T Palin-Luc

List of Publications by Year
in descending order

76 papers	1,438 citations	279798 23 h-index	345221 36 g-index
84 all docs	84 docs citations	84 times ranked	828 citing authors

#	Article	IF	Citations
1	Fatigue crack initiation and growth on a steel in the very high cycle regime with sea water corrosion. Engineering Fracture Mechanics, 2010, 77, 1953-1962.	4.3	94
2	Very high cycle fatigue of a high strength steel under sea water corrosion: A strong corrosion and mechanical damage coupling. International Journal of Fatigue, 2015, 74, 156-165.	5.7	86
3	A volumetric energy based high cycle multiaxial fatigue citerion. International Journal of Fatigue, 2003, 25, 755-769.	5.7	85
4	An energy based criterion for high cycle multiaxial fatigue. European Journal of Mechanics, A/Solids, 1998, 17, 237-251.	3.7	72
5	Residual stresses in surface induction hardening of steels: Comparison between experiment and simulation. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2008, 487, 328-339.	5.6	63
6	Fatigue crack initiation and growth in a 35CrMo4 steel investigated by infrared thermography. Fatigue and Fracture of Engineering Materials and Structures, 2005, 28, 169-178.	3.4	59
7	Fatigue life under non-Gaussian random loading from various models. International Journal of Fatigue, 2004, 26, 349-363.	5.7	54
8	A review about the effects of structural and operational factors on the gigacycle fatigue of steels. Fatigue and Fracture of Engineering Materials and Structures, 2018, 41, 969-990.	3.4	52
9	Estimation of the fatigue strength distribution in high-cycle multiaxial fatigue taking into account the stressâ€“strain gradient effect. International Journal of Fatigue, 2006, 28, 474-484.	5.7	49
10	Effect of corrosion on the high cycle fatigue strength of martensitic stainless steel X12CrNiMoV12-3. International Journal of Fatigue, 2013, 47, 330-339.	5.7	45
11	AÂnon-local theory applied to high cycle multiaxial fatigue. Fatigue and Fracture of Engineering Materials and Structures, 2002, 25, 649-665.	3.4	44
12	Theoretical analysis, infrared and structural investigations of energy dissipation in metals under cyclic loading. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2007, 462, 367-369.	5.6	42
13	Micro-mechanical modelling of high cycle fatigue behaviour of metals under multiaxial loads. Mechanics of Materials, 2012, 55, 112-129.	3.2	39
14	A new piezoelectric fatigue testing machine in pure torsion for ultrasonic gigacycle fatigue tests: application to forged and extruded titanium alloys. Fatigue and Fracture of Engineering Materials and Structures, 2015, 38, 1294-1304.	3.4	39
15	Crack initiation in VHCF regime on forged titanium alloy under tensile and torsion loading modes. International Journal of Fatigue, 2016, 93, 318-325.	5.7	37
16	Modelling of corrosion fatigue crack initiation on martensitic stainless steel in high cycle fatigue regime. Corrosion Science, 2018, 133, 397-405.	6.6	36
17	Progress in fatigue life calculation by implementing life-dependent material parameters in multiaxial fatigue criteria. International Journal of Fatigue, 2020, 134, 105509.	5.7	34
18	Non-local energy based fatigue life calculation method under multiaxial variable amplitude loadings. International Journal of Fatigue, 2013, 54, 68-83.	5.7	29

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19	EXPERIMENTAL INVESTIGATION ON THE SIGNIFICANCE OF THE CONVENTIONAL ENDURANCE LIMIT OF A SPHEROIDAL GRAPHITE CAST IRON. Fatigue and Fracture of Engineering Materials and Structures, 1998, 21, 191-200.	3.4	28
20	Elastic-plastic transition in iron: Structural and thermodynamic features. Technical Physics, 2009, 54, 1141-1146.	0.7	28
21	Comparative study and link between mesoscopic and energetic approaches in high cycle multiaxial fatigue. International Journal of Fatigue, 2001, 23, 317-327.	5.7	26
22	In situ synchrotron ultrasonic fatigue testing device for 3D characterisation of internal crack initiation and growth. Fatigue and Fracture of Engineering Materials and Structures, 2020, 43, 558-567.	3.4	26
23	About the effect of plastic dissipation in heat at the crack tip on the stress intensity factor under cyclic loading. International Journal of Fatigue, 2014, 58, 56-65.	5.7	23
24	The mechanism of internal fatigue-crack initiation and early growth in a titanium alloy with lamellar and equiaxed microstructure. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2020, 798, 140110.	5.6	23
25	Simulation of multiaxial fatigue strength of steel component treated by surface induction hardening and comparison with experimental results. International Journal of Fatigue, 2011, 33, 1040-1047.	5.7	21
26	Statistical assessment of multiaxial HCF criteria at the grain scale. International Journal of Fatigue, 2014, 67, 151-158.	5.7	21
27	Nonâ€local high cycle fatigue strength criterion for metallic materials with corrosion defects. Fatigue and Fracture of Engineering Materials and Structures, 2015, 38, 1017-1025.	3.4	21
28	Scaling invariance of fatigue crack growth in gigacycle loading regime. Technical Physics Letters, 2010, 36, 1061-1063.	0.7	20
29	Experimental study of the impact of punching operations on the high cycle fatigue strength of Feâ€“Si thin sheets. International Journal of Fatigue, 2016, 82, 721-729.	5.7	19
30	Thermal effect of plastic dissipation at the crack tip on the stress intensity factor under cyclic loading. Engineering Fracture Mechanics, 2011, 78, 961-972.	4.3	16
31	Comparison of crack paths in a forged and extruded aeronautical titanium alloy loaded in torsion in the gigacycle fatigue regime. Engineering Fracture Mechanics, 2016, 167, 259-272.	4.3	15
32	Isothermal fatigue damage mechanisms at ambient and elevated temperature of a cast Al-Si-Cu aluminium alloy. International Journal of Fatigue, 2019, 121, 112-123.	5.7	15
33	Gigacycle fatigue behavior of a cast aluminum alloy under biaxial bending: experiments with a new piezoelectric fatigue testing device. Procedia Structural Integrity, 2016, 2, 1173-1180.	0.8	14
34	Fatigue failure probability estimation of the 7075-T651 aluminum alloy under multiaxial loading based on the life-dependent material parameters concept. International Journal of Fatigue, 2021, 147, 106174.	5.7	14
35	Experimental and theoretical study of multiscale damage-failure transition in very high cycle fatigue. Physical Mesomechanics, 2017, 20, 78-89.	1.9	12
36	Fatigue crack initiation and growth on an extruded titanium alloy in gigacycle regime: comparison between tension and torsion loadings. Procedia Structural Integrity, 2016, 2, 1125-1132.	0.8	10

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37	A method to determine composite material residual tensile strength in the fibre direction as a function of the matrix damage state after fatigue loading. Composites Part B: Engineering, 2017, 127, 15-25.	12.0	9
38	ELASTOMER AND RESIN REPLICAS FOR SEM OBSERVATION OF METALLIC MATERIALS. Experimental Techniques, 2002, 26, 33-37.	1.5	7
39	Gigacycle fatigue: non-local and scaling aspects of damage localization, crack initiation and propagation. Procedia Structural Integrity, 2016, 2, 1143-1148.	0.8	7
40	High cycle fatigue strength assessment methodology considering punching effects. Procedia Engineering, 2018, 213, 691-698.	1.2	7
41	Effect of temperature on damage mechanisms and mechanical behaviour of an acrylic-thermoplastic-matrix and glass-fibre-reinforced composite. Journal of Composite Materials, 2020, 54, 4269-4282.	2.4	7
42	How to reduce the duration of multiaxial fatigue tests under proportional service loadings. International Journal of Fatigue, 2006, 28, 554-563.	5.7	6
43	Experimental investigations of anomalous energy absorption in nanocrystalline titanium under cyclic loading conditions. Technical Physics Letters, 2008, 34, 557-560.	0.7	6
44	Crack path in aeronautical titanium alloy under ultrasonic torsion loading. Frattura Ed Integrita Strutturale, 2016, 10, 213-222.	0.9	6
45	Characterization and Simulation of the Effect of Punching on the High Cycle Fatigue Strength of Thin Electric Steel Sheets. Procedia Engineering, 2015, 133, 556-561.	1.2	5
46	Study of the contribution of different effects induced by the punching process on the high cycle fatigue strength of the M330-35A electrical steel. Procedia Structural Integrity, 2016, 2, 3256-3263.	0.8	5
47	Toward composite wind turbine blade fatigue life assessment using ply scale damage model. Procedia Engineering, 2018, 213, 173-182.	1.2	5
48	The gigacycle fatigue strength of steels: a review of structural and operating factors. Procedia Structural Integrity, 2018, 13, 1545-1553.	0.8	5
49	About the heat sources generated during fatigue crack growth: What consequences on the stress intensity factor?. Theoretical and Applied Fracture Mechanics, 2020, 109, 102704.	4.7	5
50	Ply scale modelling of the quasi-static and fatigue behaviours of an acrylic-thermoplastic-matrix and glass-fibre-reinforced laminated composite covering the service temperature range of wind turbine blades. International Journal of Fatigue, 2021, 152, 106413.	5.7	5
51	A new ultrasonic fatigue testing device for biaxial bending in the gigacycle regime. International Journal of Fatigue, 2017, 100, 619-626.	5.7	4
52	Very High Cycle Fatigue Analysis of High Strength Steel with Corrosion Pitting. Key Engineering Materials, 0, 449, 104-113.	0.4	3
53	Microstructure-based study of the crack initiation mechanisms in pure copper under high cycle multiaxial fatigue loading conditions. Procedia Structural Integrity, 2016, 2, 3210-3217.	0.8	3
54	Optimisation of an ultrasonic torsion fatigue system for high strength materials. International Journal of Fatigue, 2021, 151, 106395.	5.7	3

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55	High Cycle Multiaxial Fatigue Energy Criterion Taking Into Account The Volume Distribution of Stresses. European Structural Integrity Society, 1999, 25, 115-129.	0.1	2
56	A flexible modelling framework leading to a probabilistic multiaxial Kitagawa-Takahashi diagram: Applied to cast Al-Si alloys. MATEC Web of Conferences, 2014, 12, 02002.	0.2	2
57	High-Cycle Fatigue Behaviour of Pure Tantalum under Multiaxial and Variable Amplitude Loadings. Advanced Materials Research, 0, 891-892, 1341-1346.	0.3	2
58	Effect of Static and Intermittent Shear Stress on the Fatigue Strength of Notched Components under Combined Rotating Bending and Torsion. Procedia Engineering, 2015, 133, 107-114.	1.2	2
59	Guest Editorial for VHCF6 Special Topic. Fatigue and Fracture of Engineering Materials and Structures, 2015, 38, 1265-1265.	3.4	2
60	Effect of mean shear stress on the fatigue strength of notched components under multiaxial stress state. Procedia Engineering, 2018, 213, 25-35.	1.2	2
61	Fatigue Crack Initiation and Propagation. , 2019, , 65-90.		2
62	Very High Cycle Fatigue of D16T Aluminum Alloy. Physical Mesomechanics, 2021, 24, 77-84.	1.9	2
63	The behavior of statically-indeterminate structural members and frames with cracks present. Engineering Fracture Mechanics, 2009, 76, 1920-1929.	4.3	1
64	Non-local high cycle fatigue criterion for metallic materials with corrosion defects. MATEC Web of Conferences, 2014, 12, 10007.	0.2	1
65	Influence of defects on the very high cycle fatigue behaviour of forged aeronautic titanium alloy. MATEC Web of Conferences, 2014, 12, 10004.	0.2	1
66	Critical plane concept and energy approach in multiaxial fatigue. Materialpruefung/Materials Testing, 2005, 47, 278-286.	2.2	1
67	Effects of LCF Loadings on the HCF Life of Notched Specimens in Ferritic-Bainitic Steel*. Materialpruefung/Materials Testing, 2009, 51, 814-818.	2.2	1
68	Ultrasonic fatigue testing device under biaxial bending. Frattura Ed Integrita Strutturale, 2016, 10, 46-51.	0.9	1
69	Simulation of the Stress-Strain Gradient Effect to Design Safe Components Against Multiaxial Fatigue*. Materialpruefung/Materials Testing, 2007, 49, 370-377.	2.2	1
70	Very high cycle fatigue strength and crack growth of thin steel sheets. Frattura Ed Integrita Strutturale, 2016, 10, 112-118.	0.9	1
71	High Cycle Fatigue Strength of Punched Thin Fe-Si Steel Sheets. Materials Performance and Characterization, 2016, 5, 305-318.	0.3	1
72	Ã‰tude numÃ©rique du comportement en fatigue Ã grand nombre de cycles dâ€™agrÃ©gats polycristallins de cuivre. Mecanique Et Industries, 2011, 12, 209-214.	0.2	0

#	Article	IF	Citations
73	Overload effects on a ferriticâ€baintic steel and a cast aluminium alloy: two very different behaviours. Materialwissenschaft Und Werkstofftechnik, 2011, 42, 845-854.	0.9	0
74	Scaling laser shock peening process towards high repetition rates: a demonstration on industrial grade Al2024-T351. , 2020, , .		0
75	Editorial: Renewal of FFEMS Editorial Board. Fatigue and Fracture of Engineering Materials and Structures, 2022, 45, 331-331.	3.4	0
76	Fatigue Life of a SG Cast Iron under Real Loading Spectra: Effect of the Correlation Factor Between Bending and Torsion. , 2005, , 567-579.		0