Maxim V Berezovski

List of Publications by Year
in descending order

108	4,675	94433	106344
papers	citations	37 h-index	65 g-index

113	113	113	4506
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	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
2	Non-SELEX Selection of Aptamers. Journal of the American Chemical Society, 2006, 128, 1410-1411.	13.7	225
3	Three-Mode Electrochemical Sensing of Ultralow MicroRNA Levels. Journal of the American Chemical Society, 2013, 135, 3027-3038.	13.7	207
4	Aptamer-Facilitated Biomarker Discovery (AptaBiD). Journal of the American Chemical Society, 2008, 130, 9137-9143.	13.7	181
5	Nonequilibrium Capillary Electrophoresis of Equilibrium Mixtures â˜' A Single Experiment Reveals Equilibrium and Kinetic Parameters of Proteinâ˜'DNA Interactions. Journal of the American Chemical Society, 2002, 124, 13674-13675.	13.7	178
6	Non-SELEX: selection of aptamers without intermediate amplification of candidate oligonucleotides. Nature Protocols, 2006, 1, 1359-1369.	12.0	152
7	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
8	Affinity Analysis of a Proteinâ˜'Aptamer Complex Using Nonequilibrium Capillary Electrophoresis of Equilibrium Mixtures. Analytical Chemistry, 2003, 75, 1382-1386.	6.5	135
9	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
10	Aptamer-Based Viability Impedimetric Sensor for Bacteria. Analytical Chemistry, 2012, 84, 8966-8969.	6.5	131
11	Current and Prospective Protein Biomarkers of Lung Cancer. Cancers, 2017, 9, 155.	3.7	121
12	Selection of Smart Aptamers by Methods of Kinetic Capillary Electrophoresis. Analytical Chemistry, 2006, 78, 3171-3178.	6.5	120
13	Reversible Photocontrol of DNA Binding by a Designed GCN4-bZIP Proteinâ€. Biochemistry, 2006, 45, 6075-6084.	2.5	94
14	Ultrasensitive Norovirus Detection Using DNA Aptasensor Technology. PLoS ONE, 2013, 8, e79087.	2.5	94
15	Aptamer-Based Viability Impedimetric Sensor for Viruses. Analytical Chemistry, 2012, 84, 1813-1816.	6.5	86
16	Aptamer-Based Impedimetric Sensor for Bacterial Typing. Analytical Chemistry, 2012, 84, 8114-8117.	6.5	81
17	The proteomic analysis of breast cell line exosomes reveals disease patterns and potential biomarkers. Scientific Reports, 2020, 10, 13572.	3.3	81
18	Development of Bacteriostatic DNA Aptamers for Salmonella. Journal of Medicinal Chemistry, 2013, 56, 1564-1572.	6.4	79

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19	Quantitative Analysis of MicroRNA in Blood Serum with Protein-Facilitated Affinity Capillary Electrophoresis. Analytical Chemistry, 2011, 83, 6196-6201.	6.5	78
20	Aptamers Selected to Postoperative Lung Adenocarcinoma Detect Circulating Tumor Cells in Human Blood. Molecular Therapy, 2015, 23, 1486-1496.	8.2	78
21	Four-Way Junction Formation Promoting Ultrasensitive Electrochemical Detection of MicroRNA. Analytical Chemistry, 2013, 85, 9422-9427.	6.5	76
22	Non-equilibrium capillary electrophoresis of equilibrium mixturesâ€"appreciation of kinetics in capillary electrophoresis. Analyst, The, 2003, 128, 571-575.	3.5	70
23	Thermochemistry of Proteinâ^'DNA Interaction Studied with Temperature-Controlled Nonequilibrium Capillary Electrophoresis of Equilibrium Mixtures. Analytical Chemistry, 2005, 77, 1526-1529.	6.5	67
24	Selection of Smart Small-Molecule Ligands: The Proof of Principle. Analytical Chemistry, 2009, 81, 490-494.	6.5	64
25	Electrochemical sensing of microRNAs: Avenues and paradigms. Biosensors and Bioelectronics, 2015, 68, 83-94.	10.1	64
26	Using DNA-Binding Proteins as an Analytical Tool. Journal of the American Chemical Society, 2003, 125, 13451-13454.	13.7	62
27	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
28	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
29	Electrochemical aptasensor for lung cancer-related protein detection in crude blood plasma samples. Scientific Reports, 2016, 6, 34350.	3.3	52
30	Detection of Cryptosporidium parvum Oocysts on Fresh Produce Using DNA Aptamers. PLoS ONE, 2015, 10, e0137455.	2.5	52
31	DNA-Aptamer Targeting Vimentin for Tumor Therapy In Vivo. Nucleic Acid Therapeutics, 2014, 24, 160-170.	3.6	51
32	Revealing Equilibrium and Rate Constants of Weak and Fast Noncovalent Interactions. Analytical Chemistry, 2011, 83, 2364-2370.	6.5	47
33	In Vivo Cancer Cells Elimination Guided by Aptamer-Functionalized Gold-Coated Magnetic Nanoparticles and Controlled with Low Frequency Alternating Magnetic Field. Theranostics, 2017, 7, 3326-3337.	10.0	47
34	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
35	Electrochemical Sensing of Aptamer-Facilitated Virus Immunoshielding. Analytical Chemistry, 2012, 84, 1677-1686.	6.5	43
36	Using Nonequilibrium Capillary Electrophoresis of Equilibrium Mixtures for the Determination of Temperature in Capillary Electrophoresis. Analytical Chemistry, 2004, 76, 7114-7117.	6.5	40

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37	â€œInject-Mix-React-Separate-and-Quantitateâ€•(IMReSQ) Method for Screening Enzyme Inhibitors. Journal of the American Chemical Society, 2008, 130, 11862-11863.	13.7	38
38	Protein Electrocatalysis for Direct Sensing of Circulating MicroRNAs. Analytical Chemistry, 2015, 87, 1395-1403.	6.5	38
39	Sweeping Capillary Electrophoresis:â€‰ 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
40	Simultaneous analysis of enzyme structure and activity by kinetic capillary electrophoresisâ€“MS. Nature Chemical Biology, 2016, 12, 918-922.	8.0	37
41	On-line Aptamer Affinity Solid-Phase Extraction Capillary Electrophoresis-Mass Spectrometry for the Analysis of Blood Î±-Synuclein. Analytical Chemistry, 2020, 92, 1525-1533.	6.5	36
42	Realâ€Time Monitoring of Protein Conformational Dynamics in Solution Using Kinetic Capillary Electrophoresis. Angewandte Chemie - International Edition, 2012, 51, 12464-12468.	13.8	35
43	Direct detection of endogenous MicroRNAs and their post-transcriptional modifications in cancer serum by capillary electrophoresis-mass spectrometry. Analytical and Bioanalytical Chemistry, 2016, 408, 2891-2899.	3.7	35
44	Aptamers for CD Antigens: From Cell Profiling to Activity Modulation. Molecular Therapy - Nucleic Acids, 2017, 6, 29-44.	5.1	33
45	Anti-Fab Aptamers for Shielding Virus from Neutralizing Antibodies. Journal of the American Chemical Society, 2012, 134, 17168-17177.	13.7	31
46	Electrochemical Differentiation of Epitope-Specific Aptamers. Analytical Chemistry, 2012, 84, 2548-2556.	6.5	31
47	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
48	Targeting Ephrin Receptor Tyrosine Kinase A2 with a Selective Aptamer for Glioblastoma Stem Cells. Molecular Therapy - Nucleic Acids, 2020, 20, 176-185.	5.1	29
49	MASKE: Macroscopic Approach to Studying Kinetics at Equilibrium. Journal of the American Chemical Society, 2010, 132, 7062-7068.	13.7	28
50	Measuring the activity of farnesyltransferase by capillary electrophoresis with laser-induced fluorescence detection. Electrophoresis, 2002, 23, 3398-3403.	2.4	27
51	Analysis of Circulating microRNAs and Their Post-Transcriptional Modifications in Cancer Serum by On-Line Solid-Phase Extractionâ€“Capillary Electrophoresisâ€“Mass Spectrometry. Analytical Chemistry, 2018, 90, 6618-6625.	6.5	27
52	DNA Aptamers for the Characterization of Histological Structure of Lung Adenocarcinoma. Molecular Therapy - Nucleic Acids, 2017, 6, 150-162.	5.1	26
53	Aptamer-Conjugated Superparamagnetic Ferroarabinogalactan Nanoparticles for Targeted Magnetodynamic Therapy of Cancer. Cancers, 2020, 12, 216.	3.7	26
54	Selection of surfactants for cell lysis in chemical cytometry to study protein-DNA interactions. Electrophoresis, 2006, 27, 1489-1494.	2.4	24

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55	Aptamer-Targeted Plasmonic Photothermal Therapy of Cancer. Molecular Therapy - Nucleic Acids, 2017, 9, 12-21.	5.1	23
56	Photomodification of RNA and DNA fragments by oligonucleotide reagents bearing arylazide groups. Biochimie, 1993, 75, 25-27.	2.6	22
57	Kinetic capillary electrophoresis-based affinity screening of aptamer clones. Analytica Chimica Acta, 2009, 631, 102-107.	5.4	22
58	Viral Quantitative Capillary Electrophoresis for Counting Intact Viruses. Analytical Chemistry, 2011, 83, 5431-5435.	6.5	22
59	Aptamer-facilitated Protection of Oncolytic Virus from Neutralizing Antibodies. Molecular Therapy - Nucleic Acids, 2014, 3, e167.	5.1	22
60	Switchable aptamers for biosensing and bioseparation of viruses (SwAps-V). Biosensors and Bioelectronics, 2015, 67, 280-286.	10.1	21
61	Aptamer-Based Methods for Detection of Circulating Tumor Cells and Their Potential for Personalized Diagnostics. Advances in Experimental Medicine and Biology, 2017, 994, 67-81.	1.6	21
62	Nucleic Acid Aptamers for Molecular Therapy of Epilepsy and Blood-Brain Barrier Damages. Molecular Therapy - Nucleic Acids, 2020, 19, 157-167.	5.1	20
63	Development of DNA Aptamers to Native EpCAM for Isolation of Lung Circulating Tumor Cells from Human Blood. Cancers, 2019, 11, 351.	3.7	19
64	Proteomics-Based Machine Learning Approach as an Alternative to Conventional Biomarkers for Differential Diagnosis of Chronic Kidney Diseases. International Journal of Molecular Sciences, 2020, 21, 4802.	4.1	19
65	Comparative Study of Three Methods for Affinity Measurements: Capillary Electrophoresis Coupled with UV Detection and Mass Spectrometry, and Direct Infusion Mass Spectrometry. Journal of the American Society for Mass Spectrometry, 2012, 23, 1232-1240.	2.8	18
66	Multifunctional electrochemical aptasensor for aptamer clones screening, virus quantitation in blood and viability assessment. Analyst, The, 2013, 138, 1865.	3.5	17
67	TOE1 is an inhibitor of HIV-1 replication with cell-penetrating capability. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, E3392-E3401.	7.1	17
68	Noninvasive Microsurgery Using Aptamer-Functionalized Magnetic Microdisks for Tumor Cell Eradication. Nucleic Acid Therapeutics, 2017, 27, 105-114.	3.6	17
69	Bioanalysis for Biocatalysis: Multiplexed Capillary Electrophoresisâ€“Mass Spectrometry Assay for Aminotransferase Substrate Discovery and Specificity Profiling. Journal of the American Chemical Society, 2013, 135, 13728-13736.	13.7	16
70	Characterization and differentiation of quinoa seed proteomes by label-free mass spectrometry-based shotgun proteomics. Food Chemistry, 2021, 363, 130250.	8.2	16
71	The collaborative role of molecular conformation and energetics in the binding of gas-phase non-covalent polymer/amine complexes. Physical Chemistry Chemical Physics, 2012, 14, 165-172.	2.8	15
72	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

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73	Aptamer-Conjugated Tb(III)-Doped Silica Nanoparticles for Luminescent Detection of Leukemia Cells. Biomedicines, 2020, 8, 14.	3.2	14
74	The role of SAXS and molecular simulations in 3D structure elucidation of a DNA aptamer against lung cancer. Molecular Therapy - Nucleic Acids, 2021, 25, 316-327.	5.1	14
75	Electrochemical Aptasensors for Microbial and Viral Pathogens. Advances in Biochemical Engineering/Biotechnology, 2013, 140, 155-181.	1.1	13
76	Four steps for revealing and adjusting the 3D structure of aptamers in solution by small-angle X-ray scattering and computer simulation. Analytical and Bioanalytical Chemistry, 2019, 411, 6723-6732.	3.7	13
77	The cell wall proteome from two strains of Pseudocercospora fijiensis with differences in virulence. World Journal of Microbiology and Biotechnology, 2019, 35, 105.	3.6	13
78	Viral Quantitative Capillary Electrophoresis for Counting and Quality Control of RNA Viruses. Analytical Chemistry, 2012, 84, 9585-9591.	6.5	12
79	Conformational Dynamics of DNA Gâ€Quadruplex in Solution Studied by Kinetic Capillary Electrophoresis Coupled Onâ€line with Mass Spectrometry. ChemistryOpen, 2014, 3, 58-64.	1.9	11
80	11C-radiolabeled aptamer for imaging of tumors and metastases using positron emission tomography-computed tomography. Molecular Therapy - Nucleic Acids, 2021, 26, 1159-1172.	5.1	11
81	Phosphoproteomic Analysis of Breast Cancer-Derived Small Extracellular Vesicles Reveals Disease-Specific Phosphorylated Enzymes. Biomedicines, 2022, 10, 408.	3.2	10
82	DNA-aptamer/protein interaction as a cause of apoptosis and arrest of proliferation in Ehrlich ascites adenocarcinoma cells. Biochemistry (Moscow) Supplement Series A: Membrane and Cell Biology, 2014, 8, 60-72.	0.6	9
83	Structureâ€and Interactionâ€Based Design of Antiâ€SARSâ€CoVâ€2 Aptamers. Chemistry - A European Journal, 2022, 28, .	3.3	9
84	Aptamer-facilitated mass cytometry. Analytical and Bioanalytical Chemistry, 2018, 410, 3047-3051.	3.7	8
85	Molecular Epitope Determination of Aptamer Complexes of the Multidomain Protein Câ€Met by Proteolytic Affinityâ€Mass Spectrometry. ChemMedChem, 2020, 15, 363-369.	3.2	8
86	Carbohydrate-Based Ice Recrystallization Inhibitors Increase Infectivity and Thermostability of Viral Vectors. Scientific Reports, 2015, 4, 5903.	3.3	7
87	Breast Cancer-Derived Microvesicles Are the Source of Functional Metabolic Enzymes as Potential Targets for Cancer Therapy. Biomedicines, 2021, 9, 107.	3.2	7
88	Development of Electrochemical Aptasensor for Lung Cancer Diagnostics in Human Blood. Sensors, 2021, 21, 7851.	3.8	6
89	Comparative Proteomic Profiling of Secreted Extracellular Vesicles from Breast Fibroadenoma and Malignant Lesions: A Pilot Study. International Journal of Molecular Sciences, 2022, 23, 3989.	4.1	6
90	Aptamer-Facilitated Cryoprotection of Viruses. ACS Medicinal Chemistry Letters, 2014, 5, 1240-1244.	2.8	5

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91	Investigating the relationship between the gas-phase conformations and dissociation energetics of peptideâ€“saccharide complexes. International Journal of Mass Spectrometry, 2012, 316-318, 31-39.	1.5	4
92	Inhibition of complement dependent cytotoxicity by anti-CD20 aptamers. RSC Advances, 2016, 6, 12435-12438.	3.6	4
93	Single-Run Separation and Quantification of 14 Cannabinoids Using Capillary Electrophoresis. Separations, 2021, 8, 30.	2.4	4
94	Quantitative Analysis of MicroRNA in Blood Serum with Protein-Facilitated Affinity Capillary Electrophoresis. Methods in Molecular Biology, 2013, 1039, 245-259.	0.9	4
95	Assessment of energetic costs of AhR activation by Î²-naphthoflavone in rainbow trout (Oncorhynchus) Tj ETQq1 1 0.784314 rgBT /O 86-94.	2.8	3
96	Quantitative Capillary Electrophoresis for Analysis of Extracellular Vesicles (EVqCE). Separations, 2021, 8, 110.	2.4	3
97	A study of the flexibility of the carbon catabolic pathways of extremophilic P. aeruginosa san ai exposed to benzoate versus glucose as sole carbon sources by multi omics analytical platform. Microbiological Research, 2022, 259, 126998.	5.3	3
98	Separation Abilities of Capillary Electrophoresis Coupled with Ion Mobility Mass Spectrometry for the Discrete Detection of Sequence Isomeric Peptides. Separations, 2022, 9, 106.	2.4	3
99	Conformational Dynamics of DNA G-Quadruplex in Solution Studied by Kinetic Capillary Electrophoresis Coupled On-line with Mass Spectrometry. ChemistryOpen, 2014, 3, 38-38.	1.9	2
100	Hemojuvelin deficiency promotes liver mitochondrial dysfunction and predisposes mice to hepatocellular carcinoma. Communications Biology, 2022, 5, 153.	4.4	2
101	Utility of kinetic capillary electrophoresis-mass spectrometry to study protein dynamics and affinity interactions. Expert Review of Proteomics, 2012, 9, 477-479.	3.0	1
102	Aptamers in Oncotherapy. RNA Technologies, 2015, , 107-121.	0.3	1
103	Three Diverse Granule Preparation Methods for Proteomic Analysis of Mature Rice (Oryza sativa L.) Starch Grain. Molecules, 2022, 27, 3307.	3.8	1
104	Kinetic methods in capillary electrophoresis and their applications. , 2005, , .		0
105	The discovery of RNA-aptamers that selectively bind and inhibit glioblastoma stem cells by targeting EphA2. Annals of Oncology, 2019, 30, v802.	1.2	0
106	Proteomics-Based Regression Model for Assessing the Development of Chronic Lymphocytic Leukemia. Proteomes, 2021, 9, 3.	3.5	0
107	Application of full proteomic analysis of blood cells, plasma and urine for differential diagnosis. Siberian Medical Review, 2021, , 87-89.	0.2	0
108	Kinetic Capillary Electrophoresis. , 2007, , 361-380.		0