MiklÏŒs Gratzl

List of Publications by Year
in descending order

50	742	471509 17	552781 26
papers	citations	h-index	g-index

50	50	50	591
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Release of dopamine and norepinephrine by hypoxia from PC-12 cells. American Journal of Physiology - Cell Physiology, 1998, 274, C1592-C1600.	4.6	81
2	Diffusional microtitration: acid/base titrations in pico- and femtoliter samples. Analytical Chemistry, 1993, 65, 2085-2088.	6.5	49
3	Electrochemistry in Microscopic Domains. 1. The Electrochemical Cell and Its Voltammetric and Amperometric Response. Analytical Chemistry, 1998, 70, 1468-1476.	6.5	47
4	Monitoring Drug Efflux from Sensitive and Multidrug-Resistant Single Cancer Cells with Microvoltammetry. Analytical Chemistry, 1999, 71, 2821-2830.	6.5	43
5	Continuous in Situ Electrochemical Monitoring of Doxorubicin Efflux from Sensitive and Drug-Resistant Cancer Cells. Biophysical Journal, 1998, 75, 2255-2261.	0.5	35
6	Stationary-State Oxidized Platinum Microsensor for Selective and On-Line Monitoring of Nitric Oxide in Biological Preparations. Analytical Chemistry, 2001, 73, 3965-3974.	6.5	35
7	Micro-miniature Autonomous Optical Sensor Array for Monitoring Ions and Metabolites 1: Design, Fabrication, and Data Analysis. Analytical Sciences, 2006, 22, 383-388.	1.6	34
8	Theoretical interpretation of transient signals obtained with precipitate-based ion-selective electrodes in the presence of interfering ions. Analytical Chemistry, 1985, 57, 1506-1511.	6.5	28
9	Diffusional Microtitration: Reagent Delivery by a Diffusional Microburet into Microscopic Samples. Analytical Chemistry, 1994, 66, 1976-1982.	6.5	27
10	Comparison of proposed response mechanisms of precipitate-based ion-selective electrodes in the presence of interfering ions. Analytical Chemistry, 1989, 61, 453-458.	6.5	26
11	Micro-miniature Autonomous Optical Sensor Array for Monitoring Ions and Metabolites 2: Color Responses to pH, K+ and Glucose. Analytical Sciences, 2006, 22, 937-941.	1.6	26
12	Complexometric Determination of Metal Ions by Microscopic Diffusional Titration. Analytical Chemistry, 1996, 68, 1580-1584.	6.5	24
13	Adjusting the Distance of Electrochemical Microsensors from Secreting Cell Monolayers on the Micrometer Scale Using Impedance. Analytical Chemistry, 1999, 71, 2814-2820.	6.5	23
14	Optical Detection in Microscopic Domains. 2. Inner Filter Effects for Monitoring Nonfluorescent Molecules with Fluorescence. Analytical Chemistry, 2001, 73, 2070-2077.	6.5	22
15	A Microscopic, Continous, Optical Monitor for Interstitial Electrolytes and Glucose. ChemPhysChem, 2003, 4, 155-161.	2.1	21
16	Fine Chemical Manipulations of Microscopic Liquid Samples. 1. Droplet Loading with Chemicals. Analytical Chemistry, 1999, 71, 2751-2756.	6.5	20
17	Hydrodynamic Micromanipulation of Individual Cells onto Patterned Attachment Sites on Biomicroelectromechanical System Chips. Analytical Chemistry, 2003, 75, 4686-4690.	6.5	18
18	Rotating Sample System:â€‰ An Equivalent of a Rotating Electrode for Microliter Samples. Analytical Chemistry, 1997, 69, 3687-3692.	6.5	17

#	ARTICLE	IF	CITATIONS
19	Minimizing color interference from biological samples in optode-based measurements. Sensors and Actuators B: Chemical, 2014, 204, 319-325.	7.8	16
20	Computational Modeling and Analysis of Iron Release from Macrophages. PLoS Computational Biology, 2014, 10, e1003701.	3.2	15
21	Impedance measurements for pressed-pellet electrode membranes based on silver iodide and silver iodide/silver sulfide with solution contacts. Analytica Chimica Acta, 1986, 189, 217-228.	5.4	12
22	Diffusional microtitration: a technique for analyzing ultramicro samples. Analytical Chemistry, 1988, 60, 484-488.	6.5	12
23	Diffusional microtitration: stationary or nonstationary reagent delivery. Analytical Chemistry, 1988, 60, 2147-2152.	6.5	11
24	Diffusional Titration of Metal Ions in Microliter Samples with Potentiometric Indication. Analytical Chemistry, 1996, 68, 3665-3669.	6.5	11
25	Anomalies of deconvolution via discrete Fourier transform: a case study on assessing transport at live cell preparations. TrAC - Trends in Analytical Chemistry, 2004, 23, 459-567.	11.4	9
26	Time resolved secretion of chloride from a monolayer of mucin-secreting epithelial cells. European Biophysics Journal, 2008, 37, 411-419.	2.2	9
27	Reagentless pH-stat for Microliter Fluid Specimens. Analytical Chemistry, 2008, 80, 4065-4069.	6.5	9
28	Deconvolution of Concentration Recordings at Live Cell Preparations via Shape Error Optimization. Analytical Chemistry, 2005, 77, 2875-2881.	6.5	7
29	Fine Chemical Manipulations of Microscopic Liquid Samples. 2. Consuming and Nonconsuming Schemes. Analytical Chemistry, 1999, 71, 4896-4902.	6.5	6
30	Modelling the response function of enzyme-based optical glucose-sensing capsules. Supramolecular Chemistry, 2010, 22, 425-433.	1.2	6
31	Hydrodynamic Electrochemistry in 20 .MU.L Drops in the Rotating Sample System. Analytical Sciences, 2005, 21, 1155-1160.	1.6	5
32	Simultaneous Visualization of Surface Topography and Concentration Field by Means of Scanning Electrochemical Microscopy Using a Single Electrochemical Probe and Impedance Spectroscopy. ChemPhysChem, 2011, 12, 2798-2805.	2.1	5
33	Spatially Averaging Electrodes. Analytical Chemistry, 2009, 81, 2129-2134.	6.5	4
34	Electrochemical mapping of oxygenation in the three-dimensional multicellular tumour hemi-spheroid. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2019, 475, 20180647.	2.1	4
35	Optical Detection in Microscopic Domains. 3. Confocal Analysis of Fluorescent Amphiphilic Molecules. Analytical Chemistry, 2003, 75, 6133-6140.	6.5	3
36	Serum cholinesterase assay using a reagent-free micro pH-stat. Analytical Biochemistry, 2009, 389, 93-96.	2.4	3

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37	Time-resolved release of calcium from an epithelial cell monolayer during mucin secretion. European Biophysics Journal, 2011, 40, 165-174.	2.2	3
38	Single Cell Model for Simultaneous Drug Delivery and Efflux. Annals of Biomedical Engineering, 1999, 27, 208-218.	2.5	2
39	Electrochemical pH-Stat for Microliter Fluid Specimens. ECS Transactions, 2006, 3, 117-124.	0.5	2
40	MEMS Device to Monitor Biological Oxygen Uptake at Arrays of Single Cells and Small Cell Clusters. Electroanalysis, 2008, 20, 627-634.	2.9	2
41	Effects of Sampling Rate on the Interpretation of Cellular Transport Measurements. Analytical Chemistry, 2008, 80, 7684-7689.	6.5	2
42	Differential linear scan voltammetry: analytical performance in comparison with pulsed voltammetry techniques. Analytical and Bioanalytical Chemistry, 2013, 405, 5539-5547.	3.7	2
43	Functional Imaging of Chemically Active Surfaces with Optical Reporter Microbeads. PLoS ONE, 2015, 10, e0136970.	2.5	2
44	Optical Detection in Microscopic Domains. 1. Monitoring Chemical Manipulations with Absorption Microspectrometry. Analytical Chemistry, 2000, 72, 1569-1575.	6.5	1
45	Rate-Limiting Hydrodynamic Resistance for Controlled Reagent Delivery for Laboratory Solution Preparation. Analytical Chemistry, 2007, 79, 2541-2545.	6.5	1
46	Determination of critical micelle concentration with the rotating sample system. Analytical and Bioanalytical Chemistry, 2008, 392, 1391-1396.	3.7	1
47	Continuous and Quantitative Delivery of Molecules into Individual Cells with a Diffusional Microburet. Analytical Chemistry, 2008, 80, 9310-9315.	6.5	1
48	Controlled diffusion for laboratory solution preparation. Analytical and Bioanalytical Chemistry, 2008, 392, 471-477.	3.7	0
49	Temporal ratiometry to assess dynamic concentration distributions of fluorescent molecules in single live cells during continuous diffusional dosing. Analytical and Bioanalytical Chemistry, 2009, 395, 449-456.	3.7	0
50	Disposable optical slide provides a snapshot of metabolic parameters from a drop of blood at the bedside. , 2013, , .		0