Jiri Man

List of Publications by Year
in descending order

58	1,689	331538	289141
papers	citations	21 h-index	40 g-index

59	59	59	782
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Extrusions and intrusions in fatigued metals. Part 1. State of the art and historyâ€. Philosophical Magazine, 2009, 89, 1295-1336.	0.7	154
2	Atomic force microscopy of surface relief in individual grains of fatigued 316L austenitic stainless steel. Acta Materialia, 2002, 50, 3767-3780.	3.8	129
3	Study of surface relief evolution in fatigued 316L austenitic stainless steel by AFM. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2003, 351, 123-132.	2.6	104
4	AFM evidence of surface relief formation and models of fatigue crack nucleation. International Journal of Fatigue, 2003, 25, 1027-1036.	2.8	86
5	AFM and TEM study of cyclic slip localization in fatigued ferritic X10CrAl24 stainless steel. Acta Materialia, 2004, 52, 5551-5561.	3.8	80
6	Mechanisms of extrusion and intrusion formation in fatigued crystalline materials. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2014, 596, 15-24.	2.6	79
7	Extrusions and intrusions in fatigued metals. Part 2. AFM and EBSD study of the early growth of extrusions and intrusions in 316L steel fatigued at room temperature. Philosophical Magazine, 2009, 89, 1337-1372.	0.7	77
8	Study of cyclic strain localization and fatigue crack initiation using FIB technique. International Journal of Fatigue, 2012, 39, 44-53.	2.8	77
9	Creepâ€“fatigueâ€“oxidation interactions in a 9Crâ€“1Mo martensitic steel. Part III: Lifetime prediction. International Journal of Fatigue, 2008, 30, 1797-1812.	2.8	65
10	The shape of extrusions and intrusions and initiation of stage I fatigue cracks. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2009, 517, 204-211.	2.6	63
11	The role of extrusions and intrusions in fatigue crack initiation. Engineering Fracture Mechanics, 2017, 185, 46-60.	2.0	60
12	Fatigue crack initiation â€“ The role of point defects. International Journal of Fatigue, 2014, 65, 18-27.	2.8	53
13	Dislocation structures in cyclically strained X10CrAl24 ferritic steelâ˜†. Acta Materialia, 2006, 54, 3429-3443.	3.8	51
14	Experimental evidence and physical models of fatigue crack initiation. International Journal of Fatigue, 2016, 91, 294-303.	2.8	49
15	Profiles of persistent slip markings and internal structure of underlying persistent slip bands. Fatigue and Fracture of Engineering Materials and Structures, 2017, 40, 1101-1116.	1.7	42
16	Austenite stability in reversion-treated structures of a 301LN steel under tensile loading. Materials Characterization, 2017, 127, 12-26.	1.9	40
17	Stability of austenitic 316L steel against martensite formation during cyclic straining. Procedia Engineering, 2011, 10, 1279-1284.	1.2	39
18	Half-cycle slip activity of persistent slip bands at different stages of fatigue life of polycrystalline nickel. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2008, 492, 118-127.	2.6	35

#	Article	IF	Citations
19	AFM and SEM-FEG study on fundamental mechanisms leading to fatigue crack initiation. International Journal of Fatigue, 2015, 76, 11-18.	2.8	35
20	Short crack growth in polycrystalline materials. Procedia Engineering, 2010, 2, 883-892.	1.2	31
21	Effect of metallurgical variables on the austenite stability in fatigued AISI 304 type steels. Engineering Fracture Mechanics, 2017, 185, 139-159.	2.0	26
22	Influence of dwell times on the thermomechanical fatigue behavior of a directionally solidified Ni-base superalloy. International Journal of Fatigue, 2015, 80, 426-433.	2.8	24
23	Microstructural changes during deformation of AISI 300 grade austenitic stainless steels: Impact of chemical heterogeneity. Procedia Structural Integrity, 2016, 2, 2299-2306.	0.3	23
24	Stability of grain-refined reversed structures in a 301LN austenitic stainless steel under cyclic loading. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2017, 703, 280-292.	2.6	23
25	The shape of extrusions and intrusions produced by cyclic straining. International Journal of Materials Research, 2003, 94, 1327-1330.	0.8	22
26	Surface Relief and Internal Structure in Fatigued Stainless Sanicro 25 Steel. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2016, 47, 1907-1911.	1.1	20
27	Isothermal fatigue behavior of cast superalloy Inconel 792-5A at 23 and 900ÂÂ°C. Journal of Materials Science, 2009, 44, 3305-3314.	1.7	19
28	The shape of early persistent slip markings in fatigued 316L steel. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2013, 564, 8-12.	2.6	19
29	AFM study of surface relief evolution in 316L steel fatigued at low and high temperatures. Procedia Engineering, 2010, 2, 1625-1633.	1.2	15
30	Microstructure of austenitic stainless steels of various phase stabilities after cyclic and tensile deformation. International Journal of Materials Research, 2011, 102, 1374-1377.	0.1	14
31	Influence of surface morphology on fatigue behavior of metastable austenitic stainless steel AISI 347 at ambient temperature and 300Â°C. Procedia Structural Integrity, 2017, 5, 989-996.	0.3	14
32	Orientation dependence of surface relief topography in fatigued copper single crystals. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 1997, 234-236, 727-730.	2.6	13
33	Fatigue behavior of ferriticâ€“pearliticâ€“bainitic steel in loading with positive mean stress. International Journal of Fatigue, 2012, 39, 103-108.	2.8	13
34	Initiation and short crack growth in austeniticâ€“ferritic duplex steelâ€effect of positive mean stress. Fatigue and Fracture of Engineering Materials and Structures, 2012, 35, 257-268.	1.7	11
35	Initiation of Stage I Fatigue Cracks â€“ Experiments and Models. Procedia Engineering, 2015, 101, 386-394.	1.2	11
36	Dislocation structure and surface relief in fatigued metals. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2005, 400-401, 405-408.	2.6	10

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37	LCF Behaviour of Ultrafine Grained 301LN Stainless Steel. Procedia Engineering, 2014, 74, 147-150.	1.2	10
38	Influence of Crystalline Elasticity on the Stress Distribution at the Free Surface of an Austenitic Stainless Steel Polycrystal. Comparison with Experiments. Materials Science Forum, 2008, 567-568, 149-152.	0.3	8
39	The influence of tempering on cleavage fracture stress and transition behaviour of bainitic 2.25Cr1Mo steel. Steel Research = Archiv FÃ¼r Das EisenhÃ¼ttenwesen, 1995, 66, 264-271.	0.2	7
40	Atomic Force Microscopy Study of the Early Fatigue Damage. Materials Science Forum, 2005, 482, 45-50.	0.3	6
41	Fatigue Crack Initiation in Crystalline Materials â€“ Experimental Evidence and Models. Key Engineering Materials, 2007, 345-346, 379-382.	0.4	6
42	Damage Evolution During Fatigue in Structural Materials. , 2012, 1, 3-12.		4
43	AFM and FIB Study of Cyclic Strain Localization and Surface Relief Evolution in Fatigued f.c.c. Polycrystals. Advanced Materials Research, 0, 891-892, 524-529.	0.3	4
44	Cyclic deformation behaviour and stability of grain-refined 301LN austenitic stainless structure. MATEC Web of Conferences, 2018, 165, 06005.	0.1	4
45	Extrusion and intrusion evolution in cyclically strained cast superalloy Inconel 738LC using confocal laser scanning microscope and AFM. Journal of Physics: Conference Series, 2010, 240, 012054.	0.3	3
46	Mechanisms of High Temperature Damage in Elastoplastic Cyclic Loading of Nickel Superalloys and TiAl Intermetallics. Procedia Engineering, 2013, 55, 114-122.	1.2	3
47	Cyclic Stress in 316L Austenitic Stainless Steel at Low Temperatures. Materials Science Forum, 2008, 567-568, 401-404.	0.3	2
48	The True Shape of Persistent Slip Markings in Fatigued Metals. Key Engineering Materials, 0, 592-593, 781-784.	0.4	2
49	Mechanisms of fatigue crack initiation and early propagation in cyclically strained nickel superalloy. Procedia Structural Integrity, 2019, 23, 161-166.	0.3	2
50	Cyclic Slip Localization and Crack Initiation in Crystalline Materials. Advanced Materials Research, 0, 891-892, 452-457.	0.3	1
51	Quantitative Model of the Surface Relief Formation in Cyclic Straining. Acta Physica Polonica A, 2015, 128, 675-681.	0.2	1
52	Effect of Plasma Nitriding on Fatigue Behavior of 316L Stainless Steel. , 2006, , 224-228.		0
53	Application of FIB technique to study of early fatigue damage in polycrystals. Journal of Physics: Conference Series, 2010, 240, 012058.	0.3	0
54	Cyclic Plasticity and Cyclic Creep in Austenitic-Ferritic Duplex Steel. Key Engineering Materials, 0, 465, 431-434.	0.4	0

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55	Slip Activity of Persistent Slip Bands in early Stages of Fatigue Life of Austenitic 316L Steel. Key Engineering Materials, 0, 592-593, 785-788.	0.4	0
56	Character of Fatigue Damage under Axial, Torsional and Biaxial Loading of 316L Stainless Steel. Defect and Diffusion Forum, 0, 405, 264-270.	0.4	0
57	The shape of extrusions and intrusions produced by cyclic straining. International Journal of Materials Research, 2022, 94, 1327-1330.	0.1	0
58	Mechanisms of the Early Fatigue Damage in Metallic Materials. Communications - Scientific Letters of the University of Zilina, 2006, 8, 5-9.	0.3	0