

Fredric Granberg

List of Publications by Citations

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

38
papers

1,208
citations

16
h-index

34
g-index

40
ext. papers

1,563
ext. citations

4.1
avg, IF

4.75
L-index

#	Paper	IF	Citations
38	Mechanism of Radiation Damage Reduction in Equiatomic Multicomponent Single Phase Alloys. <i>Physical Review Letters</i> , 2016 , 116, 135504	7.4	250
37	Primary radiation damage: A review of current understanding and models. <i>Journal of Nuclear Materials</i> , 2018 , 512, 450-479	3.3	208
36	Improving atomic displacement and replacement calculations with physically realistic damage models. <i>Nature Communications</i> , 2018 , 9, 1084	17.4	146
35	Atomic-level heterogeneity and defect dynamics in concentrated solid-solution alloys. <i>Current Opinion in Solid State and Materials Science</i> , 2017 , 21, 221-237	12	110
34	Multiscale modeling of dislocation-precipitate interactions in Fe: From molecular dynamics to discrete dislocations. <i>Physical Review E</i> , 2016 , 93, 013309	2.4	53
33	Radiation damage buildup and dislocation evolution in Ni and equiatomic multicomponent Ni-based alloys. <i>Journal of Nuclear Materials</i> , 2017 , 490, 323-332	3.3	49
32	Local segregation versus irradiation effects in high-entropy alloys: Steady-state conditions in a driven system. <i>Journal of Applied Physics</i> , 2017 , 122, 105106	2.5	36
31	Effects of the short-range repulsive potential on cascade damage in iron. <i>Journal of Nuclear Materials</i> , 2018 , 508, 530-539	3.3	33
30	Cascade debris overlap mechanism of <100> dislocation loop formation in Fe and FeCr. <i>Europhysics Letters</i> , 2017 , 119, 56003	1.6	33
29	Effects of precipitates and dislocation loops on the yield stress of irradiated iron. <i>Scientific Reports</i> , 2018 , 8, 6914	4.9	30
28	GeV ion irradiation of NiFe and NiCo: Insights from MD simulations and experiments. <i>Acta Materialia</i> , 2018 , 151, 191-200	8.4	22
27	Radiation damage buildup by athermal defect reactions in nickel and concentrated nickel alloys. <i>Materials Research Letters</i> , 2017 , 5, 433-439	7.4	21
26	Tensile testing of Fe and FeCr nanowires using molecular dynamics simulations. <i>Journal of Applied Physics</i> , 2015 , 117, 014313	2.5	20
25	Segregation of Ni at early stages of radiation damage in NiCoFeCr solid solution alloys. <i>Acta Materialia</i> , 2020 , 196, 44-51	8.4	18
24	Collision cascades overlapping with self-interstitial defect clusters in Fe and W. <i>Journal of Physics Condensed Matter</i> , 2019 , 31, 245402	1.8	18
23	Damage buildup and edge dislocation mobility in equiatomic multicomponent alloys. <i>Nuclear Instruments & Methods in Physics Research B</i> , 2017 , 393, 114-117	1.2	17
22	Interaction of dislocations with carbides in BCC Fe studied by molecular dynamics. <i>Journal of Nuclear Materials</i> , 2015 , 460, 23-29	3.3	16

21	Dynamical stability of radiation-induced C15 clusters in iron. <i>Journal of Nuclear Materials</i> , 2020 , 528, 151893	15
20	Investigation of the thermal stability of Cu nanowires using atomistic simulations. <i>Journal of Applied Physics</i> , 2014 , 115, 213518	2.5 14
19	Defect accumulation and evolution during prolonged irradiation of Fe and FeCr alloys. <i>Journal of Nuclear Materials</i> , 2020 , 528, 151843	3.3 13
18	Interaction of Dislocations with Carbides in BCC Fe Studied by Molecular Dynamics. <i>Fusion Science and Technology</i> , 2014 , 66, 283-288	1.1 11
17	Cascade overlap with vacancy-type defects in Fe. <i>European Physical Journal B</i> , 2019 , 92, 1	1.2 9
16	Angular and velocity distributions of tungsten sputtered by low energy argon ions. <i>Journal of Nuclear Materials</i> , 2017 , 496, 18-23	3.3 9
15	Effect of random surface orientation on W sputtering yields. <i>Nuclear Materials and Energy</i> , 2018 , 17, 113-122	2.1 9
14	Molecular dynamics investigation of the interaction of dislocations with carbides in BCC Fe. <i>Nuclear Instruments & Methods in Physics Research B</i> , 2015 , 352, 77-80	1.2 8
13	Molecular dynamics simulations of thermally activated edge dislocation unpinning from voids in Fe. <i>Physical Review Materials</i> , 2017 , 1,	3.2 8
12	Origin of increased helium density inside bubbles in Ni(1-x)Fe alloys. <i>Scripta Materialia</i> , 2021 , 191, 1-6	5.6 6
11	Parameter-free quantitative simulation of high-dose microstructure and hydrogen retention in ion-irradiated tungsten. <i>Physical Review Materials</i> , 2021 , 5,	3.2 6
10	Optimization of single crystal mirrors for ITER diagnostics. <i>Fusion Engineering and Design</i> , 2019 , 146, 1450-1453	1.7 5
9	Radiation stability of nanocrystalline single-phase multicomponent alloys. <i>Journal of Materials Research</i> , 2019 , 34, 854-866	2.5 5
8	Low energy sputtering of Mo surfaces. <i>Journal of Nuclear Materials</i> , 2020 , 539, 152274	3.3 4
7	Absence of a Crystal Direction Regime in which Sputtering Corresponds to Amorphous Material. <i>Physical Review Letters</i> , 2020 , 125, 225502	7.4 3
6	Temperature effect on irradiation damage in equiatomic multi-component alloys. <i>Computational Materials Science</i> , 2021 , 197, 110571	3.2 1
5	Molecular dynamics simulations of high-dose damage production and defect evolution in tungsten. <i>Journal of Nuclear Materials</i> , 2021 , 556, 153158	3.3 1
4	Estimate for thermal diffusivity in highly irradiated tungsten using molecular dynamics simulation. <i>Physical Review Materials</i> , 2021 , 5,	3.2 1

- 3 Punching of arbitrary face prismatic loops from hydrogen nanobubbles in copper. *Acta Materialia*, 8.4 o
2022, 225, 117554
- 2 Effect of cascade overlap and C15 clusters on the damage evolution in Fe: An OKMC study. 3.2
Materialia, 2022, 21, 101344
- 1 Effect of interatomic potential on the sputtering of Pd surfaces. *Computational Materials Science*, 3.2
2021, 188, 110134