Tadeusz Åagoda

List of Publications by Year
in descending order

114 papers	1,542 citations	304743 22 h-index	377865 34 g-index
115 all docs	115 docs citations	115 times ranked	564 citing authors

#	Article	IF	Citations
1	A critical plane approach based on energy concepts: application to biaxial random tension-compression high-cycle fatigue regime. International Journal of Fatigue, 1999, 21, 431-443.	5.7	106
2	Fatigue life calculation by means of the cycle counting and spectral methods under multiaxial random loading. Fatigue and Fracture of Engineering Materials and Structures, 2005, 28, 409-420.	3.4	73
3	Energy models for fatigue life estimation under uniaxial random loading. Part I: The model elaboration. International Journal of Fatigue, 2001, 23, 467-480.	5.7	59
4	Fatigue life under non-Gaussian random loading from various models. International Journal of Fatigue, 2004, 26, 349-363.	5.7	54
5	Criteria of multiaxial random fatigue based on stress, strain and energy parameters of damage in the critical plane. Materialwissenschaft Und Werkstofftechnik, 2005, 36, 429-437.	0.9	54
6	Lifetime of semi-ductile materials through the critical plane approach. International Journal of Fatigue, 2014, 67, 73-77.	5.7	52
7	Relations between cavitation erosion resistance of materials and their fatigue strength under random loading. Wear, 1999, 230, 201-209.	3.1	51
8	Assessment of multiaxial fatigue behaviour of welded joints under combined bending and torsion by application of a fictitious notch radius. International Journal of Fatigue, 2004, 26, 265-279.	5.7	44
9	New energy model for fatigue life determination under multiaxial loading with different mean values. International Journal of Fatigue, 2014, 66, 229-245.	5.7	41
10	The multiaxial random fatigue criteria based on strain and energy damage parameters on the critical plane for the low-cycle range. International Journal of Fatigue, 2012, 37, 100-111.	5.7	39
11	A correction in the algorithm of fatigue life calculation based on the critical plane approach. International Journal of Fatigue, 2016, 83, 174-183.	5.7	39
12	Estimation of fatigue life under multiaxial loading by varying the critical plane orientation. International Journal of Fatigue, 2017, 100, 512-520.	5.7	35
13	Damage accumulation under variable amplitude loading of welded medium- and high-strength steels. International Journal of Fatigue, 2004, 26, 487-495.	5.7	33
14	Energy models for fatigue life estimation under uniaxial random loading. Part II: Verification of the model. International Journal of Fatigue, 2001, 23, 481-489.	5.7	32
15	The influence of the mean stress on fatigue life of 10HNAP steel under random loading. International Journal of Fatigue, 2001, 23, 283-291.	5.7	32
16	Fractal dimension for bendingâ€"torsion fatigue fracture characterisation. Measurement: Journal of the International Measurement Confederation, 2021, 184, 109910.	5.0	31
17	ESTIMATED AND EXPERIMENTAL FATIGUE LIVES OF 30CrNiMo8 STEEL UNDER INâ€AND OUTâ€OFâ€PHASE COMBINED BENDING AND TORSION WITH VARIABLE AMPLITUDES. Fatigue and Fracture of Engineering Materials and Structures, 1994, 17, 1307-1318.	3.4	29
18	Multiaxial fatigue behaviour of AA6068 and AA2017A aluminium alloys under in-phase bending with torsion loading condition. Materialwissenschaft Und Werkstofftechnik, 2014, 45, 947-952.	0.9	28

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19	Comparison of Fatigue Characteristics of some Selected Materials. Materialpruefung/Materials Testing, 2014, 56, 92-95.	2.2	28
20	Spectral analysis of the criteria for multiaxial Random Fatigue. Materialwissenschaft Und Werkstofftechnik, 1991, 22, 85-98.	0.9	27
21	Fatigue assessment of metallic components under uniaxial and multiaxial variable amplitude loading. Fatigue and Fracture of Engineering Materials and Structures, 2018, 41, 1306-1317.	3.4	24
22	FATIGUE LIFE OF ALUMINIUM ALLOY 6082 T6 UNDER CONSTANT AND VARIABLE AMPLITUDE BENDING WITH TORSION. Journal of Theoretical and Applied Mechanics, 0, , 421.	0.5	24
23	The Use of Spectral Method for Fatigue Life Assessment for Non-Gaussian Random Loads. Acta Mechanica Et Automatica, 2016, 10, 100-103.	0.6	22
24	Fatigue life under variable-amplitude loading according to the cycle-counting and spectral methods. Materials Science, 2006, 42, 416-425.	0.9	20
25	Fatigue life of 2017(A) aluminum alloy under proportional constant-amplitude bending with torsion in the energy approach. Materials Science, 2008, 44, 541-549.	0.9	20
26	Influence of correlations between stresses on calculated fatigue life of machine elements. International Journal of Fatigue, 1996, 18, 547-555.	5.7	19
27	Comparison of the fatigue characteristics for some selected structural materials under bending and torsion. Materials Science, 2011, 47, 334-344.	0.9	19
28	Energyâ€based fatigue failure characteristics of materials under random bending loading in elasticâ€plastic range. Fatigue and Fracture of Engineering Materials and Structures, 2018, 41, 249-259.	3.4	19
29	Fatigue life of steel notched elements including the complex stress state. Materials & Design, 2013, 51, 935-942.	5.1	17
30	Energy approach to fatigue under combined cyclic bending with torsion of smooth and notched specimens. Materials Science, 1998, 34, 630-639.	0.9	16
31	Structural notch effect in steel welded joints. Materials & Design, 2009, 30, 4562-4564.	5.1	16
32	Stress-life curve for high and low cycle fatigue. Journal of Theoretical and Applied Mechanics, 2019, 57, 677-684.	0.5	16
33	Determining fatigue life of bent and tensioned elements with a notch, with use of fictitious radius. Fatigue and Fracture of Engineering Materials and Structures, 2015, 38, 693-699.	3.4	15
34	A new algorithm for estimating fatigue life under mean value of stress. Fatigue and Fracture of Engineering Materials and Structures, 2017, 40, 448-459.	3.4	15
35	Fatigue life prediction of welded joints from nominal system to fracture mechanics. International Journal of Fatigue, 2020, 137, 105647.	5.7	15
36	Comparison of different methods for presenting variable amplitude loading fatigue results. Materialwissenschaft Und Werkstofftechnik, 2004, 35, 13-20.	0.9	14

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37	The fatigue life estimation of elements with circumferential notch under uniaxial state of loading. International Journal of Fatigue, 2011, 33, 1304-1312.	5.7	14
38	Fatigue life estimation of notched elements with use of non-local volumetric method. International Journal of Fatigue, 2014, 61, 59-66.	5.7	14
39	Non-standard fatigue stands for material testing under bending and torsion loadings. AIP Conference Proceedings, 2018, , .	0.4	14
40	Application of the Dangâ€Van criterion for life determination under uniaxial random tensionâ€"compression with different mean values. Fatigue and Fracture of Engineering Materials and Structures, 2004, 27, 505-512.	3.4	13
41	Fatigue lifetime under uniaxial random loading with different mean values according to some selected models. Materials & Design, 2007, 28, 2604-2610.	5.1	13
42	Fatigue Life Estimation under Cyclic Loading Including Out-of-Parallelism of the Characteristics. Applied Mechanics and Materials, 0, 104, 125-132.	0.2	12
43	Estimation of Fatigue Life of Materials with Out-of-Parallel Fatigue Characteristics under Block Loading. Materials Science Forum, 0, 726, 181-188.	0.3	12
44	Nonâ€local line method for notched elements with use of effective length calculated in an elastoâ€plastic condition. Fatigue and Fracture of Engineering Materials and Structures, 2017, 40, 89-102.	3.4	12
45	The Fictitious Radius as a Tool for Fatigue Life Estimation of Notched Elements. Materials Science Forum, 0, 726, 27-32.	0.3	10
46	Accumulation of Fatigue Damage Using Memory of the Material. , 2014, 3, 2-7.		10
47	Investigation on the effect of geometric and structural notch on the fatigue notch factor in steel welded joints. International Journal of Fatigue, 2017, 101, 224-231.	5.7	10
48	The Influence of the Strain and Stress Gradient in Determining Strain Fatigue Characteristics for Oscillatory Bending. Materials, 2020, 13, 173.	2.9	10
49	Low Cycle Fatigue of Steel in Strain Controled Cyclic Bending. Acta Mechanica Et Automatica, 2016, 10, 62-65.	0.6	9
50	Variability of fatigue parameters under uniaxial loading in the function of the number of cycles to failure. International Journal of Fatigue, 2018, 113, 246-252.	5.7	9
51	Fatigue damage cumulation in materials under random loading based on an energy model. Fatigue and Fracture of Engineering Materials and Structures, 2021, 44, 1114-1124.	3.4	9
52	Life time assessment of an aluminum alloy under complex low cycle fatigue loading*. Materialpruefung/Materials Testing, 2015, 57, 160-164.	2.2	9
53	The equivalent stress on the critical plane determined by the maximum covariance of normal and shear stresses. Bestimmung der Äquivalenten Spannung in der kritischen Ebene durch die maximale Kovarianz von Normal- und Scherspannungen. Materialwissenschaft Und Werkstofftechnik, 2010, 41, 218-220.	0.9	8
54	Influence of changes of the bending plane position on the fatigue life. Materialwissenschaft Und Werkstofftechnik, 2014, 45, 1018-1029.	0.9	8

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55	Using the Smith-Watson-Topper Parameter and Its Modifications to Calculate the Fatigue Life of Metals: The State-of-the-Art. Materials, 2022, 15, 3481.	2.9	8
56	Concept of Fatigue for Determining Characteristics of Materials with Strengthening. Materials Science Forum, 2012, 726, 43-48.	0.3	7
57	Stress gradient as a size effect in fatigue life determination for alternating bending. International Journal of Fatigue, 2021, 153, 106461.	5.7	7
58	Fatigue life estimation for selected materials in multiaxial stress states with mean stress. Journal of Theoretical and Applied Mechanics, 0, , 385.	0.5	7
59	Covariance between components of biaxial stress state in fatigue life calculations. Materialwissenschaft Und Werkstofftechnik, 1992, 23, 201-212.	0.9	6
60	Cracking of thick-walled fiber composites during bending tests. Theoretical and Applied Fracture Mechanics, 2019, 101, 46-52.	4.7	6
61	Fatigue Damage Accumulation Model of 6082-T6 Aluminum Alloy in Conditions of Block Bending and Torsion. Journal of Testing and Evaluation, 2020, 48, 4416-4434.	0.7	6
62	Modification of the algorithm for calculating fatigue life for the criteria based on the concept of the critical plane. Journal of Theoretical and Applied Mechanics, 0, , 191.	0.5	6
63	Fracture of elastic-brittle and elastic-plastic material in cantilever cyclic bending. Frattura Ed Integrita Strutturale, 2019, 13, 42-49.	0.9	6
64	Application of the covariance on the critical plane for determination of fatigue life under cyclic loading. Procedia Engineering, 2010, 2, 1211-1218.	1.2	5
65	Comparison of 15Mo3 Strain Curves Obtained for Strain-Controlled Cyclic Bending and Tension-Compression Tests. Solid State Phenomena, 0, 250, 85-93.	0.3	5
66	Estimation of the Fatigue Life of 35NCD16 Alloy Steel Under Random Loading. Materials Science, 2017, 52, 492-499.	0.9	5
67	Correlation of Uniaxial Cyclic Torsion and Tension-Compression for Low-Cycle Fatigue. Materials Science, 2018, 53, 522-531.	0.9	5
68	A formulation of the criterion for multiaxial fatigue in terms of complex number as proposed by Macha. International Journal of Fatigue, 2020, 133, 105430.	5.7	5
69	Fatigue Life of Aluminum Alloys Based on Shear and Hydrostatic Strain. Materials, 2020, 13, 4850.	2.9	5
70	Modelling of Stresses in Welded Joints Under Consideration of Plastic Strains in Fatigue Life Calculations*. Materialpruefung/Materials Testing, 2011, 53, 339-343.	2.2	5
71	Life estimation by varying the critical plane orientation in the modified Carpinteri-Spagnoli criterion. Frattura Ed Integrita Strutturale, 2015, 9, .	0.9	5
72	Strain-controlled tests for determining the changes in the fatigue parameters of materials. Materials Science, 2007, 43, 492-498.	0.9	4

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73	Evaluation of fatigue life of steel using steel grain size. Materialwissenschaft Und Werkstofftechnik, 2015, 46, 1059-1067.	0.9	4
74	The Use of a Power Law Function for Fatigue Life Estimation for Block Loads. Solid State Phenomena, 0, 250, 1-9.	0.3	4
75	Strain-life fatigue curves on the basis of shear strains from torsion. Procedia Structural Integrity, 2018, 13, 2210-2215.	0.8	4
76	Determination of the critical plane orientation depending on the fatigue curves for bending and torsion. Frattura Ed Integrita Strutturale, 2017, 11, 24-30.	0.9	4
77	The application of the criteria of multiaxial fatigue in the critical plane for the topology optimization of a structure. AIP Conference Proceedings, 2016, , .	0.4	3
78	Including of Ratio of Fatigue Limits from Bending and Torsion for Estimation Fatigue Life under Cyclic Loading. , 2016, 12, 30-35.		3
79	Strain characteristics of non-ferrous metals obtained on the basic of different loads. MATEC Web of Conferences, 2018, 165, 15005.	0.2	3
80	Fatigue Life Calculation with the Use of the Energy Parameter for the Elastic Material State in the Spectral Method. Lecture Notes in Mechanical Engineering, 2019, , 80-87.	0.4	3
81	Fatigue Life According to Cyclic Strain Characteristics Determined from Variable-Amplitude Loading*. Materialpruefung/Materials Testing, 2009, 51, 286-290.	2.2	3
82	The Influence of the Ferrite and Pearlite Grain Size on the S-N Fatigue Characteristics of Steel. Solid State Phenomena, 2014, 224, 3-8.	0.3	2
83	Accumulation of Fatigue Damages for Block-Type Loads with Use of Material Memory Function. Solid State Phenomena, 0, 224, 39-44.	0.3	2
84	Application of Fictitious Radius to Fatigue Life Calculations of Bending Notched Specimens. Key Engineering Materials, 2014, 598, 119-124.	0.4	2
85	Variations of Selected Cyclic Properties Depending on Testing Temperature. Materials Science, 2015, 50, 555-563.	0.9	2
86	Equivalent Fatigue Zone in a Notched Elements Determined by Use of Non-Local Line Method with Weight Function. Solid State Phenomena, 2016, 250, 77-84.	0.3	2
87	Incorporation of Corrosion Effects into the Life-Cycle Analysis of AW-2017A-T4 Aluminium Alloy under Bending Moment. Materials, 2020, 13, 3681.	2.9	2
88	Formulation of Strain Fatigue Criterion Based on Complex Numbers. Materials, 2021, 14, 1227.	2.9	2
89	Investigation of Changes in Fatigue Damage Caused by Mean Load under Block Loading Conditions. Materials, 2021, 14, 2738.	2.9	2
90	Estimation of fatigue life of selected construction materials under cyclic loading. Frattura Ed Integrita Strutturale, 2015, 9, 302-308.	0.9	2

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91	Fatigue cracking of aluminium alloy AlZn6Mg0.8Zr subjected to thermomechanical treatment. Frattura Ed Integrita Strutturale, 2016, 10, 449-455.	0.9	2
92	Estimation of fatigue strength under multiaxial cyclic loading by varying the critical plane orientation. Frattura Ed Integrita Strutturale, 2016, 10, 221-227.	0.9	2
93	WIELOOSIOWE LOSOWE ZMÄ˜CZENIE ELEMENTÃ“W MASZYN. Journal of Science of the Gen Tadeusz Kosciuszko Military Academy of Land Forces, 2014, 174, 104-117.	0.1	2
94	Change in elastic modulus during fatigue bending and torsion of a polymer reinforced with continuous glass fibers. Engineering Failure Analysis, 2022, 138, 106341.	4.0	2
95	Fatigue lifetime of GFRP laminates in critical plane defined by equivalent normal stress. Procedia Structural Integrity, 2022, 41, 232-240.	0.8	2
96	Estimation of the fatigue life of high strength steel under variable-amplitude tension with torsion: Use of the energy parameter in the critical plane. European Structural Integrity Society, 2003, 31, 183-202.	0.1	1
97	Fatigue life of welded joints according to energy criteria in the critical plane. Strength of Materials, 2006, 38, 417-422.	0.5	1
98	Modification of the fatigue life calculation algorithm for criteria based on the critical plane concept. AIP Conference Proceedings, 2016, , .	0.4	1
99	Application of the fictitious radius for the calculation of the fatigue life using the elastic-plastic body model. AIP Conference Proceedings, 2016, , .	0.4	1
100	Strain-Life Fatigue Curves on the Basis of Shear Strains from Torsion. Lecture Notes in Mechanical Engineering, 2019, , 395-402.	0.4	1
101	Fatgue Life Under Random Tension-Compression Load for Different Probability Levels. Materialpruefung/Materials Testing, 2010, 52, 363-366.	2.2	1
102	An assessment of fatigue strength of welded joints in bending and torsion. Welding International, 2006, 20, 538-543.	0.7	0
103	A model based on the stress concentration factor for the assessment of fatigue life of welded joints. Welding International, 2006, 20, 875-882.	0.7	0
104	Identification of the cyclic strain curve based on random test results. Materials Science, 2008, 44, 278-282.	0.9	0
105	Structural notch effect in steel-welded joints. Welding International, 2012, 26, 118-121.	0.7	0
106	Determination of stress and strain concentrations in the elastic-plastic materials under bending and torsion. Materials Science, 2012, 47, 545-552.	0.9	0
107	Fatigue Properties of Aluminium Alloys for Uniaxial Cyclic Loads. Key Engineering Materials, 2014, 598, 13-19.	0.4	0
108	Numerical procedures of multiaxial fatigue for structural design. AIP Conference Proceedings, 2018, , .	0.4	0

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109	Examination tests of the time courses during the milling of an element for various special tool configuration. AIP Conference Proceedings, 2018, , .	0.4	0
110	The application of the theory of large deformations in uniaxial tension-compression of selected metals. Procedia Structural Integrity, 2019, 16, 19-26.	0.8	0
111	The generalized criterion of multiaxial random fatigue based on conception proposed by prof. Macha. MATEC Web of Conferences, 2019, 300, 15001.	0.2	0
112	Application of variable equivalent amplitude for determination of fatigue life of elements subjected to block loading. MATEC Web of Conferences, 2021, 338, 01020.	0.2	0
113	Predicting fatigue life of welded aluminium joints with combined bending and torsion using energy based criteria*. Materialpruefung/Materials Testing, 2006, 48, 103-110.	2.2	0
114	Designing of the Structure Elements Being Bent from the Fatigue Life Point of View. Lecture Notes in Mechanical Engineering, 2019, , 353-360.	0.4	0