

# Sergey N Krylov

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/8746248/publications.pdf>

Version: 2024-02-01

182  
papers

6,874  
citations

57631

44  
h-index

79541

73  
g-index

199  
all docs

199  
docs citations

199  
times ranked

6299  
citing authors

#	ARTICLE	IF	CITATIONS
1	Synthetic, Switchable Enzymes. <i>Journal of Molecular Microbiology and Biotechnology</i> , 2017, 27, 117-127.	1.0	419
2	Nonequilibrium Capillary Electrophoresis of Equilibrium Mixtures: A Universal Tool for Development of Aptamers. <i>Journal of the American Chemical Society</i> , 2005, 127, 3165-3171.	6.6	275
3	Non-SELEX Selection of Aptamers. <i>Journal of the American Chemical Society</i> , 2006, 128, 1410-1411.	6.6	225
4	A circular RNA circ-DNMT1 enhances breast cancer progression by activating autophagy. <i>Oncogene</i> , 2018, 37, 5829-5842.	2.6	222
5	Aptamer-Facilitated Biomarker Discovery (AptaBiD). <i>Journal of the American Chemical Society</i> , 2008, 130, 9137-9143.	6.6	181
6	Nonequilibrium Capillary Electrophoresis of Equilibrium Mixtures – A Single Experiment Reveals Equilibrium and Kinetic Parameters of Protein–DNA Interactions. <i>Journal of the American Chemical Society</i> , 2002, 124, 13674-13675.	6.6	178
7	Non-SELEX: selection of aptamers without intermediate amplification of candidate oligonucleotides. <i>Nature Protocols</i> , 2006, 1, 1359-1369.	5.5	152
8	Kinetic Capillary Electrophoresis (KCE): A Conceptual Platform for Kinetic Homogeneous Affinity Methods. <i>Journal of the American Chemical Society</i> , 2005, 127, 17104-17110.	6.6	136
9	Affinity Analysis of a Protein–Aptamer Complex Using Nonequilibrium Capillary Electrophoresis of Equilibrium Mixtures. <i>Analytical Chemistry</i> , 2003, 75, 1382-1386.	3.2	135
10	Selection of Smart Aptamers by Equilibrium Capillary Electrophoresis of Equilibrium Mixtures (ECEEM). <i>Journal of the American Chemical Society</i> , 2005, 127, 11224-11225.	6.6	132
11	Selection of Smart Aptamers by Methods of Kinetic Capillary Electrophoresis. <i>Analytical Chemistry</i> , 2006, 78, 3171-3178.	3.2	120
12	Instrumentation for Chemical Cytometry. <i>Analytical Chemistry</i> , 2000, 72, 872-877.	3.2	119
13	Capillary Electrophoresis for the Analysis of Biopolymers. <i>Analytical Chemistry</i> , 2000, 72, 111-128.	3.2	116
14	Kinetic CE: Foundation for homogeneous kinetic affinity methods. <i>Electrophoresis</i> , 2007, 28, 69-88.	1.3	108
15	Exosomal MicroRNAs Are Diagnostic Biomarkers and Can Mediate Cell–Cell Communication in Renal Cell Carcinoma. <i>European Urology Focus</i> , 2016, 2, 210-218.	1.6	108
16	Selection of aptamers by systematic evolution of ligands by exponential enrichment: Addressing the polymerase chain reaction issue. <i>Analytica Chimica Acta</i> , 2006, 564, 91-96.	2.6	101
17	Reversible Photocontrol of DNA Binding by a Designed GCN4-bZIP Protein. <i>Biochemistry</i> , 2006, 45, 6075-6084.	1.2	94
18	One-Dimensional Protein Analysis of an HT29 Human Colon Adenocarcinoma Cell. <i>Analytical Chemistry</i> , 2000, 72, 318-322.	3.2	92

#	ARTICLE	IF	CITATIONS
19	Capillary Electrophoresis for Quantitative Studies of Biomolecular Interactions. Analytical Chemistry, 2015, 87, 157-171.	3.2	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.	1.3	83
22	miR-590-3p Promotes Ovarian Cancer Growth and Metastasis via a Novel FOXA2- $\alpha$ -Versican Pathway. Cancer Research, 2018, 78, 4175-4190.	0.4	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.	1.1	81
24	Nonequilibrium Capillary Electrophoresis of Equilibrium Mixtures, Mathematical Model. Analytical Chemistry, 2004, 76, 1507-1512.	3.2	79
25	Transverse Diffusion of Laminar Flow Profiles To Produce Capillary Nanoreactors. Analytical Chemistry, 2005, 77, 5925-5929.	3.2	77
26	Cell Cycle-Dependent Protein Fingerprint from a Single Cancer Cell: Image Cytometry Coupled with Single-Cell Capillary Sieving Electrophoresis. Analytical Chemistry, 2003, 75, 3495-3501.	3.2	74
27	Non-equilibrium capillary electrophoresis of equilibrium mixtures- $\alpha$ appreciation of kinetics in capillary electrophoresis. Analyst, The, 2003, 128, 571-575.	1.7	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.	1.9	68
29	Thermochemistry of Protein-DNA Interaction Studied with Temperature-Controlled Nonequilibrium Capillary Electrophoresis of Equilibrium Mixtures. Analytical Chemistry, 2005, 77, 1526-1529.	3.2	67
30	Direct Quantitative Analysis of Multiple miRNAs (DQAMmiR). Angewandte Chemie - International Edition, 2011, 50, 10335-10339.	7.2	65
31	Selection of Smart Small-Molecule Ligands: The Proof of Principle. Analytical Chemistry, 2009, 81, 490-494.	3.2	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.	3.2	64
33	Using DNA-Binding Proteins as an Analytical Tool. Journal of the American Chemical Society, 2003, 125, 13451-13454.	6.6	62
34	Single-cell analysis using capillary electrophoresis: Influence of surface support properties on cell injection into the capillary. Electrophoresis, 2000, 21, 767-773.	1.3	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.	6.5	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

#	ARTICLE	IF	CITATIONS
37	Transverse diffusion of laminar flow profiles – a generic method for mixing reactants in capillary microreactor. <i>Journal of Separation Science</i> , 2009, 32, 742-756.	1.3	55
38	miR-210 Is a Prognostic Marker in Clear Cell Renal Cell Carcinoma. <i>Journal of Molecular Diagnostics</i> , 2015, 17, 136-144.	1.2	55
39	Smart Aptamers Facilitate Multi-Probe Affinity Analysis of Proteins with Ultra-Wide Dynamic Range of Measured Concentrations. <i>Journal of the American Chemical Society</i> , 2007, 129, 7260-7261.	6.6	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. <i>Environmental Toxicology and Chemistry</i> , 1997, 16, 2283.	2.2	51
41	MicroRNA-194 is a Marker for Good Prognosis in Clear Cell Renal Cell Carcinoma. <i>Cancer Medicine</i> , 2016, 5, 656-664.	1.3	50
42	Dynamic Combinatorial Mass Spectrometry Leads to Inhibitors of a 2-Oxoglutarate-Dependent Nucleic Acid Demethylase. <i>Journal of Medicinal Chemistry</i> , 2012, 55, 2173-2184.	2.9	49
43	Detection of a Thousand Copies of miRNA without Enrichment or Modification. <i>Analytical Chemistry</i> , 2012, 84, 5470-5474.	3.2	48
44	“Getting the best sensitivity from on-capillary fluorescence detection in capillary electrophoresis” A tutorial. <i>Analytica Chimica Acta</i> , 2016, 935, 58-81.	2.6	47
45	Plug–Plug Kinetic Capillary Electrophoresis: A Method for Direct Determination of Rate Constants of Complex Formation and Dissociation. <i>Analytical Chemistry</i> , 2006, 78, 4803-4810.	3.2	46
46	Label-Free Solution-Based Kinetic Study of Aptamer–Small Molecule Interactions by Kinetic Capillary Electrophoresis with UV Detection Revealing How Kinetics Control Equilibrium. <i>Analytical Chemistry</i> , 2011, 83, 8387-8390.	3.2	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. <i>Environmental Toxicology and Chemistry</i> , 1997, 16, 2296.	2.2	45
48	Use of Capillary Electrophoresis and Endogenous Fluorescent Substrate To Monitor Intracellular Activation of Protein Kinase A. <i>Analytical Chemistry</i> , 2003, 75, 3720-3724.	3.2	43
49	Ideal–Filter Capillary Electrophoresis (IFCE) Facilitates the One–Step Selection of Aptamers. <i>Angewandte Chemie - International Edition</i> , 2019, 58, 2739-2743.	7.2	43
50	Using Nonequilibrium Capillary Electrophoresis of Equilibrium Mixtures for the Determination of Temperature in Capillary Electrophoresis. <i>Analytical Chemistry</i> , 2004, 76, 7114-7117.	3.2	40
51	Universal Drag Tag for Direct Quantitative Analysis of Multiple MicroRNAs. <i>Analytical Chemistry</i> , 2013, 85, 6518-6523.	3.2	40
52	“Inject-Mix-React-Separate-and-Quantitate” (IMReSQ) Method for Screening Enzyme Inhibitors. <i>Journal of the American Chemical Society</i> , 2008, 130, 11862-11863.	6.6	38
53	Universal Method for Determining Electrolyte Temperatures in Capillary Electrophoresis. <i>Analytical Chemistry</i> , 2011, 83, 1808-1814.	3.2	38
54	Sweeping Capillary Electrophoresis: A Non-Stopped-Flow Method for Measuring Bimolecular Rate Constant of Complex Formation between Protein and DNA. <i>Journal of the American Chemical Society</i> , 2004, 126, 7166-7167.	6.6	37

#	ARTICLE	IF	CITATIONS
55	Methyl- $\beta$ -cyclodextrin modified micellar electrokinetic capillary chromatography with laser-induced fluorescence for separation and detection of phospholipids. <i>Journal of Chromatography A</i> , 2000, 894, 129-134.	1.8	35
56	Single-cell analysis avoids sample processing bias. <i>Biomedical Applications</i> , 2000, 741, 31-35.	1.7	35
57	Mathematical Model for Mixing Reactants in a Capillary Microreactor by Transverse Diffusion of Laminar Flow Profiles. <i>Analytical Chemistry</i> , 2008, 80, 7482-7486.	3.2	35
58	The Inject-Mix-React-Separate-and-Quantitate (IMReSQ) approach to studying reactions in capillaries. <i>TrAC - Trends in Analytical Chemistry</i> , 2009, 28, 987-1010.	5.8	33
59	Using Nonequilibrium Capillary Electrophoresis of Equilibrium Mixtures (NECEEM) for Simultaneous Determination of Concentration and Equilibrium Constant. <i>Analytical Chemistry</i> , 2015, 87, 3099-3106.	3.2	33
60	Highly-Sensitive Amplification-Free Analysis of Multiple miRNAs by Capillary Electrophoresis. <i>Analytical Chemistry</i> , 2015, 87, 1404-1410.	3.2	32
61	Pressure-Based Approach for the Analysis of Protein Adsorption in Capillary Electrophoresis. <i>Analytical Chemistry</i> , 2012, 84, 453-458.	3.2	31
62	Predicting Electrophoretic Mobility of Protein-Ligand Complexes for Ligands from DNA-Encoded Libraries of Small Molecules. <i>Analytical Chemistry</i> , 2016, 88, 5498-5506.	3.2	30
63	Chemical cytometry for monitoring metabolism of a Ras-mimicking substrate in single cells. <i>Cytometry Part A: the Journal of the International Society for Analytical Cytology</i> , 2005, 63A, 41-47.	1.1	29
64	miR-10b is a prognostic marker in clear cell renal cell carcinoma. <i>Journal of Clinical Pathology</i> , 2017, 70, 854-859.	1.0	29
65	miR-620 promotes tumor radioresistance by targeting 15-hydroxyprostaglandin dehydrogenase (HPGD). <i>Oncotarget</i> , 2015, 6, 22439-22451.	0.8	29
66	Metabolic Cytometry: Monitoring Oligosaccharide Biosynthesis in Single Cells by Capillary Electrophoresis. <i>Analytical Biochemistry</i> , 2000, 283, 133-135.	1.1	28
67	MASKE: Macroscopic Approach to Studying Kinetics at Equilibrium. <i>Journal of the American Chemical Society</i> , 2010, 132, 7062-7068.	6.6	28
68	Inhibition of Dexamethasone-induced Fatty Liver Development by Reducing miR-17-5p Levels. <i>Molecular Therapy</i> , 2015, 23, 1222-1233.	3.7	28
69	Improvement of LOD in Fluorescence Detection with Spectrally Nonuniform Background by Optimization of Emission Filtering. <i>Analytical Chemistry</i> , 2017, 89, 11122-11128.	3.2	28
70	Measuring the activity of farnesyltransferase by capillary electrophoresis with laser-induced fluorescence detection. <i>Electrophoresis</i> , 2002, 23, 3398-3403.	1.3	27
71	Extracting Kinetics from Affinity Capillary Electrophoresis (ACE) Data: A New Blade for the Old Tool. <i>Analytical Chemistry</i> , 2014, 86, 1298-1305.	3.2	27
72	Identification of Base Pairs in Single-Nucleotide Polymorphisms by MutS Protein-Mediated Capillary Electrophoresis. <i>Analytical Chemistry</i> , 2006, 78, 2035-2038.	3.2	26

#	ARTICLE	IF	CITATIONS
73	Temperature Difference between the Cooled and the Noncooled Parts of an Electrolyte in Capillary Electrophoresis. <i>Analytical Chemistry</i> , 2010, 82, 8692-8695.	3.2	26
74	DNA aptamers for as analytical tools for the quantitative analysis of DNA-dealkylating enzymes. <i>Analytical Biochemistry</i> , 2011, 414, 261-265.	1.1	26
75	Direct miRNA-hybridization assays and their potential in diagnostics. <i>TrAC - Trends in Analytical Chemistry</i> , 2013, 44, 121-130.	5.8	26
76	Advances in steady-state continuous-flow purification by small-scale free-flow electrophoresis. <i>TrAC - Trends in Analytical Chemistry</i> , 2015, 72, 68-79.	5.8	26
77	Detailed Model of the Peroxidase-Catalyzed Oxidation of Indole-3-Acetic Acid at Neutral pH. <i>The Journal of Physical Chemistry</i> , 1996, 100, 913-920.	2.9	25
78	Dynamic Kinetic Capillary Isoelectric Focusing: A Powerful Tool for Studying Protein-DNA Interactions. <i>Analytical Chemistry</i> , 2007, 79, 1097-1100.	3.2	25
79	A semipermanent coating for preventing protein adsorption at physiological pH in kinetic capillary electrophoresis. <i>Electrophoresis</i> , 2012, 33, 2584-2590.	1.3	25
80	Selection of surfactants for cell lysis in chemical cytometry to study protein-DNA interactions. <i>Electrophoresis</i> , 2006, 27, 1489-1494.	1.3	24
81	Heterogeneity of protein labeling with a fluorogenic reagent, 3-(2-furoyl)quinoline-2-carboxaldehyde. <i>Journal of Chromatography B: Analytical Technologies in the Biomedical and Life Sciences</i> , 2002, 780, 283-287.	1.2	23
82	Reciprocal regulation of miRNAs and piRNAs in embryonic development. <i>Cell Death and Differentiation</i> , 2016, 23, 1458-1470.	5.0	23
83	Kinetic capillary electrophoresis-based affinity screening of aptamer clones. <i>Analytica Chimica Acta</i> , 2009, 631, 102-107.	2.6	22
84	Noncooled Capillary Inlet: A Source of Systematic Errors in Capillary-Electrophoresis-Based Affinity Analyses. <i>Analytical Chemistry</i> , 2010, 82, 8637-8641.	3.2	22
85	Separation-Based Approach to Study Dissociation Kinetics of Noncovalent DNA-Multiple Protein Complexes. <i>Journal of the American Chemical Society</i> , 2011, 133, 12486-12492.	6.6	22
86	Single-stranded DNA-binding protein facilitates gel-free analysis of polymerase chain reaction products in capillary electrophoresis. <i>Journal of Chromatography A</i> , 2004, 1051, 171-175.	1.8	21
87	Direct Analysis of Enzyme-Catalyzed DNA Demethylation. <i>Analytical Chemistry</i> , 2009, 81, 5871-5875.	3.2	21
88	Method for Determination of Peak Areas in Nonequilibrium Capillary Electrophoresis of Equilibrium Mixtures. <i>Analytical Chemistry</i> , 2011, 83, 8617-8622.	3.2	21
89	Kinetic Capillary Electrophoresis with Mass Spectrometry Detection (KCE-MS) Facilitates Label-Free Solution-Based Kinetic Analysis of Protein-Small Molecule Binding. <i>ChemBioChem</i> , 2011, 12, 2551-2554.	1.3	21
90	Accurate MicroRNA Analysis in Crude Cell Lysate by Capillary Electrophoresis-Based Hybridization Assay in Comparison with Quantitative Reverse Transcription-Polymerase Chain Reaction. <i>Analytical Chemistry</i> , 2017, 89, 4743-4748.	3.2	21

#	ARTICLE	IF	CITATIONS
91	Peroxidase-catalyzed co-oxidation of indole-3-acetic acid and xanthene dyes in the absence of hydrogen peroxide. <i>FEBS Letters</i> , 1993, 324, 6-8.	1.3	20
92	Evidence for a free radical chain mechanism in the reaction between peroxidase and indole-3-acetic acid at neutral pH. <i>Biophysical Chemistry</i> , 1996, 58, 325-334.	1.5	20
93	Kinetic Size-Exclusion Chromatography with Mass Spectrometry Detection: An Approach for Solution-Based Label-Free Kinetic Analysis of Protein–Small Molecule Interactions. <i>Analytical Chemistry</i> , 2014, 86, 10016-10020.	3.2	20
94	Metabolic Suppression of a Drug-Resistant Subpopulation in Cancer Spheroid Cells. <i>Journal of Cellular Biochemistry</i> , 2016, 117, 59-65.	1.2	20
95	Analysis of DNA in Phosphate Buffered Saline Using Kinetic Capillary Electrophoresis. <i>Analytical Chemistry</i> , 2016, 88, 7421-7428.	3.2	20
96	Aptamer facilitated purification of functional proteins. <i>Journal of Chromatography B: Analytical Technologies in the Biomedical and Life Sciences</i> , 2018, 1073, 201-206.	1.2	20
97	Steady-State Continuous-Flow Purification by Electrophoresis. <i>Angewandte Chemie - International Edition</i> , 2013, 52, 7256-7260.	7.2	19
98	Prediction of Protein–DNA Complex Mobility in Gel-Free Capillary Electrophoresis. <i>Analytical Chemistry</i> , 2015, 87, 2474-2479.	3.2	19
99	Achieving Single-Nucleotide Specificity in Direct Quantitative Analysis of Multiple MicroRNAs (DQAMiR). <i>Analytical Chemistry</i> , 2016, 88, 2472-2477.	3.2	19
100	Protein Labeling Enhances Aptamer Selection by Methods of Kinetic Capillary Electrophoresis. <i>Analytical Chemistry</i> , 2011, 83, 6330-6335.	3.2	18
101	Calibration-Free Quantitative Analysis of mRNA. <i>Analytical Chemistry</i> , 2005, 77, 8027-8030.	3.2	17
102	Predicting efficiency of NECEM-based partitioning of protein binders from nonbinders in DNA-encoded libraries. <i>Electrophoresis</i> , 2018, 39, 2991-2996.	1.3	17
103	Asymmetry between Sister Cells in a Cancer Cell Line Revealed by Chemical Cytometry. <i>Analytical Chemistry</i> , 2004, 76, 3864-3866.	3.2	16
104	Correlation between Multi-Drug Resistance-Associated Membrane Transport in Clonal Cancer Cells and the Cell Cycle Phase. <i>PLoS ONE</i> , 2012, 7, e41368.	1.1	16
105	Simplified universal method for determining electrolyte temperatures in a capillary electrophoresis instrument with forced-air cooling. <i>Electrophoresis</i> , 2012, 33, 1079-1085.	1.3	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. <i>Journal of the American Chemical Society</i> , 2013, 135, 8041-8046.	6.6	16
107	Diffusion as a Tool of Measuring Temperature inside a Capillary. <i>Analytical Chemistry</i> , 2008, 80, 6752-6757.	3.2	15
108	Electric Field Destabilizes Noncovalent Protein–DNA Complexes. <i>Journal of the American Chemical Society</i> , 2010, 132, 13639-13641.	6.6	15

#	ARTICLE	IF	CITATIONS
109	DNA Adsorption to the Reservoir Walls Causing Irreproducibility in Studies of Protein-DNA Interactions by Methods of Kinetic Capillary Electrophoresis. <i>Analytical Chemistry</i> , 2011, 83, 8041-8045.	3.2	15
110	Inhibition of enzymatic indole-3-acetic acid oxidation by phenols. <i>Phytochemistry</i> , 1994, 36, 263-267.	1.4	14
111	Cell lysis inside the capillary facilitated by transverse diffusion of laminar flow profiles (TDLFP). <i>Analytical and Bioanalytical Chemistry</i> , 2006, 387, 91-96.	1.9	14
112	Selection of aptamers for a non-DNA binding protein in the context of cell lysate. <i>Analytica Chimica Acta</i> , 2010, 681, 92-97.	2.6	14
113	Slow-Dissociation and Slow-Recombination Assumptions in Nonequilibrium Capillary Electrophoresis of Equilibrium Mixtures. <i>Analytical Chemistry</i> , 2011, 83, 7582-7585.	3.2	14
114	Slow-Equilibration Approximation in Macroscopic Approach to Studying Kinetics at Equilibrium. <i>Analytical Chemistry</i> , 2011, 83, 1381-1387.	3.2	14
115	Volatile Kinetic Capillary Electrophoresis for Studies of Protein-Small Molecule Interactions. <i>Analytical Chemistry</i> , 2012, 84, 6944-6947.	3.2	14
116	Microfluidic free flow electrophoresis: I. Fast prototyping of mFFE devices. <i>Journal of Separation Science</i> , 2011, 34, 556-564.	1.3	13
117	Peak-Shape Correction to Symmetry for Pressure-Driven Sample Injection in Capillary Electrophoresis. <i>Analytical Chemistry</i> , 2012, 84, 149-154.	3.2	13
118	Mechanistic Studies on the Application of DNA Aptamers as Inhibitors of 2-Oxoglutarate-Dependent Oxygenases. <i>Journal of Medicinal Chemistry</i> , 2012, 55, 3546-3552.	2.9	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. <i>Analytical Chemistry</i> , 2010, 82, 1183-1185.	3.2	12
120	Single-Cell-Kinetics Approach to Compare Multidrug Resistance-Associated Membrane Transport in Subpopulations of Cells. <i>Analytical Chemistry</i> , 2011, 83, 6132-6134.	3.2	12
121	Image processing and analysis system for development and use of free flow electrophoresis chips. <i>Lab on a Chip</i> , 2017, 17, 256-266.	3.1	12
122	Stable DNA Aggregation by Removal of Counterions. <i>Analytical Chemistry</i> , 2013, 85, 10004-10007.	3.2	11
123	Ultrasensitive on-column laser-induced fluorescence in capillary electrophoresis using multiparameter confocal detection. <i>Analyst</i> , 2012, 137, 5538.	1.7	10
124	Improvements to Direct Quantitative Analysis of Multiple MicroRNAs Facilitating Faster Analysis. <i>Analytical Chemistry</i> , 2013, 85, 10062-10066.	3.2	10
125	Kinetics of MDR Transport in Tumor-Initiating Cells. <i>PLoS ONE</i> , 2013, 8, e79222.	1.1	10
126	Systematic Approach to Optimization of Experimental Conditions in Nonequilibrium Capillary Electrophoresis of Equilibrium Mixtures. <i>Analytical Chemistry</i> , 2016, 88, 9300-9308.	3.2	10

#	ARTICLE	IF	CITATIONS
127	Spherical-Shape Assumption for Protein–Aptamer Complexes Facilitates Prediction of Their Electrophoretic Mobility. <i>Analytical Chemistry</i> , 2019, 91, 12680-12687.	3.2	10
128	Ideal–Filter Capillary Electrophoresis (IFCE) Facilitates the One–Step Selection of Aptamers. <i>Angewandte Chemie</i> , 2019, 131, 2765-2769.	1.6	10
129	Determination of the Equilibrium Constant and Rate Constant of Protein–Oligonucleotide Complex Dissociation under the Conditions of Ideal-Filter Capillary Electrophoresis. <i>Analytical Chemistry</i> , 2019, 91, 8532-8539.	3.2	10
130	Monitoring the three enzymatic activities involved in posttranslational modifications of Ras proteins. <i>Analytica Chimica Acta</i> , 2004, 521, 1-7.	2.6	9
131	Heat-Associated Field Distortion in Electro-Migration Techniques. <i>Analytical Chemistry</i> , 2010, 82, 8398-8401.	3.2	9
132	Predictive measure of quality of micromixing. <i>Chemical Communications</i> , 2011, 47, 7767.	2.2	9
133	Theoretical estimation of drag tag lengths for direct quantitative analysis of multiple miRNAs (DQAMmiR). <i>Analyst, The</i> , 2013, 138, 553-558.	1.7	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. <i>Analyst, The</i> , 2015, 140, 990-994.	1.7	9
135	Slow-Equilibration Approximation in Kinetic Size Exclusion Chromatography. <i>Analytical Chemistry</i> , 2016, 88, 4063-4070.	3.2	9
136	Direct Quantitative Analysis of Multiple microRNAs (DQAMmiR) with Peptide Nucleic Acid Hybridization Probes. <i>Analytical Chemistry</i> , 2018, 90, 14610-14615.	3.2	9
137	Ideal–filter capillary electrophoresis: A highly efficient partitioning method for selection of protein binders from oligonucleotide libraries. <i>Electrophoresis</i> , 2019, 40, 2553-2564.	1.3	9
138	Transient Incomplete Separation Facilitates Finding Accurate Equilibrium Dissociation Constant of Protein–Small Molecule Complex. <i>Angewandte Chemie - International Edition</i> , 2019, 58, 6635-6639.	7.2	9
139	Necessity and Challenges of Sample Preconcentration in Analysis of Multiple MicroRNAs by Capillary Electrophoresis. <i>Analytical Chemistry</i> , 2020, 92, 14251-14258.	3.2	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. <i>Analytical Chemistry</i> , 2021, 93, 5343-5354.	3.2	9
141	Non-orthogonal micro-free flow electrophoresis: From theory to design concept. <i>Analytica Chimica Acta</i> , 2010, 674, 102-109.	2.6	8
142	Making DNA Hybridization Assays in Capillary Electrophoresis Quantitative. <i>Analytical Chemistry</i> , 2010, 82, 4428-4433.	3.2	8
143	Quantitative Characterization of Micromixing Based on Uniformity and Overlap. <i>Angewandte Chemie - International Edition</i> , 2011, 50, 11999-12002.	7.2	8
144	Theoretical Modeling of Masking DNA Application in Aptamer-Facilitated Biomarker Discovery. <i>Analytical Chemistry</i> , 2013, 85, 4157-4164.	3.2	8

#	ARTICLE	IF	CITATIONS
145	Quantitative Characterization of Molecular-Stream Separation. <i>Analytical Chemistry</i> , 2018, 90, 9504-9509.	3.2	8
146	Cytometry of Reaction Rate Constant: Measuring Reaction Rate Constant in Individual Cells To Facilitate Robust and Accurate Analysis of Cell-Population Heterogeneity. <i>Analytical Chemistry</i> , 2019, 91, 4186-4194.	3.2	8
147	Accelerating Effect of Umbelliferone on Peroxidase-Catalyzed Oxidation of Indole-3-acetic Acid at Neutral pH. <i>The Journal of Physical Chemistry</i> , 1996, 100, 19719-19727.	2.9	7
148	Minimizing adsorption of histidine-tagged proteins for the study of protein-deoxyribonucleic acid interactions by kinetic capillary electrophoresis. <i>Journal of Chromatography A</i> , 2013, 1322, 90-96.	1.8	7
149	One-Dimensional Approach to Study Kinetics of Reversible Binding of Protein on Capillary Walls. <i>Analytical Chemistry</i> , 2015, 87, 1219-1225.	3.2	7
150	Hyphenation of Production-Scale Free-Flow Electrophoresis to Electrospray Ionization Mass Spectrometry Using a Highly Conductive Background Electrolyte. <i>Analytical Chemistry</i> , 2016, 88, 8415-8420.	3.2	7
151	Preservation of the 3D Phenotype Upon Dispersal of Cultured Cell Spheroids Into Monolayer Cultures. <i>Journal of Cellular Biochemistry</i> , 2017, 118, 154-162.	1.2	7
152	Non-aqueous continuous-flow electrophoresis (NACFE): potential separation complement for continuous-flow organic synthesis. <i>Lab on A Chip</i> , 2019, 19, 2156-2160.	3.1	7
153	Multi-drug-resistance efflux in cisplatin-naive and cisplatin-exposed A2780 ovarian cancer cells responds differently to cell culture dimensionality. <i>Molecular and Clinical Oncology</i> , 2021, 15, 161.	0.4	7
154	Quantitative Characterization of Partitioning in Selection of DNA Aptamers for Protein Targets by Capillary Electrophoresis. <i>Analytical Chemistry</i> , 2022, 94, 2578-2588.	3.2	7
155	Monitoring viral DNA release with capillary electrophoresis. <i>Analyst, The</i> , 2004, 129, 1234.	1.7	6
156	Single-Cell Analysis by Chemical Cytometry Combined with Fluorescence Microscopy. <i>Instrumentation Science and Technology</i> , 2004, 32, 31-41.	0.9	6
157	Two-peak approximation in kinetic capillary electrophoresis. <i>Analyst, The</i> , 2012, 137, 1649.	1.7	6
158	Single-Cell-Kinetics Approach to Discover Functionally Distinct Subpopulations within Phenotypically Uniform Populations of Cells. <i>Analytical Chemistry</i> , 2013, 85, 2578-2581.	3.2	6
159	Simultaneous Analysis of a Non-Lipidated Protein and Its Lipidated Counterpart: Enabling Quantitative Investigation of Protein Lipidation's Impact on Cellular Regulation. <i>Analytical Chemistry</i> , 2017, 89, 13502-13507.	3.2	6
160	Analytical Challenges in Development of Chemoresistance Predictors for Precision Oncology. <i>Analytical Chemistry</i> , 2020, 92, 12101-12110.	3.2	6
161	Single-stranded DNA-binding protein facilitates gel-free analysis of polymerase chain reaction products in capillary electrophoresis. <i>Journal of Chromatography A</i> , 2004, 1051, 171-175.	1.8	6
162	Spheroid-Based Approach to Assess the Tissue Relevance of Analysis of Dispersed-Settled Tissue Cells by Cytometry of the Reaction Rate Constant. <i>Analytical Chemistry</i> , 2020, 92, 9348-9355.	3.2	5

#	ARTICLE	IF	CITATIONS
163	Detailed Mechanism of Phenol-Inhibited Peroxidase-Catalyzed Oxidation of Indole-3-Acetic Acid at Neutral pH. <i>Photochemistry and Photobiology</i> , 1996, 63, 735-741.	1.3	4
164	High-precision quantitation of a tuberculosis vaccine antigen with capillary-gel electrophoresis using an injection standard. <i>Talanta</i> , 2017, 175, 273-279.	2.9	4
165	Assessing Accuracy of an Analytical Method <i>in Silico</i> : Application to "Accurate Constant via Transient Incomplete Separation" (ACTIS). <i>Analytical Chemistry</i> , 2020, 92, 11973-11980.	3.2	4
166	Template Instrumentation for "Accurate Constant via Transient Incomplete Separation". <i>Analytical Chemistry</i> , 2021, 93, 11654-11659.	3.2	4
167	Visualization of Streams of Small Organic Molecules in Continuous-Flow Electrophoresis. <i>Analytical Chemistry</i> , 2020, 92, 2907-2910.	3.2	4
168	Optically Pumped Chemiluminescence of Indole-3-Acetic Acid. <i>Photochemistry and Photobiology</i> , 1996, 63, 621-627.	1.3	3
169	Time-resolved detection of luminescence for electrophoretic methods. <i>TrAC - Trends in Analytical Chemistry</i> , 2012, 33, 23-34.	5.8	3
170	Reducing pH Gradients in Free-Flow Electrophoresis. <i>Analytical Chemistry</i> , 2014, 86, 5656-5660.	3.2	3
171	Single-stranded DNA-binding protein facilitates gel-free analysis of polymerase chain reaction products in capillary electrophoresis. <i>Journal of Chromatography A</i> , 2004, 1051, 171-5.	1.8	3
172	Computer simulation of damped oscillations during peroxidase-catalyzed oxidation of indole-3-acetic acid. <i>Biophysical Chemistry</i> , 1998, 72, 285-295.	1.5	2
173	Slow-equilibration approximation in studying kinetics of protein adsorption on capillary walls. <i>Analyst</i> , 2015, 140, 2797-2803.	1.7	2
174	Transient Incomplete Separation Facilitates Finding Accurate Equilibrium Dissociation Constant of Protein-Small Molecule Complex. <i>Angewandte Chemie</i> , 2019, 131, 6707-6711.	1.6	2
175	Aptamer-facilitated Protein Isolation from Cells. <i>Protocol Exchange</i> , 0, , .	0.3	2
176	Sequential-dissociation kinetics of non-covalent complexes of DNA with multiple proteins in separation-based approach: General theory and its application. <i>Analytica Chimica Acta</i> , 2012, 724, 111-118.	2.6	1
177	A fast stable discretization of the Constant-Convection-Diffusion-Reaction equations of Kinetic Capillary Electrophoresis (KCE). <i>Applied Numerical Mathematics</i> , 2017, 122, 82-91.	1.2	1
178	Empirical predictor of conditions that support ideal-filter capillary electrophoresis. <i>Electrophoresis</i> , 2020, 41, 1225-1229.	1.3	1
179	Circular Geometry in Molecular Stream Separation to Facilitate Nonorthogonal Field-to-Flow Orientation. <i>Analytical Chemistry</i> , 2022, 94, 9519-9524.	3.2	1
180	Kinetic Capillary Electrophoresis for Selection, Characterization, and Analytical Utilization of Aptamers. , 0, , 181-212.		0

#	ARTICLE	IF	CITATIONS
181	Unexpected Electrophoretic Behavior of Complexes between Rod-like Virions and Bivalent Antibodies. Analytical Chemistry, 2016, 88, 11908-11912.	3.2	0
182	Topino: A Graphical Tool for Quantitative Assessment of Molecular Stream Separations. Analytical Chemistry, 2021, 93, 9980-9985.	3.2	0