

François P Huet

List of Publications by Year in descending order

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67
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97
all docs

97
docs citations

97
times ranked

3251
citing authors

#	ARTICLE	IF	CITATIONS
1	Safety focused modeling of lithium-ion batteries: A review. Journal of Power Sources, 2016, 306, 178-192.	7.8	591
2	A review of impedance measurements for determination of the state-of-charge or state-of-health of secondary batteries. Journal of Power Sources, 1998, 70, 59-69.	7.8	495
3	Simplified Electrochemical and Thermal Model of LiFePO ₄ -Graphite Li-Ion Batteries for Fast Charge Applications. Journal of the Electrochemical Society, 2012, 159, A1508-A1519.	2.9	272
4	Noise Resistance Applied to Corrosion Measurements: I. Theoretical Analysis. Journal of the Electrochemical Society, 1997, 144, 31-37.	2.9	218
5	Experimental characterization of flow regimes in various porous media: II: Transition to turbulent regime. Chemical Engineering Science, 1998, 53, 3897-3909.	3.8	158
6	A Simplified Electrochemical and Thermal Aging Model of LiFePO ₄ -Graphite Li-ion Batteries: Power and Capacity Fade Simulations. Journal of the Electrochemical Society, 2013, 160, A616-A628.	2.9	148
7	Combined experimental and modeling approaches of the thermal runaway of fresh and aged lithium-ion batteries. Journal of Power Sources, 2018, 399, 264-273.	7.8	131
8	Noise Resistance Applied to Corrosion Measurements: II. Experimental Tests. Journal of the Electrochemical Society, 1997, 144, 37-43.	2.9	129
9	Drift Removal Procedures in the Analysis of Electrochemical Noise. Corrosion, 2002, 58, 337-347.	1.1	125
10	Noise Analysis Applied to Electrochemical Systems. Corrosion, 1995, 51, 131-144.	1.1	121
11	Potential drops due to an attached bubble on a gas-evolving electrode. Journal of Applied Electrochemistry, 1989, 19, 617-629.	2.9	103
12	Fluctuations of concentration overpotential generated at gas-evolving electrodes. Electrochimica Acta, 2005, 50, 3726-3736.	5.2	93
13	Analysis of Electrochemical Noise by Power Spectral Density Applied to Corrosion Studies: Maximum Entropy Method or Fast Fourier Transform?. Journal of the Electrochemical Society, 1998, 145, 2780-2786.	2.9	92
14	A Review of the Probabilistic Aspects of Localized Corrosion. Corrosion, 1990, 46, 266-278.	1.1	88
15	Investigation of electrochemical processes by an electrochemical noise analysis. Theoretical and experimental aspects in potentiostatic regime. Electrochimica Acta, 1986, 31, 1025-1039.	5.2	87
16	Scanning Electrochemical Microscopy Imaging by Means of High-Frequency Impedance Measurements in Feedback Mode. Journal of Physical Chemistry B, 2004, 108, 11620-11626.	2.6	79
17	Review: Electrochemical Noise Applied in Corrosion Science: Theoretical and Mathematical Models towards Quantitative Analysis. Journal of the Electrochemical Society, 2020, 167, 081507.	2.9	78
18	A Novel Way of Measuring Local Electrochemical Impedance Using A Single Vibrating Probe. Journal of the Electrochemical Society, 1997, 144, L87-L90.	2.9	61

#	ARTICLE	IF	CITATIONS
19	Noise Resistance Applied to Corrosion Measurements: III. Influence of the Instrumental Noise on the Measurements. <i>Journal of the Electrochemical Society</i> , 1997, 144, 2786-2793.	2.9	55
20	EIS Measurements for Determining the SoC and SoH of Li-Ion Batteries. <i>ECS Transactions</i> , 2011, 33, 41-53.	0.5	53
21	Local electrochemical impedance measurement: scanning vibrating electrode technique in ac mode. <i>Electrochimica Acta</i> , 1999, 44, 4117-4127.	5.2	52
22	Measurement time versus accuracy trade-off analyzed for electrochemical impedance measurements by means of sine, white noise and step signals. <i>Journal of Electroanalytical Chemistry and Interfacial Electrochemistry</i> , 1982, 138, 201-208.	0.1	51
23	Guideline for an assessment of electrochemical noise measurement devices. <i>Materials and Corrosion - Werkstoffe Und Korrosion</i> , 2012, 63, 297-302.	1.5	50
24	Investigation of water electrolysis by spectral analysis. I. Influence of the current density. <i>Journal of Applied Electrochemistry</i> , 1989, 19, 683-696.	2.9	45
25	Noise Resistance Applied to Corrosion Measurements: V. Influence of Electrode Asymmetry. <i>Journal of the Electrochemical Society</i> , 2001, 148, B412.	2.9	44
26	Study of the "coup de fouet" of lead-acid cells as a function of their state-of-charge and state-of-health. <i>Journal of Power Sources</i> , 2006, 158, 1019-1028.	7.8	44
27	Measurement of the Noise Resistance for Corrosion Applications. <i>Corrosion</i> , 2001, 57, 35-42.	1.1	42
28	Oxygen evolution on electrodes of different roughness: an electrochemical noise study. <i>Journal of Solid State Electrochemistry</i> , 2004, 8, 786.	2.5	41
29	Reliability of electrochemical noise measurements: Results of round-robin testing on electrochemical noise. <i>Electrochimica Acta</i> , 2014, 120, 379-389.	5.2	41
30	Characterization of electrolytic bubble evolution by spectral analysis. Application to a corroding electrode. <i>Journal of Applied Electrochemistry</i> , 1985, 15, 503-508.	2.9	38
31	Comparison of sine wave and white noise analysis for electrochemical impedance measurements. <i>Journal of Electroanalytical Chemistry</i> , 1992, 335, 33-53.	3.8	38
32	Real-Time Measurement of Electrolyte Resistance Fluctuations. <i>Journal of the Electrochemical Society</i> , 1991, 138, L82-L84.	2.9	36
33	Initiation and growth of a single pit on 316L stainless steel: Influence of SO ₄ ²⁻ and ClO ₄ ⁻ anions. <i>Electrochimica Acta</i> , 2013, 104, 274-281.	5.2	36
34	Electrochemical Noise Measurements of Coalescence and Gas-Oscillator Phenomena on Gas-Evolving Electrodes. <i>Journal of the Electrochemical Society</i> , 2002, 149, E71.	2.9	35
35	Growth mechanism for silver electrodeposition: A kinetic analysis by impedance and noise measurements. <i>Electrochimica Acta</i> , 1983, 28, 899-908.	5.2	34
36	New results concerning the oscillations observed for the system iron-sulphuric acid. <i>Electrochimica Acta</i> , 1998, 44, 455-465.	5.2	34

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37	Investigation of the high-frequency resistance of a lead-acid battery. <i>Journal of Power Sources</i> , 2006, 158, 1012-1018.	7.8	33
38	Single pit initiation on 316L austenitic stainless steel using scanning electrochemical microscopy. <i>Electrochimica Acta</i> , 2011, 56, 8589-8596.	5.2	33
39	Fluctuations in electrochemical systems. I. General theory on diffusion limited electrochemical reactions. <i>Journal of Chemical Physics</i> , 1993, 99, 7232-7239.	3.0	32
40	Noise Resistance Applied to Corrosion Measurements: IV. Asymmetric Coated Electrodes. <i>Journal of the Electrochemical Society</i> , 1999, 146, 1730-1736.	2.9	32
41	Frequency Analysis of Transients in Electrochemical Noise: Mathematical Relationships and Computer Simulations. <i>Corrosion</i> , 2000, 56, 675-683.	1.1	31
42	Influence of Aliasing in Time and Frequency Electrochemical Noise Measurements. <i>Journal of the Electrochemical Society</i> , 2000, 147, 671.	2.9	31
43	Artefacts in electrochemical impedance measurement in electrolytic solutions due to the reference electrode. <i>Electrochimica Acta</i> , 2011, 56, 8034-8034.	5.2	30
44	Electrochemical noise analysis of O ₂ evolution on PbO ₂ and PbO ₂ -matrix composites containing Co or Ru oxides. <i>Electrochimica Acta</i> , 2003, 48, 3981-3989.	5.2	28
45	Use of electrochemical sensors for the determination of wall turbulence characteristics in annular swirling decaying flows. <i>Experimental Thermal and Fluid Science</i> , 1997, 15, 125-136.	2.7	26
46	Dynamic analysis of charge transport in fluidized bed electrodes: Impedance techniques for electro-inactive beds. <i>Journal of Applied Electrochemistry</i> , 1992, 22, 801-809.	2.9	25
47	Investigation of gold oxidation in sulfuric medium. I. Electrochemical impedance techniques. <i>Electrochimica Acta</i> , 1993, 38, 1023-1028.	5.2	25
48	Electrochemical impedance of H ₂ -evolving Pt electrode under bubble-induced and forced convections in alkaline solutions. <i>Electrochimica Acta</i> , 2002, 47, 2043-2048.	5.2	25
49	Noise Resistance Applied to Corrosion Measurements: VI. Partition of the Current Fluctuations Between the Electrodes. <i>Journal of the Electrochemical Society</i> , 2002, 149, B89.	2.9	24
50	Electrochemical noise analysis of cathodically polarised AISI 4140 steel. I. Characterisation of hydrogen evolution on vertical unstressed electrodes. <i>Electrochimica Acta</i> , 2002, 47, 4315-4323.	5.2	24
51	Electrochemical Noise—Guidance for Improving Measurements and Data Analysis. <i>Corrosion</i> , 2019, 75, 1065-1073.	1.1	24
52	Electrochemical noise measurements on stainless steel using a gelled electrolyte. <i>Corrosion Science</i> , 2019, 148, 48-56.	6.6	24
53	Electrochemical Noise Analysis of Tribocorrosion Processes under Steady-State Friction Regime. <i>Corrosion</i> , 2006, 62, 514-521.	1.1	23
54	Analysis of the Inhibitive Effect of BTAH on Localized Corrosion of Al 2024 from Electrochemical Noise Measurements. <i>Journal of the Electrochemical Society</i> , 2009, 156, C67.	2.9	23

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55	Dynamic analysis of charge transport in fluidized bed electrodes: Impedance techniques for electroactive beds. <i>Journal of Applied Electrochemistry</i> , 1994, 24, 481-488.	2.9	21
56	Electrochemical noise study of the effect of electrode surface wetting on the evolution of electrolytic hydrogen bubbles. <i>Journal of Electroanalytical Chemistry</i> , 2006, 597, 60-68.	3.8	21
57	Spectral analysis of wall turbulence with photolithography devised electrochemical probes. <i>International Journal of Heat and Mass Transfer</i> , 1993, 36, 823-829.	4.8	20
58	A new approach for monitoring corrosion and flow characteristics in oil/brine mixtures. <i>Electrochimica Acta</i> , 2005, 50, 2081-2090.	5.2	20
59	Hydrogen Absorption Estimation on Pd Electrodes from Electrochemical Noise Measurements in Single-Compartment Cells. <i>Journal of the Electrochemical Society</i> , 2001, 148, E241.	2.9	19
60	Fluctuations in electrochemical systems. II. Application to a diffusion limited redox process. <i>Journal of Chemical Physics</i> , 1993, 99, 7240-7252.	3.0	17
61	Selection of Electrode Area for Electrochemical Noise Measurements to Monitor Localized CO ₂ Corrosion. <i>Journal of the Electrochemical Society</i> , 2012, 159, C283-C288.	2.9	16
62	Detection and sizing of single droplets flowing in a lab-on-a-chip device by measuring impedance fluctuations. <i>Sensors and Actuators B: Chemical</i> , 2016, 236, 794-804.	7.8	16
63	Scanning Electrochemical Microscopy for Investigating Gas Bubble/Liquid Interfaces. <i>Electrochemical and Solid-State Letters</i> , 2003, 6, E23.	2.2	15
64	Investigation of bubble evolution with a quartz crystal microbalance. <i>Journal of Electroanalytical Chemistry and Interfacial Electrochemistry</i> , 1991, 297, 515-522.	0.1	14
65	Electrolyte-resistance change due to an insulating sphere in contact with a disk electrode. <i>Electrochimica Acta</i> , 2010, 55, 1645-1655.	5.2	14
66	Spectral analysis of wall turbulence with a bicircular electrochemical probe. <i>Experiments in Fluids</i> , 1993, 16, 97-104.	2.4	13
67	Electrochemical Resistance Noise during Composite Plating. <i>Journal of the Electrochemical Society</i> , 1998, 145, 436-446.	2.9	13
68	ALIDISSI, a Research Program to Evaluate Electrochemical Impedance Spectroscopy as a SoC and SoH Diagnosis Tool for Li-ion Batteries. <i>Oil and Gas Science and Technology</i> , 2010, 65, 79-89.	1.4	13
69	Time resolved rrde applied to pitting of Fe-Cr alloy and 304 stainless steel. <i>Corrosion Science</i> , 1996, 38, 133-145.	6.6	12
70	Use of Multiple Reference Electrodes in Electrochemical Noise Measurements. <i>Corrosion</i> , 2003, 59, 629-634.	1.1	12
71	Monitoring and Quantifying the Passive Transport of Molecules Through Patched Clamp Suspended Real and Model Cell Membranes. <i>Angewandte Chemie - International Edition</i> , 2014, 53, 3192-3196.	13.8	12
72	Corrosion propagation monitoring using electrochemical noise measurements on carbon steel in hydrogenocarbonated solution containing chloride ions. <i>Corrosion Science</i> , 2021, 193, 109885.	6.6	12

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73	Electrochemical noise analysis of cathodically polarised AISI 4140 steel. II. Identification of potential fluctuation sources for unstressed electrodes. <i>Electrochimica Acta</i> , 2002, 47, 4325-4332.	5.2	11
74	Electrochemical noise analysis of cathodically polarised AISI 4140 steel. III. Influence of hydrogen absorption for stressed electrodes. <i>Electrochimica Acta</i> , 2002, 47, 4333-4338.	5.2	11
75	Comparative Analysis of Potential, Current, and Electrolyte Resistance Fluctuations in Two-Phase Oil/Water Mixtures. <i>Corrosion</i> , 2003, 59, 747-755.	1.1	11
76	ac impedance and electrochemical noise of strongly adsorbed electroactive species. Application to a redox polymer modified electrode. <i>Electrochimica Acta</i> , 1988, 33, 1371-1381.	5.2	10
77	Fluctuations of Permeation Rate Through an Iron Membrane Induced by Hydrogen Bubbles. <i>Journal of the Electrochemical Society</i> , 1994, 141, 2059-2061.	2.9	10
78	Fluctuation analysis in electrochemical engineering processes with two phase flows. <i>Journal of Applied Electrochemistry</i> , 1994, 24, 593-601.	2.9	10
79	Adaptation of the Scanning Vibrating Electrode Technique to ac Mode: Local Electrochemical Impedance Measurement. <i>Materials Science Forum</i> , 1998, 289-292, 57-68.	0.3	10
80	Simultaneous real-time measurements of potential and high-frequency resistance of a lab cell. <i>Journal of Power Sources</i> , 2003, 113, 414-421.	7.8	10
81	A flow microdevice for studying the initiation and propagation of a single pit. <i>Corrosion Science</i> , 2012, 62, 1-4.	6.6	10
82	Electrochemical Noise Measurements with Dummy Cells: Evaluation of a Round-Robin Test Series. <i>Corrosion</i> , 2018, 74, 1457-1465.	1.1	10
83	Perturbation of the Flow of Current to a Disk Electrode by an Insulating Sphere. <i>Journal of the Electrochemical Society</i> , 1995, 142, 4181-4189.	2.9	9
84	Polarization Resistance Measurements: Potentiostatically or Galvanostatically?. <i>Corrosion</i> , 2009, 65, 136-144.	1.1	9
85	Frequency and Time Resolved Measurements at Rotating Ring-Disk Electrodes for Studying Localized Corrosion. <i>Journal of the Electrochemical Society</i> , 1993, 140, 1955-1961.	2.9	8
86	Dynamic behaviour of an electrolyser with a two phase solid-liquid electrolyte Part II: Investigation of elementary phenomena and electrode modelling. <i>Journal of Applied Electrochemistry</i> , 1994, 24, 1235-1243.	2.9	7
87	Measurement of Electrolyte Resistance Fluctuations Generated by Oil-Brine Mixtures in a Flow-Loop Cell. <i>Corrosion</i> , 2007, 63, 307-317.	1.1	5
88	Results of an international round-robin exercise on electrochemical impedance spectroscopy. <i>Corrosion Engineering Science and Technology</i> , 2021, 56, 254-268.	1.4	4
89	Dynamic behaviour of an electrolyser with a two phase solid-liquid electrolyte Part I: Spectral analysis of potential fluctuations. <i>Journal of Applied Electrochemistry</i> , 1994, 24, 1228-1234.	2.9	3
90	Detection and Sizing of Single Droplets Flowing in a Microfluidic Device by Impedance Measurement. <i>Procedia Engineering</i> , 2016, 168, 1466-1470.	1.2	3

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91	Influence on the electrolyte resistance of the contact angle of a bubble attached to a disk electrode. <i>Journal of Electroanalytical Chemistry</i> , 2015, 737, 114-122.	3.8	2
92	In-situ particle sizing at millimeter scale from electrochemical noise: simulation and experiments. <i>Electrochimica Acta</i> , 2015, 180, 1050-1058.	5.2	2
93	Analysis of the alamethicin induced single channel conductance fluctuations in lipid bilayers as a birth and death process. <i>Journal of Electroanalytical Chemistry and Interfacial Electrochemistry</i> , 1990, 296, 429-444.	0.1	1
94	Comment on "Laboratory-Scale Identification of Corrosion Mechanisms by a Novel Pattern Recognition System Based on Electrochemical Noise Measurements" [J. Electrochem. Soc., 166, C284 (2019)]. <i>Journal of the Electrochemical Society</i> , 2019, 166, Y31-Y31.	2.9	1
95	The influence of Temperature on the Electrochemical Behavior of Austenitic Stainless Steel in MgCl ₂ . <i>Journal of the Brazilian Chemical Society</i> , 1995, 6, 59-63.	0.6	0