Ch Laberty-Robert

List of Publications by Year
in descending order

121 papers	5,082 citations	109321 35 h-index	95266 68 g-index
124 all docs	124 docs citations	124 times ranked	8160 citing authors

#	Article	IF	Citations
1	Converting silicon nanoparticles into nickel iron silicide nanocrystals within molten salts for water oxidation electrocatalysis. Journal of Materials Chemistry A, 2022, 10, 1350-1358.	10.3	17
2	Regeneration of Electrocatalyst through Li-Ion Insertion. Journal of the Electrochemical Society, 2022, 169, 030522.	2.9	2
3	Interface evolution and performance degradation in LiCoO2 composite battery electrodes monitoredÂby advanced EQCM. Electrochimica Acta, 2022, 413, 140171.	5.2	1
4	Towards a high MnO₂ loading and gravimetric capacity from proton-coupled Mn⁴⁺/Mn²⁺ reactions using a 3D free-standing conducting scaffold. Journal of Materials Chemistry A, 2021, 9, 1500-1506.	10.3	12
5	A novel microbial fuel cell electrode design: prototyping a self-standing one-step bacteria-encapsulating bioanode with electrospinning. Journal of Materials Chemistry B, 2021, 9, 4309-4318.	5.8	9
6	Scrutiny of the LiCoO₂ Composite Electrode/Electrolyte Interface by Advanced Electrogravimetry and Implications for Aqueous Li-Ion Batteries. Journal of Physical Chemistry C, 2021, 125, 3859-3867.	3.1	7
7	Electrospun carbon fibers for microbial fuel cells: A novel bioanode design applied to wastewater treatment. Electrochimica Acta, 2021, 373, 137864.	5.2	16
8	The Role of Al³⁺â€Based Aqueous Electrolytes in the Charge Storage Mechanism of MnO_x Cathodes. Small, 2021, 17, e2101515.	10.0	18
9	Synergistic Effect Between Ca 4 V 4 O 14 and Vanadiumâ€Substituted Hydroxyapatite in the Oxidative Dehydrogenation of Propane. ChemCatChem, 2021, 13, 3995-4009.	3.7	3
10	Critical Current Density Limitation of LLZO Solid Electrolyte: Microstructure vs Interface. Journal of the Electrochemical Society, 2021, 168, 120550.	2.9	18
11	Experimental Descriptors for the Synthesis of Multicationic Nickel Perovskite Nanoparticles for Oxygen Reduction. ACS Applied Nano Materials, 2020, 3, 7482-7489.	5.0	9
12	Hydroxyapatites as Versatile Inorganic Hosts of Unusual Pentavalent Manganese Cations. Chemistry of Materials, 2020, 32, 10584-10593.	6.7	2
13	Hydronium Ions Stabilized in a Titanate-Layered Structure with High Ionic Conductivity: Application to Aqueous Proton Batteries. Chemistry of Materials, 2020, 32, 9458-9469.	6.7	17
14	Assessing the Oxidation Behavior of EC:DMC Based Electrolyte on Non-Catalytically Active Surface. Journal of the Electrochemical Society, 2020, 167, 080530.	2.9	24
15	Structureâ€“Activity Relationship in Manganese Perovskite Oxide Nanocrystals from Molten Salts for Efficient Oxygen Reduction Reaction Electrocatalysis. Chemistry of Materials, 2020, 32, 4241-4247.	6.7	27
16	Native Collagen: Electrospinning of Pure, Cross-Linker-Free, Self-Supported Membrane. ACS Applied Bio Materials, 2020, 3, 2948-2957.	4.6	21
17	A first-principles computational comparison of defect-free and disordered, fluorinated anatase TiO2 (001) interfaces with water. RSC Advances, 2020, 10, 8982-8988.	3.6	2
18	Phase selective synthesis of nickel silicide nanocrystals in molten salts for electrocatalysis of the oxygen evolution reaction. Nanoscale, 2020, 12, 15209-15213.	5.6	22

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19	Activation of Câ˜H Bond of Propane by Strong Basic Sites Generated by Bulk Proton Conduction on Vâ€Modified Hydroxyapatites for the Formation of Propene.. ChemCatChem, 2020, 12, 2506-2521.	3.7	14
20	Red-Shifted Absorptions of Cation-Defective and Surface-Functionalized Anatase with Enhanced Photoelectrochemical Properties. ACS Omega, 2019, 4, 10929-10938.	3.5	6
21	Thin Fiber-Based Separators for High-Rate Sodium Ion Batteries. ACS Applied Energy Materials, 2019, 2, 8369-8375.	5.1	18
22	Morphological and Structural Evolution of Co₃O₄ Nanoparticles Revealed by in Situ Electrochemical Transmission Electron Microscopy during Electrocatalytic Water Oxidation. ACS Nano, 2019, 13, 11372-11381.	14.6	140
23	Versatile Molten Salt Synthesis of Manganite Perovskite Oxide Nanocrystals and Their Magnetic Properties. ChemNanoMat, 2019, 5, 358-363.	2.8	8
24	Microbial diversity involved in iron and cryptic sulfur cycling in the ferruginous, low-sulfate waters of Lake Pavin. PLoS ONE, 2019, 14, e0212787.	2.5	43
25	Characterization of LiCoO₂ nanoparticle suspensions by single collision events. Physical Chemistry Chemical Physics, 2019, 21, 5416-5423.	2.8	12
26	CuO photoelectrodes synthesized by the solâ€“gel method for water splitting. Journal of Sol-Gel Science and Technology, 2019, 89, 255-263.	2.4	27
27	Capillarity-induced folds fuel extreme shape changes in thin wicked membranes. Science, 2018, 360, 296-299.	12.6	50
28	Lithium Intercalation in Anatase Titanium Vacancies and the Role of Local Anionic Environment. Chemistry of Materials, 2018, 30, 3078-3089.	6.7	49
29	Lightâ€Induced Charge Separation in Mixed Electronic/Ionic Semiconductor Driving Lithiumâ€Ion Transfer for Photoâ€Rechargeable Electrode. Advanced Sustainable Systems, 2018, 2, 1700166.	5.3	20
30	Multicationic Sr4Mn3O10 mesostructures: molten salt synthesis, analytical electron microscopy study and reactivity. Materials Horizons, 2018, 5, 480-485.	12.2	5
31	Silica immobilization of Geobacter sulfurreducens for constructing readyâ€toâ€use artificial bioelectrodes. Microbial Biotechnology, 2018, 11, 39-49.	4.2	27
32	Harvesting light with semiconductor: Role of interface in the processes of charge transfer. Materials Science in Semiconductor Processing, 2018, 73, 2-12.	4.0	5
33	Effect of anode polarization on biofilm formation and electron transfer in Shewanella oneidensis /graphite felt microbial fuel cells. Bioelectrochemistry, 2018, 120, 1-9.	4.6	44
34	Microwave-assisted reactive sintering and lithium ion conductivity of Li1.3Al0.3Ti1.7(PO4)3 solid electrolyte. Journal of Power Sources, 2018, 378, 48-52.	7.8	77
35	Electron Transfer at the Metal Oxide/Electrolyte Interface: A Simple Methodology for Quantitative Kinetics Evaluation. Journal of Physical Chemistry C, 2018, 122, 12761-12770.	3.1	4
36	Nickel-Doped Sodium Cobaltite 2D Nanomaterials: Synthesis and Electrocatalytic Properties. Chemistry of Materials, 2018, 30, 4986-4994.	6.7	17

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37	Mesoporous thin film WO₃ photoanode for photoelectrochemical water splitting: a solâ€“gel dip coating approach. Sustainable Energy and Fuels, 2017, 1, 145-153.	4.9	65
38	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.	10.3	43
39	Hybrid Li Ion Conducting Membrane as Protection for the Li Anode in an Aqueous Liâ€“Air Battery: Coupling Solâ€“Gel Chemistry and Electrospinning. Langmuir, 2017, 33, 9288-9297.	3.5	27
40	Solarâ€Waterâ€Splitting BiVO₄ Thinâ€Film Photoanodes Prepared By Using a Solâ€“Gel Dipâ€Coating Technique. ChemPhotoChem, 2017, 1, 273-280.	3.0	31
41	Incorporation of vanadium into the framework of hydroxyapatites: importance of the vanadium content and pH conditions during the precipitation step. Physical Chemistry Chemical Physics, 2017, 19, 9630-9640.	2.8	21
42	Sulfonic Acid Functionalized Chitosan as a Sustainable Component for Proton Conductivity Management in PEMs. ChemistrySelect, 2017, 2, 2503-2511.	1.5	8
43	Surfaceâ€Driven Magnetotransport in Perovskite Nanocrystals. Advanced Materials, 2017, 29, 1604745.	21.0	21
44	Engineering nâ€“p junction for photo-electrochemical hydrogen production. Physical Chemistry Chemical Physics, 2017, 19, 30675-30682.	2.8	11
45	Investigating Charge Transfer in Functionalized Mesoporous EISAâ€“SnO₂ Films. Journal of Physical Chemistry C, 2017, 121, 23207-23217.	3.1	1
46	Phosphate Ion Functionalization of Perovskite Surfaces for Enhanced Oxygen Evolution Reaction. Journal of Physical Chemistry Letters, 2017, 8, 3466-3472.	4.6	109
47	Electrospinning a versatile tool for designing hybrid proton conductive membrane. Journal of Membrane Science, 2016, 513, 12-19.	8.2	22
48	How Should Iron and Titanium be Combined in Oxides to Improve Photoelectrochemical Properties?. Journal of Physical Chemistry C, 2016, 120, 24521-24532.	3.1	35
49	Proton Transport in Electrospun Hybrid Organicâ€“Inorganic Membranes: An Illuminating Paradox. Advanced Functional Materials, 2016, 26, 594-604.	14.9	14
50	Interplay between Electrical Relaxation and Structural Properties in Hybrid Membrane Based on PVDFâ€“HFP and Functionalized Silica Network. Journal of Physical Chemistry C, 2016, 120, 6963-6970.	3.1	4
51	Evaluation of Hydrophilized Graphite Felt for Electrochemical Heavy Metals Detection (Pb²⁺, Hg²⁺). International Journal of Electrochemistry, 2015, 2015, 1-7.	2.4	6
52	Search for Li-electrochemical activity and Li-ion conductivity among lithium bismuth oxides. Solid State Ionics, 2015, 283, 68-74.	2.7	11
53	Hybrid Electrolytes. ACS Symposium Series, 2015, , 73-97.	0.5	1
54	Proton Diffusion Coefficient in Electrospun Hybrid Membranes by Electrochemical Impedance Spectroscopy. Langmuir, 2015, 31, 9737-9741.	3.5	4

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55	New Insights into Pseudocapacitive Charge-Storage Mechanisms in Li-Birnessite Type MnO₂ Monitored by Fast Quartz Crystal Microbalance Methods. Journal of Physical Chemistry C, 2014, 118, 26551-26559.	3.1	49
56	New Fe₂TiO₅-based nanoheterostructured mesoporous photoanodes with improved visible light photoresponses. Journal of Materials Chemistry A, 2014, 2, 6567-6577.	10.3	59
57	Molecular Engineering of Functional Inorganic and Hybrid Materials. Chemistry of Materials, 2014, 26, 221-238.	6.7	147
58	Nanocrystalline mesoporous LiFePO4 thin-films as cathodes for Li-ion microbatteries. Journal of Materials Chemistry A, 2014, 2, 3038.	10.3	29
59	Synthesis, characterization and electrical properties of La0.7Sr0.3Co0.2Fe0.8O3/Gdâ€“CeO2 thin films (â‰ˆ500 nm). Journal of Materials Chemistry A, 2014, 2, 6448.	10.3	3
60	Discussion on a Percolating Conducting Network of a Composite Thin-Film Electrode (â‰ˆ1 Î¼m) for Micro-Solid Oxide Fuel Cell Application. Langmuir, 2014, 30, 8889-8897.	3.5	3
61	A one-pot route to prepare class II hybrid ionogel electrolytes. New Journal of Chemistry, 2014, 38, 2008-2015.	2.8	13
62	Hybrid materials science: a promised land for the integrative design of multifunctional materials. Nanoscale, 2014, 6, 6267-6292.	5.6	168
63	Synthesis and Electrochemical Performance of the Orthorhombic Li₂Fe(SO₄)₂ Polymorph for Li-Ion Batteries. Chemistry of Materials, 2014, 26, 4178-4189.	6.7	53
64	Room-Temperature Synthesis of Iron-Doped Anatase TiO₂ for Lithium-Ion Batteries and Photocatalysis. Inorganic Chemistry, 2014, 53, 10129-10139.	4.0	49
65	Reduction of NiO to Ni in Nanocrystalline Composite NiO/Ce_{0.9}Gd_{0.1}O_{2-Î´} Porous Thin Films: Microstructure Evolution Through in Situ Impedance Spectroscopy. Journal of Physical Chemistry C, 2013, 117, 16297-16305.	3.1	7
66	Nanocrystalline, mesoporous NiO/Ce0.9Gd0.1O2âˆ’Î´ thin films with tuned microstructures and electrical properties: in situ characterization of electrical responses during the reduction of NiO. Journal of Materials Chemistry A, 2013, 1, 10753.	10.3	11
67	A H2-evolving photocathode based on direct sensitization of MoS3 with an organic photovoltaic cell. Energy and Environmental Science, 2013, 6, 2706.	30.8	83
68	Determination of the Diffusion Coefficient of Protons in Nafion Thin Films by ac-Electrogravimetry. Langmuir, 2013, 29, 13655-13660.	3.5	30
69	Fractal Inorganicâˆ’Organic Interfaces in Hybrid Membranes for Efficient Proton Transport. Advanced Functional Materials, 2013, 23, 2872-2880.	14.9	28
70	Nanostructured ceria based thin films (â‰ˆ1 Î¼m) As cathode/electrolyte interfaces. Journal of Solid State Chemistry, 2013, 197, 113-119.	2.9	25
71	Dye-sensitized nanostructured crystalline mesoporous tin-doped indium oxide films with tunable thickness for photoelectrochemical applications. Journal of Materials Chemistry A, 2013, 1, 8217.	10.3	33
72	Pt||ZrO2 nanoelectrode array synthesized through the solâ€“gel process: evaluation of their sensing capability. Journal of Solid State Electrochemistry, 2013, 17, 1099-1107.	2.5	6

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73	Silicaâ€“carbon hydrogels as cytocompatible bioelectrodes. Journal of Materials Chemistry B, 2013, 1, 606-609.	5.8	13
74	Mass Transport Properties of Silicified Graphite Felt Electrodes. Journal of Physical Chemistry C, 2013, 117, 15918-15923.	3.1	9
75	Flexible Electroactive Nanomaterials Biotemplated with Versatile M13 Phage Platforms. Advanced Engineering Materials, 2013, 15, 954-961.	3.5	12
76	Understanding crystallization processes of NiO/Ce0.9Gd0.1O2âˆ’Î´ solâ€“gel processed thin films for the design of efficient electrodes: an in situ thermal ellipsometry analysis. Journal of Materials Chemistry, 2012, 22, 9368.	6.7	12
77	DWCNT-Doped Silica Gel Exhibiting Both Ionic and Electronic Conductivities. Journal of Physical Chemistry C, 2012, 116, 11306-11314.	3.1	12
78	Solâ€“Gel Route to Zirconiaâ€“Pt-Nanoelectrode Arrays 8 nm in Radius: Their Geometrical Impact in Mass Transport. Langmuir, 2012, 28, 3650-3657.	3.5	19
79	Mesoporous Î±-Fe2O3 thin films synthesized via the solâ€“gel process for light-driven water oxidation. Physical Chemistry Chemical Physics, 2012, 14, 13224.	2.8	55
80	Nanoporous Piezo- and Ferroelectric Thin Films. Langmuir, 2012, 28, 2944-2949.	3.5	31
81	Optimized Solâ€“Gel Routes to Synthesize Yttria-Stabilized Zirconia Thin Films as Solid Electrolytes for Solid Oxide Fuel Cells. Chemistry of Materials, 2012, 24, 4540-4548.	6.7	33
82	Probing Properties, Stability, and Performances of Hierarchical Mesoporous Materials with Nanoscale Interfaces. Journal of Physical Chemistry C, 2012, 116, 7658-7663.	3.1	13
83	A composite solâ€“gel process to prepare a YSZ electrolyte for Solid Oxide Fuel Cells. Journal of Power Sources, 2012, 206, 77-83.	7.8	45
84	Direct nano-in-micropatterning of TiO2 thin layers and TiO2/Pt nanoelectrode arrays by deep X-ray lithography. Journal of Materials Chemistry, 2011, 21, 3597.	6.7	36
85	Design and properties of functional hybrid organicâ€“inorganic membranes for fuel cells. Chemical Society Reviews, 2011, 40, 961.	38.1	473
86	Sulfonic and Phosphonic Acid and Bifunctional Organicâ€“Inorganic Hybrid Membranes and Their Proton Conduction Properties. Chemistry - an Asian Journal, 2011, 6, 2992-3000.	3.3	27
87	Synthesis of poly(phenylene oxide)-based fluoro-tin-oxide/ZrO2 nanoelectrode arrays by hybrid organic/inorganic approach. Electrochimica Acta, 2011, 56, 7155-7162.	5.2	7
88	Gold Nanoelectrode Arrays and their Evaluation by Impedance Spectroscopy and Cyclic Voltammetry. ChemPhysChem, 2010, 11, 1971-1977.	2.1	17
89	Original Fuelâ€Cell Membranes from Crosslinked Terpolymers via a â€œSolâ€“gelâ€•Strategy. Advanced Functional Materials, 2010, 20, 1090-1098.	14.9	53
90	Proton transport properties in hybrid membranes investigated by ac-electrogravimetry. Electrochemistry Communications, 2010, 12, 1136-1139.	4.7	19

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91	â€œChimie douceâ€: A land of opportunities for the designed construction of functional inorganic and hybrid organic-inorganic nanomaterials. Comptes Rendus Chimie, 2010, 13, 3-39.	0.5	270
92	Electropolymerization of Phenol on FTO Modified ZrO2 Nanoelectrode Arrays: Morphology and Electrochemical Properties. ECS Meeting Abstracts, 2010, , .	0.0	0
93	Proton Insertion Properties in a Hybrid Membrane/Conducting Polymer Bilayer Investigated by AC Electrogravimetry. Journal of the Electrochemical Society, 2010, 157, F69.	2.9	11
94	Sol-Gel Process to Prepare an Anode Supported YSZ Electrolyte. ECS Transactions, 2009, 25, 1651-1657.	0.5	1
95	Design and Development of High-Performance Hybrid Inorganic-Organic Fuel Cell Membranes. ECS Transactions, 2009, 25, 1091-1099.	0.5	0
96	Functionalized Hybrid Organic-Inorganic Membranes Investigated by ac-Electrogravimetry. ECS Transactions, 2009, 25, 1115-1123.	0.5	0
97	Design, Synthesis, Structural and Textural Characterization, and Electrical Properties of Mesoporous Thin Films Made of Rare Earth Oxide Binaries. Chemistry of Materials, 2009, 21, 2184-2192.	6.7	39
98	Designing meso- and macropore architectures in hybrid organicâ€“inorganic membranes by combining surfactant and breath figure templating (BFT). Physical Chemistry Chemical Physics, 2009, 11, 3733.	2.8	29
99	Highly ordered metal oxide nanopatterns prepared by template-assisted chemical solution deposition. Journal of Sol-Gel Science and Technology, 2008, 48, 102-112.	2.4	16
100	Pechini synthesis and characterization of molybdenum carbide and nickel molybdenum carbide. Journal of Solid State Chemistry, 2008, 181, 2741-2747.	2.9	27
101	Solâ€“gel route to advanced nanoelectrode arrays (NEA) based on titania gold nanocomposites. Journal of Materials Chemistry, 2008, 18, 1216.	6.7	23
102	Ionic Nanowires at 600â€‰Â°C: Using Nanoarchitecture to Optimize Electrical Transport in Nanocrystalline Gadolinium-Doped Ceria. Advanced Materials, 2007, 19, 1734-1739.	21.0	68
103	Microstructural characterisation by X-ray scattering of perovskite-type La0.8Sr0.2MnO3Â±Î´ thin films prepared by a dip-coating process. Journal of Materials Science, 2007, 42, 4581-4590.	3.7	1
104	Solâ€™Gel-Derived Ceria Nanoarchitectures:â€‰ Synthesis, Characterization, and Electrical Properties. Chemistry of Materials, 2006, 18, 50-58.	6.7	219
105	Composition and porosity graded La2â€™xNiO4+Î´ (xâ‰¥0) interlayers for SOFC: Control of the microstructure via a solâ€“gel process. Journal of Power Sources, 2006, 156, 33-38.	7.8	40
106	Thick YSZ films prepared via a modified solâ€“gel route: Thickness control (8â€“80Î¼m). Journal of the European Ceramic Society, 2006, 26, 3153-3160.	5.7	47
107	Synthesis of La2NiO4+Î´ oxides by solâ€“gel process: Structural and microstructural evolution from amorphous to nanocrystallized powders. Materials Research Bulletin, 2006, 41, 1747-1753.	5.2	24
108	Synthesis of La9.33Si6O26 Poreâ€“Solid Nanoarchitectures via Epoxide-Driven Solâ€“Gel Chemistry. Advanced Materials, 2006, 18, 615-618.	21.0	52

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109	Synthesis by solâ€“gel route of oxyapatite powders for dense ceramics: Applications as electrolytes for solid oxide fuel cells. Journal of the European Ceramic Society, 2005, 25, 2665-2668.	5.7	53
110	High power density electrodes for Carbon supercapacitor applications. Electrochimica Acta, 2005, 50, 4174-4181.	5.2	327
111	Lanthanum ferromanganites thin films by solâ€“gel process. Influence of the organic/inorganic R ratio on the microstructural properties. Solid State Sciences, 2005, 7, 159-163.	3.2	16
112	Thick films of YSZ electrolytes by dip-coating process. Journal of the European Ceramic Society, 2005, 25, 2643-2646.	5.7	43
113	Elaboration and characterization of La2NiO4+Î´ powders and thin films via a modified solâ€“gel process. Journal of Solid State Chemistry, 2004, 177, 1471-1479.	2.9	25
114	Modification of Al current collector surface by solâ€“gel deposit for carbonâ€“carbon supercapacitor applications. Electrochimica Acta, 2004, 49, 905-912.	5.2	377
115	Evaluation of a solâ€“gel process for the synthesis of La1â^'xSrxMnO3+Î´ cathodic multilayers for solid oxide fuel cells. Journal of Power Sources, 2004, 133, 214-222.	7.8	24
116	Synthesis of La2â^'xNiO4+Î´ oxides by polymeric route: non-stoichoimetry control. Ceramics International, 2004, 30, 2087-2098.	4.8	28
117	New chemical process for the preparation of fine powders and thin films of LSMx-YSZ composite oxides. Solid State Sciences, 2003, 5, 1377-1383.	3.2	16
118	Dense yttria stabilized zirconia: sintering and microstructure. Ceramics International, 2003, 29, 151-158.	4.8	89
119	Preparation and characterization of La1â€“xSrxMnO3+Î´ (0â©½xâ©½0.6) powder by solâ€“gel processing. Solid State Sciences, 2002, 4, 125-133.	3.2	164
120	Synthesis of YSZ powders by the sol-gel method: surfactant effects on the morphology. Solid State Sciences, 2002, 4, 1053-1059.	3.2	46
121	Powder synthesis of nanocrystalline ZrO2â€“8%Y2O3 via a polymerization route. Materials Research Bulletin, 2001, 36, 2083-2101.	5.2	98