David Taylor

List of Publications by Year
in descending order

195	9,394	34105 52	43889 91
papers	citations	h-index	g-index

201	201	201	4344
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Geometrical effects in fatigue: a unifying theoretical model. International Journal of Fatigue, 1999, 21, 413-420.	5.7	602
2	The theory of critical distances. Engineering Fracture Mechanics, 2008, 75, 1696-1705.	4.3	399
3	Living with cracks: Damage and repair in human bone. Nature Materials, 2007, 6, 263-268.	27.5	323
4	Finite fracture mechanics: A coupled stress and energy failure criterion. Engineering Fracture Mechanics, 2006, 73, 2021-2033.	4.3	264
5	Prediction of bone adaptation using damage accumulation. Journal of Biomechanics, 1994, 27, 1067-1076.	2.1	260
6	The fracture mechanics of finite crack extension. Engineering Fracture Mechanics, 2005, 72, 1021-1038.	4.3	231
7	A novel formulation of the theory of critical distances to estimate lifetime of notched components in the medium-cycle fatigue regime. Fatigue and Fracture of Engineering Materials and Structures, 2007, 30, 567-581.	3.4	226
8	The theory of critical distances to predict static strength of notched brittle components subjected to mixed-mode loading. Engineering Fracture Mechanics, 2008, 75, 534-550.	4.3	205
9	Microcrack accumulation at different intervals during fatigue testing of compact bone. Journal of Biomechanics, 2003, 36, 973-980.	2.1	187
10	Detecting microdamage in bone. Journal of Anatomy, 2003, 203, 161-172.	1.5	175
11	Bone adaptation to load: microdamage as a stimulus for bone remodelling. Journal of Anatomy, 2002, 201, 437-446.	1.5	173
12	A finite fracture mechanics approach to structures with sharp V-notches. Engineering Fracture Mechanics, 2008, 75, 1736-1752.	4.3	172
13	The effect of bone microstructure on the initiation and growth of microcracks. Journal of Orthopaedic Research, 2005, 23, 475-480.	2.3	167
14	On the use of the Theory of Critical Distances to predict static failures in ductile metallic materials containing different geometrical features. Engineering Fracture Mechanics, 2008, 75, 4410-4421.	4.3	159
15	Effects of Stride Length and Running Mileage on a Probabilistic Stress Fracture Model. Medicine and Science in Sports and Exercise, 2009, 41, 2177-2184.	0.4	153
16	Predicting the fracture strength of ceramic materials using the theory of critical distances. Engineering Fracture Mechanics, 2004, 71, 2407-2416.	4.3	150
17	The fatigue behaviour of three-dimensional stress concentrations. International Journal of Fatigue, 2005, 27, 207-221.	5.7	140
18	Some new methods for predicting fatigue in welded joints. International Journal of Fatigue, 2002, 24, 509-518.	5.7	137

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19	Prediction of fatigue failure location on a component using a critical distance method. International Journal of Fatigue, 2000, 22, 735-742.	5.7	126
20	The fracture toughness of soft tissues. Journal of the Mechanical Behavior of Biomedical Materials, 2012, 6, 139-147.	3.1	126
21	A critical distance/plane method to estimate finite life of notched components under variable amplitude uniaxial/multiaxial fatigue loading. International Journal of Fatigue, 2012, 38, 7-24.	5.7	125
22	The effect of stress concentrations on the fracture strength of polymethylmethacrylate. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2004, 382, 288-294.	5.6	119
23	Visualisation of three-dimensional microcracks in compact bone. Journal of Anatomy, 2000, 197, 413-420.	1.5	116
24	A mechanistic approach to critical-distance methods in notch fatigue. Fatigue and Fracture of Engineering Materials and Structures, 2001, 24, 215-224.	3.4	110
25	An improved labelling technique for monitoring microcrack growth in compact bone. Journal of Biomechanics, 2002, 35, 523-526.	2.1	103
26	Microdamage: A cell transducing mechanism based on ruptured osteocyte processes. Journal of Biomechanics, 2006, 39, 2096-2103.	2.1	102
27	Fracture toughness of locust cuticle. Journal of Experimental Biology, 2012, 215, 1502-1508.	1.7	100
28	Two methods for predicting the multiaxial fatigue limits of sharp notches. Fatigue and Fracture of Engineering Materials and Structures, 2003, 26, 821-833.	3.4	99
29	On the use of the Theory of Critical Distances and the Modified WÃ¶hler Curve Method to estimate fretting fatigue strength of cylindrical contacts. International Journal of Fatigue, 2007, 29, 95-107.	5.7	91
30	Fatigue of bone and bones: An analysis based on stressed volume. Journal of Orthopaedic Research, 1998, 16, 163-169.	2.3	90
31	Fatigue design in the presence of stress concentrations. Journal of Strain Analysis for Engineering Design, 2003, 38, 443-452.	1.8	84
32	An Elasto-Plastic Reformulation of the Theory of Critical Distances to Estimate Lifetime of Notched Components Failing in the Low/Medium-Cycle Fatigue Regime. Journal of Engineering Materials and Technology, Transactions of the ASME, 2010, 132, .	1.4	81
33	Veins Improve Fracture Toughness of Insect Wings. PLoS ONE, 2012, 7, e43411.	2.5	81
34	Effects of running speed on a probabilistic stress fracture model. Clinical Biomechanics, 2010, 25, 372-377.	1.2	80
35	The Modified WÃ¶hler Curve Method applied along with the Theory of Critical Distances to estimate finite life of notched components subjected to complex multiaxial loading paths. Fatigue and Fracture of Engineering Materials and Structures, 2008, 31, 1047-1064.	3.4	78
36	The Theory of Critical Distances to estimate lifetime of notched components subjected to variable amplitude uniaxial fatigue loading. International Journal of Fatigue, 2011, 33, 900-911.	5.7	78

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37	The Theory of Critical Distances as an alternative experimental strategy for the determination of KIc and Î”Kth. Engineering Fracture Mechanics, 2010, 77, 1492-1501.	4.3	77
38	Fatigue failure in the cement mantle of an artificial hip joint. Clinical Materials, 1993, 12, 95-102.	0.5	74
39	The prediction of stress fractures using a â€˜stressed volumeâ€™ concept. Journal of Orthopaedic Research, 2001, 19, 919-926.	2.3	72
40	RANKL and OPG activity is regulated by injury size in networks of osteocyte-like cells. Bone, 2011, 48, 182-188.	2.9	66
41	Applications of the theory of critical distances in failure analysis. Engineering Failure Analysis, 2011, 18, 543-549.	4.0	66
42	Microdamage and mechanical behaviour: predicting failure and remodelling in compact bone. Journal of Anatomy, 2003, 203, 203-211.	1.5	65
43	A simplified approach to apply the theory of critical distances to notched components under torsional fatigue loading. International Journal of Fatigue, 2006, 28, 417-430.	5.7	62
44	On the prediction of high-cycle fretting fatigue strength: Theory of critical distances vs. hot-spot approach. Engineering Fracture Mechanics, 2008, 75, 1763-1778.	4.3	62
45	The biomechanics of bamboo: investigating the role of the nodes. Wood Science and Technology, 2015, 49, 345-357.	3.2	62
46	Microcrack growth parameters for compact bone deduced from stiffness variations. Journal of Biomechanics, 1998, 31, 587-592.	2.1	60
47	Bone as a composite material: The role of osteons as barriers to crack growth in compact bone. International Journal of Fatigue, 2007, 29, 1051-1056.	5.7	60
48	Anisotropy of the fatigue behaviour of cancellous bone. Journal of Biomechanics, 2008, 41, 636-641.	2.1	60
49	Bone maintenance and remodeling: A control system based on fatigue damage. Journal of Orthopaedic Research, 1997, 15, 601-606.	2.3	56
50	Measuring the shape and size of microcracks in bone. Journal of Biomechanics, 1998, 31, 1177-1180.	2.1	56
51	Predicting stress fractures using a probabilistic model of damage, repair and adaptation. Journal of Orthopaedic Research, 2004, 22, 487-494.	2.3	56
52	Analysis of fatigue failures in components using the theory of critical distances. Engineering Failure Analysis, 2005, 12, 906-914.	4.0	55
53	Numerical investigation of insect wing fracture behaviour. Journal of Biomechanics, 2015, 48, 89-94.	2.1	55
54	The Theory of Critical Distances: A link to micromechanisms. Theoretical and Applied Fracture Mechanics, 2017, 90, 228-233.	4.7	54

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55	Compression data on bovine bone confirms that a â€œstressed volumeâ€• principle explains the variability of fatigue strength results. Journal of Biomechanics, 1999, 32, 1199-1203.	2.1	52
56	The cellular transducer in damage-stimulated bone remodelling: a theoretical investigation using fracture mechanics. Journal of Theoretical Biology, 2003, 225, 65-75.	1.7	52
57	A critical distance study of stress concentrations in bone. Journal of Biomechanics, 2008, 41, 603-609.	2.1	51
58	Experimental determination and sensitivity analysis of the fatigue critical distance obtained with rounded V-notched specimens. International Journal of Fatigue, 2018, 113, 113-125.	5.7	51
59	Quantitative analysis of the effect of porosity on the fatigue strength of bone cement. Acta Biomaterialia, 2009, 5, 719-726.	8.3	50
60	Notch fatigue behaviour in cast irons explained using a fracture mechanics approach. International Journal of Fatigue, 1996, 18, 439-445.	5.7	49
61	Fatigue assessment of welded joints using critical distance and other methods. Engineering Failure Analysis, 2005, 12, 129-142.	4.0	48
62	Cutting sharpness measurement: a critical review. Journal of Materials Processing Technology, 2004, 153-154, 261-267.	6.3	47
63	PREDICTION OF FATIGUE FAILURE IN A CRANKSHAFT USING THE TECHNIQUE OF CRACK MODELLING. Fatigue and Fracture of Engineering Materials and Structures, 1997, 20, 13-21.	3.4	46
64	The fatigue strength of compact bone in torsion. Journal of Biomechanics, 2003, 36, 1103-1109.	2.1	46
65	Material heterogeneity in cancellous bone promotes deformation recovery after mechanical failure. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 2892-2897.	7.1	46
66	The role of osteocytes and bone microstructure in preventing osteoporotic fractures. Osteoporosis International, 2007, 18, 1-8.	3.1	45
67	The Theory of Critical Distances to estimate the static strength of notched samples of Al6082 loaded in combined tension and torsion. Part II: Multiaxial static assessment. Engineering Fracture Mechanics, 2010, 77, 470-478.	4.3	45
68	Sheet thickness effect of spot welds based on crack propagation. Engineering Fracture Mechanics, 2000, 67, 55-63.	4.3	44
69	Fracture and repair of bone: a multiscale problem. Journal of Materials Science, 2007, 42, 8911-8918.	3.7	44
70	Scaling Effects in the Fatigue Strength of Bones from Different Animals. Journal of Theoretical Biology, 2000, 206, 299-306.	1.7	43
71	Optimization of spot-welded structures. Finite Elements in Analysis and Design, 2001, 37, 1013-1022.	3.2	42
72	Selfâ€healing materials: what can nature teach us?. Fatigue and Fracture of Engineering Materials and Structures, 2017, 40, 655-669.	3.4	41

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73	The Theory of Critical Distances: Basics. , 2007, , 21-31.		40
74	Determination of the fatigue critical distance according to the Line and the Point Methods with rounded V-notched specimen. International Journal of Fatigue, 2018, 106, 208-218.	5.7	39
75	The behaviour of microcracks in compact bone. European Journal of Morphology, 2005, 42, 71-79.	0.8	38
76	Intrinsic material length, Theory of Critical Distances and Gradient Mechanics: analogies and differences in processing linearâ€elastic crack tip stress fields. Fatigue and Fracture of Engineering Materials and Structures, 2013, 36, 39-55.	3.4	38
77	Fatigue of insect cuticle. Journal of Experimental Biology, 2013, 216, 1924-7.	1.7	37
78	The Theory of Critical Distances to estimate finite lifetime of notched components subjected to constant and variable amplitude torsional loading. Engineering Fracture Mechanics, 2013, 98, 64-79.	4.3	34
79	Mechanisms of short crack growth at constant stress in bone. Biomaterials, 2006, 27, 2114-2122.	11.4	33
80	Shape optimization in exoskeletons and endoskeletons: a biomechanics analysis. Journal of the Royal Society Interface, 2012, 9, 3480-3489.	3.4	33
81	Notch geometry effects in fatigue: A conservative design approach. Engineering Failure Analysis, 1994, 1, 275-287.	4.0	32
82	A model for fatigue crack propagation and remodelling in compact bone. Proceedings of the Institution of Mechanical Engineers, Part H: Journal of Engineering in Medicine, 1997, 211, 369-375.	1.8	32
83	Damage, repair and regeneration in insect cuticle: The story so far, and possibilities for the future. Arthropod Structure and Development, 2017, 46, 49-55.	1.4	32
84	Measuring fracture toughness in biological materials. Journal of the Mechanical Behavior of Biomedical Materials, 2018, 77, 776-782.	3.1	32
85	The effects of increased intracortical remodeling on microcrack behaviour in compact bone. Bone, 2008, 43, 889-893.	2.9	30
86	The Theory of Critical Distances to estimate the static strength of notched samples of Al6082 loaded in combined tension and torsion. Part I: Material cracking behaviour. Engineering Fracture Mechanics, 2010, 77, 452-469.	4.3	30
87	Fatigue in bamboo. International Journal of Fatigue, 2015, 75, 51-56.	5.7	30
88	Crack modelling: A technique for the fatigue design of components. Engineering Failure Analysis, 1996, 3, 129-136.	4.0	29
89	The fracture toughness of eggshell. Acta Biomaterialia, 2016, 37, 21-27.	8.3	29
90	A crack growth model for the simulation of fatigue in bone. International Journal of Fatigue, 2003, 25, 387-395.	5.7	28

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91	EUROMECH COLLOQUIUM ON SHORT FATIGUE CRACKS. Fatigue and Fracture of Engineering Materials and Structures, 1982, 5, 305-309.	3.4	27
92	Prediction of fatigue failure in a camshaft using the crack modelling method. Engineering Failure Analysis, 2000, 7, 189-197.	4.0	27
93	Bridging the gap: wound healing in insects restores mechanical strength by targeted cuticle deposition. Journal of the Royal Society Interface, 2016, 13, 20150984.	3.4	27
94	Fatigue in porous PMMA: The effect of stress concentrations. International Journal of Fatigue, 2008, 30, 989-995.	5.7	26
95	Theory of Critical Distances versus Gradient Mechanics in modelling the transition from the short to long crack regime at the fatigue limit. Fatigue and Fracture of Engineering Materials and Structures, 2013, 36, 861-869.	3.4	26
96	High cycle fatigue of welded joints: The TCD experience. International Journal of Fatigue, 2009, 31, 20-27.	5.7	25
97	Wedge Indentation Fracture of Cortical Bone: Experimental Data and Predictions. Journal of Biomechanical Engineering, 2010, 132, 081009.	1.3	25
98	Generalized fracture toughness for specimens with re-entrant corners: Experiments vs. theoretical predictions. Structural Engineering and Mechanics, 2009, 32, 609-620.	1.0	25
99	Non-propagating cracks and high-cycle fatigue failures in sharply notched specimens under in-phase Mode I and II loading. Engineering Failure Analysis, 2007, 14, 861-876.	4.0	24
100	The failure of polypropylene surgical mesh in vivo. Journal of the Mechanical Behavior of Biomedical Materials, 2018, 88, 370-376.	3.1	24
101	Mixed-mode fatigue from stress concentrations: an approach based on equivalent stress intensity. International Journal of Fatigue, 1999, 21, 173-178.	5.7	23
102	Fatigue of materials used in microscopic components. Fatigue and Fracture of Engineering Materials and Structures, 2005, 28, 1153-1160.	3.4	23
103	The effect of aging on the mechanical behaviour of cuticle in the locust Schistocerca gregaria. Journal of the Mechanical Behavior of Biomedical Materials, 2017, 68, 247-251.	3.1	23
104	The effect of crack shape on the fatigue limit of three-dimensional stress concentrations. International Journal of Fatigue, 2006, 28, 114-123.	5.7	22
105	A comparison of critical distance methods for fracture prediction. International Journal of Mechanical Sciences, 2008, 50, 1075-1081.	6.7	21
106	Wing cross veins: an efficient biomechanical strategy to mitigate fatigue failure of insect cuticle. Biomechanics and Modeling in Mechanobiology, 2017, 16, 1947-1955.	2.8	20
107	Rupture of osteocyte processes across microcracks: the effect of crack length and stress. Biomechanics and Modeling in Mechanobiology, 2012, 11, 759-766.	2.8	19
108	Buckling failures in insect exoskeletons. Bioinspiration and Biomimetics, 2016, 11, 016003.	2.9	19

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109	Notch and mean stress effect in fatigue as phenomena of elasto-plastic inherent multiaxiality. Engineering Fracture Mechanics, 2011, 78, 1628-1643.	4.3	18
110	Estimating Lifetime of Notched Components Subjected to Variable Amplitude Fatigue Loading According to the Elastoplastic Theory of Critical Distances. Journal of Engineering Materials and Technology, Transactions of the ASME, 2015, 137, .	1.4	18
111	The effect of bisphosphonate treatment on the biochemical and cellular events during bone remodelling in response to microinjury stimulation. , 2015, 30, 271-281.		18
112	The splitting of bamboo in response to changes in humidity and temperature. Journal of the Mechanical Behavior of Biomedical Materials, 2020, 111, 103990.	3.1	17
113	Failure Processes in Hard and Soft Tissues. , 2003, , 35-95.		16
114	A BIOMECHANICAL ANALYSIS OF FOUR DIFFERENT METHODS OF HARVESTING BONE-PATELLAR TENDON-BONE GRAFT IN PORCINE KNEES. Journal of Bone and Joint Surgery - Series A, 2002, 84, 1782-1787.	3.0	16
115	Numerical evaluation of fatigue strength on mechanical notched components under multiaxial loadings. International Journal of Fatigue, 2011, 33, 661-671.	5.7	15
116	Fatigue-resistant components: What can we learn from nature?. Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science, 2015, 229, 1186-1193.	2.1	15
117	Implementation of the Theory of Critical Distances using mesh control. Theoretical and Applied Fracture Mechanics, 2017, 92, 113-121.	4.7	15
118	Erosion of soft tissue by polypropylene mesh products. Journal of the Mechanical Behavior of Biomedical Materials, 2021, 115, 104281.	3.1	15
119	Short fatigue crack growth in cast iron described using Pâˆ'a curves. International Journal of Fatigue, 1995, 17, 201-206.	5.7	14
120	Impact damage and repair in shells of the limpet <i>Patella vulgata</i>. Journal of Experimental Biology, 2016, 219, 3927-3935.	1.7	14
121	Fatigue failure of osteocyte cellular processes: implications for the repair of bone. , 2014, 27, 39-49.		14
122	What we can't learn from nature. Materials Science and Engineering C, 2011, 31, 1160-1163.	7.3	12
123	The Theory of Critical Distances applied to multiscale toughening mechanisms. Engineering Fracture Mechanics, 2019, 209, 392-403.	4.3	12
124	Bio-inspired protective structures for marine applications. Bioinspiration and Biomimetics, 2020, 15, 056016.	2.9	12
125	On the use of P-a plots to model the behaviour of short fatigue cracks. International Journal of Fatigue, 1992, 14, 163-168.	5.7	11
126	Distribution of microcrack lengths in bone in vivo and in vitro. Journal of Theoretical Biology, 2012, 304, 164-171.	1.7	11

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127	A new method for joining bamboo culms. Engineering Structures, 2019, 190, 1-8.	5.3	11
128	Application of the Theory of Critical Distances to predict the effect of induced and process inherent defects for SLM Ti-6Al-4V in high cycle fatigue. CIRP Annals - Manufacturing Technology, 2021, 70, 171-174.	3.6	11
129	Biomechanical Factors in the Adaptations of Insect Tibia Cuticle. PLoS ONE, 2016, 11, e0159262.	2.5	11
130	Modelling of fatigue crack growth at the microstructural level. Computational Materials Science, 2002, 25, 228-236.	3.0	9
131	Stress intensity variations in bone microcracks during the repair process. Journal of Theoretical Biology, 2004, 229, 169-177.	1.7	9
132	Comparison of the fatigue behaviour of two different forms of PMMA. Fatigue and Fracture of Engineering Materials and Structures, 2009, 32, 261-269.	3.4	9
133	Fracture and fatigue in osteocytes. Journal of the Mechanical Behavior of Biomedical Materials, 2014, 39, 231-237.	3.1	9
134	Using the theory of critical distances to predict notch effects in fibre composites. Theoretical and Applied Fracture Mechanics, 2022, 118, 103285.	4.7	9
135	Fracture toughness and damage development in limpet shells. Theoretical and Applied Fracture Mechanics, 2018, 96, 168-173.	4.7	8
136	In vitro characterisation of the erosion of soft tissues by surgical mesh. Journal of the Mechanical Behavior of Biomedical Materials, 2020, 101, 103420.	3.1	8
137	The crackâ€modelling technique: optimization of parameters. Fatigue and Fracture of Engineering Materials and Structures, 1999, 22, 41-50.	3.4	7
138	A Theoretical Model for the Simulation of Microdamage Accumulation and Repair in Compact Bone*. Meccanica, 2002, 37, 397-406.	2.0	7
139	Age related responses to injury and repair in insect cuticle. Journal of Experimental Biology, 2019, 222, .	1.7	7
140	Repair and remodelling in the shells of the limpet<i>Patella vulgata</i>. Journal of the Royal Society Interface, 2018, 15, 20180299.	3.4	7
141	An investigation of crack propagation in an insect wing using the theory of critical distances. Engineering Fracture Mechanics, 2020, 232, 107052.	4.3	7
142	The cellular transducer in bone: What is it?. Technology and Health Care, 2006, 14, 367-377.	1.2	6
143	Predicting the structural integrity of bone defects repaired using bone graft materials. Computer Methods in Biomechanics and Biomedical Engineering, 2009, 12, 297-304.	1.6	6
144	Observations on the role of fracture mechanics in biology and medicine. Engineering Fracture Mechanics, 2018, 187, 422-430.	4.3	6

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145	An asymptotic matching approach to shallow-notched structural elements. Engineering Fracture Mechanics, 2010, 77, 348-358.	4.3	5
146	Analisys of the fatigue properties of different specimens of a 10% by weight short glass fibre reinforced polyamide 6.6. Polymer Testing, 2014, 40, 149-155.	4.8	5
147	Dynamic short crack growth in cortical bone. Technology and Health Care, 2006, 14, 393-402.	1.2	4
148	Microstructural Parameters in the Theory of Critical Distances. Materials Science Forum, 2008, 567-568, 23-28.	0.3	4
149	On the role of microstructure in finite fracture mechanics. Procedia Structural Integrity, 2016, 2, 1999-2005.	0.8	4
150	Functional Adaptation in Bone. , 1999, , 1-10.		4
151	On the application of the Theory of Critical Distances for prediction of fracture in fibre composites. Frattura Ed Integrita Strutturale, 2010, 4, 3-9.	0.9	4
152	Statistical analysis and reliability prediction with short fatigue crack data. Fatigue and Fracture of Engineering Materials and Structures, 1999, 22, 67-76.	3.4	3
153	The Theory of Critical Distances. , 2006, , 1095-1096.		3
154	The Theory of Critical Distances in Detail. , 2007, , 33-49.		3
155	Welcome to the Journal of the Mechanical Behavior of Biomedical Materials. Journal of the Mechanical Behavior of Biomedical Materials, 2008, 1, 1.	3.1	3
156	The Scissors Model of Microcrack Detection in Bone: Work in Progress. Materials Research Society Symposia Proceedings, 2010, 1274, 1.	0.1	3
157	Repair of microdamage caused by cyclic loading in insect cuticle. Journal of Experimental Zoology Part A: Ecological and Integrative Physiology, 2020, 333, 20-28.	1.9	3
158	Analysis of fracture data from notched specimens can provide information on multiscale toughening mechanisms. Theoretical and Applied Fracture Mechanics, 2020, 109, 102730.	4.7	3
159	The Development of Equipment to Measure Mesh Erosion of Soft Tissue. Materials, 2021, 14, 941.	2.9	3
160	Fracture and repair in a bioâ€inspired selfâ€healing structure. Fatigue and Fracture of Engineering Materials and Structures, 2021, 44, 3373-3383.	3.4	3
161	The cellular transducer in bone: What is it?. Technology and Health Care, 2006, 14, 367-77.	1.2	3
162	A stress distribution remodelling technique. International Journal of Fracture, 2007, 143, 177-188.	2.2	2

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163	Theoretical modelling in bioengineering. Irish Journal of Medical Science, 2008, 177, 1-8.	1.5	2
164	Interdisciplinary research: Easy, or hard?. Journal of the Mechanical Behavior of Biomedical Materials, 2009, 2, 1-2.	3.1	2
165	Sensibility analysis of the fatigue critical distance values assessed by combining plain and notched cylindrical specimens. Procedia Structural Integrity, 2018, 8, 67-74.	0.8	2
166	Failure mechanisms and bending strength of <i>Fuchsia magellanica</i> var. <i>gracilis</i> stems. Journal of the Royal Society Interface, 2021, 18, 20201023.	3.4	2
167	A Coupled Stress and Energy Criterion within Finite Fracture Mechanics. , 2006, , 1107-1108.		2
168	Analysis of biaxial fatigue limit models for cases with circular notches. International Journal of Fatigue, 2022, 162, 106981.	5.7	2
169	Energy TCD - robust and simple failure prediction unifying the TCD and ASED criterion. Engineering Fracture Mechanics, 2022, 271, 108652.	4.3	2
170	A Fatigue-Based Model of Disuse Osteoporosis. Computer Methods in Biomechanics and Biomedical Engineering, 2001, 4, 413-420.	1.6	1
171	Comment on â€œNotch Size Effects in the Fatigue Limit of Steelâ€•by M. Makkonen [Int J Fatigue 25 (2003) 17â€“26]. International Journal of Fatigue, 2003, 25, 779-780.	5.7	1
172	Theoretical Aspects. , 2007, , 261-275.		1
173	Why are your bones not made of steel?. Materials Today, 2010, 13, 6-7.	14.2	1
174	Structural materials: What can we learn from nature?. MATEC Web of Conferences, 2013, 7, 00001.	0.2	1
175	Fracture Mechanics in Biology and Medicine. Procedia Structural Integrity, 2016, 2, 42-49.	0.8	1
176	Optimal notched specimen parameters for accurate fatigue critical distance determination. Procedia Structural Integrity, 2017, 5, 817-824.	0.8	1
177	Through-life Engineering: Inspirations from Nature. Procedia Manufacturing, 2018, 16, 163-170.	1.9	1
178	Impact resistance of limpet shells: a study of local adaptations. Applied Physics A: Materials Science and Processing, 2020, 126, 1.	2.3	1
179	Osteoporosis and Fatigue Fracture Prevention by Analysis of Bone Microdamage. Minerals, Metals and Materials Series, 2017, , 319-330.	0.4	1
180	Bone as a structural material: how good is it?. Studies in Health Technology and Informatics, 2008, 133, 221-9.	0.3	1

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181	Royal academy of medicine in Ireland section of bioengineering. Irish Journal of Medical Science, 1998, 167, 105-117.	1.5	0
182	How Does Bone Detect Cracks?. Key Engineering Materials, 2007, 348-349, 57-60.	0.4	0
183	Predicting Fatigue in Welded Joints: New Theories and some Practical Experience. Key Engineering Materials, 2007, 348-349, 557-560.	0.4	0
184	Case Studies and Practical Aspects. , 2007, , 235-259.		0
185	Rejection: Giving it and taking it. Journal of the Mechanical Behavior of Biomedical Materials, 2008, 1, 275.	3.1	0
186	ICMOBT: The international conference on the mechanics of biomaterials and tissues. Journal of the Mechanical Behavior of Biomedical Materials, 2009, 2, 129-129.	3.1	0
187	On the Use of the Theory of Critical Distances to Estimate K_{Ic} and âˆ†K_{th} from Experimental Results Generated by Testing Standard Notches. Key Engineering Materials, 0, 417-418, 25-28.	0.4	0
188	Outside or inside. Materials Today, 2011, 14, 62-63.	14.2	0
189	Can the theory of critical distances predict the failure of shape memory alloys?. Computer Methods in Biomechanics and Biomedical Engineering, 2011, 14, 491-496.	1.6	0
190	Fatigue and Creep Failure in Musculoskeletal Tissues. , 2016, , .		0
191	Biological and Biomimetic Materialsâ€"Honoring Prof. A. Darvizeh. Applied Physics A: Materials Science and Processing, 2021, 127, 1.	2.3	0
192	Letter to the editor. Journal of the Mechanical Behavior of Biomedical Materials, 2021, 126, 104548.	3.1	0
193	The Critical Volume Method in Fatigue Analysis. , 2001, , 187-205.		0
194	Fatigue of Biological Structures and Biomaterials. , 2001, , 2951-2954.		0
195	Fracture and Fatigue of Bone and Bone Cement: The Critical Distance Approach. , 2006, , 1025-1026.		0