

Eiji Akiyama

List of Publications by Year in descending order

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224
papers

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57719

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times ranked

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#	ARTICLE	IF	CITATIONS
1	Hydrogen-assisted decohesion and localized plasticity in dual-phase steel. <i>Acta Materialia</i> , 2014, 70, 174-187.	3.8	366
2	Effect of hydrogen on the fracture behavior of high strength steel during slow strain rate test. <i>Corrosion Science</i> , 2007, 49, 4081-4097.	3.0	336
3	Overview of hydrogen embrittlement in high-Mn steels. <i>International Journal of Hydrogen Energy</i> , 2017, 42, 12706-12723.	3.8	228
4	Effect of hydrogen and stress concentration on the notch tensile strength of AISI 4135 steel. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2005, 398, 37-46.	2.6	226
5	Hydrogen-assisted failure in a twinning-induced plasticity steel studied under in situ hydrogen charging by electron channeling contrast imaging. <i>Acta Materialia</i> , 2013, 61, 4607-4618.	3.8	218
6	Storage and Release of Soluble Hexavalent Chromium from Chromate Conversion Coatings Equilibrium Aspects of Cr[^{sup VI}] Concentration. <i>Journal of the Electrochemical Society</i> , 2000, 147, 2556.	1.3	177
7	Hydrogen embrittlement associated with strain localization in a precipitation-hardened Fe-Mn-Al-C light weight austenitic steel. <i>International Journal of Hydrogen Energy</i> , 2014, 39, 4634-4646.	3.8	170
8	Hydrogen-induced cracking at grain and twin boundaries in an Fe-Mn-C austenitic steel. <i>Scripta Materialia</i> , 2012, 66, 459-462.	2.6	168
9	Review of Hydrogen Embrittlement in Metals: Hydrogen Diffusion, Hydrogen Characterization, Hydrogen Embrittlement Mechanism and Prevention. <i>Acta Metallurgica Sinica (English Letters)</i> , 2020, 33, 759-773.	1.5	142
10	The role of corrosion-resistant alloying elements in passivity. <i>Corrosion Science</i> , 2007, 49, 42-52.	3.0	137
11	Hydrogen embrittlement in a Fe-Mn-C ternary twinning-induced plasticity steel. <i>Corrosion Science</i> , 2012, 54, 1-4.	3.0	134
12	Hydrogen degradation of a boron-bearing steel with 1050 and 1300MPa strength levels. <i>Scripta Materialia</i> , 2005, 52, 403-408.	2.6	130
13	Determination of the critical hydrogen concentration for delayed fracture of high strength steel by constant load test and numerical calculation. <i>Corrosion Science</i> , 2006, 48, 2189-2202.	3.0	129
14	Recent progress in microstructural hydrogen mapping in steels: Quantification, kinetic analysis, and multi-scale characterisation. <i>Materials Science and Technology</i> , 2017, 33, 1481-1496.	0.8	125
15	Evaluation of hydrogen entry into high strength steel under atmospheric corrosion. <i>Corrosion Science</i> , 2010, 52, 2758-2765.	3.0	115
16	Effect of hydrogen content on the embrittlement in a Fe-Mn-C twinning-induced plasticity steel. <i>Corrosion Science</i> , 2012, 59, 277-281.	3.0	103
17	Global CO2 recycling—novel materials and prospect for prevention of global warming and abundant energy supply. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 1999, 267, 200-206.	2.6	99
18	Crosshead speed dependence of the notch tensile strength of a high strength steel in the presence of hydrogen. <i>Scripta Materialia</i> , 2005, 53, 713-718.	2.6	99

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19	Anodically deposited manganese oxide and manganese tungsten oxide electrodes for oxygen evolution from seawater. <i>Electrochimica Acta</i> , 1998, 43, 3303-3312.	2.6	96
20	Hydrogen-assisted quasi-cleavage fracture in a single crystalline type 316 austenitic stainless steel. <i>Corrosion Science</i> , 2013, 75, 345-353.	3.0	85
21	Hydrogen entry into Fe and high strength steels under simulated atmospheric corrosion. <i>Electrochimica Acta</i> , 2011, 56, 1799-1805.	2.6	77
22	Title is missing!. <i>Journal of Applied Electrochemistry</i> , 1999, 29, 769-775.	1.5	74
23	Evaluation of Delayed Fracture Characteristics of High Strength Steel based on CSRT Method. <i>Tetsu-To-Hagane/Journal of the Iron and Steel Institute of Japan</i> , 2008, 94, 215-221.	0.1	70
24	Evaluation of susceptibility of high strength steels to delayed fracture by using cyclic corrosion test and slow strain rate test. <i>Corrosion Science</i> , 2010, 52, 1660-1667.	3.0	69
25	Experimental evidence for the critical size of heterogeneity areas for pitting corrosion of Cr-Zr alloys in 6 M HCl. <i>Corrosion Science</i> , 1998, 40, 1-17.	3.0	68
26	The effect of air exposure on the corrosion behavior of amorphous Fe-8Cr-Mo-13P-7C alloys in 1 M HCl. <i>Corrosion Science</i> , 1995, 37, 1289-1301.	3.0	67
27	Characterization of sputter-deposited Ni-Mo and Ni-W alloy electrocatalysts for hydrogen evolution in alkaline solution. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 1997, 226-228, 905-909.	2.6	67
28	Oxygen evolution on manganese molybdenum oxide anodes in seawater electrolysis. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 1999, 267, 254-259.	2.6	65
29	Spatially and Kinetically Resolved Mapping of Hydrogen in a Twinning-Induced Plasticity Steel by Use of Scanning Kelvin Probe Force Microscopy. <i>Journal of the Electrochemical Society</i> , 2015, 162, C638-C647.	1.3	64
30	Compositional dependence of the CO ₂ methanation activity of Ni/ZrO ₂ catalysts prepared from amorphous NiZr alloy precursors. <i>Applied Catalysis A: General</i> , 1997, 163, 187-197.	2.2	61
31	Hydrogen Embrittlement of a 1500-MPa Tensile Strength Level Steel with an Ultrafine Elongated Grain Structure. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2012, 43, 1670-1687.	1.1	61
32	Recent progress in corrosion-resistant metastable alloys. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 1995, 198, 1-10.	2.6	57
33	CO ₂ methanation catalysts prepared from amorphous Ni-Zr-Sm and Ni-Zr-misch metal alloy precursors. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 1999, 267, 220-226.	2.6	57
34	The corrosion behavior of sputter-deposited amorphous titanium-chromium alloys in 1 M and 6 M HCl solutions. <i>Corrosion Science</i> , 1993, 34, 975-987.	3.0	55
35	Materials for global carbon dioxide recycling. <i>Corrosion Science</i> , 2002, 44, 371-386.	3.0	55
36	Effects of severe plastic deformation on the corrosion behavior of aluminum alloys. <i>Journal of Solid State Electrochemistry</i> , 2009, 13, 277-282.	1.2	55

#	ARTICLE	IF	CITATIONS
37	Advanced materials for global carbon dioxide recycling. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2001, 304-306, 88-96.	2.6	54
38	The corrosion behavior of sputter-deposited amorphous chromium-zirconium alloys in 6 M HCl solution. <i>Corrosion Science</i> , 1993, 34, 1817-1827.	3.0	53
39	The role of chromium and molybdenum in passivation of amorphous Fe-Cr-Mo-P-C alloys in deaerated 1 M HCl. <i>Corrosion Science</i> , 1996, 38, 2137-2151.	3.0	53
40	The passivation behavior of sputter-deposited W-Ta alloys in 12 M HCl. <i>Corrosion Science</i> , 1998, 40, 757-779.	3.0	53
41	The corrosion behavior of sputter-deposited Mo-Ti alloys in concentrated hydrochloric acid. <i>Corrosion Science</i> , 1996, 38, 1649-1667.	3.0	51
42	Hydrogen embrittlement property of a 1700-MPa-class ultrahigh-strength tempered martensitic steel. <i>Science and Technology of Advanced Materials</i> , 2010, 11, 025005.	2.8	51
43	Hydrogen-induced delayed fracture of a Fe-22Mn-0.6C steel pre-strained at different strain rates. <i>Scripta Materialia</i> , 2012, 66, 947-950.	2.6	50
44	Effect of Al/Al ₃ Ni microstructure on the corrosion behaviour of Al-5.4wt% Ni alloy fabricated by equal-channel angular pressing. <i>Corrosion Science</i> , 2007, 49, 2962-2972.	3.0	47
45	The corrosion behavior of sputter-deposited amorphous Cr-Nb and Cr-Ta alloys in 12 M HCl solution. <i>Corrosion Science</i> , 1993, 34, 1947-1955.	3.0	46
46	Storage and Release of Soluble Hexavalent Chromium from Chromate Conversion Coatings on Al Alloys: Kinetics of Release. <i>Journal of the Electrochemical Society</i> , 2003, 150, B83.	1.3	46
47	Evaluation of Delayed Fracture Property of High Strength Bolt Steels. <i>ISIJ International</i> , 2012, 52, 307-315.	0.6	45
48	The corrosion behavior of sputter-deposited amorphous Mo-Zr alloys in 12 M HCl. <i>Corrosion Science</i> , 1995, 37, 307-320.	3.0	43
49	Studies of Evaluation of Hydrogen Embrittlement Property of High-Strength Steels with Consideration of the Effect of Atmospheric Corrosion. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2013, 44, 1290-1300.	1.1	43
50	Tensile mechanical properties and fracture behaviors of nickel-based superalloy 718 in the presence of hydrogen. <i>International Journal of Hydrogen Energy</i> , 2018, 43, 20118-20132.	3.8	42
51	An XPS study of passive films on corrosion-resistant Cr-Zr alloys prepared by sputter deposition. <i>Corrosion Science</i> , 1997, 39, 1365-1380.	3.0	41
52	Corrosion-resistant amorphous surface alloys. <i>Corrosion Science</i> , 1993, 35, 363-370.	3.0	40
53	Fracture criterion for hydrogen embrittlement of high strength steel. <i>Materials Science and Technology</i> , 2006, 22, 167-172.	0.8	40
54	The corrosion behavior of sputter-deposited amorphous W-Ti alloys in 6 M HCl solution. <i>Corrosion Science</i> , 1995, 37, 2071-2086.	3.0	39

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55	The corrosion behavior of sputter-deposited Mo–Ta alloys in 12 M HCl solution. <i>Corrosion Science</i> , 1996, 38, 397-411.	3.0	39
56	An XPS study of the corrosion behavior of sputter-deposited amorphous Cr-Nb and Cr-Ta alloys in 12 M HCl solution. <i>Corrosion Science</i> , 1994, 36, 511-523.	3.0	38
57	The effect of heat treatment on the corrosion behavior of sputter-deposited aluminum–chromium alloys. <i>Corrosion Science</i> , 1998, 41, 477-499.	3.0	38
58	Microstructural and crystallographic study of hydrogen-assisted cracking in high strength PSB1080 steel. <i>International Journal of Hydrogen Energy</i> , 2018, 43, 17898-17911.	3.8	38
59	Electrochemical and xps studies of the corrosion behavior of sputter-deposited amorphous W-Zr alloys in 6 and 12 M HCl solutions. <i>Corrosion Science</i> , 1997, 39, 355-375.	3.0	37
60	Room-temperature blue brittleness of Fe-Mn-C austenitic steels. <i>Scripta Materialia</i> , 2017, 141, 20-23.	2.6	37
61	The Influence of Dichromate Ions on Aluminum Dissolution Kinetics in Artificial Crevice Electrode Cells. <i>Journal of the Electrochemical Society</i> , 1999, 146, 4095-4100.	1.3	35
62	Hydrogen Embrittlement in Al-added Twinning-induced Plasticity Steels Evaluated by Tensile Tests during Hydrogen Charging. <i>ISIJ International</i> , 2012, 52, 2283-2287.	0.6	35
63	The corrosion behavior of sputter-deposited Mo-Nb alloys in 12 M HCl solution. <i>Corrosion Science</i> , 1996, 38, 1731-1750.	3.0	34
64	Effects of Additional Elements on Electrocatalytic Properties of Thermally Decomposed Manganese Oxide Electrodes for Oxygen Evolution from Seawater. <i>Materials Transactions, JIM</i> , 1997, 38, 899-905.	0.9	34
65	Evaluation of delayed fracture property of outdoor-exposed high strength AISI 4135 steels. <i>Corrosion Science</i> , 2010, 52, 3198-3204.	3.0	34
66	Martensitic transformation-induced hydrogen desorption characterized by utilizing cryogenic thermal desorption spectroscopy during cooling. <i>Scripta Materialia</i> , 2016, 122, 50-53.	2.6	34
67	The corrosion behavior of sputter-deposited Cr-Mo alloys in 12 M HCl solution. <i>Corrosion Science</i> , 1995, 37, 1843-1860.	3.0	33
68	Electrochemical and XPS studies of the corrosion behavior of sputter-deposited W-Nb alloys in concentrated hydrochloric acid solutions. <i>Corrosion Science</i> , 1998, 40, 19-42.	3.0	32
69	Corrosion behaviour of sputter-deposited Mg–Zr alloys in a borate buffer solution. <i>Corrosion Science</i> , 2011, 53, 2988-2993.	3.0	32
70	Comparison of Constant Load, SSRT and CSRT Methods for Hydrogen Embrittlement Evaluation Using Round Bar Specimens of High Strength Steels. <i>ISIJ International</i> , 2016, 56, 1268-1275.	0.6	32
71	Effect of Strain Rate on the Hydrogen Embrittlement Property of Ultra High-strength Low Alloy TRIP-aided Steel. <i>ISIJ International</i> , 2018, 58, 751-759.	0.6	32
72	Surface activation of manganese oxide electrode for oxygen evolution from seawater. <i>Journal of Applied Electrochemistry</i> , 1997, 27, 1362-1368.	1.5	31

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73	Electrochemical and XPS studies on the passivation behavior of sputter-deposited W-Cr Alloys in 12 M HCl solution. <i>Corrosion Science</i> , 1998, 40, 155-175.	3.0	31
74	The corrosion behavior of sputter-deposited amorphous Cr-Ni-Mo alloys in 12 M HCl. <i>Corrosion Science</i> , 1994, 36, 1395-1410.	3.0	30
75	Constant-load delayed fracture test of atmospherically corroded high strength steels. <i>Applied Surface Science</i> , 2011, 257, 8275-8281.	3.1	30
76	Effect of heat treatment on hydrogen-assisted fracture behavior of PH13-8Mo steel. <i>Corrosion Science</i> , 2017, 128, 198-212.	3.0	30
77	Effects of Mn Content and Grain Size on Hydrogen Embrittlement Susceptibility of Face-Centered Cubic High-Entropy Alloys. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2020, 51, 5612-5616.	1.1	30
78	The corrosion behavior of sputter-deposited amorphous Al _{1-x} Cr _x Mo alloys in 1 M HCl. <i>Corrosion Science</i> , 1996, 38, 279-292.	3.0	29
79	The corrosion behaviour of sputter-deposited amorphous Mn-Ti alloys in 0.5 M NaCl solutions. <i>Corrosion Science</i> , 1997, 39, 305-320.	3.0	29
80	Electrochemical hydrogen permeation tests under galvanostatic hydrogen charging conditions conventionally used for hydrogen embrittlement study. <i>Corrosion Reviews</i> , 2016, 34, 103-112.	1.0	29
81	The influences of Mo addition and air exposure on the corrosion behavior of amorphous Fe _{1-x} Cr _x 13Pt _{1-x} 7C alloy in de-aerated 1 M HCl. <i>Corrosion Science</i> , 1996, 38, 349-365.	3.0	27
82	Spontaneously passivated films on sputter-deposited Cr-Ti alloys in 6 M HCl solution. <i>Corrosion Science</i> , 1997, 39, 935-948.	3.0	27
83	The corrosion behavior of amorphous and crystalline Ni-10Ta-20P alloys in 12 M HCl. <i>Corrosion Science</i> , 1996, 38, 1269-1279.	3.0	26
84	Hydrogen embrittlement of high strength steam turbine last stage blade steels: Comparison between PH17-4 steel and PH13-8Mo steel. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2019, 742, 353-363.	2.6	26
85	Hydrogen-assisted damage in austenite/martensite dual-phase steel. <i>Philosophical Magazine Letters</i> , 2016, 96, 9-18.	0.5	25
86	Effects of Static and Dynamic Strain Aging on Hydrogen Embrittlement in TWIP Steels Containing Al. <i>ISIJ International</i> , 2013, 53, 1268-1274.	0.6	24
87	Hydrogen embrittlement behavior of Inconel 718 alloy at room temperature. <i>Journal of Materials Science and Technology</i> , 2019, 35, 499-502.	5.6	24
88	Effect of hydrogen charging time on hydrogen blister and hydrogen-induced cracking of pure iron. <i>Corrosion Science</i> , 2021, 181, 109200.	3.0	24
89	The degradation of the corrosion resistance of sputter-deposited chromium-titanium alloys by nanoscale heterogeneity. <i>Corrosion Science</i> , 1999, 41, 1871-1890.	3.0	23
90	Comparison of Constant Load, SSRT and CSRT Methods for Hydrogen Embrittlement Evaluation Using Round Bar Specimens of High Strength Steels. <i>Tetsu-To-Hagane/Journal of the Iron and Steel Institute of Japan</i> , 2014, 100, 1298-1305.	0.1	23

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91	Transformation-assisted hydrogen desorption during deformation in steels: Examples of δ - and μ -Martensite. International Journal of Hydrogen Energy, 2019, 44, 30472-30477.	3.8	23
92	The corrosion behaviour of sputter-deposited amorphous Ni-Ti alloys in 1 M HCl. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 1994, 181-182, 1128-1132.	2.6	21
93	The effects of alloying elements on the passivity of sputter-deposited amorphous Al-Cr-Mo alloys in 1M HCl. Corrosion Science, 1996, 38, 1281-1294.	3.0	21
94	A study of the structure of a passive film using angle-resolved X-ray photo-electron spectroscopy. Corrosion Science, 1996, 38, 1127-1140.	3.0	21
95	The corrosion behavior of sputter-deposited amorphous Fe-Cr-Ni-Ta alloys in 12 M HCl. Corrosion Science, 1999, 41, 1849-1869.	3.0	21
96	Hydrogen Visualization in Steels Using Ag Decoration Method. Materials Transactions, 2015, 56, 793-797.	0.4	21
97	Effects of Alloying Elements Addition on Delayed Fracture Properties of Ultra High-Strength TRIP-Aided Martensitic Steels. Metals, 2020, 10, 6.	1.0	21
98	Effects of residual stress and plastic strain on hydrogen embrittlement of a stretch-formed TRIP-aided martensitic steel sheet. Corrosion Science, 2020, 177, 108957.	3.0	21
99	Warm tempforming effect on the hydrogen embrittlement of 1.8-GPa-class ultra-high-strength low-alloy steel. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2017, 703, 503-512.	2.6	20
100	Interfacial hydrogen localization in austenite/martensite dual-phase steel visualized through optimized silver decoration and scanning Kelvin probe force microscopy. Materials and Corrosion - Werkstoffe Und Korrosion, 2017, 68, 306-310.	0.8	20
101	Strain rate and hydrogen effects on crack growth from a notch in a Fe-high-Mn steel containing 1.1Åwt% solute carbon. International Journal of Hydrogen Energy, 2020, 45, 1125-1139.	3.8	19
102	Distribution of Hydrogen Occluded in Bolts Tightened beyond the Yield Strength and Exposed at a Seashore Site. Tetsu-To-Hagane/Journal of the Iron and Steel Institute of Japan, 2002, 88, 849-856.	0.1	19
103	Total Synthesis and Absolute Configuration of (-)-Sedacryptine. Synlett, 1996, 1996, 100-102.	1.0	18
104	The roles of tantalum and phosphorus in the corrosion behavior of Ni-Ta-P alloys in 12 M HCl. Corrosion Science, 1997, 39, 321-332.	3.0	18
105	An XPS study of passive films on sputter-deposited Cr-Nb alloys in 12 M HCl solution. Corrosion Science, 1998, 40, 821-838.	3.0	18
106	High-concentration carbon assists plasticity-driven hydrogen embrittlement in a Fe-high Mn steel with a relatively high stacking fault energy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2018, 717, 78-84.	2.6	18
107	Role of mill scale on corrosion behavior of steel rebars in mortar. Corrosion Science, 2020, 177, 108995.	3.0	18
108	Hydrogen embrittlement resistance of pre-strained ultra-high-strength low alloy TRIP-aided steel. International Journal of Fracture, 2020, 224, 253-260.	1.1	18

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109	Hydrogen Entry Behavior into Iron and Steel under Atmospheric Corrosion. ISIJ International, 2013, 53, 1062-1069.	0.6	18
110	The corrosion behaviour of sputter-deposited amorphous Mn-Ta alloys in 0.5 M NaCl solution. Corrosion Science, 1997, 39, 1965-1979.	3.0	17
111	XPS and electrochemical studies on the corrosion behaviour of sputter-deposited amorphous Mn-Nb alloys in a neutral chloride solution. Corrosion Science, 1998, 40, 1513-1531.	3.0	17
112	Effects of Oxygen Pressure and Chloride Ion Concentration on Corrosion of Iron in Mortar Exposed to Pressurized Humid Oxygen Gas. Journal of the Electrochemical Society, 2018, 165, C582-C589.	1.3	17
113	Pre-strain effects on critical stress and hydrogen content for hydrogen-induced quasi-cleavage fracture in a TRIP-aided bainitic ferrite steel: Martensitic transformation, matrix damage, and strain aging. International Journal of Hydrogen Energy, 2020, 45, 27920-27928.	3.8	17
114	Effect of austempering treatment on the microstructure and mechanical properties of 0.4C-1.5Si-1.5Mn TRIP-aided bainitic ferrite steel. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2021, 819, 141479.	2.6	17
115	Electrochemical and XPS studies of the effects of alloying elements on the corrosion behavior of amorphous Fe-Cr-Metalloid alloys in 9 M H ₂ SO ₄ . Corrosion Science, 1993, 34, 1829-1839.	3.0	16
116	The corrosion behavior of amorphous Fe-8Cr-13P-7C and Fe-8Cr-20P alloys in concentrated sulfuric acid. Corrosion Science, 1994, 36, 1537-1550.	3.0	16
117	The effect of phosphorus addition on the corrosion behavior of amorphous Ni-30Ta-P alloys in 12 M HCl. Corrosion Science, 1995, 37, 321-330.	3.0	16
118	Global CO ₂ Recycling. Zairyo To Kankyo/ Corrosion Engineering, 1996, 45, 614-620.	0.0	16
119	Corrosion-resistant amorphous aluminum alloys and structure of passive films. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 1997, 226-228, 920-924.	2.6	16
120	Effects of nanocrystalline heterogeneity on the corrosion behavior of sputter-deposited chromium-niobium alloys. Corrosion Science, 2000, 42, 361-382.	3.0	16
121	Interstitial Carbon Enhanced Corrosion Resistance of Fe-33Mn-xC Austenitic Steels: Inhibition of Anodic Dissolution. Journal of the Electrochemical Society, 2018, 165, C19-C26.	1.3	16
122	Hydrogen embrittlement and associated surface crack growth in fine-grained equiatomic CoCrFeMnNi high-entropy alloys with different annealing temperatures evaluated by tensile testing under in situ hydrogen charging. International Journal of Hydrogen Energy, 2021, 46, 33028-33038.	3.8	16
123	The effect of phosphorus addition on the corrosion behavior of amorphous Fe-8Cr-P alloys in 9M H ₂ SO ₄ . Corrosion Science, 1995, 37, 709-722.	3.0	15
124	Mn-W Oxide Anodes Prepared by Thermal Decomposition for Oxygen Evolution in Seawater Electrolysis. Materials Transactions, JIM, 1998, 39, 308-313.	0.9	15
125	The effect of magnesium on the corrosion behavior of sputter-deposited amorphous Al-Mg-Ti ternary alloys in a neutral chloride solution. Corrosion Science, 1993, 34, 27-40.	3.0	14
126	Change in the surface composition of amorphous Fe-Cr-Mo-P-C alloys during air exposure. Corrosion Science, 1995, 37, 331-341.	3.0	14

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127	High Temperature Sulfidation and Oxidation Behavior of Sputter-Deposited Al-refractory Metal Alloys. <i>Materials Transactions, JIM</i> , 1996, 37, 379-382.	0.9	14
128	Electrochemical and XPS studies of the passivation behavior of sputter-deposited Cr-Ta alloys in 12 M HCl. <i>Corrosion Science</i> , 1998, 40, 1587-1604.	3.0	14
129	Characterization of CO ₂ methanation catalysts prepared from amorphous Ni-Zr and Ni-Zr-rare earth element alloys. <i>Studies in Surface Science and Catalysis</i> , 1998, 114, 451-454.	1.5	14
130	Hydrogen mapping across a crevice: Effect of applied potential. <i>Scripta Materialia</i> , 2005, 53, 1219-1223.	2.6	14
131	Fretting fatigue behaviour of Ni-free high-nitrogen stainless steel in a simulated body fluid. <i>Science and Technology of Advanced Materials</i> , 2013, 14, 025002.	2.8	14
132	Quantitative Evaluation of Hydrogen Effects on Evolutions of Deformation-Induced $\hat{\mu}$ -Martensite and Damage in a High-Mn Steel. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2020, 51, 6184-6194.	1.1	14
133	An angle-resolved xps study of the in-depth structure of passivated amorphous aluminum alloys. <i>Corrosion Science</i> , 1997, 39, 1351-1364.	3.0	13
134	Strain rate sensitivity of hydrogen-assisted $\hat{\mu}$ -martensitic transformation and associated hydrogen embrittlement in high-Mn steel. <i>International Journal of Hydrogen Energy</i> , 2021, 46, 27221-27233.	3.8	13
135	Hydrogen Mapping Across Crevices. <i>Electrochemical and Solid-State Letters</i> , 2005, 8, B30.	2.2	12
136	Detection of hydrogen effusion before, during, and after martensitic transformation: Example of multiphase transformation-induced plasticity steel. <i>International Journal of Hydrogen Energy</i> , 2019, 44, 26028-26035.	3.8	12
137	Lowering Strain Rate Simultaneously Enhances Carbon- and Hydrogen-Induced Mechanical Degradation in an Fe-33Mn-1.1C Steel. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2019, 50, 1137-1141.	1.1	12
138	Application of an iridium complex for detecting hydrogen permeation through pure iron. <i>International Journal of Hydrogen Energy</i> , 2020, 45, 25580-25586.	3.8	12
139	Activation energy of hydrogen desorption from high-performance titanium oxide carrier-selective contacts with silicon oxide interlayers. <i>Current Applied Physics</i> , 2021, 21, 36-42.	1.1	12
140	The effect of phosphorus on the passivation behavior of Ni-10Ta-P alloys in 12 M HCl. <i>Corrosion Science</i> , 1995, 37, 1313-1324.	3.0	11
141	The effect of molybdenum on the stability of passive films formed on amorphous Fe-Cr-Mo-P-C alloys by potentiostatic polarization in deaerated 1 M HCl. <i>Corrosion Science</i> , 1997, 39, 589-603.	3.0	11
142	The effect of alloying elements on the corrosion behaviour of sputter-deposited amorphous Mn-Ta-Cr alloys in 1 M H ₂ SO ₄ . <i>Corrosion Science</i> , 1998, 40, 1491-1512.	3.0	11
143	Electrochemical and XPS studies of the corrosion behavior of sputter-deposited amorphous Fe-Cr-Ni-Nb alloys in 6 M HCl. <i>Corrosion Science</i> , 1999, 41, 1095-1118.	3.0	11
144	Discrete electrochemical transients of aluminium alloys generated by slurry jet impingement. <i>Journal Physics D: Applied Physics</i> , 2006, 39, 3157-3164.	1.3	11

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