Mohsen Dadfarnia

List of Publications by Year
in descending order

32 papers	2,031 citations	430874 18 h-index	610901 24 g-index
33 all docs	33 docs citations	33 times ranked	1042 citing authors

#	Article	IF	Citations
1	Achieving a Carbon Neutral Future through Advanced Functional Materials and Technologies. Bulletin of the Chemical Society of Japan, 2022, 95, 73-103.	3.2	39
2	Modeling the Hydrogen Effect on the Constitutive Response of a Low Carbon Steel in Cyclic Loading. Journal of Applied Mechanics, Transactions ASME, 2021, 88, .	2.2	3
3	Effect of Hydrogen on Creep Properties of SUS304 Austenitic Stainless Steel. Corrosion, 2021, 77, 256-265.	1.1	4
4	Effect of hydrogen on creep properties of SUS304, SUS304L, SUS310S and SUY-1. The Proceedings of the Materials and Mechanics Conference, 2021, 2021, OS1704.	0.0	0
5	On the stress field ahead of a stationary crack tip during the transition from primary to secondary creep. International Journal of Solids and Structures, 2020, 193-194, 455-473.	2.7	3
6	A model for high temperature hydrogen attack in carbon steels under constrained void growth. International Journal of Fracture, 2019, 219, 1-17.	2.2	7
7	Assessment of resistance to fatigue crack growth of natural gas line pipe steels carrying gas mixed with hydrogen. International Journal of Hydrogen Energy, 2019, 44, 10808-10822.	7.1	49
8	Enumeration of the hydrogen-enhanced localized plasticity mechanism for hydrogen embrittlement in structural materials. Acta Materialia, 2019, 165, 734-750.	7.9	295
9	Hydrogen-enhanced-plasticity mediated decohesion for hydrogen-induced intergranular and â€œquasi-cleavageâ€•fracture of lath martensitic steels. Journal of the Mechanics and Physics of Solids, 2018, 112, 403-430.	4.8	225
10	On the theoretical modeling of fatigue crack growth. Journal of the Mechanics and Physics of Solids, 2018, 121, 341-362.	4.8	55
11	Hydrogen Embrittlement: Mechanisms. , 2016, , 1768-1784.		4
12	Modeling hydrogen transport by dislocations. Journal of the Mechanics and Physics of Solids, 2015, 78, 511-525.	4.8	168
13	Recent advances on hydrogen embrittlement of structural materials. International Journal of Fracture, 2015, 196, 223-243.	2.2	146
14	Interpretation of Hydrogen-induced Fracture Surface Morphologies for Lath Martensitic Steel. , 2014, 3, 1700-1705.		47
15	On Modeling Hydrogen-Induced Crack Propagation Under Sustained Load. Jom, 2014, 66, 1390-1398.	1.9	19
16	The effect of nanosized (Ti,Mo)C precipitates on hydrogen embrittlement of tempered lath martensitic steel. Acta Materialia, 2014, 74, 244-254.	7.9	208
17	The Relationship Between Crack-Tip Strain and Subcritical Cracking Thresholds for Steels in High-Pressure Hydrogen Gas. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2013, 44, 248-269.	2.2	69
18	The role of hydrogen in hydrogen embrittlement fracture of lath martensitic steel. Acta Materialia, 2012, 60, 5182-5189.	7.9	314

#	Article	IF	Citations
19	Interaction of Hydrogen Transport and Material Elastoplasticity in Pipeline Steels. Journal of Pressure Vessel Technology, Transactions of the ASME, 2009, 131, .	0.6	20
20	On the small scale character of the stress and hydrogen concentration fields at the tip of an axial crack in steel pipeline: effect of hydrogen-induced softening on void growth. International Journal of Materials Research, 2008, 99, 557-570.	0.3	13
21	Micromechanics of Hydrogen Transport and Embrittlement in Pipeline Steels. , 2006, , 741.		3
22	Numerical Simulation of Hydrogen Transport at a Crack Tip in a Pipeline Steel. , 2006, , .		3
23	A comparative study of the Galerkin approximation utilized in the Timoshenko beam theory. Journal of Sound and Vibration, 2005, 280, 1132-1142.	3.9	22
24	A Fresh Insight Into the Microcantilever-Sample Interaction Problem in Non-Contact Atomic Force Microscopy. Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME, 2004, 126, 327-335.	1.6	62
25	An observer-based piezoelectric control of flexible Cartesian robot arms: theory and experiment. Control Engineering Practice, 2004, 12, 1041-1053.	5.5	72
26	A Lyapunov-Based Piezoelectric Controller for Flexible Cartesian Robot Manipulators. Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME, 2004, 126, 347-358.	1.6	84
27	Lyapunov-Based Vibration Control of Translational Euler-Bernoulli Beams Using the Stabilizing Effect of Beam Damping Mechanisms. JVC/Journal of Vibration and Control, 2004, 10, 933-961.	2.6	44
28	A new software tool for synthesis of linear PID controllers. Advances in Engineering Software, 2003, 34, 551-557.	3.8	9
29	A piezoelectric driven ratchet actuator mechanism with application to automotive engine valves. Mechatronics, 2003, 13, 933-956.	3.3	38
30	An Investigation of Damping Mechanisms in Translational Euler-Bernoulli Beams Using a Lyapunov-Based Stability Approach. , 2003, , .		3
31	A Reduced-Order Observer Based Piezoelectric Control of Flexible Cartesian (SCARA) Robot Manipulator. , 2002, , 395.		2
32	Effects of diffusion and primary creep on intergranular cavitation at high temperatures. International Journal of Fracture, 0, , .	2.2	0