

Alexey Orlov

List of Publications by Year in descending order

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Version: 2024-02-01

47
papers

987
citations

361045

20
h-index

433756

31
g-index

48
all docs

48
docs citations

48
times ranked

706
citing authors

#	ARTICLE	IF	CITATIONS
1	Magnetic Immunoassay for Detection of Staphylococcal Toxins in Complex Media. <i>Analytical Chemistry</i> , 2013, 85, 1154-1163.	3.2	77
2	Multiplex Biosensing Based on Highly Sensitive Magnetic Nanolabel Quantification: Rapid Detection of Botulinum Neurotoxins A, B, and E in Liquids. <i>Analytical Chemistry</i> , 2016, 88, 10419-10426.	3.2	76
3	Rapid dry-reagent immunomagnetic biosensing platform based on volumetric detection of nanoparticles on 3D structures. <i>Biosensors and Bioelectronics</i> , 2016, 79, 423-429.	5.3	70
4	Rapid lateral flow assays based on the quantification of magnetic nanoparticle labels for multiplexed immunodetection of small molecules: application to the determination of drugs of abuse. <i>Mikrochimica Acta</i> , 2019, 186, 621.	2.5	67
5	Multiplex biosensing with highly sensitive magnetic nanoparticle quantification method. <i>Journal of Magnetism and Magnetic Materials</i> , 2018, 459, 260-264.	1.0	51
6	Ultrasensitive quantitative detection of small molecules with rapid lateral-flow assay based on high-affinity bifunctional ligand and magnetic nanolabels. <i>Analytica Chimica Acta</i> , 2018, 1034, 161-167.	2.6	48
7	Ultrasensitive detection enabled by nonlinear magnetization of nanomagnetic labels. <i>Nanoscale</i> , 2018, 10, 11642-11650.	2.8	48
8	Analytical Platform with Selectable Assay Parameters Based on Three Functions of Magnetic Nanoparticles: Demonstration of Highly Sensitive Rapid Quantitation of Staphylococcal Enterotoxin B in Food. <i>Analytical Chemistry</i> , 2019, 91, 9852-9857.	3.2	45
9	Highly reproducible and sensitive detection of mycotoxins by label-free biosensors. <i>Sensors and Actuators B: Chemical</i> , 2017, 246, 1080-1084.	4.0	42
10	Real-time detection of ochratoxin A in wine through insight of aptamer conformation in conjunction with graphene field-effect transistor. <i>Biosensors and Bioelectronics</i> , 2022, 200, 113890.	5.3	41
11	A new real-time method for investigation of affinity properties and binding kinetics of magnetic nanoparticles. <i>Journal of Magnetism and Magnetic Materials</i> , 2015, 380, 231-235.	1.0	39
12	Multiplex label-free biosensor for detection of autoantibodies in human serum: Tool for new kinetics-based diagnostics of autoimmune diseases. <i>Biosensors and Bioelectronics</i> , 2020, 159, 112187.	5.3	38
13	Nanomagnetic lateral flow assay for high-precision quantification of diagnostically relevant concentrations of serum TSH. <i>Talanta</i> , 2020, 216, 120961.	2.9	36
14	Reversible Conformational Transitions of a Polymer Brush Containing Boronic Acid and its Interaction with Mucin Glycoprotein. <i>Macromolecular Bioscience</i> , 2011, 11, 275-284.	2.1	31
15	Direct immunosensing by spectral correlation interferometry: assay characteristics versus antibody immobilization chemistry. <i>Analytical and Bioanalytical Chemistry</i> , 2015, 407, 3955-3964.	1.9	31
16	Express high-sensitive detection of ochratoxin A in food by a lateral flow immunoassay based on magnetic biolabels. <i>Food Chemistry</i> , 2022, 383, 132427.	4.2	27
17	Development and label-free investigation of logic-gating bilayers for smart biosensing. <i>Sensors and Actuators B: Chemical</i> , 2018, 257, 971-979.	4.0	25
18	Detection of pyrethroids by spectral correlation interferometry. <i>Applied Biochemistry and Microbiology</i> , 2013, 49, 306-311.	0.3	23

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19	Development of Immunoassays Using Interferometric Real-Time Registration of Their Kinetics. <i>Acta Naturae</i> , 2014, 6, 85-95.	1.7	22
20	Interferometric detection of chloramphenicol via its immunochemical recognition at polymer-coated nano-corrugated surfaces. <i>Sensors and Actuators B: Chemical</i> , 2019, 282, 984-991.	4.0	21
21	Nanobiosensing based on optically selected antibodies and superparamagnetic labels for rapid and highly sensitive quantification of polyvalent hepatitis B surface antigen. <i>Analytical Methods</i> , 2021, 13, 2424-2433.	1.3	19
22	Rapid and Easy-to-Use Method for Accurate Characterization of Target Binding and Kinetics of Magnetic Particle Bioconjugates for Biosensing. <i>Sensors</i> , 2021, 21, 2802.	2.1	17
23	Highly Sensitive Nanomagnetic Quantification of Extracellular Vesicles by Immunochromatographic Strips: A Tool for Liquid Biopsy. <i>Nanomaterials</i> , 2022, 12, 1579.	1.9	14
24	Spectral-Phase Interferometry Detection of Ochratoxin A via Aptamer-Functionalized Graphene Coated Glass. <i>Nanomaterials</i> , 2021, 11, 226.	1.9	13
25	Multiplex Label-Free Kinetic Characterization of Antibodies for Rapid Sensitive Cardiac Troponin I Detection Based on Functionalized Magnetic Nanotags. <i>International Journal of Molecular Sciences</i> , 2022, 23, 4474.	1.8	13
26	Effect of the C-terminal domain peptide fragment (65-76) of monocytic chemotactic protein-1 (MCP-1) on the interaction between MCP-1 and heparin. <i>Doklady Biological Sciences</i> , 2010, 433, 289-292.	0.2	6
27	Synthesis and electrochemical properties of nanocomposites containing		

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37	Smart Biolayers on Solid Phase: Rational Design and Investigation by Spectral-Phase Interferometry. , 2018, , .		1
38	Detection of Autoimmune Disease Markers by Optical Label-Free Immunosensors. , 2018, , .		1
39	High-Sensitive Analytical Systems for Rapid On-site Detection of Haptens. , 2018, , .		1
40	Biosensors based on spectral correlation interferometry for biomedical research and diagnostics. , 2014, , .		0
41	Biosensors based on magnetic nanolabels: Optimization with spectral interferometry and highly-sensitive electronic registration. , 2016, , .		0
42	Real-time sensitive detection of low molecular weight compounds by optical immunosensors. , 2016, , .		0
43	Label-Free Method for Multiplex Investigation of Dynamics of Protein-Protein Interactions. , 2018, , .		0
44	Oxidative Polymerization of 3,6-Phenylenediamino-2,5-dichlorobenzoquinone. Polymer Science - Series B, 2019, 61, 519-529.	0.3	0
45	Novel magneto-optical sensors based on anisotropic magnetic nanomaterials for detecting biological agents. , 2020, , .		0
46	Three-dimensional modular biosensor for express determination of several cardiac markers. , 2020, , .		0
47	High-sensitive immunoanalytical platform based on iron oxide nanoparticles and magnetic beads containing composite nanomaterials. , 2020, , .		0