Arpan Das

List of Publications by Citations

54 papers	1,363 citations	18 h-index	35 g-index
55 ext. papers	1,503 ext. citations	3.6 avg, IF	5.35 L-index

#	Paper	IF	Citations
54	Experimental investigation on martensitic transformation and fracture morphologies of austenitic stainless steel. *International Journal of Plasticity*, **2009**, 25, 2222-2247	7.6	141
53	Morphologies and characteristics of deformation induced martensite during tensile deformation of 304 LN stainless steel. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2008**, 486, 283-286	5.3	136
52	Revisiting Stacking Fault Energy of Steels. *Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science*, **2016**, 47, 748-768	2.3	83
51	Analysis of deformation induced martensitic transformation in stainless steels. *Materials Science and Technology*, **2011**, 27, 366-370	1.5	77
50	Geometry of dimples and its correlation with mechanical properties in austenitic stainless steel. *Scripta Materialia*, **2008**, 59, 1014-1017	5.6	75
49	Estimation of deformation induced martensite in austenitic stainless steels. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2011**, 529, 9-20	5.3	63
48	Morphologies and characteristics of deformation induced martensite during low cycle fatigue behaviour of austenitic stainless steel. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2011**, 528, 7909-7914	5.3	62
47	Cyclic plastic behaviour of primary heat transport piping materials: Influence of loading schemes on hysteresis loop. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2010**, 527, 6858-6869	5.3	52
46	Reactive diffusion in the roll bonded iron□luminum system. *Materials Letters*, **2006**, 60, 1758-1761	3.3	49
45	Correlation of Fractographic Features with Mechanical Properties in Systematically Varied Microstructures of Cu-Strengthened High-Strength Low-Alloy Steel. *Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science*, **2009**, 40, 3138-3146	2.3	34
44	Automatic characterization of fracture surfaces of AISI 304LN stainless steel using image texture analysis. *Measurement: Journal of the International Measurement Confederation*, **2012**, 45, 1140-1150	4.6	30
43	Martensite□Void Interaction. *Scripta Materialia*, **2013**, 68, 514-517	5.6	30
42	Correspondence of fracture surface features with mechanical properties in 304LN stainless steel. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing* , **2008**, 496, 98-105	5.3	29
41	Magnetic properties of cyclically deformed austenite. *Journal of Magnetism and Magnetic Materials*, **2014**, 361, 232-242	2.8	28
40	Connection between deformation-induced dislocation substructures and martensite formation in stainless steel. *Philosophical Magazine Letters*, **2011**, 91, 664-675	1	28
39	Stability of austenite and quasi-adiabatic heating during high-strain-rate deformation of twinning-induced plasticity steels. *Scripta Materialia*, **2010**, 62, 5-8	5.6	28
38	Stress induced creep cavity. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2014**, 598, 28-33	5.3	24

37	Fracture-property correlation in copper-strengthened high-strength low-alloy steel. *Scripta Materialia*, **2008**, 59, 681-683	5.6	23
36	Grain boundary engineering: fatigue fracture. *Philosophical Magazine*, **2017**, 97, 867-916	1.6	18
35	Characterization of micrographs and fractographs of Cu-strengthened HSLA steel using image texture analysis. *Measurement: Journal of the International Measurement Confederation*, **2014**, 47, 130-144	4.6	18
34	Ductile fracture micro-mechanisms of high strength low alloy steels. *Materials & Design*, **2014**, 54, 1002-1009		17
33	Dry Sliding Wear Characteristics of Gravity Die-Cast Magnesium Alloys. *Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science*, **2014**, 45, 2270-2283	2.3	17
32	Crystallographic variant selection of martensite at high stress/strain. *Philosophical Magazine*, **2015**, 95, 2210-2227	1.6	16
31	Effect of notch geometry on fracture features. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2015**, 641, 210-214	5.3	16
30	Dislocation configurations through austenite grain misorientations. *International Journal of Fatigue*, **2015**, 70, 473-479	5	16
29	Characterization of bond coat in a thermal barrier coated superalloy used in combustor liners of aero engines. *Materials Characterization*, **2006**, 57, 199-209	3.9	16
28	Spatial Martensite. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2016**, 658, 484-489	5.3	15
27	Dry sliding wear characteristics of rheocast Mg□n based alloys. *Materials & Design*, **2014**, 54, 820-830		15
26	Estimation of damage in high strength steels. *Applied Soft Computing Journal*, **2013**, 13, 1033-1041	7.5	15
25	Contribution of deformation-induced martensite to fracture appearance of austenitic stainless steel. *Materials Science and Technology*, **2016**, 32, 1366-1373	1.5	14
24	Effect of large strains on grain boundary character distribution in AISI 304L austenitic stainless steel. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2007**, 454-455, 239-244	5.3	14
23	Fracture complexity of pressure vessel steels. *Philosophical Magazine*, **2017**, 97, 3084-3141	1.6	13
22	Crystallographic variant selection of martensite during fatigue deformation. *Philosophical Magazine* , **2015**, 95, 844-860	1.6	13
21	Structure□wear-property correlation. *Materials & Design*, **2013**, 47, 557-565		13
20	Slip System Activity During Cyclic Plasticity. *Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science*, **2014**, 45, 2927-2930	2.3	12

19	Analysis of Damage Accumulations in High Strength Low Alloy Steels under Monotonic Deformation. *Procedia Engineering*, **2013**, 55, 786-792		11
18	Fractographic correlations with mechanical properties in ferritic martensitic steels. *Surface Topography: Metrology and Properties*, **2017**, 5, 045006	1.5	11
17	Elucidating microstructure of spinodal copper alloy through annealing. *Materials Characterization*, **2016**, 120, 152-158	3.9	10
16	Effect of Stress State on Fracture Features. *Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science*, **2018**, 49, 1425-1432	2.3	9
15	Intervention of martensite variants on the spatial aspect of microvoids. *Materials Research Express*, **2016**, 3, 066501	1.7	9
14	Cyclic plasticity induced transformation of austenitic stainless steels. *Materials Characterization*, **2019**, 149, 1-25	3.9	9
13	Correlation of fracture features with mechanical properties as a function of strain rate in zirconium alloys. *International Journal of Materials Research*, **2016**, 107, 184-188	0.5	8
12	Resurgence of texture in cyclically deformed austenite. *Materials Characterization*, **2017**, 123, 315-327	3.9	7
11	Calculation of ductility from pearlite microstructure. *Materials Science and Technology*, **2018**, 34, 1046-1063	1.5	7
10	Calculation of Crystallographic Texture of BCC Steels During Cold Rolling. *Journal of Materials Engineering and Performance*, **2017**, 26, 2708-2720	1.6	5
9	Effect of Cooling Rate on the Microstructure of a Pressure Vessel Steel. *Metallography, Microstructure, and Analysis*, **2019**, 8, 795-805	1.1	5
8	Structural Integrity and Uncertainty in Creep Damage Assessment of Service Exposed Reformer Tubes. *Procedia Engineering*, **2014**, 86, 858-869		5
7	Evolution of grain-boundary character distribution during iterative processing of an austenitic stainless steel. *Philosophical Magazine Letters*, **2008**, 88, 407-414	1	4
6	Fracture mechanisms of spinodal alloys. *Philosophical Magazine*, **2018**, 98, 3007-3033	1.6	4
5	Enigma of dislocation patterning due to slip in fatigued austenite. *International Journal of Damage Mechanics*, **2018**, 27, 218-237	3	3
4	Effect of rare earth elements on tribological behaviour of magnesium alloys. *Tribology - Materials, Surfaces and Interfaces*, **2012**, 6, 147-154	1.4	2
3	Stress/Strain Induced Void?. *Archives of Computational Methods in Engineering*, **2021**, 28, 1795-1852	7.8	1
2	Tackling Flow Stress of Zirconium Alloys. *Archives of Computational Methods in Engineering*, **2021**, 28, 2103-2131	7.8	1

1	Fractal-property correlation of hierarchical 3D nanolayered /Zr networks. *Scripta Materialia*, **2022**, 218, 114833	5.6	1