

Li-Kun Xu

List of Publications by Year in descending order

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69
papers

1,745
citations

279798

23
h-index

289244

40
g-index

70
all docs

70
docs citations

70
times ranked

1818
citing authors

#	ARTICLE	IF	CITATIONS
1	Effectively enhanced photocatalytic hydrogen production performance of one-pot synthesized MoS ₂ clusters/CdS nanorod heterojunction material under visible light. <i>Chemical Engineering Journal</i> , 2018, 345, 404-413.	12.7	128
2	Investigation of aging behavior and mechanism of nitrile-butadiene rubber (NBR) in the accelerated thermal aging environment. <i>Polymer Testing</i> , 2016, 54, 59-66.	4.8	109
3	Self-healing properties of protective coatings containing isophorone diisocyanate microcapsules on carbon steel surfaces. <i>Corrosion Science</i> , 2014, 80, 528-535.	6.6	95
4	A comparative study on IrO ₂ /Ta ₂ O ₅ coated titanium electrodes prepared with different methods. <i>Electrochimica Acta</i> , 2009, 54, 1820-1825.	5.2	94
5	Self-healing mechanisms of water triggered smart coating in seawater. <i>Journal of Materials Chemistry A</i> , 2014, 2, 1914-1921.	10.3	93
6	A study on the deactivation of an IrO ₂ /Ta ₂ O ₅ coated titanium anode. <i>Corrosion Science</i> , 2003, 45, 2729-2740.	6.6	90
7	Free-standing, layered graphene monoliths for long-life supercapacitor. <i>Chemical Engineering Journal</i> , 2018, 350, 386-394.	12.7	67
8	Synthesis and characterisation of composite nanoparticles of mesoporous silica loaded with inhibitor for corrosion protection of Cu-Zn alloy. <i>Corrosion Science</i> , 2017, 120, 139-147.	6.6	60
9	Fabrication of an ultrathin 2D/2D C ₃ N ₄ /MoS ₂ heterojunction photocatalyst with enhanced photocatalytic performance. <i>Journal of Alloys and Compounds</i> , 2019, 808, 151681.	5.5	56
10	Microstructure and Electrochemical Properties of IrO ₂ -Ta ₂ O ₅ -Coated Titanium Anodes. <i>Journal of the Electrochemical Society</i> , 2003, 150, B254.	2.9	54
11	Enhanced visible light-driven activity of TiO ₂ nanotube array photoanode co-sensitized by AgInS ₂ photosensitizer and In ₂ S ₃ buffer layer. <i>Electrochimica Acta</i> , 2018, 269, 429-440.	5.2	54
12	Synthesis of isocyanate microcapsules and micromechanical behavior improvement of microcapsule shells by oxygen plasma treated carbon nanotubes. <i>Journal of Materials Chemistry A</i> , 2013, 1, 776-782.	10.3	46
13	Long-term field exposure corrosion behavior investigation of 316L stainless steel in the deep sea environment. <i>Ocean Engineering</i> , 2019, 189, 106405.	4.3	44
14	Electrochemical Surface Characterization of IrO ₂ -Ta ₂ O ₅ Coated Titanium Electrodes in Na ₂ SO ₄ Solution. <i>Journal of the Electrochemical Society</i> , 2003, 150, B288.	2.9	43
15	Sensing corrosion within an artificial defect in organic coating using SECM. <i>Sensors and Actuators B: Chemical</i> , 2019, 280, 235-242.	7.8	41
16	Enhanced visible-light-driven photocatalytic activities of 0D/1D heterojunction carbon quantum dot modified CdS nanowires. <i>Chinese Journal of Catalysis</i> , 2018, 39, 841-848.	14.0	38
17	Fabrication of a novel g-C ₃ N ₄ /Carbon nanotubes/Ag ₃ PO ₄ Z-scheme photocatalyst with enhanced photocatalytic performance. <i>Materials Letters</i> , 2019, 234, 183-186.	2.6	37
18	Identifying defect levels in organic coatings with electrochemical noise (EN) measured in Single Cell (SC) mode. <i>Progress in Organic Coatings</i> , 2019, 126, 53-61.	3.9	33

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19	Spatial resolution comparison of AC-SECM with SECM and their characterization of self-healing performance of hexamethylene diisocyanate trimer microcapsule coatings. <i>Journal of Materials Chemistry A</i> , 2015, 3, 5599-5607.	10.3	32
20	Corrosion Behavior of Q235 Steel Exposed in Deepwater of South China Sea. <i>Journal of Materials Engineering and Performance</i> , 2018, 27, 4489-4496.	2.5	31
21	Pitting corrosion of 2Cr13 stainless steel in deep-sea environment. <i>Journal of Materials Science and Technology</i> , 2021, 64, 187-194.	10.7	30
22	Enhanced Photoelectrochemical Cathodic Protection Performance of the Secondary Reduced Graphene Oxide Modified Graphitic Carbon Nitride. <i>Journal of the Electrochemical Society</i> , 2017, 164, C822-C830.	2.9	28
23	First-principle calculation of the electronic structures and optical properties of the metallic and nonmetallic elements-doped ZnO on the basis of photocatalysis. <i>Physica B: Condensed Matter</i> , 2019, 555, 53-60.	2.7	28
24	Challenges and solutions of cathodic protection for marine ships. <i>Corrosion Communications</i> , 2021, 2, 33-40.	6.0	27
25	Temperature dependence of passivity degradation on UNS N08800 in near neutral crevice chemistries containing thiosulphate. <i>Corrosion Science</i> , 2018, 140, 260-271.	6.6	24
26	Enhanced performance of microbial fuel cell using carbon microspheres modified graphite anode. <i>Energy Science and Engineering</i> , 2017, 5, 217-225.	4.0	23
27	Correlation between Passivity Breakdown and Composition of Passive Film Formed on Alloy 690 Studied by Sputtering XPS and FIB-HRTEM. <i>Journal of the Electrochemical Society</i> , 2019, 166, C332-C344.	2.9	21
28	Enhanced photoelectrochemical performance of hydrogen-treated SrTiO ₃ /TiO ₂ nanotube arrays heterojunction composite. <i>Journal of Electroanalytical Chemistry</i> , 2017, 807, 213-219.	3.8	19
29	Highly enhanced photoelectrochemical cathodic protection performance of the preparation of magnesium oxides modified TiO ₂ nanotube arrays. <i>Journal of Electroanalytical Chemistry</i> , 2019, 834, 138-144.	3.8	19
30	Influence of temperature on corrosion behavior, wettability, and surface conductivity of 304 stainless steel in simulated cathode environment of proton exchange membrane fuel cells. <i>International Journal of Hydrogen Energy</i> , 2021, 46, 22920-22931.	7.1	19
31	Photoelectrochemical Cathodic Protection Induced from Nanoflower-Structured WO ₃ Sensitized with CdS Nanoparticles. <i>Journal of the Electrochemical Society</i> , 2016, 163, C928-C936.	2.9	17
32	Service Lifetime Estimation of EPDM Rubber Based on Accelerated Aging Tests. <i>Journal of Materials Engineering and Performance</i> , 2017, 26, 1735-1740.	2.5	17
33	A Self-Cleaning Mucus-Like and Hierarchical Ciliary Bionic Surface for Marine Antifouling. <i>Advanced Engineering Materials</i> , 2020, 22, 1901198.	3.5	17
34	Corrosion resistance of a superhydrophobic dodecyltrimethoxysilane coating on magnesium alloy AZ31 fabricated by one-step electrodeposition. <i>New Journal of Chemistry</i> , 2021, 45, 14665-14676.	2.8	17
35	Reliability of the estimation of uniform corrosion rate of Q235B steel under simulated marine atmospheric conditions by electrochemical noise (EN) analyses. <i>Measurement: Journal of the International Measurement Confederation</i> , 2019, 148, 106946.	5.0	16
36	Corrosion behaviour investigation of 460 low alloy steels exposed in the natural deep-sea environment. <i>Corrosion Engineering Science and Technology</i> , 2019, 54, 485-492.	1.4	15

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37	Effectively enhanced photocatalytic degradation performance of the Ag-modified porous ZnO nanorod photocatalyst. <i>Journal of Materials Science: Materials in Electronics</i> , 2018, 29, 9301-9311.	2.2	14
38	Impact of inhibitor loaded mesoporous silica nanoparticles on waterborne coating performance in various corrosive environments. <i>Journal of Applied Polymer Science</i> , 2021, 138, .	2.6	13
39	Long-term corrosion behaviour of 1060 aluminium in deep-sea environment of South China Sea. <i>Corrosion Engineering Science and Technology</i> , 2021, 56, 327-340.	1.4	13
40	High-strength double network hydrogels as potential materials for artificial 3D scaffold of cell migration in vitro. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2018, 549, 50-57.	4.7	12
41	Development of an electrochemical sensor and measuring the shelf life of tinplate cans. Measurement: <i>Journal of the International Measurement Confederation</i> , 2019, 134, 500-508.	5.0	10
42	A Superjunction Schottky Barrier Diode With Trench Metal-oxide-Semiconductor Structure. <i>IEEE Electron Device Letters</i> , 2012, 33, 1744-1746.	3.9	9
43	Preparation and corrosion resistance of ZnO/CeO ₂ composite films. <i>Surface Engineering</i> , 2016, 32, 32-37.	2.2	8
44	Identifying defect size in organic coatings by electrochemical noise, galvanostatic step and potentiostatic step techniques. <i>Journal of Electroanalytical Chemistry</i> , 2020, 856, 113596.	3.8	8
45	Measuring the atmospheric corrosion of Q235B and T91 steels using gray value, wavelet analysis and fuzzy Kolmogorov-Sinai entropy. <i>Anti-Corrosion Methods and Materials</i> , 2019, 66, 621-630.	1.5	7
46	Corrosion Behavior of T2 and B30 Cu-Ni Alloy at Different Seawater Depths of the South China Sea. <i>Journal of Materials Engineering and Performance</i> , 2021, 30, 6027-6038.	2.5	7
47	Electrochemical Behavior of Mg-Al-Zn-Ga Alloy as Anode Materials in 3.5wt.% NaCl Solution. <i>Journal of Materials Engineering and Performance</i> , 2018, 27, 5460-5469.	2.5	6
48	Corrosion mechanism of copper immersed in ammonium sulfate solution. <i>Materials and Corrosion - Werkstoffe Und Korrosion</i> , 2018, 69, 1597-1608.	1.5	6
49	Investigation of acidity on corrosion behavior and surface properties of SS304 in simulated PEMFC cathode environments. <i>International Journal of Hydrogen Energy</i> , 2022, 47, 22938-22951.	7.1	6
50	Evolution of Calcareous Deposits and Passive Film on 304 Stainless Steel with Cathodic Polarization in Sea Water. <i>Coatings</i> , 2018, 8, 194.	2.6	5
51	Peroxidase-like and oxidase-like nanozyme activities of reusable Mn-Co-Se/Ni foam for antibacterial application. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2021, 626, 127010.	4.7	5
52	Enhancement of corrosion resistance and lubricating performance of electrodeposited Ni-Co coating composited with mesoporous silica nanoparticles and silicone oil impregnation. <i>Materials Chemistry and Physics</i> , 2022, 282, 125929.	4.0	5
53	Properties of SS304 Modified by Nickel-Cobalt Alloy Coating with Cauliflower-Shaped Micro/Nano Structures in Simulated PEMFC Cathode Environment. <i>Nanomaterials</i> , 2022, 12, 1976.	4.1	4
54	Self-Healing Ability of Smart Coating for Anticorrosion of Reinforcing Steel. <i>Applied Mechanics and Materials</i> , 0, 357-360, 680-683.	0.2	2

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55	Quantitative Determination of the Amount of Copper(I) Oxide in the Corrosion Products Formed on Copper by the Potassium Permanganate Titration Method. International Journal of Electrochemical Science, 2017, 12, 11556-11570.	1.3	2
56	Electrochemical Characterization on the Potential Dependent Stress Corrosion Cracking Mechanism of 10Ni8CrMoV High Strength Steel. ISIJ International, 2017, 57, 888-894.	1.4	2
57	Pitting Corrosion of 10Ni8CrMoV High-Strength Steel Induced by a Potential Perturbation. Journal of Materials Engineering and Performance, 2018, 27, 5794-5802.	2.5	2
58	Fabrication of Ag-modified porous ZnMgO nanorods with enhanced photocatalytic performance. Journal of Materials Science: Materials in Electronics, 2018, 29, 16962-16970.	2.2	2
59	In situ study of the deep sea electrochemical performance of aluminum-based galvanic anodes. Materials and Corrosion - Werkstoffe Und Korrosion, 2020, 71, 1946-1956.	1.5	2
60	Fabrication of zinc-aluminum composite coating on stainless steel with long-term protection durability. Philosophical Magazine Letters, 2020, 100, 55-62.	1.2	2
61	The Deactivation Mechanism of RuO ₂ -IrO ₂ -SnO ₂ /Ti Anodes Under Alternative Current Electrolysis Condition. , 0, , .		2
62	Electrochemical Impedance Spectroscopy (EIS) Study of Ru-La Oxide Coatings in NaCl Solution. Acta Chimica Sinica, 2012, 70, 1166.	1.4	2
63	IrO ₂ -Ta ₂ O ₅ Anode for Oxygen Evolution with TaO _x Interlayer Prepared by Thermal Decomposition in Inert Atmosphere. Journal of the Electrochemical Society, 2022, 169, 046516.	2.9	2
64	Performance of SS304 Modified by Silver Micro/Nano-Dendrite Coating with Hot-Water Super-Repellency in Simulated PEMFC Cathode Environment. Nanomaterials, 2022, 12, 1726.	4.1	2
65	Corrosion Inhibition from Thiol Self-assembly Layer: A High Pressure Perspective. Journal Wuhan University of Technology, Materials Science Edition, 2018, 33, 1334-1343.	1.0	1
66	The Promotional Effect of Lanthanum Additive on the Apparent Electrocatalysis of Ti/(Ru,Ir)O _x Electrode. Advanced Materials Research, 2011, 299-300, 596-599.	0.3	0
67	Effect of electrolysis temperature on surface morphology and stability of Ti/RuO ₂ -IrO ₂ -SnO ₂ anode. Materials Research Innovations, 2014, 18, S4-665-S4-668.	2.3	0
68	Comparative Study on Kinetics of Chlorine Evolution Reaction for Ru-La-O Oxide Coatings. Wujia Cailiao Xuebao/Journal of Inorganic Materials, 2015, 30, 493.	1.3	0
69	Self-healing performance of water triggered smart coating characterized by local electrochemical techniques. , 0, , .		0