

Juan Carlos Matos Franco

List of Publications by Year in descending order

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#	ARTICLE	IF	CITATIONS
1	A critical review of stress intensity factor solutions for surface cracks in round bars subjected to tension loading. <i>Engineering Failure Analysis</i> , 2009, 16, 794-809.	4.0	60
2	Micro- and macro-approach to the fatigue crack growth in progressively drawn pearlitic steels at different R-ratios. <i>International Journal of Fatigue</i> , 2009, 31, 2014-2021.	5.7	55
3	Numerical modelling of crack shape evolution for surface flaws in round bars under tensile loading. <i>Engineering Failure Analysis</i> , 2009, 16, 618-630.	4.0	42
4	Fatigue crack propagation in cold drawn steel. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2007, 468-470, 267-272.	5.6	31
5	Tensile Fracture Behavior of Progressively-Drawn Pearlitic Steels. <i>Metals</i> , 2016, 6, 114.	2.3	31
6	Influence of Microstructure on Strength and Ductility in Fully Pearlitic Steels. <i>Metals</i> , 2016, 6, 318.	2.3	30
7	Fatigue and fracture paths in cold drawn pearlitic steel. <i>Engineering Fracture Mechanics</i> , 2010, 77, 2024-2032.	4.3	29
8	Microstructure and Mechanical Properties in Progressively Drawn Pearlitic Steel. <i>Materials Transactions</i> , 2014, 55, 93-98.	1.2	22
9	Numerical modelling of cracking path in round bars subjected to cyclic tension and bending. <i>International Journal of Fatigue</i> , 2014, 58, 20-27.	5.7	20
10	Strength anisotropy and mixed mode fracture in heavily drawn pearlitic steel. <i>Fatigue and Fracture of Engineering Materials and Structures</i> , 2013, 36, 1178-1186.	3.4	18
11	A macro- and micro-approach to the anisotropic fatigue behaviour of hot-rolled and cold-drawn pearlitic steel. <i>Engineering Fracture Mechanics</i> , 2014, 123, 70-76.	4.3	16
12	Initiation and propagation of fatigue cracks in cold-drawn pearlitic steel wires. <i>Theoretical and Applied Fracture Mechanics</i> , 2017, 92, 410-419.	4.7	16
13	Numerical and experimental analyses of the plasticity-induced fatigue crack growth in high-strength steels. <i>Construction and Building Materials</i> , 2011, 25, 3935-3940.	7.2	15
14	Analysis of Fatigue Crack Paths in Cold Drawn Pearlitic Steel. <i>Materials</i> , 2015, 8, 7439-7446.	2.9	15
15	Failure analysis of a lifting platform for tree pruning. <i>Engineering Failure Analysis</i> , 2010, 17, 739-747.	4.0	13
16	Compliance evolution in round cracked bars under tensile fatigue. <i>Engineering Fracture Mechanics</i> , 2011, 78, 3243-3252.	4.3	11
17	Analysis of the Bauschinger Effect in Cold Drawn Pearlitic Steels. <i>Metals</i> , 2020, 10, 114.	2.3	11
18	Evaluation by Sharp Indentation of Anisotropic Plastic Behaviour in Progressively Drawn Pearlitic Steel. <i>ISIJ International</i> , 2011, 51, 843-848.	1.4	11

#	ARTICLE	IF	CITATIONS
19	Role of the microstructure on the mechanical properties of fully pearlitic eutectoid steels. <i>Frattura Ed Integrita Strutturale</i> , 2014, 8, 424-430.	0.9	10
20	Aspect ratio evolution associated with surface cracks in sheets subjected to fatigue. <i>International Journal of Fatigue</i> , 2016, 92, 588-595.	5.7	10
21	Fatigue behaviour of bolted joints. <i>Metals and Materials International</i> , 2012, 18, 553-558.	3.4	9
22	Cleavage Stress Required to Produce Fracture Path Deflection in Cold-Drawn Prestressing Steel Wires. <i>International Journal of Fracture</i> , 2007, 144, 189-196.	2.2	8
23	Critical stress intensity factors in steel cracked wires. <i>Materials & Design</i> , 2011, 32, 4424-4429.	5.1	8
24	Influence of Residual Stress Field on the Fatigue Crack Propagation in Prestressing Steel Wires. <i>Materials</i> , 2015, 8, 7589-7597.	2.9	8
25	Corrosion-Fatigue Crack Growth in Plates: A Model Based on the Paris Law. <i>Materials</i> , 2017, 10, 439.	2.9	8
26	Aspect Ratio Evolution in Embedded, Surface, and Corner Cracks in Finite-Thickness Plates under Tensile Fatigue Loading. <i>Applied Sciences (Switzerland)</i> , 2017, 7, 746.	2.5	8
27	Effect of sudden load decrease on the fatigue crack growth in cold drawn prestressing steel. <i>International Journal of Fatigue</i> , 2015, 76, 53-59.	5.7	7
28	Micro- and Macro-Approach to the Fatigue Crack Propagation in High-Strength Pearlitic Steel Wires. <i>Key Engineering Materials</i> , 2007, 348-349, 681-684.	0.4	6
29	Numerical Modeling of Plasticity-Induced Fatigue Crack Growth Retardation Due to Deflection in the Near-Tip Area. <i>Metals</i> , 2021, 11, 541.	2.3	6
30	Notch effect on the stress intensity factor in tension-loaded circumferentially cracked bars. <i>Engineering Fracture Mechanics</i> , 2018, 202, 436-444.	4.3	5
31	Evolution of crack paths and compliance in round bars under cyclic tension and bending. <i>Theoretical and Applied Fracture Mechanics</i> , 2015, 80, 104-110.	4.7	4
32	Fatigue crack growth in round bars for rock anchorages: the role of residual stresses. <i>Procedia Structural Integrity</i> , 2016, 2, 2734-2741.	0.8	4
33	Paris Law-Based Approach to Fatigue Crack Growth in Notched Plates under Tension Loading. <i>Procedia Structural Integrity</i> , 2017, 5, 1299-1303.	0.8	4
34	Crack tip field in eccentric circumferentially cracked round bar (CCRB) under tensile loading. <i>Fatigue and Fracture of Engineering Materials and Structures</i> , 2018, 41, 2153-2161.	3.4	4
35	Hydrogen embrittlement and notch tensile strength of pearlitic steel: a numerical approach. <i>Procedia Structural Integrity</i> , 2020, 28, 2444-2449.	0.8	4
36	Anisotropic Fatigue & Fracture Behaviour in Hot-Rolled and Cold-Drawn Pearlitic Steel Wires. <i>Key Engineering Materials</i> , 2016, 713, 103-106.	0.4	3

#	ARTICLE	IF	CITATIONS
37	Effect of the Crack Tip Bifurcation on the Plasticity-Induced Fatigue Propagation in Metallic Materials. <i>Materials</i> , 2021, 14, 3385.	2.9	3
38	Fatigue and fracture crack paths in spheroidized steel. <i>Procedia Structural Integrity</i> , 2020, 28, 2378-2381.	0.8	3
39	Anisotropic Fracture Behaviour of Progressively Drawn Pearlitic Steel. <i>Key Engineering Materials</i> , 0, 452-453, 1-4.	0.4	2
40	Influence of the Microstructure of Eutectoid Steel on the Cyclic Crack Propagation: Pearlite and Spheroidite. <i>International Journal of Fracture</i> , 2011, 171, 209-215.	2.2	2
41	Multi-Scale Approach to the Fatigue Crack Propagation in High-Strength Pearlitic Steel Wires. <i>Journal of ASTM International</i> , 2008, 5, 1-15.	0.2	2
42	Stress intensity factor for an eccentric circular inner crack in a round bar subjected to tensile loading. <i>Procedia Structural Integrity</i> , 2020, 28, 2382-2385.	0.8	2
43	Macro- and micro-approach to locally multiaxial fatigue crack paths in oriented and non-oriented pearlitic microstructures. <i>Procedia Structural Integrity</i> , 2020, 28, 2396-2403.	0.8	2
44	Fatigue performance of cold drawn prestressing steel: The effect of sudden load changes. <i>Procedia Engineering</i> , 2011, 10, 3546-3551.	1.2	1
45	Transient and Steady State Regimes of Fatigue Crack Growth in High Strength Steel. <i>Key Engineering Materials</i> , 2012, 525-526, 553-556.	0.4	1
46	Environmentally-assisted fatigue crack growth in prestressing steel wires. <i>Materials Science</i> , 2012, 47, 764-772.	0.9	1
47	Influence of surface defects on the fatigue crack initiation in pearlitic steel. <i>MATEC Web of Conferences</i> , 2014, 12, 06008.	0.2	1
48	Evolution of crack paths and compliance in round bars under cyclic tension and bending. <i>Frattura Ed Integrita Strutturale</i> , 2014, 8, 182-190.	0.9	1
49	Fracture behaviour of slightly hypereutectoid steel with different degree of spheroidization. <i>Fatigue and Fracture of Engineering Materials and Structures</i> , 2014, 37, 800-806.	3.4	1
50	Hydrogen-Assisted Fatigue Propagation in Corner Cracks at Holes Located in Plates under Tensile Loading. <i>Metals</i> , 2021, 11, 552.	2.3	1
51	Stress Intensity Factors for Embedded, Surface, and Corner Cracks in Finite-Thickness Plates Subjected to Tensile Loading. <i>Materials</i> , 2021, 14, 2807.	2.9	1
52	Influence of crack micro-roughness on the plasticity-induced fatigue propagation in high strength steel. <i>Frattura Ed Integrita Strutturale</i> , 2017, 11, 62-65.	0.9	1
53	Multi-Scale Approach to the Fatigue Crack Propagation in High-Strength Pearlitic Steel Wires. , 2009, , 439-458.		1
54	Corrosion-Fatigue of High Strength Steel Bars: Evolution of Crack Aspect Ratio. <i>Key Engineering Materials</i> , 0, 488-489, 1-4.	0.4	0

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55	Initiation of Fatigue Cracks in Bolted Joints. Key Engineering Materials, 0, 577-578, 549-552.	0.4	0
56	Fatigue cracking in high-strength cold-drawn pearlitic steel wires for anchorage in rocks. Procedia Structural Integrity, 2016, 2, 2330-2337.	0.8	0
57	Damage evolution in plates subjected to fatigue loading. Journal of Physics: Conference Series, 2017, 842, 012072.	0.4	0
58	Modeling of Surface Crack Advance in Round Wires Subjected to Cyclic Loading. , 2012, , 126-135.		0
59	Modeling of Surface Crack Advance in Round Wires Subjected to Cyclic Loading. Journal of ASTM International, 2012, 9, 1-7.	0.2	0
60	Strength Anisotropy in Prestressing Steel Wires. Advanced Structured Materials, 2012, , 259-270.	0.5	0
61	Evolution of Crack Aspect Ratio in Sheets Under Tension and Bending Cyclic Loading. , 2014, , 263-272.		0
62	Fatigue Crack Growth in Pre-Stressing Steel Wires: Transient and Steady-State Regimes. , 2014, , 251-261.		0
63	Crack tip fields and mixed mode fracture behaviour of progressively drawn pearlitic steel. Frattura Ed Integrita Strutturale, 2015, 9, 221-228.	0.9	0
64	Crack tip field in circumferentially-cracked round bar (CCRB) in tension affected by loss of axial symmetry. Frattura Ed Integrita Strutturale, 2017, 11, 139-142.	0.9	0
65	Estimation of Critical Stress Intensity Factor in Steel Cracked Wires. , 2006, , 215-216.		0
66	Analysis of near-tip fatigue crack path bifurcation in metallic materials. Procedia Structural Integrity, 2022, 39, 479-483.	0.8	0
67	A modified Paris Law approach to fatigue crack propagation in cold drawn pearlitic steel. Procedia Structural Integrity, 2022, 41, 718-723.	0.8	0