102-120.	1.4	32
7	Numerical Prediction of the Fatigue Crack Growth Rate in SLM Ti-6Al-4V Based on Crack Tip Plastic Strain. Metals, 2020, 10, 1133.	1.0	29
8	Inverse Strategies for Identifying the Parameters of Constitutive Laws of Metal Sheets. Advances in Materials Science and Engineering, 2016, 2016, 1-18.	1.0	27
9	Single and ensemble classifiers for defect prediction in sheet metal forming under variability. Neural Computing and Applications, 2020, 32, 12335-12349.	3.2	27
10	Fatigue Crack Growth in Maraging Steel Obtained by Selective Laser Melting. Applied Sciences (Switzerland), 2019, 9, 4412.	1.3	22
11	Mechanical design of ring tensile specimen via surrogate modelling for inverse material parameter identification. Mechanics of Materials, 2021, 153, 103673.	1.7	20
12	A Simple Method for Estimation of Residual Stresses by Depthâ€Sensing Indentation. Strain, 2012, 48, 75-87.	1.4	19
13	Identification of material parameters for thin sheets from single biaxial tensile test using a sequential inverse identification strategy. International Journal of Material Forming, 2016, 9, 547-571.	0.9	17
14	Fatigue crack propagation analysis in 2024-T351 aluminium alloy using nonlinear parameters. International Journal of Fatigue, 2021, 153, 106478.	2.8	16
15	Anisotropy and plastic flow in the circular bulge test. International Journal of Mechanical Sciences, 2017, 128-129, 70-93.	3.6	15
16	Numerical study on the effect of mechanical properties variability in sheet metal forming processes. International Journal of Advanced Manufacturing Technology, 2018, 96, 561-580.	1.5	14
17	Effect of Youngâ€™s modulus on fatigue crack growth. International Journal of Fatigue, 2020, 132, 105375.	2.8	14
18	On the equivalence between sets of parameters of the yield criterion and the isotropic and kinematic hardening laws. International Journal of Material Forming, 2015, 8, 505-515.	0.9	13

#	ARTICLE	IF	CITATIONS
19	Inverse identification of the Swift law parameters using the bulge test. International Journal of Material Forming, 2017, 10, 493-513.	0.9	13
20	Load sequence effects and cyclic deformation behaviour of 7075-T651 aluminium alloy. International Journal of Fatigue, 2022, 155, 106593.	2.8	13
21	Inverse identification of the work hardening law from circular and elliptical bulge tests. Journal of Materials Processing Technology, 2020, 279, 116573.	3.1	12
22	Performance Comparison of Parametric and Non-Parametric Regression Models for Uncertainty Analysis of Sheet Metal Forming Processes. Metals, 2020, 10, 457.	1.0	12
23	Model Prediction of Defects in Sheet Metal Forming Processes. Communications in Computer and Information Science, 2018, , 169-180.	0.4	11
24	Notch fatigue analysis and crack initiation life estimation of maraging steel fabricated by laser beam powder bed fusion under multiaxial loading. International Journal of Fatigue, 2021, 153, 106468.	2.8	11
25	Normal stress components during shear tests of metal sheets. International Journal of Mechanical Sciences, 2019, 164, 105169.	3.6	10
26	A Numerical Study of the Effect of Isotropic Hardening Parameters on Mode I Fatigue Crack Growth. Metals, 2020, 10, 177.	1.0	10
27	On the identification of kinematic hardening with reverse shear test. Engineering With Computers, 2015, 31, 681-690.	3.5	9
28	Effect of kinematic hardening parameters on fatigue crack growth. Theoretical and Applied Fracture Mechanics, 2020, 106, 102501.	2.1	9
29	On the applicability of the cumulative strain energy density for notch fatigue analysis under multiaxial loading. Theoretical and Applied Fracture Mechanics, 2022, 120, 103405.	2.1	8
30	Numerical determination of plastic <scp>CTOD</scp>. Fatigue and Fracture of Engineering Materials and Structures, 2018, 41, 2197-2207.	1.7	7
31	Numerical prediction of fatigue threshold of metallic materials in vacuum. Engineering Fracture Mechanics, 2019, 216, 106491.	2.0	7
32	Fatigue Crack Growth from Notches: A Numerical Analysis. Applied Sciences (Switzerland), 2020, 10, 4174.	1.3	7
33	On the characterization of the plastic anisotropy in orthotropic sheet metals with a cruciform biaxial test. IOP Conference Series: Materials Science and Engineering, 2010, 10, 012142.	0.3	6
34	Influence of specimen orientation on fatigue crack growth in 7050-T7451 and 2050-T8 aluminium alloys. International Journal of Fatigue, 2022, 164, 107136.	2.8	5
35	Analytical sensitivity matrix for the inverse identification of hardening parameters of metal sheets. European Journal of Mechanics, A/Solids, 2019, 75, 205-215.	2.1	4
36	Elastic correction of fatigue crack growth laws. Fatigue and Fracture of Engineering Materials and Structures, 2019, 42, 1052-1061.	1.7	4

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37	Effect of yield stress on fatigue crack growth. Frattura Ed Integrita Strutturale, 2019, 13, 9-19.	0.5	4
38	How to Combine the Parameters of the Yield Criteria and the Hardening Law. Key Engineering Materials, 0, 554-557, 1195-1202.	0.4	3
39	Comparing metamodeling techniques for variability analysis in sheet metal forming processes. AIP Conference Proceedings, 2019, , .	0.3	3
40	Numerical Study on the Variability of Plastic CTOD. Materials, 2020, 13, 1276.	1.3	3
41	Mixed numericalâ€experimental method for generation of energyâ€life fatigue master curves. Material Design and Processing Communications, 2019, 1, e37.	0.5	2
42	Numerical Study on the Forming Behaviour of Multilayer Sheets. Metals, 2020, 10, 716.	1.0	2
43	Fatigue crack growth in notched specimens: a numerical analysis. Frattura Ed Integrita Strutturale, 2019, 13, 666-675.	0.5	2
44	Inverse analysis methodology on metal sheets for constitutive parameters identification. International Journal of Materials Engineering Innovation, 2013, 4, 101.	0.2	1
45	Crack tip mechanisms: a numerical analysis. Procedia Structural Integrity, 2019, 23, 571-576.	0.3	1
46	Model for fatigue crack growth analysis. Procedia Structural Integrity, 2020, 25, 254-261.	0.3	1
47	Federated Learning as a Privacy-Providing Machine Learning for Defect Predictions in Smart Manufacturing. Smart and Sustainable Manufacturing Systems, 2021, 5, 1-17.	0.3	1
48	Effect of numerical parameters on plastic CTOD. Frattura Ed Integrita Strutturale, 2017, 11, 149-156.	0.5	1
49	Numerical Study of Mechanical Behaviour of Heterogeneous Materials. Materials Science Forum, 2012, 730-732, 549-554.	0.3	0
50	Numerical Determination of Fatigue Threshold from CTOD. Solid State Phenomena, 0, 258, 290-293.	0.3	0
51	A Mixed Experimental-numerical Energy-based Approach for Fatigue Life Assessment in Notched Samples under Multiaxial Loading. KnE Engineering, 0, , .	0.1	0
52	Machine Learning for the Prediction of Edge Cracking in Sheet Metal Forming Processes. Management and Industrial Engineering, 2022, , 127-144.	0.3	0