

# Jorg Strutwolf

## List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

95 papers	1,411 citations	23 h-index	31 g-index
103 ext. papers	1,528 ext. citations	3.9 avg, IF	4.63 L-index

#	Paper	IF	Citations
95	Rectangular electrodes: Simulation of accurate steady state currents and the behaviour of square electrode arrays. <i>Electrochimica Acta</i> , <b>2022</b> , 404, 139750	6.7	
94	Printed Multilayer Piezoelectric Transducers on Paper for Haptic Feedback and Dual Touch-Sound Sensation. <i>Sensors</i> , <b>2022</b> , 22, 3796	3.8	1
93	Memristive devices based on mass printed organic resistive switching layers. <i>Applied Physics A: Materials Science and Processing</i> , <b>2021</b> , 127, 1	2.6	0
92	Revisiting rectangular electrodes; a simulation study. <i>Electrochimica Acta</i> , <b>2020</b> , 338, 135728	6.7	4
91	Use of the Saul'yev method for the digital simulation of chronoamperometry at the disk electrode, in the presence of homogeneous chemical reactions. <i>Electrochimica Acta</i> , <b>2018</b> , 283, 300-305	6.7	2
90	Use of the Saul'yev method for the digital simulation of chronoamperometry and linear sweep voltammetry at the ultramicrodisk electrode. <i>Electrochimica Acta</i> , <b>2017</b> , 258, 17-23	6.7	2
89	Effects Due to Uncompensated Resistance and Capacitance. <i>Monographs in Electrochemistry</i> , <b>2016</b> , 241-249	0.8	1
88	Simulation Packages. <i>Monographs in Electrochemistry</i> , <b>2016</b> , 427-438	0.8	
87	An Electrochemical Sensing Platform Based on Liquid-Liquid Microinterface Arrays Formed in Laser-Ablated Glass Membranes. <i>Analytical Chemistry</i> , <b>2016</b> , 88, 2596-604	7.8	17
86	Two (and Three) Dimensions. <i>Monographs in Electrochemistry</i> , <b>2016</b> , 251-337	0.8	
85	Migrational Effects. <i>Monographs in Electrochemistry</i> , <b>2016</b> , 339-367	0.8	
84	Convection. <i>Monographs in Electrochemistry</i> , <b>2016</b> , 369-388	0.8	
83	Programming. <i>Monographs in Electrochemistry</i> , <b>2016</b> , 421-425	0.8	0
82	The Explicit Method. <i>Monographs in Electrochemistry</i> , <b>2016</b> , 89-100	0.8	
81	Boundary Conditions. <i>Monographs in Electrochemistry</i> , <b>2016</b> , 101-121	0.8	
80	Unequal Intervals. <i>Monographs in Electrochemistry</i> , <b>2016</b> , 123-144	0.8	0
79	The Commonly Used Implicit Methods. <i>Monographs in Electrochemistry</i> , <b>2016</b> , 145-176	0.8	

78	Other Methods. <i>Monographs in Electrochemistry</i> , <b>2016</b> , 177-234	0.8	
77	Basic Equations. <i>Monographs in Electrochemistry</i> , <b>2016</b> , 5-37	0.8	
76	Approximations to Derivatives. <i>Monographs in Electrochemistry</i> , <b>2016</b> , 39-59	0.8	
75	Digital Simulation in Electrochemistry. <i>Monographs in Electrochemistry</i> , <b>2016</b> ,	0.8	33
74	Surface concentration nonuniformities resulting from chronoamperometry of a reversible reaction at an ultramicrodisk electrode. <i>Journal of Electroanalytical Chemistry</i> , <b>2016</b> , 776, 202-205	4.1	2
73	Ion-transfer voltammetric behavior of propranolol at nanoscale liquid-liquid interface arrays. <i>Analytical Chemistry</i> , <b>2015</b> , 87, 4487-94	7.8	26
72	Digital simulation of chronoamperometry at a disk electrode under a flat polymer film containing an enzyme. <i>Electrochimica Acta</i> , <b>2015</b> , 152, 302-307	6.7	9
71	Several ways to simulate time dependent liquid junction potentials by finite differences. <i>Electrochimica Acta</i> , <b>2014</b> , 137, 328-335	6.7	16
70	Reversible Integration of Microfluidic Devices with Microelectrode Arrays for Neurobiological Applications. <i>BioNanoScience</i> , <b>2014</b> , 4, 263-275	3.4	7
69	A Capacitive Humidity Sensor Suitable for CMOS Integration. <i>IEEE Sensors Journal</i> , <b>2013</b> , 13, 4487-4495	4	12
68	Digital simulation of chronoamperometry at an electrode within a hemispherical polymer drop containing an enzyme: comparison of a hemispherical with a flat disk electrode. <i>Biosensors and Bioelectronics</i> , <b>2013</b> , 50, 269-77	11.8	5
67	Chronoamperometric response at nanoscale liquid-liquid interface arrays. <i>Electrochimica Acta</i> , <b>2013</b> , 101, 177-185	6.7	20
66	Bioanalytical Applications of Electrochemistry at Liquid-Liquid Microinterfaces. <i>Electroanalytical Chemistry, A Series of Advances</i> , <b>2013</b> , 105-178		16
65	Minimum grid digital simulation of chronoamperometry at a disk electrode. <i>Electrochimica Acta</i> , <b>2012</b> , 78, 365-376	6.7	18
64	Finite-element simulations of the influence of pore wall adsorption on cyclic voltammetry of ion transfer across a liquid-liquid interface formed at a micropore. <i>Physical Chemistry Chemical Physics</i> , <b>2012</b> , 14, 2494-500	3.6	8
63	Digital simulation of thermal reactions. <i>Applied Mathematics and Computation</i> , <b>2011</b> , 218, 1280-1290	2.7	11
62	Microelectrochemical Systems on Silicon Chips for the Detection of Pollutants in Seawater. <i>Electroanalysis</i> , <b>2011</b> , 23, 147-155	3	15
61	Pharmaceutical modulation of diffusion potentials at aqueous-aqueous boundaries under laminar flow conditions. <i>Electrophoresis</i> , <b>2011</b> , 32, 844-9	3.6	

60	Single nanoskived nanowires for electrochemical applications. <i>Analytical Chemistry</i> , <b>2011</b> , 83, 5535-40	7.8	47
59	Nanofabrication of Robust Nanoelectrodes for Electrochemical Applications. <i>ECS Transactions</i> , <b>2010</b> , 28, 29-37	1	6
58	Ion-transfer electrochemistry at arrays of nanointerfaces between immiscible electrolyte solutions confined within silicon nitride nanopore membranes. <i>Analytical Chemistry</i> , <b>2010</b> , 82, 6115-23	7.8	51
57	Electrochemical surface structuring with palladium nanoparticles for signal enhancement. <i>Langmuir</i> , <b>2010</b> , 26, 12293-9	4	27
56	Serum-protein effects on the detection of the beta-blocker propranolol by ion-transfer voltammetry at a micro-ITIES array. <i>Talanta</i> , <b>2010</b> , 80, 1993-8	6.2	33
55	Voltammetric behaviour of biological macromolecules at arrays of aqueous/organogel micro-interfaces. <i>Physical Chemistry Chemical Physics</i> , <b>2010</b> , 12, 10040-7	3.6	36
54	Potentiometric investigation of protonation reactions at aqueous-aqueous boundaries within a dual-stream microfluidic structure. <i>Langmuir</i> , <b>2010</b> , 26, 18526-33	4	10
53	Optimisation of the conditions for stripping voltammetric analysis at liquid-liquid interfaces supported at micropore arrays: a computational simulation. <i>Analytical and Bioanalytical Chemistry</i> , <b>2010</b> , 398, 1625-31	4.4	17
52	Electrochemical surface nanopatterning by selective reductive desorption from mixed metal surfaces. <i>Electrochimica Acta</i> , <b>2010</b> , 55, 4309-4313	6.7	2
51	Reference values of the chronoamperometric response at cylindrical and capped cylindrical electrodes. <i>Electrochimica Acta</i> , <b>2010</b> , 55, 5629-5635	6.7	24
50	The performance of differential pulse stripping voltammetry at micro-liquid/liquid interface arrays. <i>Journal of Electroanalytical Chemistry</i> , <b>2010</b> , 641, 7-13	4.1	20
49	Flow-injection amperometry at microfabricated silicon-based liquid/liquid interface arrays. <i>Electrochimica Acta</i> , <b>2010</b> , 55, 4234-4239	6.7	11
48	Diffusion-limited chronoamperometry at conical-tip microelectrodes. <i>Electrochimica Acta</i> , <b>2010</b> , 55, 1276-1277	6.7	10
47	Study of the Effects of Nonlinear Potential Sweeps on Voltammetry. <i>Electroanalysis</i> , <b>2009</b> , 21, 68-76	3	5
46	Potentiometric characterisation of a dual-stream electrochemical microfluidic device. <i>Microfluidics and Nanofluidics</i> , <b>2009</b> , 6, 231-240	2.8	9
45	Investigation of potential distribution and the influence of ion complexation on diffusion potentials at aqueous-aqueous boundaries within a dual-stream microfluidic structure. <i>Analytical Chemistry</i> , <b>2009</b> , 81, 8373-9	7.8	7
44	Interactions of proteins with small ionised molecules: electrochemical adsorption and facilitated ion transfer voltammetry of haemoglobin at the liquid/liquid interface. <i>Analyst, The</i> , <b>2009</b> , 134, 1608-13	5	51
43	Electrochemical ion transfer across liquid/liquid interfaces confined within solid-state micropore arrays--simulations and experiments. <i>Analyst, The</i> , <b>2009</b> , 134, 148-58	5	61

42	Electrochemical fabrication of nanostructured surfaces for enhanced response. <i>ChemPhysChem</i> , <b>2008</b> , 9, 920-7	3.2	19
41	Comparison of flux approximations in electrochemical digital simulation. Part 2: Complications due to homogeneous chemical reactions, charge estimation and application to the ultramicrodisk electrode. <i>Journal of Electroanalytical Chemistry</i> , <b>2008</b> , 622, 51-58	4.1	4
40	Electrochemically deposited palladium as a substrate for self-assembled monolayers. <i>Langmuir</i> , <b>2007</b> , 23, 10823-30	4	27
39	Microstructures by Selective Desorption of Self-Assembled Monolayer from Polycrystalline Gold Electrodes. <i>Electroanalysis</i> , <b>2007</b> , 19, 1467-1475	3	29
38	Comparison of flux approximations in electrochemical digital simulation. <i>Journal of Electroanalytical Chemistry</i> , <b>2007</b> , 602, 210-216	4.1	3
37	Introduction: Proceedings of the First and Second European Workshops on Preterm Labour of the Special Non-Invasive Advances in Fetal and Neonatal Evaluation (SAFE) Network of Excellence. <i>BMC Pregnancy and Childbirth</i> , <b>2007</b> , 7,	3.2	78
36	Investigation of Molecular Transfer Processes across Phospholipid Monolayers by the Combined Scanning Electrochemical Microscopy-Langmuir Trough Technique. <i>Progress in Reaction Kinetics and Mechanism</i> , <b>2007</b> , 32, 195-217	0.5	1
35	Electroanalytical response of an ultramicroelectrode at the bottom of an insulating conical well: Digital simulation. <i>Electrochimica Acta</i> , <b>2006</b> , 52, 33-41	6.7	14
34	Reference values of the diffusion-limited chronoamperometric current at a microband electrode. <i>Electrochimica Acta</i> , <b>2005</b> , 51, 333-339	6.7	19
33	Electrochemical Sensor Design Using Coplanar and Elevated Interdigitated Array Electrodes. A Computational Study. <i>Electroanalysis</i> , <b>2005</b> , 17, 169-177	3	12
32	Computational Study of Chronoamperometry at Rectangular Microelectrodes. <i>Electroanalysis</i> , <b>2005</b> , 17, 1547-1554	3	14
31	Reference values of the diffusion-limited current at a microdisk electrode. <i>Electrochimica Acta</i> , <b>2004</b> , 50, 107-113	6.7	21
30	Higher-order spatial discretisations in electrochemical digital simulation. Part 5: application to stationary ultramicrodisc electrode simulation. <i>Journal of Electroanalytical Chemistry</i> , <b>2004</b> , 566, 15-23	4.1	11
29	Damping of Crank-Nicolson error oscillations. <i>Computational Biology and Chemistry</i> , <b>2003</b> , 27, 253-63	3.6	41
28	Combined scanning electrochemical microscopy/Langmuir trough technique for investigating phase transfer kinetics across liquid/liquid interfaces modified by a molecular monolayer. <i>Electrochemistry Communications</i> , <b>2003</b> , 5, 105-110	5.1	25
27	Higher-order spatial discretisations in electrochemical digital simulations. Part 4. Discretisation on an arbitrarily spaced grid. <i>Computational Biology and Chemistry</i> , <b>2003</b> , 27, 327-37	3.6	23
26	High-order spatial discretisations in electrochemical digital simulation. Part 3. Combination with the explicit Runge-Kutta algorithm. <i>Computers &amp; Chemistry</i> , <b>2002</b> , 26, 97-103		12
25	High order spatial discretisations in electrochemical digital simulation. 2. Combination with the extrapolation algorithm. <i>Computers &amp; Chemistry</i> , <b>2001</b> , 25, 205-14		17

24	High order spatial discretisations in electrochemical digital simulation. 2. Combination with the extrapolation algorithm. <i>Computers &amp; Chemistry</i> , <b>2001</b> , 25, 511-20		7
23	Liquid liquid interface electrochemistry applied to study of a two-phase permanganate oxidation. <i>Electrochemistry Communications</i> , <b>2001</b> , 3, 619-623	5.1	11
22	Theory and practice of electrochemical titrations with dual microband electrodes. <i>Journal of Electroanalytical Chemistry</i> , <b>2001</b> , 500, 108-120	4.1	35
21	Investigation of some starting protocols for BDF (FIRM) in electrochemical digital simulation. <i>Journal of Electroanalytical Chemistry</i> , <b>2001</b> , 512, 119-123	4.1	16
20	Effect of phospholipids on the kinetics of dioxygen transfer across a 1,2-dichloroethane/water interface. <i>Physical Chemistry Chemical Physics</i> , <b>2001</b> , 3, 5553-5558	3.6	21
19	Effect of Nonionic Surfactants on Interfacial Electron Transfer at the Liquid/Liquid Interface. <i>Langmuir</i> , <b>2001</b> , 17, 8348-8354	4	10
18	Probing liquid liquid interfaces using neutron reflection measurements and scanning electrochemical microscopy. <i>Journal of Electroanalytical Chemistry</i> , <b>2000</b> , 483, 163-173	4.1	53
17	High-order spatial discretisations in electrochemical digital simulation. 1. Combination with the BDF algorithm. <i>Computers &amp; Chemistry</i> , <b>2000</b> , 24, 673-84		23
16	Electron transfer mediated by glucose oxidase at the liquid/liquid interface. <i>Faraday Discussions</i> , <b>2000</b> , 109-18; discussion 171-90	3.6	23
15	Cationic systems as self-assembled monolayers on gold surfaces. <i>Journal of Electroanalytical Chemistry</i> , <b>1999</b> , 464, 263-267	4.1	10
14	Effect of self-assembled surfactant structures on ion transport across the liquid liquid interface. <i>Electrochemistry Communications</i> , <b>1999</b> , 1, 139-144	5.1	23
13	Digital Simulation of Two-Dimensional Mass Transfer Problems in Electrochemistry Using the Extrapolation Method. <i>Electroanalysis</i> , <b>1999</b> , 11, 487-493	3	24
12	Model Calculation to Characterize Kinetic Effects for Electrochemical Phase Formation*. <i>Zeitschrift Fur Physikalische Chemie</i> , <b>1999</b> , 208, 239-251	3.1	4
11	On the Bond strengths in higher element homologues of methylenephosphane and diphosphene. <i>Journal of the Chemical Society, Faraday Transactions</i> , <b>1997</b> , 93, 2957-2962		19
10	Digital simulation of potential step experiments using the extrapolation method. <i>Electroanalysis</i> , <b>1997</b> , 9, 1403-1408	3	44
9	The phospho-2-allyl-system: electrochemical and quantum chemical investigations. <i>Journal of the Chemical Society, Faraday Transactions</i> , <b>1996</b> , 92, 1751		10
8	Linear and cyclic sweep voltammetry at a rotating disk electrode. A digital simulation. <i>Electroanalysis</i> , <b>1996</b> , 8, 1034-1039	3	21
7	On The Electronic Structures of Metaphosphate PX <sub>3</sub> (I) and Metaphosphite PX <sub>2</sub> (II) Anions, X = CH <sub>2</sub> , SiH <sub>2</sub> , NH, PH, O, S. <i>Phosphorus, Sulfur and Silicon and the Related Elements</i> , <b>1996</b> , 111, 41-41	1	

6	Orbital Isomerism in the 1.3-Dphosphacyclobutane-2.4-Diyl, Quantum Chemical Investigations at MCSCF Level. <i>Phosphorus, Sulfur and Silicon and the Related Elements</i> , <b>1996</b> , 111, 42-42	1	2
5	On the electronic structures of the metaphosphate (metaphosphite) anions $PX_3(IV)PX_2(III)$ , X = CH <sub>2</sub> , SiH <sub>2</sub> , NH, PH, O, S. <i>Computational and Theoretical Chemistry</i> , <b>1995</b> , 333, 249-260		4
4	Halogen Substitution at Phosphorus in Phosphaalkenes and Phosphasilenes versus Bis(methylene)phosphoranes: A Quantum Chemical Evaluation of Bonding Properties. <i>The Journal of Physical Chemistry</i> , <b>1995</b> , 99, 2329-2334		8
3	On the electronic hypersurface of the methylenephosphenium cation. <i>Computational and Theoretical Chemistry</i> , <b>1994</b> , 305, 127-137		9
2	Phosphorus in Strained Ring Systems. <i>Phosphorus, Sulfur and Silicon and the Related Elements</i> , <b>1993</b> , 77, 93-96	1	2
1	Rotational barrier in phosphatriafulvene: An MCSCF study. <i>Journal of Computational Chemistry</i> , <b>1993</b> , 14, 3-7	3.5	2