Yuanyuan Zheng

List of Publications by Year
in descending order

41 papers	1,292 citations	394421 19 h-index	345221 36 g-index
41 all docs	41 docs citations	41 times ranked	977 citing authors

#	Article	IF	Citations
1	Effect of nickel equivalent on hydrogen gas embrittlement of austenitic stainless steels based on type 316 at low temperatures. Acta Materialia, 2008, 56, 3414-3421.	7.9	195
2	Effect of strain-induced martensite on hydrogen embrittlement of austenitic stainless steels investigated by combined tension and hydrogen release methods. International Journal of Hydrogen Energy, 2013, 38, 8208-8214.	7.1	111
3	Fabrication of novel slurry containing graphene oxide-modified microencapsulated phase change material for direct absorption solar collector. Solar Energy Materials and Solar Cells, 2018, 188, 73-80.	6.2	108
4	The effect of the partial pressure of H2S on the permeation of hydrogen in low carbon pipeline steel. Corrosion Science, 2013, 67, 184-192.	6.6	106
5	Formation of strain-induced martensite in selective laser melting austenitic stainless steel. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2019, 740-741, 420-426.	5.6	83
6	Improvement of corrosion resistance of SS316L manufactured by selective laser melting through subcritical annealing. Corrosion Science, 2020, 164, 108353.	6.6	69
7	Effects of internal hydrogen and surface-absorbed hydrogen on the hydrogen embrittlement of X80 pipeline steel. International Journal of Hydrogen Energy, 2019, 44, 22547-22558.	7.1	66
8	Influence of low temperature prestrain on hydrogen gas embrittlement of metastable austenitic stainless steels. International Journal of Hydrogen Energy, 2013, 38, 11181-11187.	7.1	47
9	Influence of hydrogen pressure on fatigue properties of X80 pipeline steel. International Journal of Hydrogen Energy, 2017, 42, 15669-15678.	7.1	44
10	Effect of pre-strain on hydrogen embrittlement of metastable austenitic stainless steel under different hydrogen conditions. International Journal of Hydrogen Energy, 2019, 44, 26036-26048.	7.1	44
11	Improved resistance to hydrogen environment embrittlement of warm-deformed 304 austenitic stainless steel in high-pressure hydrogen atmosphere. Corrosion Science, 2019, 148, 159-170.	6.6	43
12	Internal Reversible Hydrogen Embrittlement of Austenitic Stainless Steels Based on Type 316 at Low Temperatures. ISIJ International, 2012, 52, 240-246.	1.4	36
13	Sulphide stress cracking behaviour of the dissimilar metal welded joint of X60 pipeline steel and Inconel 625 alloy. Corrosion Science, 2016, 110, 242-252.	6.6	35
14	Effects of Î±â€² martensite and deformation twin on hydrogen-assisted fatigue crack growth in cold/warm-rolled type 304 stainless steel. International Journal of Hydrogen Energy, 2018, 43, 3342-3352.	7.1	34
15	Investigating the influence mechanism of hydrogen partial pressure on fracture toughness and fatigue life by in-situ hydrogen permeation. International Journal of Hydrogen Energy, 2021, 46, 20621-20629.	7.1	34
16	The influence of copper on the stress corrosion cracking of 304 stainless steel. Applied Surface Science, 2019, 478, 492-498.	6.1	26
17	Hydrogen effect on the deformation evolution process in situ detected by nanoindentation continuous stiffness measurement. Materials Characterization, 2017, 127, 35-40.	4.4	23
18	Hydrogen Effects on Localized Plasticity in SUS310S Stainless Steel Investigated by Nanoindentation and Atomic Force Microscopy. Japanese Journal of Applied Physics, 2009, 48, 08JB08.	1.5	21

#	Article	IF	Citations
19	The dependence of hydrogen embrittlement on hydrogen transport in selective laser melted 304L stainless steel. International Journal of Hydrogen Energy, 2021, 46, 16153-16163.	7.1	21
20	Effect of hydrogen and strain rate on nanoindentation creep of austenitic stainless steel. International Journal of Hydrogen Energy, 2019, 44, 1253-1262.	7.1	18
21	Synthesis of novel microencapsulated phase change material with SnO₂/CNTs shell for solar energy storage and photo-thermal conversion. Materials Research Express, 2020, 7, 015513.	1.6	17
22	Microstructure Evolution and Corrosion Behavior of Deformed Austenitic Stainless Steel Manufactured by Selective Laser Melting. Journal of Materials Engineering and Performance, 2021, 30, 1652-1664.	2.5	12
23	Dependence of strain rate on hydrogen-induced hardening of austenitic stainless steel investigated by nanoindentation. International Journal of Hydrogen Energy, 2019, 44, 14055-14063.	7.1	11
24	Effects of hydrogen on the mechanical response of X80 pipeline steel subject to high strain rate tensile tests. Fatigue and Fracture of Engineering Materials and Structures, 2020, 43, 684-697.	3.4	11
25	Effect of interaction between corrosion film and H₂S/CO₂ partial pressure ratio on the hydrogen permeation in X80 pipeline steel. Corrosion Engineering Science and Technology, 2020, 55, 392-399.	1.4	11
26	Hydrogen embrittlement resistance of TWIP (twinning-induced plasticity) steel in high pressure hydrogen environment. International Journal of Fatigue, 2021, 151, 106362.	5.7	11
27	Surface treatment and corrosion behavior of 316L stainless steel fabricated by selective laser melting. Materials Research Express, 2019, 6, 106518.	1.6	7
28	Deformation-induced hydrogen desorption from the surface oxide layer of 6061 aluminum alloy. Journal of Alloys and Compounds, 2014, 617, 792-796.	5.5	6
29	Hydrogen effect on nanoindentation creep of austenitic stainless steel: A comparative study between primary creep stage and steady-state creep stage. International Journal of Hydrogen Energy, 2019, 44, 22576-22583.	7.1	6
30	The dependence of fatigue crack growth on hydrogen in warm-rolled 316 austenitic stainless steel. International Journal of Hydrogen Energy, 2021, 46, 12348-12360.	7.1	6
31	Density power law and structures of metallic glasses. Acta Materialia, 2017, 141, 75-82.	7.9	5
32	Coupling effect of grain boundary and hydrogen segregation on dislocation nucleation in bi-crystal nickel. International Journal of Hydrogen Energy, 2020, 45, 20021-20031.	7.1	5
33	The Room Temperature Creep of Selective Laser Melted 316L Stainless Steel Investigated by Nanoindentation. Journal of Materials Engineering and Performance, 2021, 30, 6502-6510.	2.5	4
34	Effects of External Hydrogen on Hydrogen Transportation and Distribution Around the Fatigue Crack Tip in Type 304 Stainless Steel. Journal of Materials Engineering and Performance, 2017, 26, 4990-4996.	2.5	3
35	Hydrogen Effect on the Fatigue Crack Growth in Austenitic Stainless Steel Investigated by a New Method Based on Nanohardness Distribution. Journal of Materials Engineering and Performance, 2018, 27, 6485-6492.	2.5	3
36	Effect of nitrogen on nanomechanical behavior of austenitic stainless steel investigated by nanoindentation. Materials Research Express, 2018, 5, 096515.	1.6	3

#	Article	IF	Citations
37	The evolution of oxygen-rich nanoparticle and its effect on the mechanical property in selective laser melted 304L stainless steel. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2021, 827, 142009.	5.6	3
38	Influence of Warm Predeformation Temperature on the Corrosion Property of Type 304 Austenitic Stainless Steel. Journal of Materials Engineering and Performance, 2020, 29, 4515-4528.	2.5	2
39	An apparatus for detecting hydrogen desorption from metals during deformation. Vacuum, 2016, 128, 128-132.	3.5	1
40	Evolution behavior of nanohardness after thermal-aging and hydrogen-charging on austenite and strain-induced martensite in pre-strained austenitic stainless steel. Materials Research Express, 2018, 5, 056524.	1.6	1
41	Abnormal Evolution of Pitting Behavior of Warmly Pre-Strained Austenitic Stainless Steels. Journal of Materials Engineering and Performance, 2020, 29, 8165-8182.	2.5	0