Francisco Javier Tovar-LÃ³pez

List of Publications by Year
in descending order

33 papers	1,484 citations	567281 15 h-index	526287 27 g-index
34 all docs	34 docs citations	34 times ranked	2114 citing authors

#	Article	IF	Citations
1	A shear gradientâ€“dependent platelet aggregation mechanism drives thrombus formation. Nature Medicine, 2009, 15, 665-673.	30.7	712
2	A microfluidics device to monitor platelet aggregation dynamics in response to strain rate micro-gradients in flowing blood. Lab on A Chip, 2010, 10, 291-302.	6.0	114
3	Differential microwave sensor for characterization of glycerolâ€“water solutions. Sensors and Actuators B: Chemical, 2020, 321, 128561.	7.8	71
4	Shear stress mediates exocytosis of functional TRPV4 channels in endothelial cells. Cellular and Molecular Life Sciences, 2016, 73, 649-666.	5.4	70
5	Dielectrophoretic manipulation and separation of microparticles using curved microelectrodes. Electrophoresis, 2009, 30, 3707-3717.	2.4	62
6	Dielectrophoretic-activated cell sorter based on curved microelectrodes. Microfluidics and Nanofluidics, 2010, 9, 411-426.	2.2	51
7	On-chip separation of Lactobacillus bacteria from yeasts using dielectrophoresis. Microfluidics and Nanofluidics, 2012, 12, 597-606.	2.2	47
8	Meta-atom microfluidic sensor for measurement of dielectric properties of liquids. Journal of Applied Physics, 2017, 121, .	2.5	44
9	Continuous transfer of liquid metal droplets across a fluidâ€“fluid interface within an integrated microfluidic chip. Lab on A Chip, 2015, 15, 2476-2485.	6.0	43
10	An Investigation on Platelet Transport during Thrombus Formation at Micro-Scale Stenosis. PLoS ONE, 2013, 8, e74123.	2.5	36
11	Examination of the role of transient receptor potential vanilloid type 4 in endothelial responses to shear forces. Biomicrofluidics, 2014, 8, 044117.	2.4	36
12	Size based separation of microparticles using a dielectrophoretic activated system. Journal of Applied Physics, 2010, 108, 034904.	2.5	34
13	Extremely Sensitive Microwave Microfluidic Dielectric Sensor Using a Transmission Line Loaded with Shunt LC Resonators. Sensors, 2021, 21, 6811.	3.8	26
14	Particle trapping using dielectrophoretically patterned carbon nanotubes. Electrophoresis, 2010, 31, 1366-1375.	2.4	24
15	Hydrodynamic directional control of liquid metal droplets within a microfluidic flow focusing system. Applied Physics Letters, 2016, 108, 164101.	3.3	24
16	Application of a strain rate gradient microfluidic device to von Willebrand's disease screening. Lab on A Chip, 2017, 17, 2595-2608.	6.0	17
17	Droplet on Soft Shuttle: Electrowetting-on-Dielectric Actuation of Small Droplets. ACS Applied Materials & Interfaces, 2019, 11, 39283-39291.	8.0	16
18	Structural and hydrodynamic simulation of an acute stenosis-dependent thrombosis model in mice. Journal of Biomechanics, 2011, 44, 1031-1039.	2.1	11

#	Article	IF	Citations
19	Dielectrophoresis with 3D microelectrodes fabricated by surface tension assisted lithography. Electrophoresis, 2013, 34, 3150-3154.	2.4	11
20	Nonlinear Dynamic Modelling of Platelet Aggregation via Microfluidic Devices. IEEE Transactions on Biomedical Engineering, 2015, 62, 1718-1727.	4.2	11
21	A Multimode-TIRFM and Microfluidic Technique to Examine Platelet Adhesion Dynamics. Methods in Molecular Biology, 2013, 1046, 39-58.	0.9	8
22	A novel Surface Tension Assisted Lithography (STAL) technique for microfabrication of 3D structures. Journal of Materials Chemistry C, 2013, 1, 401-405.	5.5	4
23	Dynamic drag force based on iterative density mapping: A new numerical tool for threeâ€dimensional analysis of particle trajectories in a dielectrophoretic system. Electrophoresis, 2016, 37, 645-657.	2.4	4
24	A hydrodynamic microchip for formation of continuous cell chains. Applied Physics Letters, 2014, 104, 203701.	3.3	3
25	Magnetic actuation and deformation of a soft shuttle. Biomicrofluidics, 2020, 14, 034103.	2.4	2
26	Dielectrophoresis of micro/nano particles using curved microelectrodes. Proceedings of SPIE, 2011, , .	0.8	1
27	Design, characterization and application of a novel mono-layer pin-microvalve for microfluidic devices. RSC Advances, 2014, 4, 24394-24398.	3.6	1
28	Microwave Microfluidic Sensor for Detecting Heavy Metal Pollution in Water. , 2021, , .		1
29	Characterization of flows in micro contractions using micro PIV and CFD to study the protein aggregation process. Proceedings of SPIE, 2007, , .	0.8	0
30	Characterization of high fluid strain micro contractions to study the stress on biological fluids. Proceedings of SPIE, 2008, , .	0.8	0
31	Hydrodynamic flow focusing to study the isolated effects of the flow components. , 2008, , .		0
32	A microfluidic platform to study the mechano sensational properties of ion channels. Proceedings of SPIE, 2013, , .	0.8	0
33	Regulation of dynamic platelet aggregation in response to shear rate micro-gradients in a microfluidics device applying switching control. , 2013, , .		0