

Arunodaya Bhattacharya

List of Publications by Year in descending order

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27
docs citations

27
times ranked

406
citing authors

#	ARTICLE	IF	CITATIONS
1	Effect of chromium on void swelling in ion irradiated high purity Fe-Cr alloys. Acta Materialia, 2016, 108, 241-251.	7.9	55
2	Chromium enrichment on the habit plane of dislocation loops in ion-irradiated high-purity Fe-Cr alloys. Acta Materialia, 2014, 78, 394-403.	7.9	47
3	Temperature-dependent cavity swelling in dual-ion irradiated Fe and Fe-Cr ferritic alloys. Acta Materialia, 2021, 207, 116660.	7.9	41
4	Helium induced microstructure damage, nano-scale grain formation and helium retention behaviour of ZrC. Acta Materialia, 2019, 163, 14-27.	7.9	31
5	Neutron irradiation-induced microstructure damage in ultra-high temperature ceramic TiC. Acta Materialia, 2020, 186, 1-10.	7.9	30
6	Nano-scale microstructure damage by neutron irradiations in a novel Boron-11 enriched TiB2 ultra-high temperature ceramic. Acta Materialia, 2019, 165, 26-39.	7.9	28
7	Dramatic reduction of void swelling by helium in ion-irradiated high purity δ -iron. Materials Research Letters, 2018, 6, 372-377.	8.7	21
8	Mechanical properties and microstructure characterization of Eurofer97 steel variants in EUROfusion program. Fusion Engineering and Design, 2019, 146, 2227-2232.	1.9	20
9	High throughput crystal structure and composition mapping of crystalline nanoprecipitates in alloys by transmission Kikuchi diffraction and analytical electron microscopy. Ultramicroscopy, 2019, 202, 33-43.	1.9	18
10	Oxide dispersion strengthened ferritic steels: a basic research joint program in France. Journal of Nuclear Materials, 2014, 455, 605-611.	2.7	17
11	Cascading microstructures in aluminum-steel interfaces created by impact welding. Materials Characterization, 2019, 151, 119-128.	4.4	17
12	Combined effect of injected interstitials and He implantation, and cavities inside dislocation loops in high purity Fe-Cr alloys. Journal of Nuclear Materials, 2019, 519, 30-44.	2.7	10
13	Technological aspects in blanket design: Effects of micro-alloying and thermo-mechanical treatments of EUROFER97 type steels after neutron irradiation. Fusion Engineering and Design, 2021, 168, 112645.	1.9	10
14	Cavity Swelling in Irradiated Materials. , 2020, , 406-455.		10
15	Effect of heavy ion irradiation dose rate and temperature on δ precipitation in high purity Fe-18%Cr alloy. Acta Materialia, 2022, 231, 117888.	7.9	9
16	Irradiation damage concurrent challenges with RAFM and ODS steels for fusion reactor first-wall/blanket: a review. JPhys Energy, 2022, 4, 034003.	5.3	9
17	Radiation induced amorphization of carbides in additively manufactured and conventional ferritic-martensitic steels: In-situ experiments on extraction replicas. Journal of Nuclear Materials, 2022, 563, 153646.	2.7	6
18	Phase instabilities in austenitic steels during particle bombardment at high and low dose rates. Materials and Design, 2022, 217, 110588.	7.0	6

#	ARTICLE	IF	CITATIONS
19	The effect of helium on cavity swelling in dual-ion irradiated Fe and Fe-10Cr ferritic alloys. Journal of Nuclear Materials, 2022, 569, 153907.	2.7	6
20	Irradiation hardening and ductility loss of Eurofer97 steel variants after neutron irradiation to ITER-TBM relevant conditions. Fusion Engineering and Design, 2021, 173, 112935.	1.9	5
21	Master Curve Fracture Toughness Characterization of Eurofer97 Steel Variants Using Miniature Multi-Notch Bend Bar Specimens for Fusion Applications. , 2019, , .		3
22	Helium causing disappearance of $\frac{1}{2}\langle 111 \rangle$ dislocation loops in binary Fe-Cr ferritic alloys. Journal of Nuclear Materials, 2021, 556, 153213.	2.7	2
23	Helium Causing Disappearance of $\frac{1}{2}\langle 111 \rangle$ Dislocation Loops in Binary Fe-Cr Ferritic Alloys. SSRN Electronic Journal, 0, , .	0.4	0
24	Post-Irradiation Evaluation of Eurofer97 Fracture Toughness Using Miniature Multinotch Bend Bar Specimens. , 2020, , .		0
25	Temperature-Dependent Cavity Swelling in Dual-Ion Irradiated Fe and Fe-Cr Ferritic Alloys. SSRN Electronic Journal, 0, , .	0.4	0