

Ricardo Branco

List of Publications by Year in descending order

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111
papers

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186209

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117
times ranked

942
citing authors

#	ARTICLE	IF	CITATIONS
1	A review on 3D-FE adaptive remeshing techniques for crack growth modelling. <i>Engineering Fracture Mechanics</i> , 2015, 141, 170-195.	2.0	125
2	Low-Cycle Fatigue Behaviour of AISI 18Ni300 Maraging Steel Produced by Selective Laser Melting. <i>Metals</i> , 2018, 8, 32.	1.0	68
3	Low-cycle fatigue behaviour of 34CrNiMo6 high strength steel. <i>Theoretical and Applied Fracture Mechanics</i> , 2012, 58, 28-34.	2.1	66
4	Finite element modelling and analysis of crack shape evolution in mode-I fatigue Middle Cracked Tension specimens. <i>Engineering Fracture Mechanics</i> , 2008, 75, 3020-3037.	2.0	64
5	Fatigue crack growth modelling based on CTOD for the 7050-T6 alloy. <i>Fatigue and Fracture of Engineering Materials and Structures</i> , 2017, 40, 1309-1320.	1.7	51
6	New methodology of fatigue life evaluation for multiaxially loaded notched components based on two uniaxial strain-controlled tests. <i>International Journal of Fatigue</i> , 2018, 111, 308-320.	2.8	49
7	A numerical analysis of CTOD in constant amplitude fatigue crack growth. <i>Theoretical and Applied Fracture Mechanics</i> , 2016, 85, 45-55.	2.1	46
8	Fatigue life assessment of notched round bars under multiaxial loading based on the total strain energy density approach. <i>Theoretical and Applied Fracture Mechanics</i> , 2018, 97, 340-348.	2.1	43
9	Rapid assessment of multiaxial fatigue lifetime in notched components using an averaged strain energy density approach. <i>International Journal of Fatigue</i> , 2019, 124, 89-98.	2.8	42
10	Fatigue crack growth in the 2050-T8 aluminium alloy. <i>International Journal of Fatigue</i> , 2018, 115, 79-88.	2.8	41
11	Influence of through-thickness crack shape on plasticity induced crack closure. <i>Fatigue and Fracture of Engineering Materials and Structures</i> , 2008, 31, 209-220.	1.7	40
12	Determination of the Paris law constants in round bars from beach marks on fracture surfaces. <i>Engineering Fracture Mechanics</i> , 2012, 96, 96-106.	2.0	39
13	Effect of strain ratio on cyclic deformation behaviour of 7050-T6 aluminium alloy. <i>International Journal of Fatigue</i> , 2019, 129, 105234.	2.8	39
14	Multiaxial fatigue behaviour of maraging steel produced by selective laser melting. <i>Materials and Design</i> , 2021, 201, 109469.	3.3	39
15	Comparison of different one-parameter damage laws and local stress-strain approaches in multiaxial fatigue life assessment of notched components. <i>International Journal of Fatigue</i> , 2021, 151, 106405.	2.8	39
16	A numerical study of plasticity induced crack closure under plane strain conditions. <i>International Journal of Fatigue</i> , 2015, 71, 75-86.	2.8	38
17	Effect of multiaxial bending-torsion loading on fracture surface parameters in high-strength steels processed by conventional and additive manufacturing. <i>Engineering Failure Analysis</i> , 2020, 118, 104784.	1.8	37
18	Monotonic and Cyclic Behavior of DIN 34CrNiMo6 Tempered Alloy Steel. <i>Metals</i> , 2016, 6, 98.	1.0	36

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19	Finite element meshes for optimal modelling of plasticity induced crack closure. <i>Engineering Fracture Mechanics</i> , 2015, 142, 184-200.	2.0	35
20	Effect of crack closure on non-linear crack tip parameters. <i>International Journal of Fatigue</i> , 2015, 71, 53-63.	2.8	35
21	A fractographic study exploring the fracture surface topography of S355J2 steel after pseudo-random bending-torsion fatigue tests. <i>Measurement: Journal of the International Measurement Confederation</i> , 2021, 178, 109443.	2.5	35
22	Fatigue behaviour and life prediction of lateral notched round bars under bending-torsion loading. <i>Engineering Fracture Mechanics</i> , 2014, 119, 66-84.	2.0	34
23	Fatigue crack growth versus plastic CTOD in the 304L stainless steel. <i>Engineering Fracture Mechanics</i> , 2019, 214, 487-503.	2.0	34
24	Determination of Paris law constants with a reverse engineering technique. <i>Engineering Failure Analysis</i> , 2009, 16, 631-638.	1.8	33
25	A brief review of recent three-dimensional studies of brittle fracture. <i>Physical Mesomechanics</i> , 2016, 19, 6-20.	1.0	31
26	Profile and Areal Surface Parameters for Fatigue Fracture Characterisation. <i>Materials</i> , 2020, 13, 3691.	1.3	31
27	Fractal dimension for bending-torsion fatigue fracture characterisation. <i>Measurement: Journal of the International Measurement Confederation</i> , 2021, 184, 109910.	2.5	31
28	A numerical study of the effect of single overloads on plasticity induced crack closure. <i>Theoretical and Applied Fracture Mechanics</i> , 2017, 88, 51-63.	2.1	30
29	Extent of surface regions near corner points of notched cracked bodies subjected to mode-I loading. <i>Finite Elements in Analysis and Design</i> , 2012, 50, 147-160.	1.7	29
30	A numerical analysis of the mechanisms behind plasticity induced crack closure: Application to variable amplitude loadings. <i>International Journal of Fatigue</i> , 2016, 89, 43-52.	2.8	28
31	Fatigue crack initiation behaviour of notched 34CrNiMo6 steel bars under proportional bending-torsion loading. <i>International Journal of Fatigue</i> , 2020, 130, 105268.	2.8	28
32	Three-dimensional fractographic analysis of total fracture areas in 6082 aluminium alloy specimens under fatigue bending with controlled damage degree. <i>Mechanics of Materials</i> , 2020, 147, 103410.	1.7	26
33	Modelling fatigue crack propagation in CT specimens. <i>Fatigue and Fracture of Engineering Materials and Structures</i> , 2008, 31, 452-465.	1.7	25
34	Numerical study of contact forces for crack closure analysis. <i>International Journal of Solids and Structures</i> , 2014, 51, 1330-1339.	1.3	25
35	Effect of tensile pre-strain on low-cycle fatigue behaviour of 7050-T6 aluminium alloy. <i>Engineering Failure Analysis</i> , 2020, 114, 104592.	1.8	24
36	Evolution of tensile properties with transformation temperature in medium-carbon carbide-free bainitic steel. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2020, 775, 138964.	2.6	23

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37	Fatigue fracture morphology of AISI H13 steel obtained by additive manufacturing. <i>International Journal of Fracture</i> , 2022, 235, 79-98.	1.1	22
38	Quasistatic and fatigue behavior of an AISI H13 steel obtained by additive manufacturing and conventional method. <i>Fatigue and Fracture of Engineering Materials and Structures</i> , 2021, 44, 3384-3398.	1.7	21
39	Strain sequence effect on fatigue life and fracture surface topography of 7075-T651 aluminium alloy. <i>Mechanics of Materials</i> , 2021, 160, 103972.	1.7	21
40	Artificial neural network based fatigue life assessment of friction stir welding AA2024-T351 aluminum alloy and multi-objective optimization of welding parameters. <i>International Journal of Fatigue</i> , 2022, 160, 106840.	2.8	21
41	Plasticity induced crack closure in Middleâ€Crack Tension specimen: numerical versus experimental. <i>Fatigue and Fracture of Engineering Materials and Structures</i> , 2010, 33, 673-686.	1.7	20
42	Effect of compressive loads on plasticity induced crack closure. <i>Theoretical and Applied Fracture Mechanics</i> , 2015, 80, 193-204.	2.1	19
43	Fracture surface topography investigation and fatigue life assessment of notched austenitic steel specimens. <i>Engineering Failure Analysis</i> , 2022, 135, 106121.	1.8	19
44	Effect of loading orientation on fatigue behaviour in severely notched round bars under non-zero mean stress bending-torsion. <i>Theoretical and Applied Fracture Mechanics</i> , 2017, 92, 185-197.	2.1	18
45	A simplified method for the evaluation of fatigue crack front shapes under mode I loading. <i>International Journal of Fracture</i> , 2014, 188, 203-211.	1.1	15
46	Effect of tempering temperature on monotonic and low-cycle fatigue properties of a new low-carbon martensitic steel. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2021, 826, 141939.	2.6	15
47	Notch fatigue analysis and life assessment using an energy field intensity approach in 7050-T6 aluminium alloy under bending-torsion loading. <i>International Journal of Fatigue</i> , 2022, 162, 106947.	2.8	15
48	Effect of Youngâ€™s modulus on fatigue crack growth. <i>International Journal of Fatigue</i> , 2020, 132, 105375.	2.8	14
49	A methodology for simulating plasticity induced crack closure and crack shape evolution based on elasticâ€plastic fracture parameters. <i>Engineering Fracture Mechanics</i> , 2021, 241, 107412.	2.0	14
50	Assessment of unusual failure in crankshaft of heavy-duty truck engine. <i>Engineering Failure Analysis</i> , 2022, 134, 106085.	1.8	14
51	Fatigue behaviour of maraging steel samples produced by SLM under constant and variable amplitude loading. <i>Procedia Structural Integrity</i> , 2019, 22, 10-16.	0.3	13
52	Load sequence effects and cyclic deformation behaviour of 7075-T651 aluminium alloy. <i>International Journal of Fatigue</i> , 2022, 155, 106593.	2.8	13
53	Three-Dimensional Computational Analysis of Stress State Transition in Through-Cracked Plates. <i>Mathematics in Computer Science</i> , 2016, 10, 343-352.	0.2	12
54	Mechanical Behavior of High-Strength, Low-Alloy Steels. <i>Metals</i> , 2018, 8, 610.	1.0	12

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55	Influence of Mn addition on cyclic deformation behaviour of bainitic rail steels. International Journal of Fatigue, 2020, 132, 105362.	2.8	12
56	Mechanical Properties and Sliding Wear Resistance of Suspension Plasma Sprayed YSZ Coatings. Advances in Science and Technology Research Journal, 2020, 14, 307-314.	0.4	12
57	On the use of the cumulative strain energy density for fatigue life assessment in advanced high-strength steels. International Journal of Fatigue, 2022, 164, 107121.	2.8	12
58	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
59	Stress Intensity Factor Solutions for CTS Mixed Mode Specimen. Frattura Ed Integrita Strutturale, 2019, 13, 676-692.	0.5	11
60	Effect of non-zero mean stress bending-torsion fatigue on fracture surface parameters of 34CrNiMo6 steel notched bars. Production Engineering Archives, 2020, 26, 167-173.	0.8	11
61	Notched M(T) specimen for plane strain studies. International Journal of Fatigue, 2014, 58, 28-39.	2.8	10
62	A Numerical Study of the Effect of Isotropic Hardening Parameters on Mode I Fatigue Crack Growth. Metals, 2020, 10, 177.	1.0	10
63	Fatigue fracture surface metrology of thin-walled tubular austenitic steel specimens after asynchronous loadings. Engineering Failure Analysis, 2022, 138, 106354.	1.8	10
64	Extent of the Surface Region in Notched Middle Cracked Tension Specimens. Key Engineering Materials, 0, 560, 107-127.	0.4	9
65	Fatigue Life Assessment in Bainitic Steels Based on The Cumulative Strain Energy Density. Applied Sciences (Switzerland), 2020, 10, 7774.	1.3	9
66	Effect of kinematic hardening parameters on fatigue crack growth. Theoretical and Applied Fracture Mechanics, 2020, 106, 102501.	2.1	9
67	Study of the notch fatigue behaviour under biaxial conditions of maraging steel produced by selective laser melting. Theoretical and Applied Fracture Mechanics, 2022, 121, 103469.	2.1	9
68	Effect of Underloads on Plasticity-Induced Crack Closure: A Numerical Analysis. Journal of Engineering Materials and Technology, Transactions of the ASME, 2019, 141, .	0.8	8
69	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
70	Using a standard specimen for crack propagation under plain strain conditions. International Journal of Structural Integrity, 2010, 1, 332-343.	1.8	7
71	Lynx: A user-friendly computer application for simulating fatigue growth of planar cracks using FEM. Computer Applications in Engineering Education, 2014, 22, 529-540.	2.2	7
72	A new method for analysis of part-elliptical surface cracks in structures subjected to fatigue loading. Theoretical and Applied Fracture Mechanics, 2019, 103, 102258.	2.1	7

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73	Fatigue Crack Growth from Notches: A Numerical Analysis. Applied Sciences (Switzerland), 2020, 10, 4174.	1.3	7
74	Overview of three-dimensional linear-elastic fracture mechanics. International Journal of Fracture, 2022, 234, 5-20.	1.1	7
75	Artificial neural network model of hardness, porosity and cavitation erosion wear of APS deposited Al ₂ O ₃ -13 wt% TiO ₂ coatings. Journal of Physics: Conference Series, 2021, 1736, 012033.	0.3	7
76	Fracture Surface Behavior of 34CrNiMo6 High-Strength Steel Bars with Blind Holes under Bending-Torsion Fatigue. Materials, 2022, 15, 80.	1.3	7
77	The microstructure, mechanical, and fatigue behaviours of MAG welded G20Mn5 cast steel. Fatigue and Fracture of Engineering Materials and Structures, 2020, 43, 1051-1063.	1.7	6
78	An analytical model of plasticity induced crack closure. Procedia Engineering, 2010, 2, 1005-1014.	1.2	5
79	A numerical study of non-linear crack tip parameters. Frattura Ed Integrita Strutturale, 2015, 9, 199-208.	0.5	5
80	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
81	A numerical analysis of fatigue crack closure using CTOD. Procedia Structural Integrity, 2019, 18, 645-650.	0.3	4
82	Multiaxial fatigue life assessment in notched components based on the effective strain energy density. Procedia Structural Integrity, 2020, 28, 1808-1815.	0.3	4
83	The Evaluation of Front Shapes of Through-the-Thickness Fatigue Cracks. Metals, 2021, 11, 403.	1.0	4
84	Effect of yield stress on fatigue crack growth. Frattura Ed Integrita Strutturale, 2019, 13, 9-19.	0.5	4
85	On the analysis of structures with cracks of elliptical and part-elliptical shapes. Theoretical and Applied Fracture Mechanics, 2018, 98, 149-156.	2.1	3
86	An analytical-based approach for simulating fatigue crack growth in round bars. International Journal of Fracture, 2022, 234, 57-68.	1.1	3
87	Fatigue crack growth under mixed mode I+II in Ti-6Al-4V specimens produced by Laser powder Bed fusion. Engineering Fracture Mechanics, 2022, 264, 108327.	2.0	3
88	Cyclic deformation behaviour of AlSi10Mg aluminium alloy manufactured by laser-beam powder bed fusion. Procedia Structural Integrity, 2022, 37, 462-468.	0.3	3
89	Plasticity Induced Crack Closure under Plane Strain Conditions. Key Engineering Materials, 0, 465, 548-551.	0.4	2
90	Numerical validation of crack closure concept using non-linear crack tip parameters. Procedia Structural Integrity, 2016, 1, 90-97.	0.3	2

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91	Special Issue on "Mechanical Behaviour of Aluminium Alloys", Applied Sciences (Switzerland), 2018, 8, 1854.	1.3	2
92	Effect of pre-strain on cyclic plastic behaviour of 7050-T6 aluminium alloy. Procedia Structural Integrity, 2019, 17, 177-182.	0.3	2
93	Mixed numerical-experimental method for generation of energy-life fatigue master curves. Material Design and Processing Communications, 2019, 1, e37.	0.5	2
94	Cyclic plastic behaviour of 7075 aluminium alloy. Procedia Structural Integrity, 2020, 25, 438-444.	0.3	2
95	Does the front of fatigue crack intersect free surface at critical angle?. Theoretical and Applied Fracture Mechanics, 2021, 114, 102985.	2.1	2
96	Fatigue crack growth in notched specimens: a numerical analysis. Frattura Ed Integrita Strutturale, 2019, 13, 666-675.	0.5	2
97	Influence of Material Parameters on Plasticity Induced Crack Closure. Key Engineering Materials, 0, 417-418, 113-116.	0.4	1
98	Influence of Errors in Young's Modulus on Fatigue Life Predictions of Notched Round Bars Under Bending-Torsion Loading. Recent Patents on Mechanical Engineering, 2014, 7, 63-76.	0.2	1
99	Comparative Study of the Uniaxial Cyclic Behaviour of Carbide-Bearing and Carbide-Free Bainitic Steels. Metals, 2018, 8, 422.	1.0	1
100	Crack tip mechanisms: a numerical analysis. Procedia Structural Integrity, 2019, 23, 571-576.	0.3	1
101	Model for fatigue crack growth analysis. Procedia Structural Integrity, 2020, 25, 254-261.	0.3	1
102	The crack surface morphology investigation of S355J2 steel after bending-torsion fatigue. Journal of Physics: Conference Series, 2021, 1736, 012020.	0.3	1
103	Mixed mechanical-metrological approach to quantify the fractographic damage in mechanical components subjected to cyclic loading. Procedia Structural Integrity, 2020, 28, 1875-1882.	0.3	1
104	Effect of numerical parameters on plastic CTOD. Frattura Ed Integrita Strutturale, 2017, 11, 149-156.	0.5	1
105	Prediction of multiaxial fatigue life of notched maraging steel components manufactured by selective laser melting. Procedia Structural Integrity, 2022, 39, 273-280.	0.3	1
106	Influence of loading pattern in fatigue life for notched round bars subjected to bending-torsion. MATEC Web of Conferences, 2014, 12, 08004.	0.1	0
107	Evaluation of Fatigue Crack Front Shape for a Specimen with Finite Thickness. MATEC Web of Conferences, 2015, 28, 01004.	0.1	0
108	On the stress state transition in notched cracked plates under tension loading. Material Design and Processing Communications, 2019, 1, e85.	0.5	0

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109	Prediction of Fatigue Crack Initiation Life in Notched Cylindrical Bars Under Multiaxial Cycling Loading. Structural Integrity, 2019, , 271-277.	0.8	0
110	3D automatic procedure to evaluate the fatigue life extension by overloading. Material Design and Processing Communications, 2020, 2, e110.	0.5	0
111	Propagation of notch fatigue cracks on maraging steel under biaxial conditions. Procedia Structural Integrity, 2022, 39, 509-514.	0.3	0