Petr VanÃ½sek

List of Publications by Year
in descending order

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114 papers	1,726 citations	279701 23 h-index	330025 37 g-index
116 all docs	116 docs citations	116 times ranked	1437 citing authors

#	Article	IF	Citations
1	Ion Distributions near a Liquid-Liquid Interface. Science, 2006, 311, 216-218.	6.0	229
2	Tuning ion correlations at an electrified soft interface. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 20326-20331.	3.3	74
3	Valinomycin mediated transfer of potassium across the water/nitrobenzene interface. Journal of Electroanalytical Chemistry and Interfacial Electrochemistry, 1983, 148, 117-121.	0.3	63
4	INTERFACE BETWEEN TWO IMMISCIBLE LIQUID ELECTROLYTES: A REVIEW. Journal of the Chilean Chemical Society, 2008, 53, .	0.5	61
5	Charge transfer processes on liquid/liquid interfaces: The first century. Electrochimica Acta, 1995, 40, 2841-2847.	2.6	51
6	The Effect of Film Thickness and Growth Method on Polyaniline Film Properties. Journal of the Electrochemical Society, 1999, 146, 3324-3334.	1.3	49
7	Redox flow batteries as the means for energy storage. Journal of Energy Storage, 2017, 13, 435-441.	3.9	47
8	New developments in liquid/liquid interface transport. Journal of Electroanalytical Chemistry and Interfacial Electrochemistry, 1984, 163, 1-9.	0.3	46
9	Properties of the Interface Between Two Immiscible Electrolytes in the Presence of Proteins. Journal of the Electrochemical Society, 1984, 131, 1788-1791.	1.3	42
10	Ion distributions at the nitrobenzeneâ€“water interface electrified by a common ion. Journal of Electroanalytical Chemistry, 2006, 593, 142-158.	1.9	42
11	X-ray studies of the interface between two polar liquids: neat and with electrolytes. Faraday Discussions, 2005, 129, 23.	1.6	39
12	Structure of the Interface between Two Polar Liquids:Â Nitrobenzene and Water. Journal of Physical Chemistry B, 2006, 110, 4527-4530.	1.2	39
13	Interfacial potential differences at mixed conductor interfaces: Nernst, Nernst-Donnan, Nernst Distribution and generalizations. Journal of Electroanalytical Chemistry and Interfacial Electrochemistry, 1990, 292, 73-91.	0.3	36
14	Ion Distributions at the Water/1,2-Dichloroethane Interface: Potential of Mean Force Approach to Analyzing X-ray Reflectivity and Interfacial Tension Measurements. Journal of Physical Chemistry B, 2013, 117, 5365-5378.	1.2	36
15	Synthesis and characterization of Na2Ti6O13 and Na2Ti6O13/Na2Ti3O7 sodium titanates with nanorod-like structure as negative electrode materials for sodium-ion batteries. Journal of Energy Storage, 2017, 14, 391-398.	3.9	35
16	Investigation of acetylcholine, choline and acetylcholinesterase at the interface of the two immiscible electrolyte solutions. Journal of Electroanalytical Chemistry and Interfacial Electrochemistry, 1981, 130, 287-292.	0.3	34
17	Bovine serum albumin adsorption on a water/nitrobenzene interface. Bioelectrochemistry, 1990, 23, 177-194.	1.0	33
18	An In Vitro Corrosion Study of Open Cell Iron Structures with PEG Coating for Bone Replacement Applications. Metals, 2018, 8, 499.	1.0	30

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19	Communications: Monovalent ion condensation at the electrified liquid/liquid interface. Journal of Chemical Physics, 2010, 132, 171101.	1.2	28
20	The width of the water/2-heptanone liquidâ€“liquid interface. Electrochemistry Communications, 2005, 7, 627-630.	2.3	25
21	Properties of the Interface of Two Immiscible Electrolytes Mediated by Molecules of Biological Importance: A Literature Review. Journal of the Electrochemical Society, 1984, 131, 1792-1796.	1.3	24
22	Multi-ion Nernst distribution potential equations: interfacial potentials at equilibrium liquid/liquid and membrane interfaces. Journal of Electroanalytical Chemistry and Interfacial Electrochemistry, 1991, 297, 19-35.	0.3	24
23	Impedance and voltammetric studies of electrogenerated polyaniline conducting films. Synthetic Metals, 1994, 64, 1-8.	2.1	24
24	An electrochemical study of the composition of thin, compact Pd oxide films. Journal of the Chemical Society, Faraday Transactions, 1996, 92, 4041-4047.	1.7	24
25	Editorial: ECS Journals Are Focused on the Future. Journal of the Electrochemical Society, 2013, 160, Y1-Y1.	1.3	24
26	311 - A new model of membrane transport: electrolysis at the interface of two immiscible electrolyte solutions. Bioelectrochemistry, 1980, 7, 61-68.	1.0	23
27	Study of zinc deposited in the presence of organic additives for zinc-based secondary batteries. Journal of Energy Storage, 2019, 21, 295-300.	3.9	23
28	Effect of negative potential on the extent of PID degradation in photovoltaic power plant in a real operation mode. Microelectronics Reliability, 2018, 85, 12-18.	0.9	22
29	Potential dependence of capacitance at a polarizable (blocked) liquid/liquid interface. Journal of Electroanalytical Chemistry and Interfacial Electrochemistry, 1984, 161, 1-15.	0.3	20
30	Ion Transport across a Microscopic Interface between two Immiscible Electrolytes. Journal of the Electrochemical Society, 1990, 137, 2763-2768.	1.3	20
31	Transfer of alkali-metal and hydrogen ions across liquid/liquid interfaces mediated by monensin. A voltammetric study at the interface of two immiscible electrolyte solutions. Faraday Discussions of the Chemical Society, 1984, 77, 209-216.	2.2	19
32	Impedance characterization of thin electrochemically formed palladium oxide films. Journal of Electroanalytical Chemistry, 1994, 378, 63-75.	1.9	19
33	Effect of zinc and iron ions on the electrochemistry of nickel oxide electrode: slow cyclic voltammetry. Journal of Power Sources, 1994, 47, 79-88.	4.0	18
34	Proton transfer across the water/nitrobenzene interface faciliated by Î±-hexylate anion. Electrochimica Acta, 1983, 28, 575-577.	2.6	17
35	Transport of Znâ€‰(â€‰â€‰OHâ€‰â€‰)â€‰4 2â€‰â€”â€‰ Ions across a Polyolefin Microporous Membrane. Journal of the Electrochemical Society, 1993, 140, 2279-2283.	1.3	15
36	Diversity of ion carrier functions of monensin: A study using voltammetry at the interface of two immiscible electrolyte solutions. Journal of Electroanalytical Chemistry and Interfacial Electrochemistry, 1983, 159, 413-420.	0.3	14

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37	Prediction of deuterium abundance in comets. Icarus, 1985, 61, 57-59.	1.1	14
38	Electrochemical determination of lead and lead ion transfer at liquid-liquid interfaces. Analytica Chimica Acta, 1990, 228, 241-249.	2.6	14
39	Determination of choline, picrate, dodecyl sulfate, and several quaternary ammonium salts on an electrified liquid/liquid microinterface. Microchemical Journal, 1990, 41, 327-339.	2.3	14
40	Transport studies of Î²-lactam antibiotics and their degradation products across electrified water/oil interface. Journal of Pharmaceutical and Biomedical Analysis, 1999, 19, 183-192.	1.4	14
41	Polarization phenomena at ionic membrane/electrolyte interfaces. Journal of Electroanalytical Chemistry, 1992, 332, 349-355.	1.9	13
42	Potential dependence of capacitance at a liquid/liquid interface. Journal of Electroanalytical Chemistry and Interfacial Electrochemistry, 1984, 170, 109-125.	0.3	12
43	Nanostructured Gold Microelectrodes for Nonâ€enzymatic Glucose Sensor. Electroanalysis, 2019, 31, 1680-1689.	1.5	12
44	Synthesizing a LiFePO4/graphene composite with electrochemically prepared few-layer graphene. Journal of Energy Storage, 2019, 22, 373-377.	3.9	12
45	Electrochemical processes at liquid interfaces. Analytical Chemistry, 1990, 62, 827A-835A.	3.2	11
46	Ion Distributions at Electrified Water-Organic Interfaces: PB-PMF Calculations and Impedance Spectroscopy Measurements. Journal of the Electrochemical Society, 2015, 162, H890-H897.	1.3	11
47	Electric Field Effect on Phospholipid Monolayers at an Aqueousâ€“Organic Liquidâ€“Liquid Interface. Journal of Physical Chemistry B, 2015, 119, 9319-9334.	1.2	11
48	Mixed Sodium Titanate As an Anode for a Sodium-Ion Battery. ECS Transactions, 2016, 74, 331-337.	0.3	11
49	Redox and optically active carbohelicene layers prepared by potentiodynamic polymerization. Electrochemistry Communications, 2020, 113, 106689.	2.3	11
50	Structure of crystal violet tetraphenylborate. Journal of Crystallographic and Spectroscopic Research, 1989, 19, 589-596.	0.3	10
51	Interfacial Ion Transport between Immiscible Liquids. Advances in Chemistry Series, 1994, , 55-81.	0.6	10
52	Boosting of the output voltage of a galvanic cell. Electrochimica Acta, 2018, 282, 331-335.	2.6	10
53	Ligand-to-metal charge transfer (LMCT) complex: New approach to non-enzymatic glucose sensors based on TiO2. Journal of Electroanalytical Chemistry, 2020, 878, 114589.	1.9	10
54	Impact of electrode geometry, depth of immersion, and size on impedance measurements. Canadian Journal of Chemistry, 1997, 75, 1635-1642.	0.6	9

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55	New insights in the dihydroxybenzenes-driven Fenton reaction: electrochemical study of interaction between dihydroxybenzenes and Fe(III). Water Science and Technology, 2011, 64, 2103-2108.	1.2	9
56	In-situ AFM observations of the effect of addition of glass fibers and lignosulfonates on performance of the negative active mass of a lead-acid storage battery. Journal of Energy Storage, 2020, 29, 101318.	3.9	9
57	Proton transfer across the water/nitrobenzene interface facilitated by aniline. Journal of Colloid and Interface Science, 1983, 96, 548-550.	5.0	8
58	Redoxâ€Pairâ€Defined Electrochemical Measurements: Biamperometric Setup for Elimination of Interferent Effects and for Sensing of Unstable Redox Systems. ChemElectroChem, 2016, 3, 877-882.	1.7	8
59	Spectroscopic and Fluorometric Characterization of Oxacyanine Dyes in Water and Nitrobenzene. Applied Spectroscopy, 1988, 42, 958-961.	1.2	7
60	Impedance Characterization of a Quartz Crystal Microbalance. Electroanalysis, 2006, 18, 371-377.	1.5	7
61	Liquid/liquid Electrochemistry in Electroanalysis: Fundamentals Revisited. ECS Transactions, 2009, 19, 55-63.	0.3	7
62	In-Situ X-Ray Study of Carbon Coated LiFePO₄ for Li-Ion Battery in Different State of Charge. ECS Transactions, 2018, 87, 107-114.	0.3	7
63	A new model of membrane transport: Electrolysis at the interface of two immiscible electrolyte solutions. Journal of Electroanalytical Chemistry and Interfacial Electrochemistry, 1980, 116, 61-68.	0.3	6
64	Uncertainty in the potential of a reference interface in liquid/liquid measurements. Electroanalysis, 1990, 2, 409-413.	1.5	6
65	ELECTROCHEMICAL AND ELECTROPHORETIC STUDY OF SODIUM METAMIZOLE. Journal of the Chilean Chemical Society, 2008, 53, .	0.5	6
66	Changes of temperature during pulse charging of lead acid battery cell in a flooded state. Journal of Energy Storage, 2017, 14, 364-371.	3.9	6
67	Selective electrocatalysis of reduced graphene oxide towards hydrogen peroxide aiming oxidases-based biosensing: Caution while interpreting. Electrochimica Acta, 2017, 223, 1-7.	2.6	6
68	Determination of aniline traces in nitrobenzene by the facilitated proton transfer across the water/nitrobenzene interface. Microchemical Journal, 1984, 29, 162-167.	2.3	5
69	Distribution of oxacyanine dyes between water and nitrobenzene: Determination of the partition constants, association, and potentials of transfer of the dye cations on liquid/liquid interfaces. Journal of Colloid and Interface Science, 1990, 135, 272-282.	5.0	5
70	Impedance Data Masquerading as Unusual Circuit Elements: Instrumentation Artifacts. ECS Transactions, 2008, 13, 101-113.	0.3	5
71	Mobilities of some univalent ions in aqueous and nitrobenzene media. Collection of Czechoslovak Chemical Communications, 1984, 49, 1277-1281.	1.0	4
72	Bovine serum albumin adsorption on a water / nitrobenzene interface. Journal of Electroanalytical Chemistry and Interfacial Electrochemistry, 1990, 298, 177-194.	0.3	4

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73	Sintering of Ce, Sm, and Pr Oxide Nanorods. Journal of the American Ceramic Society, 2016, 99, 1155-1163.	1.9	4
74	The effect of post-treatment on the composition of formed negative electrode mass in lead acid batteries studied by XRD. Journal of Energy Storage, 2017, 14, 378-382.	3.9	4
75	Graphene Oxide from Improved Hummersâ€™ Method: Is This Material Suitable for Reproducible Electrochemical (Bio)Sensing?. ECS Journal of Solid State Science and Technology, 2018, 7, M166-M171.	0.9	4
76	Supporting electrolytes for electrochemistry at liquid/liquid interfaces: Crystal violet and tetrabutylammonium tetraphenylborate in nitrobenzene. Journal of Colloid and Interface Science, 1990, 139, 527-534.	5.0	3
77	Two Common Electroanalytical Techniques - Cyclic Voltammetry and Impedance Capacitance Data from Cyclic Voltammetry. ECS Transactions, 2012, 41, 15-24.	0.3	3
78	Historic and suppressed technologies for energetics. Journal of Energy Storage, 2020, 27, 101105.	3.9	3
79	In-Situ Atomic Force Microscopy Observations of the Effect of Addition of Graphite and Titanium Dioxide on Performance of the Negative Active Mass of a Lead-Acid Battery. Journal of Energy Storage, 2021, 44, 103246.	3.9	3
80	Microscopic Interface Between Two Immiscible Electrolytes: A Parallelism to an Ultramicroelectrode. Analytical Letters, 1990, 23, 771-785.	1.0	2
81	XRD Study of Lead Sulphate Crystal Growth in a Sulphuric Acid Solution. ECS Transactions, 2016, 74, 147-155.	0.3	2
82	Pulse Deposition of Zinc in Electrolytes with Reduced Zinc Oxide Solubility. ECS Transactions, 2016, 74, 137-146.	0.3	2
83	DC Compliance Bias Introduced by a Potentiostat: Effects During AC Impedance Measurements and Possible Prevention. ECS Transactions, 2009, 19, 43-54.	0.3	1
84	Fibrous Materials Prepared by Centrifugal Force Spinning. ECS Transactions, 2018, 87, 261-267.	0.3	1
85	Structure of the Double Layer and Rates of Ion Crossings at â€œSingleâ€•Immiscible Liquid/Liquid (L/L) Interfaces. , 1986, , 103-185.		1
86	Data correction technique for using common electrochemical apparatus for the measurement of crystal impedance. Electrochimica Acta, 2007, 52, 8031-8038.	2.6	0
87	Liquid/liquid Electrochemistry in Electroanalysis: Fundamentals Revisited. ECS Meeting Abstracts, 2009, , .	0.0	0
88	Electrochemical Impedance Spectroscopy - Just One of Many Tools to Study Batteries and Power Sources. ECS Transactions, 2014, 48, 33-42.	0.3	0
89	From the Editor: Working with Stuff. Electrochemical Society Interface, 2014, 23, 3-3.	0.3	0
90	Interfaceat Twenty-Five: The Editors ofInterfaceâ€”The First Twenty-Five Years. Electrochemical Society Interface, 2016, 25, 20-23.	0.3	0

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91	Curing of Positive Electrode Mass of Lead Acid Battery Studied by XRD. ECS Transactions, 2016, 74, 131-136.	0.3	0
92	ECS Classics: Acheson, Silicon Carbide, and the Electric Arc. Electrochemical Society Interface, 2017, 26, 36-39.	0.3	0
93	Preface to the special issue on electrochemical energy storage discussed at the NZEE conference 2016 in Czech Republic. Journal of Energy Storage, 2017, 14, 363.	3.9	0
94	In-SituObservations of Lead Sulfate Crystal Growth on the Surface of a Negative Electrode. ECS Transactions, 2017, 81, 145-150.	0.3	0
95	Asymmetric bipolar electrochemistry: Detailed empirical description and determination of output characteristics of a galvanic system with multiple short-circuited cells in one electrolyte. Electrochimica Acta, 2019, 307, 269-274.	2.6	0
96	Light Intensity Modulated Photo-Electrochemical Methods and Distribution of Relaxation Times As Tools to Investigation Photovoltaic Materials. ECS Meeting Abstracts, 2021, MA2021-01, 1787-1787.	0.0	0
97	Impedance Evaluation By Distribution of Relaxation Times Applied to a Lead-Acid Storage Battery. ECS Meeting Abstracts, 2021, MA2021-01, 29-29.	0.0	0
98	Encountering Spurious Elements in Electrical Impedance Spectroscopy Data Fitting. Journal of the Electrochemical Society, 2021, 168, 106512.	1.3	0
99	Triphenyl[(triphenylphosphoranylidene)amino]phosphonium tetrakis(pentafluorophenyl)borate. Acta Crystallographica Section E: Structure Reports Online, 2013, 69, o87-o87.	0.2	0
100	From the Editor: â€œUse What You Need, but Need What You Useâ€• Electrochemical Society Interface, 2016, 25, 3-3.	0.3	0
101	Electrochemical Properties of Mo Doped High Voltage Cathode for Lithium-Ion Battery. ECS Meeting Abstracts, 2016, , .	0.0	0
102	Using of Finite Elements Modeling Computer Simulation in Impedance Prediction and Data Evaluation. ECS Meeting Abstracts, 2016, , .	0.0	0
103	(Invited) Impedance Characterization of High-Temperature Spinned Fiber Ceramic Materials. ECS Meeting Abstracts, 2017, , .	0.0	0
104	ECS Classics: Weston, the Weston Cell, and the Volt. Electrochemical Society Interface, 2017, 26, 36-38.	0.3	0
105	From the Editor: 1917. Electrochemical Society Interface, 2017, 26, 3-3.	0.3	0
106	Synthesis of Mixed Na2Ti3O7/Na2Ti6O13 Sodium Titanates with Different Phase Ratios and Their Lithium Insertion Properties. ECS Meeting Abstracts, 2017, , .	0.0	0
107	Titanium Oxide Filled Carbon Fibres for Lihium and Sodium Ion Insertion. ECS Meeting Abstracts, 2017, , .	0.0	0
108	Electrical Impedance Spectroscopy and Its Application in the Study of Electrochemical Sensors. ECS Meeting Abstracts, 2019, , .	0.0	0

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109	(Keynote Lecture) The Thermodynamic and Practical Limits to Energy Conversion: Considerations in the Search for Alternative Energy Sources. ECS Transactions, 2012, 40, 13-23.	0.3	0
110	Light Intensity Modulated Photo-Electrochemical Methods As a Tool in Investigation of Perovskites for Photovoltaics. ECS Meeting Abstracts, 2020, MA2020-01, 2573-2573.	0.0	0
111	Recent Progress in High-Voltage Cathode Materials for Lithium-Ion Batteries. ECS Transactions, 2020, 99, 17-23.	0.3	0
112	Electromigration and Flux Residues. ECS Transactions, 2021, 105, 401-409.	0.3	0
113	Visualizing Impedance Spectroscopy Response for Interpretation of Collected Data. ECS Transactions, 2021, 105, 109-118.	0.3	0
114	Perovskite Single Crystals for Energy Conversion of Solar Radiation. ECS Transactions, 2021, 105, 261-267.	0.3	0