

Jun Liang

List of Publications by Year in descending order

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citing authors

| # | ARTICLE | IF | CITATIONS |
|----|---|------|-----------|
| 1 | 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. | 6.1 | 199 |
| 2 | 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. | 6.1 | 182 |
| 3 | Characterization of microarc oxidation coatings formed on AM60B magnesium alloy in silicate and phosphate electrolytes. <i>Applied Surface Science</i> , 2007, 253, 4490-4496. | 6.1 | 175 |
| 4 | Effects of NaAlO ₂ 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. | 4.8 | 133 |
| 5 | Preparation and characterization of oxide films containing crystalline TiO ₂ on magnesium alloy by plasma electrolytic oxidation. <i>Electrochimica Acta</i> , 2007, 52, 4836-4840. | 5.2 | 127 |
| 6 | 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. | 6.1 | 116 |
| 7 | One-step preparation of TiO ₂ /MoS ₂ composite coating on Ti6Al4V alloy by plasma electrolytic oxidation and its tribological properties. <i>Surface and Coatings Technology</i> , 2013, 214, 124-130. | 4.8 | 115 |
| 8 | 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. | 6.1 | 105 |
| 9 | 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. | 4.8 | 105 |
| 10 | Conducting polymer PPy nanowire-based triboelectric nanogenerator and its application for self-powered electrochemical cathodic protection. <i>Chemical Science</i> , 2016, 7, 6477-6483. | 7.4 | 94 |
| 11 | Preparation and tribological properties of self-lubricating TiO ₂ /graphite composite coating on Ti6Al4V alloy. <i>Applied Surface Science</i> , 2012, 258, 8570-8576. | 6.1 | 87 |
| 12 | Characterization of calcium containing plasma electrolytic oxidation coatings on AM50 magnesium alloy. <i>Applied Surface Science</i> , 2010, 256, 4017-4022. | 6.1 | 85 |
| 13 | Electrochemical deposition and characterization of Zn-Al layered double hydroxides (LDHs) films on magnesium alloy. <i>Applied Surface Science</i> , 2014, 313, 834-840. | 6.1 | 83 |
| 14 | 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. | 6.1 | 83 |
| 15 | 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. | 5.5 | 78 |
| 16 | Preparation and characterization of dopamine-induced biomimetic hydroxyapatite coatings on the AZ31 magnesium alloy. <i>Surface and Coatings Technology</i> , 2015, 281, 82-88. | 4.8 | 77 |
| 17 | Triboelectrification based on double-layered polyaniline nanofibers for self-powered cathodic protection driven by wind. <i>Nano Research</i> , 2018, 11, 1873-1882. | 10.4 | 73 |
| 18 | Effect of laser surface melting on microstructure and corrosion characteristics of AM60B magnesium alloy. <i>Applied Surface Science</i> , 2015, 343, 133-140. | 6.1 | 72 |

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|----|---|------|-----------|
| 19 | Dual self-healing composite coating on magnesium alloys for corrosion protection. <i>Chemical Engineering Journal</i> , 2021, 424, 130551. | 12.7 | 64 |
| 20 | Thermal control coatings on magnesium alloys prepared by plasma electrolytic oxidation. <i>Applied Surface Science</i> , 2013, 280, 151-155. | 6.1 | 63 |
| 21 | Corrosion and tribocorrosion performance of multilayer diamond-like carbon film in NaCl solution. <i>RSC Advances</i> , 2015, 5, 104829-104840. | 3.6 | 63 |
| 22 | 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. | 3.5 | 62 |
| 23 | Preparation of superhydrophobic zinc coating for corrosion protection. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2014, 454, 113-118. | 4.7 | 61 |
| 24 | Enhancement of photoelectrochemical and photocathodic protection properties of TiO ₂ nanotube arrays by simple surface UV treatment. <i>Applied Surface Science</i> , 2017, 394, 440-445. | 6.1 | 59 |
| 25 | Tribological properties of duplex MAO/DLC coatings on magnesium alloy using combined microarc oxidation and filtered cathodic arc deposition. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2007, 454-455, 164-169. | 5.6 | 58 |
| 26 | 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. | 4.8 | 57 |
| 27 | Electro-codeposition of Ni-SiO ₂ nanocomposite coatings from deep eutectic solvent with improved corrosion resistance. <i>Applied Surface Science</i> , 2016, 367, 449-458. | 6.1 | 57 |
| 28 | 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. | 5.9 | 54 |
| 29 | 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. | 6.1 | 53 |
| 30 | Enhanced corrosion performance of Zn coating by incorporating graphene oxide electrodeposited from deep eutectic solvent. <i>RSC Advances</i> , 2015, 5, 60698-60707. | 3.6 | 53 |
| 31 | Electrodeposition of zinc-cobalt alloys from choline chloride-urea ionic liquid. <i>Electrochimica Acta</i> , 2014, 115, 499-503. | 5.2 | 51 |
| 32 | 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. | 4.8 | 51 |
| 33 | 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. | 4.7 | 48 |
| 34 | 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. | 5.5 | 46 |
| 35 | Optical properties of N and transition metal R (R=V, Cr, Mn, Fe, Co, Ni, Cu, and Zn) codoped anatase TiO ₂ . <i>Physica B: Condensed Matter</i> , 2012, 407, 2709-2715. | 2.7 | 46 |
| 36 | A Novel Approach to the Robust Ti6Al4V-Based Superhydrophobic Surface with Crater-like Structure. <i>Advanced Engineering Materials</i> , 2007, 9, 316-321. | 3.5 | 42 |

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|----|--|------|-----------|
| 37 | 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. | 4.8 | 41 |
| 38 | Characterization and corrosion behavior of plasma electrolytic oxidation coated AZ91-T6 magnesium alloy. <i>Surface and Coatings Technology</i> , 2016, 304, 179-187. | 4.8 | 41 |
| 39 | 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. | 6.1 | 39 |
| 40 | 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. | 7.9 | 39 |
| 41 | A chemical-free sealing method for Micro-arc oxidation coatings on AZ31 Mg alloy. <i>Surface and Coatings Technology</i> , 2021, 406, 126655. | 4.8 | 39 |
| 42 | 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. | 3.9 | 38 |
| 43 | Cavitation erosion resistance of microarc oxidation coating on aluminium alloy. <i>Applied Surface Science</i> , 2013, 280, 287-296. | 6.1 | 37 |
| 44 | Electrodeposition and characterization of Ni@SiC composite coatings from deep eutectic solvent. <i>RSC Advances</i> , 2015, 5, 44933-44942. | 3.6 | 37 |
| 45 | A novel multifunctional PTFE/PEO composite coating prepared by one-step method. <i>Surface and Coatings Technology</i> , 2016, 299, 90-95. | 4.8 | 37 |
| 46 | Preparation of Hydroxyapatite/Tannic Acid Coating to Enhance the Corrosion Resistance and Cytocompatibility of AZ31 Magnesium Alloys. <i>Coatings</i> , 2017, 7, 105. | 2.6 | 37 |
| 47 | Electrodeposition of homogenous Ni/SiO ₂ nanocomposite coatings from deep eutectic solvent with in-situ synthesized SiO ₂ nanoparticles. <i>Electrochimica Acta</i> , 2016, 222, 1272-1280. | 5.2 | 36 |
| 48 | Characterization and properties of plasma electrolytic oxidation coating on low carbon steel fabricated from aluminate electrolyte. <i>Vacuum</i> , 2017, 144, 207-216. | 3.5 | 36 |
| 49 | Y-doped TiO ₂ coating with superior bioactivity and antibacterial property prepared via plasma electrolytic oxidation. <i>Materials and Design</i> , 2020, 192, 108758. | 7.0 | 35 |
| 50 | Hydrogenated TiO ₂ nanotube arrays with enhanced photoelectrochemical property for photocathodic protection under visible light. <i>Materials Letters</i> , 2016, 185, 81-84. | 2.6 | 34 |
| 51 | 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. | 4.2 | 32 |
| 52 | Corrosion and tribocorrosion resistance of MAO-based composite coating on AZ31 magnesium alloy. <i>Journal of Magnesium and Alloys</i> , 2022, 10, 3406-3417. | 11.9 | 32 |
| 53 | Development of decorative and corrosion resistant plasma electrolytic oxidation coatings on AM50 magnesium alloy. <i>Surface Engineering</i> , 2010, 26, 367-370. | 2.2 | 31 |
| 54 | Fabrication of Superhydrophobic Surface on Magnesium Alloy. <i>Chemistry Letters</i> , 2007, 36, 416-417. | 1.3 | 29 |

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|----|--|------|-----------|
| 55 | Electrodeposition of composition controllable Zn Ni coating from water modified deep eutectic solvent. <i>Surface and Coatings Technology</i> , 2019, 366, 138-145. | 4.8 | 28 |
| 56 | Electrochemical deposition of Mg(OH) ₂ /GO composite films for corrosion protection of magnesium alloys. <i>Journal of Magnesium and Alloys</i> , 2015, 3, 231-236. | 11.9 | 26 |
| 57 | 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. | 5.5 | 24 |
| 58 | Simultaneous electropolishing and electrodeposition of aluminum in ionic liquid under ambient conditions. <i>Applied Surface Science</i> , 2018, 434, 918-921. | 6.1 | 23 |
| 59 | Effects of NiCr intermediate layer on microstructure and tribological property of laser cladding Cr ₃ C ₂ reinforced Ni60A-Ag composite coating on copper alloy. <i>Optics and Laser Technology</i> , 2021, 142, 106963. | 4.6 | 23 |
| 60 | Facile preparation of petaliform-like superhydrophobic meshes via moisture etching for oil-water separation. <i>Surface and Coatings Technology</i> , 2020, 399, 126124. | 4.8 | 21 |
| 61 | Influence of MoSi ₂ 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. | 4.8 | 21 |
| 62 | In situ growth of single-crystal TiO ₂ nanorod arrays on Ti substrate: Controllable synthesis and photoelectro-chemical water splitting. <i>Nano Research</i> , 2017, 10, 1021-1032. | 10.4 | 20 |
| 63 | Plasma Electrolytic Oxidation Coatings on Lightweight Metals. , 0, , . | | 19 |
| 64 | Calculation of the multimode Franck-Condon factors based on the coherent state method. <i>Molecular Physics</i> , 2005, 103, 3337-3342. | 1.7 | 18 |
| 65 | Preparation and characterization of graphite-dispersed styrene-acrylic emulsion composite coating on magnesium alloy. <i>Applied Surface Science</i> , 2012, 258, 4360-4364. | 6.1 | 18 |
| 66 | 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. | 2.9 | 18 |
| 67 | Microstructure and corrosion behaviour of laser surface melting treated WE43 magnesium alloy. <i>RSC Advances</i> , 2016, 6, 30642-30651. | 3.6 | 18 |
| 68 | 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. | 4.8 | 18 |
| 69 | 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. | 4.8 | 18 |
| 70 | Electropolishing of Al and Al alloys in AlCl ₃ /trimethylamine hydrochloride ionic liquid. <i>Surface and Coatings Technology</i> , 2018, 335, 72-79. | 4.8 | 17 |
| 71 | 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. | 4.8 | 16 |
| 72 | RGDC Peptide-Induced Biomimetic Calcium Phosphate Coating Formed on AZ31 Magnesium Alloy. <i>Materials</i> , 2017, 10, 358. | 2.9 | 16 |

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|----|--|-----|-----------|
| 73 | Preparation and Characterization of Aminated Hydroxyethyl Cellulose-Induced Biomimetic Hydroxyapatite Coatings on the AZ31 Magnesium Alloy. <i>Metals</i> , 2017, 7, 214. | 2.3 | 16 |
| 74 | Environmentally assisted cracking behaviour of plasma electrolytic oxidation coated AZ31 magnesium alloy. <i>Corrosion Engineering Science and Technology</i> , 2011, 46, 706-711. | 1.4 | 15 |
| 75 | Comparison of Corrosion Resistance and Cytocompatibility of MgO and ZrO ₂ Coatings on AZ31 Magnesium Alloy Formed via Plasma Electrolytic Oxidation. <i>Coatings</i> , 2018, 8, 441. | 2.6 | 15 |
| 76 | 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. | 4.0 | 14 |
| 77 | 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. | 4.8 | 14 |
| 78 | Wear and corrosion resistance of Co-P coatings: the effects of current modes. <i>RSC Advances</i> , 2018, 8, 895-903. | 3.6 | 14 |
| 79 | 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. | 2.9 | 13 |
| 80 | 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. | 2.2 | 13 |
| 81 | Preparation and characterization of laser clad FeCrMoBSi amorphous composite coatings. <i>Surface and Coatings Technology</i> , 2021, 423, 127520. | 4.8 | 13 |
| 82 | Microstructure evolution and wear resistance of in-situ nanoparticles reinforcing Fe-based amorphous composite coatings. <i>Surfaces and Interfaces</i> , 2020, 21, 100652. | 3.0 | 12 |
| 83 | Preparation and Characterization of Fluoride-Incorporated Plasma Electrolytic Oxidation Coatings on the AZ31 Magnesium Alloy. <i>Coatings</i> , 2019, 9, 826. | 2.6 | 11 |
| 84 | Fluoride-dominated coating on Mg alloys fabricated by plasma electrolytic process in ambient non-aqueous electrolyte. <i>Surface Engineering</i> , 2021, 37, 360-364. | 2.2 | 11 |
| 85 | 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. | 2.9 | 11 |
| 86 | 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. | 2.9 | 9 |
| 87 | 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. | 1.3 | 9 |
| 88 | Ni-Al nanocomposite coating electrodeposited from deep eutectic solvent. <i>Surface and Coatings Technology</i> , 2021, 405, 126587. | 4.8 | 9 |
| 89 | Corrosion behaviour of plasma electrolytic oxidation coated AZ91 Mg alloy: influence of laser surface melting pretreatment. <i>RSC Advances</i> , 2016, 6, 70343-70351. | 3.6 | 8 |
| 90 | Ni-Ti Nanocomposite Coatings Electro-Codeposited from Deep Eutectic Solvent Containing Ti Nanoparticles. <i>Journal of the Electrochemical Society</i> , 2020, 167, 042502. | 2.9 | 8 |

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|-----|---|-----|-----------|
| 91 | Preparation and Characterization of Hydroxyapatite Coating on AZ31 Magnesium Alloy Induced by Carboxymethyl Cellulose-Dopamine. <i>Materials</i> , 2021, 14, 1849. | 2.9 | 8 |
| 92 | Influence of Cu ²⁺ Ions on the Corrosion Resistance of AZ31 Magnesium Alloy with Microarc Oxidation. <i>Materials</i> , 2020, 13, 2647. | 2.9 | 7 |
| 93 | 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. | 4.4 | 7 |
| 94 | One-step electrochemical fabrication of bilayered MgO/polymer coating on magnesium alloy. <i>Frontiers of Materials Science</i> , 2014, 8, 307-312. | 2.2 | 6 |
| 95 | Effects of N-Doped TiO ₂ Thin Films on Corrosion Resistance of Stainless Steel Orthodontic Brackets in Artificial Saliva. <i>Corrosion</i> , 2015, 71, 784-794. | 1.1 | 6 |
| 96 | 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. | 2.5 | 6 |
| 97 | Plasma electrolytic fluorination on Al alloys: Coating growth and plasma discharge behavior. <i>Ceramics International</i> , 2021, 47, 29758-29770. | 4.8 | 6 |
| 98 | Proton irradiation effects on the structural and tribological properties of polytetrafluoroethylene. <i>Chinese Journal of Polymer Science (English Edition)</i> , 2016, 34, 1448-1455. | 3.8 | 4 |
| 99 | 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. | 1.6 | 3 |
| 100 | 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. | 2.5 | 3 |
| 101 | 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. | 2.3 | 2 |
| 102 | Plasma electrolytic fluorination on Mg alloys: coating growth and plasma discharge behaviour. <i>Surface Engineering</i> , 2021, 37, 1373-1387. | 2.2 | 1 |
| 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 |