Qiao Lin

List of Publications by Year
in descending order

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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	Nanowires in Flexible Sensors: Structure is Becoming a Key in Controlling the Sensing Performance. Advanced Materials Technologies, 2022, 7, .	5.8	6
2	Surface acoustic wave-assisted microfluidic isolation of aptamers. Microfluidics and Nanofluidics, 2022, 26, .	2.2	2
3	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
4	Cytokine Storm Biomarkers: A Flexible and Regenerative Aptameric Grapheneâ€“Nafion Biosensor for Cytokine Storm Biomarker Monitoring in Undiluted Biofluids toward Wearable Applications (Adv.) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50	14.9	1
5	Modulating the Linker Immobilization Density on Aptameric Graphene Field Effect Transistors Using an Electric Field. ACS Sensors, 2020, 5, 2503-2513.	7.8	40
6	Mathematical approaches in estimating aptamer-target binding affinity. Analytical Biochemistry, 2020, 600, 113742.	2.4	14
7	A Mechanically Flexible Aptamer-Based Graphene Nanosensor for Biomarker Monitoring. , 2019, , .		0
8	Isothermal titration calorimetry in a 3D-printed microdevice. Biomedical Microdevices, 2019, 21, 96.	2.8	5
9	An Ultraflexible and Stretchable Aptameric Graphene Nanosensor for Biomarker Detection and Monitoring. Advanced Functional Materials, 2019, 29, 1905202.	14.9	88
10	Microfluidic Isolation of Aptamers for Glycan Targets. , 2019, , .		0
11	Hybrid Metasurface-Based Mid-Infrared Biosensor for Simultaneous Quantification and Identification of Monolayer Protein. ACS Photonics, 2019, 6, 501-509.	6.6	47
12	Measurements of aptamerâ€“protein binding kinetics using graphene field-effect transistors. Nanoscale, 2019, 11, 12573-12581.	5.6	42
13	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
14	An Integrated Preprocessing Approach for Exploring Single-Cell Gene Expression in Rare Cells. Scientific Reports, 2019, 9, 19758.	3.3	2
15	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
16	Selective detection of water pollutants using a differential aptamer-based graphene biosensor. Biosensors and Bioelectronics, 2019, 126, 59-67.	10.1	41
17	A 3D microfluidic device for carbon capture microcapsules production. , 2018, , .		7
18	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

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19	Optical conductivity-based ultrasensitive mid-infrared biosensing on a hybrid metasurface. Light: Science and Applications, 2018, 7, 67.	16.6	98
20	A Microfluidic Chip with Double-Slit Arrays for Enhanced Capture of Single Cells. Micromachines, 2018, 9, 157.	2.9	9
21	A graphene aptasensor for biomarker detection in human serum. Electrochimica Acta, 2018, 290, 356-363.	5.2	46
22	Monolayer Molybdenum Disulfide Transistors with Single-Atom-Thick Gates. Nano Letters, 2018, 18, 3807-3813.	9.1	88
23	Differential method for undisturbed detection of 17Î²-estradiol using an integrated aptameric graphene nanosensor. , 2018, , .		0
24	Microfabrication-based isothermal titration calorimetry using a combined in-mixing and post-mixing titration approach. Analytical Methods, 2018, 10, 4665-4670.	2.7	6
25	A Fast and Effective Microfluidic Spraying-Plunging Method for High-Resolution Single-Particle Cryo-EM. Structure, 2017, 25, 663-670.e3.	3.3	112
26	Real-time monitoring of insulin using a graphene aptameric nanosensor. , 2017, , .		0
27	Characterization of biomolecules using an aptamer-based graphene nanosensor. , 2017, , .		0
28	A dielectric affinity glucose microsensor using hydrogel-functionalized coplanar electrodes. Microfluidics and Nanofluidics, 2017, 21, 1.	2.2	4
29	Integrated Microfluidic Selex Using Free Solution Electrokinetics. Journal of the Electrochemical Society, 2017, 164, B3122-B3129.	2.9	14
30	Tunable mid-infrared biosensors based on graphene metasurfaces. , 2017, , .		0
31	Real-Time Monitoring of Insulin Using a Graphene Field-Effect Transistor Aptameric Nanosensor. ACS Applied Materials & Interfaces, 2017, 9, 27504-27511.	8.0	102
32	Modeling of a viscometric MEMS affinity glucose sensor. , 2017, , .		2
33	Isothermal titration calorimetry in a polymeric microdevice. Microfluidics and Nanofluidics, 2017, 21, 1.	2.2	6
34	An Integrated Microfluidic SELEX Approach Using Combined Electrokinetic and Hydrodynamic Manipulation. SLAS Technology, 2017, 22, 63-72.	1.9	12
35	Integrated Microfluidic Isolation of Aptamers Using Electrophoretic Oligonucleotide Manipulation. Scientific Reports, 2016, 6, 26139.	3.3	22
36	Highâ€Î° Solidâ€Gate Transistor Configured Graphene Biosensor with Fully Integrated Structure and Enhanced Sensitivity. Advanced Functional Materials, 2016, 26, 7668-7678.	14.9	54

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37	A hydrogel-based glucose affinity microsensor. Sensors and Actuators B: Chemical, 2016, 237, 992-998.	7.8	22
38	A graphene-based affinity nanosensor for detection of low-charge and low-molecular-weight molecules. Nanoscale, 2016, 8, 5815-5819.	5.6	53
39	A microfabrication-based approach to quantitative isothermal titration calorimetry. Biosensors and Bioelectronics, 2016, 78, 438-446.	10.1	13
40	Blu-ray based optomagnetic aptasensor for detection of small molecules. Biosensors and Bioelectronics, 2016, 75, 396-403.	10.1	29
41	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
42	Microfluidic selection of aptamers using combined electrokinetic and hydrodynamic manipulation. , 2015, , .		0
43	A solid-gated graphene fet sensor for PH measurements. , 2015, , .		4
44	Isolation of thermally sensitive protein-binding oligonucleotides on a microchip. Microfluidics and Nanofluidics, 2015, 19, 795-804.	2.2	7
45	A microfluidic approach to parallelized transcriptional profiling of single cells. Microfluidics and Nanofluidics, 2015, 19, 1429-1440.	2.2	8
46	An aptameric graphene nanosensor for label-free detection of small-molecule biomarkers. Biosensors and Bioelectronics, 2015, 71, 222-229.	10.1	53
47	Mathematical model for biomolecular quantification using large-area surface-enhanced Raman spectroscopy mapping. RSC Advances, 2015, 5, 85845-85853.	3.6	8
48	A solid dielectric gated graphene nanosensor in electrolyte solutions. Applied Physics Letters, 2015, 106, 123503.	3.3	27
49	A polymer-based MEMS differential scanning calorimeter. , 2014, , .		1
50	An integrated planar magnetic micropump. Microelectronic Engineering, 2014, 117, 35-40.	2.4	32
51	A mechanically tunable microfluidic cell-trapping device. Sensors and Actuators A: Physical, 2014, 215, 197-203.	4.1	7
52	A MEMS Dielectric Affinity Glucose Biosensor. Journal of Microelectromechanical Systems, 2014, 23, 14-20.	2.5	11
53	A microfluidic device for multiplex single-nucleotide polymorphism genotyping. RSC Advances, 2014, 4, 4269-4277.	3.6	7
54	Microfluidic flow-free generation of chemical concentration gradients. Sensors and Actuators B: Chemical, 2014, 190, 334-341.	7.8	20

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55	Integrating aptamers and microfluidics for biological manipulation and sensing. , 2013, , .		0
56	Nucleic acid isolation and enrichment on a microchip. Sensors and Actuators A: Physical, 2013, 195, 183-190.	4.1	23
57	An elastomeric polymer microchip for mechanically tunable cell trapping. , 2013, , .		2
58	A MEMS-based approach to single nucleotide polymorphism genotyping. Sensors and Actuators A: Physical, 2013, 195, 175-182.	4.1	11
59	Microcantilever-based label-free characterization of temperature-dependent biomolecular affinity binding. Sensors and Actuators B: Chemical, 2013, 176, 653-659.	7.8	11
60	Physical modulation based cell manipulation in microfluidic devices. , 2013, , .		0
61	Formation and Stimuli-Directed Migration of Slugs in Microchips. Journal of Medical and Biological Engineering, 2013, 33, 263-268.	1.8	0
62	A MEMS Differential-Scanning-Calorimetric Sensor for Thermodynamic Characterization of Biomolecules. Journal of Microelectromechanical Systems, 2012, 21, 1165-1171.	2.5	20
63	Bead-based polymerase chain reaction on a microchip. Microfluidics and Nanofluidics, 2012, 13, 749-760.	2.2	8
64	Light-directed migration of D. discoideum slugs in microfabricated confinements. Sensors and Actuators A: Physical, 2012, 188, 312-319.	4.1	5
65	Isolation of thermally sensitive aptamers on a microchip. , 2012, , .		3
66	A MEMS-based approach to detection of single nucleotide polymorphisms for genetic disorder diagnosis. , 2012, , .		0
67	A MEMS differential scanning calorimeter for thermodynamic characterization of biomolecules. , 2011, , .		7
68	Specific cell capture and temperature-mediated release using surface-immobilized aptamers in a microfluidic device. , 2011, , .		1
69	A microfluidic device for pulsatile transdermal delivery for neurobiological drugs. , 2010, , .		0
70	Simulation of a planar PDMS micropump using in-contact, low-leakage check valves. , 2010, , .		1
71	A planar PDMS micropump using in-contact minimized-leakage check valves. Journal of Micromechanics and Microengineering, 2010, 20, 095033.	2.6	31
72	Thermally Tunable Polymer Microlenses for Biological Imaging. Journal of Microelectromechanical Systems, 2010, 19, 1444-1449.	2.5	8

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73	A permittivity-based MEMS affinity glucose sensor with integrated temperature measurements. , 2010, , .		0
74	Microcantilever-based label-free thermal characterization of biomolecular affinity binding. , 2010, , .		6
75	A planar PDMS micropump based on in-contact low-leakage check valves. , 2010, , .		0
76	A dielectric affinity microbiosensor. Applied Physics Letters, 2010, 96, 033701.	3.3	24
77	A Microfluidic Device for Continuous-Flow Magnetically Controlled Capture and Isolation of Microparticles. Journal of Microelectromechanical Systems, 2010, 19, 743-751.	2.5	33
78	A Microfluidic Affinity Cocaine Sensor. , 2009, , .		1
79	A capacitively based MEMS affinity glucose sensor. , 2009, , .		5
80	An aptamer-based microfluidic device for thermally controlled affinity extraction. Microfluidics and Nanofluidics, 2009, 6, 479-487.	2.2	39
81	Emerging applications of aptamers to micro- and nanoscale biosensing. Microfluidics and Nanofluidics, 2009, 6, 347-362.	2.2	49
82	A MEMS affinity glucose sensor using a biocompatible glucose-responsive polymer. Sensors and Actuators B: Chemical, 2009, 140, 603-609.	7.8	76
83	A Compliance-Based Microflow Stabilizer. Journal of Microelectromechanical Systems, 2009, 18, 539-546.	2.5	25
84	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
85	A Capacitive MEMS Viscometric Sensor for Affinity Detection of Glucose. Journal of Microelectromechanical Systems, 2009, 18, 1246-1254.	2.5	30
86	A biocompatible affinity MEMS sensor for continuous monitoring of glucose. , 2009, , .		5
87	A MEMS Thermal Biosensor for Metabolic Monitoring Applications. Journal of Microelectromechanical Systems, 2008, 17, 318-327.	2.5	80
88	Thermally tunable polymer microlenses. Applied Physics Letters, 2008, 92, 251904.	3.3	19
89	Single-Molecule Detection in Temperature-Controlled Microchannels. , 2007, , .		3
90	Thermally Adjustable Microlenses for Biological Imaging. , 2007, , .		0

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91	A MEMS Nanocalorimeter for Biomolecular Characterization. , 2006, , .		1
92	Compliance-Based Latchable Microfluidic Actuators Using a Paraffin Wax. , 0, , .		2