Herwig Mayer

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/6641162/publications.pdf

Version: 2024-02-01

96	3,612	117625	149698
papers	citations	34 h-index	56 g-index

98	98	98	1841
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Slow fatigue crack growth in 2024-T3 and Ti-6Al-4V at low and ultrasonic frequency. International Journal of Materials Research, 2022, 94, 539-546.	0.3	1
2	Fatigue properties of wood at different load ratios tested at 50â€…Hz and 20â€…kHz. Materialwissenschaft Und Werkstofftechnik, 2022, 53, 344-354.	0.9	4
3	Effects of Non-Metallic Inclusions and Mean Stress on Axial and Torsion Very High Cycle Fatigue of SWOSC-V Spring Steel. Metals, 2022, 12, 1113.	2.3	3
4	Meanâ€stress sensitivity of an ultrahighâ€strength steel under uniaxial and torsional high and very high cycle fatigue loading. Fatigue and Fracture of Engineering Materials and Structures, 2022, 45, 3361-3377.	3.4	5
5	Variable amplitude very high cycle fatigue of 17-4PH steel with a stepwise S-N curve. International Journal of Fatigue, 2021, 142, 105963.	5.7	19
6	Effect of microstructure and cycling frequency on the torsional fatigue properties of 17-4PH stainless steel. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2021, 801, 140481.	5.6	13
7	Usability of Ultrasonic Frequency Testing for Rapid Generation of High and Very High Cycle Fatigue Data. Materials, 2021, 14, 2245.	2.9	15
8	Influence of load ratio on torsion very high cycle fatigue of highâ€strength spring steel in the presence of detrimental defects. Fatigue and Fracture of Engineering Materials and Structures, 2021, 44, 2356-2371.	3.4	14
9	Influence of small defects and nonmetallic inclusions on the high and very high cycle fatigue strength of an ultrahighâ€strength steel. Fatigue and Fracture of Engineering Materials and Structures, 2021, 44, 2990-3007.	3.4	16
10	Ultrasonic fatigue testing of concrete. Ultrasonics, 2021, 116, 106521.	3.9	8
11	High Speed In Situ Synchrotron Observation of Cyclic Deformation and Phase Transformation of Superelastic Nitinol at Ultrasonic Frequency. Experimental Mechanics, 2020, 60, 317-328.	2.0	9
12	Inclusion initiated fracture in spring steel under axial and torsion very high cycle fatigue loading at different load ratios. International Journal of Fatigue, 2020, 134, 105525.	5.7	31
13	Effect of small defects on the fatigue strength of martensitic stainless steels. International Journal of Fatigue, 2019, 127, 362-375.	5.7	64
14	Inclusion initiated fracture under cyclic torsion very high cycle fatigue at different load ratios. International Journal of Fatigue, 2019, 122, 199-207.	5.7	26
15	Influence of cycling frequency and testing volume on the VHCF properties of 18Ni maraging steel. Engineering Fracture Mechanics, 2019, 216, 106525.	4.3	14
16	Soil aggregate breakdown and carbon release along a chronosequence of recovering landslide scars in a subtropical watershed. Catena, 2018, 165, 530-536.	5.0	14
17	Microwave testing of moist and oven-dry wood to evaluate grain angle, density, moisture content and the dielectric constant of spruce from 8ÂGHz to 12ÂGHz. European Journal of Wood and Wood Products, 2018, 76, 89-103.	2.9	21
18	Nearâ€threshold fatigue crack growth properties of wrought magnesium alloy <scp>AZ61</scp> in ambient air, dry air, and vacuum. Fatigue and Fracture of Engineering Materials and Structures, 2018, 41, 1938-1947.	3.4	27

#	Article	IF	Citations
19	Fatigue testing of thin CoNiCr wire up to 1010cycles. International Journal of Fatigue, 2017, 98, 92-100.	5.7	9
20	Influence of inclusion type on the very high cycle fatigue properties of 18Ni maraging steel. Journal of Materials Science, 2017, 52, 5954-5967.	3.7	43
21	Investigation of the high and very high cycle fatigue behaviour of continuous fibre reinforced plastics by conventional and ultrasonic fatigue testing. Composites Science and Technology, 2017, 141, 130-136.	7.8	34
22	Very high cycle fatigue testing of concrete using ultrasonic cycling. Materialpruefung/Materials Testing, 2017, 59, 438-444.	2.2	19
23	Influence of small defects on the uniaxial and torsional fatigue strength of 17-4PH stainless steel. Procedia Structural Integrity, 2017, 7, 492-496.	0.8	10
24	Calibration of ultrasonic power output in water, ethanol and sodium polytungstate. International Agrophysics, 2017, 31, 583-588.	1.7	8
25	Mean stress sensitivity and crack initiation mechanisms of spring steel for torsional and axial VHCF loading. International Journal of Fatigue, 2016, 93, 309-317.	5.7	38
26	Very high cycle fatigue of wrought magnesium alloy AZ61. Procedia Structural Integrity, 2016, 2, 1047-1054.	0.8	9
27	Ultrasonic fatigue testing of thin MP35N alloy wire. Procedia Structural Integrity, 2016, 2, 1039-1046.	0.8	4
28	Recent developments in ultrasonic fatigue. Fatigue and Fracture of Engineering Materials and Structures, 2016, 39, 3-29.	3.4	123
29	Constant and variable amplitude fatigue testing of aluminum alloy 2024-T351 with ultrasonic and servo-hydraulic equipment. International Journal of Fatigue, 2016, 91, 363-372.	5.7	22
30	Study of soil aggregate breakdown dynamics under low dispersive ultrasonic energies with sedimentation and X-ray attenuation. International Agrophysics, 2015, 29, 501-508.	1.7	8
31	Variable Amplitude Testing of 2024-T351 Aluminum Alloy Using Ultrasonic and Servo-hydraulic Fatigue Testing Equipment. Procedia Engineering, 2015, 101, 169-176.	1.2	5
32	Mean stress sensitivity of spring steel in the very high cycle fatigue regime. Journal of Materials Science, 2015, 50, 5514-5523.	3.7	18
33	VHCF properties of nitrided 18Ni maraging steel thin sheets with different Co and Ti content. Fatigue and Fracture of Engineering Materials and Structures, 2015, 38, 518-527.	3.4	32
34	Cyclic torsion very high cycle fatigue of VDSiCr spring steel at different load ratios. International Journal of Fatigue, 2015, 70, 322-327.	5.7	48
35	Fatigue strength of VDSiCr spring steel under cyclic torsion and cyclic axial loading at different load ratios in the VHCF regime. MATEC Web of Conferences, 2014, 12, 01003.	0.2	0
36	VHCF of spray formed hypereutectic aluminium silicon alloy. MATEC Web of Conferences, 2014, 12, 10002.	0.2	0

#	Article	IF	Citations
37	Variable amplitude loading of sprayâ€formed hypereutectic aluminium silicon alloy DISPALÂ® S232 in the VHCF regime. Fatigue and Fracture of Engineering Materials and Structures, 2014, 37, 945-957.	3.4	14
38	Variable amplitude loading of Al 2024-T351 at different load ratios using ultrasonic equipment. International Journal of Fatigue, 2014, 60, 34-42.	5.7	10
39	Very high cycle fatigue of nitrided 18Ni maraging steel sheet. International Journal of Fatigue, 2014, 64, 140-146.	5.7	23
40	Constant and variable amplitude ultrasonic fatigue of 2024-T351 aluminium alloy at different load ratios. Ultrasonics, 2013, 53, 1425-1432.	3.9	42
41	Fatigue of 2024-T351 aluminium alloy at different load ratios up to 1010 cycles. International Journal of Fatigue, 2013, 57, 113-119.	5.7	47
42	Non-destructive evaluation of grain angle, moisture content and density of spruce with microwaves. European Journal of Wood and Wood Products, 2013, 71, 779-786.	2.9	7
43	Very high cycle fatigue of VDSiCr spring steel under torsional and axial loading. Materialwissenschaft Und Werkstofftechnik, 2013, 44, 282-289.	0.9	17
44	Fatigue properties of spray formed hypereutectic aluminium silicon alloy DISPALÂ® S232 at high and very high numbers of cycles. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2012, 538, 327-334.	5.6	15
45	Soil aggregation, aggregate stability, organic carbon and nitrogen in different soil aggregate fractions under forest and shrub vegetation on the Loess Plateau, China. Catena, 2010, 81, 226-233.	5.0	226
46	Fatigue damage of low amplitude cycles in low carbon steel. Journal of Materials Science, 2009, 44, 4919-4929.	3.7	29
47	Very high cycle fatigue properties of bainitic high carbonâ€“chromium steel. International Journal of Fatigue, 2009, 31, 242-249.	5.7	116
48	Very high cycle fatigue properties of bainitic high carbonâ€“chromium steel under variable amplitude conditions. International Journal of Fatigue, 2009, 31, 1300-1308.	5.7	63
49	Fatigue strength of spring steel under axial and torsional loading in the very high cycle regime. International Journal of Fatigue, 2008, 30, 2057-2063.	5.7	91
50	High Cycle Fatigue Behavior of Normalized 0.15% C Steel under Tension-Compression and Torsion Loading. Key Engineering Materials, 2008, 378-379, 29-38.	0.4	2
51	Beitrag niedriger Lastamplituden zur ErmÃ¼dungsschÃdigung von 0,15â€Š%C Stahl. Materialwissenschaft Und Werkstofftechnik, 2007, 38, 581-590.	0.9	7
52	Fatigue behaviour of graphite and interpenetrating graphiteâ€“aluminium composite up to 109 load cycles. Carbon, 2006, 44, 1801-1807.	10.3	14
53	Effects of microstructure and temperature on fatigue behavior of E319-T7 cast aluminum alloy in very long life cycles. International Journal of Fatigue, 2006, 28, 1566-1571.	5.7	106
54	Very high cycle fatigue of normalized carbon steels. International Journal of Fatigue, 2006, 28, 1583-1589.	5.7	52

#	Article	IF	Citations
55	Ultrasonic torsion and tensionâ€“compression fatigue testing: Measuring principles and investigations on 2024-T351 aluminium alloy. International Journal of Fatigue, 2006, 28, 1446-1455.	5.7	88
56	ErmÃ¼dungsverhalten und Dauerfestigkeit von Graphit und Aluminium â€“ infiltriertem Graphit. Materialwissenschaft Und Werkstofftechnik, 2006, 37, 264-271.	0.9	0
57	Ultrasonic-assisted cutting of wood. Journal of Materials Processing Technology, 2005, 170, 42-49.	6.3	23
58	Influence of cyclic loads below endurance limit or threshold stress intensity on fatigue damage in cast aluminium alloy 319-T7. International Journal of Fatigue, 2005, 27, 129-141.	5.7	33
59	Endurance limit and threshold stress intensity of die cast magnesium and aluminium alloys at elevated temperatures. International Journal of Fatigue, 2005, 27, 1076-1088.	5.7	56
60	Surface properties of wood and MDF after ultrasonic-assisted cutting. Journal of Materials Science, 2005, 40, 4325-4332.	3.7	6
61	Near threshold fatigue crack growth at positive load ratio in aluminium alloys at low and ultrasonic frequency: influences of strain rate, slip behaviour and air humidity. International Journal of Fatigue, 2004, 26, 27-38.	5.7	40
62	Demonstration of an endurance limit in cast 319 aluminum. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2003, 34, 33-41.	2.2	62
63	Influence of porosity on the fatigue limit of die cast magnesium and aluminium alloys. International Journal of Fatigue, 2003, 25, 245-256.	5.7	333
64	Near threshold fatigue crack growth in aluminium alloys at low and ultrasonic frequency: Influences of specimen thickness, strain rate, slip behaviour and air humidity. International Journal of Fatigue, 2003, 25, 397-411.	5.7	63
65	Langsames ErmÃ¼dungsrisswachstum in Aluminium- und Magnesiumgusslegierungen in Raumluft und in Vakuum. Materialwissenschaft Und Werkstofftechnik, 2002, 33, 15-23.	0.9	7
66	Einfluss von Gussfehlern auf die Dauerfestigkeit von Aluminium- und Magnesiumgusslegierungen. Materialwissenschaft Und Werkstofftechnik, 2002, 33, 117-127.	0.9	3
67	Cyclic plastic deformation of tantalum and niobium at very high numbers of cycles. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2002, 325, 520-524.	5.6	26
68	Very high cycle regime fatigue of thin walled tubes made from austenitic stainless steel. Fatigue and Fracture of Engineering Materials and Structures, 2002, 25, 837-844.	3.4	34
69	Variable amplitude loading in the very high-cycle fatigue regime. Fatigue and Fracture of Engineering Materials and Structures, 2002, 25, 887-896.	3.4	14
70	Influence of atmospheric moisture on slow fatigue crack growth at ultrasonic frequency in aluminium and magnesium alloys. Fatigue and Fracture of Engineering Materials and Structures, 2002, 25, 795-804.	3.4	42
71	Fatigue properties of Alâ€“1Mgâ€“0.6Si foam at low and ultrasonic frequencies. International Journal of Fatigue, 2001, 23, 565-573.	5.7	26
72	Fatigue and fatigue crack growth of aluminium alloys at very high numbers of cycles. International Journal of Fatigue, 2001, 23, 231-237.	5.7	112

#	Article	IF	Citations
73	Influence of loading frequency on high cycle fatigue properties of b.c.c. and h.c.p. metals. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2001, 308, 143-152.	5.6	86
74	Influence of loading frequency on the high cycle fatigue properties of AlZnMgCu1.5 aluminium alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2001, 314, 48-54.	5.6	81
75	Effects of surface treatments on high cycle corrosion fatigue of metallic implant materials. International Journal of Fatigue, 2000, 22, 873-886.	5.7	78
76	Fatigue properties of aluminium foams at high numbers of cycles. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2000, 292, 1-7.	5.6	53
77	Application of ultrasound for fatigue testing of lightweight alloys. Fatigue and Fracture of Engineering Materials and Structures, 1999, 22, 591-599.	3.4	68
78	KorrosionsermÃ¼dung von Aluminium- und Magnesium-GuÃŸlegierungen. Materials and Corrosion - Werkstoffe Und Korrosion, 1999, 50, 81-89.	1.5	23
79	Fatigue crack growth and threshold measurements at very high frequencies. International Materials Reviews, 1999, 44, 1-34.	19.3	165
80	Fatigue crack growth and threshold measurements at very high frequencies. International Materials Reviews, 1999, 44, 1-34.	19.3	61
81	Fatigue properties of Al2O3-particle-reinforced 6061 aluminium alloy in the high-cycle regime. International Journal of Fatigue, 1996, 18, 475-481.	5.7	25
82	NEAR-THRESHOLD FATIGUE CRACK GROWTH IN A12O3PARTICLE REINFORCED 6061 ALUMINIUM ALLOY. Fatigue and Fracture of Engineering Materials and Structures, 1995, 18, 477-487.	3.4	23
83	Fatigue and fatigue crack propagation in AlSi7Mg cast alloys under in-service loading conditions. International Journal of Fatigue, 1995, 17, 149-155.	5.7	47
84	INFLUENCE OF TRANSFORMATIONâ€INDUCED CRACK CLOSURE ON SLOW FATIGUE CRACK GROWTH UNDER VARIABLE AMPLITUDE LOADING. Fatigue and Fracture of Engineering Materials and Structures, 1995, 18, 935-948.	3.4	32
85	Influence of cyclic frequency on strain localization and cyclic deformation in fatigue. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 1994, 187, 23-35.	5.6	20
86	CRACK FACE INTERACTIONS AND NEAR-THRESHOLD FATIGUE CRACK GROWTH. Fatigue and Fracture of Engineering Materials and Structures, 1993, 16, 71-83.	3.4	20
87	High frequency method for torsion fatigue testing. Ultrasonics, 1993, 31, 275-280.	3.9	54
88	In-service loading of AlSill aluminium cast alloy in the very high cycle regime. International Journal of Fatigue, 1993, 15, 311-316.	5.7	39
89	FEM modelling of stress intensity factors for fatigue crack growth at ultrasonic frequencies. Engineering Fracture Mechanics, 1993, 45, 487-495.	4.3	20
90	FATIGUE CRACK GROWTH OF Al 2024-T3 UNDER LOW AMPLITUDE TWO-STEP LOADING. Fatigue and Fracture of Engineering Materials and Structures, 1992, 15, 265-275.	3.4	12

#	Article	IF	Citations
91	Fatigue crack propagation in the threshold regime after rapid load reduction. Engineering Fracture Mechanics, 1991, 40, 1035-1043.	4.3	8
92	The influence of air humidity on near-threshold fatigue crack growth of 2024-T3 aluminum alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 1991, 147, 45-54.	5.6	51
93	Lifetime measurements for random loading in the very high cycle fatigue range. International Journal of Fatigue, 1986, 8, 195-200.	5.7	50
94	Measurement of soil aggregate stability using low intensity ultrasonic vibration. Spanish Journal of Soil Science, 0, 1, .	0.0	2
95	Determination of dissolved organic carbon in soils with UV spectroscopy, ultrasonic dispersion pre-treatment and separation with size exclusion chromatography .. Spanish Journal of Soil Science, 0, 4, .	0.0	2
96	Very High Cycle Fatigue Behaviour under Cyclic Torsion Loading. , 0, , 1123-1124.		0