Qiao Lin

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/5978592/publications.pdf

Version: 2024-02-01

92 papers	2,023 citations	218677 26 h-index	254184 43 g-index
92 all docs	92 docs citations	92 times ranked	2960 citing authors

#	Article	IF	Citations
1	Graphene-based fully integrated portable nanosensing system for on-line detection of cytokine biomarkers in saliva. Biosensors and Bioelectronics, 2019, 134, 16-23.	10.1	115
2	A Fast and Effective Microfluidic Spraying-Plunging Method for High-Resolution Single-Particle Cryo-EM. Structure, 2017, 25, 663-670.e3.	3.3	112
3	Real-Time Monitoring of Insulin Using a Graphene Field-Effect Transistor Aptameric Nanosensor. ACS Applied Materials & Interfaces, 2017, 9, 27504-27511.	8.0	102
4	Optical conductivity-based ultrasensitive mid-infrared biosensing on a hybrid metasurface. Light: Science and Applications, 2018, 7, 67.	16.6	98
5	Monolayer Molybdenum Disulfide Transistors with Single-Atom-Thick Gates. Nano Letters, 2018, 18, 3807-3813.	9.1	88
6	An Ultraflexible and Stretchable Aptameric Graphene Nanosensor for Biomarker Detection and Monitoring. Advanced Functional Materials, 2019, 29, 1905202.	14.9	88
7	A Flexible and Regenerative Aptameric Grapheneâ€“Nafion Biosensor for Cytokine Storm Biomarker Monitoring in Undiluted Biofluids toward Wearable Applications. Advanced Functional Materials, 2021, 31, 2005958.	14.9	86
8	A MEMS Thermal Biosensor for Metabolic Monitoring Applications. Journal of Microelectromechanical Systems, 2008, 17, 318-327.	2.5	80
9	A MEMS affinity glucose sensor using a biocompatible glucose-responsive polymer. Sensors and Actuators B: Chemical, 2009, 140, 603-609.	7.8	76
10	Measurement of cytokine biomarkers using an aptamer-based affinity graphene nanosensor on a flexible substrate toward wearable applications. Nanoscale, 2018, 10, 21681-21688.	5.6	69
11	Highâ€Îº Solidâ€€Gate Transistor Configured Graphene Biosensor with Fully Integrated Structure and Enhanced Sensitivity. Advanced Functional Materials, 2016, 26, 7668-7678.	14.9	54
12	An aptameric graphene nanosensor for label-free detection of small-molecule biomarkers. Biosensors and Bioelectronics, 2015, 71, 222-229.	10.1	53
13	A graphene-based affinity nanosensor for detection of low-charge and low-molecular-weight molecules. Nanoscale, 2016, 8, 5815-5819.	5.6	53
14	Emerging applications of aptamers to micro- and nanoscale biosensing. Microfluidics and Nanofluidics, 2009, 6, 347-362.	2.2	49
15	Hybrid Metasurface-Based Mid-Infrared Biosensor for Simultaneous Quantification and Identification of Monolayer Protein. ACS Photonics, 2019, 6, 501-509.	6.6	47
16	A graphene aptasensor for biomarker detection in human serum. Electrochimica Acta, 2018, 290, 356-363.	5.2	46
17	Measurements of aptamerâ€“protein binding kinetics using graphene field-effect transistors. Nanoscale, 2019, 11, 12573-12581.	5.6	42
18	Selective detection of water pollutants using a differential aptamer-based graphene biosensor. Biosensors and Bioelectronics, 2019, 126, 59-67.	10.1	41

#	Article	IF	Citations
19	Modulating the Linker Immobilization Density on Aptameric Graphene Field Effect Transistors Using an Electric Field. ACS Sensors, 2020, 5, 2503-2513.	7.8	40
20	An aptamer-based microfluidic device for thermally controlled affinity extraction. Microfluidics and Nanofluidics, 2009, 6, 479-487.	2.2	39
21	A Microfluidic Device for Continuous-Flow Magnetically Controlled Capture and Isolation of Microparticles. Journal of Microelectromechanical Systems, 2010, 19, 743-751.	2.5	33
22	An integrated planar magnetic micropump. Microelectronic Engineering, 2014, 117, 35-40.	2.4	32
23	A planar PDMS micropump using in-contact minimized-leakage check valves. Journal of Micromechanics and Microengineering, 2010, 20, 095033.	2.6	31
24	A Capacitive MEMS Viscometric Sensor for Affinity Detection of Glucose. Journal of Microelectromechanical Systems, 2009, 18, 1246-1254.	2.5	30
25	Blu-ray based optomagnetic aptasensor for detection of small molecules. Biosensors and Bioelectronics, 2016, 75, 396-403.	10.1	29
26	A bead-based microfluidic approach to integrated single-cell gene expression analysis by quantitative RT-PCR. RSC Advances, 2015, 5, 4886-4893.	3.6	28
27	A solid dielectric gated graphene nanosensor in electrolyte solutions. Applied Physics Letters, 2015, 106, 123503.	3.3	27
28	A Compliance-Based Microflow Stabilizer. Journal of Microelectromechanical Systems, 2009, 18, 539-546.	2.5	25
29	A dielectric affinity microbiosensor. Applied Physics Letters, 2010, 96, 033701.	3.3	24
30	Nucleic acid isolation and enrichment on a microchip. Sensors and Actuators A: Physical, 2013, 195, 183-190.	4.1	23
31	Integrated Microfluidic Isolation of Aptamers Using Electrophoretic Oligonucleotide Manipulation. Scientific Reports, 2016, 6, 26139.	3.3	22
32	A hydrogel-based glucose affinity microsensor. Sensors and Actuators B: Chemical, 2016, 237, 992-998.	7.8	22
33	A MEMS Differential-Scanning-Calorimetric Sensor for Thermodynamic Characterization of Biomolecules. Journal of Microelectromechanical Systems, 2012, 21, 1165-1171.	2.5	20
34	Microfluidic flow-free generation of chemical concentration gradients. Sensors and Actuators B: Chemical, 2014, 190, 334-341.	7.8	20
35	Thermally tunable polymer microlenses. Applied Physics Letters, 2008, 92, 251904.	3.3	19
36	Integrated Microfluidic Selex Using Free Solution Electrokinetics. Journal of the Electrochemical Society, 2017, 164, B3122-B3129.	2.9	14

#	Article	IF	Citations
37	Mathematical approaches in estimating aptamer-target binding affinity. Analytical Biochemistry, 2020, 600, 113742.	2.4	14
38	An Aptameric Microfluidic System for Specific Purification, Enrichment, and Mass Spectrometric Detection of Biomolecules. Journal of Microelectromechanical Systems, 2009, 18, 1198-1207.	2.5	13
39	A microfabrication-based approach to quantitative isothermal titration calorimetry. Biosensors and Bioelectronics, 2016, 78, 438-446.	10.1	13
40	An Integrated Microfluidic SELEX Approach Using Combined Electrokinetic and Hydrodynamic Manipulation. SLAS Technology, 2017, 22, 63-72.	1.9	12
41	A MEMS-based approach to single nucleotide polymorphism genotyping. Sensors and Actuators A: Physical, 2013, 195, 175-182.	4.1	11
42	Microcantilever-based label-free characterization of temperature-dependent biomolecular affinity binding. Sensors and Actuators B: Chemical, 2013, 176, 653-659.	7.8	11
43	A MEMS Dielectric Affinity Glucose Biosensor. Journal of Microelectromechanical Systems, 2014, 23, 14-20.	2.5	11
44	Exploiting electrostatic shielding-effect of metal nanoparticles to recognize uncharged small molecule affinity with label-free graphene electronic biosensor. Biosensors and Bioelectronics, 2019, 129, 93-99.	10.1	11
45	A Microfluidic Chip with Double-Slit Arrays for Enhanced Capture of Single Cells. Micromachines, 2018, 9, 157.	2.9	9
46	Thermally Tunable Polymer Microlenses for Biological Imaging. Journal of Microelectromechanical Systems, 2010, 19, 1444-1449.	2.5	8
47	Bead-based polymerase chain reaction on a microchip. Microfluidics and Nanofluidics, 2012, 13, 749-760.	2.2	8
48	A microfluidic approach to parallelized transcriptional profiling of single cells. Microfluidics and Nanofluidics, 2015, 19, 1429-1440.	2.2	8
49	Mathematical model for biomolecular quantification using large-area surface-enhanced Raman spectroscopy mapping. RSC Advances, 2015, 5, 85845-85853.	3.6	8
50	A MEMS differential scanning calorimeter for thermodynamic characterization of biomolecules. , 2011, , .		7
51	A mechanically tunable microfluidic cell-trapping device. Sensors and Actuators A: Physical, 2014, 215, 197-203.	4.1	7
52	A microfluidic device for multiplex single-nucleotide polymorphism genotyping. RSC Advances, 2014, 4, 4269-4277.	3.6	7
53	Isolation of thermally sensitive protein-binding oligonucleotides on a microchip. Microfluidics and Nanofluidics, 2015, 19, 795-804.	2.2	7
54	A 3D microfluidic device for carbon capture microcapsules production. , 2018, , .		7

#	Article	IF	Citations
55	Microcantilever-based label-free thermal characterization of biomolecular affinity binding. , 2010, , .		6
56	Isothermal titration calorimetry in a polymeric microdevice. Microfluidics and Nanofluidics, 2017, 21, 1.	2.2	6
57	Microfabrication-based isothermal titration calorimetry using a combined in-mixing and post-mixing titration approach. Analytical Methods, 2018, 10, 4665-4670.	2.7	6
58	Nanowires in Flexible Sensors: Structure is Becoming a Key in Controlling the Sensing Performance. Advanced Materials Technologies, 2022, 7, .	5.8	6
59	A capacitively based MEMS affinity glucose sensor. , 2009, , .		5
60	A biocompatible affinity MEMS sensor for continuous monitoring of glucose. , 2009, , .		5
61	Light-directed migration of D. discoideum slugs in microfabricated confinements. Sensors and Actuators A: Physical, 2012, 188, 312-319.	4.1	5
62	Isothermal titration calorimetry in a 3D-printed microdevice. Biomedical Microdevices, 2019, 21, 96.	2.8	5
63	A solid-gated graphene fet sensor for PH measurements. , 2015, , .		4
64	A dielectric affinity glucose microsensor using hydrogel-functionalized coplanar electrodes. Microfluidics and Nanofluidics, 2017, 21, 1.	2.2	4
65	Single-Molecule Detection in Temperature-Controlled Microchannels. , 2007, , .		3
66	Isolation of thermally sensitive aptamers on a microchip. , 2012, , .		3
67	Compliance-Based Latchable Microfluidic Actuators Using a Paraffin Wax. , 0, , .		2
68	An elastomeric polymer microchip for mechanically tunable cell trapping. , 2013, , .		2
69	Modeling of a viscometric MEMS affinity glucose sensor. , 2017, , .		2
70	An Integrated Preprocessing Approach for Exploring Single-Cell Gene Expression in Rare Cells. Scientific Reports, 2019, 9, 19758.	3.3	2
71	Surface acoustic wave-assisted microfluidic isolation of aptamers. Microfluidics and Nanofluidics, 2022, 26, .	2.2	2
72	A MEMS Nanocalorimeter for Biomolecular Characterization. , 2006, , .		1

#	Article	IF	Citations
73	A Microfluidic Affinity Cocaine Sensor. , 2009, , .		1
74	Simulation of a planar PDMS micropump using in-contact, low-leakage check valves. , 2010, , .		1
75	Specific cell capture and temperature-mediated release using surface-immobilized aptamers in a microfluidic device. , 2011, , .		1
76	A polymer-based MEMS differential scanning calorimeter. , 2014, , .		1
77	Cytokine Storm Biomarkers: A Flexible and Regenerative Aptameric Grapheneâ€“Nafion Biosensor for Cytokine Storm Biomarker Monitoring in Undiluted Biofluids toward Wearable Applications (Adv.) Tj ETQq1 1 0.784314 rgBT /Overlock	13.3	1
78	Thermally Adjustable Microlenses for Biological Imaging. , 2007, , .		0
79	A microfluidic device for pulsatile transdermal delivery for neurobiological drugs. , 2010, , .		0
80	A permittivity-based MEMS affinity glucose sensor with integrated temperature measurements. , 2010, , .		0
81	A planar PDMS micropump based on in-contact low-leakage check valves. , 2010, , .		0
82	A MEMS-based approach to detection of single nucleotide polymorphisms for genetic disorder diagnosis. , 2012, , .		0
83	Integrating aptamers and microfluidics for biological manipulation and sensing. , 2013, , .		0
84	Physical modulation based cell manipulation in microfluidic devices. , 2013, , .		0
85	Microfluidic selection of aptamers using combined electrokinetic and hydrodynamic manipulation. , 2015, , .		0
86	Real-time monitoring of insulin using a graphene aptameric nanosensor. , 2017, , .		0
87	Characterization of biomolecules using an aptamer-based graphene nanosensor. , 2017, , .		0
88	Tunable mid-infrared biosensors based on graphene metasurfaces. , 2017, , .		0
89	Differential method for undisturbed detection of 17Î²-estradiol using an integrated aptameric graphene nanosensor. , 2018, , .		0
90	A Mechanically Flexible Aptamer-Based Graphene Nanosensor for Biomarker Monitoring. , 2019, , .		0

#	Article	IF	Citations
91	Microfluidic Isolation of Aptamers for Glycan Targets. , 2019, , .		0
92	Formation and Stimuli-Directed Migration of Slugs in Microchips. Journal of Medical and Biological Engineering, 2013, 33, 263-268.	1.8	0