

May L Martin

List of Publications by Year in descending order

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29
papers

2,242
citations

516710

16
h-index

526287

27
g-index

29
all docs

29
docs citations

29
times ranked

1034
citing authors

#	ARTICLE	IF	CITATIONS
1	On the formation and nature of quasi-cleavage fracture surfaces in hydrogen embrittled steels. <i>Acta Materialia</i> , 2011, 59, 1601-1606.	7.9	295
2	Enumeration of the hydrogen-enhanced localized plasticity mechanism for hydrogen embrittlement in structural materials. <i>Acta Materialia</i> , 2019, 165, 734-750.	7.9	295
3	Hydrogen-induced intergranular failure in nickel revisited. <i>Acta Materialia</i> , 2012, 60, 2739-2745.	7.9	282
4	The effect of nanosized (Ti,Mo)C precipitates on hydrogen embrittlement of tempered lath martensitic steel. <i>Acta Materialia</i> , 2014, 74, 244-254.	7.9	208
5	Hydrogen-induced intergranular failure of iron. <i>Acta Materialia</i> , 2014, 69, 275-282.	7.9	204
6	Modeling hydrogen transport by dislocations. <i>Journal of the Mechanics and Physics of Solids</i> , 2015, 78, 511-525.	4.8	168
7	Interpreting hydrogen-induced fracture surfaces in terms of deformation processes: A new approach. <i>Acta Materialia</i> , 2011, 59, 3680-3687.	7.9	155
8	Recent advances on hydrogen embrittlement of structural materials. <i>International Journal of Fracture</i> , 2015, 196, 223-243.	2.2	146
9	Effect of hydrogen environment on the separation of Fe grain boundaries. <i>Acta Materialia</i> , 2016, 107, 279-288.	7.9	106
10	Crack and blister initiation and growth in purified iron due to hydrogen loading. <i>Acta Materialia</i> , 2016, 115, 24-34.	7.9	89
11	A microstructural based understanding of hydrogen-enhanced fatigue of stainless steels. <i>International Journal of Fatigue</i> , 2013, 57, 28-36.	5.7	54
12	Liquid-metal-induced fracture mode of martensitic T91 steels. <i>Journal of Nuclear Materials</i> , 2012, 426, 71-77.	2.7	45
13	Hydrogen embrittlement in ferritic steels. <i>Applied Physics Reviews</i> , 2020, 7, .	11.3	40
14	Hydrogen-induced cracking and blistering in steels: A review. <i>Journal of Natural Gas Science and Engineering</i> , 2022, 101, 104547.	4.4	34
15	In situ high energy X-ray diffraction measurement of strain and dislocation density ahead of crack tips grown in hydrogen. <i>Acta Materialia</i> , 2019, 180, 272-286.	7.9	33
16	Evaluating a natural gas pipeline steel for blended hydrogen service. <i>Journal of Natural Gas Science and Engineering</i> , 2022, 101, 104529.	4.4	18
17	Cu-CeO ₂ nanocomposites: mechanochemical synthesis, physico-chemical properties, CO-PROX activity. <i>Journal of Nanoparticle Research</i> , 2016, 18, 1.	1.9	14
18	Hydrogen-induced accelerated grain growth in vanadium. <i>Acta Materialia</i> , 2018, 155, 262-267.	7.9	11

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19	Fatigue Testing of Pipeline Welds and Heat-Affected Zones in Pressurized Hydrogen Gas. Journal of Research of the National Institute of Standards and Technology, 2019, 124, 1-19.	1.2	9
20	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
21	Hydrogen isotope effect on the embrittlement and fatigue crack growth of steel. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2019, 753, 331-340.	5.6	6
22	Dominant factors for fracture at the micro-scale in electrodeposited nickel alloys. Sensors and Actuators A: Physical, 2020, 314, 112239.	4.1	5
23	Elastic-plastic properties of mesoscale electrodeposited LIGA nickel alloy films: microscopy and mechanics. Journal of Micromechanics and Microengineering, 2021, 31, 015002.	2.6	5
24	Unification of hydrogen-enhanced damage understanding through strain-life experiments for modeling. Engineering Fracture Mechanics, 2019, 216, 106504.	4.3	4
25	Microfabricated fiducial markers for digital image correlation-based micromechanical testing of LIGA Ni alloys. Engineering Research Express, 2021, 3, 025019.	1.6	4
26	High energy X-ray diffraction and small-angle scattering measurements of hydrogen fatigue damage in AISI 4130 steel. Journal of Pipeline Science and Engineering, 2022, 2, 100068.	4.8	4
27	Effect of Ion Irradiation on Dislocation Processes in Stainless Steel. Materials Research Society Symposia Proceedings, 2011, 1363, 1.	0.1	1
28	Experimental Study of Shear and Tensile Properties of LIGA Ni-Fe and Ni-Co Alloys at Quasi-static and Intermediate Strain Rates. Conference Proceedings of the Society for Experimental Mechanics, 2021, , 101-107.	0.5	0
29	Hydrogen concentration-induced stresses in an environmental TEM. Physical Review Materials, 2022, 6, .	2.4	0