Tzuen-Rong Tzeng

List of Publications by Year
in descending order

59 papers	1,485 citations	331259 21 h-index	315357 38 g-index
59 all docs	59 docs citations	59 times ranked	1865 citing authors

#	Article	IF	Citations
1	Single-walled carbon nanotubes displaying multivalent ligands for capturing pathogens. Chemical Communications, 2005, , 874.	2.2	129
2	Microfluidic separation of live and dead yeast cells using reservoir-based dielectrophoresis. Biomicrofluidics, 2012, 6, 34102.	1.2	111
3	Magnetic separation of particles and cells in ferrofluid flow through a straight microchannel using two offset magnets. Journal of Magnetism and Magnetic Materials, 2013, 346, 118-123.	1.0	109
4	DC dielectrophoretic focusing of particles in a serpentine microchannel. Microfluidics and Nanofluidics, 2009, 7, 751-756.	1.0	94
5	Distinguishing the viability of a single yeast cell with an ultra-sensitive radio frequency sensor. Lab on A Chip, 2010, 10, 553.	3.1	94
6	Continuous dielectrophoretic separation of particles in a spiral microchannel. Electrophoresis, 2010, 31, 1382-1388.	1.3	72
7	Electrokinetic focusing and filtration of cells in a serpentine microchannel. Biomicrofluidics, 2009, 3, 44109.	1.2	69
8	Continuous-flow particle and cell separations in a serpentine microchannel via curvature-induced dielectrophoresis. Microfluidics and Nanofluidics, 2011, 11, 743-752.	1.0	55
9	Effect of laser fluence in laserâ€assisted direct writing of human colon cancer cell. Rapid Prototyping Journal, 2010, 16, 202-208.	1.6	54
10	Magnetic concentration of particles and cells in ferrofluid flow through a straight microchannel using attracting magnets. Microfluidics and Nanofluidics, 2013, 15, 49-55.	1.0	48
11	Development of Luminescent pH Sensor Films for Monitoring Bacterial Growth Through Tissue. Advanced Healthcare Materials, 2014, 3, 197-204.	3.9	48
12	Three-dimensional magnetic focusing of particles and cells in ferrofluid flow through a straight microchannel. Journal of Micromechanics and Microengineering, 2012, 22, 105018.	1.5	45
13	Identification of four structural genes and two putative promoters necessary for utilization of phenanthrene naphthalene, fluoranthene, and by Sphingomonas paucimobilis var. EPA505.. Gene, 2000, 260, 155-169.	1.0	43
14	Effect of laser fluence on yeast cell viability in laser-assisted cell transfer. Journal of Applied Physics, 2009, 106, .	1.1	43
15	Integrated electrical concentration and lysis of cells in a microfluidic chip. Biomicrofluidics, 2010, 4, 044101.	1.2	38
16	Visualizing Adhesion-Induced Agglutination of Escherichia coli with Mannosylated Nanoparticles. Journal of Nanoscience and Nanotechnology, 2005, 5, 319-322.	0.9	34
17	Electrokinetic preconcentration of particles and cells in microfluidic reservoirs. Analyst, The, 2015, 140, 2869-2875.	1.7	33
18	Exploiting magnetic asymmetry to concentrate diamagnetic particles in ferrofluid microflows. Journal of Applied Physics, 2014, 115, 044907.	1.1	28

#	Article	IF	Citations
19	Multianchored Glycoconjugateâ€Functionalized Magnetic Nanoparticles: A Tool for Selective Killing of Targeted Bacteria via Alternating Magnetic Fields. Advanced Functional Materials, 2017, 27, 1701473.	7.8	27
20	The Antibacterial Effects of Biphasic Brookite-Anatase Titanium Dioxide Nanoparticles on Multiple-Drug-Resistant <I>Staphylococcus aureus</I>. Journal of Biomedical Nanotechnology, 2008, 4, 339-348.	0.5	22
21	A quantitative structureâ€“activity relationship (QSAR) study on glycan array data to determine the specificities of glycan-binding proteins. Glycobiology, 2012, 22, 552-560.	1.3	22
22	AC Insulator-Based Dielectrophoretic Focusing of Particles and Cells in an â€œInfiniteâ€•Microchannel. Analytical Chemistry, 2021, 93, 5947-5953.	3.2	20
23	FEAST of biosensors: Food, environmental and agricultural sensing technologies (FEAST) in North America. Biosensors and Bioelectronics, 2021, 178, 113011.	5.3	19
24	Size-dependent cellular toxicity and uptake of commercial colloidal gold nanoparticles in DU-145 cells. Cancer Nanotechnology, 2013, 4, 13-20.	1.9	18
25	An implanted pH sensor read using radiography. Analyst, The, 2019, 144, 2984-2993.	1.7	18
26	Xâ€Ray Excited Luminescence Chemical Imaging of Bacterial Growth on Surfaces Implanted in Tissue. Advanced Healthcare Materials, 2015, 4, 903-910.	3.9	15
27	Passive Dielectrophoretic Focusing of Particles and Cells in Ratchet Microchannels. Micromachines, 2020, 11, 451.	1.4	15
28	Galactosylated Polymeric Nanoparticles: Synthesis and Adhesion Interactions with <I>Escherichia coli</I>. Journal of Biomedical Nanotechnology, 2005, 1, 61-67.	0.5	15
29	Binding of Escherichia coli to Functionalized Gold Nanoparticles. Plasmonics, 2012, 7, 301-308.	1.8	13
30	Highly stable multi-anchored magnetic nanoparticles for optical imaging within biofilms. Journal of Colloid and Interface Science, 2015, 459, 175-182.	5.0	13
31	Quantitative Analysis of Bacterial Aggregation Mediated by Bioactive Nanoparticles. Journal of Biomedical Nanotechnology, 2005, 1, 291-296.	0.5	13
32	<I>In Vitro</I> and <I>In Vivo</I> Biocompatibility of Mannosylated Polystyrene Nanoparticles. Journal of Biomedical Nanotechnology, 2006, 2, 1-10.	0.5	11
33	Adhesin-Specific Nanomechanical Cantilever Biosensors for Detection of Microorganisms. Journal of Heat Transfer, 2011, 133, .	1.2	10
34	Synthesis and application of glycoconjugate-functionalized magnetic nanoparticles as potent anti-adhesion agents for reducing enterotoxigenic Escherichia coli infections. Nanoscale, 2015, 7, 8326-8331.	2.8	10
35	Chargeâ€based separation of particles and cells with similar sizes via the wallâ€induced electrical lift. Electrophoresis, 2017, 38, 320-326.	1.3	10
36	Revisit of wallâ€induced lateral migration in particle electrophoresis through a straight rectangular microchannel: Effects of particle zeta potential. Electrophoresis, 2019, 40, 955-960.	1.3	8

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37	Polyphenol effects on CuO-nanoparticle-mediated DNA damage, reactive oxygen species generation, and fibroblast cell death. Toxicology in Vitro, 2022, 78, 105252.	1.1	8
38	Conformal Coating of Orthopedic Plates with X-ray Scintillators and pH Indicators for X-ray Excited Luminescence Chemical Imaging through Tissue. ACS Applied Materials & Interfaces, 2020, 12, 52343-52353.	4.0	7
39	Enhanced Throughput for Electrokinetic Manipulation of Particles and Cells in a Stacked Microfluidic Device. Micromachines, 2016, 7, 156.	1.4	6
40	Bioanalytical approaches for the detection, characterization, and risk assessment of micro/nanoplastics in agriculture and food systems. Analytical and Bioanalytical Chemistry, 2022, 414, 4591-4612.	1.9	6
41	Enhanced fed-batch production, partial purification, characterization of jenseniin P, and discovery of a new bacteriocin-like substance produced by Propionibacterium jensenii B1264. European Food Research and Technology, 2014, 239, 79-86.	1.6	5
42	Time domain detection and differentiation of single particles and cells with a radio frequency interferometer. , 2016, , .		5
43	Glaucarubulone glucoside from Castela macrophylla suppresses MCFâ€7 breast cancer cell growth and attenuates benzo[a]pyreneâ€mediated CYP1A gene induction. Journal of Applied Toxicology, 2017, 37, 873-883.	1.4	4
44	Efficacy of a plasma-deposited, vancomycin/chitosan antibiotic coating for orthopaedic devices in a bacterially challenged rabbit model. Materialia, 2021, 17, 101122.	1.3	4
45	X-ray excited luminescent chemical imaging (XELCI) for non-invasive imaging of implant infections. Proceedings of SPIE, 2017, 10081, .	0.8	3
46	Detecting and correlating bacterial populations to visual color change of polydiacetylene-coated filters. Talanta, 2021, 221, 121482.	2.9	2
47	Effects of Dietary Inclusion of Dry Hydrastis canadensis on Laying Performance, Egg Quality, Serum Biochemical Parameters and Cecal Microbiota in Laying Hens. Animals, 2021, 11, 1381.	1.0	2
48	Abstract 3521: The effect of MazF, Escherichia coli ribonuclease, on gastric adenocarcinoma (AGS) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50		2
49	Broadband Dielectric Properties Characterization of Biological Cells. , 2009, , .		1
50	Dielectrophoretic Focusing of Microparticles in Curved Microchannels. , 2009, , .		1
51	A proposed mechanism to induce multi-layer polydiacetylene-coated filter color response to bacteria. Results in Chemistry, 2020, 2, 100065.	0.9	1
52	Assessing the Biocompatibility of Multi-Anchored Glycoconjugate Functionalized Iron Oxide Nanoparticles in a Normal Human Colon Cell Line CCD-18Co. Nanomaterials, 2021, 11, 2465.	1.9	1
53	Abstract 4314: Exclusive delivery ofmazFin cancer cells byListeria monocytogenes. , 2017, , .		1
54	Dielectrophoretic Separation of Microparticles in Curved Microchannels. , 2009, , .		0

#	Article	IF	Citations
55	Electric Trapping and Lysing of Cells in a Microchannel Constriction. , 2009, , .		0
56	Gentle Dielectrophoretic Focusing of Yeast Cells in Curved Microchannels. , 2009, , .		0
57	<i>Electroflotation of Escherichia coli Improves Detection Rates by Loop-mediated Isothermal Amplification</i>. , 2017, , .		0
58	Adhesin-Specific Nanomechnical Cantilever Biosensors for Detection of Microorganisms. , 2009, , .		0
59	The effect of surface roughness and chitosan deposition volume on microbial growth in biofilm involving titanium surfaces for orthopaedic applications. Materialia, 2022, 24, 101481.	1.3	0