

Bin Xiang

List of Publications by Year in descending order

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Version: 2024-02-01

80
papers

2,510
citations

257450

24
h-index

206112

48
g-index

80
all docs

80
docs citations

80
times ranked

2134
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|---|------|-----------|
| 1 | Experimental and theoretical studies of four allyl imidazolium-based ionic liquids as green inhibitors for copper corrosion in sulfuric acid. <i>Corrosion Science</i> , 2017, 119, 68-78. | 6.6 | 466 |
| 2 | Papaya leaves extract as a novel eco-friendly corrosion inhibitor for Cu in H ₂ SO ₄ medium. <i>Journal of Colloid and Interface Science</i> , 2021, 582, 918-931. | 9.4 | 275 |
| 3 | Corrosion control of copper in 3.5wt.% NaCl Solution by Domperidone: Experimental and Theoretical Study. <i>Corrosion Science</i> , 2014, 85, 77-86. | 6.6 | 166 |
| 4 | Synthesis of CuO@CoNi LDH on Cu foam for high-performance supercapacitors. <i>Chemical Engineering Journal</i> , 2020, 401, 126145. | 12.7 | 122 |
| 5 | Excellent corrosion inhibition performance of novel quinoline derivatives on mild steel in HCl media: Experimental and computational investigations. <i>Journal of Molecular Liquids</i> , 2018, 255, 53-63. | 4.9 | 109 |
| 6 | Polydopamine functionalized graphene oxide nanocomposites reinforced the corrosion protection and adhesion properties of waterborne polyurethane coatings. <i>European Polymer Journal</i> , 2019, 120, 109249. | 5.4 | 100 |
| 7 | Free-standing, layered graphene monoliths for long-life supercapacitor. <i>Chemical Engineering Journal</i> , 2018, 350, 386-394. | 12.7 | 67 |
| 8 | Graphene oxide-drove transformation of NiS/Ni ₃ S ₄ microbars towards Ni ₃ S ₄ polyhedrons for supercapacitor. <i>Journal of Colloid and Interface Science</i> , 2020, 559, 115-123. | 9.4 | 67 |
| 9 | Flexible high-energy and stable rechargeable vanadium-zinc battery based on oxygen defect modulated V ₂ O ₅ cathode. <i>Nano Energy</i> , 2021, 87, 106164. | 16.0 | 64 |
| 10 | Selenium Defect Boosted Electrochemical Performance of Binder-Free VSe ₂ Nanosheets for Aqueous Zinc-Ion Batteries. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 23230-23238. | 8.0 | 55 |
| 11 | Sandwich Complex of TATB/Graphene: An Approach to Molecular Monolayers of Explosives. <i>Journal of Physical Chemistry C</i> , 2010, 114, 22684-22687. | 3.1 | 54 |
| 12 | Synthesis of Silane Functionalized Graphene Oxide and Its Application in Anti-Corrosion Waterborne Polyurethane Composite Coatings. <i>Coatings</i> , 2019, 9, 587. | 2.6 | 44 |
| 13 | Facile fabrication of core-shell structured Ni(OH) ₂ /Ni(PO ₃) ₂ composite via one-step electrodeposition for high performance asymmetric supercapacitor. <i>Journal of Colloid and Interface Science</i> , 2021, 583, 243-254. | 9.4 | 44 |
| 14 | Rapid Production of Mn ₃ O ₄ /rGO as an Efficient Electrode Material for Supercapacitor by Flame Plasma. <i>Materials</i> , 2018, 11, 881. | 2.9 | 43 |
| 15 | CoO/rGO composite prepared by a facile direct-flame approach for high-power supercapacitors. <i>Ceramics International</i> , 2018, 44, 16900-16907. | 4.8 | 39 |
| 16 | Mn ₃ O ₄ /Co(OH) ₂ cactus-type nanoarrays for high-energy-density asymmetric supercapacitors. <i>Journal of Materials Science</i> , 2020, 55, 724-737. | 3.7 | 39 |
| 17 | Controlled synthesis of a high-performance $\hat{\pm}$ -NiS/Ni ₃ S ₄ hybrid by a binary synergy of sulfur sources for supercapacitor. <i>Journal of Colloid and Interface Science</i> , 2021, 581, 56-65. | 9.4 | 36 |
| 18 | Synthesis and surface characterization of self-assembled monolayers of thiazoles incorporating hydrocarbon and fluorocarbon chains on copper substrates. <i>Applied Surface Science</i> , 2018, 456, 25-36. | 6.1 | 35 |

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|----|--|------|-----------|
| 19 | A Universal Voltage Design for Triggering Manganese Dioxide Defects Construction to Significantly Boost the Pseudocapacitance. <i>Advanced Functional Materials</i> , 2021, 31, 2102693. | 14.9 | 35 |
| 20 | Hydrothermal synthesis of graphene-encapsulated 2D circular nanoplates of Fe_2O_3 towards enhanced electrochemical performance for supercapacitor. <i>Journal of Alloys and Compounds</i> , 2019, 775, 63-71. | 5.5 | 33 |
| 21 | Tuning the kinetics of binder-free ammonium vanadate cathode via defect modulation for ultrastable rechargeable zinc ion batteries. <i>Nano Energy</i> , 2021, 90, 106596. | 16.0 | 29 |
| 22 | Corrosion control of mild steel in 0.1M H_2SO_4 solution by benzimidazole and its derivatives: an experimental and theoretical study. <i>RSC Advances</i> , 2017, 7, 23961-23969. | 3.6 | 28 |
| 23 | Sulfur source-inspired synthesis of NiS with high specific capacity and tunable morphologies for hybrid supercapacitor. <i>Electrochimica Acta</i> , 2020, 337, 135826. | 5.2 | 28 |
| 24 | New insights into Sr-O bonds enhances Co/Fe catalytic activity in SrCoFe perovskite for boosted peroxydisulfate activation. <i>Chemical Engineering Journal</i> , 2021, 426, 131525. | 12.7 | 28 |
| 25 | Excellent inhibition performance of low-toxicity Dibenzylthiocarbamic Acid Zinc Salt self-assembled nano-film for copper corrosion in sulfuric acid. <i>Journal of Molecular Liquids</i> , 2018, 271, 959-969. | 4.9 | 25 |
| 26 | Oxygen vacancy-rich, binder-free copper pyrovanadate for zinc ion storage. <i>Chemical Engineering Journal</i> , 2021, 420, 130474. | 12.7 | 24 |
| 27 | Ultrathin nickel manganese nanosheets with rich oxygen-vacancy as a durability electrode for aqueous Ni//Zn batteries. <i>Journal of Colloid and Interface Science</i> , 2020, 578, 677-684. | 9.4 | 23 |
| 28 | Engineering porous structure in Bi-component-active ZnO quantum dots anchored vanadium nitride boosts reaction kinetics for zinc storage. <i>Nano Energy</i> , 2021, 89, 106386. | 16.0 | 23 |
| 29 | Phenothiazine drugs as novel and eco-friendly corrosion inhibitors for copper in sulfuric acid solution. <i>Journal of the Taiwan Institute of Chemical Engineers</i> , 2020, 113, 253-263. | 5.3 | 22 |
| 30 | Conductive copper glue constructs a reversible and stable zinc metal anode interface for advanced aqueous zinc ion battery. <i>Journal of Colloid and Interface Science</i> , 2022, 608, 22-29. | 9.4 | 22 |
| 31 | Facile synthesis of Fe_2O_3 pyramid on reduced graphene oxide for supercapacitor and photo-degradation. <i>Journal of Alloys and Compounds</i> , 2018, 744, 412-420. | 5.5 | 19 |
| 32 | Phosphate ion functionalization of $\text{Co}(\text{OH})_2$ nanosheets by a simple immersion method. <i>Journal of Alloys and Compounds</i> , 2018, 768, 57-64. | 5.5 | 19 |
| 33 | Facile electrochemical phosphatization of Mn_3O_4 nanosheet arrays for supercapacitor with enhanced performance. <i>Journal of Materials Science</i> , 2019, 54, 625-637. | 3.7 | 18 |
| 34 | Two common antihistamine drugs as high-efficiency corrosion inhibitors for copper in 0.5M H_2SO_4 . <i>Journal of the Taiwan Institute of Chemical Engineers</i> , 2021, 123, 11-20. | 5.3 | 18 |
| 35 | Combining electrochemical, surface topography analysis, and theoretical calculation methods to insight into the anti-corrosion property of <i>Syzygium samarangense</i> leaf extract. <i>Journal of Industrial and Engineering Chemistry</i> , 2021, 102, 302-311. | 5.8 | 18 |
| 36 | Synthesis of aqueous and hydroxy-terminated polyurethanes: Impacts of formulation parameters by orthogonal matrix design. <i>Progress in Organic Coatings</i> , 2016, 90, 1-9. | 3.9 | 17 |

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|----|--|-----|-----------|
| 37 | Inhibition of Tryptophan on AA 2024 in Chloride-Containing Solutions. <i>Journal of Materials Engineering and Performance</i> , 2011, 20, 265-270. | 2.5 | 15 |
| 38 | Why is the crystal shape of TATB is so similar to its molecular shape? Understanding by only its root molecule. <i>Journal of Molecular Modeling</i> , 2012, 18, 2247-2256. | 1.8 | 15 |
| 39 | Two novel drugs as bio-functional inhibitors for copper performing excellent anticorrosion and antibacterial properties. <i>Colloids and Surfaces B: Biointerfaces</i> , 2020, 190, 110898. | 5.0 | 15 |
| 40 | Ultraviolet light absorber with low surface energy: synthesis and characterization. <i>Tetrahedron</i> , 2014, 70, 6585-6593. | 1.9 | 13 |
| 41 | Chemically assembling chromium vanadate into an urchin-like porous rich matrix with ultrathin nanosheets for rapid Zn ²⁺ storage. <i>Journal of Colloid and Interface Science</i> , 2021, 597, 422-428. | 9.4 | 13 |
| 42 | Construction of three-dimensional ordered structure of crystalline bismuth for long life aqueous nickel-bismuth batteries. <i>Applied Surface Science</i> , 2020, 515, 145977. | 6.1 | 12 |
| 43 | Are amino groups advantageous to insensitive high explosives (IHEs)?. <i>Journal of Molecular Modeling</i> , 2012, 18, 4729-4738. | 1.8 | 11 |
| 44 | Inhibition of Zinc Corrosion by Fucoidan in Natural Sea water. <i>Acta Metallurgica Sinica (English) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 46</i> | 2.9 | 10 |
| 45 | Surfactant-free synthesis of homogeneous nano-grade cadmium sulfide grafted reduced graphene oxide composite as a high-activity photocatalyst in visible light. <i>Ceramics International</i> , 2019, 45, 14376-14383. | 4.8 | 10 |
| 46 | Three piperazine compounds as corrosion inhibitors for copper in 0.5 M sulfuric acid medium. <i>Journal of the Taiwan Institute of Chemical Engineers</i> , 2021, 126, 231-243. | 5.3 | 10 |
| 47 | Preparation optimization of ATO particles by robust parameter design. <i>Materials Science in Semiconductor Processing</i> , 2016, 42, 354-358. | 4.0 | 9 |
| 48 | An intermittent microwave-exfoliated non-expansive graphite oxide process for highly-efficient production of high-quality graphene. <i>Journal of Colloid and Interface Science</i> , 2020, 565, 288-294. | 9.4 | 9 |
| 49 | Electrochemical activation fabrication towards high-capacity nickel hydroxide electrode. <i>Journal of Alloys and Compounds</i> , 2021, 855, 157332. | 5.5 | 9 |
| 50 | Doping-driven electronic structure and conductivity modification of nickel sulfide. <i>Dalton Transactions</i> , 2022, 51, 8318-8326. | 3.3 | 9 |
| 51 | Morphology transition of FeOOH induced by N-doped graphene for excellent pseudocapacitive energy storage. <i>Electrochimica Acta</i> , 2022, 403, 139676. | 5.2 | 8 |
| 52 | Corrosion of AM60B magnesium alloy in simulated acid rain. <i>Anti-Corrosion Methods and Materials</i> , 2010, 57, 244-248. | 1.5 | 7 |
| 53 | Understanding the desensitizing mechanism of olefin in explosives: shear slide of mixed HMX-olefin systems. <i>Journal of Molecular Modeling</i> , 2012, 18, 1503-1512. | 1.8 | 7 |
| 54 | Fabrication of ultra-closely graphene-wrapped Ni foam substrate for supercapacitor electrode by flame induction and electrostatic interaction. <i>Journal of Alloys and Compounds</i> , 2019, 791, 423-430. | 5.5 | 7 |

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|----|--|-----|-----------|
| 55 | Scalable modulation of reduced graphene oxide properties via regulating graphite oxide precursors. <i>Journal of Alloys and Compounds</i> , 2019, 782, 17-27. | 5.5 | 7 |
| 56 | A Copper(I)-Thioarsenate(III) Inorganic Framework Directed by [Ni(en) ₃] ²⁺ . <i>Inorganic Chemistry</i> , 2021, 60, 6813-6819. | 4.0 | 7 |
| 57 | Corrosion Behavior of 35CrMn and Q235 Steel in Simulated Acid Rain Conditions. <i>Journal of Materials Engineering and Performance</i> , 2012, 21, 524-529. | 2.5 | 6 |
| 58 | Anticorrosion potential of domperidone on copper in different concentration of hydrochloric acid solution. <i>Journal of Adhesion Science and Technology</i> , 2018, 32, 1485-1502. | 2.6 | 6 |
| 59 | Functional triazine ultraviolet absorbers for sunlight protection of polymer materials surface. <i>Materials Letters</i> , 2019, 236, 743-746. | 2.6 | 5 |
| 60 | One-Dimensional Vanadium(III) Chalcogenidostannates Incorporating [V(tepa)] ³⁺ Complexes as Bridging Groups. <i>Inorganic Chemistry</i> , 2021, 60, 2127-2132. | 4.0 | 5 |
| 61 | Design of Co(OH) ₂ composite electrode with high active surface area by sulfur control and graphene encapsulation strategies. <i>Applied Surface Science</i> , 2022, 596, 153612. | 6.1 | 5 |
| 62 | An ultra-effective pathway for fully removing the oxygen components of graphene oxide by a flame-assisted microwave process. <i>Dalton Transactions</i> , 2020, 49, 6964-6968. | 3.3 | 4 |
| 63 | A novel 3-D lead-iodide polymer based on the linkage of rare binuclear [Pb ₂] ³⁺ cations and anionic bis(pyrazinyl)-triazole bridges. <i>Dalton Transactions</i> , 2021, 50, 4486-4489. | 3.3 | 4 |
| 64 | Effect of Heavy Metals on Brownfield Quality in Different Industries. <i>Advanced Materials Research</i> , 0, 414, 284-288. | 0.3 | 3 |
| 65 | Nickel hydroxide/sulfide hybrids: halide ion controlled synthesis, structural characteristics, and electrochemical performance. <i>Dalton Transactions</i> , 2022, 51, 4153-4165. | 3.3 | 3 |
| 66 | Soil Environmental Quality Assessment on an Abandoned Industrial Land. <i>Advanced Materials Research</i> , 2011, 356-360, 726-729. | 0.3 | 2 |
| 67 | Photo-Aging of Polyurethane Coating Based on TDI-TMP and N3390. <i>Advanced Materials Research</i> , 0, 189-193, 1100-1104. | 0.3 | 2 |
| 68 | Effects of formulation on set-to-touch time of waterborne alkyd resin by uniform design. <i>Progress in Organic Coatings</i> , 2015, 87, 189-196. | 3.9 | 2 |
| 69 | Synthesis and exploration of triazine ultraviolet absorbers with surface enrichment property. <i>Tetrahedron</i> , 2017, 73, 4566-4572. | 1.9 | 2 |
| 70 | Different Curing Agents on the Photoaging of Polyurethane Coatings. <i>Advanced Materials Research</i> , 2011, 189-193, 1109-1112. | 0.3 | 1 |
| 71 | Effect of Additives on Photo-Aging Performance of Polyurethane Coating. <i>Advanced Materials Research</i> , 2011, 291-294, 211-214. | 0.3 | 1 |
| 72 | Visualization of microRNA-21 Dynamics in Neuroblastoma Using Magnetic Resonance Imaging Based on a microRNA-21-Responsive Reporter Gene. <i>Frontiers in Oncology</i> , 2021, 11, 747305. | 2.8 | 1 |

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|----|--|-----|-----------|
| 73 | Corrosion-controlled surface engineering improves the adhesion of materials for stable free-standing electrodes. Journal of Colloid and Interface Science, 2022, 614, 617-628. | 9.4 | 1 |
| 74 | Effect of nano-TiO ₂ on MP25 resin. Journal of Applied Polymer Science, 2008, 107, 1598-1603. | 2.6 | 0 |
| 75 | Computer Simulation of an Synthetic Ultraviolet Absorbent in the Interface of DMB and DMF. Advanced Materials Research, 0, 146-147, 966-971. | 0.3 | 0 |
| 76 | Heavy Metal Research on Sites of Former Machining Industry in Chongqing. Advanced Materials Research, 2011, 414, 301-305. | 0.3 | 0 |
| 77 | Scaling Mechanism of Heat Exchanger for Spent Sulfuric Acid Concentrating in Titania Production. Advanced Materials Research, 2012, 560-561, 678-681. | 0.3 | 0 |
| 78 | Photo-Aging of Coating Based on Mixture of TDI and N75. Advanced Materials Research, 2014, 1035, 453-457. | 0.3 | 0 |
| 79 | Electric Field Calculation of Pipe with Cathodic Protection in Seawater by BEM. Applied Mechanics and Materials, 2014, 621, 230-234. | 0.2 | 0 |
| 80 | Synthesis and Characterization of a New Fluorine-Containing Ultraviolet Light Absorber Based on BTA. Advanced Materials Research, 2015, 1096, 204-208. | 0.3 | 0 |