# Frederic Sauvage

List of Publications by Year
in descending order



| 80 | 4,278 | 147726 31 | 106281 65 |
|---|---|---|---|
| papers | citations | h-index | g-index |

| 84 | 84 | 84 | 6322 |
|---|---|---|---|
| all docs | docs citations | times ranked | citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Study of the Insertion/Deinsertion Mechanism of Sodium into Na0.44MnO2. Inorganic Chemistry, 2007, 46, 3289-3294. | 1.9 | 423 |
| 2 | Dye-Sensitized Solar Cells Employing a Single Film of Mesoporous TiO<sub>2</sub> Beads Achieve Power Conversion Efficiencies Over 10%. ACS Nano, 2010, 4, 4420-4425. | 7.3 | 412 |
| 3 | Hierarchical TiO<sub>2</sub> Photoanode for Dye-Sensitized Solar Cells. Nano Letters, 2010, 10, 2562-2567. | 4.5 | 331 |
| 4 | Regenerative PbS and CdS Quantum Dot Sensitized Solar Cells with a Cobalt Complex as Hole Mediator. Langmuir, 2009, 25, 7602-7608. | 1.6 | 270 |
| 5 | Poreâ€Filling of Spiroâ€OMeTAD in Solidâ€State Dye Sensitized Solar Cells: Quantification, Mechanism, and Consequences for Device Performance. Advanced Functional Materials, 2009, 19, 2431-2436. | 7.8 | 258 |
| 6 | Mixed Dimensional 2D/3D Hybrid Perovskite Absorbers: The Future of Perovskite Solar Cells?. Advanced Functional Materials, 2019, 29, 1806482. | 7.8 | 257 |
| 7 | Doping a TiO<sub>2</sub> Photoanode with Nb<sup>5+</sup> to Enhance Transparency and Charge Collection Efficiency in Dye-Sensitized Solar Cells. Journal of Physical Chemistry C, 2010, 114, 15849-15856. | 1.5 | 153 |
| 8 | Effect of Sensitizer Adsorption Temperature on the Performance of Dye-Sensitized Solar Cells. Journal of the American Chemical Society, 2011, 133, 9304-9310. | 6.6 | 143 |
| 9 | Symmetric vs. asymmetric squaraines as photosensitisers in mesoscopic injection solar cells: a structureâ€“property relationship study. Chemical Communications, 2012, 48, 2782. | 2.2 | 79 |
| 10 | Effect of texture on the electrochemical properties of LiFePO thin films. Solid State Ionics, 2005, 176, 1869-1876. | 1.3 | 77 |
| 11 | Study of the potentiometric response towards sodium ions of Na0.44â^'xMnO2 for the development of selective sodium ion sensors. Sensors and Actuators B: Chemical, 2007, 120, 638-644. | 4.0 | 76 |
| 12 | Butyronitrile-Based Electrolyte for Dye-Sensitized Solar Cells. Journal of the American Chemical Society, 2011, 133, 13103-13109. | 6.6 | 75 |
| 13 | Lithium Insertion / De-Insertion Properties of Ï€-Extended Naphthyl-Based Dicarboxylate Electrode Synthesized by Freeze-Drying. Journal of the Electrochemical Society, 2014, 161, A46-A52. | 1.3 | 74 |
| 14 | Ga<sup>3+</sup> and Y<sup>3+</sup> Cationic Substitution in Mesoporous TiO<sub>2</sub> Photoanodes for Photovoltaic Applications. Journal of Physical Chemistry C, 2011, 115, 9232-9240. | 1.5 | 73 |
| 15 | Toward Sustainable, Colorless, and Transparent Photovoltaics: State of the Art and Perspectives for the Development of Selective Nearâ€Infrared Dyeâ€Sensitized Solar Cells. Advanced Energy Materials, 2021, 11, 2101598. | 10.2 | 73 |
| 16 | Room-Temperature Synthesis Leading to Nanocrystalline Ag<sub>2</sub>V<sub>4</sub>O<sub>11</sub>. Journal of the American Chemical Society, 2010, 132, 6778-6782. | 6.6 | 72 |
| 17 | Tunable Redox Potential, Optical Properties, and Enhanced Stability of Modified Ferrocene-Based Complexes. ACS Omega, 2019, 4, 14780-14789. | 1.6 | 71 |
| 18 | Hyper-conjugated lithium carboxylate based on a perylene unit for high-rate organic lithium-ion batteries. Journal of Materials Chemistry A, 2014, 2, 18225-18228. | 5.2 | 69 |

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|---|---|---|---|
| 19 | Transparent and Colorless Dye-Sensitized Solar Cells Exceeding 75% Average Visible Transmittance. Jacs Au, 2021, 1, 409-426. | 3.6 | 66 |
| 20 | Panchromatic ruthenium sensitizer based on electron-rich heteroarylvinylene Ï€-conjugated quaterpyridine for dye-sensitized solar cells. Dalton Transactions, 2011, 40, 234-242. | 1.6 | 57 |
| 21 | Factors affecting the electrochemical reactivity vs. lithium of carbon-free LiFePO4 thin films. Journal of Power Sources, 2008, 175, 495-501. | 4.0 | 50 |
| 22 | Ag<sub>4</sub>V<sub>2</sub>O<sub>6</sub>F<sub>2</sub> (SVOF): A High Silver Density Phase and Potential New Cathode Material for Implantable Cardioverter Defibrillators. Inorganic Chemistry, 2008, 47, 8464-8472. | 1.9 | 50 |
| 23 | Defect Passivation via the Incorporation of Tetrapropylammonium Cation Leading to Stability Enhancement in Lead Halide Perovskite. Advanced Functional Materials, 2020, 30, 1909737. | 7.8 | 50 |
| 24 | Room-Temperature Synthesis of Iron-Doped Anatase TiO<sub>2</sub> for Lithium-Ion Batteries and Photocatalysis. Inorganic Chemistry, 2014, 53, 10129-10139. | 1.9 | 49 |
| 25 | Unsymmetrical squaraine dimer with an extended Ï€-electron framework: An approach in harvesting near infra-red photons for energy conversion. Dyes and Pigments, 2010, 87, 30-38. | 2.0 | 43 |
| 26 | Shedding light on the light-driven lithium ion de-insertion reaction: towards the design of a photo-rechargeable battery. Journal of Materials Chemistry A, 2017, 5, 5927-5933. | 5.2 | 43 |
| 27 | In Situ Measurements of Li Ion Battery Electrode Material Conductivity:â€‰ Application to LixCoO2and Conversion Reactions. Journal of Physical Chemistry C, 2007, 111, 9624-9630. | 1.5 | 41 |
| 28 | 2D-Layered Lithium Carboxylate Based on Biphenyl Core as Negative Electrode for Organic Lithium-Ion Batteries. Chemistry of Materials, 2017, 29, 546-554. | 3.2 | 41 |
| 29 | Phase stability frustration on ultra-nanosized anatase TiO2. Scientific Reports, 2015, 5, 10928. | 1.6 | 39 |
| 30 | A Dendritic Oligothiophene Ruthenium Sensitizer for Stable Dyeâ€Sensitized Solar Cells. ChemSusChem, 2009, 2, 761-768. | 3.6 | 35 |
| 31 | Room Temperature Synthesis of the Larger Power, High Silver Density Cathode Material Ag4V2O6F2 for Implantable Cardioverter Defibrillators. Chemistry of Materials, 2009, 21, 3017-3020. | 3.2 | 34 |
| 32 | A Review on Current Status of Stability and Knowledge on Liquid Electrolyte-Based Dye-Sensitized Solar Cells. Advances in Chemistry, 2014, 2014, 1-23. | 1.1 | 33 |
| 33 | Electrochemical Reactivity of Li2VOSiO4toward Li. Chemistry of Materials, 2006, 18, 407-412. | 3.2 | 31 |
| 34 | Structural and transport evolution in the LixAg2V4O11 system. Journal of Power Sources, 2010, 195, 1195-1201. | 4.0 | 30 |
| 35 | SiO<sub>2</sub>/Ionic Liquid Hybrid Nanoparticles for Solid-State Lithium Ion Conduction. Chemistry of Materials, 2015, 27, 7926-7933. | 3.2 | 30 |
| 36 | Molecularâ€Level Insight into Correlation between Surface Defects and Stability of Methylammonium Lead Halide Perovskite Under Controlled Humidity. Small Methods, 2021, 5, e2000834. | 4.6 | 30 |

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|---|---|---|---|
| 37 | Structural, microstructural and transport properties study of lanthanum lithium titanium perovskite thin films grown by Pulsed Laser Deposition. Thin Solid Films, 2008, 516, 1651-1655. | 0.8 | 29 |
| 38 | Transport properties and lithium insertion study in the p-type semi-conductors AgCuO2 and AgCu0.5Mn0.5O2. Journal of Solid State Chemistry, 2009, 182, 374-380. | 1.4 | 28 |
| 39 | Crystal Growth of Ag3MOxF6â˜x(M= V,x= 2;M= Mo,x= 3). Crystal Growth and Design, 2010, 10, 4868-4873. | 1.4 | 28 |
| 40 | Interface Stability of a TiO<sub>2</sub>/3â€Methoxypropionitrileâ€Based Electrolyte: First Evidence for Solid Electrolyte Interphase Formation and Implications. ChemPhysChem, 2014, 15, 1126-1137. | 1.0 | 26 |
| 41 | Investigation on the Interface Modification of TiO<sub>2</sub> Surfaces by Functional Coâ€Adsorbents for Highâ€Efficiency Dyeâ€Sensitized Solar Cells. ChemPhysChem, 2017, 18, 2724-2731. | 1.0 | 26 |
| 42 | Gold Catalysis and Photoactivation: A Fast and Selective Procedure for the Oxidation of Free Sugars. ACS Catalysis, 2018, 8, 1635-1639. | 5.5 | 26 |
| 43 | Effect of standard light illumination on electrolyteâ€™s stability of lithium-ion batteries based on ethylene and di-methyl carbonates. Scientific Reports, 2019, 9, 135. | 1.6 | 26 |
| 44 | Fineâ€Tuning of Triarylamineâ€Based Photosensitizers for Dyeâ€Sensitized Solar Cells. ChemSusChem, 2011, 4, 731-736. | 3.6 | 25 |
| 45 | Dicyanovinyl and Cyano-Ester Benzoindolenine Squaraine Dyes: The Effect of the Central Functionalization on Dye-Sensitized Solar Cell Performance. Energies, 2016, 9, 486. | 1.6 | 25 |
| 46 | Origin of electrochemical reactivity enhancement of post-annealed LiFePO4 thin films: Preparation of heterosite-type FePO4. Solid State Ionics, 2007, 178, 145-152. | 1.3 | 24 |
| 47 | Low-temperature electrodeposition approach leading to robust mesoscopic anatase TiO2 films. Scientific Reports, 2016, 6, 21588. | 1.6 | 22 |
| 48 | Lightâ€Induced Charge Separation in Mixed Electronic/Ionic Semiconductor Driving Lithiumâ€Ion Transfer for Photoâ€Rechargeable Electrode. Advanced Sustainable Systems, 2018, 2, 1700166. | 2.7 | 20 |
| 49 | Roomâ€Temperature Synthesis of High Surface Area Anatase TiO<sub>2</sub> Exhibiting a Complete Lithium Insertion Solid Solution. Particle and Particle Systems Characterization, 2013, 30, 1093-1104. | 1.2 | 18 |
| 50 | Nature of Paramagnetic Species in Nitrogen-Doped SnO<sub>2</sub>: A Combined Electron Paramagnetic Resonance and Density Functional Theory Study. Journal of Physical Chemistry C, 2015, 119, 26895-26903. | 1.5 | 18 |
| 51 | Electrical Properties of <scp><scp>Nb</scp></scp>â€, <scp><scp>Ga</scp></scp>â€, and <scp><scp>Y</scp></scp>â€Substituted Nanocrystalline Anatase <scp><scp>TiO</scp></scp><sub>2</sub> Prepared by Hydrothermal Synthesis. Journal of the American Ceramic Society, 2012, 95, 3192-3196. | 1.9 | 16 |
| 52 | Passing the limit of electrodeposition: â€˜Gas templateâ€™ H2 nanobubbles for growing highly crystalline nanoporous ZnO. Nano Energy, 2012, 1, 742-750. | 8.2 | 14 |
| 53 | Ag<sub>6</sub>Mo<sub>2</sub>O<sub>7</sub>F<sub>3</sub>Cl: A New Silver Cathode Material for Enhanced ICD Primary Lithium Batteries. Inorganic Chemistry, 2010, 49, 6461-6467. | 1.9 | 13 |
| 54 | Wide bandgap halide perovskite absorbers for semi-transparent photovoltaics: From theoretical design to modules. Nano Energy, 2022, 101, 107560. | 8.2 | 12 |

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| 55 | Insights into the potentiometric response behaviour vs. Li+ of LiFePO4 thin films in aqueous medium. Analytica Chimica Acta, 2008, 622, 163-168. | 2.6 | 11 |
| 56 | Electrolyte containing lithium cation in squaraine-sensitized solar cells: interactions and consequences for performance and charge transfer dynamics. Physical Chemistry Chemical Physics, 2017, 19, 27670-27681. | 1.3 | 11 |
| 57 | Mesoscale Texturation of Organic-Based Negative Electrode Material through in Situ Proton Reduction of Conjugated Carboxylic Acid. Chemistry of Materials, 2019, 31, 6224-6230. | 3.2 | 11 |
| 58 | Preparation and electrochemical properties of nano-sized cryptomelane particles for the formation of potentiometric potassium ion sensors. Mikrochimica Acta, 2009, 164, 363-369. | 2.5 | 9 |
| 59 | Photocatalyzed Transformation of Free Carbohydrates. Catalysts, 2018, 8, 672. | 1.6 | 9 |
| 60 | A Drift-Diffusion Study on Charge Unbalancing Effects in Dye-Sensitized Solar Cells. Journal of the Electrochemical Society, 2015, 162, H753-H758. | 1.3 | 8 |
| 61 | Insight on the Contribution of Plasmons to Goldâ€Catalyzed Solarâ€Driven Selective Oxidation of Glucose under Oxygen. Solar Rrl, 2020, 4, 2000084. | 3.1 | 8 |
| 62 | A multi-technique comparison of the electronic properties of pristine and nitrogen-doped polycrystalline SnO<sub>2</sub>. Physical Chemistry Chemical Physics, 2016, 18, 22617-22627. | 1.3 | 7 |
| 63 | ZnO Nanowires as a Promotor of High Photoinduced Efficiency and Voltage Gain for Cathode Battery Recharging. ACS Applied Energy Materials, 2019, 2, 6254-6262. | 2.5 | 7 |
| 64 | Empowering organicâ€based negative electrode material based on conjugated lithium carboxylate through molecular design. ChemSusChem, 2020, 13, 2321-2327. | 3.6 | 7 |
| 65 | Moistureâ€Induced Nonâ€Equilibrium Phase Segregation in Triple Cation Mixed Halide Perovskite Monitored by In Situ Characterization Techniques and Solidâ€State NMR. Energy and Environmental Materials, 2023, 6, . | 7.3 | 7 |
| 66 | Structural and optical characterization of electrodeposited CdSe in mesoporous anatase TiO2for regenerative quantum-dot-sensitized solar cells. Nanotechnology, 2012, 23, 395401. | 1.3 | 6 |
| 67 | Electrodeposition of TiO2 Using Ionic Liquids. ECS Electrochemistry Letters, 2014, 3, D16-D18. | 1.9 | 6 |
| 68 | Consequences of Solid Electrolyte Interphase (SEI) Formation upon Aging on Charge-Transfer Processes in Dye-Sensitized Solar Cells. Journal of Physical Chemistry C, 2016, 120, 18991-18998. | 1.5 | 6 |
| 69 | Epitaxial TiO2 Shell Grown by Atomic Layer Deposition on ZnO Nanowires Using a Double-Step Process and Its Beneficial Passivation Effect. Journal of Physical Chemistry C, 2020, 124, 13447-13455. | 1.5 | 6 |
| 70 | New iodide-based amino acid molecules for more sustainable electrolytes in dye-sensitized solar cells. Green Chemistry, 2018, 20, 1059-1064. | 4.6 | 5 |
| 71 | Pulsed laser deposition and potentiometric response towards silver ions of Î²-AgCuPO4 thin films. Electrochimica Acta, 2005, 50, 2507-2513. | 2.6 | 4 |
| 72 | Formation of autonomous ion sensors based on ion insertion-type materials. Journal of Applied Electrochemistry, 2008, 38, 803-808. | 1.5 | 3 |

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|---|---|---|---|
| 73 | Towards Renewable Iodide Sources for Electrolytes in Dye-Sensitized Solar Cells. Energies, 2016, 9, 241. | 1.6 | 3 |
| 74 | A Holistic Study on the Effect of Annealing Temperature and Time on CH3NH3PbI3-Based Perovskite Solar Cell Characteristics. Frontiers in Energy Research, 2021, 9, . | 1.2 | 3 |
| 75 | Stark-Field Effect in Nanocrystalline Anatase TiO<sub>2</sub> Ruling Miscibility Gap and Electrochemical Performances of Carbon-Free Electrodes for Batteries. ACS Applied Energy Materials, 2020, 3, 8706-8715. | 2.5 | 2 |
| 76 | Rationalization of excited state energy transfer in Dâ€“Ï€â€“A porphyrin sensitizers enhancing efficiency in dye-sensitized solar cells. Materials Advances, 0, , . | 2.6 | 2 |
| 77 | Transparent and Colorless Dyeâ€Sensitized Solar Cells Based on Pyrrolopyrrole Cyanine Sensitizers. Angewandte Chemie, 2022, 134, . | 1.6 | 2 |
| 78 | Poly[Î¼6-(naphthalene-2,6-dicarboxylato)-bis(aqualithium)]. Acta Crystallographica Section E: Structure Reports Online, 2014, 70, m288-m288. | 0.2 | 0 |
| 79 | Low-Cost Electricity Production from Sunlight: Third-Generation Photovoltaics and the Dye-Sensitized Solar Cell. , 2016, , 93-153. | | 0 |
| 80 | Ultrafast spectroscopy of transparent dye-sensitized solar cells designed for the near-infrared. , 2020, , . | | 0 |