# Liang An

List of Publications by Year
in descending order

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| 71 | 2,765 | 218381 | 182168 |
|---|---|---|---|
| papers | citations | 26 h-index | 51 g-index |

| 72 | 72 | 72 | 3184 |
|---|---|---|---|
| all docs | docs citations | times ranked | citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Water flooding behavior in flow cells for ammonia production via electrocatalytic nitrogen reduction. Fundamental Research, 2022, 2, 757-763. | 1.6 | 10 |
| 2 | Membranes for vanadium-air redox flow batteries. , 2022, , 155-175. | | 1 |
| 3 | Operation of liquid e-fuel cells using air as oxidant. Applied Energy, 2022, 311, 118677. | 5.1 | 7 |
| 4 | Manipulation of Electrode Composition for Effective Water Management in Fuel Cells Fed with an Electrically Rechargeable Liquid Fuel. ACS Applied Materials & Interfaces, 2022, 14, 18600-18606. | 4.0 | 5 |
| 5 | Advances and Challenges in Photoelectrochemical Redox Batteries for Solar Energy Conversion and Storage. Advanced Energy Materials, 2022, 12, . | 10.2 | 27 |
| 6 | Spatially resolved electrochemical performance and temperature distribution of a segmented solid oxide fuel cell under various hydrogen dilution ratios and electrical loadings. Journal of Power Sources, 2022, 536, 231477. | 4.0 | 5 |
| 7 | Ultralow loading FeCoNi alloy nanoparticles decorated carbon mat for hydrogen peroxide reduction reaction and its application in direct ethylene glycol fuel cells. International Journal of Energy Research, 2022, 46, 13820-13831. | 2.2 | 7 |
| 8 | A discrete regenerative fuel cell mediated by ammonia for renewable energy conversion and storage. Applied Energy, 2022, 322, 119463. | 5.1 | 7 |
| 9 | Organic Electrolytes Recycling From Spent Lithiumâ€ion Batteries. Global Challenges, 2022, 6, . | 1.8 | 18 |
| 10 | Enhanced oxygen discharge with structured mesh channel in proton exchange membrane electrolysis cell. Applied Energy, 2022, 323, 119651. | 5.1 | 15 |
| 11 | Three-dimensional porous electrodes for direct formate fuel cells. Science China Technological Sciences, 2021, 64, 705-718. | 2.0 | 4 |
| 12 | Mathematical modeling of direct formate fuel cells incorporating the effect of ion migration. International Journal of Heat and Mass Transfer, 2021, 164, 120629. | 2.5 | 14 |
| 13 | Revealing the sodiumâ€storage performance enhancement of adsorptionâ€type carbon materials after ammonia treatment: Active nitrogen dopants or specific surface area?. International Journal of Energy Research, 2021, 45, 7447-7456. | 2.2 | 2 |
| 14 | Machine learning for advanced energy materials. Energy and AI, 2021, 3, 100049. | 5.8 | 96 |
| 15 | Boosting electrocatalytic nitrogen reduction to ammonia in alkaline media. International Journal of Energy Research, 2021, 45, 19634-19644. | 2.2 | 3 |
| 16 | A computational model of a liquid e-fuel cell. Journal of Power Sources, 2021, 501, 230023. | 4.0 | 8 |
| 17 | Polymer Electrolyte Membranes for Vanadium Redox Flow Batteries: Fundamentals and Applications. Progress in Energy and Combustion Science, 2021, 85, 100926. | 15.8 | 61 |
| 18 | A Flexible Smart Monitoring System for the Conservation of Textile Relics. Advanced Functional Materials, 2021, 31, 2106088. | 7.8 | 5 |

| # | Article | IF | Citations |
|---|---|---|---|
| 19 | Performance characteristics of a liquid e-fuel cell. Applied Energy, 2021, 297, 117145. | 5.1 | 9 |
| 20 | A liquid e-fuel cell operating at â˜’20ÂÂ°C. Journal of Power Sources, 2021, 506, 230198. | 4.0 | 7 |
| 21 | In-situ formation of bismuth nanoparticles on nickel foam for ambient ammonia synthesis via electrocatalytic nitrogen reduction. Journal of Alloys and Compounds, 2021, 875, 160006. | 2.8 | 10 |
| 22 | A Passive Fuel Cell Fed with an Electrically Rechargeable Liquid Fuel. ACS Applied Materials & Interfaces, 2021, 13, 48795-48800. | 4.0 | 12 |
| 23 | A Flexible Smart Monitoring System for the Conservation of Textile Relics (Adv. Funct. Mater. 48/2021). Advanced Functional Materials, 2021, 31, . | 7.8 | 0 |
| 24 | Anion-Exchange Membrane Electrode Assembled Photoelectrochemical Cell with a Visible Light Responsive Photoanode for Simultaneously Treating Wastewater and Generating Electricity. Industrial & Engineering Chemistry Research, 2020, 59, 137-145. | 1.8 | 10 |
| 25 | A cost-effective and chemically stable electrode binder for alkaline-acid direct ethylene glycol fuel cells. Applied Energy, 2020, 258, 114060. | 5.1 | 45 |
| 26 | Aqueous metal-air batteries: Fundamentals and applications. Energy Storage Materials, 2020, 27, 478-505. | 9.5 | 221 |
| 27 | Ion Transport Characteristics in Membranes for Direct Formate Fuel Cells. Frontiers in Chemistry, 2020, 8, 765. | 1.8 | 10 |
| 28 | Energizing Fuel Cells with an Electrically Rechargeable Liquid Fuel. Cell Reports Physical Science, 2020, 1, 100102. | 2.8 | 18 |
| 29 | Carbon-free sustainable energy technology: Direct ammonia fuel cells. Journal of Power Sources, 2020, 476, 228454. | 4.0 | 61 |
| 30 | Flow Batteries: Modeling and Simulation of Flow Batteries (Adv. Energy Mater. 31/2020). Advanced Energy Materials, 2020, 10, 2070133. | 10.2 | 26 |
| 31 | One-dimensional TiO2 nanotube array photoanode for a microfluidic all-vanadium photoelectrochemical cell for solar energy storage. Catalysis Science and Technology, 2020, 10, 4352-4361. | 2.1 | 11 |
| 32 | Two-Dimensional Layered SnO<sub>2</sub> Nanosheets for Ambient Ammonia Synthesis. ACS Applied Energy Materials, 2020, 3, 6735-6742. | 2.5 | 16 |
| 33 | Modeling and Simulation of Flow Batteries. Advanced Energy Materials, 2020, 10, 2000758. | 10.2 | 66 |
| 34 | Numerical Simulation on Interface Dynamics of Core Coalescence of Double-Emulsion Droplets. Industrial & Engineering Chemistry Research, 2020, 59, 21248-21260. | 1.8 | 11 |
| 35 | Performance of a hybrid direct ethylene glycol fuel cell. International Journal of Energy Research, 2019, 43, 2583-2591. | 2.2 | 42 |
| 36 | Performance characteristics of a passive direct formate fuel cell. International Journal of Energy Research, 2019, 43, 7433. | 2.2 | 11 |

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| 37 | A direct ethylene glycol fuel cell stack as air-independent power sources for underwater and outer space applications. Journal of Power Sources, 2019, 437, 226944. | 4.0 | 25 |
| 38 | Advances in three-dimensional graphene-based materials: configurations, preparation and application in secondary metal (Li, Na, K, Mg, Al)-ion batteries. Energy and Environmental Science, 2019, 12, 2030-2053. | 15.6 | 163 |
| 39 | Mathematical modeling of direct ethylene glycol fuel cells incorporating the effect of the competitive adsorption. Applied Thermal Engineering, 2019, 147, 1115-1124. | 3.0 | 27 |
| 40 | Performance characteristics of a passive direct ethylene glycol fuel cell with hydrogen peroxide as oxidant. Applied Energy, 2019, 250, 846-854. | 5.1 | 51 |
| 41 | Hydrogen-Location-Sensitive Modulation of the Redox Reactivity for Oxygen-Deficient TiO<sub>2</sub>. Journal of the American Chemical Society, 2019, 141, 8407-8411. | 6.6 | 59 |
| 42 | Toward CO<sub>2</sub> utilization for direct power generation using an integrated system consisting of CO<sub>2</sub> photoreduction with 3D TiO<sub>2</sub>/Ni-foam and a photocatalytic fuel cell. Journal of Materials Chemistry A, 2019, 7, 6275-6284. | 5.2 | 17 |
| 43 | Highly Flexible and Ultraprecise Manipulation of Light-Levitated Femtoliter/Picoliter Droplets. Journal of Physical Chemistry Letters, 2019, 10, 1068-1077. | 2.1 | 28 |
| 44 | Enhancing high-voltage performance of LiNi0.5Co0.2Mn0.3O2 cathode material via surface modification with lithium-conductive Li3Fe2(PO4)3. Journal of Alloys and Compounds, 2019, 773, 519-526. | 2.8 | 32 |
| 45 | High Value-Added Products From Recycling of Spent Lithium-Ion Batteries. , 2019, , 141-159. | | 0 |
| 46 | Engineering the Band Gap States of the Rutile TiO<sub>2</sub>(110) Surface by Modulating the Active Heteroatom. Angewandte Chemie - International Edition, 2018, 57, 8550-8554. | 7.2 | 20 |
| 47 | Engineering the Band Gap States of the Rutile TiO 2 (110) Surface by Modulating the Active Heteroatom. Angewandte Chemie, 2018, 130, 8686-8690. | 1.6 | 9 |
| 48 | Multifunctional Separator with Porous Carbon/Multiâ€Walled Carbon Nanotube Coating for Advanced Lithiumâ˜Sulfur Batteries. ChemElectroChem, 2018, 5, 71-77. | 1.7 | 38 |
| 49 | AgSn intermetallics as highly selective and active oxygen reduction electrocatalysts in membraneless alkaline fuel cells. Journal of Power Sources, 2018, 404, 106-117. | 4.0 | 22 |
| 50 | Tin-based materials as versatile anodes for alkali (earth)-ion batteries. Journal of Power Sources, 2018, 395, 41-59. | 4.0 | 98 |
| 51 | A visible-light responsive micro photocatalytic fuel cell with laterally arranged electrodes. Applied Thermal Engineering, 2018, 143, 193-199. | 3.0 | 12 |
| 52 | Recycling of lithium-ion batteries: Recent advances and perspectives. Journal of Power Sources, 2018, 399, 274-286. | 4.0 | 587 |
| 53 | Layered Spongy-like O-Doped g-C<sub>3</sub>N<sub>4</sub>: An Efficient Non-Metal Oxygen Reduction Catalyst for Alkaline Fuel Cells. Journal of the Electrochemical Society, 2017, 164, F354-F363. | 1.3 | 26 |
| 54 | High-performance optofluidic membrane microreactor with a mesoporous CdS/TiO 2 /SBA-15@carbon paper composite membrane for the CO 2 photoreduction. Chemical Engineering Journal, 2017, 316, 911-918. | 6.6 | 73 |

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|---|---|---|---|
| 55 | A micro membrane-less photoelectrochemical cell for hydrogen and electricity generation in the presence of methanol. Electrochimica Acta, 2017, 245, 549-560. | 2.6 | 15 |
| 56 | A membrane electrode assembled photoelectrochemical cell with a solar-responsive cadmium sulfide-zinc sulfide-titanium dioxide/mesoporous silica photoanode. Journal of Power Sources, 2017, 371, 96-105. | 4.0 | 11 |
| 57 | Bifunctional Electrocatalysts for Oxygen Reduction and Borohydride Oxidation Reactions Using Ag<sub>3</sub>Sn Nanointermetallic for the Ensemble Effect. ACS Applied Materials & Interfaces, 2017, 9, 35701-35711. | 4.0 | 28 |
| 58 | An effective hybrid organic/inorganic inhibitor for alkaline aluminum-air fuel cells. Electrochimica Acta, 2017, 248, 478-485. | 2.6 | 90 |
| 59 | Multi-Scaled Porous Fe-N/C Nanofibrous Catalysts for the Cathode Electrodes of Direct Methanol Fuel Cells. Journal of the Electrochemical Society, 2017, 164, F1556-F1565. | 1.3 | 19 |
| 60 | A microfluidic all-vanadium photoelectrochemical cell for solar energy storage. Electrochimica Acta, 2017, 258, 842-849. | 2.6 | 26 |
| 61 | An optofluidic planar microreactor for photocatalytic reduction of CO2 in alkaline environment. Energy, 2017, 120, 276-282. | 4.5 | 54 |
| 62 | Characteristics of the IR Laser Photothermally Induced Phase Change in Microchannels with Different Depths. Industrial & Engineering Chemistry Research, 2016, 55, 8450-8459. | 1.8 | 7 |
| 63 | Catalytic performance of a pyrolyzed graphene supported Feâ€“Nâ€“C composite and its application for acid direct methanol fuel cells. RSC Advances, 2016, 6, 90797-90805. | 1.7 | 6 |
| 64 | Optofluidics-Based Membrane Microreactor for Wastewater Treatment by Photocatalytic Ozonation. Industrial & Engineering Chemistry Research, 2016, 55, 8627-8635. | 1.8 | 16 |
| 65 | A cascading gradient pore microstructured photoanode with enhanced photoelectrochemical and photocatalytic activities. Journal of Catalysis, 2016, 344, 411-419. | 3.1 | 29 |
| 66 | A micro photocatalytic fuel cell with an air-breathing, membraneless and monolithic design. Science Bulletin, 2016, 61, 1699-1710. | 4.3 | 31 |
| 67 | Integrated Porous Cathode made of Pure Perovskite Lanthanum Nickel Oxide for Nonaqueous Lithiumâ€“Oxygen Batteries. Energy Technology, 2015, 3, 1093-1100. | 1.8 | 15 |
| 68 | The dual role of hydrogen peroxide in fuel cells. Science Bulletin, 2015, 60, 55-64. | 4.3 | 98 |
| 69 | Charge carriers in alkaline direct oxidation fuel cells. Energy and Environmental Science, 2012, 5, 7536. | 15.6 | 63 |
| 70 | An alkaline direct ethanol fuel cell with a cation exchange membrane. Energy and Environmental Science, 2011, 4, 2213. | 15.6 | 85 |
| 71 | Nafion membranes for e-fuel cell applications. International Journal of Green Energy, 0, , 1-7. | 2.1 | 4 |