Palaniappan Sethu

List of Publications by Year
in descending order

45 papers	1,125 citations	567144 15 h-index	414303 32 g-index
47 all docs	47 docs citations	47 times ranked	1684 citing authors

#	Article	IF	Citations
1	Microfluidic diffusive filter for apheresis (leukapheresis). Lab on A Chip, 2006, 6, 83-89.	3.1	159
2	Continuous Flow Microfluidic Device for Rapid Erythrocyte Lysis. Analytical Chemistry, 2004, 76, 6247-6253.	3.2	112
3	Endothelial Cell Culture Model for Replication of Physiological Profiles of Pressure, Flow, Stretch, and Shear Stress <i>in Vitro</i>. Analytical Chemistry, 2011, 83, 3170-3177.	3.2	84
4	Microfluidic Cardiac Cell Culture Model (Î¼CCCM). Analytical Chemistry, 2010, 82, 7581-7587.	3.2	80
5	Mitoquinone ameliorates pressure overload-induced cardiac fibrosis and left ventricular dysfunction in mice. Redox Biology, 2019, 21, 101100.	3.9	80
6	Review: Microfluidics technologies for blood-based cancer liquid biopsies. Analytica Chimica Acta, 2018, 1012, 10-29.	2.6	79
7	Microfluidic Isolation of Leukocytes from Whole Blood for Phenotype and Gene Expression Analysis. Analytical Chemistry, 2006, 78, 5453-5461.	3.2	71
8	Microfluidic endothelial cell culture model to replicate disturbed flow conditions seen in atherosclerosis susceptible regions. Biomicrofluidics, 2011, 5, 32006-3200611.	1.2	61
9	Effects of Physiologic Mechanical Stimulation on Embryonic Chick Cardiomyocytes Using a Microfluidic Cardiac Cell Culture Model. Analytical Chemistry, 2015, 87, 2107-2113.	3.2	42
10	Cardiac Cell Culture Model As a Left Ventricle Mimic for Cardiac Tissue Generation. Analytical Chemistry, 2013, 85, 8773-8779.	3.2	26
11	Cardiac Tissue Chips (CTCs) for Modeling Cardiovascular Disease. IEEE Transactions on Biomedical Engineering, 2019, 66, 3436-3443.	2.5	26
12	Biomimetic Cardiac Tissue Model Enables the Adaption of Human Induced Pluripotent Stem Cell Cardiomyocytes to Physiological Hemodynamic Loads. Analytical Chemistry, 2016, 88, 9862-9868.	3.2	24
13	Evaluation of the effect of diminished pulsatility as seen in continuous flow ventricular assist devices on arterial endothelial cell phenotype and function. Journal of Heart and Lung Transplantation, 2016, 35, 930-932.	0.3	24
14	Microfluidic inertia enhanced phase partitioning for enriching nucleated cell populations in blood. Lab on A Chip, 2013, 13, 892.	3.1	19
15	Hyperglycemic Arterial Disturbed Flow Niche as an In Vitro Model of Atherosclerosis. Analytical Chemistry, 2014, 86, 10948-10954.	3.2	15
16	Microfluidic Adaptation of Density-Gradient Centrifugation for Isolation of Particles and Cells. Bioengineering, 2017, 4, 67.	1.6	15
17	Low-stress Microfluidic Density-gradient Centrifugation for Blood Cell Sorting. Biomedical Microdevices, 2018, 20, 77.	1.4	15
18	Evaluation of flow-modulation approaches in ventricular assist devices using an in-vitro endothelial cell culture model. Journal of Heart and Lung Transplantation, 2019, 38, 456-465.	0.3	15

#	Article	IF	Citations
19	Micro- and nanotechnology approaches for capturing circulating tumor cells. Cancer Nanotechnology, 2010, 1, 3-11.	1.9	14
20	Mechanisms of Periodic Acceleration Induced Endothelial Nitric Oxide Synthase (eNOS) Expression and Upregulation Using an In Vitro Human Aortic Endothelial Cell Model. Cardiovascular Engineering and Technology, 2012, 3, 292-301.	0.7	14
21	Inertial lift enhanced phase partitioning for continuous microfluidic surface energy based sorting of particles. Lab on A Chip, 2012, 12, 1296.	3.1	13
22	Exploiting osmosis for blood cell sorting. Biomedical Microdevices, 2011, 13, 453-462.	1.4	12
23	A Sensorless Rotational Speed-Based Control System for Continuous Flow Left Ventricular Assist Devices. IEEE Transactions on Biomedical Engineering, 2020, 67, 1050-1060.	2.5	12
24	Tissue Chips and Microphysiological Systems for Disease Modeling and Drug Testing. Micromachines, 2021, 12, 139.	1.4	11
25	Hemodynamic Stimulation Using the Biomimetic Cardiac Tissue Model (BCTM) Enhances Maturation of Human Induced Pluripotent Stem Cell-Derived Cardiomyocytes. Cells Tissues Organs, 2018, 206, 82-94.	1.3	10
26	Repurposing Nintedanib for pathological cardiac remodeling and dysfunction. Pharmacological Research, 2021, 169, 105605.	3.1	10
27	Effect of pulsatility on shearâ€induced extensional behavior of Von Willebrand factor. Artificial Organs, 2022, 46, 887-898.	1.0	10
28	Acute Response of Human Aortic Endothelial Cells to Loss of Pulsatility as Seen during Cardiopulmonary Bypass. Cells Tissues Organs, 2022, 211, 324-334.	1.3	9
29	Transcriptional profile of immediate response to ionizing radiation exposure. Genomics Data, 2016, 7, 82-85.	1.3	8
30	Osteocyte Characterization on Polydimethylsiloxane Substrates for Microsystems Applications. Journal of Biomimetics, Biomaterials, and Tissue Engineering, 2012, 16, 27-42.	0.7	7
31	Thermally induced substrate release via intramolecular cyclizations of Amino esters and Amino carbonates. Tetrahedron, 2014, 70, 3422-3429.	1.0	7
32	Dataset for dose and time-dependent transcriptional response to ionizing radiation exposure. Data in Brief, 2019, 27, 104624.	0.5	5
33	Engineered Aging Cardiac Tissue Chip Model for Studying Cardiovascular Disease. Cells Tissues Organs, 2022, 211, 348-359.	1.3	5
34	microRNA-377 Signaling Modulates Anticancer Drug-Induced Cardiotoxicity in Mice. Frontiers in Cardiovascular Medicine, 2021, 8, 737826.	1.1	5
35	Activation of Autophagic Flux Maintains Mitochondrial Homeostasis during Cardiac Ischemia/Reperfusion Injury. Cells, 2022, 11, 2111.	1.8	5
36	Growing Human Parathyroids in a Microphysiological System: A Novel Approach to Understanding and Developing New Treatments for Hyperparathyroidism. Cells Tissues Organs, 2018, 206, 54-61.	1.3	4

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37	A suction index based control system for rotary blood pumps. Biomedical Signal Processing and Control, 2020, 62, 102057.	3.5	4
38	Microfluidic cardiac circulation model (µCCM) for functional cardiomyocyte studies. , 2009, 2009, 1060-3.		3
39	Glucose-Regulated Protein 78 Autoantibodies Are Associated with Carotid Atherosclerosis in Chronic Obstructive Pulmonary Disease Patients. ImmunoHorizons, 2020, 4, 108-118.	0.8	3
40	A Flow Sensor-Based Suction-Index Control Strategy for Rotary Left Ventricular Assist Devices. Sensors, 2021, 21, 6890.	2.1	3
41	Effects of Pulsatility on Arterial Endothelial and Smooth Muscle Cells. Cells Tissues Organs, 2023, 212, 272-284.	1.3	2
42	A Sensorless non-linear Control algorithm for Continuous Flow Right Ventricular Assist Devices. , 2018, , .		1
43	Demonstration of biocompatibility of single walled carbon nanotubes with blood leukocytes. Materials Research Society Symposia Proceedings, 2012, 1416, 7.	0.1	0
44	Cell-, Tissue- and Organs- on-a-Chip. Cells Tissues Organs, 2022, , .	1.3	0
45	Acute Response of Engineered Cardiac Tissue to Pressure and Stretch. Cells Tissues Organs, 0, , .	1.3	0