Ilaksh Adlakha

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/3366806/publications.pdf

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22	359	777949 13	889612 19
papers	citations	h-index	g-index

23	23	23	422
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Crystal Elasticity Simulations of Polycrystalline Material Using Rank-One Approximation. Integrating Materials and Manufacturing Innovation, 2022, 11, 139-157.	1.2	1
2	Surface reconstruction in core@shell nanoalloys: interplay between size and strain. Acta Materialia, 2022, , 118038.	3.8	4
3	Effect of hydrogen on the ideal shear strength in metals and its implications on plasticity: A first-principles study. International Journal of Hydrogen Energy, 2021, 46, 25726-25737.	3.8	9
4	Analysis of the Crack Initiation and Growth in Crystalline Materials Using Discrete Dislocations and the Modified Kitagawaâ€“Takahashi Diagram. Crystals, 2020, 10, 358.	1.0	3
5	Revealing the atomistic nature of dislocation-precipitate interactions in Al-Cu alloys. Journal of Alloys and Compounds, 2019, 797, 325-333.	2.8	33
6	First-Principles Investigation of the Effect of Solutes on the Ideal Shear Resistance and Electronic Properties of Magnesium. Minerals, Metals and Materials Series, 2019, , 231-237.	0.3	0
7	Thermo-mechanical strengthening mechanisms in a stable nanocrystalline binary alloy â€“ A combined experimental and modeling study. Materials and Design, 2019, 163, 107551.	3.3	23
8	Effect of mechanical loading on the galvanic corrosion behavior of a magnesium-steel structural joint. Corrosion Science, 2018, 133, 300-309.	3.0	24
9	Role of hydrogen on the incipient crack tip deformation behavior in Î±-Fe: An atomistic perspective. Journal of Applied Physics, 2018, 123, .	1.1	18
10	Revealing the role of nitrogen on hydride nucleation and stability in pure niobium using first-principles calculations. Superconductor Science and Technology, 2018, 31, 115007.	1.8	19
11	Anomalous mechanical behavior of nanocrystalline binary alloys under extreme conditions. Nature Communications, 2018, 9, 2699.	5.8	50
12	Effect of solutes on ideal shear resistance and electronic properties of magnesium: A first-principles study. Acta Materialia, 2018, 153, 327-335.	3.8	21
13	Dislocation core properties ofÎ²-tin: a first-principles study. Modelling and Simulation in Materials Science and Engineering, 2017, 25, 025014.	0.8	7
14	Energetics of Hydrogen Segregation to Î±-Fe Grain Boundaries for Modeling Stress Corrosion Cracking. Jom, 2017, 69, 1398-1403.	0.9	6
15	Role of Static and Cyclic Deformation on the Corrosion Behavior of a Magnesium-Steel Structural Joint. Jom, 2017, 69, 2328-2334.	0.9	7
16	Critical assessment of hydrogen effects on the slip transmission across grain boundaries in Î± -Fe. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2016, 472, 20150617.	1.0	20
17	Atomic-scale investigation of triple junction role on defects binding energetics and structural stability in Î±-Fe. Acta Materialia, 2016, 118, 64-76.	3.8	21
18	Generalized stacking fault energies and slip in Î²-tin. Scripta Materialia, 2016, 123, 21-25.	2.6	17

#	Article	IF	Citations
19	Structural stability and energetics of grain boundary triple junctions in face centered cubic materials. Scientific Reports, 2015, 5, 8692.	1.6	18
20	Discrete dislocation modeling of stress corrosion cracking in an iron. Corrosion Reviews, 2015, 33, 467-475.	1.0	7
21	Atomic scale investigation of grain boundary structure role on intergranular deformation in aluminium. Philosophical Magazine, 2014, 94, 3445-3466.	0.7	25
22	The role of grain boundary structure and crystal orientation on crack growth asymmetry in aluminum. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2014, 618, 345-354.	2.6	26