Kartik Prasad

List of Publications by Year
in descending order

49 papers	658 citations	516215 16 h-index	676716 22 g-index
49 all docs	49 docs citations	49 times ranked	445 citing authors

#	Article	IF	Citations
1	Crystal plasticity-based homogenized models of transformed Î² colonies in titanium alloys. Multiscale and Multidisciplinary Modeling, Experiments and Design, 2022, 5, 119-134.	0.9	3
2	Homogenization of Transformed Î² Colony of a Titanium Alloy Using CPFEM. Lecture Notes in Mechanical Engineering, 2022, , 93-102.	0.3	0
3	Crystal plasticity modeling of a titanium alloy under thermo-mechanical fatigue. Mechanics Research Communications, 2021, 111, 103647.	1.0	11
4	The effect of laser scanning strategies on the microstructure, texture and crystallography of grains exhibiting hot cracks in additively manufactured Hastelloy X. Mechanics of Materials, 2021, 157, 103816.	1.7	23
5	Synchrotron diffraction characterization of dislocation density in additively manufactured IN 718 superalloy. Materials Characterization, 2021, 179, 111379.	1.9	19
6	The possible role of nano sized precipitates on the mechanical properties of additively manufactured IN 718 superalloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2021, 826, 141972.	2.6	5
7	On the probabilistic assessment of variability in fatigue life in a near Î± titanium alloy Timetal 834: Crystallography of fatigue crack initiating facets. Acta Materialia, 2021, 218, 117214.	3.8	13
8	Transmission X ray diffraction characterization of deformation induced martensite in 301 and 304 stainless steels rolled at 77K: Role of grain size. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2020, 794, 139984.	2.6	10
9	On the Dominance of Creepâ€“Fatigue Interaction Over Oxidation in Thermomechanical Fatigue Behavior of a Diffusion Aluminide Coated Near Î± Titanium Alloy. , 2020, 5, 759-768.		0
10	Low-Cycle-Fatigue (LCF) behavior and cyclic plasticity modeling of E250A mild steel. Structures, 2019, 20, 594-606.	1.7	18
11	Strain controlled isothermal low cycle fatigue life, deformation and fracture characteristics of Superni 263 superalloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2019, 760, 296-315.	2.6	6
12	Probabilistic prediction of minimum fatigue life behaviour in Î±Â+ÂÎ² titanium alloys. Fatigue and Fracture of Engineering Materials and Structures, 2019, 42, 674-685.	1.7	11
13	Effects of silicon on characteristics of dynamic strain aging in a near-Î± titanium alloy. International Journal of Materials Research, 2017, 108, 275-285.	0.1	3
14	Isothermal and thermomechanical fatigue behavior of aluminide coated near Î± titanium alloy. International Journal of Fatigue, 2016, 92, 107-115.	2.8	8
15	Effects of Î± + Î² phase deformation on microstructure, fatigue and dwell fatigue behavior of a near alpha titanium alloy. International Journal of Fatigue, 2016, 91, 100-109.	2.8	28
16	A Critical Assessment of Cyclic Softening and Hardening Behavior in a Near-Î± Titanium Alloy During Thermomechanical Fatigue. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2016, 47, 4904-4921.	1.1	12
17	A comparative assessment of crack closure mechanisms in Timetal 834 near Î± titanium alloy under isothermal and thermomechanical fatigue loading. Journal of Alloys and Compounds, 2016, 688, 8-11.	2.8	13
18	Effects of Crack Closure and Cyclic Deformation on Thermomechanical Fatigue Crack Growth of a Near Î± Titanium Alloy. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2016, 47, 3713-3730.	1.1	9

#	Article	IF	Citations
19	Role of shrinkage pores, carbides on cyclic deformation behaviour of conventionally cast nickel base superalloy CM247LCÂ® at 870 Â°C. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2016, 654, 381-389.	2.6	19
20	Influence of test temperature on cyclic deformation behavior of a near Î± titanium alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2016, 662, 373-384.	2.6	10
21	Experimental evidence for segregation of interstitial impurities to defects in a near Î± titanium alloy during dynamic strain aging using energy filtered transmission electron microscopy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2015, 638, 90-96.	2.6	13
22	On the occurrence of dynamic strain aging in C-103 Nb based alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2015, 620, 286-292.	2.6	19
23	Electron back scattered diffraction characterization of thermomechanical fatigue crack propagation of a near Î± titanium alloy Timetal 834. Materials & Design, 2015, 65, 297-311.	5.1	18
24	Influence of mixed mode I/III loading on dynamic fracture toughness of mild steel at room and low temperatures. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2014, 590, 54-59.	2.6	6
25	Simultaneous creepâ€"fatigue damage accumulation of forged turbine disc of IN 718 superalloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2013, 572, 1-7.	2.6	24
26	Temperature gradients in flat thermomechanical fatigue specimens. Applied Thermal Engineering, 2013, 59, 131-133.	3.0	7
27	Fatigue crack growth behaviour of a near Î± titanium alloy Timetal 834 at 450Â°C and 600Â°C. Engineering Fracture Mechanics, 2013, 102, 194-206.	2.0	15
28	Fatigue Crack Growth Behaviour of Conventional and Modified IN 718 Superalloys at 650ÂÂ°C. Transactions of the Indian Institute of Metals, 2013, 66, 1-4.	0.7	2
29	High temperature low cycle fatigue deformation behaviour of forged IN 718 superalloy turbine disc. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2013, 568, 239-245.	2.6	43
30	Effect of Shot Peening on Low Cycle Fatigue Life of Compressor Disc of a Typical Fighter Class Aero-Engine. Procedia Engineering, 2013, 55, 144-148.	1.2	13
31	A novel test method to study the simultaneous creepâ€"fatigue interaction. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2012, 551, 293-295.	2.6	6
32	Effect of frequency and orientation on fatigue crack growth behavior of forged turbine disc of IN 718 superalloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2012, 544, 83-87.	2.6	6
33	Tensile behaviour of boron modified Timetal 834 titanium alloy in the intermediate temperature range 400â€"500Â°C. Journal of Alloys and Compounds, 2011, 509, 7361-7367.	2.8	12
34	High-temperature low cycle fatigue damage assessment in near alpha IMI-834 titanium alloy. Fatigue and Fracture of Engineering Materials and Structures, 2011, 34, 131-138.	1.7	8
35	Fracture toughness and low cycle fatigue behaviour in boron modified Timetal 834 titanium alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2011, 529, 74-80.	2.6	18
36	Effect of strain rate on tensile behaviour of cryo-rolled ultrafine grained OFHC copper. Transactions of the Indian Institute of Metals, 2011, 64, 321-324.	0.7	5

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37	Effects of strain waveform on low cycle fatigue behaviour of near Î± Timetal 834 titanium alloy. Materials & Design, 2011, 32, 1710-1715.	5.1	16
38	Isothermal and thermomechanical fatigue behaviour of Tiâ€“6Alâ€“4V titanium alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2011, 528, 6263-6270.	2.6	32
39	Tensile and creep properties of thermomechanically processed boron modified Timetal 834 titanium alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2011, 528, 6733-6741.	2.6	28
40	Low cycle fatigue behaviour of modified and conventional superalloy Inconel 718 at 650Â°C. Transactions of the Indian Institute of Metals, 2010, 63, 63-66.	0.7	7
41	A comparative evaluation of low cycle fatigue behavior of conventional and modified INCONEL 718. Transactions of the Indian Institute of Metals, 2010, 63, 515-516.	0.7	5
42	Fatigue crack growth behaviour of nickel based superalloys at ambient temperature. Transactions of the Indian Institute of Metals, 2010, 63, 719-721.	0.7	0
43	Effect of temperature and hold time on internal hardening behavior of a near Î± titanium alloy under cyclic deformation. Materials & Design, 2010, 31, 2716-2724.	5.1	19
44	High temperature low cycle fatigue behaviour of hot isostatically pressed superalloy Udimet 720 LI. Materials at High Temperatures, 2010, 27, 295-300.	0.5	0
45	Dynamic fracture toughness of a near alpha titanium alloy Timetal 834. Journal of Alloys and Compounds, 2010, 491, 237-241.	2.8	16
46	Influence of hold time on low cycle fatigue behaviour of near alpha titanium alloy IMI 834 at 873K. Transactions of the Indian Institute of Metals, 2008, 61, 407-414.	0.7	2
47	Serrated flow behavior in a near alpha titanium alloy IMI 834. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2008, 486, 158-166.	2.6	50
48	Transient flow behaviour in a near alpha titanium alloy Timetal 834 in the dynamic strain aging regime. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2008, 490, 477-480.	2.6	16
49	The influence of dynamic strain aging on the low cycle fatigue behavior of near alpha titanium alloy IMI 834. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2008, 494, 227-231.	2.6	31