

František Opekar

List of Publications by Year in descending order

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91
papers

2,159
citations

201674

27
h-index

254184

43
g-index

94
all docs

94
docs citations

94
times ranked

1396
citing authors

#	ARTICLE	IF	CITATIONS
1	Contactless Conductivity Detector for Microchip Capillary Electrophoresis. <i>Analytical Chemistry</i> , 2002, 74, 1968-1971.	6.5	211
2	Rotating disk electrodes. <i>Journal of Electroanalytical Chemistry and Interfacial Electrochemistry</i> , 1976, 69, 1-105.	0.1	176
3	Electrochemical sensors with solid polymer electrolytes. <i>Analytica Chimica Acta</i> , 1999, 385, 151-162.	5.4	109
4	A chip-based capillary electrophoresis-contactless conductivity microsystem for fast measurements of low-explosive ionic components. <i>Analyst</i> , 2002, 127, 719-723.	3.5	96
5	Dual photometric-contactless conductometric detector for capillary electrophoresis. <i>Analytica Chimica Acta</i> , 2001, 433, 13-21.	5.4	74
6	A Contactless Conductometric Detector with Easily Exchangeable Capillary for Capillary Electrophoresis. <i>Electroanalysis</i> , 2001, 13, 989-992.	2.9	63
7	A contactless conductivity detector for capillary electrophoresis: Effects of the detection cell geometry on the detector performance. <i>Electrophoresis</i> , 2002, 23, 3718-3724.	2.4	53
8	Rapid Capillary Zone Electrophoresis Along Short Separation Pathways and Its Use in Some Hyphenated Systems: A Critical Review. <i>Chemical Reviews</i> , 2009, 109, 4487-4499.	47.7	52
9	Neutral and ionic reaction mechanisms for the allylation of aldehydes by bipyridine N,N'-dioxides. <i>Chemical Communications</i> , 2009, , 2314.	4.1	42
10	Large-volume sample stacking for in vivo monitoring of trace levels of β -aminobutyric acid, glycine and glutamate in microdialysates of periaqueductal gray matter by capillary electrophoresis with contactless conductivity detection. <i>Journal of Chromatography A</i> , 2013, 1303, 94-99.	3.7	41
11	Contactless Impedance Sensors and Their Application to Flow Measurements. <i>Sensors</i> , 2013, 13, 2786-2801.	3.8	41
12	An amperometric solid-state NO ₂ sensor with a solid polymer electrolyte and a reticulated vitreous carbon indicator electrode. <i>Sensors and Actuators B: Chemical</i> , 2000, 69, 199-204.	7.8	40
13	Electric resistance in a Nafion® membrane exposed to air after a step change in the relative humidity. <i>Journal of Electroanalytical Chemistry</i> , 1995, 385, 269-271.	3.8	38
14	Improved dual photometric-contactless conductometric detector for capillary electrophoresis. <i>Analytica Chimica Acta</i> , 2004, 525, 17-21.	5.4	35
15	A contactless conductivity detection cell for flow injection analysis: Determination of total inorganic carbon. <i>Analytica Chimica Acta</i> , 2005, 551, 132-136.	5.4	35
16	Ionic liquid-based polymer electrolyte for amperometric solid-state NO ₂ sensor. <i>Electrochimica Acta</i> , 2011, 56, 5650-5655.	5.2	35
17	A planar, solid-state amperometric sensor for nitrogen dioxide, employing an ionic liquid electrolyte contained in a polymeric matrix. <i>Sensors and Actuators B: Chemical</i> , 2012, 161, 811-817.	7.8	35
18	Simultaneous and rapid determination of caffeine and taurine in energy drinks by MEKC in a short capillary with dual contactless conductivity/photometry detection. <i>Electrophoresis</i> , 2014, 35, 1660-1665.	2.4	35

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19	Some important combinations of detection techniques for electrophoresis in capillaries and on chips with emphasis on electrochemical principles. <i>Electrophoresis</i> , 2011, 32, 795-810.	2.4	34
20	Rapid determinations of saccharides in high-energy drinks by short-capillary electrophoresis with contactless conductivity detection. <i>Analytical and Bioanalytical Chemistry</i> , 2012, 404, 1549-1554.	3.7	33
21	An amperometric solid-state sensor for Nitrogen dioxide based on a solid polymer electrolyte. <i>Electroanalysis</i> , 1992, 4, 133-138.	2.9	32
22	Pressure-assisted introduction of urine samples into a short capillary for electrophoretic separation with contactless conductivity and UV spectrometry detection. <i>Electrophoresis</i> , 2015, 36, 1962-1968.	2.4	32
23	Au/PVC composite—a new material for solid-state gas sensors. <i>Sensors and Actuators B: Chemical</i> , 2004, 97, 379-386.	7.8	31
24	Detection of hydrogen in air with a detector containing a nafion membrane metallized on both sides. <i>Journal of Electroanalytical Chemistry and Interfacial Electrochemistry</i> , 1989, 260, 451-455.	0.1	30
25	The Effects of the Electrode System Geometry on the Properties of Contactless Conductivity Detectors for Capillary Electrophoresis. <i>Electroanalysis</i> , 2005, 17, 1181-1186.	2.9	29
26	Dual-channel capillary electrophoresis for simultaneous determination of cations and anions. <i>Journal of Chromatography A</i> , 2016, 1446, 158-163.	3.7	29
27	Determination of 1-methylhistidine and 3-methylhistidine by capillary and chip electrophoresis with contactless conductivity detection. <i>Electrophoresis</i> , 2007, 28, 2174-2180.	2.4	28
28	Indicator and reference platinum solid polymer electrolyte electrodes for a simple solid-state amperometric hydrogen sensor. <i>Journal of Electroanalytical Chemistry</i> , 1994, 379, 301-306.	3.8	25
29	Amperometric solid-state NO ₂ sensor based on plasticized PVC matrix containing a hydrophobic electrolyte. <i>Sensors and Actuators B: Chemical</i> , 1997, 41, 1-6.	7.8	25
30	Amperometric Solid-State Gas Sensors: Materials for Their Active Components. <i>Critical Reviews in Analytical Chemistry</i> , 2002, 32, 253-259.	3.5	25
31	Thinly Insulated Wire Cells - A New Device for Sensitive Contactless Conductivity Detection in Flow Analyses. <i>Electroanalysis</i> , 2005, 17, 1924-1930.	2.9	24
32	A simple contactless impedance probe for determination of ethanol in gasoline. <i>Analytica Chimica Acta</i> , 2011, 694, 57-60.	5.4	24
33	A dual spectrophotometric/contactless conductivity detector for CE determination of incompletely separated amino acids. <i>Journal of Separation Science</i> , 2008, 31, 353-355.	2.5	23
34	Capillary and microchip electrophoresis with contactless conductivity detection for analysis of foodstuffs and beverages. <i>Food Chemistry</i> , 2022, 375, 131858.	8.2	23
35	Solid-state hydrogen sensor based on a solid-polymer electrolyte. <i>Electroanalysis</i> , 1995, 7, 1054-1058.	2.9	22
36	A conductometric detector for capillary separations. <i>Electroanalysis</i> , 1996, 8, 722-725.	2.9	22

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37	An Amperometric Detector with a Platinum Tubular Electrode for High Performance Liquid Chromatography. <i>Electroanalysis</i> , 2000, 12, 39-43.	2.9	20
38	Direct sample injection from a syringe needle into a separation capillary. <i>Analytica Chimica Acta</i> , 2018, 1042, 133-140.	5.4	20
39	Electrokinetic injection of samples into a short electrophoretic capillary controlled by piezoelectric micropumps. <i>Electrophoresis</i> , 2016, 37, 595-600.	2.4	19
40	Determination of gaseous hydrogen sulfide by cathodic stripping voltammetry after preconcentration on a silver metalized porous membrane electrode. <i>Analytical Chemistry</i> , 1984, 56, 1206-1209.	6.5	18
41	Renaissance of HF Impedimetry in Application to CE Detection. <i>Electroanalysis</i> , 2006, 18, 1282-1288.	2.9	16
42	A Comparison of the Properties of Contactless Conductivity and Diode Array Photometric Detectors in Analyses of Low Molecular, Biologically Active Substances by Capillary Electrophoresis in Acetic Acid Solutions. <i>Electroanalysis</i> , 2008, 20, 477-484.	2.9	16
43	Effect of gas humidity on the potential of pseudoreference Pt/air electrode in amperometric solid-state gas sensors. <i>Sensors and Actuators B: Chemical</i> , 2002, 81, 329-333.	7.8	15
44	Hydrodynamic sample injection into short electrophoretic capillary in systems with a flow-gating interface. <i>Journal of Chromatography A</i> , 2017, 1480, 93-98.	3.7	15
45	Determination of urinary 8-hydroxy-2'-deoxyguanosine in obese patients by HPLC with electrochemical detection. <i>Analytica Chimica Acta</i> , 2004, 516, 107-110.	5.4	14
46	An air-assisted flow-gating interface for capillary electrophoresis. <i>Electrophoresis</i> , 2019, 40, 587-590.	2.4	14
47	A simple impedance tester for determining the water content in organic solvents. <i>Sensors and Actuators B: Chemical</i> , 2015, 220, 485-490.	7.8	13
48	Coaxial flow-gating interface for capillary electrophoresis. <i>Journal of Separation Science</i> , 2017, 40, 3138-3143.	2.5	13
49	A wall-jet conductometric detector for determination of sulphur dioxide in air after preconcentration in water in an aerodispersion unit. <i>Analytica Chimica Acta</i> , 1987, 203, 1-10.	5.4	12
50	A solid polymer electrolyte amperometric detector for FIA and HPLC with mobile phases of low conductivity. <i>Electroanalysis</i> , 1992, 4, 447-451.	2.9	12
51	Flow-through coulometric stripping analysis and the determination of manganese by cathodic stripping voltammetry. <i>Analytica Chimica Acta</i> , 1981, 126, 15-21.	5.4	11
52	Electrochemical oxidation of K ₄ O ₆ (CN) ₆ on a platinum electrode. <i>Journal of Electroanalytical Chemistry and Interfacial Electrochemistry</i> , 1976, 71, 120-124.	0.1	10
53	Split-flow injector for capillary zone electrophoresis. <i>Journal of Chromatography A</i> , 2000, 883, 223-230.	3.7	10
54	Comparison of the performance characteristics of two tubular contactless conductivity detectors with different dimensions and application in conjunction with HPLC. <i>Analytical and Bioanalytical Chemistry</i> , 2011, 401, 1669-1676.	3.7	10

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55	Very fast electrophoretic separation on commercial instruments using a combination of two capillaries with different internal diameters. <i>Electrophoresis</i> , 2013, 34, 552-556.	2.4	10
56	Rapid determination of majority cations in yoghurts using on-line connection of capillary electrophoresis with mini-dialysis. <i>Food Chemistry</i> , 2020, 308, 125647.	8.2	10
57	Analytical applications of metallized membrane electrodes. <i>Electroanalysis</i> , 1989, 1, 287-295.	2.9	9
58	An amperometric detector with a tubular electrode deposited on the capillary for capillary liquid chromatography. <i>Analytica Chimica Acta</i> , 1998, 360, 53-59.	5.4	9
59	Determination of Intact Heparin by Capillary Electrophoresis with Contactless Conductivity Detection in Background Electrolytes Containing Hydrophilic Polymers. <i>Collection of Czechoslovak Chemical Communications</i> , 2008, 73, 187-200.	1.0	9
60	A Contactless Impedance Probe for Simple and Rapid Determination of the Ratio of Liquids with Different Permittivities in Binary Mixtures. <i>Electroanalysis</i> , 2009, 21, 96-100.	2.9	9
61	A thin-layer contactless conductivity cell for detection in flowing liquids. <i>Analytica Chimica Acta</i> , 2009, 650, 189-194.	5.4	9
62	Dialysis of one sample drop on-line connected with electrophoresis in short capillary. <i>Talanta</i> , 2020, 219, 121252.	5.5	9
63	Electrochemical stripping determination of traces of copper, lead, cadmium and zinc in zirconium metal and zirconium dioxide. <i>Talanta</i> , 1978, 25, 363-369.	5.5	8
64	Pneumatoamperometric determination of various oxidants and total dissolved chlorine. <i>Analytica Chimica Acta</i> , 1982, 136, 389-393.	5.4	8
65	Pneumatoamperometric determination of cyanide, sulfide and their mixtures. <i>Analytica Chimica Acta</i> , 1985, 169, 407-412.	5.4	8
66	Pneumatoamperometric Determination of Sulfur Dioxide in Air on ppb Level. <i>International Journal of Environmental Analytical Chemistry</i> , 1986, 27, 123-135.	3.3	8
67	The electrochemical generation of small amounts of hydrogen cyanide. <i>Talanta</i> , 1986, 33, 688-690.	5.5	6
68	Pneumatopotentiometric determination of nanogram amounts of cyanide. <i>Analytica Chimica Acta</i> , 1986, 183, 293-299.	5.4	6
69	Determination of total sulphur and nitrogen in crude oil products by oxidative pyrolysis with detection using a metal-plated membrane electrode. <i>Analyst, The</i> , 1988, 113, 501-503.	3.5	6
70	A Simple Contactless Conductivity Detector Employing a Medium Wave Radio Integrated Circuit for the Signal Treatment. <i>Electroanalysis</i> , 2010, 22, 161-167.	2.9	6
71	Contactless conductometric determination of methanol and ethanol in samples containing water after their electrophoretic desalination. <i>Electrophoresis</i> , 2015, 36, 1976-1981.	2.4	6
72	Voltammetric study of the cyanide complexes of osmium(II). The reduction of the cyanide complex of Os(VI) on a platinum rde. <i>Electrochimica Acta</i> , 1977, 22, 243-248.	5.2	5

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73	Voltammetric study of the cyanide complexes of osmium(II). The behaviour of lower oxidation state cyanide complexes of osmium on a platinum rde. <i>Electrochimica Acta</i> , 1977, 22, 249-254.	5.2	4
74	A simple laboratory generator for low concentrations of sulphur dioxide. <i>Analytica Chimica Acta</i> , 1985, 166, 305-310.	5.4	4
75	Amperometric detection of nitrates using a flow-through membrane detector. <i>Journal of Electroanalytical Chemistry and Interfacial Electrochemistry</i> , 1986, 214, 125-134.	0.1	4
76	Application of a metallized membrane electrode for the determination of gaseous sulphur compounds after reductive pyrolysis. <i>Talanta</i> , 1987, 34, 453-459.	5.5	4
77	Measurement of electrode potentials in electrochemical systems with solid polymer electrolytes against common reference electrodes. <i>Sensors and Actuators B: Chemical</i> , 1994, 21, 131-134.	7.8	4
78	Properties of the Contactless Impedance Detector with Insulated Wire Electrodes Placed Inside the Flowing Liquid Stream. <i>Electroanalysis</i> , 2007, 19, 2413-2418.	2.9	4
79	Some Possibilities and Limitations of Contactless Impedimetric Determinations of Organic Liquids in Aqueous Solutions. The Interference from Ionic Compounds. <i>Electroanalysis</i> , 2010, 22, 2353-2358.	2.9	4
80	The use of a multichannel capillary for electrophoretic separations of mixtures of clinically important substances with contactless conductivity and UV photometric detection. <i>Electrophoresis</i> , 2013, 34, 2058-2064.	2.4	4
81	Characterization of various geometric arrangements of assisted-flow gating interfaces for capillary electrophoresis. <i>Electrophoresis</i> , 2021, 42, 749-755.	2.4	4
82	Simple technique for joining of capillaries in capillary separation methods. <i>Journal of Chromatography A</i> , 1998, 802, 381-384.	3.7	3
83	Effect of AC voltage frequency on the sensitivity of conductometric detection in microseparation techniques. <i>Analytica Chimica Acta</i> , 1999, 390, 101-106.	5.4	3
84	Determination of subnanogram amounts of sulfur dioxide and sulfites by pneumatopotentiometry. <i>Collection of Czechoslovak Chemical Communications</i> , 1986, 51, 2077-2082.	1.0	3
85	Application of kalousek polarography in stripping analysis. <i>Journal of Electroanalytical Chemistry and Interfacial Electrochemistry</i> , 1977, 85, 207-212.	0.1	2
86	Synchronization of signal sampling with liquid pulsation in systems with peristaltic pumps. <i>Analytica Chimica Acta</i> , 1981, 127, 239-243.	5.4	2
87	A flow-through polarographic detector for species forming products soluble in mercury during electrochemical reduction. <i>Journal of Electroanalytical Chemistry and Interfacial Electrochemistry</i> , 1988, 251, 41-54.	0.1	2
88	Application of Contactless Impedance Detection to Determination of Substances in Gaseous Phase. <i>Electroanalysis</i> , 2011, 23, 1325-1328.	2.9	2
89	Galvanostatic dissolution of mercury from the surface of glassy carbon into thiocyanate solution. <i>Collection of Czechoslovak Chemical Communications</i> , 1980, 45, 169-178.	1.0	2
90	Electrochemically-controlled generation of small amounts of carbon monoxide. <i>Talanta</i> , 1992, 39, 367-369.	5.5	1

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91	The stripping voltammetric determination of copper with a rotating ring-disk electrode. Collection of Czechoslovak Chemical Communications, 1982, 47, 1315-1320.	1.0	0