

Ali Tehranchi

List of Publications by Year in descending order

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Version: 2024-02-01

13
papers

557
citations

758635

12
h-index

1125271

13
g-index

13
all docs

13
docs citations

13
times ranked

471
citing authors

#	ARTICLE	IF	CITATIONS
1	Solute strengthening of basal slip in Mg alloys. <i>Acta Materialia</i> , 2018, 151, 56-66.	3.8	87
2	Atomistic study of hydrogen embrittlement of grain boundaries in nickel: I. Fracture. <i>Journal of the Mechanics and Physics of Solids</i> , 2017, 101, 150-165.	2.3	84
3	Calculation of the Additional Constants for fcc Materials in Second Strain Gradient Elasticity: Behavior of a Nano-Size Bernoulli-Euler Beam With Surface Effects. <i>Journal of Applied Mechanics, Transactions ASME</i> , 2012, 79, .	1.1	56
4	A decohesion pathway for hydrogen embrittlement in nickel: Mechanism and quantitative prediction. <i>Acta Materialia</i> , 2020, 185, 98-109.	3.8	55
5	Ab initio calculations of characteristic lengths of crystalline materials in first strain gradient elasticity. <i>Mechanics of Materials</i> , 2013, 61, 73-78.	1.7	52
6	The role of atomistic simulations in probing hydrogen effects on plasticity and embrittlement in metals. <i>Engineering Fracture Mechanics</i> , 2019, 216, 106502.	2.0	51
7	A formulation for the characteristic lengths of fcc materials in first strain gradient elasticity via the Sutton-Chen potential. <i>Philosophical Magazine</i> , 2010, 90, 1893-1913.	0.7	36
8	Softening and hardening of yield stress by hydrogen-solute interactions. <i>Philosophical Magazine</i> , 2017, 97, 400-418.	0.7	34
9	Hydrogen-vacancy-dislocation interactions in α -Fe. <i>Modelling and Simulation in Materials Science and Engineering</i> , 2017, 25, 025001.	0.8	28
10	Atomistic study of hydrogen embrittlement of grain boundaries in nickel: II. Decohesion. <i>Modelling and Simulation in Materials Science and Engineering</i> , 2017, 25, 075013.	0.8	21
11	Multiscale Modelling of Hydrogen Transport and Segregation in Polycrystalline Steels. <i>Metals</i> , 2018, 8, 430.	1.0	21
12	Mechanism and Prediction of Hydrogen Embrittlement in fcc Stainless Steels and High Entropy Alloys. <i>Physical Review Letters</i> , 2021, 127, 175501.	2.9	20
13	On the viscoelastic beam subjected to moving mass. <i>Advances in Engineering Software</i> , 2010, 41, 240-247.	1.8	12