Di Wan

List of Publications by Year
in descending order

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44	977	430442	454577
papers	citations	18 h-index	30 g-index

44	44	44	593
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Additive manufacturing of fine-grained and dislocation-populated CrMnFeCoNi high entropy alloy by laser engineered net shaping. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2019, 761, 138056.	2.6	94
2	Chemical heterogeneity enhances hydrogen resistance in high-strength steels. Nature Materials, 2021, 20, 1629-1634.	13.3	83
3	In-situ micro-cantilever bending test in environmental scanning electron microscope: Real time observation of hydrogen enhanced cracking. Scripta Materialia, 2017, 127, 19-23.	2.6	56
4	Effect of electrochemical charging on the hydrogen embrittlement susceptibility of alloy 718. Acta Materialia, 2019, 179, 36-48.	3.8	55
5	Current Challenges and Opportunities Toward Understanding Hydrogen Embrittlement Mechanisms in Advanced High-Strength Steels: A Review. Acta Metallurgica Sinica (English Letters), 2021, 34, 741-754.	1.5	54
6	Hydrogen-enhanced fatigue crack growth in a single-edge notched tensile specimen under in-situ hydrogen charging inside an environmental scanning electron microscope. Acta Materialia, 2019, 170, 87-99.	3.8	50
7	Formation of fully equiaxed grain microstructure in additively manufactured AlCoCrFeNiTi0.5 high entropy alloy. Materials and Design, 2019, 184, 108202.	3.3	43
8	Additively manufactured CrMnFeCoNi/AlCoCrFeNiTi0.5 laminated high-entropy alloy with enhanced strength-plasticity synergy. Scripta Materialia, 2020, 183, 133-138.	2.6	37
9	Hydrogen embrittlement effect observed by in-situ hydrogen plasma charging on a ferritic alloy. Scripta Materialia, 2018, 151, 24-27.	2.6	36
10	In-situ observation of martensitic transformation in an interstitial metastable high-entropy alloy during cathodic hydrogen charging. Scripta Materialia, 2019, 173, 56-60.	2.6	35
11	Additive manufacturing of TiB2-containing CoCrFeMnNi high-entropy alloy matrix composites with high density and enhanced mechanical properties. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2021, 825, 141871.	2.6	35
12	Fatigue assessment of asâ€built and heatâ€treated Inconel 718 specimens produced by additive manufacturing including notch effects. Fatigue and Fracture of Engineering Materials and Structures, 2020, 43, 2326-2336.	1.7	34
13	Hydrogen enhanced fatigue crack growth rates in a ferritic Fe-3â€¯wt%Si alloy and a X70 pipeline steel. Engineering Fracture Mechanics, 2019, 219, 106641.	2.0	33
14	Assessment of the potential of hydrogen plasma charging as compared to conventional electrochemical hydrogen charging on dual phase steel. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2019, 754, 613-621.	2.6	33
15	Effect of hydrogen-induced surface steps on the nanomechanical behavior of a CoCrFeMnNi high-entropy alloy revealed by in-situ electrochemical nanoindentation. Intermetallics, 2019, 114, 106605.	1.8	30
16	Effect of hydrogen on the embrittlement susceptibility of Feâ€“22Mn-0.6C TWIP steel revealed by in-situ tensile tests. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2021, 802, 140638.	2.6	22
17	Strain visualization of growing short fatigue cracks in the heat-affected zone of a Niâ€“Crâ€“Moâ€“V steel welded joint: Intergranular cracking and crack closure. International Journal of Pressure Vessels and Piping, 2019, 178, 103992.	1.2	21
18	Hydrogen embrittlement of additively manufactured AlCoCrFeNi2.1 eutectic high-entropy alloy. Corrosion Science, 2022, 195, 110007.	3.0	21

#	Article	IF	Citations
19	Fatigue crack growth behavior of Ni-Cr-Mo-V steel welded joints considering strength mismatch effect. International Journal of Fatigue, 2021, 151, 106389.	2.8	17
20	Hydrogen-enhanced fatigue crack growth behaviors in a ferritic Fe-3wt%Si steel studied by fractography and dislocation structure analysis. International Journal of Hydrogen Energy, 2019, 44, 5030-5042.	3.8	16
21	The impact of thermo-mechanical processing routes on product quality in integrated aluminium tube bending process. Journal of Manufacturing Processes, 2021, 67, 503-512.	2.8	15
22	Understanding the hydrogen effect on pop-in behavior of an equiatomic high-entropy alloy during in-situ nanoindentation. Journal of Materials Science and Technology, 2022, 98, 118-122.	5.6	15
23	Plasticity in cryogenic brittle fracture of ferritic steels: Dislocation versus twinning. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2019, 744, 335-339.	2.6	14
24	The influence of hydrogen on cyclic plasticity of <001> oriented nickel single crystal. Part I: Dislocation organisations and internal stresses. International Journal of Plasticity, 2020, 126, 102611.	4.1	14
25	Novel in-situ residual strain measurements in additive manufacturing specimens by using the Optical Backscatter Reflectometry. Additive Manufacturing, 2020, 32, 101040.	1.7	14
26	The effect of hydrogen on the crack initiation site of TRIP-assisted steels during in-situ hydrogen plasma micro-tensile testing: Leading to an improved ductility?. Materials Characterization, 2020, 167, 110493.	1.9	14
27	Evaluation of hydrogen effect on the fatigue crack growth behavior of medium-Mn steels via in-situ hydrogen plasma charging in an environmental scanning electron microscope. Journal of Materials Science and Technology, 2021, 85, 30-43.	5.6	13
28	Microstructure and nanomechanical behavior of an additively manufactured (CrCoNiFe)94Ti2Al4 high-entropy alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2021, 823, 141737.	2.6	11
29	Probing hydrogen effect on nanomechanical properties of X65 pipeline steel using in-situ electrochemical nanoindentation. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2021, 824, 141819.	2.6	11
30	Solid-State Hydrogen Storage Properties of Tiâ€“Vâ€“Nbâ€“Cr High-Entropy Alloys and the Associated Effects of Transitional Metals (Mâ€‰=â€‰Mn, Fe, Ni). Acta Metallurgica Sinica (English Letters), 2023, 36, 1113-1122.	1.5	8
31	Synergistic effects of Cd, Si and Cr additions on precipitation strengthening and thermal stability of dispersoids in AA3003 alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2022, 832, 142422.	2.6	5
32	Hydrogen Enhanced Fatigue Crack Growth Rates in a Ferritic Fe-3wt%Si Alloy. Procedia Structural Integrity, 2018, 13, 1514-1520.	0.3	4
33	Low-Cycle Fatigue Life Prediction of 10CrNi3MoV Steel and Undermatched Welds by Damage Mechanics Approach. Frontiers in Materials, 2021, 8, .	1.2	4
34	Revealing the influence of electron beam melted Ti-6Al-4V scaffolds on osteogenesis of human bone marrow-derived mesenchymal stromal cells. Journal of Materials Science: Materials in Medicine, 2021, 32, 97.	1.7	4
35	Tensile and fatigue behavior of a Pb-Sn-Sb alloy investigated via small-scale in-situ mechanical testing in SEM. Procedia Structural Integrity, 2020, 28, 648-658.	0.3	4
36	In-situ tensile and fatigue behavior of electrical grade Cu alloy for subsea cables. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2022, 835, 142654.	2.6	4

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37	Impurity removal from Si by Si-Ca-Mg ternary alloying-leaching system. Materials and Design, 2021, 198, 109348.	3.3	3
38	Risk-based inspection planning for hydrogen technologies: review of currents standards and suggestions for modification. IOP Conference Series: Materials Science and Engineering, 2021, 1193, 012075.	0.3	3
39	Fatigue performance of shelled additively manufactured parts subjected to hot isostatic pressing. Additive Manufacturing, 2022, 51, 102607.	1.7	3
40	Hydrogen-assisted fatigue crack growth in ferritic steels â€“ a fractographic study. MATEC Web of Conferences, 2018, 165, 03004.	0.1	2
41	Super long-range diffusion of carbon during proeutectoid ferrite transformation. Journal of Central South University, 2019, 26, 560-566.	1.2	2
42	An In-Situ Electrochemical Nanoindentation (ECNI) Study on the Effect of Hydrogen on the Mechanical Properties of 316L Austenitic Stainless Steel. Materials, 2021, 14, 6426.	1.3	2
43	Reveal Hydrogen Behavior at Grain Boundaries in Feâ€“22Mnâ€“0.6C TWIP Steel via In Situ Micropillar Compression Test. Acta Metallurgica Sinica (English Letters), 2023, 36, 1095-1104.	1.5	2
44	Effect of geometrical irregularities on fatigue of lead sheathing for submarine high voltage power cable applications. International Journal of Fatigue, 2021, 151, 106399.	2.8	1