

Werner G Kuhr

List of Publications by Year in descending order

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46918

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88
docs citations

88
times ranked

3746
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|--|-----|-----------|
| 1 | Real-time characterization of dopamine overflow and uptake in the rat striatum. <i>Neuroscience</i> , 1988, 25, 513-523. | 1.1 | 415 |
| 2 | Temporal characterization of perfluorinated ion exchange coated microvoltammetric electrodes for in vivo use. <i>Analytical Chemistry</i> , 1987, 59, 1752-1757. | 3.2 | 258 |
| 3 | Optimization of sensitivity and separation in capillary zone electrophoresis with indirect fluorescence detection. <i>Analytical Chemistry</i> , 1988, 60, 2642-2646. | 3.2 | 228 |
| 4 | Measurements of Electron-Transfer Rates of Charge-Storage Molecular Monolayers on Si(100). Toward Hybrid Molecular/Semiconductor Information Storage Devices. <i>Journal of the American Chemical Society</i> , 2003, 125, 505-517. | 6.6 | 204 |
| 5 | Indirect fluorescence detection of native amino acids in capillary zone electrophoresis. <i>Analytical Chemistry</i> , 1988, 60, 1832-1834. | 3.2 | 182 |
| 6 | Methods to Improve Electrochemical Reversibility at Carbon Electrodes. <i>Journal of the Electrochemical Society</i> , 1984, 131, 1578-1583. | 1.3 | 171 |
| 7 | Background subtraction for rapid scan voltammetry. <i>Journal of Electroanalytical Chemistry and Interfacial Electrochemistry</i> , 1986, 209, 77-90. | 0.3 | 160 |
| 8 | Extracellular Lactic Acid as an Indicator of Brain Metabolism: Continuous On-Line Measurement in Conscious, Freely Moving Rats with Intrastratial Dialysis. <i>Journal of Cerebral Blood Flow and Metabolism</i> , 1988, 8, 130-137. | 2.4 | 147 |
| 9 | Monitoring the Stimulated Release of Dopamine with In Vivo Voltammetry. I: Characterization of the Response Observed in the Caudate Nucleus of the Rat. <i>Journal of Neurochemistry</i> , 1984, 43, 560-569. | 2.1 | 143 |
| 10 | Real-time measurement of dopamine release in rat brain. <i>Brain Research</i> , 1986, 381, 168-171. | 1.1 | 140 |
| 11 | Generation of Biotin/Avidin/Enzyme Nanostructures with Maskless Photolithography. <i>Analytical Chemistry</i> , 1997, 69, 2619-2625. | 3.2 | 139 |
| 12 | Synthesis of α -Porphyrin-Linker-Thiol β -Molecules with Diverse Linkers for Studies of Molecular-Based Information Storage. <i>Journal of Organic Chemistry</i> , 2000, 65, 7345-7355. | 1.7 | 139 |
| 13 | Trypsin-modified-fused-silica capillary microreactor for peptide mapping by capillary zone electrophoresis. <i>Analytical Chemistry</i> , 1992, 64, 1610-1613. | 3.2 | 129 |
| 14 | Differentiation of Dopamine Overflow and Uptake Processes in the Extracellular Fluid of the Rat Caudate Nucleus with Fast-Scan In Vivo Voltammetry. <i>Journal of Neurochemistry</i> , 1988, 51, 1060-1069. | 2.1 | 123 |
| 15 | Enhanced electrochemical reversibility at heat-treated glassy carbon electrodes. <i>Analytical Chemistry</i> , 1983, 55, 1632-1634. | 3.2 | 121 |
| 16 | INDIRECT DETECTION METHODS FOR CAPILLARY SEPARATIONS. <i>Analytical Chemistry</i> , 1991, 63, 275A-282A. | 3.2 | 120 |
| 17 | Dehydrogenase-modified carbon-fiber microelectrodes for the measurement of neurotransmitter dynamics. 2. Covalent modification utilizing avidin-biotin technology. <i>Analytical Chemistry</i> , 1993, 65, 623-630. | 3.2 | 115 |
| 18 | Enzyme-modified carbon-fiber microelectrodes with millisecond response times. <i>Journal of the American Chemical Society</i> , 1991, 113, 1832-1833. | 6.6 | 109 |

| # | ARTICLE | IF | CITATIONS |
|----|---|-----|-----------|
| 19 | Ultrasensitive Voltammetric Detection of Underivatized Oligonucleotides and DNA. <i>Analytical Chemistry</i> , 1997, 69, 4828-4832. | 3.2 | 107 |
| 20 | Molecular approach toward information storage based on the redox properties of porphyrins in self-assembled monolayers. <i>Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena</i> , 2000, 18, 2359. | 1.6 | 105 |
| 21 | In vivo Identification and Quantitative Evaluation of Carrier-Mediated Transport of Lactate at the Cellular Level in the Striatum of Conscious, Freely Moving Rats. <i>Journal of Cerebral Blood Flow and Metabolism</i> , 1988, 8, 848-856. | 2.4 | 102 |
| 22 | Synthesis of Thiol-Derivatized Ferrocene~Porphyrins for Studies of Multibit Information Storage. <i>Journal of Organic Chemistry</i> , 2000, 65, 7356-7362. | 1.7 | 99 |
| 23 | Capacitance and conductance characterization of ferrocene-containing self-assembled monolayers on silicon surfaces for memory applications. <i>Applied Physics Letters</i> , 2002, 81, 1494-1496. | 1.5 | 98 |
| 24 | Online Microreactors/Capillary Electrophoresis/Mass Spectrometry for the Analysis of Proteins and Peptides. <i>Analytical Chemistry</i> , 1995, 67, 4170-4177. | 3.2 | 97 |
| 25 | Studies related to the design and synthesis of a molecular octal counter. <i>Journal of Materials Chemistry</i> , 2001, 11, 1162-1180. | 6.7 | 95 |
| 26 | Performance of Pyrolyzed Photoresist Carbon Films in a Microchip Capillary Electrophoresis Device with Sinusoidal Voltammetric Detection. <i>Analytical Chemistry</i> , 2003, 75, 4265-4271. | 3.2 | 91 |
| 27 | Enzyme-modified microelectrodes for in vivo neurochemical measurements. <i>Electroanalysis</i> , 1995, 7, 405-416. | 1.5 | 86 |
| 28 | Characterization of Charge Storage in Redox-Active Self-Assembled Monolayers. <i>Langmuir</i> , 2002, 18, 4030-4040. | 1.6 | 85 |
| 29 | Comparison of Electron-Transfer and Charge-Retention Characteristics of Porphyrin-Containing Self-Assembled Monolayers Designed for Molecular Information Storage. <i>Journal of Physical Chemistry B</i> , 2002, 106, 8639-8648. | 1.2 | 84 |
| 30 | Synthesis of Thiol-Derivatized Europium Porphyrinic Triple-Decker Sandwich Complexes for Multibit Molecular Information Storage. <i>Journal of Organic Chemistry</i> , 2000, 65, 7379-7390. | 1.7 | 81 |
| 31 | Dopaminergic neurons: simultaneous measurements of dopamine release and single-unit activity during stimulation of the medial forebrain bundle. <i>Brain Research</i> , 1987, 418, 122-128. | 1.1 | 80 |
| 32 | Direct Electrochemical Detection of Purine- and Pyrimidine-Based Nucleotides with Sinusoidal Voltammetry. <i>Analytical Chemistry</i> , 1997, 69, 3552-3557. | 3.2 | 72 |
| 33 | Capillary Gel Electrophoresis with Sinusoidal Voltammetric Detection: A Strategy To Allow Four-Color DNA Sequencing. <i>Analytical Chemistry</i> , 2001, 73, 4882-4890. | 3.2 | 71 |
| 34 | Online peptide mapping by capillary zone electrophoresis. <i>Analytical Chemistry</i> , 1993, 65, 2693-2697. | 3.2 | 67 |
| 35 | Localized Avidin/Biotin Derivatization of Glassy Carbon Electrodes Using SECM. <i>Analytical Chemistry</i> , 1998, 70, 2601-2606. | 3.2 | 67 |
| 36 | Dehydrogenase-modified carbon-fiber microelectrodes for the measurement of neurotransmitter dynamics. 1. NADH voltammetry. <i>Analytical Chemistry</i> , 1993, 65, 617-622. | 3.2 | 62 |

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|----|--|-----|-----------|
| 37 | Effects of restricted diffusion at ultramicroelectrodes in brain tissue. <i>Journal of Electroanalytical Chemistry and Interfacial Electrochemistry</i> , 1986, 213, 31-42. | 0.3 | 61 |
| 38 | Electrical characterization of redox-active molecular monolayers on SiO ₂ for memory applications. <i>Applied Physics Letters</i> , 2003, 83, 198-200. | 1.5 | 59 |
| 39 | Optimization of Online Peptide Mapping by Capillary Zone Electrophoresis. <i>Analytical Chemistry</i> , 1994, 66, 4400-4407. | 3.2 | 58 |
| 40 | Preservation of NADH Voltammetry for Enzyme-Modified Electrodes Based on Dehydrogenase. <i>Analytical Chemistry</i> , 1999, 71, 1720-1727. | 3.2 | 58 |
| 41 | Investigation of Tightly Coupled Porphyrin Arrays Comprised of Identical Monomers for Multibit Information Storage. <i>Journal of Organic Chemistry</i> , 2000, 65, 7371-7378. | 1.7 | 56 |
| 42 | Design, synthesis, and characterization of prototypical multistate counters in three distinct architectures. Electronic supplementary information (ESI) available: ¹ H NMR and ¹³ C NMR spectra for each dipyrromethane; absorption, LD-MS, and ¹ H NMR spectra for each porphyrin and each triple decker; absorption and LD-MS spectra for each triple-decker dyad. See http://www.rsc.org/suppdata/jm/b1/b108520d/ . <i>Journal of Materials Chemistry</i> , 2002, 12, 808-828. | 6.7 | 56 |
| 43 | Synthesis of Thiol-Derivatized Porphyrin Dimers and Trimers for Studies of Architectural Effects on Multibit Information Storage. <i>Journal of Organic Chemistry</i> , 2000, 65, 7363-7370. | 1.7 | 55 |
| 44 | Immobilization and detection of DNA on microfluidic chips. <i>Talanta</i> , 2001, 55, 909-918. | 2.9 | 55 |
| 45 | Electrocatalytic Surface for the Oxidation of NADH and Other Anionic Molecules of Biological Significance. <i>Analytical Chemistry</i> , 1995, 67, 3583-3588. | 3.2 | 54 |
| 46 | Detection of hydrogen peroxide and other molecules of biological importance at an electrocatalytic surface on a carbon fiber microelectrode. <i>Electroanalysis</i> , 1997, 9, 102-109. | 1.5 | 49 |
| 47 | Detection of Native Amino Acids and Peptides Utilizing Sinusoidal Voltammetry. <i>Analytical Chemistry</i> , 2000, 72, 5542-5548. | 3.2 | 48 |
| 48 | Segregation of Micrometer-Dimension Biosensor Elements on a Variety of Substrate Surfaces. <i>Analytical Chemistry</i> , 2000, 72, 3253-3259. | 3.2 | 48 |
| 49 | A Microchip Electrophoresis Device with Integrated Electrochemical Detection: A Direct Comparison of Constant Potential Amperometry and Sinusoidal Voltammetry. <i>Analytical Chemistry</i> , 2003, 75, 3301-3307. | 3.2 | 48 |
| 50 | Indirect fluorescence detection in micellar electrokinetic chromatography. <i>Analytical Chemistry</i> , 1991, 63, 1733-1737. | 3.2 | 47 |
| 51 | Electrochemical DNA analysis comes of age. <i>Nature Biotechnology</i> , 2000, 18, 1042-1043. | 9.4 | 47 |
| 52 | Rapid fabrication of a poly(dimethylsiloxane) microfluidic capillary gel electrophoresis system utilizing high precision machining. <i>Lab on A Chip</i> , 2003, 3, 93. | 3.1 | 47 |
| 53 | A Single Base Extension Technique for the Analysis of Known Mutations Utilizing Capillary Gel Electrophoresis with Electrochemical Detection. <i>Analytical Chemistry</i> , 2002, 74, 3421-3428. | 3.2 | 46 |
| 54 | Microchip capillary electrophoresis coupled to sinusoidal voltammetry for the detection of native carbohydrates. <i>Electrophoresis</i> , 2002, 23, 3750-3759. | 1.3 | 45 |

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|----|---|-----|-----------|
| 55 | Capillary Biosensor for Glutamate. <i>Analytical Chemistry</i> , 1996, 68, 2164-2169. | 3.2 | 43 |
| 56 | Sinusoidal Voltammetry for the Analysis of Carbohydrates at Copper Electrodes. <i>Analytical Chemistry</i> , 1997, 69, 1662-1668. | 3.2 | 43 |
| 57 | Separation of Double- and Single-Stranded DNA Restriction Fragments:Â Capillary Electrophoresis with Polymer Solutions under Alkaline Conditions. <i>Analytical Chemistry</i> , 1999, 71, 1668-1673. | 3.2 | 40 |
| 58 | Use of an electrochemically labeled nucleotide terminator for known point mutation analysis. <i>Electrophoresis</i> , 2003, 24, 2749-2757. | 1.3 | 36 |
| 59 | Imaging of electrophoretic flow across a capillary junction. <i>Analytical Chemistry</i> , 1993, 65, 277-282. | 3.2 | 34 |
| 60 | Characterization of Reaction Dynamics in a Trypsin-Modified Capillary Microreactor. <i>Analytical Chemistry</i> , 1998, 70, 1902-1908. | 3.2 | 34 |
| 61 | The effect of l-DOPA on in vivo dopamine release from nigrostriatal bundle neurons. <i>Brain Research</i> , 1988, 447, 191-194. | 1.1 | 32 |
| 62 | N-methyl-D-aspartate receptor involvement in lactate production following ischemia or convulsion in rats. <i>European Journal of Pharmacology</i> , 1988, 155, 145-149. | 1.7 | 31 |
| 63 | Fluorescence detection in capillary electrophoresis. <i>TrAC - Trends in Analytical Chemistry</i> , 1992, 11, 114-120. | 5.8 | 31 |
| 64 | Electron transfer kinetics at a biotin/avidin patterned glassy carbon electrode. <i>Biosensors and Bioelectronics</i> , 1998, 13, 1237-1244. | 5.3 | 31 |
| 65 | Characterization of the Chemical Architecture of Carbon-Fiber Microelectrodes. 3. Effect of Charge on the Electron-Transfer Properties of ECL Reactions. <i>Analytical Chemistry</i> , 1994, 66, 1996-2004. | 3.2 | 30 |
| 66 | Sinusoidal voltammetry:. <i>Journal of Electroanalytical Chemistry</i> , 2002, 531, 119-132. | 1.9 | 30 |
| 67 | Characterization of the oligomeric dispersion of poly(oxyalkylene)diamine polymers by precolumn derivatization and capillary zone electrophoresis with fluorescence detection. <i>Analytical Chemistry</i> , 1990, 62, 2189-2193. | 3.2 | 28 |
| 68 | Characterization of the chemical architecture of carbon-fiber microelectrodes. 1. Carboxylates. <i>Analytical Chemistry</i> , 1991, 63, 1413-1418. | 3.2 | 26 |
| 69 | Direct coupling of intracerebral dialysis with flow injection analysis based on enzymatic/fluorescence detection of lactic acid. <i>Analytica Chimica Acta</i> , 1988, 205, 53-59. | 2.6 | 25 |
| 70 | The use of in vivo brain dialysis of dopamine, acetylcholine, aminoacids and lactic acid in studies on the neurotoxin 1-methyl-4-phenyl-1,2,3,6-tetrahydropyridine (MPTP). <i>Toxicology</i> , 1988, 49, 503-511. | 2.0 | 21 |
| 71 | Molecular Memories Based on a CMOS Platform. <i>MRS Bulletin</i> , 2004, 29, 838-842. | 1.7 | 21 |
| 72 | Micrometer Dimension Derivatization of Biosensor Surfaces Using Confocal Dynamic Patterning. <i>Analytical Chemistry</i> , 1999, 71, 2558-2563. | 3.2 | 20 |

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|----|---|-----|-----------|
| 73 | Independently-addressable micron-sized biosensor elements. <i>Biosensors and Bioelectronics</i> , 2003, 18, 1299-1307. | 5.3 | 19 |
| 74 | A Laser Ablation Method for the Spatial Segregation of Enzyme and Redox Sites on Carbon Fiber Microelectrodes. <i>Analytical Chemistry</i> , 1998, 70, 1133-1140. | 3.2 | 18 |
| 75 | Characterization of the chemical architecture of carbon-fiber microelectrodes. 2. Correlation of carboxylate distribution with electron-transfer properties. <i>Analytical Chemistry</i> , 1993, 65, 2452-2458. | 3.2 | 17 |
| 76 | Background-subtraction of fast-scan cyclic staircase voltammetry at protein-modified carbon-fiber electrodes. <i>Biosensors and Bioelectronics</i> , 1998, 13, 1297-1305. | 5.3 | 15 |
| 77 | Voltammetric Detection of Dopamine Release in the Rat Corpus Striatum. <i>Annals of the New York Academy of Sciences</i> , 1986, 473, 92-105. | 1.8 | 13 |
| 78 | Cyclic voltammetry with harmonic lock-in detection: Applications to flow streams. <i>Electroanalysis</i> , 1996, 8, 314-319. | 1.5 | 13 |
| 79 | Development of sub-micron patterned carbon electrodes for immunoassays. <i>Journal of Pharmaceutical and Biomedical Analysis</i> , 1999, 19, 83-91. | 1.4 | 10 |
| 80 | Laser Interference Pattern Ablation of a Carbon Fiber Microelectrode: Biosensor Signal Enhancement after Enzyme Attachment. <i>Analytical Chemistry</i> , 2000, 72, 4914-4920. | 3.2 | 10 |
| 81 | Charge Retention Characteristics of Self-Assembled Monolayers of Molecular Wire-Linked Porphyrins on Gold. <i>ACS Symposium Series</i> , 2003, , 51-61. | 0.5 | 6 |
| 82 | (Invited) Commercialization of Novel Electrochemical Sensors for Volatile Organics. <i>ECS Transactions</i> , 2017, 80, 1319-1332. | 0.3 | 2 |
| 83 | Electrocatalytic Determination of Biochemical Compounds. , 2002, , 87-108. | | 1 |