

Alfonso Fernández Canteli

List of Publications by Year in descending order

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Version: 2024-02-01

148
papers

2,888
citations

159585

30
h-index

223800

46
g-index

154
all docs

154
docs citations

154
times ranked

2016
citing authors

#	ARTICLE	IF	CITATIONS
1	Elastic and plastic parts of strain energy density in critical distance determination. <i>Engineering Fracture Mechanics</i> , 2015, 147, 100-118.	4.3	240
2	Generalized probabilistic model allowing for various fatigue damage variables. <i>International Journal of Fatigue</i> , 2017, 100, 187-194.	5.7	112
3	Fatigue assessment of a riveted shear splice based on a probabilistic model. <i>International Journal of Fatigue</i> , 2010, 32, 453-462.	5.7	88
4	A general regression model for lifetime evaluation and prediction. <i>International Journal of Fracture</i> , 2001, 107, 117-137.	2.2	77
5	Local unified probabilistic model for fatigue crack initiation and propagation: Application to a notched geometry. <i>Engineering Structures</i> , 2013, 52, 394-407.	5.3	73
6	The elastic and plastic constraint parameters for three-dimensional problems. <i>Engineering Fracture Mechanics</i> , 2014, 127, 83-96.	4.3	66
7	A General Method for Local Sensitivity Analysis With Application to Regression Models and Other Optimization Problems. <i>Technometrics</i> , 2004, 46, 430-444.	1.9	64
8	Interlaminar crack initiation and growth rate in a carbon-fibre epoxy composite under mode-I fatigue loading. <i>Composites Science and Technology</i> , 2008, 68, 2325-2331.	7.8	63
9	Fatigue behaviour of hot rolled reinforcing bars of austenitic and duplex stainless steels. <i>Materials Science and Technology</i> , 2007, 23, 145-150.	1.6	59
10	Specimen length effect on parameter estimation in modelling fatigue strength by Weibull distribution. <i>International Journal of Fatigue</i> , 2006, 28, 1047-1058.	5.7	55
11	On fitting a fatigue model to data. <i>International Journal of Fatigue</i> , 1999, 21, 97-106.	5.7	54
12	A methodology for probabilistic prediction of fatigue crack initiation taking into account the scale effect. <i>Engineering Fracture Mechanics</i> , 2017, 185, 101-113.	4.3	54
13	Study of the time-temperature-dependent behaviour of PVB: Application to laminated glass elements. <i>Thin-Walled Structures</i> , 2017, 119, 324-331.	5.3	50
14	A local correspondence principle for mode shapes in structural dynamics. <i>Mechanical Systems and Signal Processing</i> , 2014, 45, 91-104.	8.0	49
15	Mechanical properties and corrosion behaviour of stainless steel reinforcing bars. <i>Journal of Materials Processing Technology</i> , 2003, 143-144, 134-137.	6.3	48
16	ProFatigue: A Software Program for Probabilistic Assessment of Experimental Fatigue Data Sets. <i>Procedia Engineering</i> , 2014, 74, 236-241.	1.2	48
17	On exact and approximated formulations for scaling-mode shapes in operational modal analysis by mass and stiffness change. <i>Journal of Sound and Vibration</i> , 2012, 331, 622-637.	3.9	47
18	Statistical evaluation of fatigue strength of double shear riveted connections and crack growth rates of materials from old bridges. <i>Engineering Fracture Mechanics</i> , 2017, 185, 241-257.	4.3	43

#	ARTICLE	IF	CITATIONS
19	A probabilistic analysis of Miner's law for different loading conditions. <i>Structural Engineering and Mechanics</i> , 2016, 60, 71-90.	1.0	43
20	Unified two-stage fatigue methodology based on a probabilistic damage model applied to structural details. <i>Theoretical and Applied Fracture Mechanics</i> , 2017, 92, 252-265.	4.7	42
21	Scaling-factor estimation using an optimized mass-change strategy. <i>Mechanical Systems and Signal Processing</i> , 2010, 24, 1260-1273.	8.0	41
22	Influence of the σ_3 -stress on the 3-D stress state around corner cracks in an elastic plate. <i>Engineering Fracture Mechanics</i> , 2011, 78, 412-427.	4.3	41
23	A probabilistic interpretation of the Miner number for fatigue life prediction. <i>Frattura Ed Integrita Strutturale</i> , 2014, 8, 327-339.	0.9	39
24	A general model for fatigue damage due to any stress history. <i>International Journal of Fatigue</i> , 2008, 30, 150-164.	5.7	38
25	A procedure to derive probabilistic fatigue crack propagation data. <i>International Journal of Structural Integrity</i> , 2012, 3, 158-183.	3.3	37
26	A fatigue model with local sensitivity analysis. <i>Fatigue and Fracture of Engineering Materials and Structures</i> , 2007, 30, 149-168.	3.4	36
27	Deriving the primary cumulative distribution function of fracture stress for brittle materials from 3- and 4-point bending tests. <i>Journal of the European Ceramic Society</i> , 2011, 31, 451-460.	5.7	35
28	A general regression model for statistical analysis of strain-life fatigue data. <i>Materials Letters</i> , 2008, 62, 3639-3642.	2.6	34
29	Obtaining S-N curves from crack growth curves: an alternative to self-similarity. <i>International Journal of Fracture</i> , 2014, 187, 159-172.	2.2	33
30	Dynamic fracture toughness measurements in composites by instrumented Charpy testing: influence of aging. <i>Composites Science and Technology</i> , 2002, 62, 1315-1325.	7.8	32
31	A Unified Statistical Methodology for Modeling Fatigue Damage. , 2009, , .		29
32	A critical comparison of two models for assessment of fatigue data. <i>International Journal of Fatigue</i> , 2008, 30, 45-57.	5.7	28
33	The influence of shot peening on the fatigue behaviour of duplex stainless steels. <i>Procedia Engineering</i> , 2010, 2, 1539-1546.	1.2	28
34	Non-linear Viscoelastic Model for Behaviour Characterization of Temporomandibular Joint Discs. <i>Experimental Mechanics</i> , 2011, 51, 1435-1440.	2.0	26
35	Influence of Resin Type on the Delamination Behavior of Carbon Fiber Reinforced Composites Under Mode-II Loading. <i>International Journal of Damage Mechanics</i> , 2011, 20, 963-978.	4.2	26
36	Design and sensitivity analysis using the probability-safety-factor method. An application to retaining walls. <i>Structural Safety</i> , 2004, 26, 159-179.	5.3	25

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55	Dynamic compressive properties of articular cartilages in the porcine temporomandibular joint. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2013, 23, 62-70.	3.1	16
56	The effective-thickness concept in laminated-glass elements under static loading. <i>Engineering Structures</i> , 2013, 56, 1092-1102.	5.3	16
57	Proposal of a fatigue crack propagation model taking into account crack closure effects using a modified CCS crack growth model. <i>Procedia Structural Integrity</i> , 2016, 1, 110-117.	0.8	16
58	Fatigue delamination, initiation, and growth, under mode I and II of fracture in a carbon-fiber epoxy composite. <i>Polymer Composites</i> , 2010, 31, 700-706.	4.6	15
59	Experimental validation of a statistical model for the Weibull field corresponding to any stress level and amplitude. <i>International Journal of Fatigue</i> , 2009, 31, 231-241.	5.7	15
60	Fatigue behaviour of duplex stainless steel reinforcing bars subjected to shot peening. <i>Fatigue and Fracture of Engineering Materials and Structures</i> , 2009, 32, 567-572.	3.4	15
61	Stochastic Model for Damage Accumulation in Rubble-Mound Breakwaters Based on Compatibility Conditions and the Central Limit Theorem. <i>Journal of Waterway, Port, Coastal and Ocean Engineering</i> , 2012, 138, 451-463.	1.2	15
62	The region-dependent dynamic properties of porcine temporomandibular joint disc under unconfined compression. <i>Journal of Biomechanics</i> , 2013, 46, 845-848.	2.1	15
63	Methodology to evaluate fatigue damage under multiaxial random loading. <i>Engineering Fracture Mechanics</i> , 2017, 185, 114-123.	4.3	15
64	Relaxation modulus-complex modulus interconversion for linear viscoelastic materials. <i>Mechanics of Time-Dependent Materials</i> , 2013, 17, 465-479.	4.4	14
65	Optimal discrete-time Prony series fitting method for viscoelastic materials. <i>Mechanics of Time-Dependent Materials</i> , 2019, 23, 193-206.	4.4	14
66	Fatigue Assessment Strategy Using Bayesian Techniques. <i>Materials</i> , 2019, 12, 3239.	2.9	14
67	Effects of loading direction in prolonged clenching on stress distribution in the temporomandibular joint. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2020, 112, 104029.	3.1	14
68	A new probabilistic model for crack propagation under fatigue loads and its connection with Weibull fields. <i>International Journal of Fatigue</i> , 2010, 32, 744-753.	5.7	13
69	Using a statistical model for the analysis of the influence of the type of matrix carbon-fiber epoxy composites on the fatigue delamination under modes I and II of fracture. <i>International Journal of Fatigue</i> , 2013, 56, 54-59.	5.7	13
70	Determining fracture energy parameters of concrete from the modified compact tension test. <i>Frattura Ed Integrita Strutturale</i> , 2014, 8, 383-393.	0.9	13
71	A comparative analysis of multiaxial fatigue models under random loading. <i>Engineering Structures</i> , 2019, 182, 112-122.	5.3	13
72	Considerations about the existence or non-existence of the fatigue limit: implications on practical design. <i>International Journal of Fracture</i> , 2020, 223, 189-196.	2.2	13

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73	Fracture mechanics of the three-dimensional crack front: vertex singularity versus out of plain constraint descriptions. <i>Procedia Engineering</i> , 2010, 2, 2095-2102.	1.2	12
74	Viscoelastic Characterisation of the Temporomandibular Joint Disc in Bovines. <i>Strain</i> , 2011, 47, 188-193.	2.4	12
75	Probabilistic Characterization of Glass under Different Type of Testing. , 2014, 3, 2111-2116.		12
76	Design S-N Curves for Old Portuguese and French Riveted Bridges Connection Based on Statistical Analyses. <i>Procedia Engineering</i> , 2016, 160, 77-84.	1.2	12
77	An iterative method to obtain the specimen-independent three-parameter Weibull distribution of strength from bending tests. <i>Procedia Engineering</i> , 2011, 10, 1414-1419.	1.2	11
78	Probabilistic failure assessment of Fibreglass composites. <i>Composite Structures</i> , 2017, 160, 1163-1170.	5.8	11
79	Analysis of Constant and Variable Amplitude Strain-Life Data Using a Novel Probabilistic Weibull Regression Model. <i>Journal of Pressure Vessel Technology, Transactions of the ASME</i> , 2010, 132, .	0.6	10
80	Influence of Temperature on the Fatigue Behaviour of Glass Fibre Reinforced Polypropylene. <i>Strain</i> , 2011, 47, 222-226.	2.4	10
81	Modelling probabilistic fatigue crack propagation rates for a mild structural steel. <i>Frattura Ed Integrita Strutturale</i> , 2015, 9, 80-96.	0.9	10
82	Buckling of multilayered laminated glass beams: Validation of the effective thickness concept. <i>Composite Structures</i> , 2017, 169, 2-9.	5.8	10
83	Optimized Planning and Evaluation of Dental Implant Fatigue Testing: A Specific Software Application. <i>Biology</i> , 2020, 9, 372.	2.8	10
84	Probabilistic assessment of VHCF data as pertaining to concurrent populations using a Weibull regression model. <i>Fatigue and Fracture of Engineering Materials and Structures</i> , 2017, 40, 1772-1782.	3.4	10
85	Fatigue Damage Assessment of a Riveted Connection Made of Puddle Iron from the Fão Bridge using the Modified Probabilistic Interpretation Technique. <i>Procedia Engineering</i> , 2015, 114, 760-767.	1.2	9
86	Dynamic and stress relaxation properties of the whole porcine temporomandibular joint disc under compression. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2016, 57, 109-115.	3.1	9
87	Hazard maps and global probability as a way to transfer standard fracture results to reliable design of real components. <i>Engineering Failure Analysis</i> , 2016, 69, 135-146.	4.0	9
88	Some fatigue damage measures for longitudinal elements based on the Wohler field. <i>Fatigue and Fracture of Engineering Materials and Structures</i> , 2007, 30, 1063-1075.	3.4	8
89	Estimating the Sâ€“N Field From Strainâ€“Lifetime Curves. <i>Strain</i> , 2011, 47, e93.	2.4	8
90	Probabilistic assessment of fatigue initiation data on highly crosslinked ultrahigh molecular weight polyethylenes. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2012, 15, 190-198.	3.1	8

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91	Failure and repair analysis of a runway beam: Influence of the standard applied to lifetime prediction. Engineering Failure Analysis, 2015, 56, 89-97.	4.0	8
92	Statistical joint evaluation of fracture results from distinct experimental programs: An application to annealed glass. Theoretical and Applied Fracture Mechanics, 2016, 85, 149-157.	4.7	8
93	A statistical model for crack growth based on tension and compression Wöhler fields. Engineering Fracture Mechanics, 2008, 75, 4439-4449.	4.3	7
94	Contrast of a Probabilistic Design Model for Laminated Glass Plates. Materials Science Forum, 0, 730-732, 501-506.	0.3	7
95	Probabilistic S-N Field Assessment for a Notched Plate Made of Puddle Iron From the Eiffel Bridge with an Elliptical Hole. Procedia Engineering, 2015, 114, 691-698.	1.2	7
96	Application of Modal Superposition Technique in the Fatigue Analysis Using Local Approaches. Procedia Engineering, 2016, 160, 45-52.	1.2	7
97	Mechanical properties of SMC-35 after prolonged exposure to the atmosphere. Composites, 1994, 25, 891-894.	0.7	6
98	Updating inverses in matrix analysis of structures. , 1998, 43, 1479-1504.		6
99	Using statistical compatibility to derive advanced probabilistic fatigue models. Procedia Engineering, 2010, 2, 1131-1140.	1.2	6
100	Study of the influence of notch radii and temperature on the probability of failure: A methodology to perform a combined assessment. Fatigue and Fracture of Engineering Materials and Structures, 2019, 42, 2663-2673.	3.4	6
101	A Novel Approach to Describe the Time-Temperature Conversion among Relaxation Curves of Viscoelastic Materials. Materials, 2020, 13, 1809.	2.9	6
102	A methodology for phenomenological analysis of cumulative damage processes. Application to fatigue and fracture phenomena. International Journal of Fatigue, 2021, 150, 106311.	5.7	6
103	Rainflow analysis in Coastal Engineering using switching second order Markov models. Applied Mathematical Modelling, 2012, 36, 4286-4303.	4.2	5
104	Fatigue Life Response of P355NL1 Steel under Uniaxial Loading Using Kohout-Väçhet Model. Procedia Engineering, 2016, 160, 109-116.	1.2	5
105	A Probabilistic Approach to Assessing and Predicting the Failure of Notched Components. Materials, 2019, 12, 4053.	2.9	5
106	A compatible regression Weibull model for the description of the three-dimensional fatigue field as a basis for cumulative damage approach. International Journal of Fatigue, 2022, 155, 106596.	5.7	5
107	Design of a composite beam using the failure probability-safety factor method. International Journal for Numerical Methods in Engineering, 2005, 62, 1148-1182.	2.8	4
108	Evaluation of Concrete Fatigue Measurement Using Standard and Non-Linear Regression Model. Applied Mechanics and Materials, 0, 121-126, 2726-2729.	0.2	4

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109	Probabilistic Fatigue Assessment of a Notched Detail Taking Into Account Mean Stress Effects. Journal of Pressure Vessel Technology, Transactions of the ASME, 2012, 134, .	0.6	4
110	Probabilistic failure analysis for real glass components under general loading conditions. Fatigue and Fracture of Engineering Materials and Structures, 2019, 42, 1283-1291.	3.4	4
111	Retroextrapolation of crack growth curves using phenomenological models based on cumulative distribution functions of the generalized extreme value family. International Journal of Fatigue, 2020, 141, 105897.	5.7	4
112	Comparative statistical analysis of the fatigue of composites under different modes of loading. Journal of Materials Science, 1997, 32, 6495-6503.	3.7	3
113	Characterization of glass defects. Journal of Materials Science Letters, 2002, 21, 109-111.	0.5	3
114	Evolution of the Impact Strength of Carbon Fiber-reinforced PEI Following Exposure to Mechanical, Hygrothermal and Hygrothermomechanical Aging. Journal of Composite Materials, 2007, 41, 2337-2346.	2.4	3
115	Building models for crack propagation under fatigue loads: application to macrocrack growth. Fatigue and Fracture of Engineering Materials and Structures, 2010, 33, 619-632.	3.4	3
116	Comparison of Fracture Energy Values Obtained from 3PB, WST and CT Test Configurations. Advanced Materials Research, 0, 969, 89-92.	0.3	3
117	Numerical Simulation of Modified Compact Tension Test Depicting of Experimental Measurement by ARAMIS. Key Engineering Materials, 2014, 627, 277-280.	0.4	3
118	Análisis probabilístico de elementos de vidrio recocido mediante una distribución triparamétrica Weibull. Boletín De La Sociedad Española De Cerámica Y Vidrio, 2015, 54, 153-158.	1.9	3
119	Probabilistic Non-Linear Cumulative Fatigue Damage of the P355NL1 Pressure Vessel Steel. , 2016, , .		3
120	Dynamic Behavior of Supported Structures from Free-Free Modal Tests Using Structural Dynamic Modification. Shock and Vibration, 2018, 2018, 1-14.	0.6	3
121	A geometry and temperature dependent regression model for statistical analysis of fracture toughness in notched specimens. Engineering Fracture Mechanics, 2021, 242, 107414.	4.3	3
122	Computing failure probabilities. Applications to reliability analysis. Reliability Engineering and System Safety, 2002, 77, 131-141.	8.9	2
123	A probabilistic design model proposal for structural glass plates. Pollack Periodica, 2006, 1, 61-69.	0.4	2
124	Comparative Analysis of the Plastic and Out-of-plane Constraint Zones in Cracked Plates. , 2014, 3, 1406-1411.		2
125	Joint evaluation of fracture results from distinct test conditions, implying loading, specimen size and geometry. Procedia Structural Integrity, 2016, 2, 720-727.	0.8	2
126	Effect of region-dependent viscoelastic properties on the TMJ articular disc relaxation under prolonged clenching. Journal of the Mechanical Behavior of Biomedical Materials, 2021, 119, 104522.	3.1	2

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127	Comparación entre el comportamiento mecánico a tracción, fractura y fatiga de armaduras de refuerzo fabricadas con distintos tipos de acero. <i>Materiales De Construccion</i> , 2013, 63, 433-447.	0.7	2
128	Influence of the Damage Sequence in the Mechanical Strength of a Composite Material of Pei Reinforced with Woven Carbon-Fabric. <i>A Statistical Analysis. Advanced Composites Letters</i> , 2003, 12, 096369350301200.	1.3	1
129	A Design Model for Glass Elements Based on the Statistical Distribution of Crack Sizes. <i>Key Engineering Materials</i> , 2004, 264-268, 1855-1858.	0.4	1
130	Strength Characterization of Glass by Means of the Statistical Theory of Confounded Data. <i>Key Engineering Materials</i> , 2004, 264-268, 1923-1926.	0.4	1
131	On the Path and Area J -Integral Components and their Relationship to the Out-of-Plane Constraint in Elastic Cracked Plates. <i>Key Engineering Materials</i> , 0, 417-418, 421-424.	0.4	1
132	Thermographic Determination Methodology: Application on Fatigue Limit of AL 2024 for R=-1. <i>Key Engineering Materials</i> , 0, 577-578, 477-480.	0.4	1
133	Viscoelastic properties of the central region of porcine temporomandibular joint disc in shear stress-relaxation. <i>Journal of Biomechanics</i> , 2019, 93, 126-131.	2.1	1
134	Probabilistic Assessment of Fracture Toughness of Epoxy Resin EPOLAM 2025 Including the Notch Radii Effect. <i>Polymers</i> , 2021, 13, 1857.	4.5	1
135	Fatigue characterization of a crankshaft steel: Use and interaction of new models. <i>Frattura Ed Integrita Strutturale</i> , 2016, 10, 187-195.	0.9	1
136	The Lateral Constraint Index as a New Factor to Assess the Influence of the Specimen Thickness. , 2006, , 377-378.		1
137	Discussion of "Effect of Length on Fatigue Life of Long, Thin, Continuous Components" by J. L. Bogdanoff and F. Kozin (July, 1989, Vol. 115, No. 7). <i>Journal of Engineering Mechanics - ASCE</i> , 1990, 116, 2580-2581.	2.9	0
138	An Exponential Model for Damage Accumulation. <i>Communications in Statistics Part B: Simulation and Computation</i> , 2009, 38, 215-232.	1.2	0
139	Arcan-Richard Specimens: Is there a Pure Shear Mode?. <i>Key Engineering Materials</i> , 0, 452-453, 345-348.	0.4	0
140	Analysis of Compressive Properties of Porcine Temporomandibular Joint Disc. <i>Key Engineering Materials</i> , 0, 592-593, 354-357.	0.4	0
141	Evaluation of Conventional Al 2024 Fatigue Limit in Fatigue Test Using Thermographic Measurement: Effect of Frequency. <i>Advanced Materials Research</i> , 0, 891-892, 1308-1313.	0.3	0
142	Evaluation of Fatigue Properties of S355 J2 and S355 J0 by Using ProFatigue Software. <i>Structural Integrity</i> , 2019, , 213-219.	1.4	0
143	Effect of abutment finish lines on the mechanical behavior and marginal fit of screw-retained implant crowns: An in vitro study. <i>Journal of Prosthetic Dentistry</i> , 2021, , .	2.8	0
144	Interlaminar crack initiation and growth under modes I and II in a carbon-fibre epoxy composite subjected to fatigue. <i>WIT Transactions on the Built Environment</i> , 2008, , .	0.0	0

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145	Analysis of Constant and Variable Amplitude Strain-Life Data Using a Novel Probabilistic Weibull Regression Model. , 2009, , .		0
146	Influence of the Support Conditions in the Modal Parameters of a Cantilever Beam. Conference Proceedings of the Society for Experimental Mechanics, 2013, , 335-341.	0.5	0
147	Influence Of The Gripping Fixture On The Modified Compact Tension Test Results: Evaluation Of The Experiments On Cylindrical Concrete Specimens. Transactions of the VĀB: Technical University of Ostrava, Civil Engineering Series, 2015, 15, .	0.3	0
148	Comparative Analysis of two Models for Evaluating Fatigue Data. , 2006, , 183-184.		0