Carlos Navarro

List of Publications by Year
in descending order

43 papers	983 citations	430874 18 h-index	454955 30 g-index
43 all docs	43 docs citations	43 times ranked	381 citing authors

#	Article	IF	Citations
1	On the use of multiaxial fatigue criteria for fretting fatigue life assessment. International Journal of Fatigue, 2008, 30, 32-44.	5.7	118
2	Experimental results in fretting fatigue with shot and laser peened Al 7075-T651 specimens. International Journal of Fatigue, 2012, 40, 143-153.	5.7	70
3	Effect of shot peening residual stresses and surface roughness on fretting fatigue strength of Al 7075-T651. Tribology International, 2020, 142, 106004.	5.9	63
4	A procedure for estimating the total life in fretting fatigue. Fatigue and Fracture of Engineering Materials and Structures, 2003, 26, 459-468.	3.4	54
5	A general model to estimate life in notches and fretting fatigue. Engineering Fracture Mechanics, 2011, 78, 1590-1601.	4.3	50
6	Application of fracture mechanics to estimate fretting fatigue endurance curves. Engineering Fracture Mechanics, 2007, 74, 2168-2186.	4.3	43
7	Fretting fatigue life prediction using the extended finite element method. International Journal of Mechanical Sciences, 2011, 53, 217-225.	6.7	39
8	Fatigue behaviour of PBF additive manufactured TI6AL4V alloy after shot and laser peening. International Journal of Fatigue, 2022, 154, 106536.	5.7	39
9	Analysis of fretting fatigue initial crack path in Al7075-T651 using cylindrical contact. Tribology International, 2017, 108, 87-94.	5.9	38
10	Propagation in fretting fatigue from a surface defect. Tribology International, 2006, 39, 1149-1157.	5.9	36
11	A model to predict fretting fatigue life including residual stresses. Theoretical and Applied Fracture Mechanics, 2014, 73, 144-151.	4.7	32
12	Nucleation and early crack path in fretting fatigue. International Journal of Fatigue, 2017, 100, 602-610.	5.7	32
13	Analysis of the effect of a textured surface on fretting fatigue. Wear, 2013, 305, 23-35.	3.1	31
14	Fatigue life estimation in dental implants. Engineering Fracture Mechanics, 2014, 123, 34-43.	4.3	25
15	3D vs. 2D fatigue crack initiation and propagation in notched plates. International Journal of Fatigue, 2014, 58, 40-46.	5.7	23
16	Fatigue and fracture analysis of a sevenâ€wire stainless steel strand under axial and bending loads. Fatigue and Fracture of Engineering Materials and Structures, 2020, 43, 149-161.	3.4	23
17	Fretting-Fatigue Analysis of Shot-Peened Al 7075-T651 Test Specimens. Metals, 2019, 9, 586.	2.3	22
18	Two dimensional versus three dimensional modelling in fretting fatigue life prediction. Journal of Strain Analysis for Engineering Design, 2016, 51, 109-117.	1.8	21

#	Article	IF	Citations
19	On the estimation of fatigue life in notches differentiating the phases of crack initiation and propagation. Fatigue and Fracture of Engineering Materials and Structures, 2010, 33, 22-36.	3.4	20
20	Numerical study on the influence of artificial internal stress relief groove on fretting fatigue in a shrink-fitted assembly. Tribology International, 2020, 151, 106443.	5.9	17
21	Initiation criteria in fretting fatigue with spherical contact. International Journal of Fatigue, 2004, 26, 1253-1262.	5.7	16
22	A new method for obtaining the stress field in plane contacts. International Journal of Solids and Structures, 2012, 49, 3659-3665.	2.7	16
23	Fretting fatigue in a spherical contact. Journal of Strain Analysis for Engineering Design, 2002, 37, 469-478.	1.8	14
24	On the prediction of the crack initiation path in fretting fatigue. Theoretical and Applied Fracture Mechanics, 2019, 99, 140-146.	4.7	14
25	Voids as stress relievers and a palliative in fretting. Fatigue and Fracture of Engineering Materials and Structures, 2018, 41, 2475-2484.	3.4	12
26	The influence of underlying tension on partial slip in complete and nearly complete contacts. International Journal of Mechanical Sciences, 2003, 45, 757-773.	6.7	11
27	Analytical solution for a cylindrical contact with reverse slip. Journal of Strain Analysis for Engineering Design, 2013, 48, 189-197.	1.8	10
28	Explicit equations for the half-plane sub-surface stress field under a flat rounded contact. Journal of Strain Analysis for Engineering Design, 2014, 49, 562-570.	1.8	10
29	New fatigue device for testing cables: Design and results. Fatigue and Fracture of Engineering Materials and Structures, 2019, 42, 1826-1837.	3.4	10
30	Numerical analysis of toroidal voids as stress relievers in shrink-fitted shafts. Tribology International, 2020, 143, 105996.	5.9	9
31	Explicit equations for sub-surface stress field in plane contacts. International Journal of Mechanical Sciences, 2013, 67, 53-58.	6.7	8
32	A fretting fatigue model based on self-steered cracks. Theoretical and Applied Fracture Mechanics, 2022, 117, 103144.	4.7	8
33	Influence of the Initiation Length in Predictions of Life in Fretting Fatigue. Strain, 2011, 47, e283.	2.4	7
34	Fracture mechanics approach to fretting fatigue behaviour of coated aluminium alloy components. Journal of Strain Analysis for Engineering Design, 2014, 49, 66-75.	1.8	7
35	Influence of the rolling of contact pads on crack initiation in fretting fatigue tests. International Journal of Fatigue, 2022, 163, 107087.	5.7	7
36	Analysis of crack evolution in fretting fatigue with spherical contact. Journal of Strain Analysis for Engineering Design, 2009, 44, 503-515.	1.8	6

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37	3D contact effects in fretting fatigue tests. Theoretical and Applied Fracture Mechanics, 2022, 118, 103260.	4.7	6
38	Optimal shot peening residual stress profile for fatigue. Theoretical and Applied Fracture Mechanics, 2021, 116, 103109.	4.7	5
39	Experimental and numerical analysis of fatigue cracks emanating from internal defects in Ti6Al4V SLM. Procedia Structural Integrity, 2021, 34, 121-128.	0.8	4
40	Internal voids as a stress reliever and palliative in fretting fatigue. Procedia Engineering, 2018, 213, 846-855.	1.2	3
41	Life Assessment in Fretting Fatigue. Key Engineering Materials, 2014, 618, 99-122.	0.4	2
42	The effect of a corner radius on an asymptotic solution to the fretting of complete contacts including the plastic process zone. Fatigue and Fracture of Engineering Materials and Structures, 2003, 26, 223-228.	3.4	1
43	Rolling effect in fretting fatigue test at the crack initiation stage. Procedia Structural Integrity, 2022, 39, 104-110.	0.8	1