Da-Hai

List of Publications by Year
in descending order

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		172207	276539
100	2,276	29	41
papers	citations	h-index	g-index

102	102	102	943
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Electrochemical measurements used for assessment of corrosion and protection of metallic materials in the field: A critical review. Journal of Materials Science and Technology, 2022, 112, 151-183.	5.6	134
2	Determination of corrosion types from electrochemical noise by phase space reconstruction theory. Electrochemistry Communications, 2012, 15, 88-92.	2.3	93
3	A mechanistic study on thiosulfate-enhanced passivity degradation of Alloy 800 in chloride solutions. Electrochimica Acta, 2013, 111, 510-525.	2.6	81
4	Reviewâ€"Electrochemical Noise Applied in Corrosion Science: Theoretical and Mathematical Models towards Quantitative Analysis. Journal of the Electrochemical Society, 2020, 167, 081507.	1.3	78
5	Electrochemical noise: a review of experimental setup, instrumentation and DC removal. Russian Journal of Electrochemistry, 2015, 51, 593-601.	0.3	73
6	Corrosion behavior of tinplate in NaCl solution. Transactions of Nonferrous Metals Society of China, 2012, 22, 717-724.	1.7	67
7	Review-material degradation assessed by digital image processing: Fundamentals, progresses, and challenges. Journal of Materials Science and Technology, 2020, 53, 146-162.	5.6	54
8	Measuring atmospheric corrosion with electrochemical noise: A review of contemporary methods. Measurement: Journal of the International Measurement Confederation, 2019, 138, 54-79.	2.5	49
9	Monododecyl Phosphate Film on LY12 Aluminum Alloy: pH-Controlled Self-Assembly and Corrosion Resistance. Journal of the Electrochemical Society, 2020, 167, 161510.	1.3	49
10	Review of micro-scale and atomic-scale corrosion mechanisms of second phases in aluminum alloys. Transactions of Nonferrous Metals Society of China, 2021, 31, 3205-3227.	1.7	48
11	Microstructure modification and improving corrosion resistance of laser surface quenched nickelâ€"aluminum bronze alloy. Corrosion Science, 2020, 174, 108744.	3.0	44
12	Detection of corrosion-induced metal release from tinplate cans using a novel electrochemical sensor and inductively coupled plasma mass spectrometer. Journal of Food Engineering, 2012, 113, 11-18.	2.7	42
13	Reviewâ€"Factors Influencing Sulfur Induced Corrosion on the Secondary Side in Pressurized Water Reactors (PWRs). Journal of the Electrochemical Society, 2019, 166, C49-C64.	1.3	42
14	Assessing atmospheric corrosion of metals by a novel electrochemical sensor combining with a thin insulating net using electrochemical noise technique. Sensors and Actuators B: Chemical, 2017, 252, 353-358.	4.0	41
15	Sensing corrosion within an artificial defect in organic coating using SECM. Sensors and Actuators B: Chemical, 2019, 280, 235-242.	4.0	41
16	Detection of Atmospheric Corrosion of Aluminum Alloys by Electrochemical Probes: Theoretical Analysis and Experimental Tests. Journal of the Electrochemical Society, 2019, 166, B1000-B1009.	1.3	40
17	pH Effect on Sulfur-Induced Passivity Degradation of Alloy 800 in Simulated Crevice Chemistries. Journal of the Electrochemical Society, 2014, 161, C201-C214.	1.3	38
18	Evaluation of temperature effect on the corrosion process of 304 stainless steel in high temperature water with electrochemical noise. Materials and Design, 2015, 82, 155-163.	3.3	38

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19	Combating marine corrosion on engineered oxide surface by repelling, blocking and capturing Clâ¯: A mini review. Corrosion Communications, 2021, 2, 1-7.	2.7	38
20	Sulfur induced corrosion (SIC) mechanism of steam generator (SG) tubing at micro scale: A critical review. Materials Chemistry and Physics, 2019, 233, 133-140.	2.0	36
21	Spray coated superamphiphobic surface with hot water repellency and durable corrosion resistance. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2020, 596, 124750.	2.3	36
22	Comparison Study of Self-Cleaning, Anti-Icing, and Durable Corrosion Resistance of Superhydrophobic and Lubricant-Infused Ultraslippery Surfaces. Langmuir, 2021, 37, 11061-11071.	1.6	35
23	Fast evaluation of degradation degree of organic coatings by analyzing electrochemical impedance spectroscopy data. Transactions of Tianjin University, 2012, 18, 15-20.	3.3	34
24	Identifying defect levels in organic coatings with electrochemical noise (EN) measured in Single Cell (SC) mode. Progress in Organic Coatings, 2019, 126, 53-61.	1.9	33
25	Reviewâ€"Electrochemical Probes and Sensors Designed for Time-Dependent Atmospheric Corrosion Monitoring: Fundamentals, Progress, and Challenges. Journal of the Electrochemical Society, 2020, 167, 037513.	1.3	33
26	Metal pitting corrosion characterized by scanning acoustic microscopy and binary image processing. Corrosion Science, 2020, 170, 108685.	3.0	33
27	Covalent surface modification of LY12 aluminum alloy surface by self-assembly dodecyl phosphate film towards corrosion protection. Progress in Organic Coatings, 2020, 143, 105638.	1.9	32
28	Understanding the interaction of thiosulfate with Alloy 800 in aqueous chloride solutions using SECM. Journal of Electroanalytical Chemistry, 2015, 744, 77-84.	1.9	31
29	Semiconductivity conversion of Alloy 800 in sulphate, thiosulphate, and chloride solutions. Corrosion Science, 2014, 87, 265-277.	3.0	30
30	Detection of SCC of 304 NG stainless steel in an acidic NaCl solution using electrochemical noise based on chaos and wavelet analysis. Russian Journal of Electrochemistry, 2016, 52, 560-575.	0.3	30
31	Enhancing the Stability of Passive Film on 304 SS by Chemical Modification in Alkaline Phosphateâ€"Molybdate Solutions. Transactions of Tianjin University, 2020, 26, 135-141.	3.3	29
32	Semiconductivity of steam generator tubing alloys in simulated crevice chemistries containing lead and sulphur. Corrosion Engineering Science and Technology, 2016, 51, 37-50.	0.7	28
33	Factors Influencing Passivity Breakdown on UNS N08800 in Neutral Chloride and Thiosulfate Solutions. Journal of the Electrochemical Society, 2017, 164, C94-C103.	1.3	28
34	A mechanistic study on sulfur-induced passivity degradation on Alloy 800 in simulated alkaline crevice chemistries at temperatures ranging from 21 Â°C to 300 Â°C. Corrosion Science, 2015, 100, 504-516.	3.0	27
35	Detection of corrosion degradation using electrochemical noise (EN): review of signal processing methods for identifying corrosion forms. Corrosion Engineering Science and Technology, 0, , 1-18.	0.7	27
36	Corrosion Behavior of Tinplates in a Functional Beverage. Wuli Huaxue Xuebao/ Acta Physico - Chimica Sinica, 2012, 28, 121-126.	2.2	25

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37	Temperature dependence of passivity degradation on UNS N08800 in near neutral crevice chemistries containing thiosulphate. Corrosion Science, 2018, 140, 260-271.	3.0	24
38	Fabrication of graded surfacing layer for the repair of failed H13 mandrel using submerged arc welding technology. Journal of Materials Processing Technology, 2018, 262, 182-188.	3.1	24
39	Atmospheric corrosion assessed from corrosion images using fuzzy Kolmogorovâ€“Sinai entropy. Corrosion Science, 2017, 120, 251-256.	3.0	23
40	Semiconductivity Conversion of Passive Films on Alloy 800 in Chloride Solutions Containing Various Concentrations of Thiosulfate. Journal of the Electrochemical Society, 2015, 162, C482-C486.	1.3	21
41	Correlation between Passivity Breakdown and Composition of Passive Film Formed on Alloy 690ÂStudied by Sputtering XPS and FIB-HRTEM. Journal of the Electrochemical Society, 2019, 166, C332-C344.	1.3	21
42	The Significance of Correlation Dimension Obtained from Electrochemical Noise. Electrochemistry, 2012, 80, 907-912.	0.6	19
43	Self-assembled (3-mercaptopropyl)trimethoxylsilane film modified with La2O3 nanoparticles for brass corrosion protection in NaCl solution. Journal of Alloys and Compounds, 2017, 702, 60-67.	2.8	19
44	Passivity degradation of alloy 800 in simulated crevice chemistries. Transactions of Tianjin University, 2015, 21, 234-243.	3.3	18
45	Sensing Atmospheric Corrosion of Carbon Steel and Low-Alloy Steel Using the Electrochemical Noise Technique: Effects of Weather Conditions. Protection of Metals and Physical Chemistry of Surfaces, 2017, 53, 1100-1113.	0.3	18
46	Field Corrosion Detection of Nuclear Materials using Electrochemical Noise Techinique. Protection of Metals and Physical Chemistry of Surfaces, 2018, 54, 340-346.	0.3	18
47	Degradation mechanism of lacquered tinplate in energy drink by in-situ EIS and EN. Journal Wuhan University of Technology, Materials Science Edition, 2013, 28, 367-372.	0.4	16
48	Passivation Degradation of Alloy 800 in Boiling Solution Containing Thiosulphate. Electrochimica Acta, 2017, 233, 13-25.	2.6	16
49	Reliability of the estimation of uniform corrosion rate of Q235B steel under simulated marine atmospheric conditions by electrochemical noise (EN) analyses. Measurement: Journal of the International Measurement Confederation, 2019, 148, 106946.	2.5	16
50	The Corrosion Behavior of Lacquered Tinplate in Functional Beverage. Advanced Materials Research, 0, 233-235, 1747-1751.	0.3	15
51	Mechanical Properties and Corrosion Resistance of SA508-4 Low Carbon Alloy Steel. Electrochemistry, 2013, 81, 262-268.	0.6	15
52	Experimental and computational study of zinc coordinated 1-hydroxyethylidene-1,1-diphosphonic acid self-assembled film on steel surface. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2021, 612, 126009.	2.3	15
53	Insights into the selective phase corrosion of as cast NiAl bronze alloy: Effect of electrical properties of each phaseâ€™s protective film. Journal of Alloys and Compounds, 2022, 891, 162008.	2.8	15
54	Degradation process of coated tinplate by phase space reconstruction theory. Transactions of Tianjin University, 2013, 19, 92-97.	3.3	14

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55	Detection of the corrosion degree of beverage cans using a novel electrochemical sensor. Anti-Corrosion Methods and Materials, 2013, 60, 153-159.	0.6	14
56	Pitting growth rate on Alloy 800 in chloride solutions containing thiosulphate: image analysis assessment. Corrosion Engineering Science and Technology, 2018, 53, 206-213.	0.7	14
57	Corrosion detection of tinplate cans containing coffee using EIS/EN sensor. Journal of Central South University, 2014, 21, 76-82.	1.2	13
58	A mechanistic study of sulfur-induced passivity degradation of Alloy 800 in a simulated alkaline crevice environment at 300 Â°C. Journal of Solid State Electrochemistry, 2015, 19, 3567-3578.	1.2	13
59	Corrosion Behavior of Alloy 690 in Simulated Alkaline Water Chemistries Containing Sulfur at 300 â„ƒ. Wuli Huaxue Xuebao/ Acta Physico - Chimica Sinica, 2015, 31, 467-475.	2.2	13
60	Characterization of pH Effect on Corrosion Resistance of Nuclear Steam Generator Tubing Alloy by In-situ Scanning Electrochemical Microscopy. Wuli Huaxue Xuebao/ Acta Physico - Chimica Sinica, 2014, 30, 59-66.	2.2	12
61	Characterization of passive film formed on 304 SS in simulated alkaline water chemistries containing sulfur at 300Â°C. Transactions of Tianjin University, 2015, 21, 554-561.	3.3	12
62	Electrochemical noise monitoring of the atmospheric corrosion of steels: identifying corrosion form using wavelet analysis. Corrosion Engineering Science and Technology, 0, , 1-9.	0.7	11
63	Tempering effects on the microstructure and properties of submerged arc surfacing layers of H13 steel. Journal of Materials Processing Technology, 2019, 269, 26-34.	3.1	11
64	Corrosion process detection of tinplate in deaerated functional beverage by EIS. Transactions of Tianjin University, 2013, 19, 235-240.	3.3	10
65	Hydrogen-enhanced Surface Reactivity of X80 Pipeline Steel observed by Scanning Electrochemical Microscopy. Electrochemistry, 2016, 84, 238-242.	0.6	10
66	Passivity degradation of nuclear materials in reduced sulfur environments: A review. Transactions of Tianjin University, 2016, 22, 189-201.	3.3	10
67	Development of an electrochemical sensor and measuring the shelf life of tinplate cans. Measurement: Journal of the International Measurement Confederation, 2019, 134, 500-508.	2.5	10
68	Identifying sulfide stress cracking stages on a HSLA pipeline steel in H2S environment by electrochemical noise. Journal of Electroanalytical Chemistry, 2020, 876, 114480.	1.9	10
69	AMechanistic Study on Semiconductivity Conversion of Passive Films under Varying Sulfate to Chloride Concentration Ratios. Wuli Huaxue Xuebao/ Acta Physico - Chimica Sinica, 2014, 30, 1465-1473.	2.2	9
70	Quantum chemical studies on the inhibitive effect of silane derivatives. Progress in Organic Coatings, 2019, 126, 92-96.	1.9	9
71	A novel electrochemical noise sensor applied to detect food safety. Russian Journal of Electrochemistry, 2014, 50, 599-602.	0.3	8
72	Detection of SCC on 304 stainless steel in neutral thiosulfate solutions using electrochemical noise based on chaos theory. Anti-Corrosion Methods and Materials, 2017, 64, 241-251.	0.6	8

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73	Atmospheric corrosion monitoring of field-exposed Q235B and T91 steels in Zhoushan offshore environment using electrochemical probes. Journal Wuhan University of Technology, Materials Science Edition, 2017, 32, 1433-1440.	0.4	8
74	Identifying defect size in organic coatings by electrochemical noise, galvanostatic step and potentiostatic step techniques. Journal of Electroanalytical Chemistry, 2020, 856, 113596.	1.9	8
75	Effect of chloride ions in acid and salt solutions on self-repairing ability and corrosion performance of titanium dioxide-fluorosiloxane superhydrophobic coating. Progress in Organic Coatings, 2020, 146, 105675.	1.9	8
76	Analysis of failure causes of epoxy-phenolic coated tinplate after boiling sterilization. Engineering Failure Analysis, 2022, 135, 106129.	1.8	8
77	Electrochemical Noise Study on the Corrosion Behavior of 304NG Stainless Steel in High Temperature Water. Electrochemistry, 2014, 82, 647-653.	0.6	7
78	Monitoring the Diffusion Layer During Passive Film Breakdown on Alloy 800 with Digital Holography. Acta Metallurgica Sinica (English Letters), 2015, 28, 1170-1174.	1.5	7
79	Effects of reduced sulfur on passive film properties of steam generator (SG) tubing: an overview. Anti-Corrosion Methods and Materials, 2019, 66, 317-326.	0.6	7
80	Measuring the atmospheric corrosion of Q235B and T91 steels using gray value, wavelet analysis and fuzzy Kolmogorovâ€“Sinai entropy. Anti-Corrosion Methods and Materials, 2019, 66, 621-630.	0.6	7
81	A novel approach used to study the corrosion susceptibility of metallic materials at a dynamic seawater/air interface. Corrosion Communications, 2022, 6, 62-66.	2.7	7
82	Pitting Corrosion Mechanism of Alloy 800 in Simulated Crevice Chemistries Containing Thiosulfate. Electrochemistry, 2016, 84, 585-596.	0.6	6
83	The Kolmogorovâ€“Sinai Entropy in the Setting of Fuzzy Sets for Atmospheric Corrosion Image Texture Analysis. Russian Journal of Electrochemistry, 2018, 54, 867-872.	0.3	6
84	Degradation behavior of Ti-6Al-4V alloys for dental applications in acidic artificial saliva containing fluoride ion. Journal Wuhan University of Technology, Materials Science Edition, 2017, 32, 926-934.	0.4	5
85	In-situ Study the Corrosion Degradation Mechanism of Tinplate in Salty Water by Scanning Electrochemical Microscopy. Russian Journal of Electrochemistry, 2018, 54, 216-223.	0.3	5
86	Quantification of the Atmospheric Corrosion of 304 and 2205 Stainless Steels Using Electrochemical Probes Based on Thevenin Electrochemical Equivalent Circuit Model. Transactions of Tianjin University, 2020, 26, 218-227.	3.3	5
87	Preparation and Thermal Conductivity of Epoxy Resin/Graphene-Fe3O4 Composites. Materials, 2021, 14, 2013.	1.3	5
88	Influence of Partial Rust Layer on the Passivation and Chloride-Induced Corrosion of Q235b Steel in the Carbonated Simulated Concrete Pore Solution. Metals, 2022, 12, 1064.	1.0	5
89	Characterization of a Stressed Passive Film Using Scanning Electrochemical Microscope and Point Defect Model. Transactions of the Indian Institute of Metals, 2017, 70, 1337-1347.	0.7	4
90	Sensing the Instant Corrosivity of Haze Using Electrochemical Probes by Electrochemical Noise Technique. Electrochemistry, 2017, 85, 784-789.	0.6	4

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91	Online Monitoring of the Atmospheric Corrosion of Aluminium Alloys Using Electrochemical Noise Technique. Russian Journal of Electrochemistry, 2018, 54, 623-628.	0.3	4
92	Effect of Process Parameters on Electrodeposited Nanocrystalline Chromium Coatings Investigated by an Orthogonal Experiment. Protection of Metals and Physical Chemistry of Surfaces, 2020, 56, 857-866.	0.3	4
93	Memory effect and recoverability of passive film degradation of Alloy 800 in simulated crevice chemistry. Nuclear Engineering and Design, 2014, 280, 57-61.	0.8	3
94	Preparation and Mechanical Properties of Layered Cu/Gr Composite Film. Coatings, 2021, 11, 502.	1.2	3
95	Effect of plastic deformation on mechanical properties and corrosion resistance of nickel-aluminum bronze. Anti-Corrosion Methods and Materials, 2021, 68, 473-480.	0.6	2
96	Corrosion analysis in the Al6061-T6 alloy exposed to anhydrous ethanol-gasoline blends using the Stockwell transform and the Shannon energy. Journal of Alloys and Compounds, 2022, 902, 163802.	2.8	2
97	Passivation degradation of Alloy 800 on nucleate boiling surface. Corrosion Engineering Science and Technology, 2017, 52, 391-396.	0.7	1
98	Effect of Linear Cutting on Corrosion Behaviors in 304 Stainless Steel. Advanced Materials Research, 2011, 189-193, 3570-3574.	0.3	0
99	pH Effect on Sulfur-Induced Passivity Degradation of Alloy 800 in Simulated Crevice Chemistries. ECS Transactions, 2014, 58, 55-64.	0.3	0
100	Effect of process parameters on the microstructure evolution of laser surface quenched Ni-Al bronze. International Journal of Modern Physics B, 2020, 34, 2040029.	1.0	0