Jan Langmaier

List of Publications by Year
in descending order

71 papers	1,746 citations	201674 27 h-index	302126 39 g-index
71 all docs	71 docs citations	71 times ranked	1397 citing authors

#	Article	IF	Citations
1	A comparative study of the redox and excited state properties of (nBu4N)2[Mo6X14] and (nBu4N)2[Mo6X8(CF3COO)6] (X = Cl, Br, or I). Dalton Transactions, 2013, 42, 7224.	3.3	123
2	Polarization phenomena at the water | o-nitrophenyl octyl ether interface. Part 1. Evaluation of the standard Gibbs energies of ion transfer from the solubility and voltammetric measurements. Journal of Electroanalytical Chemistry, 1996, 409, 1-7.	3.8	74
3	Charge-transfer processes at the interface between hydrophobic ionic liquid and water. Pure and Applied Chemistry, 2009, 81, 1473-1488.	1.9	72
4	Electrocatalysis of the oxygen reduction at a polarised interface between two immiscible electrolyte solutions by electrochemically generated Pt particles. Electrochemistry Communications, 2006, 8, 475-481.	4.7	66
5	Sensitive layer for electrochemical detection of hydrogen cyanide. Analytical Chemistry, 1992, 64, 523-527.	6.5	63
6	Random nucleation and growth of Pt nanoparticles at the polarised interface between two immiscible electrolyte solutions. Journal of Electroanalytical Chemistry, 2007, 599, 160-166.	3.8	59
7	Substituent effects in cyclic voltammetry of titanocene dichlorides. Journal of Organometallic Chemistry, 1999, 579, 348-355.	1.8	58
8	Cyclic voltammetry of biopolymer heparin at PVC plasticized liquid membrane. Electrochemistry Communications, 2003, 5, 867-870.	4.7	58
9	Cyclic voltammetry of ion transfer across a room temperature ionic liquid membrane supported by a microporous filter. Electrochemistry Communications, 2007, 9, 2633-2638.	4.7	56
10	Cyclic and convolution potential sweep voltammetry of reversible ion transfer across a liquid membrane. Journal of Electroanalytical Chemistry, 2000, 481, 1-6.	3.8	55
11	Voltammetry of Ion Transfer across a Polarized Room-Temperature Ionic Liquid Membrane Facilitated by Valinomycin: Theoretical Aspects and Application. Analytical Chemistry, 2009, 81, 6382-6389.	6.5	48
12	Electrochemical evidence of catalysis of oxygen reduction at the polarized liquidâ€"liquid interface by tetraphenylporphyrin monoacid and diacid. Electrochemistry Communications, 2009, 11, 1940-1943.	4.7	43
13	Evaluation of the standard ion transfer potentials for PVC plasticized membranes from voltammetric measurements. Journal of Electroanalytical Chemistry, 2001, 496, 143-147.	3.8	42
14	Counterion binding to protamine polyion at a polarised liquidâ€"liquid interface. Journal of Electroanalytical Chemistry, 2007, 603, 235-242.	3.8	40
15	Transfer of Protonated Anesthetics across the Water|o-Nitrophenyl Octyl Ether Interface: Effect of the Ion Structure on the Transfer Kinetics and Pharmacological Activity.. Analytical Sciences, 1998, 14, 35-41.	1.6	39
16	Potentiometric Sensor for Heparin Polyion:Â Transient Behavior and Response Mechanism. Analytical Chemistry, 2007, 79, 2892-2900.	6.5	38
17	Amperometry of Heparin Polyion Using a Rotating Disk Electrode Coated with a Plasticized PVC Membrane. Electroanalysis, 2006, 18, 115-120.	2.9	35
18	Polarization phenomena at the water|o-nitrophenyl octyl ether interface Part II. Role of the solvent viscosity in the kinetics of the tetraethylammonium ion transfer. Journal of Electroanalytical Chemistry, 1997, 426, 37-45.	3.8	34

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19	Amperometric Sensor for Heparin: Sensing Mechanism and Application in Human Blood Plasma Analysis. Electroanalysis, 2006, 18, 1329-1338.	2.9	31
20	Fine tuning of the catalytic effect of a metal-free porphyrin on the homogeneous oxygenreduction. Chemical Communications, 2011, 47, 5446-5448.	4.1	31
21	Amperometric Ionâ€Selective Electrode for Alkali Metal Cations Based on a Roomâ€Temperature Ionic Liquid Membrane. Electroanalysis, 2009, 21, 1977-1983.	2.9	30
22	Electrochemical quantification of 2,6-diisopropylphenol (propofol). Analytica Chimica Acta, 2011, 704, 63-67.	5.4	30
23	Polarization phenomena at the waterâˆ£o-nitrophenyl octyl ether interface. Journal of Electroanalytical Chemistry, 1999, 463, 232-241.	3.8	29
24	Cyclic voltammetry of methyl- and trimethylsilyl-substituted zirconocene dichlorides. Journal of Organometallic Chemistry, 1999, 584, 323-328.	1.8	29
25	How To Assess the Limits of Ion-Selective Electrodes:â€‰ Method for the Determination of the Ultimate Span, Response Range, and Selectivity Coefficients of Neutral Carrier-Based Cation Selective Electrodes. Analytical Chemistry, 2006, 78, 942-950.	6.5	28
26	Mathematical Model of Current-Polarized Ionophore-Based Ion-Selective Membranes. Journal of Physical Chemistry B, 2008, 112, 2008-2015.	2.6	28
27	Electrochemical Oxidation of 8-Oxo-2â€²-Deoxyguanosine on Glassy Carbon, Gold, Platinum and Tin(IV) Oxide Electrodes. Electroanalysis, 2003, 15, 1555-1560.	2.9	27
28	Indicator and reference platinum | solid polymer electrolyte electrodes for a simple solid-state amperometric hydrogen sensor. Journal of Electroanalytical Chemistry, 1994, 379, 301-306.	3.8	25
29	Amperometric solid-state NO2 sensor based on plasticized PVC matrix containing a hydrophobic electrolyte. Sensors and Actuators B: Chemical, 1997, 41, 1-6.	7.8	25
30	Doxorubicin determination using two novel voltammetric approaches: A comparative study. Electrochimica Acta, 2020, 330, 135180.	5.2	23
31	Origin of Difference between One-Electron Redox Potentials of Guanosine and Guanine:Â Electrochemical and Quantum Chemical Study. Journal of Physical Chemistry B, 2004, 108, 15896-15899.	2.6	22
32	Thermodynamic driving force effects in the oxygen reduction catalyzed by a metal-free porphyrin. Electrochimica Acta, 2012, 82, 457-462.	5.2	22
33	Origin of the effect of ion nature on the differential capacity of an interface between two immiscible electrolyte solutions. Journal of Electroanalytical Chemistry, 1998, 444, 1-5.	3.8	20
34	Detrimental changes in the composition of hydrogen ion-selective electrode and optode membranes. Analytica Chimica Acta, 2005, 543, 156-166.	5.4	20
35	Current-polarized ion-selective membranes: The influence of plasticizer and lipophilic background electrolyte on concentration profiles, resistance, and voltage transients. Sensors and Actuators B: Chemical, 2009, 136, 410-418.	7.8	20
36	Extreme Basicity of Biguanide Drugs in Aqueous Solutions: Ion Transfer Voltammetry and DFT Calculations. Journal of Physical Chemistry A, 2016, 120, 7344-7350.	2.5	20

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37	Charge transfer in porphyrinâ€“calixarene complexes: ultrafast kinetics, cyclic voltammetry, and DFT calculations. Physical Chemistry Chemical Physics, 2011, 13, 6947.	2.8	19
38	Electrocatalytic reduction of halothane. Journal of Electroanalytical Chemistry, 1996, 402, 107-113.	3.8	18
39	New electrochemical sensors. Analytical Proceedings, 1991, 28, 366.	0.4	16
40	Inhibitory Effect of Water on the Oxygen Reduction Catalyzed by Cobalt(II) Tetraphenylporphyrin. Journal of Physical Chemistry A, 2014, 118, 2018-2028.	2.5	16
41	Evaluation of parasitic elements contributing to experimental cell impedance: impedance measurements at interfaces between two immiscible electrolyte solutions. Journal of the Chemical Society, Faraday Transactions, 1996, 92, 3843-3849.	1.7	15
42	Voltammetry of Protonated Anesthetics at a Liquid Membrane: Evaluation of the Drug Propagation. Electroanalysis, 2000, 12, 901-904.	2.9	14
43	Determination of urinary 8-hydroxy-2â€²-deoxyguanosine in obese patients by HPLC with electrochemical detection. Analytica Chimica Acta, 2004, 516, 107-110.	5.4	14
44	Kinetics of the ferric/ferrous electrode reaction on NafionÂ®-coated electrodes. Journal of Electroanalytical Chemistry, 1999, 469, 11-17.	3.8	13
45	Use of the 1,1â€²-dimethylferrocene oxidation process for the calibration of the reference electrode potential in organic solvents immiscible with water. Journal of Electroanalytical Chemistry, 2008, 616, 57-63.	3.8	12
46	Charge transfer resistance and differential capacity of the plasticized PVC membrane | water interface. Journal of Electroanalytical Chemistry, 2002, 521, 81-86.	3.8	11
47	Mechanistic model of the oxygen reduction catalyzed by a metal-free porphyrin in one- and two-phase liquid systems. Electrochimica Acta, 2013, 110, 816-821.	5.2	11
48	Simple, Single Step Potential Difference Measurement for the Determination of the Ultimate Detection Limit of Ion Selective Electrodes. Electroanalysis, 2006, 18, 1245-1253.	2.9	9
49	Electron transfer across the polarized interface between water and a hydrophobic redox-active ionic liquid. Electrochemistry Communications, 2010, 12, 1333-1335.	4.7	9
50	Lipophilicity of acetylcholine and related ions examined by ion transfer voltammetry at a polarized room-temperature ionic liquid membrane. Journal of Electroanalytical Chemistry, 2018, 815, 183-188.	3.8	9
51	Some potentiometric sensors with low output impedance. Analytica Chimica Acta, 1983, 148, 19-25.	5.4	8
52	Thermodynamic aspects of the electron transfer across the interface between water and a hydrophobic redox-active ionic liquid. Electrochimica Acta, 2011, 58, 606-613.	5.2	8
53	Competitive inhibition of a metal-free porphyrin oxygen-reduction catalyst by water. Chemical Communications, 2012, 48, 4094.	4.1	8
54	Origin of the correlation between the standard Gibbs energies of ion transfer from water to a hydrophobic ionic liquid and to a molecular solvent. Electrochimica Acta, 2013, 87, 591-598.	5.2	8

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55	Voltammetric and capillary electrophoretic study of scavenger kinetics of methylglyoxal by antidiabetic biguanide drugs. Journal of Electroanalytical Chemistry, 2016, 777, 26-32.	3.8	7
56	Determination of total sulphur and nitrogen in crude oil products by oxidative pyrolysis with detection using a metal-plated membrane electrode. Analyst, The, 1988, 113, 501-503.	3.5	6
57	Negative Impedance of the Nafion Membrane Between Two Electrolyte Solutions. Journal of the Electrochemical Society, 1998, 145, 2740-2746.	2.9	6
58	A junction-free copper reference electrode for electrochemical measurements in o-nitrophenyl octyl ether. Journal of Electroanalytical Chemistry, 2002, 528, 77-81.	3.8	6
59	Correlation between the standard Gibbs energies of an anion transfer from water to highly hydrophobic ionic liquids and to 1,2-dichloroethane. Journal of Electroanalytical Chemistry, 2014, 714-715, 109-115.	3.8	6
60	Detection of antimuscarinic agents tolterodine and fesoterodine and their metabolite 5-hydroxymethyl tolterodine by ion transfer voltammetry at a polarized room-temperature ionic liquid membrane. Electrochimica Acta, 2019, 304, 54-61.	5.2	6
61	Screen-printed amalgam electrodes. Sensors and Actuators B: Chemical, 2021, 347, 130583.	7.8	6
62	Electroanalysis of Fentanyl and Its New Analogs: A Review. Biosensors, 2022, 12, 26.	4.7	6
63	A simple laboratory generator for low concentrations of sulphur dioxide. Analytica Chimica Acta, 1985, 166, 305-310.	5.4	4
64	Transfer of heparin polyion across a polarized water/ionic liquid membrane interface. Electrochemistry Communications, 2012, 24, 25-27.	4.7	4
65	Determination of subnanogram amounts of sulfur dioxide and sulfites by pneumatopotentiometry. Collection of Czechoslovak Chemical Communications, 1986, 51, 2077-2082.	1.0	3
66	Voltammetry of Several Natural and Synthetic Opioids at a Polarized Ionic Liquid Membrane. ChemElectroChem, 2021, 8, 2519-2525.	3.4	2
67	Electrochemically-controlled generation of small amounts of carbon monoxide. Talanta, 1992, 39, 367-369.	5.5	1
68	Automatic coulometric titrator with optical indication for acidity number determination. Electroanalysis, 1994, 6, 606-608.	2.9	1
69	Voltammetry of Protonated Anesthetics at a Liquid Membrane: Evaluation of the Drug Propagation. , 2000, 12, 901.		1
70	Wall-jet ion sensor based on ion transfer processes at a polarized room-temperature ionic liquid membrane. Journal of Electroanalytical Chemistry, 2020, 861, 113948.	3.8	0
71	Adsorption of Gaseous Propylamine on Films of Polypyrrole in Different Oxidation States. Collection of Czechoslovak Chemical Communications, 1999, 64, 1-12.	1.0	0