Takao Yasui

List of Publications by Year
in descending order

74 papers	1,547 citations	331670 21 h-index	330143 37 g-index
74 all docs	74 docs citations	74 times ranked	1940 citing authors

#	Article	IF	Citations
1	Water-Selective Nanostructured Dehumidifiers for Molecular Sensing Spaces. ACS Sensors, 2022, 7, 534-544.	7.8	3
2	Tailoring ZnO nanowire crystallinity and morphology for label-free capturing of extracellular vesicles. Nanoscale, 2022, 14, 4484-4494.	5.6	9
3	Breath odor-based individual authentication by an artificial olfactory sensor system and machine learning. Chemical Communications, 2022, 58, 6377-6380.	4.1	9
4	The impact of surface Cu²⁺ of ZnO/(Cu_{1â^'x}Zn_x)O heterostructured nanowires on the adsorption and chemical transformation of carbonyl compounds. Chemical Science, 2021, 12, 5073-5081.	7.4	5
5	Rational Strategy for Space-Confined Seeded Growth of ZnO Nanowires in Meter-Long Microtubes. ACS Applied Materials & Interfaces, 2021, 13, 16812-16819.	8.0	4
6	Nanobiodevices for the Isolation of Circulating Nucleic Acid for Biomedical Applications. Chemistry Letters, 2021, 50, 1244-1253.	1.3	5
7	Comprehensive analysis of extracellular vesicle miRNA in urine using nanowire devices and AI, and its application to cancer detection. Drug Delivery System, 2021, 36, 124-129.	0.0	0
8	Microheater-integrated zinc oxide nanowire microfluidic device for hybridization-based detection of target single-stranded DNA. Nanotechnology, 2021, 32, 255301.	2.6	6
9	Urinary MicroRNA-Based Diagnostic Model for Central Nervous System Tumors Using Nanowire Scaffolds. ACS Applied Materials & Interfaces, 2021, 13, 17316-17329.	8.0	27
10	Rapid Discrimination of Extracellular Vesicles by Shape Distribution Analysis. Analytical Chemistry, 2021, 93, 7037-7044.	6.5	15
11	Fabrication of a Robust In2O3 Nanolines FET Device as a Biosensor Platform. Micromachines, 2021, 12, 642.	2.9	8
12	Annealed ZnO/Al2O3 Core-Shell Nanowire as a Platform to Capture RNA in Blood Plasma. Nanomaterials, 2021, 11, 1768.	4.1	5
13	Oxide Nanowire Microfluidic Devices for Capturing Single-stranded DNAs. Analytical Sciences, 2021, 37, 1139-1145.	1.6	7
14	Molecular profiling of extracellular vesicles via charge-based capture using oxide nanowire microfluidics. Biosensors and Bioelectronics, 2021, 194, 113589.	10.1	15
15	A thermally robust and strongly oxidizing surface of WO₃hydrate nanowires for electrical aldehyde sensing with long-term stability. Journal of Materials Chemistry A, 2021, 9, 5815-5824.	10.3	11
16	ZnO/SiO₂ core/shell nanowires for capturing CpG rich single-stranded DNAs. Analytical Methods, 2021, 13, 337-344.	2.7	4
17	Microfluidic-based capture and release of cancer-derived exosomes via peptideâ€"nanowire hybrid interface. Lab on A Chip, 2021, 21, 597-607.	6.0	56
18	Oxide nanowire microfluidics addressing previously-unattainable analytical methods for biomolecules towards liquid biopsy. Chemical Communications, 2021, 57, 13234-13245.	4.1	10

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19	Mechanical Low-Pass Filtering of Cells for Detection of Circulating Tumor Cells in Whole Blood. Analytical Chemistry, 2020, 92, 2483-2491.	6.5	13
20	Synthesis of Monodispersedly Sized ZnO Nanowires from Randomly Sized Seeds. Nano Letters, 2020, 20, 599-605.	9.1	40
21	Silica Nanopillar Arrays for Monitoring Diffraction-Based Label-Free Biomolecule Separation. ACS Applied Nano Materials, 2020, 3, 8810-8816.	5.0	6
22	Face-selective tungstate ions drive zinc oxide nanowire growth direction and dopant incorporation. Communications Materials, 2020, 1, .	6.9	12
23	Ammonia-Induced Seed Layer Transformations in a Hydrothermal Growth Process of Zinc Oxide Nanowires. Journal of Physical Chemistry C, 2020, 124, 20563-20568.	3.1	18
24	Developing spray-freeze-dried particles containing a hyaluronic acid-coated liposomeâ€“protamineâ€“DNA complex for pulmonary inhalation. International Journal of Pharmaceutics, 2020, 583, 119338.	5.2	29
25	A Method to Analyze Urinary Extracellular Vesicles. Analytical Sciences, 2020, 36, 791-798.	1.6	4
26	Monovalent sulfur oxoanions enable millimeter-long single-crystalline h-WO₃ nanowire synthesis. Nanoscale, 2020, 12, 9058-9066.	5.6	7
27	Mechanical Rupture-Based Antibacterial and Cell-Compatible ZnO/SiO2 Nanowire Structures Formed by Bottom-Up Approaches. Micromachines, 2020, 11, 610.	2.9	17
28	Photolithographically Constructed Single ZnO Nanowire Device and Its Ultraviolet Photoresponse. Analytical Sciences, 2020, 36, 1125-1129.	1.6	7
29	Preparation of Horizontal Miniature TLC Developing Chamber for Ultra-thin Layer Chromatography. Bunseki Kagaku, 2020, 69, 553-558.	0.2	0
30	Substantial Narrowing on the Width of â€œConcentration Windowâ€•of Hydrothermal ZnO Nanowires via Ammonia Addition. Scientific Reports, 2019, 9, 14160.	3.3	33
31	Microfluidic Mechanotyping of a Single Cell with Two Consecutive Constrictions of Different Sizes and an Electrical Detection System. Analytical Chemistry, 2019, 91, 12890-12899.	6.5	9
32	Waterâ€“Organic Cosolvent Effect on Nucleation of Solution-Synthesized ZnO Nanowires. ACS Omega, 2019, 4, 8299-8304.	3.5	10
33	Micro- and Nanopillar Chips for Continuous Separation of Extracellular Vesicles. Analytical Chemistry, 2019, 91, 6514-6521.	6.5	30
34	Rational Method of Monitoring Molecular Transformations on Metal-Oxide Nanowire Surfaces. Nano Letters, 2019, 19, 2443-2449.	9.1	21
35	Engineering Nanowire-Mediated Cell Lysis for Microbial Cell Identification. ACS Nano, 2019, 13, 2262-2273.	14.6	17
36	PATH-36. MACHINE LEARNING TO DETECT GLIOMAS IN URINE-BASED LIQUID BIOPSY. Neuro-Oncology, 2019, 21, vi151-vi151.	1.2	0

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37	Cancer Diagnosis Using Nanowire Devices. Journal of the Japan Society for Precision Engineering, 2019, 85, 757-760.	0.1	0
38	A real-time simultaneous measurement on a microfluidic device for individual bacteria discrimination. Sensors and Actuators B: Chemical, 2018, 260, 746-752.	7.8	17
39	Robust Ionic Current Sensor for Bacterial Cell Size Detection. ACS Sensors, 2018, 3, 574-579.	7.8	13
40	Imaging of angiogenesis of human umbilical vein endothelial cells by uptake of exosomes secreted from hepatocellular carcinoma cells. Scientific Reports, 2018, 8, 6765.	3.3	56
41	Effect of Channel Geometry on Ionic Current Signal of a Bridge Circuit Based Microfluidic Channel. Chemistry Letters, 2018, 47, 350-353.	1.3	5
42	Collection and Sensing of PM2.5 in Microfluidic Devices. , 2018, , .		0
43	PM_{2.5} Particle Detection in a Microfluidic Device by Using Ionic Current Sensing. Analytical Sciences, 2018, 34, 1347-1349.	1.6	6
44	Biomolecular recognition on nanowire surfaces modified by the self-assembled monolayer. Lab on A Chip, 2018, 18, 3225-3229.	6.0	15
45	Quantitative Evaluation of Dielectric Breakdown of Silicon Micro- and Nanofluidic Devices for Electrophoretic Transport of a Single DNA Molecule. Micromachines, 2018, 9, 180.	2.9	3
46	A millisecond micro-RNA separation technique by a hybrid structure of nanopillars and nanoslits. Scientific Reports, 2017, 7, 43877.	3.3	13
47	Optimization of the nanofluidic design for label-free detection of biomolecules using a nanowall array. Sensors and Actuators B: Chemical, 2017, 250, 39-43.	7.8	10
48	Substantial Expansion of Detectable Size Range in Ionic Current Sensing through Pores by Using a Microfluidic Bridge Circuit. Journal of the American Chemical Society, 2017, 139, 14137-14142.	13.7	39
49	Unveiling massive numbers of cancer-related urinary-microRNA candidates via nanowires. Science Advances, 2017, 3, e1701133.	10.3	170
50	Discriminating single-bacterial shape using low-aspect-ratio pores. Scientific Reports, 2017, 7, 17371.	3.3	58
51	Effect of DNA Methylation on the Velocity of DNA Translocation through a Nanochannel. Analytical Sciences, 2017, 33, 727-730.	1.6	1
52	Nanostructures Integrated with a Nanochannel for Slowing Down DNA Translocation Velocity for Nanopore Sequencing. Analytical Sciences, 2017, 33, 735-738.	1.6	1
53	Understanding the formation mechanism of lipid nanoparticles in microfluidic devices with chaotic micromixers. PLoS ONE, 2017, 12, e0187962.	2.5	96
54	Microfluidic Autologous Serum Eye-Drops Preparation as a Potential Dry Eye Treatment. Micromachines, 2016, 7, 113.	2.9	1

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55	Identifying DNA methylation in a nanochannel. Science and Technology of Advanced Materials, 2016, 17, 644-649.	6.1	11
56	Label-free detection of real-time DNA amplification using a nanofluidic diffraction grating. Scientific Reports, 2016, 6, 31642.	3.3	19
57	Recent developments in nanowires for bio-applications from molecular to cellular levels. Lab on A Chip, 2016, 16, 1126-1138.	6.0	43
58	Self-assembled Nanowire Arrays as Three-dimensional Nanopores for Filtration of DNA Molecules. Analytical Sciences, 2015, 31, 153-157.	1.6	13
59	Micropillars Fabricated on Poly(methyl methacrylate) Substrates for Separation of Microscale Objects. Analytical Sciences, 2015, 31, 1197-1200.	1.6	1
60	Nanobiodevice-based Single Cell Analysis and Single Biomolecule Analysis. Bunseki Kagaku, 2015, 64, 413-419.	0.2	4
61	Three-dimensional Nanowire Structures for Ultra-Fast Separation of DNA, Protein and RNA Molecules. Scientific Reports, 2015, 5, 10584.	3.3	39
62	A strategy for synthesis of lipid nanoparticles using microfluidic devices with a mixer structure. RSC Advances, 2015, 5, 46181-46185.	3.6	74
63	Arrangement of a Nanostructure Array To Control Equilibrium and Nonequilibrium Transports of Macromolecules. Nano Letters, 2015, 15, 3445-3451.	9.1	18
64	Nanopillar, Nanowall, and Nanowire Devices for Fast Separation of Biomolecules. Israel Journal of Chemistry, 2014, 54, 1556-1563.	2.3	7
65	Ultrafast and Wide Range Analysis of DNA Molecules Using Rigid Network Structure of Solid Nanowires. Scientific Reports, 2014, 4, 5252.	3.3	54
66	Nanopillar array chip integrated with on-line stacking for fast DNA separation with high sensitivity and high resolution. Microfluidics and Nanofluidics, 2013, 14, 961-967.	2.2	12
67	Enzyme-catalysed reaction for long-term fluorescent observation of single DNA molecules. RSC Advances, 2013, 3, 3237.	3.6	1
68	Nanobiodevices for Biomolecule Analysis and Imaging. Annual Review of Analytical Chemistry, 2013, 6, 83-96.	5.4	24
69	DNA Manipulation and Separation in Sublithographic-Scale Nanowire Array. ACS Nano, 2013, 7, 3029-3035.	14.6	61
70	Confocal Microscopic Evaluation of Mixing Performance for Three-Dimensional Microfluidic Mixer. Analytical Sciences, 2012, 28, 57.	1.6	10
71	Inkjet Injection of DNA Droplets for Microchannel Array Electrophoresis. Analytical Chemistry, 2012, 84, 9282-9286.	6.5	22
72	Microfluidic baker's transformation device for three-dimensional rapid mixing. Lab on A Chip, 2011, 11, 3356.	6.0	48

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73	Electroosmotic Flow in Microchannels with Nanostructures. ACS Nano, 2011, 5, 7775-7780.	14.6	46
74	DNA Separation in Nanowall Array Chips. Analytical Chemistry, 2011, 83, 6635-6640.	6.5	64