

# Jun Liang

## List of Publications by Year in descending order

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103  
papers

4,263  
citations

93792

39  
h-index

139680

61  
g-index

103  
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103  
docs citations

103  
times ranked

3232  
citing authors

#	ARTICLE	IF	CITATIONS
1	Corrosion and tribocorrosion resistance of MAO-based composite coating on AZ31 magnesium alloy. <i>Journal of Magnesium and Alloys</i> , 2022, 10, 3406-3417.	5.5	32
2	Evolution in microstructure features and properties of Mo-containing Fe-Cr-Ni-B-Si composite coatings by laser cladding. <i>Materials Characterization</i> , 2022, 188, 111926.	1.9	7
3	Fluoride-dominated coating on Mg alloys fabricated by plasma electrolytic process in ambient non-aqueous electrolyte. <i>Surface Engineering</i> , 2021, 37, 360-364.	1.1	11
4	Robust and non-fluorinated superhydrophobic meshes with controllable pore size for high-efficiency water-in-oil emulsion separation. <i>Separation Science and Technology</i> , 2021, 56, 1699-1709.	1.3	3
5	Effect of V and Cr transition layers on microstructure and mechanical properties of Ni-based coating on titanium alloy fabricated by laser cladding. <i>Surface and Coatings Technology</i> , 2021, 405, 126734.	2.2	18
6	A chemical-free sealing method for Micro-arc oxidation coatings on AZ31 Mg alloy. <i>Surface and Coatings Technology</i> , 2021, 406, 126655.	2.2	39
7	Ni-Al nanocomposite coating electrodeposited from deep eutectic solvent. <i>Surface and Coatings Technology</i> , 2021, 405, 126587.	2.2	9
8	Preparation and Characterization of Hydroxyapatite Coating on AZ31 Magnesium Alloy Induced by Carboxymethyl Cellulose-Dopamine. <i>Materials</i> , 2021, 14, 1849.	1.3	8
9	Preparation and Characterization of a Sol-Gel AHEC Pore-Sealing Film Prepared on Micro Arc Oxidized AZ31 Magnesium Alloy. <i>Metals</i> , 2021, 11, 784.	1.0	2
10	Wear and Corrosion Resistance of Plasma Electrolytic Oxidation Coatings on 6061 Al Alloy in Electrolytes with Aluminate and Phosphate. <i>Materials</i> , 2021, 14, 4037.	1.3	11
11	Effects of NiCr intermediate layer on microstructure and tribological property of laser cladding Cr <sub>3</sub> C <sub>2</sub> reinforced Ni <sub>60</sub> A-Ag composite coating on copper alloy. <i>Optics and Laser Technology</i> , 2021, 142, 106963.	2.2	23
12	Preparation and characterization of laser clad FeCrMoBSi amorphous composite coatings. <i>Surface and Coatings Technology</i> , 2021, 423, 127520.	2.2	13
13	Influence of MoSi <sub>2</sub> on the microstructure and elevated-temperature wear properties of Inconel 718 coating fabricated by laser cladding. <i>Surface and Coatings Technology</i> , 2021, 424, 127665.	2.2	21
14	Dual self-healing composite coating on magnesium alloys for corrosion protection. <i>Chemical Engineering Journal</i> , 2021, 424, 130551.	6.6	64
15	Plasma electrolytic fluorination on Al alloys: Coating growth and plasma discharge behavior. <i>Ceramics International</i> , 2021, 47, 29758-29770.	2.3	6
16	Plasma electrolytic fluorination on Mg alloys: coating growth and plasma discharge behaviour. <i>Surface Engineering</i> , 2021, 37, 1373-1387.	1.1	1
17	Template-free electrodeposition of ultra-high adhesive superhydrophobic Zn/Zn stearate coating with ordered hierarchical structure from deep eutectic solvent. <i>Surface and Coatings Technology</i> , 2020, 403, 126267.	2.2	18
18	Microstructure evolution and wear resistance of in-situ nanoparticles reinforcing Fe-based amorphous composite coatings. <i>Surfaces and Interfaces</i> , 2020, 21, 100652.	1.5	12

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19	Y-doped TiO <sub>2</sub> coating with superior bioactivity and antibacterial property prepared via plasma electrolytic oxidation. <i>Materials and Design</i> , 2020, 192, 108758.	3.3	35
20	Influence of Cu <sup>2+</sup> ions on the Corrosion Resistance of AZ31 Magnesium Alloy with Microarc Oxidation. <i>Materials</i> , 2020, 13, 2647.	1.3	7
21	Facile preparation of petaliform-like superhydrophobic meshes via moisture etching for oil-water separation. <i>Surface and Coatings Technology</i> , 2020, 399, 126124.	2.2	21
22	Ni-Ti Nanocomposite Coatings Electro-Codeposited from Deep Eutectic Solvent Containing Ti Nanoparticles. <i>Journal of the Electrochemical Society</i> , 2020, 167, 042502.	1.3	8
23	New Method for the Corrosion Resistance of AZ31 Mg Alloy with a Porous Micro-Arc Oxidation Membrane as an Ionic Corrosion Inhibitor Container. <i>Langmuir</i> , 2019, 35, 1134-1145.	1.6	62
24	Effect of severe shot peening on corrosion behavior of AZ31 and AZ91 magnesium alloys. <i>Journal of Alloys and Compounds</i> , 2019, 770, 500-506.	2.8	78
25	Galvanic deposition of Ni on Al alloy from a choline chloride based ionic liquid for electroless Ni-P pretreatment. <i>Materials Research Express</i> , 2019, 6, 1165a6.	0.8	3
26	The effect of ceramic friction pairs on the tribocorrosion behavior of AISI 304 stainless steel in seawater. <i>Industrial Lubrication and Tribology</i> , 2019, 71, 779-786.	0.6	9
27	Electrodeposition of composition controllable Zn Ni coating from water modified deep eutectic solvent. <i>Surface and Coatings Technology</i> , 2019, 366, 138-145.	2.2	28
28	Preparation and Characterization of Fluoride-Incorporated Plasma Electrolytic Oxidation Coatings on the AZ31 Magnesium Alloy. <i>Coatings</i> , 2019, 9, 826.	1.2	11
29	Effects of beta phase on the growth behavior of plasma electrolytic oxidation coating formed on magnesium alloys. <i>Journal of Alloys and Compounds</i> , 2019, 784, 414-421.	2.8	24
30	Synergistic effect of hydrophobic film and porous MAO membrane containing alkynol inhibitor for enhanced corrosion resistance of magnesium alloy. <i>Surface and Coatings Technology</i> , 2019, 357, 515-525.	2.2	51
31	Wear and corrosion resistance of Co-P coatings: the effects of current modes. <i>RSC Advances</i> , 2018, 8, 895-903.	1.7	14
32	A comparative study of characterisation of plasma electrolytic oxidation coatings on carbon steel prepared from aluminate and silicate electrolytes. <i>Surface Engineering</i> , 2018, 34, 54-62.	1.1	13
33	Superhydrophilic nickel-coated meshes with controllable pore size prepared by electrodeposition from deep eutectic solvent for efficient oil/water separation. <i>Separation and Purification Technology</i> , 2018, 192, 21-29.	3.9	39
34	Triboelectrification based on double-layered polyaniline nanofibers for self-powered cathodic protection driven by wind. <i>Nano Research</i> , 2018, 11, 1873-1882.	5.8	73
35	Simultaneous electropolishing and electrodeposition of aluminum in ionic liquid under ambient conditions. <i>Applied Surface Science</i> , 2018, 434, 918-921.	3.1	23
36	Electropolishing of Al and Al alloys in AlCl <sub>3</sub> /trimethylamine hydrochloride ionic liquid. <i>Surface and Coatings Technology</i> , 2018, 335, 72-79.	2.2	17

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37	Comparison of Corrosion Resistance and Cytocompatibility of MgO and ZrO <sub>2</sub> Coatings on AZ31 Magnesium Alloy Formed via Plasma Electrolytic Oxidation. <i>Coatings</i> , 2018, 8, 441.	1.2	15
38	Influence of Silicate Concentration in Electrolyte on the Growth and Performance of Plasma Electrolytic Oxidation Coatings Prepared on Low Carbon Steel. <i>Journal of Materials Engineering and Performance</i> , 2018, 27, 2345-2353.	1.2	6
39	In situ growth of single-crystal TiO <sub>2</sub> nanorod arrays on Ti substrate: Controllable synthesis and photoelectro-chemical water splitting. <i>Nano Research</i> , 2017, 10, 1021-1032.	5.8	20
40	Correlations between the growth mechanism and properties of micro-arc oxidation coatings on titanium alloy: Effects of electrolytes. <i>Surface and Coatings Technology</i> , 2017, 316, 162-170.	2.2	105
41	Enhancement of photoelectrochemical and photocathodic protection properties of TiO <sub>2</sub> nanotube arrays by simple surface UV treatment. <i>Applied Surface Science</i> , 2017, 394, 440-445.	3.1	59
42	Characterization of plasma electrolytic oxidation coating on low carbon steel prepared from silicate electrolyte with Al nanoparticles. <i>Ceramics International</i> , 2017, 43, 16851-16858.	2.3	16
43	Characterization and properties of plasma electrolytic oxidation coating on low carbon steel fabricated from aluminate electrolyte. <i>Vacuum</i> , 2017, 144, 207-216.	1.6	36
44	A protocol for fast electroless Ni-P on Al alloy at medium-low temperature accelerated by hierarchically structured Cu immersion layer. <i>Surface and Coatings Technology</i> , 2017, 309, 67-74.	2.2	14
45	RGDC Peptide-Induced Biomimetic Calcium Phosphate Coating Formed on AZ31 Magnesium Alloy. <i>Materials</i> , 2017, 10, 358.	1.3	16
46	Preparation and Characterization of Aminated Hydroxyethyl Cellulose-Induced Biomimetic Hydroxyapatite Coatings on the AZ31 Magnesium Alloy. <i>Metals</i> , 2017, 7, 214.	1.0	16
47	Preparation of Hydroxyapatite/Tannic Acid Coating to Enhance the Corrosion Resistance and Cytocompatibility of AZ31 Magnesium Alloys. <i>Coatings</i> , 2017, 7, 105.	1.2	37
48	Characterization and corrosion behavior of plasma electrolytic oxidation coated AZ91-T6 magnesium alloy. <i>Surface and Coatings Technology</i> , 2016, 304, 179-187.	2.2	41
49	A novel multifunctional PTFE/PEO composite coating prepared by one-step method. <i>Surface and Coatings Technology</i> , 2016, 299, 90-95.	2.2	37
50	Conducting polymer PPy nanowire-based triboelectric nanogenerator and its application for self-powered electrochemical cathodic protection. <i>Chemical Science</i> , 2016, 7, 6477-6483.	3.7	94
51	Hydrogenated TiO <sub>2</sub> nanotube arrays with enhanced photoelectrochemical property for photocathodic protection under visible light. <i>Materials Letters</i> , 2016, 185, 81-84.	1.3	34
52	Electrodeposition of homogenous Ni/SiO <sub>2</sub> nanocomposite coatings from deep eutectic solvent with in-situ synthesized SiO <sub>2</sub> nanoparticles. <i>Electrochimica Acta</i> , 2016, 222, 1272-1280.	2.6	36
53	Corrosion behaviour of plasma electrolytic oxidation coated AZ91 Mg alloy: influence of laser surface melting pretreatment. <i>RSC Advances</i> , 2016, 6, 70343-70351.	1.7	8
54	Proton irradiation effects on the structural and tribological properties of polytetrafluoroethylene. <i>Chinese Journal of Polymer Science (English Edition)</i> , 2016, 34, 1448-1455.	2.0	4

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55	Characterization of AZ31 magnesium alloy by duplex process combining laser surface melting and plasma electrolytic oxidation. <i>Applied Surface Science</i> , 2016, 382, 47-55.	3.1	39
56	Tribological behavior and mechanism of self-lubricating wear-resistant composite coatings fabricated by one-step plasma electrolytic oxidation. <i>Tribology International</i> , 2016, 97, 97-107.	3.0	54
57	Microstructure and corrosion behaviour of laser surface melting treated WE43 magnesium alloy. <i>RSC Advances</i> , 2016, 6, 30642-30651.	1.7	18
58	Electro-codeposition of Ni-SiO <sub>2</sub> nanocomposite coatings from deep eutectic solvent with improved corrosion resistance. <i>Applied Surface Science</i> , 2016, 367, 449-458.	3.1	57
59	Electrochemical deposition of Mg(OH) <sub>2</sub> /GO composite films for corrosion protection of magnesium alloys. <i>Journal of Magnesium and Alloys</i> , 2015, 3, 231-236.	5.5	26
60	Electrodeposition and characterization of Ni-SiC composite coatings from deep eutectic solvent. <i>RSC Advances</i> , 2015, 5, 44933-44942.	1.7	37
61	Improvement of corrosion protective performance of organic coating on low carbon steel by PEO pretreatment. <i>Progress in Organic Coatings</i> , 2015, 89, 260-266.	1.9	38
62	Effects of N-Doped TiO <sub>2</sub> Thin Films on Corrosion Resistance of Stainless Steel Orthodontic Brackets in Artificial Saliva. <i>Corrosion</i> , 2015, 71, 784-794.	0.5	6
63	Enhanced corrosion performance of Zn coating by incorporating graphene oxide electrodeposited from deep eutectic solvent. <i>RSC Advances</i> , 2015, 5, 60698-60707.	1.7	53
64	Effect of laser surface melting on microstructure and corrosion characteristics of AM60B magnesium alloy. <i>Applied Surface Science</i> , 2015, 343, 133-140.	3.1	72
65	Preparation and characterization of dopamine-induced biomimetic hydroxyapatite coatings on the AZ31 magnesium alloy. <i>Surface and Coatings Technology</i> , 2015, 281, 82-88.	2.2	77
66	Growth Kinetics of Copper Replacement Deposition on Al and Al-Si from a Deep Eutectic Solvent. <i>Journal of the Electrochemical Society</i> , 2015, 162, D515-D519.	1.3	9
67	Corrosion and tribocorrosion performance of multilayer diamond-like carbon film in NaCl solution. <i>RSC Advances</i> , 2015, 5, 104829-104840.	1.7	63
68	Copper Galvanic Replacement on Aluminum from a Choline Chloride Based Ionic Liquid: Effect of Thiourea. <i>Journal of the Electrochemical Society</i> , 2014, 161, D534-D539.	1.3	13
69	Corrosion Mechanism of Plasma Electrolytic Oxidation Coated Magnesium Alloy with Laser Surface Melting Pretreatment. <i>Journal of the Electrochemical Society</i> , 2014, 161, C20-C24.	1.3	18
70	Electrodeposition of zinc-cobalt alloys from choline chloride-urea ionic liquid. <i>Electrochimica Acta</i> , 2014, 115, 499-503.	2.6	51
71	Facile fabrication of a robust super-hydrophobic surface on magnesium alloy. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2014, 443, 118-122.	2.3	48
72	Electrochemical deposition and characterization of Zn-Al layered double hydroxides (LDHs) films on magnesium alloy. <i>Applied Surface Science</i> , 2014, 313, 834-840.	3.1	83

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73	One-step electrochemical fabrication of bilayered MgO/polymer coating on magnesium alloy. <i>Frontiers of Materials Science</i> , 2014, 8, 307-312.	1.1	6
74	Preparation of superhydrophobic zinc coating for corrosion protection. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2014, 454, 113-118.	2.3	61
75	Effects of cathodic voltages on structure and wear resistance of plasma electrolytic oxidation coatings formed on aluminium alloy. <i>Applied Surface Science</i> , 2014, 297, 176-181.	3.1	83
76	Thermal control coatings on magnesium alloys prepared by plasma electrolytic oxidation. <i>Applied Surface Science</i> , 2013, 280, 151-155.	3.1	63
77	Cavitation erosion resistance of microarc oxidation coating on aluminium alloy. <i>Applied Surface Science</i> , 2013, 280, 287-296.	3.1	37
78	One-step preparation of TiO <sub>2</sub> /MoS <sub>2</sub> composite coating on Ti6Al4V alloy by plasma electrolytic oxidation and its tribological properties. <i>Surface and Coatings Technology</i> , 2013, 214, 124-130.	2.2	115
79	Electrodeposition of high Co content nanocrystalline Zn-Co alloys from a choline chloride-based ionic liquid. <i>Materials Chemistry and Physics</i> , 2013, 142, 539-544.	2.0	14
80	Role of sintering and clay particle additions on coating formation during PEO processing of AM50 magnesium alloy. <i>Surface and Coatings Technology</i> , 2012, 213, 48-58.	2.2	57
81	Preparation and characterization of graphite-dispersed styrene-acrylic emulsion composite coating on magnesium alloy. <i>Applied Surface Science</i> , 2012, 258, 4360-4364.	3.1	18
82	Preparation and tribological properties of self-lubricating TiO <sub>2</sub> /graphite composite coating on Ti6Al4V alloy. <i>Applied Surface Science</i> , 2012, 258, 8570-8576.	3.1	87
83	Microstructure and corrosion behavior of plasma electrolytic oxidation coated magnesium alloy pre-treated by laser surface melting. <i>Surface and Coatings Technology</i> , 2012, 206, 3109-3115.	2.2	41
84	Optical properties of N and transition metal R (R=V, Cr, Mn, Fe, Co, Ni, Cu, and Zn) codoped anatase TiO <sub>2</sub> . <i>Physica B: Condensed Matter</i> , 2012, 407, 2709-2715.	1.3	46
85	Environmentally assisted cracking behaviour of plasma electrolytic oxidation coated AZ31 magnesium alloy. <i>Corrosion Engineering Science and Technology</i> , 2011, 46, 706-711.	0.7	15
86	Dry sliding wear behaviour of magnesium oxide and zirconium oxide plasma electrolytic oxidation coated magnesium alloy. <i>Applied Surface Science</i> , 2010, 256, 3265-3273.	3.1	53
87	Effect of pulse frequency on the microstructure, phase composition and corrosion performance of a phosphate-based plasma electrolytic oxidation coated AM50 magnesium alloy. <i>Applied Surface Science</i> , 2010, 256, 3928-3935.	3.1	116
88	Characterization of calcium containing plasma electrolytic oxidation coatings on AM50 magnesium alloy. <i>Applied Surface Science</i> , 2010, 256, 4017-4022.	3.1	85
89	Development of decorative and corrosion resistant plasma electrolytic oxidation coatings on AM50 magnesium alloy. <i>Surface Engineering</i> , 2010, 26, 367-370.	1.1	31
90	Effect of current density on the microstructure and corrosion behaviour of plasma electrolytic oxidation treated AM50 magnesium alloy. <i>Applied Surface Science</i> , 2009, 255, 4212-4218.	3.1	199

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91	Tribological behavior of plasma electrolytic oxidation coating on magnesium alloy with oil lubrication at elevated temperatures. <i>Journal of Alloys and Compounds</i> , 2009, 481, 903-909.	2.8	46
92	Fabrication of Superhydrophobic Surface on Magnesium Alloy. <i>Chemistry Letters</i> , 2007, 36, 416-417.	0.7	29
93	Effects of sodium tungstate on characteristics of microarc oxidation coatings formed on magnesium alloy in silicate-KOH electrolyte. <i>Transactions of Nonferrous Metals Society of China</i> , 2007, 17, 244-249.	1.7	32
94	A Novel Approach to the Robust Ti6Al4V-Based Superhydrophobic Surface with Crater-like Structure. <i>Advanced Engineering Materials</i> , 2007, 9, 316-321.	1.6	42
95	Preparation and characterization of oxide films containing crystalline TiO <sub>2</sub> on magnesium alloy by plasma electrolytic oxidation. <i>Electrochimica Acta</i> , 2007, 52, 4836-4840.	2.6	127
96	Tribological properties of duplex MAO/DLC coatings on magnesium alloy using combined microarc oxidation and filtered cathodic arc deposition. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2007, 454-455, 164-169.	2.6	58
97	Characterization of microarc oxidation coatings formed on AM60B magnesium alloy in silicate and phosphate electrolytes. <i>Applied Surface Science</i> , 2007, 253, 4490-4496.	3.1	175
98	Improvement of corrosion properties of microarc oxidation coating on magnesium alloy by optimizing current density parameters. <i>Applied Surface Science</i> , 2007, 253, 6939-6945.	3.1	105
99	Effects of NaAlO <sub>2</sub> on structure and corrosion resistance of microarc oxidation coatings formed on AM60B magnesium alloy in phosphate-KOH electrolyte. <i>Surface and Coatings Technology</i> , 2005, 199, 121-126.	2.2	133
100	Effect of potassium fluoride in electrolytic solution on the structure and properties of microarc oxidation coatings on magnesium alloy. <i>Applied Surface Science</i> , 2005, 252, 345-351.	3.1	182
101	Calculation of the multimode Franck-Condon factors based on the coherent state method. <i>Molecular Physics</i> , 2005, 103, 3337-3342.	0.8	18
102	Plasma Electrolytic Oxidation Coatings on Lightweight Metals. , 0, , .		19
103	Preparation and Tribological Properties of Graphite-Containing Plasma Electrolytic Oxidation Coatings on Al Alloy. <i>Advanced Materials Research</i> , 0, 1081, 183-186.	0.3	0