Olivier Fontaine

List of Publications by Citations

41 papers	2,112 citations	20 h-index	45 g-index
46 ext. papers	2,520 ext. citations	10.8 avg, IF	5.11 L-index

#	Paper	IF	Citations
41	Charging a Li-O2 battery using a redox mediator. *Nature Chemistry*, **2013**, 5, 489-94	17.6	675
40	Singlet oxygen generation as a major cause for parasitic reactions during cycling of aprotic lithium–oxygen batteries. *Nature Energy*, **2017**, 2,	62.3	243
39	Biredox ionic liquids with solid-like redox density in the liquid state for high-energy supercapacitors. *Nature Materials*, **2017**, 16, 446-453	27	233
38	Mechanism and performance of lithium-oxygen batteries - a perspective. *Chemical Science*, **2017**, 8, 6716-6729	9.4	116
37	"Water-in-Salt" for Supercapacitors: A Compromise between Voltage, Power Density, Energy Density and Stability. *Journal of the Electrochemical Society*, **2018**, 165, A657-A663	3.9	83
36	Singlet oxygen from cation driven superoxide disproportionation and consequences for aprotic metal–O2 batteries. *Energy and Environmental Science*, **2019**, 12, 2559-2568	35.4	82
35	Mass transport and heterogeneous electron transfer of a ferrocene derivative in a room-temperature ionic liquid. *Journal of Electroanalytical Chemistry*, **2009**, 632, 88-96	4.1	78
34	Modifications of MXene layers for supercapacitors. *Nano Energy*, **2020**, 73, 104734	17.1	74
33	Ionic liquid viscosity effects on the functionalization of electrode material through the electroreduction of diazonium. *Langmuir*, **2010**, 26, 18542-9	4	57
32	Water-in-Salt Electrolyte (WiSE) for Aqueous Batteries: A Long Way to Practicality. *Advanced Energy Materials*, **2020**, 10, 2002440	21.8	52
31	Modification of carbon electrode in ionic liquid through the reduction of phenyl diazonium salt. Electrochemical evidence in ionic liquid. *Electrochemistry Communications*, **2008**, 10, 1060-1063	5.1	44
30	Transport Properties of Li-TFSI Water-in-Salt Electrolytes. *Journal of Physical Chemistry B*, **2019**, 123, 10514-10521	3.4	39
29	Aprotic Li–O2 Battery: Influence of Complexing Agents on Oxygen Reduction in an Aprotic Solvent. *Journal of Physical Chemistry C*, **2014**, 118, 3393-3401	3.8	33
28	Competitive Salt Precipitation/Dissolution During Free-Water Reduction in Water-in-Salt Electrolyte. *Angewandte Chemie - International Edition*, **2020**, 59, 15913-15917	16.4	28
27	Biredox ionic liquids: electrochemical investigation and impact of ion size on electron transfer. *Electrochimica Acta*, **2016**, 206, 513-523	6.7	27
26	Single-ion conductor nanocomposite organic–inorganic hybrid membranes for lithium batteries. *Journal of Materials Chemistry A*, **2014**, 2, 12162-12165	13	27
25	Biredox ionic liquids: new opportunities toward high performance supercapacitors. *Faraday Discussions*, **2018**, 206, 393-404	3.6	24

24	Multiwalled Carbon Nanotube/Cellulose Composite: From Aqueous Dispersions to Pickering Emulsions. *Langmuir*, **2016**, 32, 3907-16	4	24
23	3D self-supported porous vanadium-doped nickel nitride nanosheet arrays as efficient bifunctional electrocatalysts for urea electrolysis. *Journal of Materials Chemistry A*, **2021**, 9, 4159-4166	13	23
22	Formation of negative oxidation states of platinum and gold in redox ionic liquid: Electrochemical evidence. *Electrochemistry Communications*, **2008**, 10, 1205-1209	5.1	22
21	Synthesis of Titania@Carbon Nanocomposite from Urea-Impregnated Cellulose for Efficient Lithium and Sodium Batteries. *ChemSusChem*, **2016**, 9, 264-73	8.3	20
20	Mechanism of mediated alkali peroxide oxidation and triplet versus singlet oxygen formation. *Nature Chemistry*, **2021**, 13, 465-471	17.6	18
19	Sol-gel route to zirconia-Pt-nanoelectrode arrays 8 nm in radius: their geometrical impact in mass transport. *Langmuir*, **2012**, 28, 3650-7	4	14
18	Competitive Salt Precipitation/Dissolution During Free-Water Reduction in Water-in-Salt Electrolyte. *Angewandte Chemie*, **2020**, 132, 16047-16051	3.6	11
17	Investigation of Ba0.5Sr0.5CoxFe1-xO3-δ as a pseudocapacitive electrode material with high volumetric capacitance. *Electrochimica Acta*, **2018**, 271, 677-684	6.7	8
16	PEO-Silsesquioxane Flexible Membranes: Organic-Inorganic Solid Electrolytes with Controlled Homogeneity and Nanostructure. *ChemistrySelect*, **2017**, 2, 2088-2093	1.8	7
15	Can an Inorganic Coating Serve as Stable SEI for Aqueous Superconcentrated Electrolytes?. *ACS Energy Letters*, **2021**, 6, 2575-2583	20.1	7
14	A deeper understanding of the electron transfer is the key to the success of biredox ionic liquids. *Energy Storage Materials*, **2019**, 21, 240-245	19.4	6
13	An aqueous zinc-ion battery working at 50°C enabled by low-concentration perchlorate-based chaotropic salt electrolyte. *EcoMat*,	9.4	6
12	Self-Limited Grafting of Sub-Monolayers via Diels-Alder Reaction on Glassy Carbon Electrodes: An Electrochemical Insight. *ACS Omega*, **2019**, 4, 20540-20546	3.9	6
11	Redox bucky gels: mixture of carbon nanotubes and room temperature redox ionic liquids. *Journal of Materials Chemistry A*, **2019**, 7, 13382-13388	13	4
10	Electrochemical investigations of Nb2O5/carbon materials from filter paper, microfibrillated and bacterial celluloses by sustainable reductive mineralization. *Electrochimica Acta*, **2019**, 313, 478-487	6.7	4
9	Investigation of Electrochemical and Chemical Processes Occurring at Positive Potentials in "Water-in-Salt" Electrolytes. *Journal of the Electrochemical Society*, **2021**, 168, 050550	3.9	4
8	Evaluation of the Properties of an Electrolyte Based on Formamide and LiTFSI for Electrochemical Capacitors. *Journal of the Electrochemical Society*, **2020**, 167, 110508	3.9	3
7	Nanocomposites with both structural and porous hierarchy synthesized from Pickering emulsions. *New Journal of Chemistry*, **2016**, 40, 4344-4350	3.6	3

6	Electrochemical study of asymmetric aqueous supercapacitors based on high density oxides: C/Ba0.5Sr0.5Co0.8Fe0.2O3-δ and FeWO4/Ba0.5Sr0.5Co0.8Fe0.2O3-δ *Electrochimica Acta*, **2019**, 326, 134886	6.7	2
5	Shuttle Effect Quantification for Redox Ionic Liquid Electrolyte Correlated to the Coulombic Efficiency of Supercapacitors. *Batteries and Supercaps*, **2020**, 3, 1193-1200	5.6	1
4	Constructing an efficient conductive network with carbon-based additives in metal hydroxide electrode for high-performance hybrid supercapacitor. *Electrochimica Acta*, **2021**, 397, 139242	6.7	1
3	Coulombic Force Gated Molecular Transport in Redox Flow Batteries. *Journal of Physical Chemistry Letters*, **2021**, 12, 1374-1383	6.4	0
2	MnO2-MXene Composite as Electrode for Supercapacitor. *Journal of the Electrochemical Society*, **2022**, 169, 030524	3.9	0
1	Water-in-salt electrolytes towards sustainable and cost-effective alternatives - Example for Zinc-ion batteries. *Current Opinion in Electrochemistry*, **2022**, 101070	7.2	0