Frederic Sauvage

List of Publications by Year
in descending order

80 papers	4,278 citations	147726 31 h-index	106281 65 g-index
84 all docs	84 docs citations	84 times ranked	6322 citing authors

#	Article	IF	Citations
1	Moistureâ€Induced Nonâ€Equilibrium Phase Segregation in Triple Cation Mixed Halide Perovskite Monitored by <i>In Situ</i> Characterization Techniques and Solidâ€State NMR. Energy and Environmental Materials, 2023, 6, .	7.3	7
2	Transparent and Colorless Dyeâ€Sensitized Solar Cells Based on Pyrrolopyrrole Cyanine Sensitizers. Angewandte Chemie, 2022, 134, .	1.6	2
3	Wide bandgap halide perovskite absorbers for semi-transparent photovoltaics: From theoretical design to modules. Nano Energy, 2022, 101, 107560.	8.2	12
4	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
5	Transparent and Colorless Dye-Sensitized Solar Cells Exceeding 75% Average Visible Transmittance. Jacs Au, 2021, 1, 409-426.	3.6	66
6	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
7	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
8	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
9	Empowering organicâ€based negative electrode material based on conjugated lithium carboxylate through molecular design. ChemSusChem, 2020, 13, 2321-2327.	3.6	7
10	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
11	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
12	Stark-Field Effect in Nanocrystalline Anatase TiO₂ Ruling Miscibility Gap and Electrochemical Performances of Carbon-Free Electrodes for Batteries. ACS Applied Energy Materials, 2020, 3, 8706-8715.	2.5	2
13	Ultrafast spectroscopy of transparent dye-sensitized solar cells designed for the near-infrared. , 2020, , .		0
14	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
15	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
16	Tunable Redox Potential, Optical Properties, and Enhanced Stability of Modified Ferrocene-Based Complexes. ACS Omega, 2019, 4, 14780-14789.	1.6	71
17	Mixed Dimensional 2D/3D Hybrid Perovskite Absorbers: The Future of Perovskite Solar Cells?. Advanced Functional Materials, 2019, 29, 1806482.	7.8	257
18	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

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19	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
20	Gold Catalysis and Photoactivation: A Fast and Selective Procedure for the Oxidation of Free Sugars. ACS Catalysis, 2018, 8, 1635-1639.	5.5	26
21	New iodide-based amino acid molecules for more sustainable electrolytes in dye-sensitized solar cells. Green Chemistry, 2018, 20, 1059-1064.	4.6	5
22	Photocatalyzed Transformation of Free Carbohydrates. Catalysts, 2018, 8, 672.	1.6	9
23	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
24	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
25	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
26	Investigation on the Interface Modification of TiO₂ Surfaces by Functional Coâ€Adsorbents for Highâ€Efficiency Dyeâ€Sensitized Solar Cells. ChemPhysChem, 2017, 18, 2724-2731.	1.0	26
27	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
28	Towards Renewable Iodide Sources for Electrolytes in Dye-Sensitized Solar Cells. Energies, 2016, 9, 241.	1.6	3
29	Low-Cost Electricity Production from Sunlight: Third-Generation Photovoltaics and the Dye-Sensitized Solar Cell. , 2016, , 93-153.		0
30	A multi-technique comparison of the electronic properties of pristine and nitrogen-doped polycrystalline SnO₂. Physical Chemistry Chemical Physics, 2016, 18, 22617-22627.	1.3	7
31	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
32	Low-temperature electrodeposition approach leading to robust mesoscopic anatase TiO2 films. Scientific Reports, 2016, 6, 21588.	1.6	22
33	Phase stability frustration on ultra-nanosized anatase TiO2. Scientific Reports, 2015, 5, 10928.	1.6	39
34	Nature of Paramagnetic Species in Nitrogen-Doped SnO₂: A Combined Electron Paramagnetic Resonance and Density Functional Theory Study. Journal of Physical Chemistry C, 2015, 119, 26895-26903.	1.5	18
35	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
36	SiO₂/Ionic Liquid Hybrid Nanoparticles for Solid-State Lithium Ion Conduction. Chemistry of Materials, 2015, 27, 7926-7933.	3.2	30

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37	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
38	Poly[Î¼6-(naphthalene-2,6-dicarboxylato)-bis(aqualithium)]. Acta Crystallographica Section E: Structure Reports Online, 2014, 70, m288-m288.	0.2	0
39	Electrodeposition of TiO2 Using Ionic Liquids. ECS Electrochemistry Letters, 2014, 3, D16-D18.	1.9	6
40	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
41	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
42	Interface Stability of a TiO₂/3â€Methoxypropionitrileâ€Based Electrolyte: First Evidence for Solid Electrolyte Interphase Formation and Implications. ChemPhysChem, 2014, 15, 1126-1137.	1.0	26
43	Room-Temperature Synthesis of Iron-Doped Anatase TiO₂ for Lithium-Ion Batteries and Photocatalysis. Inorganic Chemistry, 2014, 53, 10129-10139.	1.9	49
44	Roomâ€Temperature Synthesis of High Surface Area Anatase TiO₂ Exhibiting a Complete Lithium Insertion Solid Solution. Particle and Particle Systems Characterization, 2013, 30, 1093-1104.	1.2	18
45	Symmetric vs. asymmetric squaraines as photosensitisers in mesoscopic injection solar cells: a structureâ€“property relationship study. Chemical Communications, 2012, 48, 2782.	2.2	79
46	Structural and optical characterization of electrodeposited CdSe in mesoporous anatase TiO2for regenerative quantum-dot-sensitized solar cells. Nanotechnology, 2012, 23, 395401.	1.3	6
47	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
48	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>₂ Prepared by Hydrothermal Synthesis. Journal of the American Ceramic Society, 2012, 95, 3192-3196.	1.9	16
49	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
50	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
51	Butyronitrile-Based Electrolyte for Dye-Sensitized Solar Cells. Journal of the American Chemical Society, 2011, 133, 13103-13109.	6.6	75
52	Ga³⁺ and Y³⁺ Cationic Substitution in Mesoporous TiO₂ Photoanodes for Photovoltaic Applications. Journal of Physical Chemistry C, 2011, 115, 9232-9240.	1.5	73
53	Fineâ€Tuning of Triarylamineâ€Based Photosensitizers for Dyeâ€Sensitized Solar Cells. ChemSusChem, 2011, 4, 731-736.	3.6	25
54	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

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55	Structural and transport evolution in the LixAg2V4O11 system. Journal of Power Sources, 2010, 195, 1195-1201.	4.0	30
56	Crystal Growth of Ag3MOxF6âˆ'x(M= V,x= 2;M= Mo,x= 3). Crystal Growth and Design, 2010, 10, 4868-4873.	1.4	28
57	Dye-Sensitized Solar Cells Employing a Single Film of Mesoporous TiO₂ Beads Achieve Power Conversion Efficiencies Over 10%. ACS Nano, 2010, 4, 4420-4425.	7.3	412
58	Doping a TiO₂ Photoanode with Nb⁵⁺ to Enhance Transparency and Charge Collection Efficiency in Dye-Sensitized Solar Cells. Journal of Physical Chemistry C, 2010, 114, 15849-15856.	1.5	153
59	Ag₆Mo₂O₇F₃Cl: A New Silver Cathode Material for Enhanced ICD Primary Lithium Batteries. Inorganic Chemistry, 2010, 49, 6461-6467.	1.9	13
60	Room-Temperature Synthesis Leading to Nanocrystalline Ag₂V₄O₁₁. Journal of the American Chemical Society, 2010, 132, 6778-6782.	6.6	72
61	Hierarchical TiO₂ Photoanode for Dye-Sensitized Solar Cells. Nano Letters, 2010, 10, 2562-2567.	4.5	331
62	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
63	A Dendritic Oligothiophene Ruthenium Sensitizer for Stable Dyeâ€Sensitized Solar Cells. ChemSusChem, 2009, 2, 761-768.	3.6	35
64	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
65	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
66	Regenerative PbS and CdS Quantum Dot Sensitized Solar Cells with a Cobalt Complex as Hole Mediator. Langmuir, 2009, 25, 7602-7608.	1.6	270
67	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
68	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
69	Formation of autonomous ion sensors based on ion insertion-type materials. Journal of Applied Electrochemistry, 2008, 38, 803-808.	1.5	3
70	Factors affecting the electrochemical reactivity vs. lithium of carbon-free LiFePO4 thin films. Journal of Power Sources, 2008, 175, 495-501.	4.0	50
71	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
72	Ag₄V₂O₆F₂ (SVOF): A High Silver Density Phase and Potential New Cathode Material for Implantable Cardioverter Defibrillators. Inorganic Chemistry, 2008, 47, 8464-8472.	1.9	50

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73	Study of the Insertion/Deinsertion Mechanism of Sodium into Na0.44MnO2. Inorganic Chemistry, 2007, 46, 3289-3294.	1.9	423
74	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
75	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
76	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
77	Electrochemical Reactivity of Li2VOSiO4toward Li. Chemistry of Materials, 2006, 18, 407-412.	3.2	31
78	Pulsed laser deposition and potentiometric response towards silver ions of Î²-AgCuPO4 thin films. Electrochimica Acta, 2005, 50, 2507-2513.	2.6	4
79	Effect of texture on the electrochemical properties of LiFePO thin films. Solid State Ionics, 2005, 176, 1869-1876.	1.3	77
80	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