Roy Johnsen

List of Publications by Year
in descending order

29 papers	641 citations	687363 13 h-index	580821 25 g-index
30 all docs	30 docs citations	30 times ranked	517 citing authors

#	Article	IF	Citations
1	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.	2.9	2
2	Hydrogen uptake during active CO2-H2S corrosion of carbon steel wires in simulated annulus fluid. Corrosion Science, 2022, 199, 110172.	6.6	9
3	Corrosion and Microstructural Investigation on Additively Manufactured 316L Stainless Steel: Experimental and Statistical Approach. Materials, 2022, 15, 1605.	2.9	3
4	Evaluation of the cementite morphology influence on the hydrogen induced crack nucleation and propagation path in carbon steels. International Journal of Hydrogen Energy, 2022, 47, 14121-14129.	7.1	6
5	Hydrogen assisted intergranular cracking of alloy 725: The effect of boron and copper alloying. Corrosion Science, 2022, 203, 110331.	6.6	8
6	Hydrogen diffusion and trapping in nickel-based alloy 625: An electrochemical permeation study. Electrochimica Acta, 2022, 421, 140477.	5.2	11
7	Crevice corrosion of solution annealed 25Cr duplex stainless steels: Effect of W on critical temperatures. Corrosion Science, 2021, 178, 109053.	6.6	23
8	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.	5.6	22
9	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.	5.6	11
10	Stress Corrosion Cracking in an Extruded Cu-Free Al-Zn-Mg Alloy. Metals, 2020, 10, 1194.	2.3	3
11	Use of the Critical Acidification Model to Estimate the Influence of W in the Localized Corrosion Resistance of 25Cr Super Duplex Stainless Steels. Metals, 2020, 10, 1364.	2.3	4
12	The Effect of Hydrogen on the Nanoindentation Behavior of Heat Treated 718 Alloy. Metals, 2020, 10, 1451.	2.3	2
13	The Role of Tungsten on the Phase Transformation Kinetics and its Correlation with the Localized Corrosion Resistance of 25Cr Super Duplex Stainless Steels. Journal of the Electrochemical Society, 2020, 167, 081510.	2.9	9
14	Properties of TSA in natural seawater at ambient and elevated temperature. Materials and Corrosion - Werkstoffe Und Korrosion, 2019, 70, 293-306.	1.5	5
15	Effect of different microstructural features on the hydrogen embrittlement susceptibility of alloy 718. International Journal of Hydrogen Energy, 2018, 43, 6765-6776.	7.1	28
16	Effect of nickel on hydrogen permeation in ferritic/pearlitic low alloy steels. International Journal of Hydrogen Energy, 2018, 43, 3845-3861.	7.1	39
17	Effect of Nickel on the Hydrogen Stress Cracking Resistance of Ferritic/Pearlitic Low Alloy Steels. Corrosion, 2018, 74, 801-818.	1.1	3
18	Environmentally assisted degradation of spinodal copper alloy C72900. Corrosion Science, 2018, 142, 45-55.	6.6	19

#	Article	IF	Citations
19	Hydrogen stress cracking and crack initiation in precipitation hardened Ni-alloys. Engineering Failure Analysis, 2018, 89, 74-87.	4.0	9
20	In situ small-scale hydrogen embrittlement testing made easy: An electrolyte for preserving surface integrity at nano-scale during hydrogen charging. International Journal of Hydrogen Energy, 2018, 43, 12516-12529.	7.1	18
21	Effect of hydrogen on dislocation nucleation in alloy 718. International Journal of Hydrogen Energy, 2017, 42, 15933-15942.	7.1	36
22	Materials and corrosion trends in offshore and subsea oil and gas production. Npj Materials Degradation, 2017, 1, .	5.8	80
23	Effect of Tungsten on the Pitting and Crevice Corrosion Resistance of Type 25Cr Super Duplex Stainless Steels. Corrosion, 2017, 73, 53-67.	1.1	41
24	Effect of hydrogen on the hardness of different phases in super duplex stainless steel. International Journal of Hydrogen Energy, 2016, 41, 704-712.	7.1	37
25	Nanomechanical characterization of the hydrogen effect on pulsed plasma nitrided super duplex stainless steel. International Journal of Hydrogen Energy, 2013, 38, 15520-15531.	7.1	23
26	Hydrogen Effect on Nanomechanical Properties of the Nitrided Steel. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2013, 44, 766-775.	2.2	13
27	Resolving the hydrogen effect on dislocation nucleation and mobility by electrochemical nanoindentation. Scripta Materialia, 2012, 66, 414-417.	5.2	100
28	Application of hydrogen influenced cohesive laws in the prediction of hydrogen induced stress cracking in 25%Cr duplex stainless steel. Engineering Fracture Mechanics, 2008, 75, 2333-2351.	4.3	75
29	Hydrogen uptake and diffusivity in steel armor wires with different chemical composition, carbide distribution, grain size, and degree of deformation. Materials and Corrosion - Werkstoffe Und Korrosion, 0, , .	1.5	2