Eiji Tada

List of Publications by Year
in descending order

99 papers	1,133 citations	471509 17 h-index	477307 29 g-index
100 all docs	100 docs citations	100 times ranked	733 citing authors

#	Article	IF	Citations
1	Long-term monitoring of atmospheric corrosion at weathering steel bridges by an electrochemical impedance method. Corrosion Science, 2014, 87, 80-88.	6.6	96
2	Distribution of pH during galvanic corrosion of a Zn/steel couple. Electrochimica Acta, 2004, 49, 1019-1026.	5.2	91
3	The spatial distribution of Zn2+ during galvanic corrosion of a Zn/steel couple. Electrochimica Acta, 2004, 49, 2279-2285.	5.2	73
4	Evaluation of hydrogen absorption into steel in automobile moving environments. Corrosion Science, 2015, 98, 430-437.	6.6	61
5	A Method for Determining the Corrosion Rate of a Metal under a Thin Electrolyte Film. Journal of the Electrochemical Society, 2015, 162, C135-C139.	2.9	46
6	Pitting corrosion of sensitised type 304 stainless steel under wetâ€“dry cycling condition. Corrosion Science, 2017, 118, 217-226.	6.6	46
7	Corrosion behaviour of austenitic stainless steels in carbonate melt at 923â€¯K under controlled CO2-O2 environment. Corrosion Science, 2018, 133, 310-317.	6.6	33
8	In Situ Analysis of Chloride Effect on Platinum Dissolution by a Channel-Flow Multi-Electrode System. Journal of the Electrochemical Society, 2014, 161, F845-F849.	2.9	31
9	In-Situ Monitoring of Platinum Dissolution under Potential Cycling by a Channel Flow Double Electrode. Journal of the Electrochemical Society, 2014, 161, F380-F385.	2.9	31
10	Influence of corrosion of SS316L bipolar plate on PEFC performance. Journal of Power Sources, 2013, 231, 226-233.	7.8	27
11	Effect of Chloride on Platinum Dissolution. Electrochimica Acta, 2014, 143, 161-167.	5.2	25
12	Influence of the degree of saturation on carbon steel corrosion in soil. Corrosion Science, 2021, 189, 109568.	6.6	25
13	Corrosion Behavior of Zinc under Thin Solution Films of Different Thicknesses. Journal of the Electrochemical Society, 2018, 165, C590-C600.	2.9	22
14	Electrochemical monitoring of the degradation of galvanized steel in simulated marine atmosphere. Corrosion Science, 2019, 147, 273-282.	6.6	22
15	Investigations of Cut-edge Corrosion of Galvanized Steels by the Scanning Vibrating Electrode Technique. ECS Transactions, 2008, 11, 91-105.	0.5	19
16	Effect of potential cycling on dissolution of equimolar Ptâ€“M (M: Co, Ni, Fe) alloys in sulfuric acid solution. Electrochimica Acta, 2012, 85, 268-272.	5.2	18
17	Optical visualization of concentration field of Zn2+ during galvanic corrosion of a Zn/steel couple. Corrosion Science, 2010, 52, 3421-3427.	6.6	17
18	Selective dissolution of binary Ptâ€“Co alloys of different compositions in sulphuric acid solution. Corrosion Science, 2012, 65, 512-519.	6.6	17

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19	Galvanic Corrosion of a Zn/steel Couple in Aqueous NaCl. ISIJ International, 2011, 51, 1882-1889.	1.4	16
20	Hydrogen Absorption Behavior into Zn and Znâ€“Al Coated Steels during Corrosion in Aqueous Solutions. ISIJ International, 2016, 56, 444-451.	1.4	16
21	Effects of Particulate Silica Coatings on Localized Corrosion Behavior of AISI 304SS under Atmospheric Corrosion Conditions. Journal of the Electrochemical Society, 2007, 154, C318.	2.9	15
22	Simultaneous Measurements of Corrosion Potential and Hydrogen Permeation Current in Atmospheric Corrosion of Steel. ISIJ International, 2019, 59, 1659-1666.	1.4	14
23	Monitoring of corrosion fatigue cracking using harmonic analysis of current responses induced by cyclic stressing. Corrosion Science, 2004, 46, 1549-1563.	6.6	13
24	Communicationâ€”Platinum Dissolution in Alkaline Electrolytes. Journal of the Electrochemical Society, 2016, 163, C853-C855.	2.9	13
25	Passivation Mechanism of Galvanized Steel Rebar in Fresh Concrete. ISIJ International, 2020, 60, 337-345.	1.4	13
26	Analysis of Effect of Automobile Moving Environment in Deicing Salt Spraying Area on Hydrogen Absorption into Steel Sheet by Using Temperature-compensating Hydrogen Absorption Monitoring System. Tetsu-To-Hagane/Journal of the Iron and Steel Institute of Japan, 2017, 103, 27-35.	0.4	13
27	Pitting Corrosion of Stainless Steel 430 in the Presence of Thin MgCl₂ Solution Films: Effects of Film Diameter and Thickness. Materials Transactions, 2015, 56, 1219-1225.	1.2	12
28	Pit Initiation and Repassivation of Stainless Steels Exposed to Cyclic Relative Humidity Changes. Journal of the Electrochemical Society, 2015, 162, C419-C425.	2.9	12
29	In-Situ Monitoring of Preferential Dissolution of Pt-50at.%Fe Alloy under Potential Cycling in 0.5 M H₂SO₄Solution Using a Channel Flow Triple Electrode. Journal of the Electrochemical Society, 2016, 163, F1558-F1563.	2.9	12
30	Fatigue, Cyclic Deformation and Microstructure. The Effects of Straining Frequency and Stress Ratio on Polarization Current Responded to Cyclic Strain in a Commercial Iron.. ISIJ International, 1997, 37, 1189-1196.	1.4	11
31	Evaluation of Hydrogen Absorption into Iron by Alternating Current Responses in an Electrochemical Hydrogen Permeation Cell. ISIJ International, 2016, 56, 424-430.	1.4	11
32	Hydrogen Absorption Behavior of Pre-Rusted Steels under an NaCl Droplet. Journal of the Electrochemical Society, 2019, 166, C243-C249.	2.9	11
33	A Mechanistic Study of Dissolution of Ptâ€“Fe Binary Alloys in 0.5 M H₂SO₄Solution by Channel Flow Triple Electrode. Journal of the Electrochemical Society, 2017, 164, C104-C112.	2.9	10
34	Electrochemical Evaluation of Corrosion Resistance of Trivalent Chromate Conversion Coatings with Different Organic Additives. ISIJ International, 2018, 58, 1316-1323.	1.4	10
35	In Situ Evaluation of Carbon Steel Corrosion under Salt Spray Test by Electrochemical Impedance Spectroscopy. Journal of the Electrochemical Society, 2020, 167, 101508.	2.9	10
36	Improvement of Pitting Corrosion Resistance of Type 430 Stainless Steel by Electrochemical Treatments in a Concentrated Nitric Acid. ISIJ International, 2014, 54, 199-205.	1.4	9

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37	Selective Dissolution of Pt–Co Binary Alloys and Surface Enrichment of Platinum in Sulfuric Acid Solution. Materials Transactions, 2014, 55, 1350-1355.	1.2	9
38	In Situ Analysis of Scan Rate Effects on Pt Dissolution Under Potential Cycling Using a Channel Flow Double Electrode. Electrocatalysis, 2015, 6, 179-184.	3.0	9
39	Enhancing Corrosion Resistance of Type 310S Stainless Steel in Carbonate Melt by Hot-Dip Aluminizing. Journal of the Electrochemical Society, 2018, 165, C403-C411.	2.9	9
40	EIS Characteristics of Galvanic Couple of Aluminum Alloy and High-strength Steel under Thin Solution Films. Journal of the Electrochemical Society, 2020, 167, 131507.	2.9	9
41	Electrochemical Behavior of AISI 304SS with Particulate Silica Coating in 0.1â€‚M NaCl. Journal of the Electrochemical Society, 2007, 154, C312.	2.9	8
42	Effect of Boron Distribution on the Intergranular Corrosion Resistance of UNS S32506 Duplex Stainless Steels. Journal of the Electrochemical Society, 2019, 166, C375-C381.	2.9	8
43	Cathodic protection of type 310S stainless steel in a chlorideâ€“bromide mixed molten salt at 923â€‰K. Corrosion Science, 2019, 157, 62-69.	6.6	8
44	Evaluation of Epoxy Coating for Ballast Tanks under Thermal Cycling by Electrochemical Impedance Spectroscopy. ISIJ International, 2016, 56, 2029-2036.	1.4	7
45	Communicationâ€”Cathodic Platinum Dissolution Studied Using a Channel Flow Double Electrode. Journal of the Electrochemical Society, 2016, 163, F421-F423.	2.9	7
46	Effect of pH on Hydrogen Absorption into Steel in Neutral and Alkaline Solutions. Materials Transactions, 2017, 58, 211-217.	1.2	7
47	Measurement of pH in a Thin Electrolyte Droplet Using the Kelvin Probe Technique. Materials Transactions, 2019, 60, 531-537.	1.2	7
48	Detection of corrosion fatigue cracking through current responses induced by cyclic stressing. Corrosion Science, 2007, 49, 248-254.	6.6	6
49	Effect of Oxygen Evolution on Platinum Dissolution in Acidic Solution. Materials Transactions, 2015, 56, 1214-1218.	1.2	6
50	Dissolution and Consequent Morphological Evolution of Electrodeposited Ptâ^'Cu Nanoparticles under Potential Cycling in 0.5 M H2SO4Solution. Journal of the Electrochemical Society, 2019, 166, C3170-C3178.	2.9	6
51	Effects of Fe³⁺ on the Corrosion Behavior of High-Purity Aluminum in Neutral Solutions Containing Cl^{â^'}. Materials Transactions, 2021, 62, 492-497.	1.2	6
52	Effect of Environmental Factors on Hydrogen Absorption into Steel Sheet under a Wet-dry Cyclic Corrosion Condition. ISIJ International, 2021, 61, 1229-1235.	1.4	6
53	Influence of Soil Particle Size, Covering Thickness, and pH on Soil Corrosion of Carbon Steel. ISIJ International, 2020, 60, 2533-2540.	1.4	6
54	Electrodeposition of PbO2Thin Films at the Interface of Two Immiscible Liquids. Chemistry Letters, 2000, 29, 1306-1307.	1.3	5

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55	Platinum Dissolution from Carbon Supported Nanoparticles. ECS Transactions, 2015, 69, 255-261.	0.5	5
56	Effect of Environmental Factors on Hydrogen Absorption into Steel Sheet under a Wet-dry Cyclic Corrosion Condition. Tetsu-To-Hagane/Journal of the Iron and Steel Institute of Japan, 2020, 106, 448-456.	0.4	5
57	Applicability of a Channel Flow Double Electrode as a Quantitative Monitoring Method of Pt Dissolution under Potential Cycling. ECS Transactions, 2013, 58, 1309-1320.	0.5	4
58	Monitoring the Early Stage of Degradation of Epoxy-Coated Steel for Ballast Tank by Electrochemical Impedance Spectroscopy. Materials Transactions, 2017, 58, 1687-1694.	1.2	4
59	Corrosion Behavior of Zinc Covered with Native Oxides Under Thin Solution Films. Corrosion, 2020, 76, 562-569.	1.1	4
60	Observation of Pit Initiation and Growth of Stainless Steel under a Chloride Solution Droplet â€"Effect of S Content on Pit Initiation, Growth, and Repassivationâ€". Materials Transactions, 2021, 62, 412-419.	1.2	4
61	Effect of Iron Rust on Hydrogen Uptake during Steel Corrosion under an Aqueous NaCl Droplet. ISIJ International, 2021, 61, 1186-1193.	1.4	4
62	Simultaneous Measurements of Polarization Resistance and Hydrogen Permeation Current of Iron in an Aqueous NaCl Droplet. ISIJ International, 2021, 61, 1222-1228.	1.4	4
63	Investigation of the Mechanism of the Corrosion Fatigue by Analysis of Cyclic Strain and Current Response. Nippon Kinzoku Gakkaishi/Journal of the Japan Institute of Metals, 1999, 63, 1075-1082.	0.4	4
64	Identification of Chromium-Depleted Area around Chromium Nitride Precipitates in Heat-affected Zone of Lean-Duplex Stainless Steel and <i>In-situ</i> Observation of Preferential Dissolution by EC-AFM. ISIJ International, 2022, 62, 568-576.	1.4	4
65	Electrochemical Oscillation During Electrodeposition of Zinc at the Interface Between Two Immiscible Liquids. Electrochemistry, 2007, 75, 731-733.	1.4	3
66	Time-Resolved Measurements of Dissolution Rates of Platinum and Palladium by a Solution Flow Cell Combined with ICP-MS. Materials Transactions, 2021, 62, 797-806.	1.2	3
67	New Analytical Method for Measurement of Hydrogen Partial Pressure Using a Tubular Hydrogen Pump-Gauge. Sensor Letters, 2008, 6, 246-249.	0.4	3
68	Recent Activities in ISIJ HLP Research Committee Corrosion Working Group: Proposal of pH Buffer Test Solution for Fitness-For-Purpose HIC Evaluations. ISIJ International, 2016, 56, 498-503.	1.4	3
69	2ï¼Žè…é£Ÿã®ç”ç©¶å^†é‡Žã«ãŠã‘ã‚‹é›»æ°—åŒ–å¦ã‚ãƒ³ãƒ”ãƒ¼ãƒ€ãƒ³ã‚¹ã®å^©ç”¨ã•è²¢. Electrochemistry, 2016, 84, 899-903.		
70	Identical-Location Scanning Electron Microscopy Observation of Surface Morphological Changes of Ptâ€"Cu Nanoparticles. Materials Transactions, 2020, 61, 1949-1957.	1.2	3
71	Growth Behavior and Structure of Copper Film Electrodeposited at the Interface Between Two Immiscible Liquids. Journal of the Electrochemical Society, 2007, 154, D617.	2.9	2
72	Ionic Distribution During Galvanic Corrosion of a Fe-Zn Couple. Journal of the Japan Society of Colour Material, 2007, 80, 385-389.	0.1	2

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73	The Influence of Fe Ion Emission from Metal Bipolar Plates on PEFC Performance. Electrochemistry, 2010, 78, 825-831.	1.4	2
74	Change in Interfacial Tension at the Interface Between Two Immiscible Liquids during Electrodeposition of Zinc. Electrochemical and Solid-State Letters, 2010, 13, D57.	2.2	2
75	â…¢. Advanced Electrochemical Methods for Corrosion Studyâ€•Kelvin Methodâ€•. Zairyo To Kankyo/ Corrosion Engineering, 2018, 67, 145-149.	0.2	2
76	Channel-flow triple electrode for simultaneous in situ detection of platinum and copper dissolution. Journal of Electroanalytical Chemistry, 2022, 904, 115906.	3.8	2
77	Effect of Creep Deformation on Inelastic Deformation of Electroplated Copper Foil. Nihon Kikai Gakkai Ronbunshu, A Hen/Transactions of the Japan Society of Mechanical Engineers, Part A, 2010, 76, 1351-1358.	0.2	1
78	Dissolution and the Consequent Surface Enrichment of Platinum in Ptâ€“Cu Binary Alloys under Potential Cycling. Journal of the Electrochemical Society, 2020, 167, 101504.	2.9	1
79	Effects of gap on galvanic corrosion behavior of aluminum alloy A5052/carbon steel SS400 couples in NaCl solutions. Keikinzoku/Journal of Japan Institute of Light Metals, 2021, 71, 96-101.	0.4	1
80	Analysis of the Polarization Current Responded to Cyclic Strain during Corrosion Fatigue of Iron. Nippon Kinzoku Gakkaishi/Journal of the Japan Institute of Metals, 1997, 61, 1249-1254.	0.4	1
81	é‹æ•ŒÆ–304ã,¹ãƒ†ãƒ³ãƒ¬ã‚¹é‹¼ã®å±€éƒ¨è…é£ŸæŒ™å‹•ã«ã¾ã¾ã¾ã™ã,‹å¿œåŠ›ä½œç”¨ä¸‹DSSCæ³•ã«ã,ˆã,‹æœè¨Ž. Zairyo To Kankyo/ Co	0.2	1
82	Corrosion Monitoring in Humidity-Controlled Environment Simulating Gamma Ray Irradiation. Zairyo To Kankyo/ Corrosion Engineering, 2020, 69, 107-111.	0.2	1
83	Identical-Location Scanning Electron Microscopy Observation of Surface Morphological Changes of Pt-Cu Nanoparticles. Nippon Kinzoku Gakkaishi/Journal of the Japan Institute of Metals, 2020, 84, 244-252.	0.4	1
84	Corrosion Monitoring of Carbon Steel in Non-Irradiated, Humidity-Controlled Environments Simulating Gamma-Ray Irradiation. Zairyo To Kankyo/ Corrosion Engineering, 2021, 70, 358-364.	0.2	1
85	åˆ†æ¥µæ›²ç·šÂ·ã,µã,¯ãƒªãƒƒã,¯ãƒœãƒ«ã,¿ãƒ³ãƒ¡ãƒˆãƒ¼ï¼‰è…é£ŸÂ·é˜²é£Ÿ. Electrochemistry, 2009, 77, 981-986.	1.4	0
86	Electrochemical Preparation and Mechanical Properties of Dog-bone Cu Foils. Electrochemistry, 2010, 78, 153-156.	1.4	0
87	Optical Visualization of Fluid Flow during Electrodeposition of Zn Deposits at the Interface between Two Immiscible Liquids. Hyomen Gijutsu/Journal of the Surface Finishing Society of Japan, 2010, 61, 779-785.	0.2	0
88	Hydrogen Absorption Behavior of Titanium Alloys by Cathodic Polarization. , 2013, , .		0
89	Effects of NaCl concentration on galvanic corrosion behavior of aluminum alloy A5052/carbon steel SS400 couple. Keikinzoku/Journal of Japan Institute of Light Metals, 2021, 71, 89-95.	0.4	0
90	Effects of Crevice Geometry on Corrosion Behavior of Steel in NaCl Solution. Zairyo To Kankyo/ Corrosion Engineering, 2021, 70, 10-17.	0.2	0

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91	Cut-Edge Corrosion Behavior of Prepainted 55% Alâ€“Zn Steel with Chromate-free Primers in Various Atmospheric Environments. ISIJ International, 2021, 61, 2620-2628.	1.4	0
92	Preparation and Properties of a Leaky Hydrogen Pump-Gauge. Sensor Letters, 2007, 5, 467-470.	0.4	0
93	OS0804 Fatigue of Electroplated Copper Foil by Ratchetting Deformation. The Proceedings of the Materials and Mechanics Conference, 2008, 2008, _OS0804-1_-_OS0804-2_.	0.0	0
94	1202 Effect of creep deformation in inelastic deformation of electroplated copper foil. The Proceedings of the JSME Annual Meeting, 2008, 2008.1, 145-146.	0.0	0
95	OS0520 Ratchet Deformation and Creep Constitutive Model of Electroplating Copper Foil. The Proceedings of the Materials and Mechanics Conference, 2009, 2009, 616-618.	0.0	0
96	Effect of Applied Stress on the Initiation of Localized Corrosion for Sensitized 304 Stainless Steel in Aqueous MgCl2 Solutions. Zairyo To Kankyo/ Corrosion Engineering, 2012, 61, 14-21.	0.2	0
97	Crack Detection by Harmonics Analysis of the Polarization Current during Corrosion Fatigue of Iron. Nippon Kinzoku Gakkaishi/Journal of the Japan Institute of Metals, 1998, 62, 276-282.	0.4	0
98	Observation of Pit Initiation and Growth of Stainless Steel under a Chloride Solution Dropletâ€•Effect of S Content on Pit Initiation, Growth and Repassivationâ€•. Zairyo To Kankyo/ Corrosion Engineering, 2019, 68, 347-354.	0.2	0
99	Time-Resolved Measurements of Dissolution Rates of Platinum and Palladium by a Solution Flow Cell combined with ICP-MS. Zairyo To Kankyo/ Corrosion Engineering, 2020, 69, 221-230.	0.2	0