

# Sung Yang

## List of Publications by Year in descending order

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Version: 2024-02-01

67  
papers

1,989  
citations

218677

26  
h-index

243625

44  
g-index

68  
all docs

68  
docs citations

68  
times ranked

2813  
citing authors

#	ARTICLE	IF	CITATIONS
1	A microfluidic device for continuous, real time blood plasma separation. <i>Lab on A Chip</i> , 2006, 6, 871-880.	6.0	399
2	A rapid, sensitive and selective electrochemical biosensor with concanavalin A for the preemptive detection of norovirus. <i>Biosensors and Bioelectronics</i> , 2015, 64, 338-344.	10.1	99
3	Highly Stable Liquid Metal-Based Pressure Sensor Integrated with a Microfluidic Channel. <i>Sensors</i> , 2015, 15, 11823-11835.	3.8	97
4	Fabrication method and characterization of electrodeposited and heat-treated iridium oxide films for pH sensing. <i>Sensors and Actuators B: Chemical</i> , 2014, 196, 31-38.	7.8	80
5	Surface modification of PDMS by atmospheric-pressure plasma-enhanced chemical vapor deposition and analysis of long-lasting surface hydrophilicity. <i>Sensors and Actuators B: Chemical</i> , 2012, 162, 425-434.	7.8	65
6	A microfluidic device for label-free detection of <i>Escherichia coli</i> in drinking water using positive dielectrophoretic focusing, capturing, and impedance measurement. <i>Biosensors and Bioelectronics</i> , 2015, 74, 1011-1015.	10.1	64
7	Effects of Aggregation on Blood Sedimentation and Conductivity. <i>PLoS ONE</i> , 2015, 10, e0129337.	2.5	61
8	Electrochemical detection of methylated DNA on a microfluidic chip with nanoelectrokinetic pre-concentration. <i>Biosensors and Bioelectronics</i> , 2018, 107, 103-110.	10.1	60
9	A Highly Accurate and Consistent Microfluidic Viscometer for Continuous Blood Viscosity Measurement. <i>Artificial Organs</i> , 2010, 34, 944-949.	1.9	57
10	A Solid-State Thin-Film Ag/AgCl Reference Electrode Coated with Graphene Oxide and Its Use in a pH Sensor. <i>Sensors</i> , 2015, 15, 6469-6482.	3.8	57
11	A Chemically Synthesized Capture Agent Enables the Selective, Sensitive, and Robust Electrochemical Detection of Anthrax Protective Antigen. <i>ACS Nano</i> , 2013, 7, 9452-9460.	14.6	56
12	Stretchable Multichannel Electromyography Sensor Array Covering Large Area for Controlling Home Electronics with Distinguishable Signals from Multiple Muscles. <i>ACS Applied Materials &amp; Interfaces</i> , 2016, 8, 21070-21076.	8.0	53
13	Fluidic low pass filter for hydrodynamic flow stabilization in microfluidic environments. <i>Lab on A Chip</i> , 2012, 12, 1881.	6.0	51
14	Integrated microfluidic viscometer equipped with fluid temperature controller for measurement of viscosity in complex fluids. <i>Microfluidics and Nanofluidics</i> , 2013, 14, 657-668.	2.2	49
15	Blood Plasma Separation in Microfluidic Channels Using Flow Rate Control. <i>ASAIO Journal</i> , 2005, 51, 585-590.	1.6	37
16	On-chip Extraction of Intracellular Molecules in White Blood Cells from Whole Blood. <i>Scientific Reports</i> , 2015, 5, 15167.	3.3	36
17	MATE-Seq: microfluidic antigen-TCR engagement sequencing. <i>Lab on A Chip</i> , 2019, 19, 3011-3021.	6.0	36
18	Association between dyslipidemia and serum uric acid levels in Korean adults: Korea National Health and Nutrition Examination Survey 2016-2017. <i>PLoS ONE</i> , 2020, 15, e0228684.	2.5	36

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19	Micro-Viscometer for Measuring Shear-Varying Blood Viscosity over a Wide-Ranging Shear Rate. <i>Sensors</i> , 2017, 17, 1442.	3.8	35
20	A physiometer for simultaneous measurement of whole blood viscosity and its determinants: hematocrit and red blood cell deformability. <i>Analyst, The</i> , 2019, 144, 3144-3157.	3.5	35
21	Electrochemical impedance spectroscopy of blood for sensitive detection of blood hematocrit, sedimentation and dielectric properties. <i>Analytical Methods</i> , 2017, 9, 3302-3313.	2.7	34
22	Association Between Renin-Angiotensin-Aldosterone System Inhibitors and COVID-19 Infection in South Korea. <i>Hypertension</i> , 2020, 76, 742-749.	2.7	33
23	Improvement of electrical blood hematocrit measurements under various plasma conditions using a novel hematocrit estimation parameter. <i>Biosensors and Bioelectronics</i> , 2012, 35, 416-420.	10.1	31
24	Continuous cytometric bead processing within a microfluidic device for bead based sensing platforms. <i>Lab on A Chip</i> , 2007, 7, 588-595.	6.0	28
25	A Microfluidic Device for Continuous White Blood Cell Separation and Lysis From Whole Blood. <i>Artificial Organs</i> , 2010, 34, 996-1002.	1.9	27
26	Continuous, rapid concentration of foodborne bacteria (Staphylococcus aureus, Salmonella) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 467 T Control, 2020, 114, 107229.	5.5	27
27	Topology optimization of the shear thinning non-Newtonian fluidic systems for minimizing wall shear stress. <i>Computers and Mathematics With Applications</i> , 2014, 67, 1154-1170.	2.7	26
28	A fully integrated bacterial pathogen detection system based on count-on-a-cartridge platform for rapid, ultrasensitive, highly accurate and culture-free assay. <i>Biosensors and Bioelectronics</i> , 2020, 152, 112007.	10.1	21
29	Hydrogen Ion Sensing Using Schottky Contacted Silicon Nanowire FETs. <i>IEEE Nanotechnology Magazine</i> , 2008, 7, 745-748.	2.0	20
30	Microfluidic Devices for Continuous Blood Plasma Separation and Analysis During Pediatric Cardiopulmonary Bypass Procedures. <i>ASAIO Journal</i> , 2006, 52, 698-704.	1.6	19
31	Facile method for constructing an effective electron transfer mediating layer using ferrocene-containing multifunctional redox copolymer. <i>Electrochimica Acta</i> , 2014, 133, 40-48.	5.2	18
32	Rapid Detection of Norovirus from Fresh Lettuce Using Immunomagnetic Separation and a Quantum Dots Assay. <i>Journal of Food Protection</i> , 2013, 76, 707-711.	1.7	17
33	Experimental Investigation of Pulsatility Effect on the Deformability and Hemolysis of Blood Cells. <i>Artificial Organs</i> , 2010, 34, E103-9.	1.9	16
34	A single snapshot multiplex immunoassay platform utilizing dense test lines based on engineered beads. <i>Biosensors and Bioelectronics</i> , 2021, 190, 113388.	10.1	16
35	Fabrication of PDMS through-holes using the MIMIC method and the surface treatment by atmospheric-pressure CH <sub>4</sub> /He RF plasma. <i>Journal of Micromechanics and Microengineering</i> , 2011, 21, 097001.	2.6	15
36	On-Chip Parylene-C Microstencil for Simple-to-Use Patterning of Proteins and Cells on Polydimethylsiloxane. <i>ACS Applied Materials &amp; Interfaces</i> , 2013, 5, 2658-2668.	8.0	15

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37	Improvement of the accuracy of continuous hematocrit measurement under various blood flow conditions. <i>Applied Physics Letters</i> , 2014, 104, .	3.3	15
38	The Effect of Pulsatile Versus Nonpulsatile Blood Flow on Viscoelasticity and Red Blood Cell Aggregation in Extracorporeal Circulation. <i>Korean Journal of Thoracic and Cardiovascular Surgery</i> , 2016, 49, 145-150.	0.6	15
39	Continuous cell cross over and lysis in a microfluidic device. <i>Microfluidics and Nanofluidics</i> , 2010, 8, 695-701.	2.2	13
40	High-density immobilization of antibodies onto nanobead-coated cyclic olefin copolymer plastic surfaces for application as a sensitive immunoassay chip. <i>Biomedical Microdevices</i> , 2013, 15, 691-698.	2.8	13
41	Effects of osmolality and solutes on the morphology of red blood cells according to three-dimensional refractive index tomography. <i>PLoS ONE</i> , 2021, 16, e0262106.	2.5	13
42	Electrochemical impedance spectroscopy of blood. Part 3: a study of the correlation between blood conductivity and sedimentation to shorten the erythrocyte sedimentation rate test. <i>Analytical Methods</i> , 2018, 10, 180-189.	2.7	10
43	Bead Packing and Release Using Flexible Polydimethylsiloxane Membrane for Semi-Continuous Biosensing. <i>Artificial Organs</i> , 2011, 35, E136-44.	1.9	8
44	Association between hemoglobin variability and incidence of hypertension over 40 years: a Korean national cohort study. <i>Scientific Reports</i> , 2020, 10, 12061.	3.3	8
45	Effect of aspirin on coronavirus disease 2019. <i>Medicine (United States)</i> , 2021, 100, e26670.	1.0	8
46	Electrochemical impedance spectroscopy of blood. Part 2: numerical analysis of experimental dielectric spectra using the biconcave shape of human erythrocytes. <i>Analytical Methods</i> , 2018, 10, 168-179.	2.7	6
47	Rapid bacteria-detection platform based on magnetophoretic concentration, dielectrophoretic separation, and impedimetric detection. <i>Analytica Chimica Acta</i> , 2021, 1173, 338696.	5.4	6
48	A movable polymeric microneedle array actuated by thermopneumatic force. <i>Sensors and Actuators A: Physical</i> , 2016, 237, 128-135.	4.1	5
49	Temperature Correction to Enhance Blood Glucose Monitoring Accuracy Using Electrical Impedance Spectroscopy. <i>Sensors</i> , 2020, 20, 6231.	3.8	5
50	Electrochemical Impedance Characterization of Blood Cell Suspensions—Part 2: Three-Phase Systems With Single-Shelled Particles. <i>IEEE Transactions on Biomedical Engineering</i> , 2020, 67, 2979-2989.	4.2	5
51	Sensitive electrochemical immunosensor to detect prohibitin 2, a potential blood cancer biomarker. <i>Talanta</i> , 2022, 238, 123053.	5.5	5
52	Penn State Hershey—Center for Pediatric Cardiovascular Research. <i>Artificial Organs</i> , 2009, 33, 883-887.	1.9	4
53	Field enhancement factor and optimal emitter density in a nanowall array. <i>Carbon</i> , 2014, 75, 289-298.	10.3	4
54	Association between long-term hemoglobin variability and mortality in Korean adults: a nationwide population-based cohort study. <i>Scientific Reports</i> , 2019, 9, 17285.	3.3	4

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55	Electrochemical Impedance Characterization of Blood Cell Suspensions. Part 1: Basic Theory and Application to Two-Phase Systems. IEEE Transactions on Biomedical Engineering, 2020, 67, 2965-2978.	4.2	4
56	A microfluidic-based lid device for conventional cell culture dishes to automatically control oxygen level. BioTechniques, 2018, 64, 231-234.	1.8	3
57	Pediatric cardiopulmonary bypass circuits: a review of studies conducted at the Penn State Pediatric Cardiac Research Laboratories. Journal of Extra-Corporeal Technology, 2009, 41, P50-8.	0.4	3
58	The Effects of Intravenous Fluid Viscosity on the Accuracy of Intravenous Infusion Flow Regulators. Journal of Korean Medical Science, 2022, 37, e71.	2.5	2
59	Viscosity measurement using hydrodynamic diverging chamber and digital counting in microfluidic channels. , 2010, , .		1
60	Special issue on BioMEMS. Biomedical Engineering Letters, 2012, 2, 69-70.	4.1	1
61	Protein patterning utilizing region-specific control of wettability by surface modification under atmospheric pressure. Applied Physics Letters, 2013, 103, 123701.	3.3	1
62	Microfluidic Single-Cell Proteomics Assay Chip: Lung Cancer Cell Line Case Study. Micromachines, 2021, 12, 1147.	2.9	1
63	Silica nanochannel device for pH sensing based on surface charge density changes. , 2010, , .		0
64	Impedance measurement of normal and cancerous human breast cells using a microfluidic tunnel. , 2010, , .		0
65	PDMS through-hole fabrication by soft lithography using CH. , 2011, , .		0
66	Field enhancement factor for the floating sphere model of the nanotube array in parallel-plate geometry. , 2012, , .		0
67	Improved Erythrocyte Deformability Induced by Sodium-Glucose Cotransporter 2 Inhibitors in Type 2 Diabetic Patients. Cardiovascular Drugs and Therapy, 2022, 36, 59-67.	2.6	0