Aleksandr V Korchuganov

List of Publications by Year
in descending order

40	273	1040056 9	888059 17
papers	citations	h-index	g-index

40	40	40	139
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Nucleation of dislocations and twins in fcc nanocrystals: Dynamics of structural transformations. Journal of Materials Science and Technology, 2019, 35, 201-206.	10.7	46
2	Primary Ion-Irradiation Damage of BCC-Iron Surfaces. Russian Physics Journal, 2017, 60, 170-174.	0.4	30
3	Atomic rearrangements at migration of symmetric tilt grain boundaries in vanadium. Computational Materials Science, 2018, 153, 445-448.	3.0	29
4	MD simulation of plastic deformation nucleation in stressed crystallites under irradiation. Physics of Atomic Nuclei, 2016, 79, 1193-1198.	0.4	28
5	Atomic mechanisms of stacking fault propagation in copper crystallite. Materials Letters, 2019, 252, 194-197.	2.6	27
6	Atomic mechanisms of high-speed migration of symmetric tilt grain boundaries in nanocrystalline Ni. Letters on Materials, 2019, 9, 197-201.	0.7	27
7	Dynamics of the Formation and Propagation of Nanobands with Elastic Lattice Distortion in Nickel Crystallites. Physical Mesomechanics, 2018, 21, 492-497.	1.9	25
8	Anisotropy of plasticity and structural transformations under uniaxial tension of iron crystallites. Computational Materials Science, 2018, 155, 312-319.	3.0	22
9	MD simulation of primary radiation damage in metals with internal structure. Inorganic Materials: Applied Research, 2016, 7, 648-657.	0.5	14
10	Onset of plastic deformation in non-equiatomic fcc CoCrFeMnNi high-entropy alloys under high-rate loading. Letters on Materials, 2018, 8, 311-316.	0.7	7
11	The Contribution of Various Plasticity Mechanisms to the Deformation Behavior of Gradient Nanograined FeNi Alloy. Metals, 2022, 12, 573.	2.3	4
12	Formation of defect structure at the atomic level under mechanical loading of CoCrFeMnNi high-entropy alloys. AIP Conference Proceedings, 2018, , .	0.4	3
13	Role of Oxygen and Fluorine in Passivation of the GaSb(111) Surface Depending on Its Termination. Crystals, 2022, 12, 477.	2.2	3
14	Effect of Excess Atomic Volume on Crack Evolution in a Deformed Iron Single Crystal. Materials, 2021, 14, 6124.	2.9	2
15	Influence of crystallographic orientation on the response of copper crystallites to nanoindentation. , 2014, , .		1
16	Free surface damage induced by irradiation of BCC iron. AIP Conference Proceedings, 2016, , .	0.4	1
17	Molecular Dynamics Simulation Of Electric Pulse Explosion Of Metal Wires. Procedia Structural Integrity, 2016, 2, 1421-1426.	0.8	1
18	Influence of the size and wall curvature of nanopores on the gas distribution pattern in them. Journal of Applied Mechanics and Technical Physics, 2017, 58, 31-35.	0.5	1

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19	Activation of plastic deformation mechanisms in nanocrystalline iron. AIP Conference Proceedings, 2020, , .	0.4	1
20	Role of excess atomic volume in crack growth in bcc iron. Results in Physics, 2022, 33, 105163.	4.1	1
21	Investigation of defect nucleation in titanium under mechanical loading. , 2014, , .		0
22	Features of structural response of mechanically loaded crystallites to irradiation. AIP Conference Proceedings, 2015, , .	0.4	0
23	Plastic deformation nucleation in BCC crystallites under nanoindentation. AIP Conference Proceedings, 2015, , .	0.4	0
24	Peculiarities of plastic deformation nucleation in copper under nanoindentation. AIP Conference Proceedings, 2015, , .	0.4	0
25	Features of structural changes in aluminum specimens with various crystallographic orientation under ion irradiation. AIP Conference Proceedings, 2016, , .	0.4	0
26	Plastic deformation nucleation in elastically loaded CuNi alloy during nanoindentation. AIP Conference Proceedings, 2016, , .	0.4	0
27	Modification of grain structure of the near-surface layer in aluminum under high energy impact. AIP Conference Proceedings, 2017, , .	0.4	0
28	Features of structural response of vanadium crystallite under deformation in different crystallographic directions. AIP Conference Proceedings, 2017, , .	0.4	0
29	Features of structural changes in the near-surface aluminum layer under various schemes of ion implantation. AIP Conference Proceedings, 2017, , .	0.4	0
30	Influence of irradiation on mobility of edge dislocations in Feâ€“10Cr alloy. AIP Conference Proceedings, 2018, , .	0.4	0
31	Influence of free surface orientation on plasticity nucleation in BCC metals. AIP Conference Proceedings, 2018, , .	0.4	0
32	Peculiarities of plastic deformation nucleation in nanocrystalline vanadium under shear loading. AIP Conference Proceedings, 2018, , .	0.4	0
33	Nucleation of twins and dislocations in V-Ti alloys under various straining conditions. EPJ Web of Conferences, 2019, 221, 01023.	0.3	0
34	Particularities of changes in internal structure of nanocrystalline Ni under mechanical loading. EPJ Web of Conferences, 2019, 221, 01025.	0.3	0
35	Simulation of benzylpenicillin molecule distribution in slit-shaped Si nanopores. EPJ Web of Conferences, 2019, 221, 01024.	0.3	0
36	Features of defect nucleation in nanosized crystals with BCC lattice. AIP Conference Proceedings, 2019, , .	0.4	0

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37	Atomic mechanisms of plasticity nucleation and development in nanocrystalline Ni. AIP Conference Proceedings, 2019, , .	0.4	0
38	Features of structural transformations under deformation of nanocrystalline BCC Fe. AIP Conference Proceedings, 2020, , .	0.4	0
39	Mechanisms of grain growth in nanocrystalline Cu under tension. AIP Conference Proceedings, 2020, , .	0.4	0
40	Regularities of Structural Rearrangements in Single- and Bicrystals Near the Contact Zone. Springer Tracts in Mechanical Engineering, 2021, , 301-322.	0.3	0