

# Pablo LÃ³pez Crespo

## List of Publications by Year in descending order

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Version: 2024-02-01

50  
papers

1,134  
citations

331670

21  
h-index

395702

33  
g-index

52  
all docs

52  
docs citations

52  
times ranked

530  
citing authors

#	ARTICLE	IF	CITATIONS
1	The stress intensity of mixed mode cracks determined by digital image correlation. <i>Journal of Strain Analysis for Engineering Design</i> , 2008, 43, 769-780.	1.8	111
2	Evaluation of crack-tip fields from DIC data: A parametric study. <i>International Journal of Fatigue</i> , 2016, 89, 11-19.	5.7	71
3	Some experimental observations on crack closure and crack-tip plasticity. <i>Fatigue and Fracture of Engineering Materials and Structures</i> , 2009, 32, 418-429.	3.4	63
4	Effect of overload on crack closure in thick and thin specimens via digital image correlation. <i>International Journal of Fatigue</i> , 2013, 56, 17-24.	5.7	62
5	Study of crack orientation and fatigue life prediction in biaxial fatigue with critical plane models. <i>Engineering Fracture Mechanics</i> , 2015, 136, 115-130.	4.3	62
6	Study of a Crack at a Fastener Hole by Digital Image Correlation. <i>Experimental Mechanics</i> , 2009, 49, 551-559.	2.0	53
7	Measuring overload effects during fatigue crack growth in bainitic steel by synchrotron X-ray diffraction. <i>International Journal of Fatigue</i> , 2015, 71, 11-16.	5.7	51
8	Locating the Crack Tip Using Displacement Field Data: A Comparative Study. <i>Strain</i> , 2013, 49, 102-115.	2.4	50
9	Overload effects on fatigue crack-tip fields under plane stress conditions: surface and bulk analysis. <i>Fatigue and Fracture of Engineering Materials and Structures</i> , 2013, 36, 75-84.	3.4	48
10	Stress intensity factor analysis of through thickness effects. <i>International Journal of Fatigue</i> , 2013, 46, 58-66.	5.7	42
11	Numerical and experimental study of the plastic zone in cracked specimens. <i>Engineering Fracture Mechanics</i> , 2017, 185, 20-32.	4.3	35
12	Optical and analytical investigation of overloads in biaxial fatigue cracks. <i>International Journal of Fatigue</i> , 2017, 100, 583-590.	5.7	35
13	Stress intensity factor monitoring under cyclic loading by digital image correlation. <i>Fatigue and Fracture of Engineering Materials and Structures</i> , 2018, 41, 2162-2171.	3.4	29
14	Evolution of crack-bridging and crack-tip driving force during the growth of a fatigue crack in a Ti/SiC composite. <i>Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences</i> , 2012, 468, 2722-2743.	2.1	27
15	A study of the evolution of crack tip plasticity along a crack front. <i>Theoretical and Applied Fracture Mechanics</i> , 2018, 98, 59-66.	4.7	27
16	Characterisation of crack-tip fields in biaxial fatigue based on high-magnification image correlation and electro-spray technique. <i>International Journal of Fatigue</i> , 2015, 71, 17-25.	5.7	26
17	Estimations of fatigue life and variability under random loading in aluminum Al-2024T351 using strip yield models from NASGRO. <i>International Journal of Fatigue</i> , 2016, 91, 414-422.	5.7	26
18	Characterisation of overloads in fatigue by 2D strain mapping at the surface and in the bulk. <i>Fatigue and Fracture of Engineering Materials and Structures</i> , 2016, 39, 1040-1048.	3.4	25

#	ARTICLE	IF	CITATIONS
19	Multiaxial Fatigue Life Prediction on S355 Structural and Offshore Steel Using the SKS Critical Plane Model. <i>Metals</i> , 2018, 8, 1060.	2.3	24
20	A multi-scale approach to condense the cyclic elastic-plastic behaviour of the crack tip region into an extended constitutive model. <i>Fatigue and Fracture of Engineering Materials and Structures</i> , 2009, 32, 899-915.	3.4	23
21	Evaluation of the SIF and T-stress values of the Brazilian disc with a central notch by hybrid method. <i>International Journal of Fatigue</i> , 2020, 135, 105562.	5.7	22
22	The effect of grain size on the fatigue overload behaviour of nickel. <i>Materials and Design</i> , 2020, 189, 108526.	7.0	21
23	Numerical Analysis of Crack Tip Plasticity and History Effects under Mixed Mode Conditions. <i>Journal of Solid Mechanics and Materials Engineering</i> , 2008, 2, 1567-1576.	0.5	19
24	Multi-approach study of crack-tip mechanics on aluminium 2024 alloy. <i>Theoretical and Applied Fracture Mechanics</i> , 2018, 98, 38-47.	4.7	17
25	Mixed Mode ( $K_I$ and $K_{II}$ ) Stress Intensity Factor Measurement by Electronic Speckle Pattern Interferometry and Image Correlation. <i>Applied Mechanics and Materials</i> , 2004, 1-2, 107-112.	0.2	16
26	Study of the biaxial fatigue behaviour and overloads on S355 low carbon steel. <i>International Journal of Fatigue</i> , 2020, 134, 105466.	5.7	16
27	Fatigue crack propagation analysis in 2024-T351 aluminium alloy using nonlinear parameters. <i>International Journal of Fatigue</i> , 2021, 153, 106478.	5.7	16
28	Critical plane based method for multiaxial fatigue analysis of 316 stainless steel. <i>Theoretical and Applied Fracture Mechanics</i> , 2022, 118, 103273.	4.7	14
29	Effects of loading rate on crack growth behavior in carbon fiber reinforced polymer composites using digital image correlation technique. <i>Composites Part B: Engineering</i> , 2019, 175, 107161.	12.0	13
30	In situ through-thickness analysis of crack tip fields with synchrotron X-ray diffraction. <i>International Journal of Fatigue</i> , 2019, 127, 500-508.	5.7	10
31	Influence of the constraint effect on the fatigue crack growth rate in S355 J2 steel using digital image correlation. <i>Fatigue and Fracture of Engineering Materials and Structures</i> , 2020, 43, 1703-1718.	3.4	10
32	Synchrotron X-ray diffraction based method for stress intensity factor evaluation in the bulk of materials. <i>Theoretical and Applied Fracture Mechanics</i> , 2018, 98, 72-77.	4.7	9
33	The Use of Diffraction to Study Fatigue Crack Tip Mechanics. <i>Materials Science Forum</i> , 2010, 652, 216-221.	0.3	8
34	Investigation of the multiaxial fatigue behaviour of 316 stainless steel based on critical plane method. <i>Fatigue and Fracture of Engineering Materials and Structures</i> , 2019, 42, 1633-1645.	3.4	8
35	On the Behaviour of 316 and 304 Stainless Steel under Multiaxial Fatigue Loading: Application of the Critical Plane Approach. <i>Metals</i> , 2019, 9, 978.	2.3	7
36	High-strength low-modulus biocompatible Nb-1Zr alloy processed by accumulative roll bonding. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2020, 797, 140226.	5.6	7

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37	Some observations on short fatigue cracks under biaxial fatigue. Theoretical and Applied Fracture Mechanics, 2015, 80, 96-103.	4.7	6
38	Estimation of the Plastic Zone in Fatigue via Micro-Indentation. Materials, 2021, 14, 5885.	2.9	4
39	Williams' expansion-based approximation of the displacement field in an Al 2024 compact tension specimen reconstructed from optical measurements. Fatigue and Fracture of Engineering Materials and Structures, 2018, 41, 2187-2196.	3.4	3
40	On the perceptions of students and professors in the implementation of an inter-university engineering PBL experience. European Journal of Engineering Education, 2019, 44, 726-744.	2.3	3
41	Estimation of the opening load under variable amplitude loading. Fatigue and Fracture of Engineering Materials and Structures, 2019, 42, 2194-2203.	3.4	3
42	Characterisation of the crack tip plastic zone in fatigue via synchrotron X-ray diffraction. Fatigue and Fracture of Engineering Materials and Structures, 2022, 45, 2086-2098.	3.4	3
43	Numerical simulations of carbon/epoxy laminated composites under various loading rates, comparing extended finite element method and cohesive zone modeling. Material Design and Processing Communications, 2020, , e198.	0.9	2
44	Study of short cracks under biaxial fatigue. Frattura Ed Integrita Strutturale, 2014, 8, 244-251.	0.9	1
45	Estimation of the plastic zone in fatigue through the thickness based on synchrotron diffraction data. Procedia Structural Integrity, 2019, 17, 872-877.	0.8	1
46	Multiaxial Fatigue Analysis of Stainless Steel Used in Marine Structures. Structural Integrity, 2019, , 279-285.	1.4	0
47	Recent progress on experimental characterisation of fatigue and fracture behaviour of materials. Journal of Strain Analysis for Engineering Design, 2019, 54, 363-363.	1.8	0
48	Approximation of the crack-tip field in fatigue cracks in bridge steel specimens: DIC analysis of different constraint levels. Frattura Ed Integrita Strutturale, 2019, 13, 97-106.	0.9	0
49	Fatigue crack propagation studies based on the plastic component of the CTOD evaluated from Digital Image Correlation data. Procedia Structural Integrity, 2022, 39, 347-363.	0.8	0
50	On the use of the plastic component of the CTOD for fatigue analysis in austenitic stainless steel. Procedia Structural Integrity, 2022, 37, 964-976.	0.8	0