Ankur Chauhan

List of Publications by Year
in descending order

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38 papers	712 citations	567144 15 h-index	552653 26 g-index
39 all docs	39 docs citations	39 times ranked	521 citing authors

#	Article	IF	Citations
1	Microstructure characterization and strengthening mechanisms of oxide dispersion strengthened (ODS) Fe-9%Cr and Fe-14%Cr extruded bars. Journal of Nuclear Materials, 2017, 495, 6-19.	1.3	69
2	Superior low-cycle fatigue properties of CoCrNi compared to CoCrFeMnNi. Scripta Materialia, 2021, 194, 113667.	2.6	66
3	Study of the deformation and damage mechanisms of a 9Cr-ODS steel: Microstructure evolution and fracture characteristics. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2016, 658, 123-134.	2.6	45
4	Deformation mechanisms of CoCrFeMnNi high-entropy alloy under low-cycle-fatigue loading. Acta Materialia, 2021, 215, 117089.	3.8	44
5	Experimental observations of amorphization in stoichiometric and boron-rich boron carbide. Acta Materialia, 2019, 181, 207-215.	3.8	43
6	High-temperature low-cycle fatigue behavior of a 9Cr-ODS steel: Part 1 - pure fatigue, microstructure evolution and damage characteristics. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2017, 707, 207-220.	2.6	38
7	High-temperature low cycle fatigue behavior of an equiatomic CoCrFeMnNi high-entropy alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2020, 791, 139781.	2.6	37
8	High temperature tensile properties and fracture characteristics of bimodal 12Cr-ODS steel. Journal of Nuclear Materials, 2016, 468, 1-8.	1.3	36
9	Fracture-mechanical properties of neutron irradiated ITER specification tungsten. Journal of Nuclear Materials, 2021, 547, 152761.	1.3	32
10	High-temperature low-cycle fatigue behavior of a 9Cr-ODS steel: Part 2 - hold time influence, microstructural evolution and damage characteristics. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2018, 730, 197-206.	2.6	26
11	Creep-fatigue interaction in a bimodal 12Cr-ODS steel. International Journal of Fatigue, 2017, 102, 92-111.	2.8	21
12	Deformation and damage mechanisms of a bimodal 12Cr-ODS steel under high-temperature cyclic loading. International Journal of Fatigue, 2016, 93, 1-17.	2.8	20
13	Low-cycle fatigue behavior and deformation mechanisms of a dual-phase Al0.5CoCrFeMnNi high-entropy alloy. International Journal of Fatigue, 2022, 163, 107075.	2.8	19
14	Fabrication and characterization of arc melted Si/B co-doped boron carbide. Journal of the European Ceramic Society, 2019, 39, 5156-5166.	2.8	17
15	High-temperature low-cycle fatigue behavior of novel austenitic ODS steels. International Journal of Fatigue, 2016, 93, 194-200.	2.8	16
16	Micro-mechanical deformation behavior of CoCrFeMnNi high-entropy alloy. Journal of Materials Science and Technology, 2022, 100, 237-245.	5.6	16
17	Effective and back stresses evolution upon cycling a high-entropy alloy. Materials Research Letters, 2022, 10, 369-376.	4.1	15
18	Nanotwin formation in Niâ€“Moâ€“W alloys deposited by dc magnetron sputtering. Scripta Materialia, 2020, 186, 247-252.	2.6	14

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19	High-temperature low-cycle fatigue behavior and microstructural evolution of an ODS steel based on conventional T91. International Journal of Fatigue, 2017, 100, 50-57.	2.8	13
20	Direct observation of dislocation loops shrinkage upon annealing neutron-irradiated Feâ€“9Cr alloy. Journal of Nuclear Materials, 2020, 542, 152401.	1.3	13
21	Towards improved <scp>ODS</scp> steels: A comparative highâ€temperature lowâ€cycle fatigue study. Fatigue and Fracture of Engineering Materials and Structures, 2017, 40, 2128-2140.	1.7	12
22	Post-irradiation annealing of neutron-irradiated EUROFER97. Journal of Nuclear Materials, 2021, 548, 152863.	1.3	12
23	Granular flow of an advanced ceramic under ultra-high strain rates and high pressures. Journal of the Mechanics and Physics of Solids, 2020, 143, 104031.	2.3	10
24	Temperature-dependent cyclic deformation behavior of CoCrFeMnNi high-entropy alloy. International Journal of Fatigue, 2022, 160, 106863.	2.8	10
25	Elevated-temperature cyclic deformation mechanisms of CoCrNi in comparison to CoCrFeMnNi. Scripta Materialia, 2022, 220, 114926.	2.6	10
26	Dynamic failure mechanisms of granular boron carbide under multi-axial high-strain-rate loading. Scripta Materialia, 2019, 173, 125-128.	2.6	9
27	Generating duplex microstructures byâ€‰nitriding; nitriding of iron based Feâ€“Mn alloy. Materials Science and Technology, 2016, 32, 883-889.	0.8	8
28	Growth of high purity zone-refined Boron Carbide single crystals by Laser Diode Floating Zone method. Journal of Crystal Growth, 2020, 543, 125700.	0.7	8
29	Effect of irradiation temperature on the fracture-mechanical behaviour of tungsten irradiated to 1 dpa. Journal of Nuclear Materials, 2021, 556, 153200.	1.3	8
30	High-temperature low-cycle fatigue behavior and microstructural evolution of an improved austenitic ODS steel. Journal of Materials Research, 2018, 33, 1814-1821.	1.2	6
31	Effect of temperature on the neutron irradiation-induced cavities in tungsten. Philosophical Magazine, 2022, 102, 1665-1683.	0.7	5
32	Microstructure characterization of a novel austenitic ODS steel by transmission electron microscopy. Materialia, 2019, 5, 100176.	1.3	4
33	Dislocation loop coarsening and shape evolution upon annealing neutron-irradiated RAFM steel. Journal of Nuclear Materials, 2022, 558, 153366.	1.3	4
34	Observed Mitigation of Local Amorphization in Boron-Rich Boron Carbide. SSRN Electronic Journal, 0, , .	0.4	2
35	In-situ TEM investigations of dislocation loop annealing kinetics in neutron-irradiated 9%Cr RAFM steel. Journal of Nuclear Materials, 2022, 558, 153365.	1.3	2
36	Deformation and Damage Mechanisms of Novel Austenitic ODS Steel Under In Situ ACOM-TEM Straining. Microscopy and Microanalysis, 2018, 24, 2244-2245.	0.2	1

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37	Deformation Mechanisms of CoCrFeMnNi High-Entropy Alloy Under Low-Cycle-Fatigue Loading. SSRN Electronic Journal, 0, , .	0.4	0
38	Superior Low-Cycle Fatigue Properties of CoCrNi Compared to CoCrFeMnNi. SSRN Electronic Journal, 0, , .	0.4	0