

Masatoshi Sakairi

List of Publications by Year in descending order

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Version: 2024-02-01

93
papers

958
citations

471509

17
h-index

526287

27
g-index

93
all docs

93
docs citations

93
times ranked

446
citing authors

#	ARTICLE	IF	CITATIONS
1	Effect of Solution Temperatures on Electrochemical Behavior of Aluminum Alloys and Carbon Steel in 20 Mass% NaCl Solutions. <i>Zairyo To Kankyo/ Corrosion Engineering</i> , 2022, 71, 138-142.	0.2	0
2	Effects of a Corrosion Inhibitor on the Corrosion of Steels under Thin Solution Layers. <i>Zairyo To Kankyo/ Corrosion Engineering</i> , 2022, 71, 133-137.	0.2	0
3	Carbon nanohorn coating by electrodeposition accelerate bone formation on titanium implant. <i>Artificial Cells, Nanomedicine and Biotechnology</i> , 2021, 49, 20-29.	2.8	9
4	High throughput electrochemically driven metal microprinting with multicapillary droplet cell. <i>Materials Today Communications</i> , 2021, 26, 102053.	1.9	3
5	Hydrogen Permeation Behavior of Scratch Formed on Zn Coated Steels in Simulated Atmospheric Corrosion Environment. <i>ISIJ International</i> , 2021, 61, 1120-1126.	1.4	1
6	Hydrogen Absorption Mechanism into Iron in Aqueous Solution Including Metal Cations by Laser Ablation Tests and First-principles Calculations. <i>ISIJ International</i> , 2021, 61, 1085-1090.	1.4	3
7	Hydrogen Permeation Behavior of Scratch on Zn Coated Steel during 1000 Hours Wet and Dry Corrosion Test. <i>ISIJ International</i> , 2021, 61, 1127-1134.	1.4	0
8	Effect of Scratch Size on Hydrogen Permeation Behavior of Zinc Coated Steel during Wet and Dry Corrosion Tests. <i>ISIJ International</i> , 2021, 61, 1099-1103.	1.4	0
9	Hydrogen Permeation Behavior of Steel under Wet/dry Corrosion with Changes in Relative Humidity at the Dry Period. <i>ISIJ International</i> , 2021, 61, 1194-1200.	1.4	4
10	Local Electrochemical Measurements by 3D Printed Sf-MDC Equipped with Optical Microscope. <i>Journal of the Electrochemical Society</i> , 2021, 168, 061505.	2.9	3
11	Synergistic Effects of Metal Cations and Sodium Gluconate on the Inhibition of Freshwater Corrosion of Mild Steel. <i>Materials Transactions</i> , 2021, 62, 815-820.	1.2	3
12	Modeling and Simulation of Atmospheric Corrosion of Carbon Steel Considering Environmental Factor. <i>Tetsu-To-Hagane/Journal of the Iron and Steel Institute of Japan</i> , 2021, 107, 998-1003.	0.4	0
13	Influence of Metal Cations on Corrosion Behavior of Carbon Steel in Model Fresh Water. <i>Tetsu-To-Hagane/Journal of the Iron and Steel Institute of Japan</i> , 2021, 107, 1066-1073.	0.4	1
14	Preface to the Special Issue "Toward Optimization of Maintenance for Aging Infrastructures". <i>Tetsu-To-Hagane/Journal of the Iron and Steel Institute of Japan</i> , 2021, 107, 997-997.	0.4	0
15	Effect of Layer Thickness and Temperature Difference on Oxygen Diffusion Behavior in Thin Solution Layer Formed on Metal. <i>Tetsu-To-Hagane/Journal of the Iron and Steel Institute of Japan</i> , 2021, 107, 1029-1035.	0.4	1
16	3D printed solution flow type microdroplet cell for simultaneous area selective anodizing. <i>Journal of Advanced Research</i> , 2020, 26, 43-51.	9.5	4
17	Fast Fabrication of Localized Porous Alumina Patterns with 3D Printed Microdroplet Cell. <i>Journal of the Electrochemical Society</i> , 2020, 167, 081501.	2.9	7
18	Local Anodizing by Solution Flow Type Micro-Droplet Cell and its Application. <i>Hyomen Gijutsu/Journal of the Surface Finishing Society of Japan</i> , 2019, 70, 20-24.	0.2	0

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19	Effects of Zn ²⁺ Concentration on the Corrosion of Mild Steel in NaCl Aqueous Solutions. Journal of the Electrochemical Society, 2019, 166, C83-C90.	2.9	10
20	Corrosion inhibition of mild steel by metal cations in high pH simulated fresh water at different temperatures. Corrosion Science, 2019, 153, 100-108.	6.6	23
21	Auger electron spectroscopic analysis of corrosion products formed on A3003 aluminum alloy in model fresh water with different Zn ²⁺ concentration. Surface and Interface Analysis, 2019, 51, 1207-1213.	1.8	2
22	Effect of Anodizing Time on Multiscale Porous Structure of Ti-Al Alloy Microchannel Wall. Materials Transactions, 2019, 60, 519-524.	1.2	1
23	Electrochemistry for Corrosion Fundamentals. Springer Briefs in Molecular Science, 2018, , .	0.1	7
24	Influence of metal cations on inhibitor performance of gluconates in the corrosion of mild steel in fresh water. Corrosion Reviews, 2018, 36, 105-113.	2.0	6
25	Effects of metal cations on mild steel corrosion in 10 mM Cl ⁻ aqueous solution. Corrosion Science, 2018, 131, 17-27.	6.6	21
26	Advanced Electrochemical Methods for Corrosion Study - Detection of Permeated Hydrogen by Electrochemically. Zairyo To Kankyo/ Corrosion Engineering, 2018, 67, 191-196.	0.2	0
27	Local anodizing of aluminum with a solution flow-type micro-droplet cell and fabrication of through-hole-type porous alumina. Keikinzoku/Journal of Japan Institute of Light Metals, 2018, 68, 401-405.	0.4	3
28	Role of Metal Cations on Corrosion of Coated Steel Substrate in Model Aqueous Layer. ISIJ International, 2018, 58, 1616-1622.	1.4	7
29	Corrosion inhibition effects of metal cations on SUS304 in 0.5 M Cl ⁻ aqueous solution. Corrosion Science, 2018, 140, 8-17.	6.6	20
30	Micro-electrochemical Approach for Corrosion Study. Springer Briefs in Molecular Science, 2018, , 97-116.	0.1	1
31	Investigation of the Corrosion Inhibition Performance of Metal Cations for Mild Steel in Simulated Fresh Water at High Temperature. Zairyo To Kankyo/ Corrosion Engineering, 2018, 67, 457-461.	0.2	3
32	Inhibition Ability of Gluconates for Fresh Water Corrosion of Mild Steel Enhanced by Metal Cations. Journal of the Electrochemical Society, 2017, 164, C498-C504.	2.9	15
33	Changes of Oxygen Diffusion Behavior in NaCl Thin Films Formed on Zn Sheets with Temperature. Zairyo To Kankyo/ Corrosion Engineering, 2017, 66, 401-404.	0.2	2
34	Effect of anodizing time on multiscale porous structure of Ti-Al alloy microchannel wall. Keikinzoku/Journal of Japan Institute of Light Metals, 2017, 67, 589-594.	0.4	0
35	Hydrogen Permeation Behavior Changed with Size of Scratch Formed on Zinc Coated Steels During Wet-Dry Cycle Corrosion. Zairyo To Kankyo/ Corrosion Engineering, 2017, 66, 357-360.	0.2	2

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37	Effect of Surface Conditions and Relative Humidity on Hydrogen Permeation Behavior of Zinc Coated Steels during Wet and Dry Corrosion. ISIJ International, 2016, 56, 452-458.	1.4	16
38	Effect of Surface Conditions and Specimen Composition on Hydrogen Permeation Behavior of Coated and Uncoated Steels during Wet and Dry Corrosion at a Constant Dew Point. ISIJ International, 2016, 56, 465-471.	1.4	7
39	Formation of oxide films for high-capacitance aluminum electrolytic capacitor by liquid-phase deposition and anodizing. Surface and Interface Analysis, 2016, 48, 899-905.	1.8	3
40	Effect of a Kind of Metal Cation on Corrosion Mechanism of A3003 Aluminum Alloy in Tap Water. Materials Transactions, 2016, 57, 1539-1546.	1.2	7
41	Effects of metal cations on corrosion of mild steel in model fresh water. Corrosion Science, 2016, 111, 302-312.	6.6	31
42	Formation of layered structure porous-type anodic alumina films locally with a solution flow-type micro-droplet cell. Surface and Interface Analysis, 2016, 48, 921-925.	1.8	8
43	Development of an Area-selective Technique for Electrochemical Hydrogen Detection with Laser Local Activation. ISIJ International, 2016, 56, 483-486.	1.4	2
44	Surface Analysis of Al Alloys with X-ray Photoelectron and Auger Electron Spectroscopies. Zairyo To Kankyo/ Corrosion Engineering, 2015, 64, 281-284.	0.2	2
45	Reaction Area Selected Electrochemical Corrosion Test Methods. Zairyo To Kankyo/ Corrosion Engineering, 2015, 64, 66-72.	0.2	4
46	Investigation of Corrosion Behavior with Laser Irradiation and Electrochemical Techniques. Hyomen Kagaku, 2015, 36, 41-46.	0.0	1
47	The effects of film thickness and incorporated anions on pitting corrosion of aluminum with barrier-type oxide films formed in neutral borate and phosphate electrolytes. Journal of Solid State Electrochemistry, 2014, 18, 369-376.	2.5	7
48	Effect of metal cations on corrosion behavior and surface film structure of the A3003 aluminum alloy in model tap waters. Journal of Solid State Electrochemistry, 2014, 18, 325-332.	2.5	20
49	Nanostructured anodic-alumina-based dielectrics for high-frequency integral capacitors. Thin Solid Films, 2014, 550, 486-494.	1.8	39
50	Line Shaped Porous Type Anodic Oxide Film Formation on Aluminum by Sf-MDC with Coated Pt Wire Electrode. Hyomen Gijutsu/Journal of the Surface Finishing Society of Japan, 2014, 65, 385-390.	0.2	3
51	Fabrication of a meniscus microlens array made of anodic alumina by laser irradiation and electrochemical techniques. Electrochimica Acta, 2013, 94, 269-276.	5.2	26
52	Analysis of chemical compositions and morphology of surface films formed on 3003 aluminum alloy by immersion in different cation containing model tap waters. Surface and Interface Analysis, 2013, 45, 1517-1521.	1.8	8
53	Formation of alumina films with nano-structures by successive liquid phase deposition, anodizing, and substrate dissolution. Surface and Interface Analysis, 2013, 45, 1510-1516.	1.8	1
54	Influence of desiccation procedures on the surface wettability and corrosion resistance of porous aluminium anodic oxide films. Corrosion Science, 2012, 55, 332-338.	6.6	19

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55	SCC Mechanism Near Fusion Line of Low C-13%Cr Welded Joints. <i>Zairyo To Kankyo/ Corrosion Engineering</i> , 2011, 60, 196-201.	0.2	7
56	Local Cu Electro-Plating on Non-Conductive Substrate and Fabrication of Metal Structure with Solution Flow Type Micro-Droplet Cell. <i>Hyomen Gijutsu/Journal of the Surface Finishing Society of Japan</i> , 2011, 62, 511-515.	0.2	4
57	Repassivation behavior of titanium in artificial saliva investigated with a photon rupture method. <i>Electrochimica Acta</i> , 2011, 56, 1786-1791.	5.2	19
58	Electrochemical Detection of Hydrogen Generated by Atmospheric Corrosion of Scratches in Zinc Coated steels-Effect of the Scratched Area-. <i>Zairyo To Kankyo/ Corrosion Engineering</i> , 2011, 60, 435-437.	0.2	6
59	Fabrication of Cu Micro-rods with Co-axial Dual Capillary Solution Flow Type Droplet Cell and Electrodeposition with the Cell. <i>Electrochemistry</i> , 2010, 78, 118-121.	1.4	14
60	Effect of Cations on Corrosion Behavior of Aluminum Alloy in Model Tap Water. <i>Zairyo To Kankyo/ Corrosion Engineering</i> , 2010, 59, 330-331.	0.2	13
61	Area Selective Formation of Porous Type Aluminum Anodic Oxide Film by a Solution Flow-Type Micro Droplet Cell. <i>ECS Transactions</i> , 2010, 33, 57-63.	0.5	7
62	Development of a Low Solution Resistance Type Solution Flow Droplet Cell and Investigation of Its Electrochemical Performance. <i>ISIJ International</i> , 2010, 50, 1466-1470.	1.4	6
63	Influence of Wettability on Corrosion Resistance of Anodized Aluminum in NaCl Solution. <i>Zairyo To Kankyo/ Corrosion Engineering</i> , 2010, 59, 335-337.	0.2	2
64	Formation of Model Scratch on Pre-painted Coated Steel by Laser Machining and Its Wet/Dry Corrosion Behavior. <i>Zairyo To Kankyo/ Corrosion Engineering</i> , 2010, 59, 379-381.	0.2	4
65	Metallization of Oxide/Hydroxide Film of Aluminum: the Palladium Activation Techniques. <i>Hyomen Gijutsu/Journal of the Surface Finishing Society of Japan</i> , 2009, 60, 208-212.	0.2	1
66	Effect of Potential, Temperature, and Fluoride Ions on the Repassivation Kinetics of Titanium in Phosphate Buffered Saline Solution with the Photon Rupture Method. <i>Laser Chemistry</i> , 2009, 2009, 1-8.	0.5	4
67	Growth of porous type anodic oxide films at micro-areas on aluminum exposed by laser irradiation. <i>Electrochimica Acta</i> , 2009, 54, 7018-7024.	5.2	11
68	Micro- and Nano-Technologies Based on Anodizing of Aluminum-Combination of Laser Irradiation with Electrochemical Process. <i>Electrochemistry</i> , 2009, 77, 30-43.	1.4	2
69	Development of a novel microstructure fabrication method with co-axial dual capillary solution flow type droplet cells and electrochemical deposition. <i>Electrochimica Acta</i> , 2008, 54, 616-622.	5.2	22
70	Evaluation of Materials Surface Using Capillary Micro-cell Technique. <i>Hyomen Gijutsu/Journal of the Surface Finishing Society of Japan</i> , 2008, 59, 863-863.	0.2	4
71	Influence of Zinc Ions on Initial Stage of Localized Corrosion of Zn and Zn-Al Alloy Coated Steels with Photon Rupture Method. <i>ISIJ International</i> , 2008, 48, 988-993.	1.4	4
72	Nb ₂ O ₅ Deposition on Aluminum from NbCl ₅ -used Sol and Anodizing of Nb ₂ O ₅ -coated Al. <i>Electrochemistry</i> , 2007, 75, 573-575.	1.4	13

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73	Initial stage of localized corrosion in artificial pits formed with photon rupture on Zn-5 mass% Al alloy-coated steel. Corrosion Science, 2007, 49, 2362-2370.	6.6	5
74	Area-selective microscale metallization on porous anodic oxide film of aluminium. Electrochemistry Communications, 2007, 9, 1596-1601.	4.7	22
75	Initial Stage of Localized Corrosion in Artificial Pits Formed with Photon Rupture on 55mass%Al-Zn Coated Steels. ISIJ International, 2006, 46, 1218-1222.	1.4	7
76	Localized Dissolution of Zn-Al Alloy Coated Steel in Neutral Solution with Cl ⁻ by Photon Rupture Method. Tetsu-To-Hagane/Journal of the Iron and Steel Institute of Japan, 2006, 92, 68-74.	0.4	1
77	Structure, Morphology, and Dielectric Properties of Nanocomposite Oxide Films Formed by Anodizing of Sputter-Deposited Ta-Al Bilayers. Journal of the Electrochemical Society, 2004, 151, F257.	2.9	42
78	Change in the Structure and Dielectric Properties of Niobium Anodic Oxide Films during Potentiostatic Anodizing. Electrochemistry, 2004, 72, 624-632.	1.4	15
79	Initial Stage of Localized Corrosion of Al-9 mass% Si Coated Steels after Removal with a Photon Rupture Method in Solutions. Zairyo To Kankyo/ Corrosion Engineering, 2003, 52, 534-538.	0.2	5
80	Microstructure of Anodic Oxide Films on Valve Metal and Its Application to Micro- and Nano-Technology. Hyomen Gijutsu/Journal of the Surface Finishing Society of Japan, 2003, 54, 436-441.	0.2	3
81	Electroless Ni-P Deposition through Imperfections in Anodic Oxide Films on Aluminum and Al5052 Alloy. Electrochemistry, 2003, 71, 260-265.	1.4	7
82	Local Removal of Thick Anodic Oxide Film on Aluminum with A Photon Rupture Technique and Local Metal Deposition. Electrochemistry, 2003, 71, 920-926.	1.4	9
83	Formation of Al-Si Composite Oxide Films by Sol-Gel Coating/Anodizing. Materia Japan, 2003, 42, 911-911.	0.1	1
84	Anodizing of Aluminum Coated with Silicon Oxide by a Sol-Gel Method. Journal of the Electrochemical Society, 2001, 148, B473.	2.9	61
85	Formation of Composite Oxide Films on Aluminum by Sol-Gel Coating and Anodizing "For the Development of High Performance Aluminum Electrolytic Capacitors". Electrochemistry, 2001, 69, 407-413.	1.4	39
86	New Developments in Chemical Wet Processes. Fabrication of Printed Circuit Board by Anodizing of Aluminum.. Hyomen Kagaku, 2001, 22, 370-375.	0.0	7
87	Formation of Al-Zr composite oxide films on aluminum by sol-gel coating and anodizing. Journal of Electroanalytical Chemistry, 1999, 473, 250-255.	3.8	87
88	Anodizing of Aluminum Coated with Zirconium Oxide by a Sol-Gel Coating.. Hyomen Gijutsu/Journal of the Surface Finishing Society of Japan, 1999, 50, 359-366.	0.2	11
89	Anodizing of Aluminum Coated with Zirconium Oxide by a Sol-Gel Process I. Effect of Heat Treatment on the Formation of the Anodic Oxide Film. Electrochemistry, 1999, 67, 1243-1248.	1.4	18
90	Patterning of Aluminum Surface with Laser Irradiation and Nickel Electrodeposition. I. Removal of Anodic Oxide Films by Laser Irradiation.. Hyomen Gijutsu/Journal of the Surface Finishing Society of Japan, 1998, 49, 1220-1226.	0.2	10

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91	Formation and Breakdown of Anodic Oxide Films on Aluminum in Boric Acid/Borate Solutions. Journal of the Electrochemical Society, 1997, 144, 866-876.	2.9	89
92	Influence of Sulfide Inclusions on the Pit Embryo of Stainless Steels. Zairyo To Kankyo/ Corrosion Engineering, 1991, 40, 183-187.	0.2	2
93	The breakdown and repassivation of passive films on iron whisker and amorphous alloys. Corrosion Science, 1990, 31, 361-366.	6.6	7