David Taylor

List of Publications by Year
in descending order

195 papers	9,394 citations	39113 52 h-index	49824 91 g-index
201 all docs	201 docs citations	201 times ranked	4818 citing authors

#	Article	IF	Citations
1	Using the theory of critical distances to predict notch effects in fibre composites. Theoretical and Applied Fracture Mechanics, 2022, 118, 103285.	2.1	9
2	Analysis of biaxial fatigue limit models for cases with circular notches. International Journal of Fatigue, 2022, 162, 106981.	2.8	2
3	Energy TCD - robust and simple failure prediction unifying the TCD and ASED criterion. Engineering Fracture Mechanics, 2022, 271, 108652.	2.0	2
4	The Development of Equipment to Measure Mesh Erosion of Soft Tissue. Materials, 2021, 14, 941.	1.3	3
5	Failure mechanisms and bending strength of <i>Fuchsia magellanica</i> var. <i>gracilis</i> stems. Journal of the Royal Society Interface, 2021, 18, 20201023.	1.5	2
6	Erosion of soft tissue by polypropylene mesh products. Journal of the Mechanical Behavior of Biomedical Materials, 2021, 115, 104281.	1.5	15
7	Biological and Biomimetic Materialsâ€”Honoring Prof. A. Darvizeh. Applied Physics A: Materials Science and Processing, 2021, 127, 1.	1.1	0
8	Letter to the editor. Journal of the Mechanical Behavior of Biomedical Materials, 2021, 126, 104548.	1.5	0
9	Fracture and repair in a bioâ€inspired selfâ€healing structure. Fatigue and Fracture of Engineering Materials and Structures, 2021, 44, 3373-3383.	1.7	3
10	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.	1.7	11
11	In vitro characterisation of the erosion of soft tissues by surgical mesh. Journal of the Mechanical Behavior of Biomedical Materials, 2020, 101, 103420.	1.5	8
12	Repair of microdamage caused by cyclic loading in insect cuticle. Journal of Experimental Zoology Part A: Ecological and Integrative Physiology, 2020, 333, 20-28.	0.9	3
13	Analysis of fracture data from notched specimens can provide information on multiscale toughening mechanisms. Theoretical and Applied Fracture Mechanics, 2020, 109, 102730.	2.1	3
14	Bio-inspired protective structures for marine applications. Bioinspiration and Biomimetics, 2020, 15, 056016.	1.5	12
15	The splitting of bamboo in response to changes in humidity and temperature. Journal of the Mechanical Behavior of Biomedical Materials, 2020, 111, 103990.	1.5	17
16	Impact resistance of limpet shells: a study of local adaptations. Applied Physics A: Materials Science and Processing, 2020, 126, 1.	1.1	1
17	An investigation of crack propagation in an insect wing using the theory of critical distances. Engineering Fracture Mechanics, 2020, 232, 107052.	2.0	7
18	Age related responses to injury and repair in insect cuticle. Journal of Experimental Biology, 2019, 222, .	0.8	7

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19	A new method for joining bamboo culms. Engineering Structures, 2019, 190, 1-8.	2.6	11
20	The Theory of Critical Distances applied to multiscale toughening mechanisms. Engineering Fracture Mechanics, 2019, 209, 392-403.	2.0	12
21	Experimental determination and sensitivity analysis of the fatigue critical distance obtained with rounded V-notched specimens. International Journal of Fatigue, 2018, 113, 113-125.	2.8	51
22	Observations on the role of fracture mechanics in biology and medicine. Engineering Fracture Mechanics, 2018, 187, 422-430.	2.0	6
23	Measuring fracture toughness in biological materials. Journal of the Mechanical Behavior of Biomedical Materials, 2018, 77, 776-782.	1.5	32
24	Through-life Engineering: Inspirations from Nature. Procedia Manufacturing, 2018, 16, 163-170.	1.9	1
25	The failure of polypropylene surgical mesh in vivo. Journal of the Mechanical Behavior of Biomedical Materials, 2018, 88, 370-376.	1.5	24
26	Fracture toughness and damage development in limpet shells. Theoretical and Applied Fracture Mechanics, 2018, 96, 168-173.	2.1	8
27	Sensibility analysis of the fatigue critical distance values assessed by combining plain and notched cylindrical specimens. Procedia Structural Integrity, 2018, 8, 67-74.	0.3	2
28	Repair and remodelling in the shells of the limpet<i>Patella vulgata</i>. Journal of the Royal Society Interface, 2018, 15, 20180299.	1.5	7
29	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.	2.8	39
30	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.	1.5	23
31	Selfâ€healing materials: what can nature teach us?. Fatigue and Fracture of Engineering Materials and Structures, 2017, 40, 655-669.	1.7	41
32	Wing cross veins: an efficient biomechanical strategy to mitigate fatigue failure of insect cuticle. Biomechanics and Modeling in Mechanobiology, 2017, 16, 1947-1955.	1.4	20
33	The Theory of Critical Distances: A link to micromechanisms. Theoretical and Applied Fracture Mechanics, 2017, 90, 228-233.	2.1	54
34	Implementation of the Theory of Critical Distances using mesh control. Theoretical and Applied Fracture Mechanics, 2017, 92, 113-121.	2.1	15
35	Damage, repair and regeneration in insect cuticle: The story so far, and possibilities for the future. Arthropod Structure and Development, 2017, 46, 49-55.	0.8	32
36	Optimal notched specimen parameters for accurate fatigue critical distance determination. Procedia Structural Integrity, 2017, 5, 817-824.	0.3	1

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37	Osteoporosis and Fatigue Fracture Prevention by Analysis of Bone Microdamage. Minerals, Metals and Materials Series, 2017, , 319-330.	0.3	1
38	Fatigue and Creep Failure in Musculoskeletal Tissues. , 2016, , .		0
39	Impact damage and repair in shells of the limpet <i>Patella vulgata</i>. Journal of Experimental Biology, 2016, 219, 3927-3935.	0.8	14
40	Bridging the gap: wound healing in insects restores mechanical strength by targeted cuticle deposition. Journal of the Royal Society Interface, 2016, 13, 20150984.	1.5	27
41	Fracture Mechanics in Biology and Medicine. Procedia Structural Integrity, 2016, 2, 42-49.	0.3	1
42	On the role of microstructure in finite fracture mechanics. Procedia Structural Integrity, 2016, 2, 1999-2005.	0.3	4
43	The fracture toughness of eggshell. Acta Biomaterialia, 2016, 37, 21-27.	4.1	29
44	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.	3.3	46
45	Buckling failures in insect exoskeletons. Bioinspiration and Biomimetics, 2016, 11, 016003.	1.5	19
46	Biomechanical Factors in the Adaptations of Insect Tibia Cuticle. PLoS ONE, 2016, 11, e0159262.	1.1	11
47	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.	1.1	15
48	Fatigue in bamboo. International Journal of Fatigue, 2015, 75, 51-56.	2.8	30
49	The biomechanics of bamboo: investigating the role of the nodes. Wood Science and Technology, 2015, 49, 345-357.	1.4	62
50	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, .	0.8	18
51	Numerical investigation of insect wing fracture behaviour. Journal of Biomechanics, 2015, 48, 89-94.	0.9	55
52	The effect of bisphosphonate treatment on the biochemical and cellular events during bone remodelling in response to microinjury stimulation. , 2015, 30, 271-281.		18
53	Fracture and fatigue in osteocytes. Journal of the Mechanical Behavior of Biomedical Materials, 2014, 39, 231-237.	1.5	9
54	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.	2.3	5

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55	Fatigue failure of osteocyte cellular processes: implications for the repair of bone. , 2014, 27, 39-49.		14
56	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.	1.7	38
57	Fatigue of insect cuticle. Journal of Experimental Biology, 2013, 216, 1924-7.	0.8	37
58	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.	1.7	26
59	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.	2.0	34
60	Structural materials: What can we learn from nature?. MATEC Web of Conferences, 2013, 7, 00001.	0.1	1
61	Shape optimization in exoskeletons and endoskeletons: a biomechanics analysis. Journal of the Royal Society Interface, 2012, 9, 3480-3489.	1.5	33
62	Fracture toughness of locust cuticle. Journal of Experimental Biology, 2012, 215, 1502-1508.	0.8	100
63	Veins Improve Fracture Toughness of Insect Wings. PLoS ONE, 2012, 7, e43411.	1.1	81
64	Rupture of osteocyte processes across microcracks: the effect of crack length and stress. Biomechanics and Modeling in Mechanobiology, 2012, 11, 759-766.	1.4	19
65	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.	2.8	125
66	Distribution of microcrack lengths in bone in vivo and in vitro. Journal of Theoretical Biology, 2012, 304, 164-171.	0.8	11
67	The fracture toughness of soft tissues. Journal of the Mechanical Behavior of Biomedical Materials, 2012, 6, 139-147.	1.5	126
68	RANKL and OPG activity is regulated by injury size in networks of osteocyte-like cells. Bone, 2011, 48, 182-188.	1.4	66
69	Notch and mean stress effect in fatigue as phenomena of elasto-plastic inherent multiaxiality. Engineering Fracture Mechanics, 2011, 78, 1628-1643.	2.0	18
70	Outside or inside. Materials Today, 2011, 14, 62-63.	8.3	0
71	Applications of the theory of critical distances in failure analysis. Engineering Failure Analysis, 2011, 18, 543-549.	1.8	66
72	Numerical evaluation of fatigue strength on mechanical notched components under multiaxial loadings. International Journal of Fatigue, 2011, 33, 661-671.	2.8	15

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73	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.	2.8	78
74	What we can't learn from nature. Materials Science and Engineering C, 2011, 31, 1160-1163.	3.8	12
75	Can the theory of critical distances predict the failure of shape memory alloys?. Computer Methods in Biomechanics and Biomedical Engineering, 2011, 14, 491-496.	0.9	0
76	An asymptotic matching approach to shallow-notched structural elements. Engineering Fracture Mechanics, 2010, 77, 348-358.	2.0	5
77	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.	2.0	45
78	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.	2.0	30
79	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.	2.0	77
80	Why are your bones not made of steel?. Materials Today, 2010, 13, 6-7.	8.3	1
81	The Scissors Model of Microcrack Detection in Bone: Work in Progress. Materials Research Society Symposia Proceedings, 2010, 1274, 1.	0.1	3
82	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, .	0.8	81
83	Effects of running speed on a probabilistic stress fracture model. Clinical Biomechanics, 2010, 25, 372-377.	0.5	80
84	Wedge Indentation Fracture of Cortical Bone: Experimental Data and Predictions. Journal of Biomechanical Engineering, 2010, 132, 081009.	0.6	25
85	On the application of the Theory of Critical Distances for prediction of fracture in fibre composites. Frattura Ed Integrita Strutturale, 2010, 4, 3-9.	0.5	4
86	Predicting the structural integrity of bone defects repaired using bone graft materials. Computer Methods in Biomechanics and Biomedical Engineering, 2009, 12, 297-304.	0.9	6
87	Interdisciplinary research: Easy, or hard?. Journal of the Mechanical Behavior of Biomedical Materials, 2009, 2, 1-2.	1.5	2
88	Comparison of the fatigue behaviour of two different forms of PMMA. Fatigue and Fracture of Engineering Materials and Structures, 2009, 32, 261-269.	1.7	9
89	High cycle fatigue of welded joints: The TCD experience. International Journal of Fatigue, 2009, 31, 20-27.	2.8	25
90	ICMOBT: The international conference on the mechanics of biomaterials and tissues. Journal of the Mechanical Behavior of Biomedical Materials, 2009, 2, 129-129.	1.5	0

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91	Quantitative analysis of the effect of porosity on the fatigue strength of bone cement. Acta Biomaterialia, 2009, 5, 719-726.	4.1	50
92	Effects of Stride Length and Running Mileage on a Probabilistic Stress Fracture Model. Medicine and Science in Sports and Exercise, 2009, 41, 2177-2184.	0.2	153
93	Generalized fracture toughness for specimens with re-entrant corners: Experiments vs. theoretical predictions. Structural Engineering and Mechanics, 2009, 32, 609-620.	1.0	25
94	Microstructural Parameters in the Theory of Critical Distances. Materials Science Forum, 2008, 567-568, 23-28.	0.3	4
95	Welcome to the Journal of the Mechanical Behavior of Biomedical Materials. Journal of the Mechanical Behavior of Biomedical Materials, 2008, 1, 1.	1.5	3
96	A comparison of critical distance methods for fracture prediction. International Journal of Mechanical Sciences, 2008, 50, 1075-1081.	3.6	21
97	A critical distance study of stress concentrations in bone. Journal of Biomechanics, 2008, 41, 603-609.	0.9	51
98	Theoretical modelling in bioengineering. Irish Journal of Medical Science, 2008, 177, 1-8.	0.8	2
99	Anisotropy of the fatigue behaviour of cancellous bone. Journal of Biomechanics, 2008, 41, 636-641.	0.9	60
100	Rejection: Giving it and taking it. Journal of the Mechanical Behavior of Biomedical Materials, 2008, 1, 275.	1.5	0
101	On the prediction of high-cycle fretting fatigue strength: Theory of critical distances vs. hot-spot approach. Engineering Fracture Mechanics, 2008, 75, 1763-1778.	2.0	62
102	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.	2.0	205
103	The theory of critical distances. Engineering Fracture Mechanics, 2008, 75, 1696-1705.	2.0	399
104	A finite fracture mechanics approach to structures with sharp V-notches. Engineering Fracture Mechanics, 2008, 75, 1736-1752.	2.0	172
105	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.	2.0	159
106	Fatigue in porous PMMA: The effect of stress concentrations. International Journal of Fatigue, 2008, 30, 989-995.	2.8	26
107	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.	1.7	78
108	The effects of increased intracortical remodeling on microcrack behaviour in compact bone. Bone, 2008, 43, 889-893.	1.4	30

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109	Bone as a structural material: how good is it?. Studies in Health Technology and Informatics, 2008, 133, 221-9.	0.2	1
110	How Does Bone Detect Cracks?. Key Engineering Materials, 2007, 348-349, 57-60.	0.4	0
111	Predicting Fatigue in Welded Joints: New Theories and some Practical Experience. Key Engineering Materials, 2007, 348-349, 557-560.	0.4	0
112	The Theory of Critical Distances: Basics. , 2007, , 21-31.		40
113	The Theory of Critical Distances in Detail. , 2007, , 33-49.		3
114	Theoretical Aspects. , 2007, , 261-275.		1
115	Case Studies and Practical Aspects. , 2007, , 235-259.		0
116	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.	1.8	24
117	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.	2.8	91
118	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.	2.8	60
119	Living with cracks: Damage and repair in human bone. Nature Materials, 2007, 6, 263-268.	13.3	323
120	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.	1.7	226
121	The role of osteocytes and bone microstructure in preventing osteoporotic fractures. Osteoporosis International, 2007, 18, 1-8.	1.3	45
122	A stress distribution remodelling technique. International Journal of Fracture, 2007, 143, 177-188.	1.1	2
123	Fracture and repair of bone: a multiscale problem. Journal of Materials Science, 2007, 42, 8911-8918.	1.7	44
124	The cellular transducer in bone: What is it?. Technology and Health Care, 2006, 14, 367-377.	0.5	6
125	Dynamic short crack growth in cortical bone. Technology and Health Care, 2006, 14, 393-402.	0.5	4
126	Mechanisms of short crack growth at constant stress in bone. Biomaterials, 2006, 27, 2114-2122.	5.7	33

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127	Finite fracture mechanics: A coupled stress and energy failure criterion. Engineering Fracture Mechanics, 2006, 73, 2021-2033.	2.0	264
128	The effect of crack shape on the fatigue limit of three-dimensional stress concentrations. International Journal of Fatigue, 2006, 28, 114-123.	2.8	22
129	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.	2.8	62
130	Microdamage: A cell transducing mechanism based on ruptured osteocyte processes. Journal of Biomechanics, 2006, 39, 2096-2103.	0.9	102
131	The Theory of Critical Distances. , 2006, , 1095-1096.		3
132	A Coupled Stress and Energy Criterion within Finite Fracture Mechanics. , 2006, , 1107-1108.		2
133	Fracture and Fatigue of Bone and Bone Cement: The Critical Distance Approach. , 2006, , 1025-1026.		0
134	The cellular transducer in bone: What is it?. Technology and Health Care, 2006, 14, 367-77.	0.5	3
135	The effect of bone microstructure on the initiation and growth of microcracks. Journal of Orthopaedic Research, 2005, 23, 475-480.	1.2	167
136	The fatigue behaviour of three-dimensional stress concentrations. International Journal of Fatigue, 2005, 27, 207-221.	2.8	140
137	The fracture mechanics of finite crack extension. Engineering Fracture Mechanics, 2005, 72, 1021-1038.	2.0	231
138	Fatigue assessment of welded joints using critical distance and other methods. Engineering Failure Analysis, 2005, 12, 129-142.	1.8	48
139	Fatigue of materials used in microscopic components. Fatigue and Fracture of Engineering Materials and Structures, 2005, 28, 1153-1160.	1.7	23
140	Analysis of fatigue failures in components using the theory of critical distances. Engineering Failure Analysis, 2005, 12, 906-914.	1.8	55
141	The behaviour of microcracks in compact bone. European Journal of Morphology, 2005, 42, 71-79.	1.4	38
142	Stress intensity variations in bone microcracks during the repair process. Journal of Theoretical Biology, 2004, 229, 169-177.	0.8	9
143	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.	2.6	119
144	Predicting stress fractures using a probabilistic model of damage, repair and adaptation. Journal of Orthopaedic Research, 2004, 22, 487-494.	1.2	56

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145	Predicting the fracture strength of ceramic materials using the theory of critical distances. Engineering Fracture Mechanics, 2004, 71, 2407-2416.	2.0	150
146	Cutting sharpness measurement: a critical review. Journal of Materials Processing Technology, 2004, 153-154, 261-267.	3.1	47
147	Microcrack accumulation at different intervals during fatigue testing of compact bone. Journal of Biomechanics, 2003, 36, 973-980.	0.9	187
148	The fatigue strength of compact bone in torsion. Journal of Biomechanics, 2003, 36, 1103-1109.	0.9	46
149	A crack growth model for the simulation of fatigue in bone. International Journal of Fatigue, 2003, 25, 387-395.	2.8	28
150	Two methods for predicting the multiaxial fatigue limits of sharp notches. Fatigue and Fracture of Engineering Materials and Structures, 2003, 26, 821-833.	1.7	99
151	Microdamage and mechanical behaviour: predicting failure and remodelling in compact bone. Journal of Anatomy, 2003, 203, 203-211.	0.9	65
152	Detecting microdamage in bone. Journal of Anatomy, 2003, 203, 161-172.	0.9	175
153	The cellular transducer in damage-stimulated bone remodelling: a theoretical investigation using fracture mechanics. Journal of Theoretical Biology, 2003, 225, 65-75.	0.8	52
154	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.	2.8	1
155	Fatigue design in the presence of stress concentrations. Journal of Strain Analysis for Engineering Design, 2003, 38, 443-452.	1.0	84
156	Failure Processes in Hard and Soft Tissues. , 2003, , 35-95.		16
157	Modelling of fatigue crack growth at the microstructural level. Computational Materials Science, 2002, 25, 228-236.	1.4	9
158	Bone adaptation to load: microdamage as a stimulus for bone remodelling. Journal of Anatomy, 2002, 201, 437-446.	0.9	173
159	Some new methods for predicting fatigue in welded joints. International Journal of Fatigue, 2002, 24, 509-518.	2.8	137
160	An improved labelling technique for monitoring microcrack growth in compact bone. Journal of Biomechanics, 2002, 35, 523-526.	0.9	103
161	A Theoretical Model for the Simulation of Microdamage Accumulation and Repair in Compact Bone*. Meccanica, 2002, 37, 397-406.	1.2	7
162	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.	1.4	16

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163	A Fatigue-Based Model of Disuse Osteoporosis. Computer Methods in Biomechanics and Biomedical Engineering, 2001, 4, 413-420.	0.9	1
164	Optimization of spot-welded structures. Finite Elements in Analysis and Design, 2001, 37, 1013-1022.	1.7	42
165	The prediction of stress fractures using a â€˜stressed volumeâ€™ concept. Journal of Orthopaedic Research, 2001, 19, 919-926.	1.2	72
166	A mechanistic approach to critical-distance methods in notch fatigue. Fatigue and Fracture of Engineering Materials and Structures, 2001, 24, 215-224.	1.7	110
167	The Critical Volume Method in Fatigue Analysis. , 2001, , 187-205.		0
168	Fatigue of Biological Structures and Biomaterials. , 2001, , 2951-2954.		0
169	Scaling Effects in the Fatigue Strength of Bones from Different Animals. Journal of Theoretical Biology, 2000, 206, 299-306.	0.8	43
170	Sheet thickness effect of spot welds based on crack propagation. Engineering Fracture Mechanics, 2000, 67, 55-63.	2.0	44
171	Visualisation of three-dimensional microcracks in compact bone. Journal of Anatomy, 2000, 197, 413-420.	0.9	116
172	Prediction of fatigue failure location on a component using a critical distance method. International Journal of Fatigue, 2000, 22, 735-742.	2.8	126
173	Prediction of fatigue failure in a camshaft using the crack modelling method. Engineering Failure Analysis, 2000, 7, 189-197.	1.8	27
174	Geometrical effects in fatigue: a unifying theoretical model. International Journal of Fatigue, 1999, 21, 413-420.	2.8	602
175	The crackâ€•modelling technique: optimization of parameters. Fatigue and Fracture of Engineering Materials and Structures, 1999, 22, 41-50.	1.7	7
176	Statistical analysis and reliability prediction with short fatigue crack data. Fatigue and Fracture of Engineering Materials and Structures, 1999, 22, 67-76.	1.7	3
177	Mixed-mode fatigue from stress concentrations: an approach based on equivalent stress intensity. International Journal of Fatigue, 1999, 21, 173-178.	2.8	23
178	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.	0.9	52
179	Functional Adaptation in Bone. , 1999, , 1-10.		4
180	Microcrack growth parameters for compact bone deduced from stiffness variations. Journal of Biomechanics, 1998, 31, 587-592.	0.9	60

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181	Measuring the shape and size of microcracks in bone. Journal of Biomechanics, 1998, 31, 1177-1180.	0.9	56
182	Fatigue of bone and bones: An analysis based on stressed volume. Journal of Orthopaedic Research, 1998, 16, 163-169.	1.2	90
183	Royal academy of medicine in Ireland section of bioengineering. Irish Journal of Medical Science, 1998, 167, 105-117.	0.8	0
184	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.	1.0	32
185	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.	1.7	46
186	Bone maintenance and remodeling: A control system based on fatigue damage. Journal of Orthopaedic Research, 1997, 15, 601-606.	1.2	56
187	Notch fatigue behaviour in cast irons explained using a fracture mechanics approach. International Journal of Fatigue, 1996, 18, 439-445.	2.8	49
188	Crack modelling: A technique for the fatigue design of components. Engineering Failure Analysis, 1996, 3, 129-136.	1.8	29
189	Short fatigue crack growth in cast iron described using Pâˆ’a curves. International Journal of Fatigue, 1995, 17, 201-206.	2.8	14
190	Prediction of bone adaptation using damage accumulation. Journal of Biomechanics, 1994, 27, 1067-1076.	0.9	260
191	Notch geometry effects in fatigue: A conservative design approach. Engineering Failure Analysis, 1994, 1, 275-287.	1.8	32
192	Fatigue failure in the cement mantle of an artificial hip joint. Clinical Materials, 1993, 12, 95-102.	0.5	74
193	On the use of P-a plots to model the behaviour of short fatigue cracks. International Journal of Fatigue, 1992, 14, 163-168.	2.8	11
194	EUROMECH COLLOQUIUM ON SHORT FATIGUE CRACKS. Fatigue and Fracture of Engineering Materials and Structures, 1982, 5, 305-309.	1.7	27
195	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