Vasiliy S Krasnikov

List of Publications by Year in Descending Order

24 papers	483 citations	11 h-index	21 g-index
26 ext. papers	599 ext. citations	5 avg, IF	4.55 L-index

#	Paper	IF	Citations
24	Homogeneous nucleation of dislocations in copper: Theory and approximate description based on molecular dynamics and artificial neural networks. *Computational Materials Science*, **2022**, 206, 111266	3.2	1
23	Prediction of the strength of aged Al-Cu alloys with non-hybrid and hybrid {1 0 0}Al plates. *Computational Materials Science*, **2022**, 207, 111331	3.2	2
22	The unique hybrid precipitate in a peak-aged Al-Cu-Mg-Ag alloy. *Scripta Materialia*, **2021**, 194, 113669	5.6	11
21	Dislocation nucleation in Al single crystal at shear parallel to (111) plane: Molecular dynamics simulations and nucleation theory with artificial neural networks. *International Journal of Plasticity*, **2021**, 139, 102953	7.6	8
20	Influence of Phase Cutting on Precipitate Hardening of AlCu Alloy during Prolonged Plastic Deformation: Molecular Dynamics and Continuum Modeling. *Applied Sciences (Switzerland)*, **2021**, 11, 4906	2.6	3
19	Prediction of shear strength of cluster-strengthened aluminum with multi-scale approach describing transition from cutting to bypass of precipitates by dislocations. *International Journal of Plasticity*, **2021**, 146, 103095	7.6	7
18	Prediction of the shear strength of aluminum with phase inclusions based on precipitate statistics, dislocation and molecular dynamics. *International Journal of Plasticity*, **2020**, 128, 102672	7.6	18
17	Dynamics of growth and collapse of nanopores in copper. *International Journal of Solids and Structures*, **2020**, 202, 418-433	3.1	5
16	Interaction of dislocation with GP zones or phase precipitates in aluminum: Atomistic simulations and dislocation dynamics. *International Journal of Plasticity*, **2020**, 125, 169-190	7.6	13
15	Molecular Dynamics Investigation of Dislocation Slip in Pure Metals and Alloys. *Structural Integrity*, **2019**, 59-64	0.2	2
14	Dislocation dynamics in aluminum containing phase: Atomistic simulation and continuum modeling. *International Journal of Plasticity*, **2019**, 119, 21-42	7.6	29
13	Limit of Ultra-high Strain Rates in Plastic Response of Metals. *Structural Integrity*, **2019**, 273-278	0.2	3
12	High-speed collision of copper nanoparticles with aluminum surface: Inclined impact, interaction with roughness and multiple impact. *Computational Materials Science*, **2018**, 142, 108-121	3.2	4
11	Influence of local stresses on motion of edge dislocation in aluminum. *International Journal of Plasticity*, **2018**, 101, 170-187	7.6	42
10	High-speed collision of copper nanoparticle with aluminum surface: Molecular dynamics simulation. *Applied Surface Science*, **2016**, 390, 289-302	6.7	14
9	Plasticity driven growth of nanovoids and strength of aluminum at high rate tension: Molecular dynamics simulations and continuum modeling. *International Journal of Plasticity*, **2015**, 74, 75-91	7.6	47
8	Dynamics and kinetics of dislocations in Al and AlCu alloy under dynamic loading. *International Journal of Plasticity*, **2014**, 55, 94-107	7.6	77

7	Dynamic Fracture of Metals in Solid and Liquid States under Ultra- short Intensive Electron or Laser Irradiation **2014**, 3, 1890-1895		4
6	Modeling of plastic localization in aluminum and Al□u alloys under shock loading. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2014**, 619, 354-363	5.3	6
5	Numerical investigation of the change of dislocation density and microhardness in surface layer of iron targets under the high power ion- and electron-beam treatment. *Surface and Coatings Technology*, **2012**, 212, 79-87	4.4	13
4	Wave attenuation in microcrystal copper at irradiation by a powerful electron beam. *Current Applied Physics*, **2011**, 11, 1315-1318	2.6	3
3	Copper spall fracture under sub-nanosecond electron irradiation. *Engineering Fracture Mechanics*, **2011**, 78, 1306-1316	4.2	19
2	Dislocation based high-rate plasticity model and its application to plate-impact and ultra short electron irradiation simulations. *International Journal of Plasticity*, **2011**, 27, 1294-1308	7.6	100
1	Plastic deformation under high-rate loading: The multiscale approach. *Physics of the Solid State*, **2010**, 52, 1386-1396	0.8	52