## Sergey N Krylov

List of Publications by Year in descending order

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57758 79698 6,874 182 44 73 citations h-index g-index papers 199 199 199 6299 docs citations times ranked citing authors all docs

| #  | Article   | IF   | CITATIONS |
|----|---|------|-----------|
| 1  | Synthetic, Switchable Enzymes. Journal of Molecular Microbiology and Biotechnology, 2017, 27, 117-127.  | 1.0  | 419       |
| 2  | Nonequilibrium Capillary Electrophoresis of Equilibrium Mixtures: A Universal Tool for Development of Aptamers. Journal of the American Chemical Society, 2005, 127, 3165-3171.   | 13.7 | 275       |
| 3  | Non-SELEX Selection of Aptamers. Journal of the American Chemical Society, 2006, 128, 1410-1411.  | 13.7 | 225       |
| 4  | A circular RNA circ-DNMT1 enhances breast cancer progression by activating autophagy. Oncogene, 2018, 37, 5829-5842.  | 5.9  | 222       |
| 5  | Aptamer-Facilitated Biomarker Discovery (AptaBiD). Journal of the American Chemical Society, 2008, 130, 9137-9143.  | 13.7 | 181       |
| 6  | Nonequilibrium Capillary Electrophoresis of Equilibrium Mixtures â <sup>-</sup> A Single Experiment Reveals Equilibrium and Kinetic Parameters of Proteinâ <sup>-</sup> DNA Interactions. Journal of the American Chemical Society, 2002, 124, 13674-13675. | 13.7 | 178       |
| 7  | Non-SELEX: selection of aptamers without intermediate amplification of candidate oligonucleotides. Nature Protocols, 2006, 1, 1359-1369.  | 12.0 | 152       |
| 8  | Kinetic Capillary Electrophoresis (KCE):Â A Conceptual Platform for Kinetic Homogeneous Affinity Methods. Journal of the American Chemical Society, 2005, 127, 17104-17110.   | 13.7 | 136       |
| 9  | Affinity Analysis of a Proteinâ°'Aptamer Complex Using Nonequilibrium Capillary Electrophoresis of Equilibrium Mixtures. Analytical Chemistry, 2003, 75, 1382-1386.   | 6.5  | 135       |
| 10 | Selection of Smart Aptamers by Equilibrium Capillary Electrophoresis of Equilibrium Mixtures (ECEEM). Journal of the American Chemical Society, 2005, 127, 11224-11225.   | 13.7 | 132       |
| 11 | Selection of Smart Aptamers by Methods of Kinetic Capillary Electrophoresis. Analytical Chemistry, 2006, 78, 3171-3178.   | 6.5  | 120       |
| 12 | Instrumentation for Chemical Cytometry. Analytical Chemistry, 2000, 72, 872-877.  | 6.5  | 119       |
| 13 | Capillary Electrophoresis for the Analysis of Biopolymers. Analytical Chemistry, 2000, 72, 111-128.   | 6.5  | 116       |
| 14 | Kinetic CE: Foundation for homogeneous kinetic affinity methods. Electrophoresis, 2007, 28, 69-88.  | 2.4  | 108       |
| 15 | Exosomal MicroRNAs Are Diagnostic Biomarkers and Can Mediate Cell–Cell Communication in Renal Cell Carcinoma. European Urology Focus, 2016, 2, 210-218.   | 3.1  | 108       |
| 16 | Selection of aptamers by systematic evolution of ligands by exponential enrichment: Addressing the polymerase chain reaction issue. Analytica Chimica Acta, 2006, 564, 91-96.   | 5.4  | 101       |
| 17 | Reversible Photocontrol of DNA Binding by a Designed GCN4-bZIP Proteinâ€. Biochemistry, 2006, 45, 6075-6084.  | 2.5  | 94        |
| 18 | One-Dimensional Protein Analysis of an HT29 Human Colon Adenocarcinoma Cell. Analytical Chemistry, 2000, 72, 318-322.   | 6.5  | 92        |

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|----|--|--------------|-----------|
| 19 | Capillary Electrophoresis for Quantitative Studies of Biomolecular Interactions. Analytical Chemistry, 2015, 87, 157-171.  | 6.5          | 91        |
| 20 | Correlating cell cycle with metabolism in single cells: Combination of image and metabolic cytometry. , 1999, 37, 14-20.   |              | 85        |
| 21 | Tau protein binds single-stranded DNA sequence specifically - the proof obtained in vitro with non-equilibrium capillary electrophoresis of equilibrium mixtures. FEBS Letters, 2005, 579, 1371-1375.  | 2.8          | 83        |
| 22 | miR-590-3p Promotes Ovarian Cancer Growth and Metastasis via a Novel FOXA2–Versican Pathway. Cancer Research, 2018, 78, 4175-4190.   | 0.9          | 83        |
| 23 | AID Associates with Single-Stranded DNA with High Affinity and a Long Complex Half-Life in a Sequence-Independent Manner. Molecular and Cellular Biology, 2007, 27, 20-30.   | 2.3          | 81        |
| 24 | Nonequilibrium Capillary Electrophoresis of Equilibrium Mixtures, Mathematical Model. Analytical Chemistry, 2004, 76, 1507-1512.   | 6.5          | 79        |
| 25 | Transverse Diffusion of Laminar Flow Profiles To Produce Capillary Nanoreactors. Analytical Chemistry, 2005, 77, 5925-5929.  | <b>6.</b> 5  | 77        |
| 26 | Cell Cycle-Dependent Protein Fingerprint from a Single Cancer Cell:Â Image Cytometry Coupled with Single-Cell Capillary Sieving Electrophoresis. Analytical Chemistry, 2003, 75, 3495-3501.  | 6.5          | 74        |
| 27 | Non-equilibrium capillary electrophoresis of equilibrium mixtures—appreciation of kinetics in capillary electrophoresis. Analyst, The, 2003, 128, 571-575.   | 3 <b>.</b> 5 | 70        |
| 28 | Low Expression of miR-126 Is a Prognostic Marker for Metastatic Clear Cell Renal Cell Carcinoma. American Journal of Pathology, 2015, 185, 693-703.  | 3.8          | 68        |
| 29 | Thermochemistry of Proteinâ^DNA Interaction Studied with Temperature-Controlled Nonequilibrium Capillary Electrophoresis of Equilibrium Mixtures. Analytical Chemistry, 2005, 77, 1526-1529.   | <b>6.</b> 5  | 67        |
| 30 | Direct Quantitative Analysis of Multiple miRNAs (DQAMmiR). Angewandte Chemie - International Edition, 2011, 50, 10335-10339.   | 13.8         | 65        |
| 31 | Selection of Smart Small-Molecule Ligands: The Proof of Principle. Analytical Chemistry, 2009, 81, 490-494.  | 6.5          | 64        |
| 32 | Emulsion PCR Significantly Improves Nonequilibrium Capillary Electrophoresis of Equilibrium Mixtures-Based Aptamer Selection: Allowing for Efficient and Rapid Selection of Aptamer to Unmodified ABH2 Protein. Analytical Chemistry, 2015, 87, 1411-1419. | 6.5          | 64        |
| 33 | Using DNA-Binding Proteins as an Analytical Tool. Journal of the American Chemical Society, 2003, 125, 13451-13454.  | 13.7         | 62        |
| 34 | Single-cell analysis using capillary electrophoresis: Influence of surface support properties on cell injection into the capillary. Electrophoresis, 2000, 21, 767-773.  | 2.4          | 59        |
| 35 | Selection of aptamers for a protein target in cell lysate and their application to protein purification. Nucleic Acids Research, 2009, 37, e62-e62.  | 14.5         | 56        |
| 36 | Nonequilibrium Capillary Electrophoresis of Equilibrium Mixtures (NECEEM): A Novel Method for Biomolecular Screening. Journal of Biomolecular Screening, 2006, 11, 115-122.  | 2.6          | 55        |

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|----|--|------|-----------|
| 37 | Transverse diffusion of laminar flow profiles – a generic method for mixing reactants in capillary microreactor. Journal of Separation Science, 2009, 32, 742-756.   | 2.5  | 55        |
| 38 | miR-210 Is a Prognostic Marker in Clear Cell Renal Cell Carcinoma. Journal of Molecular Diagnostics, 2015, 17, 136-144.  | 2.8  | 55        |
| 39 | Smart Aptamers Facilitate Multi-Probe Affinity Analysis of Proteins with Ultra-Wide Dynamic Range of Measured Concentrations. Journal of the American Chemical Society, 2007, 129, 7260-7261.  | 13.7 | 53        |
| 40 | MECHANISTIC QUANTITATIVE STRUCTURE–ACTIVITY RELATIONSHIP MODEL FOR THE PHOTOINDUCED TOXICITY OF POLYCYCLIC AROMATIC HYDROCARBONS: I. PHYSICAL MODEL BASED ON CHEMICAL KINETICS IN A TWO-COMPARTMENT SYSTEM. Environmental Toxicology and Chemistry, 1997, 16, 2283.  | 4.3  | 51        |
| 41 | Micro <scp>RNA</scp> â€194 is a Marker for Good Prognosis in Clear Cell Renal Cell Carcinoma. Cancer Medicine, 2016, 5, 656-664.   | 2.8  | 50        |
| 42 | Dynamic Combinatorial Mass Spectrometry Leads to Inhibitors of a 2-Oxoglutarate-Dependent Nucleic Acid Demethylase. Journal of Medicinal Chemistry, 2012, 55, 2173-2184.   | 6.4  | 49        |
| 43 | Detection of a Thousand Copies of miRNA without Enrichment or Modification. Analytical Chemistry, 2012, 84, 5470-5474.   | 6.5  | 48        |
| 44 | "Getting the best sensitivity from on-capillary fluorescence detection in capillary electrophoresis―–<br>A tutorial. Analytica Chimica Acta, 2016, 935, 58-81.   | 5.4  | 47        |
| 45 | Plugâ^'Plug Kinetic Capillary Electrophoresis:Â Method for Direct Determination of Rate Constants of Complex Formation and Dissociation. Analytical Chemistry, 2006, 78, 4803-4810.  | 6.5  | 46        |
| 46 | Label-Free Solution-Based Kinetic Study of Aptamerâ€"Small Molecule Interactions by Kinetic Capillary Electrophoresis with UV Detection Revealing How Kinetics Control Equilibrium. Analytical Chemistry, 2011, 83, 8387-8390.   | 6.5  | 46        |
| 47 | MECHANISTIC QUANTITATIVE STRUCTURE–ACTIVITY RELATIONSHIP MODEL FOR THE PHOTOINDUCED TOXICITY OF POLYCYCLIC AROMATIC HYDROCARBONS: II. AN EMPIRICAL MODEL FOR THE TOXICITY OF 16 POLYCYCLIC AROMATIC HYDROCARBONS TO THE DUCKWEED LEMNA GIBBA L. G-3. Environmental Toxicology and Chemistry, 1997, 16, 2296. | 4.3  | 45        |
| 48 | Use of Capillary Electrophoresis and Endogenous Fluorescent Substrate To Monitor Intracellular Activation of Protein Kinase A. Analytical Chemistry, 2003, 75, 3720-3724.  | 6.5  | 43        |
| 49 | Idealâ€Filter Capillary Electrophoresis (IFCE) Facilitates the Oneâ€Step Selection of Aptamers. Angewandte Chemie - International Edition, 2019, 58, 2739-2743.  | 13.8 | 43        |
| 50 | Using Nonequilibrium Capillary Electrophoresis of Equilibrium Mixtures for the Determination of Temperature in Capillary Electrophoresis. Analytical Chemistry, 2004, 76, 7114-7117.   | 6.5  | 40        |
| 51 | Universal Drag Tag for Direct Quantitative Analysis of Multiple MicroRNAs. Analytical Chemistry, 2013, 85, 6518-6523.  | 6.5  | 40        |
| 52 | "Inject-Mix-React-Separate-and-Quantitate―(IMReSQ) Method for Screening Enzyme Inhibitors. Journal of the American Chemical Society, 2008, 130, 11862-11863.   | 13.7 | 38        |
| 53 | Universal Method for Determining Electrolyte Temperatures in Capillary Electrophoresis. Analytical Chemistry, 2011, 83, 1808-1814.   | 6.5  | 38        |
| 54 | Sweeping Capillary Electrophoresis:  A Non-Stopped-Flow Method for Measuring Bimolecular Rate Constant of Complex Formation between Protein and DNA. Journal of the American Chemical Society, 2004, 126, 7166-7167.   | 13.7 | 37        |

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|----|---|------|-----------|
| 55 | Methyl-Î <sup>2</sup> -cyclodextrin modified micellar electrokinetic capillary chromatography with laser-induced fluorescence for separation and detection of phospholipids. Journal of Chromatography A, 2000, 894, 129-134. | 3.7  | 35        |
| 56 | Single-cell analysis avoids sample processing bias. Biomedical Applications, 2000, 741, 31-35.  | 1.7  | 35        |
| 57 | Mathematical Model for Mixing Reactants in a Capillary Microreactor by Transverse Diffusion of Laminar Flow Profiles. Analytical Chemistry, 2008, 80, 7482-7486.  | 6.5  | 35        |
| 58 | The Inject-Mix-React-Separate-and-Quantitate (IMReSQ) approach to studying reactions in capillaries. TrAC - Trends in Analytical Chemistry, 2009, 28, 987-1010.   | 11.4 | 33        |
| 59 | Using Nonequilibrium Capillary Electrophoresis of Equilibrium Mixtures (NECEEM) for Simultaneous Determination of Concentration and Equilibrium Constant. Analytical Chemistry, 2015, 87, 3099-3106.                          | 6.5  | 33        |
| 60 | Highly-Sensitive Amplification-Free Analysis of Multiple miRNAs by Capillary Electrophoresis. Analytical Chemistry, 2015, 87, 1404-1410.  | 6.5  | 32        |
| 61 | Pressure-Based Approach for the Analysis of Protein Adsorption in Capillary Electrophoresis.<br>Analytical Chemistry, 2012, 84, 453-458.  | 6.5  | 31        |
| 62 | Predicting Electrophoretic Mobility of Protein–Ligand Complexes for Ligands from DNA-Encoded Libraries of Small Molecules. Analytical Chemistry, 2016, 88, 5498-5506.   | 6.5  | 30        |
| 63 | Chemical cytometry for monitoring metabolism of a Ras-mimicking substrate in single cells. Cytometry Part A: the Journal of the International Society for Analytical Cytology, 2005, 63A, 41-47.                              | 1.5  | 29        |
| 64 | miR-10b is a prognostic marker in clear cell renal cell carcinoma. Journal of Clinical Pathology, 2017, 70, 854-859.  | 2.0  | 29        |
| 65 | miR-620 promotes tumor radioresistance by targeting 15-hydroxyprostaglandin dehydrogenase (HPGD).<br>Oncotarget, 2015, 6, 22439-22451.  | 1.8  | 29        |
| 66 | Metabolic Cytometry: Monitoring Oligosaccharide Biosynthesis in Single Cells by Capillary Electrophoresis. Analytical Biochemistry, 2000, 283, 133-135.   | 2.4  | 28        |
| 67 | MASKE: Macroscopic Approach to Studying Kinetics at Equilibrium. Journal of the American Chemical Society, 2010, 132, 7062-7068.  | 13.7 | 28        |
| 68 | Inhibition of Dexamethasone-induced Fatty Liver Development by Reducing miR-17-5p Levels. Molecular Therapy, 2015, 23, 1222-1233.   | 8.2  | 28        |
| 69 | Improvement of LOD in Fluorescence Detection with Spectrally Nonuniform Background by Optimization of Emission Filtering. Analytical Chemistry, 2017, 89, 11122-11128.  | 6.5  | 28        |
| 70 | Measuring the activity of farnesyltransferase by capillary electrophoresis with laser-induced fluorescence detection. Electrophoresis, 2002, 23, 3398-3403.   | 2.4  | 27        |
| 71 | Extracting Kinetics from Affinity Capillary Electrophoresis (ACE) Data: A New Blade for the Old Tool. Analytical Chemistry, 2014, 86, 1298-1305.  | 6.5  | 27        |
| 72 | Identification of Base Pairs in Single-Nucleotide Polymorphisms by MutS Protein-Mediated Capillary Electrophoresis. Analytical Chemistry, 2006, 78, 2035-2038.  | 6.5  | 26        |

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|----|--|------|-----------|
| 73 | Temperature Difference between the Cooled and the Noncooled Parts of an Electrolyte in Capillary Electrophoresis. Analytical Chemistry, 2010, 82, 8692-8695.   | 6.5  | 26        |
| 74 | DNA aptamers for as analytical tools for the quantitative analysis of DNA-dealkylating enzymes. Analytical Biochemistry, 2011, 414, 261-265.   | 2.4  | 26        |
| 75 | Direct miRNA-hybridization assays and their potential in diagnostics. TrAC - Trends in Analytical Chemistry, 2013, 44, 121-130.  | 11.4 | 26        |
| 76 | Advances in steady-state continuous-flow purification by small-scale free-flow electrophoresis. TrAC - Trends in Analytical Chemistry, 2015, 72, 68-79.  | 11.4 | 26        |
| 77 | Detailed Model of the Peroxidase-Catalyzed Oxidation of Indole-3-Acetic Acid at Neutral pH. The Journal of Physical Chemistry, 1996, 100, 913-920.   | 2.9  | 25        |
| 78 | Dynamic Kinetic Capillary Isoelectric Focusing:Â A Powerful Tool for Studying Proteinâ^'DNA Interactions. Analytical Chemistry, 2007, 79, 1097-1100.   | 6.5  | 25        |
| 79 | A semipermanent coating for preventing protein adsorption at physiological p <scp>H</scp> in kinetic capillary electrophoresis. Electrophoresis, 2012, 33, 2584-2590.  | 2.4  | 25        |
| 80 | Selection of surfactants for cell lysis in chemical cytometry to study protein-DNA interactions. Electrophoresis, 2006, 27, 1489-1494.   | 2.4  | 24        |
| 81 | Heterogeneity of protein labeling with a fluorogenic reagent, 3-(2-furoyl)quinoline-2-carboxaldehyde.<br>Journal of Chromatography B: Analytical Technologies in the Biomedical and Life Sciences, 2002, 780,<br>283-287.          | 2.3  | 23        |
| 82 | Reciprocal regulation of miRNAs and piRNAs in embryonic development. Cell Death and Differentiation, 2016, 23, 1458-1470.  | 11,2 | 23        |
| 83 | Kinetic capillary electrophoresis-based affinity screening of aptamer clones. Analytica Chimica Acta, 2009, 631, 102-107.  | 5.4  | 22        |
| 84 | Noncooled Capillary Inlet: A Source of Systematic Errors in Capillary-Electrophoresis-Based Affinity Analyses. Analytical Chemistry, 2010, 82, 8637-8641.  | 6.5  | 22        |
| 85 | Separation-Based Approach to Study Dissociation Kinetics of Noncovalent DNA–Multiple Protein Complexes. Journal of the American Chemical Society, 2011, 133, 12486-12492.  | 13.7 | 22        |
| 86 | Single-stranded DNA-binding protein facilitates gel-free analysis of polymerase chain reaction products in capillary electrophoresis. Journal of Chromatography A, 2004, 1051, 171-175.  | 3.7  | 21        |
| 87 | Direct Analysis of Enzyme-Catalyzed DNA Demethylation. Analytical Chemistry, 2009, 81, 5871-5875.  | 6.5  | 21        |
| 88 | Method for Determination of Peak Areas in Nonequilibrium Capillary Electrophoresis of Equilibrium Mixtures. Analytical Chemistry, 2011, 83, 8617-8622.   | 6.5  | 21        |
| 89 | Kinetic Capillary Electrophoresis with Massâ€Spectrometry Detection (KCEâ€MS) Facilitates Labelâ€Free<br>Solutionâ€Based Kinetic Analysis of Protein–Small Molecule Binding. ChemBioChem, 2011, 12, 2551-2554.                     | 2.6  | 21        |
| 90 | Accurate MicroRNA Analysis in Crude Cell Lysate by Capillary Electrophoresis-Based Hybridization Assay in Comparison with Quantitative Reverse Transcription-Polymerase Chain Reaction. Analytical Chemistry, 2017, 89, 4743-4748. | 6.5  | 21        |

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| 91  | Peroxidase-catalyzed co-oxidation of indole-3-acetic acid and xanthene dyes in the absence of hydrogen peroxide. FEBS Letters, 1993, 324, 6-8.  | 2.8  | 20        |
| 92  | Evidence for a free radical chain mechanism in the reaction between peroxidase and indole-3-acetic acid at neutral pH. Biophysical Chemistry, 1996, 58, 325-334.  | 2.8  | 20        |
| 93  | Kinetic Size-Exclusion Chromatography with Mass Spectrometry Detection: An Approach for Solution-Based Label-Free Kinetic Analysis of Protein–Small Molecule Interactions. Analytical Chemistry, 2014, 86, 10016-10020.                 | 6.5  | 20        |
| 94  | Metabolic Suppression of a Drugâ€Resistant Subpopulation in Cancer Spheroid Cells. Journal of Cellular Biochemistry, 2016, 117, 59-65.  | 2.6  | 20        |
| 95  | Analysis of DNA in Phosphate Buffered Saline Using Kinetic Capillary Electrophoresis. Analytical Chemistry, 2016, 88, 7421-7428.  | 6.5  | 20        |
| 96  | Aptamer facilitated purification of functional proteins. Journal of Chromatography B: Analytical Technologies in the Biomedical and Life Sciences, 2018, 1073, 201-206.   | 2.3  | 20        |
| 97  | Steadyâ€State Continuousâ€Flow Purification by Electrophoresis. Angewandte Chemie - International Edition, 2013, 52, 7256-7260.   | 13.8 | 19        |
| 98  | Prediction of Protein–DNA Complex Mobility in Gel-Free Capillary Electrophoresis. Analytical Chemistry, 2015, 87, 2474-2479.  | 6.5  | 19        |
| 99  | Achieving Single-Nucleotide Specificity in Direct Quantitative Analysis of Multiple MicroRNAs (DQAMmiR). Analytical Chemistry, 2016, 88, 2472-2477.   | 6.5  | 19        |
| 100 | Protein Labeling Enhances Aptamer Selection by Methods of Kinetic Capillary Electrophoresis. Analytical Chemistry, 2011, 83, 6330-6335.   | 6.5  | 18        |
| 101 | Calibration-Free Quantitative Analysis of mRNA. Analytical Chemistry, 2005, 77, 8027-8030.  | 6.5  | 17        |
| 102 | Predicting efficiency of NECEEMâ€based partitioning of protein binders from nonbinders in DNAâ€encoded libraries. Electrophoresis, 2018, 39, 2991-2996.   | 2.4  | 17        |
| 103 | Asymmetry between Sister Cells in a Cancer Cell Line Revealed by Chemical Cytometry. Analytical Chemistry, 2004, 76, 3864-3866.   | 6.5  | 16        |
| 104 | Correlation between Multi-Drug Resistance-Associated Membrane Transport in Clonal Cancer Cells and the Cell Cycle Phase. PLoS ONE, 2012, 7, e41368.   | 2.5  | 16        |
| 105 | Simplified universal method for determining electrolyte temperatures in a capillary electrophoresis instrument with forced-air cooling. Electrophoresis, 2012, 33, 1079-1085.   | 2.4  | 16        |
| 106 | Non-uniform Velocity of Homogeneous DNA in a Uniform Electric Field: Consequence of Electric-Field-Induced Slow Dissociation of Highly Stable DNA–Counterion Complexes. Journal of the American Chemical Society, 2013, 135, 8041-8046. | 13.7 | 16        |
| 107 | Diffusion as a Tool of Measuring Temperature inside a Capillary. Analytical Chemistry, 2008, 80, 6752-6757.   | 6.5  | 15        |
| 108 | Electric Field Destabilizes Noncovalent Proteinâ^'DNA Complexes. Journal of the American Chemical Society, 2010, 132, 13639-13641.  | 13.7 | 15        |

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|-----|--|-----|-----------|
| 109 | DNA Adsorption to the Reservoir Walls Causing Irreproducibility in Studies of Protein–DNA Interactions by Methods of Kinetic Capillary Electrophoresis. Analytical Chemistry, 2011, 83, 8041-8045.                 | 6.5 | 15        |
| 110 | Inhibition of enzymatic indole-3-acetic acid oxidation by phenols. Phytochemistry, 1994, 36, 263-267.  | 2.9 | 14        |
| 111 | Cell lysis inside the capillary facilitated by transverse diffusion of laminar flow profiles (TDLFP). Analytical and Bioanalytical Chemistry, 2006, 387, 91-96.  | 3.7 | 14        |
| 112 | Selection of aptamers for a non-DNA binding protein in the context of cell lysate. Analytica Chimica Acta, 2010, 681, 92-97.   | 5.4 | 14        |
| 113 | Slow-Dissociation and Slow-Recombination Assumptions in Nonequilibrium Capillary Electrophoresis of Equilibrium Mixtures. Analytical Chemistry, 2011, 83, 7582-7585.   | 6.5 | 14        |
| 114 | Slow-Equilibration Approximation in Macroscopic Approach to Studying Kinetics at Equilibrium. Analytical Chemistry, 2011, 83, 1381-1387.   | 6.5 | 14        |
| 115 | Volatile Kinetic Capillary Electrophoresis for Studies of Protein–Small Molecule Interactions.<br>Analytical Chemistry, 2012, 84, 6944-6947.   | 6.5 | 14        |
| 116 | Milliâ€free flow electrophoresis: I. Fast prototyping of mFFE devices. Journal of Separation Science, 2011, 34, 556-564.   | 2.5 | 13        |
| 117 | Peak-Shape Correction to Symmetry for Pressure-Driven Sample Injection in Capillary Electrophoresis.<br>Analytical Chemistry, 2012, 84, 149-154.   | 6.5 | 13        |
| 118 | Mechanistic Studies on the Application of DNA Aptamers as Inhibitors of 2-Oxoglutarate-Dependent Oxygenases. Journal of Medicinal Chemistry, 2012, 55, 3546-3552.  | 6.4 | 13        |
| 119 | Non-Orthogonal-to-the-Flow Electric Field Improves Resolution in the Orthogonal Direction: Hidden Reserves for Combining Synthesis and Purification in Continuous Flow. Analytical Chemistry, 2010, 82, 1183-1185. | 6.5 | 12        |
| 120 | Single-Cell-Kinetics Approach to Compare Multidrug Resistance-Associated Membrane Transport in Subpopulations of Cells. Analytical Chemistry, 2011, 83, 6132-6134.   | 6.5 | 12        |
| 121 | Image processing and analysis system for development and use of free flow electrophoresis chips. Lab on A Chip, 2017, 17, 256-266.   | 6.0 | 12        |
| 122 | Stable DNA Aggregation by Removal of Counterions. Analytical Chemistry, 2013, 85, 10004-10007.   | 6.5 | 11        |
| 123 | Ultrasensitive on-column laser-induced fluorescence in capillary electrophoresis using multiparameter confocal detection. Analyst, The, 2012, 137, 5538.   | 3.5 | 10        |
| 124 | Improvements to Direct Quantitative Analysis of Multiple MicroRNAs Facilitating Faster Analysis. Analytical Chemistry, 2013, 85, 10062-10066.  | 6.5 | 10        |
| 125 | Kinetics of MDR Transport in Tumor-Initiating Cells. PLoS ONE, 2013, 8, e79222.  | 2.5 | 10        |
| 126 | Systematic Approach to Optimization of Experimental Conditions in Nonequilibrium Capillary Electrophoresis of Equilibrium Mixtures. Analytical Chemistry, 2016, 88, 9300-9308.                                     | 6.5 | 10        |

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|-----|---|------|-----------|
| 127 | Spherical-Shape Assumption for Protein–Aptamer Complexes Facilitates Prediction of Their Electrophoretic Mobility. Analytical Chemistry, 2019, 91, 12680-12687.   | 6.5  | 10        |
| 128 | Idealâ€Filter Capillary Electrophoresis (IFCE) Facilitates the Oneâ€Step Selection of Aptamers. Angewandte Chemie, 2019, 131, 2765-2769.  | 2.0  | 10        |
| 129 | Determination of the Equilibrium Constant and Rate Constant of Protein–Oligonucleotide Complex Dissociation under the Conditions of Ideal-Filter Capillary Electrophoresis. Analytical Chemistry, 2019, 91, 8532-8539.        | 6.5  | 10        |
| 130 | Monitoring the three enzymatic activities involved in posttranslational modifications of Ras proteins. Analytica Chimica Acta, 2004, 521, 1-7.  | 5.4  | 9         |
| 131 | Heat-Associated Field Distortion in Electro-Migration Techniques. Analytical Chemistry, 2010, 82, 8398-8401.  | 6.5  | 9         |
| 132 | Predictive measure of quality of micromixing. Chemical Communications, 2011, 47, 7767.  | 4.1  | 9         |
| 133 | Theoretical estimation of drag tag lengths for direct quantitative analysis of multiple miRNAs (DQAMmiR). Analyst, The, 2013, 138, 553-558.   | 3.5  | 9         |
| 134 | Pre-equilibration kinetic size-exclusion chromatography with mass spectrometry detection (peKSEC-MS) for label-free solution-based kinetic analysis of protein–small molecule interactions. Analyst, The, 2015, 140, 990-994. | 3.5  | 9         |
| 135 | Slow-Equilibration Approximation in Kinetic Size Exclusion Chromatography. Analytical Chemistry, 2016, 88, 4063-4070.   | 6.5  | 9         |
| 136 | Direct Quantitative Analysis of Multiple microRNAs (DQAMmiR) with Peptide Nucleic Acid Hybridization Probes. Analytical Chemistry, 2018, 90, 14610-14615.   | 6.5  | 9         |
| 137 | Idealâ $\in$ filter capillary electrophoresis: A highly efficient partitioning method for selection of protein binders from oligonucleotide libraries. Electrophoresis, 2019, 40, 2553-2564.                                  | 2.4  | 9         |
| 138 | Transient Incomplete Separation Facilitates Finding Accurate Equilibrium Dissociation Constant of Protein–Small Molecule Complex. Angewandte Chemie - International Edition, 2019, 58, 6635-6639.                             | 13.8 | 9         |
| 139 | Necessity and Challenges of Sample Preconcentration in Analysis of Multiple MicroRNAs by Capillary Electrophoresis. Analytical Chemistry, 2020, 92, 14251-14258.  | 6.5  | 9         |
| 140 | How to Develop and Prove High-Efficiency Selection of Ligands from Oligonucleotide Libraries: A Universal Framework for Aptamers and DNA-Encoded Small-Molecule Ligands. Analytical Chemistry, 2021, 93, 5343-5354.           | 6.5  | 9         |
| 141 | Non-orthogonal micro-free flow electrophoresis: From theory to design concept. Analytica Chimica Acta, 2010, 674, 102-109.  | 5.4  | 8         |
| 142 | Making DNA Hybridization Assays in Capillary Electrophoresis Quantitative. Analytical Chemistry, 2010, 82, 4428-4433.   | 6.5  | 8         |
| 143 | Quantitative Characterization of Micromixing Based on Uniformity and Overlap. Angewandte Chemie - International Edition, 2011, 50, 11999-12002.   | 13.8 | 8         |
| 144 | Theoretical Modeling of Masking DNA Application in Aptamer-Facilitated Biomarker Discovery. Analytical Chemistry, 2013, 85, 4157-4164.  | 6.5  | 8         |

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|-----|---|-------------|-----------|
| 145 | Quantitative Characterization of Molecular-Stream Separation. Analytical Chemistry, 2018, 90, 9504-9509.  | 6.5         | 8         |
| 146 | Cytometry of Reaction Rate Constant: Measuring Reaction Rate Constant in Individual Cells To Facilitate Robust and Accurate Analysis of Cell-Population Heterogeneity. Analytical Chemistry, 2019, 91, 4186-4194.       | <b>6.</b> 5 | 8         |
| 147 | Accelerating Effect of Umbelliferone on Peroxidase-Catalyzed Oxidation of Indole-3-acetic Acid at Neutral pH. The Journal of Physical Chemistry, 1996, 100, 19719-19727.  | 2.9         | 7         |
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