Patrice Huguet

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/9875611/publications.pdf

Version: 2024-02-01

57 papers	1,456 citations	361413 20 h-index	330143 37 g-index
58 all docs	58 docs citations	58 times ranked	1365 citing authors

#	Article	IF	Citations
1	Solventâ€“Diluent Interaction-Mediated Solvation Structure of Localized High-Concentration Electrolytes. ACS Applied Materials & Interfaces, 2022, 14, 4211-4219.	8.0	34
2	Operando Î¼-Raman Measurement of Water Distribution Along and Across the Membrane in a Fuel Cell. Journal of the Electrochemical Society, 2022, 169, 074502.	2.9	1
3	Physicochemical and electrochemical characterization of Nafion-type membranes with embedded silica nanoparticles: Effect of functionalization. Electrochimica Acta, 2021, 370, 137689.	5.2	15
4	Operando Âµ-Raman study of the membrane water content in the polymer electrolyte membrane fuel cell: Effects of gas flow-field geometry and temperature. Electrochimica Acta, 2021, 372, 137904.	5.2	4
5	Nanostructured Carbon-Nitrogen-Sulfur-Nickel Networks Derived From Polyaniline as Bifunctional Catalysts for Water Splitting. Frontiers in Chemistry, 2020, 8, 385.	3.6	13
6	Insights from the Physicochemical and Electrochemical Screening of the Potentiality of the Chemically Synthesized Polyaniline. Journal of the Electrochemical Society, 2020, 167, 066503.	2.9	23
7	Artificial nucleation sites with stable SEI for Li metal anodes by aggressive Al pulverization. Nano Energy, 2020, 73, 104746.	16.0	22
8	Modeling of essential oils adsorption onto clays towards a better understanding of their interactions. Journal of Molecular Liquids, 2018, 249, 132-143.	4.9	19
9	Operando Î¼ -Raman study of the actual water content of perfluorosulfonic acid membranes in the fuel cell. Journal of Power Sources, 2017, 356, 200-211.	7.8	22
10	Mathematical modeling of concentration dependences of electric conductivity and diffusion permeability of anion-exchange membranes soaked in wine. Petroleum Chemistry, 2017, 57, 511-517.	1.4	9
11	Non-linear analysis in estimating model parameters for thymol adsorption onto hydroxyiron-clays. Journal of Molecular Liquids, 2017, 244, 201-210.	4.9	16
12	Mathematical modeling of transport properties of proton-exchange membranes containing immobilized nanoparticles. International Journal of Hydrogen Energy, 2016, 41, 15605-15614.	7.1	30
13	Developing a Macroscopic Mechanistic Model for Low Molecular Weight Diffusion through Polymers in the Rubbery State. Industrial & Engineering Chemistry Research, 2016, 55, 5078-5089.	3.7	7
14	Effect of pulsed electric field on electrodialysis of a NaCl solution in sub-limiting current regime. Electrochimica Acta, 2015, 164, 267-280.	5.2	38
15	Asymmetric bi-layer PFSA membranes as model systems for the study of water management in the PEMFC. Physical Chemistry Chemical Physics, 2014, 16, 20941-20956.	2.8	11
16	In situ Î¼-Raman spectroscopy study of an isolated micrometer-size pseudo-single crystal of Î²-H2NiO2 under electrochemical operation. Ionics, 2014, 20, 593-599.	2.4	0
17	Effect of coating and plasma treatments on the induced coupled plasma-reactive ionic etching of boron-doped diamond for microelectromechanical systems (MEMS) applications. Nanoscience Methods, 2014, 3, 1-10.	1.0	1
18	Raman Microspectroscopy as a Useful Tool for In Situ and Operando Studies of Water Transport in Perfluorosulfonic Membranes for PEMFCs. Fuel Cells, 2014, 14, 677-693.	2.4	19

#	Article	IF	Citations
19	Depthâ€resolved microâ€Raman spectroscopy of triâ€layer PFSA membrane for PEM fuel cells: how to obtain reliable inner water contents. Journal of Raman Spectroscopy, 2013, 44, 321-328.	2.5	27
20	3 In situ and operando determination of the water content distribution in proton conducting membranes for fuel cells: a critical review. Energy and Environmental Science, 2012, 5, 8824.	30.8	73
21	Upstream microelectrodialysis for heavy metals detection on boron doped diamond. Journal of Electroanalytical Chemistry, 2012, 670, 50-55.	3.8	17
22	Fuel Cell Performance and Water Transport Properties of Asymmetric Bi-Layer Proton Conducting Membranes. ECS Meeting Abstracts, 2012, , .	0.0	0
23	Influence of Compressive Stress on the Water Content of Perfluorosulphonated Membranes: A Î¼â€Raman Study. Fuel Cells, 2012, 12, 162-168.	2.4	14
24	In-Situ Measurement of Electroosmotic Drag Coefficient in Nafion Membrane for the PEMFC. Journal of Physical Chemistry B, 2011, 115, 12835-12844.	2.6	27
25	Swelling and permeability of NafionÂ®117 in waterâ€“methanol solutions: An experimental and modelling investigation. Journal of Membrane Science, 2011, 377, 54-64.	8.2	25
26	In situ analysis of water management in operating fuel cells by confocal Raman spectroscopy. Electrochemistry Communications, 2011, 13, 418-422.	4.7	53
27	Ageing of ion-exchange membranes used in electrodialysis: Investigation of static parameters, electrolyte permeability and tensile strength. Separation and Purification Technology, 2011, 80, 270-275.	7.9	42
28	Microanalytical System for Concentration by Microelectrodialysis and Electrodetection on Boron Doped Diamond. Sensor Letters, 2011, 9, 2305-2308.	0.4	1
29	Intensive current transfer in membrane systems: Modelling, mechanisms and application in electrodialysis. Advances in Colloid and Interface Science, 2010, 160, 101-123.	14.7	292
30	Protonation and diffusion phenomena in poly(4-vinylpyridine)-based weak anion-exchange membranes. Journal of Membrane Science, 2009, 340, 257-265.	8.2	13
31	Determination of the pKa of poly (4-vinylpyridine)-based weak anion exchange membranes for the investigation of the side proton leakage. Journal of Membrane Science, 2009, 326, 650-658.	8.2	68
32	A top surface liquid layer during membrane formation using vapor-induced phase separation (VIPS)â€"Evidence and mechanism of formation. Journal of Membrane Science, 2008, 310, 278-288.	8.2	61
33	In situ confocal-Raman measurement of water and methanol concentration profiles in NafionÂ® membrane under cross-transport conditions. Journal of Power Sources, 2008, 176, 39-45.	7.8	41
34	Probing proton dissociation in ionic polymers by means of in situ ATR-FTIR spectroscopy. Physical Chemistry Chemical Physics, 2008, 10, 1577.	2.8	33
35	Application of relaxation periods during electrodialysis of a casein solution: Impact on anion-exchange membrane fouling. Journal of Membrane Science, 2007, 287, 41-50.	8.2	85
36	Electromembrane process with pulsed electric field. Desalination, 2006, 199, 62-63.	8.2	18

#	Article	IF	Citations
37	Study of ionic transport in anion-exchange membranes: relationship between structure and transport properties. Desalination, 2006, 200, 155-156.	8.2	1
38	In situ confocal-Raman imagery of ion and solvent transport through an ion-exchange membrane. Desalination, 2006, 200, 173-174.	8.2	3
39	Effect of pulsed electric field on anion-exchange membrane fouling during electrodialysis of a casein solution. Desalination, 2006, 200, 208-209.	8.2	3
40	The crossed interdiffusion of sodium nitrate and sulfate through an anion exchange membrane, as studied by Raman spectroscopy. New Journal of Chemistry, 2005, 29, 955.	2.8	16
41	Chronopotentiometry applied to the study of ion transfer through anion exchange membranes. Journal of Membrane Science, 2004, 228, 65-76.	8.2	126
42	Confocal Raman micro-spectroscopy and electrochemical investigation of anion transport through ion-exchange membranes. Desalination, 2002, 149, 429-433.	8.2	11
43	Characterisation of cation exchange membrane in hydro-organic media by electrochemistry and Raman spectroscopy. Physical Chemistry Chemical Physics, 2001, 3, 1481-1485.	2.8	20
44	Electrochemical and Raman Spectroscopy Study of a Nafion Perfluorosulfonic Membrane in Organic Solventâ^'Water Mixtures. Journal of Physical Chemistry B, 2001, 105, 4151-4154.	2.6	28
45	Determination of shifts by means of the absolute area of the difference spectrum: cases of non-rigorous application of the theory. Journal of Molecular Structure, 2000, 526, 309-315.	3.6	0
46	Title is missing!. Journal of Applied Electrochemistry, 1999, 29, 371-382.	2.9	8
47	Contribution of Raman Spectroscopy to the Comprehension of Limiting Phenomena Occurring with a Vinylpyridinium Anion Exchange Membrane during the Electrolysis of Cr(VI) Solutions. Journal of Physical Chemistry B, 1999, 103, 11366-11371.	2.6	14
48	Finalization and illustration of indirect Raman difference spectroscopy. Journal of Raman Spectroscopy, 1998, 29, 353-358.	2.5	3
49	The poisoning effect of mercury complexes with an anionic exchange membrane used in an electrodialysis process: a Raman study. New Journal of Chemistry, 1998, 22, 233-235.	2.8	5
50	Behaviour of the calibration of a Raman spectrometer with temperature changes. Journal of Raman Spectroscopy, 1997, 28, 785-789.	2.5	17
51	Raman spectroscopy investigation and improved knowledge on industrial cation-exchange membranes involved in electrodialysis process. Journal of Molecular Structure, 1996, 379, 219-226.	3.6	10
52	Method for the determination of spectral shifts in Raman spectroscopy. Journal of Raman Spectroscopy, 1995, 26, 243-253.	2.5	8
53	Accurate relative calibration of a multi-channel Raman spectrometer. Journal of Raman Spectroscopy, 1995, 26, 325-326.	2.5	2
54	Determination of the temperature of a gas by a simple and accurate Raman method. Journal of Raman Spectroscopy, 1995, 26, 327-329.	2.5	2

#	Article	IF	Citations
55	Chemical Vapour Deposition of Thick Tungsten Coatings : Raman Measurements and Mass Transport Modelling. European Physical Journal Special Topics, 1995, 05, C5-143-C5-150.	0.2	0
56	Chemical Vapor Deposition of Thick Tungsten Coatings: Mass Transport Modelling and Experiments. Journal De Physique III, 1995, 5, 1145-1160.	0.3	1
57	Confocal Raman Microscopy for Membrane Content Visualization. , 0, , 127-149.		2