

Ricardo Branco

List of Publications by Year in descending order

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111
papers

2,019
citations

186209

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302012

39
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117
all docs

117
docs citations

117
times ranked

942
citing authors

#	ARTICLE	IF	CITATIONS
1	Overview of three-dimensional linear-elastic fracture mechanics. <i>International Journal of Fracture</i> , 2022, 234, 5-20.	1.1	7
2	An analytical-based approach for simulating fatigue crack growth in round bars. <i>International Journal of Fracture</i> , 2022, 234, 57-68.	1.1	3
3	Load sequence effects and cyclic deformation behaviour of 7075-T651 aluminium alloy. <i>International Journal of Fatigue</i> , 2022, 155, 106593.	2.8	13
4	Fatigue fracture morphology of AISI H13 steel obtained by additive manufacturing. <i>International Journal of Fracture</i> , 2022, 235, 79-98.	1.1	22
5	Assessment of unusual failure in crankshaft of heavy-duty truck engine. <i>Engineering Failure Analysis</i> , 2022, 134, 106085.	1.8	14
6	Fracture surface topography investigation and fatigue life assessment of notched austenitic steel specimens. <i>Engineering Failure Analysis</i> , 2022, 135, 106121.	1.8	19
7	Prediction of multiaxial fatigue life of notched maraging steel components manufactured by selective laser melting. <i>Procedia Structural Integrity</i> , 2022, 39, 273-280.	0.3	1
8	Propagation of notch fatigue cracks on maraging steel under biaxial conditions. <i>Procedia Structural Integrity</i> , 2022, 39, 509-514.	0.3	0
9	Fatigue crack growth under mixed mode I+II in Ti-6Al-4V specimens produced by Laser powder Bed fusion. <i>Engineering Fracture Mechanics</i> , 2022, 264, 108327.	2.0	3
10	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
11	Fracture Surface Behavior of 34CrNiMo6 High-Strength Steel Bars with Blind Holes under Bending-Torsion Fatigue. <i>Materials</i> , 2022, 15, 80.	1.3	7
12	Cyclic deformation behaviour of AlSi10Mg aluminium alloy manufactured by laser-beam powder bed fusion. <i>Procedia Structural Integrity</i> , 2022, 37, 462-468.	0.3	3
13	Fatigue fracture surface metrology of thin-walled tubular austenitic steel specimens after asynchronous loadings. <i>Engineering Failure Analysis</i> , 2022, 138, 106354.	1.8	10
14	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
15	On the applicability of the cumulative strain energy density for notch fatigue analysis under multiaxial loading. <i>Theoretical and Applied Fracture Mechanics</i> , 2022, 120, 103405.	2.1	8
16	Influence of specimen orientation on fatigue crack growth in 7050-T7451 and 2050-T8 aluminium alloys. <i>International Journal of Fatigue</i> , 2022, 164, 107136.	2.8	5
17	Study of the notch fatigue behaviour under biaxial conditions of maraging steel produced by selective laser melting. <i>Theoretical and Applied Fracture Mechanics</i> , 2022, 121, 103469.	2.1	9
18	On the use of the cumulative strain energy density for fatigue life assessment in advanced high-strength steels. <i>International Journal of Fatigue</i> , 2022, 164, 107121.	2.8	12

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19	A methodology for simulating plasticity induced crack closure and crack shape evolution based on elastic-plastic fracture parameters. <i>Engineering Fracture Mechanics</i> , 2021, 241, 107412.	2.0	14
20	The Evaluation of Front Shapes of Through-the-Thickness Fatigue Cracks. <i>Metals</i> , 2021, 11, 403.	1.0	4
21	Multiaxial fatigue behaviour of maraging steel produced by selective laser melting. <i>Materials and Design</i> , 2021, 201, 109469.	3.3	39
22	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
23	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
24	Does the front of fatigue crack intersect free surface at critical angle?. <i>Theoretical and Applied Fracture Mechanics</i> , 2021, 114, 102985.	2.1	2
25	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
26	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
27	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
28	Fractal dimension for bending-torsion fatigue fracture characterisation. <i>Measurement: Journal of the International Measurement Confederation</i> , 2021, 184, 109910.	2.5	31
29	Notch fatigue analysis and crack initiation life estimation of maraging steel fabricated by laser beam powder bed fusion under multiaxial loading. <i>International Journal of Fatigue</i> , 2021, 153, 106468.	2.8	11
30	Artificial neural network model of hardness, porosity and cavitation erosion wear of APS deposited Al ₂ O ₃ -13 wt% TiO ₂ coatings. <i>Journal of Physics: Conference Series</i> , 2021, 1736, 012033.	0.3	7
31	The crack surface morphology investigation of S355J2 steel after bending-torsion fatigue. <i>Journal of Physics: Conference Series</i> , 2021, 1736, 012020.	0.3	1
32	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
33	Influence of Mn addition on cyclic deformation behaviour of bainitic rail steels. <i>International Journal of Fatigue</i> , 2020, 132, 105362.	2.8	12
34	Effect of Young's modulus on fatigue crack growth. <i>International Journal of Fatigue</i> , 2020, 132, 105375.	2.8	14
35	Fatigue Life Assessment in Bainitic Steels Based on The Cumulative Strain Energy Density. <i>Applied Sciences (Switzerland)</i> , 2020, 10, 7774.	1.3	9
36	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

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37	Profile and Areal Surface Parameters for Fatigue Fracture Characterisation. <i>Materials</i> , 2020, 13, 3691.	1.3	31
38	Multiaxial fatigue life assessment in notched components based on the effective strain energy density. <i>Procedia Structural Integrity</i> , 2020, 28, 1808-1815.	0.3	4
39	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
40	Model for fatigue crack growth analysis. <i>Procedia Structural Integrity</i> , 2020, 25, 254-261.	0.3	1
41	Cyclic plastic behaviour of 7075 aluminium alloy. <i>Procedia Structural Integrity</i> , 2020, 25, 438-444.	0.3	2
42	The microstructure, mechanical, and fatigue behaviours of MAG welded G20Mn5 cast steel. <i>Fatigue and Fracture of Engineering Materials and Structures</i> , 2020, 43, 1051-1063.	1.7	6
43	Fatigue Crack Growth from Notches: A Numerical Analysis. <i>Applied Sciences (Switzerland)</i> , 2020, 10, 4174.	1.3	7
44	3D automatic procedure to evaluate the fatigue life extension by overloading. <i>Material Design and Processing Communications</i> , 2020, 2, e110.	0.5	0
45	Effect of kinematic hardening parameters on fatigue crack growth. <i>Theoretical and Applied Fracture Mechanics</i> , 2020, 106, 102501.	2.1	9
46	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
47	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
48	Mixed mechanical-metrological approach to quantify the fractographic damage in mechanical components subjected to cyclic loading. <i>Procedia Structural Integrity</i> , 2020, 28, 1875-1882.	0.3	1
49	Mechanical Properties and Sliding Wear Resistance of Suspension Plasma Sprayed YSZ Coatings. <i>Advances in Science and Technology Research Journal</i> , 2020, 14, 307-314.	0.4	12
50	A Numerical Study of the Effect of Isotropic Hardening Parameters on Mode I Fatigue Crack Growth. <i>Metals</i> , 2020, 10, 177.	1.0	10
51	Effect of non-zero mean stress bending-torsion fatigue on fracture surface parameters of 34CrNiMo6 steel notched bars. <i>Production Engineering Archives</i> , 2020, 26, 167-173.	0.8	11
52	On the stress state transition in notched cracked plates under tension loading. <i>Material Design and Processing Communications</i> , 2019, 1, e85.	0.5	0
53	Effect of pre-strain on cyclic plastic behaviour of 7050-T6 aluminium alloy. <i>Procedia Structural Integrity</i> , 2019, 17, 177-182.	0.3	2
54	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

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55	A numerical analysis of fatigue crack closure using CTOD. Procedia Structural Integrity, 2019, 18, 645-650.	0.3	4
56	Mixed numericalâ€œexperimental method for generation of energyâ€œlife fatigue master curves. Material Design and Processing Communications, 2019, 1, e37.	0.5	2
57	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
58	Prediction of Fatigue Crack Initiation Life in Notched Cylindrical Bars Under Multiaxial Cycling Loading. Structural Integrity, 2019, , 271-277.	0.8	0
59	Fatigue crack growth versus plastic CTOD in the 304L stainless steel. Engineering Fracture Mechanics, 2019, 214, 487-503.	2.0	34
60	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
61	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
62	Crack tip mechanisms: a numerical analysis. Procedia Structural Integrity, 2019, 23, 571-576.	0.3	1
63	Fatigue behaviour of maraging steel samples produced by SLM under constant and variable amplitude loading. Procedia Structural Integrity, 2019, 22, 10-16.	0.3	13
64	Fatigue crack growth in notched specimens: a numerical analysis. Frattura Ed Integrita Strutturale, 2019, 13, 666-675.	0.5	2
65	Stress Intensity Factor Solutions for CTS Mixed Mode Specimen. Frattura Ed Integrita Strutturale, 2019, 13, 676-692.	0.5	11
66	Effect of yield stress on fatigue crack growth. Frattura Ed Integrita Strutturale, 2019, 13, 9-19.	0.5	4
67	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
68	Fatigue crack growth in the 2050-T8 aluminium alloy. International Journal of Fatigue, 2018, 115, 79-88.	2.8	41
69	Fatigue life assessment of notched round bars under multiaxial loading based on the total strain energy density approach. Theoretical and Applied Fracture Mechanics, 2018, 97, 340-348.	2.1	43
70	Special Issue on â€œMechanical Behaviour of Aluminium Alloysâ€œ. Applied Sciences (Switzerland), 2018, 8, 1854.	1.3	2
71	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
72	Low-Cycle Fatigue Behaviour of AISI 18Ni300 Maraging Steel Produced by Selective Laser Melting. Metals, 2018, 8, 32.	1.0	68

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73	Comparative Study of the Uniaxial Cyclic Behaviour of Carbide-Bearing and Carbide-Free Bainitic Steels. <i>Metals</i> , 2018, 8, 422.	1.0	1
74	Mechanical Behavior of High-Strength, Low-Alloy Steels. <i>Metals</i> , 2018, 8, 610.	1.0	12
75	Fatigue crack growth modelling based on CTOD for the 7050Al alloy. <i>Fatigue and Fracture of Engineering Materials and Structures</i> , 2017, 40, 1309-1320.	1.7	51
76	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
77	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
78	Effect of numerical parameters on plastic CTOD. <i>Frattura Ed Integrita Strutturale</i> , 2017, 11, 149-156.	0.5	1
79	Monotonic and Cyclic Behavior of DIN 34CrNiMo6 Tempered Alloy Steel. <i>Metals</i> , 2016, 6, 98.	1.0	36
80	A brief review of recent three-dimensional studies of brittle fracture. <i>Physical Mesomechanics</i> , 2016, 19, 6-20.	1.0	31
81	Numerical validation of crack closure concept using non-linear crack tip parameters. <i>Procedia Structural Integrity</i> , 2016, 1, 90-97.	0.3	2
82	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
83	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
84	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
85	Effect of compressive loads on plasticity induced crack closure. <i>Theoretical and Applied Fracture Mechanics</i> , 2015, 80, 193-204.	2.1	19
86	Evaluation of Fatigue Crack Front Shape for a Specimen with Finite Thickness. <i>MATEC Web of Conferences</i> , 2015, 28, 01004.	0.1	0
87	A review on 3D-FE adaptive remeshing techniques for crack growth modelling. <i>Engineering Fracture Mechanics</i> , 2015, 141, 170-195.	2.0	125
88	Finite element meshes for optimal modelling of plasticity induced crack closure. <i>Engineering Fracture Mechanics</i> , 2015, 142, 184-200.	2.0	35
89	Effect of crack closure on non-linear crack tip parameters. <i>International Journal of Fatigue</i> , 2015, 71, 53-63.	2.8	35
90	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

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91	A numerical study of non-linear crack tip parameters. <i>Frattura Ed Integrita Strutturale</i> , 2015, 9, 199-208.	0.5	5
92	Influence of Errors in Young's Modulus on Fatigue Life Predictions of Notched Round Bars Under Bending-Torsion Loading. <i>Recent Patents on Mechanical Engineering</i> , 2014, 7, 63-76.	0.2	1
93	Lynx: A user-friendly computer application for simulating fatigue growth of planar cracks using FEM. <i>Computer Applications in Engineering Education</i> , 2014, 22, 529-540.	2.2	7
94	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
95	Numerical study of contact forces for crack closure analysis. <i>International Journal of Solids and Structures</i> , 2014, 51, 1330-1339.	1.3	25
96	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
97	Notched M(T) specimen for plane strain studies. <i>International Journal of Fatigue</i> , 2014, 58, 28-39.	2.8	10
98	Influence of loading pattern in fatigue life for notched round bars subjected to bending-torsion. <i>MATEC Web of Conferences</i> , 2014, 12, 08004.	0.1	0
99	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
100	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
101	Low-cycle fatigue behaviour of 34CrNiMo6 high strength steel. <i>Theoretical and Applied Fracture Mechanics</i> , 2012, 58, 28-34.	2.1	66
102	Using a standard specimen for crack propagation under plain strain conditions. <i>International Journal of Structural Integrity</i> , 2010, 1, 332-343.	1.8	7
103	An analytical model of plasticity induced crack closure. <i>Procedia Engineering</i> , 2010, 2, 1005-1014.	1.2	5
104	Plasticity induced crack closure in Middle-Crack Tension specimen: numerical versus experimental. <i>Fatigue and Fracture of Engineering Materials and Structures</i> , 2010, 33, 673-686.	1.7	20
105	Determination of Paris law constants with a reverse engineering technique. <i>Engineering Failure Analysis</i> , 2009, 16, 631-638.	1.8	33
106	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
107	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
108	Modelling fatigue crack propagation in CT specimens. <i>Fatigue and Fracture of Engineering Materials and Structures</i> , 2008, 31, 452-465.	1.7	25

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109	Influence of Material Parameters on Plasticity Induced Crack Closure. Key Engineering Materials, 0, 417-418, 113-116.	0.4	1
110	Plasticity Induced Crack Closure under Plane Strain Conditions. Key Engineering Materials, 0, 465, 548-551.	0.4	2
111	Extent of the Surface Region in Notched Middle Cracked Tension Specimens. Key Engineering Materials, 0, 560, 107-127.	0.4	9