Maxim V Berezovski

List of Publications by Year in descending order

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108 papers

4,675 citations

108046 37 h-index 65 g-index

113 all docs

113 docs citations

113 times ranked

5037 citing authors

#	Article	IF	CITATIONS
1	Structure―and Interactionâ€Based Design of Antiâ€SARSâ€CoVâ€2 Aptamers. Chemistry - A European Journal, 2022, 28, .	1.7	9
2	Phosphoproteomic Analysis of Breast Cancer-Derived Small Extracellular Vesicles Reveals Disease-Specific Phosphorylated Enzymes. Biomedicines, 2022, 10, 408.	1.4	10
3	Hemojuvelin deficiency promotes liver mitochondrial dysfunction and predisposes mice to hepatocellular carcinoma. Communications Biology, 2022, 5, 153.	2.0	2
4	Comparative Proteomic Profiling of Secreted Extracellular Vesicles from Breast Fibroadenoma and Malignant Lesions: A Pilot Study. International Journal of Molecular Sciences, 2022, 23, 3989.	1.8	6
5	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.	2.5	3
6	Separation Abilities of Capillary Electrophoresis Coupled with Ion Mobility Mass Spectrometry for the Discrete Detection of Sequence Isomeric Peptides. Separations, 2022, 9, 106.	1.1	3
7	Three Diverse Granule Preparation Methods for Proteomic Analysis of Mature Rice (Oryza sativa L.) Starch Grain. Molecules, 2022, 27, 3307.	1.7	1
8	Proteomics-Based Regression Model for Assessing the Development of Chronic Lymphocytic Leukemia. Proteomes, 2021, 9, 3.	1.7	0
9	Breast Cancer-Derived Microvesicles Are the Source of Functional Metabolic Enzymes as Potential Targets for Cancer Therapy. Biomedicines, 2021, 9, 107.	1.4	7
10	Application of full proteomic analysis of blood cells, plasma and urine for differential diagnosis. Siberian Medical Review, 2021, , 87-89.	0.1	0
11	Single-Run Separation and Quantification of 14 Cannabinoids Using Capillary Electrophoresis. Separations, 2021, 8, 30.	1.1	4
12	Quantitative Capillary Electrophoresis for Analysis of Extracellular Vesicles (EVqCE). Separations, 2021, 8, 110.	1.1	3
13	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.	2.3	14
14	Characterization and differentiation of quinoa seed proteomes by label-free mass spectrometry-based shotgun proteomics. Food Chemistry, 2021, 363, 130250.	4.2	16
15	11C-radiolabeled aptamer for imaging of tumors and metastases using positron emission tomography-computed tomography. Molecular Therapy - Nucleic Acids, 2021, 26, 1159-1172.	2.3	11
16	Development of Electrochemical Aptasensor for Lung Cancer Diagnostics in Human Blood. Sensors, 2021, 21, 7851.	2.1	6
17	Nucleic Acid Aptamers for Molecular Therapy of Epilepsy and Blood-Brain Barrier Damages. Molecular Therapy - Nucleic Acids, 2020, 19, 157-167.	2.3	20
18	Molecular Epitope Determination of Aptamer Complexes of the Multidomain Protein Câ€Met by Proteolytic Affinityâ€Mass Spectrometry. ChemMedChem, 2020, 15, 363-369.	1.6	8

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19	On-line Aptamer Affinity Solid-Phase Extraction Capillary Electrophoresis-Mass Spectrometry for the Analysis of Blood α-Synuclein. Analytical Chemistry, 2020, 92, 1525-1533.	3.2	36
20	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.	1.8	19
21	The proteomic analysis of breast cell line exosomes reveals disease patterns and potential biomarkers. Scientific Reports, 2020, 10, 13572.	1.6	81
22	Targeting Ephrin Receptor Tyrosine Kinase A2 with a Selective Aptamer for Glioblastoma Stem Cells. Molecular Therapy - Nucleic Acids, 2020, 20, 176-185.	2.3	29
23	Aptamer-Conjugated Superparamagnetic Ferroarabinogalactan Nanoparticles for Targeted Magnetodynamic Therapy of Cancer. Cancers, 2020, 12, 216.	1.7	26
24	Aptamer-Conjugated Tb(III)-Doped Silica Nanoparticles for Luminescent Detection of Leukemia Cells. Biomedicines, 2020, 8, 14.	1.4	14
25	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.	1.9	13
26	The cell wall proteome from two strains of Pseudocercospora fijiensis with differences in virulence. World Journal of Microbiology and Biotechnology, 2019, 35, 105.	1.7	13
27	The discovery of RNA-aptamers that selectively bind and inhibit glioblastoma stem cells by targeting EphA2. Annals of Oncology, 2019, 30, v802.	0.6	O
28	Development of DNA Aptamers to Native EpCAM for Isolation of Lung Circulating Tumor Cells from Human Blood. Cancers, 2019, 11, 351.	1.7	19
29	Analysis of Circulating microRNAs and Their Post-Transcriptional Modifications in Cancer Serum by On-Line Solid-Phase Extraction–Capillary Electrophoresis–Mass Spectrometry. Analytical Chemistry, 2018, 90, 6618-6625.	3.2	27
30	Aptamer-facilitated mass cytometry. Analytical and Bioanalytical Chemistry, 2018, 410, 3047-3051.	1.9	8
31	Aptamers for CD Antigens: From Cell Profiling to Activity Modulation. Molecular Therapy - Nucleic Acids, 2017, 6, 29-44.	2.3	33
32	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.	0.8	21
33	Noninvasive Microsurgery Using Aptamer-Functionalized Magnetic Microdisks for Tumor Cell Eradication. Nucleic Acid Therapeutics, 2017, 27, 105-114.	2.0	17
34	DNA Aptamers for the Characterization of Histological Structure of Lung Adenocarcinoma. Molecular Therapy - Nucleic Acids, 2017, 6, 150-162.	2.3	26
35	Aptamer-Targeted Plasmonic Photothermal Therapy of Cancer. Molecular Therapy - Nucleic Acids, 2017, 9, 12-21.	2.3	23
36	<i>In Vivo</i> Cancer Cells Elimination Guided by Aptamer-Functionalized Gold-Coated Magnetic Nanoparticles and Controlled with Low Frequency Alternating Magnetic Field. Theranostics, 2017, 7, 3326-3337.	4.6	47

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37	Current and Prospective Protein Biomarkers of Lung Cancer. Cancers, 2017, 9, 155.	1.7	121
38	Simultaneous analysis of enzyme structure and activity by kinetic capillary electrophoresis–MS. Nature Chemical Biology, 2016, 12, 918-922.	3.9	37
39	Electrochemical aptasensor for lung cancer-related protein detection in crude blood plasma samples. Scientific Reports, 2016, 6, 34350.	1.6	52
40	Inhibition of complement dependent cytotoxicity by anti-CD20 aptamers. RSC Advances, 2016, 6, 12435-12438.	1.7	4
41	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.	1.9	35
42	Carbohydrate-Based Ice Recrystallization Inhibitors Increase Infectivity and Thermostability of Viral Vectors. Scientific Reports, 2015, 4, 5903.	1.6	7
43	Electrochemical sensing of microRNAs: Avenues and paradigms. Biosensors and Bioelectronics, 2015, 68, 83-94.	5. 3	64
44	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.	3.3	17
45	Aptamers in Oncotherapy. RNA Technologies, 2015, , 107-121.	0.2	1
46	Aptamers Selected to Postoperative Lung Adenocarcinoma Detect Circulating Tumor Cells in Human Blood. Molecular Therapy, 2015, 23, 1486-1496.	3.7	78
47	Protein Electrocatalysis for Direct Sensing of Circulating MicroRNAs. Analytical Chemistry, 2015, 87, 1395-1403.	3.2	38
48	Switchable aptamers for biosensing and bioseparation of viruses (SwAps-V). Biosensors and Bioelectronics, 2015, 67, 280-286.	5.3	21
49	Detection of Cryptosporidium parvum Oocysts on Fresh Produce Using DNA Aptamers. PLoS ONE, 2015, 10, e0137455.	1.1	52
50	Aptamer-facilitated Protection of Oncolytic Virus from Neutralizing Antibodies. Molecular Therapy - Nucleic Acids, 2014, 3, e167.	2.3	22
51	Conformational Dynamics of DNA G-Quadruplex in Solution Studied by Kinetic Capillary Electrophoresis Coupled On-line with Mass Spectrometry. ChemistryOpen, 2014, 3, 38-38.	0.9	2
52	Conformational Dynamics of DNA Gâ€Quadruplex in Solution Studied by Kinetic Capillary Electrophoresis Coupled Onâ€line with Mass Spectrometry. ChemistryOpen, 2014, 3, 58-64.	0.9	11
53	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.	0.3	9
54	Aptamer-Facilitated Cryoprotection of Viruses. ACS Medicinal Chemistry Letters, 2014, 5, 1240-1244.	1.3	5

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55	DNA-Aptamer Targeting Vimentin for Tumor Therapy <i>In Vivo</i> i>. Nucleic Acid Therapeutics, 2014, 24, 160-170.	2.0	51
56	Three-Mode Electrochemical Sensing of Ultralow MicroRNA Levels. Journal of the American Chemical Society, 2013, 135, 3027-3038.	6.6	207
57	Four-Way Junction Formation Promoting Ultrasensitive Electrochemical Detection of MicroRNA. Analytical Chemistry, 2013, 85, 9422-9427.	3.2	76
58	Electrochemical Aptasensors for Microbial and Viral Pathogens. Advances in Biochemical Engineering/Biotechnology, 2013, 140, 155-181.	0.6	13
59	Development of Bacteriostatic DNA Aptamers for Salmonella. Journal of Medicinal Chemistry, 2013, 56, 1564-1572.	2.9	79
60	Multifunctional electrochemical aptasensor for aptamer clones screening, virus quantitation in blood and viability assessment. Analyst, The, 2013, 138, 1865.	1.7	17
61	Assessment of energetic costs of AhR activation by β-naphthoflavone in rainbow trout (Oncorhynchus) Tj ETQq1 86-94.	1 0.78431 1.3	.4 rgBT /Ove
62	Bioanalysis for Biocatalysis: Multiplexed Capillary Electrophoresis–Mass Spectrometry Assay for Aminotransferase Substrate Discovery and Specificity Profiling. Journal of the American Chemical Society, 2013, 135, 13728-13736.	6.6	16
63	Ultrasensitive Norovirus Detection Using DNA Aptasensor Technology. PLoS ONE, 2013, 8, e79087.	1.1	94
64	Quantitative Analysis of MicroRNA in Blood Serum with Protein-Facilitated Affinity Capillary Electrophoresis. Methods in Molecular Biology, 2013, 1039, 245-259.	0.4	4
65	Utility of kinetic capillary electrophoresis-mass spectrometry to study protein dynamics and affinity interactions. Expert Review of Proteomics, 2012, 9, 477-479.	1.3	1
66	Realâ€Time Monitoring of Protein Conformational Dynamics in Solution Using Kinetic Capillary Electrophoresis. Angewandte Chemie - International Edition, 2012, 51, 12464-12468.	7.2	35
67	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.	1.3	15
68	Viral Quantitative Capillary Electrophoresis for Counting and Quality Control of RNA Viruses. Analytical Chemistry, 2012, 84, 9585-9591.	3.2	12
69	Electrochemical Sensing of Aptamer-Facilitated Virus Immunoshielding. Analytical Chemistry, 2012, 84, 1677-1686.	3.2	43
70	Aptamer-Based Impedimetric Sensor for Bacterial Typing. Analytical Chemistry, 2012, 84, 8114-8117.	3.2	81
71	Anti-Fab Aptamers for Shielding Virus from Neutralizing Antibodies. Journal of the American Chemical Society, 2012, 134, 17168-17177.	6.6	31
72	Aptamer-Based Viability Impedimetric Sensor for Bacteria. Analytical Chemistry, 2012, 84, 8966-8969.	3.2	131

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73	Electrochemical Differentiation of Epitope-Specific Aptamers. Analytical Chemistry, 2012, 84, 2548-2556.	3.2	31
74	Aptamer-Based Viability Impedimetric Sensor for Viruses. Analytical Chemistry, 2012, 84, 1813-1816.	3.2	86
75	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.	1.2	18
76	Investigating the relationship between the gas-phase conformations and dissociation energetics of peptide–saccharide complexes. International Journal of Mass Spectrometry, 2012, 316-318, 31-39.	0.7	4
77	Revealing Equilibrium and Rate Constants of Weak and Fast Noncovalent Interactions. Analytical Chemistry, 2011, 83, 2364-2370.	3.2	47
78	Viral Quantitative Capillary Electrophoresis for Counting Intact Viruses. Analytical Chemistry, 2011, 83, 5431-5435.	3.2	22
79	Quantitative Analysis of MicroRNA in Blood Serum with Protein-Facilitated Affinity Capillary Electrophoresis. Analytical Chemistry, 2011, 83, 6196-6201.	3.2	78
80	MASKE: Macroscopic Approach to Studying Kinetics at Equilibrium. Journal of the American Chemical Society, 2010, 132, 7062-7068.	6.6	28
81	Kinetic capillary electrophoresis-based affinity screening of aptamer clones. Analytica Chimica Acta, 2009, 631, 102-107.	2.6	22
82	Selection of Smart Small-Molecule Ligands: The Proof of Principle. Analytical Chemistry, 2009, 81, 490-494.	3.2	64
83	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
84	Aptamer-Facilitated Biomarker Discovery (AptaBiD). Journal of the American Chemical Society, 2008, 130, 9137-9143.	6.6	181
85	"Inject-Mix-React-Separate-and-Quantitate―(IMReSQ) Method for Screening Enzyme Inhibitors. Journal of the American Chemical Society, 2008, 130, 11862-11863.	6.6	38
86	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.	6.6	53
87	Kinetic Capillary Electrophoresis. , 2007, , 361-380.		0
88	Non-SELEX Selection of Aptamers. Journal of the American Chemical Society, 2006, 128, 1410-1411.	6.6	225
89	Plugâ^Plug Kinetic Capillary Electrophoresis:Â Method for Direct Determination of Rate Constants of Complex Formation and Dissociation. Analytical Chemistry, 2006, 78, 4803-4810.	3.2	46
90	Reversible Photocontrol of DNA Binding by a Designed GCN4-bZIP Proteinâ€. Biochemistry, 2006, 45, 6075-6084.	1.2	94

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91	Selection of Smart Aptamers by Methods of Kinetic Capillary Electrophoresis. Analytical Chemistry, 2006, 78, 3171-3178.	3.2	120
92	Non-SELEX: selection of aptamers without intermediate amplification of candidate oligonucleotides. Nature Protocols, 2006, 1, 1359-1369.	5.5	152
93	Cell lysis inside the capillary facilitated by transverse diffusion of laminar flow profiles (TDLFP). Analytical and Bioanalytical Chemistry, 2006, 387, 91-96.	1.9	14
94	Selection of surfactants for cell lysis in chemical cytometry to study protein-DNA interactions. Electrophoresis, 2006, 27, 1489-1494.	1.3	24
95	Kinetic methods in capillary electrophoresis and their applications. , 2005, , .		0
96	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.	1.1	29
97	Selection of Smart Aptamers by Equilibrium Capillary Electrophoresis of Equilibrium Mixtures (ECEEM). Journal of the American Chemical Society, 2005, 127, 11224-11225.	6.6	132
98	Kinetic Capillary Electrophoresis (KCE):Â A Conceptual Platform for Kinetic Homogeneous Affinity Methods. Journal of the American Chemical Society, 2005, 127, 17104-17110.	6.6	136
99	Nonequilibrium Capillary Electrophoresis of Equilibrium Mixtures: A Universal Tool for Development of Aptamers. Journal of the American Chemical Society, 2005, 127, 3165-3171.	6.6	275
100	Thermochemistry of Proteinâ^'DNA Interaction Studied with Temperature-Controlled Nonequilibrium Capillary Electrophoresis of Equilibrium Mixtures. Analytical Chemistry, 2005, 77, 1526-1529.	3.2	67
101	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.	6.6	37
102	Using Nonequilibrium Capillary Electrophoresis of Equilibrium Mixtures for the Determination of Temperature in Capillary Electrophoresis. Analytical Chemistry, 2004, 76, 7114-7117.	3.2	40
103	Using DNA-Binding Proteins as an Analytical Tool. Journal of the American Chemical Society, 2003, 125, 13451-13454.	6.6	62
104	Affinity Analysis of a Proteinâ^'Aptamer Complex Using Nonequilibrium Capillary Electrophoresis of Equilibrium Mixtures. Analytical Chemistry, 2003, 75, 1382-1386.	3.2	135
105	Non-equilibrium capillary electrophoresis of equilibrium mixturesâ€"appreciation of kinetics in capillary electrophoresis. Analyst, The, 2003, 128, 571-575.	1.7	70
106	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.	6.6	178
107	Measuring the activity of farnesyltransferase by capillary electrophoresis with laser-induced fluorescence detection. Electrophoresis, 2002, 23, 3398-3403.	1.3	27
108	Photomodification of RNA and DNA fragments by oligonucleotide reagents bearing arylazide groups. Biochimie, 1993, 75, 25-27.	1.3	22