

Peter Ertl

List of Publications by Year in descending order

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Version: 2024-02-01

80
papers

2,893
citations

147801

31
h-index

182427

51
g-index

84
all docs

84
docs citations

84
times ranked

4203
citing authors

#	ARTICLE	IF	CITATIONS
1	Fingerprinting Metabolic Activity and Tissue Integrity of 3D Lung Cancer Spheroids under Gold Nanowire Treatment. <i>Cells</i> , 2022, 11, 478.	4.1	6
2	Screening for Best Neuronal-Glial Differentiation Protocols of Neuralizing Agents Using a Multi-Sized Microfluidic Embryoid Body Array. <i>Pharmaceutics</i> , 2022, 14, 339.	4.5	0
3	Recent Advances in Additive Manufacturing and 3D Bioprinting for Organs-On-A-Chip and Microphysiological Systems. <i>Frontiers in Bioengineering and Biotechnology</i> , 2022, 10, 837087.	4.1	15
4	Microscale Perfusion-Based Cultivation for <i>Pichia pastoris</i> Clone Screening Enables Accelerated and Optimized Recombinant Protein Production Processes. <i>Biotechnology Journal</i> , 2021, 16, e2000215.	3.5	7
5	Establishment of a human three-dimensional chip-based chondro-synovial coculture joint model for reciprocal cross talk studies in arthritis research. <i>Lab on A Chip</i> , 2021, 21, 4128-4143.	6.0	26
6	Monitoring the neurotransmitter release of human midbrain organoids using a redox cycling microsensor as a novel tool for personalized Parkinson's disease modelling and drug screening. <i>Analyst, The</i> , 2021, 146, 2358-2367.	3.5	22
7	A Fast Alternative to Soft Lithography for the Fabrication of Organ-on-a-Chip Elastomeric-Based Devices and Microactuators. <i>Advanced Science</i> , 2021, 8, 2003273.	11.2	19
8	A Microfluidic Multisize Spheroid Array for Multiparametric Screening of Anticancer Drugs and Blood-Brain Barrier Transport Properties. <i>Advanced Science</i> , 2021, 8, e2004856.	11.2	46
9	A Decade of Organs-on-a-Chip Emulating Human Physiology at the Microscale: A Critical Status Report on Progress in Toxicology and Pharmacology. <i>Micromachines</i> , 2021, 12, 470.	2.9	23
10	Microfluidic and Lab-on-a-Chip Systems for Cutaneous Wound Healing Studies. <i>Pharmaceutics</i> , 2021, 13, 793.	4.5	15
11	Measurement of respiration and acidification rates of mammalian cells in thermoplastic microfluidic devices. <i>Sensors and Actuators B: Chemical</i> , 2021, 334, 129664.	7.8	27
12	A combined microfluidic deep learning approach for lung cancer cell high throughput screening toward automatic cancer screening applications. <i>Scientific Reports</i> , 2021, 11, 9804.	3.3	30
13	Breaking the Third Wall: Implementing 3D-Printing Techniques to Expand the Complexity and Abilities of Multi-Organ-on-a-Chip Devices. <i>Micromachines</i> , 2021, 12, 627.	2.9	23
14	Dependence of mitochondrial function on the filamentous actin cytoskeleton in cultured mesenchymal stem cells treated with cytochalasin B. <i>Journal of Bioscience and Bioengineering</i> , 2021, 132, 310-320.	2.2	3
15	A microfluidic microparticle-labeled impedance sensor array for enhancing immunoassay sensitivity. <i>Analyst, The</i> , 2021, 146, 3289-3298.	3.5	9
16	A microfluidic impedance-based extended infectivity assay: combining retroviral amplification and cytopathic effect monitoring on a single lab-on-a-chip platform. <i>Lab on A Chip</i> , 2021, 21, 1364-1372.	6.0	5
17	Bridging the academic-industrial gap: application of an oxygen and pH sensor-integrated lab-on-a-chip in nanotoxicology. <i>Lab on A Chip</i> , 2021, 21, 4237-4248.	6.0	19
18	Cytotoxicity, Retention, and Anti-inflammatory Effects of a CeO ₂ Nanoparticle-Based Supramolecular Complex in a 3D Liver Cell Culture Model. <i>ACS Pharmacology and Translational Science</i> , 2021, 4, 101-106.	4.9	6

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19	Gold Nanowires/Fibrin Nanostructure as Microfluidics Platforms for Enhancing Stem Cell Differentiation: Bio-AFM Study. <i>Micromachines</i> , 2020, 11, 50.	2.9	23
20	Emerging Biosensor Trends in Organ-on-a-Chip. <i>Advances in Biochemical Engineering/Biotechnology</i> , 2020, , 343-354.	1.1	13
21	An on-chip wound healing assay fabricated by xurography for evaluation of dermal fibroblast cell migration and wound closure. <i>Scientific Reports</i> , 2020, 10, 16192.	3.3	29
22	Monitoring tissue-level remodelling during inflammatory arthritis using a three-dimensional synovium-on-a-chip with non-invasive light scattering biosensing. <i>Lab on A Chip</i> , 2020, 20, 1461-1471.	6.0	39
23	Stiffness Matters: Fine-Tuned Hydrogel Elasticity Alters Chondrogenic Redifferentiation. <i>Frontiers in Bioengineering and Biotechnology</i> , 2020, 8, 373.	4.1	60
24	Downscaling screening cultures in a multifunctional bioreactor array on a chip for speeding up optimization of yeast-based lactic acid bioproduction. <i>Biotechnology and Bioengineering</i> , 2020, 117, 2046-2057.	3.3	7
25	A lab-on-a-chip system with an embedded porous membrane-based impedance biosensor array for nanoparticle risk assessment on placental Bewo trophoblast cells. <i>Sensors and Actuators B: Chemical</i> , 2020, 312, 127946.	7.8	34
26	PDMS Nano-Modified Scaffolds for Improvement of Stem Cells Proliferation and Differentiation in Microfluidic Platform. <i>Nanomaterials</i> , 2020, 10, 668.	4.1	36
27	FTIR spectroscopy as a novel analytical approach for investigation of glucose transport and glucose transport inhibition studies in transwell in vitro barrier models. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2020, 237, 118388.	3.9	1
28	Latest Trends in Biosensing for Microphysiological Organs-on-a-Chip and Body-on-a-Chip Systems. <i>Biosensors</i> , 2019, 9, 110.	4.7	71
29	The Usual Suspects 2019: of Chips, Droplets, Synthesis, and Artificial Cells. <i>Micromachines</i> , 2019, 10, 285.	2.9	3
30	Monitoring transient cell-to-cell interactions in a multi-layered and multi-functional allergy-on-a-chip system. <i>Lab on A Chip</i> , 2019, 19, 1916-1921.	6.0	12
31	Effect of Spheroidal Age on Sorafenib Diffusivity and Toxicity in a 3D HepG2 Spheroid Model. <i>Scientific Reports</i> , 2019, 9, 4863.	3.3	52
32	Oxygen Management at the Microscale: A Functional Biochip Material with Long-Lasting and Tunable Oxygen Scavenging Properties for Cell Culture Applications. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 9730-9739.	8.0	42
33	Optimized plasma-assisted bi-layer photoresist fabrication protocol for high resolution microfabrication of thin-film metal electrodes on porous polymer membranes. <i>MethodsX</i> , 2019, 6, 2606-2613.	1.6	4
34	Tomorrow today: organ-on-a-chip advances towards clinically relevant pharmaceutical and medical in vitro models. <i>Current Opinion in Biotechnology</i> , 2019, 55, 81-86.	6.6	81
35	Combinatorial in Vitro and in Silico Approach To Describe Shear-Force Dependent Uptake of Nanoparticles in Microfluidic Vascular Models. <i>Analytical Chemistry</i> , 2018, 90, 3651-3655.	6.5	14
36	Next-Generation Live-Cell Microarray Technologies. <i>Methods in Molecular Biology</i> , 2018, 1771, 3-8.	0.9	1

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37	Recent advances in microfluidic technologies for cell-to-cell interaction studies. <i>Lab on A Chip</i> , 2018, 18, 249-270.	6.0	219
38	Next-Generation Magnetic Nanocomposites: Cytotoxic and Genotoxic Effects of Coated and Uncoated Ferric Cobalt Boron (FeCoB) Nanoparticles <i>In Vitro</i> . <i>Basic and Clinical Pharmacology and Toxicology</i> , 2018, 122, 355-363.	2.5	12
39	Small Force, Big Impact: Next Generation Organ-on-a-Chip Systems Incorporating Biomechanical Cues. <i>Frontiers in Physiology</i> , 2018, 9, 1417.	2.8	66
40	Engineering of three-dimensional pre-vascular networks within fibrin hydrogel constructs by microfluidic control over reciprocal cell signaling. <i>Biomicrofluidics</i> , 2018, 12, 042216.	2.4	39
41	A Self-Assembled Antifouling Nano-Biointerface for the Generation of Spheroids. <i>Methods in Molecular Biology</i> , 2018, 1771, 251-258.	0.9	1
42	Every Breath You Take: Non-invasive Real-Time Oxygen Biosensing in Two- and Three-Dimensional Microfluidic Cell Models. <i>Frontiers in Physiology</i> , 2018, 9, 815.	2.8	66
43	Optimized alamarBlue assay protocol for drug dose-response determination of 3D tumor spheroids. <i>MethodsX</i> , 2018, 5, 781-787.	1.6	44
44	Microfluidic Migration and Wound Healing Assay Based on Mechanically Induced Injuries of Defined and Highly Reproducible Areas. <i>Analytical Chemistry</i> , 2017, 89, 2326-2333.	6.5	42
45	3D synovial organoid culture reveals cellular mechanisms of tissue formation and inflammatory remodelling. , 2017, , .		0
46	Development of a Multifunctional Nanobiointerface Based on Self-Assembled Fusion-Protein rSbpA/ZZ for Blood Cell Enrichment and Phenotyping. <i>ACS Applied Materials & Interfaces</i> , 2017, 9, 34423-34434.	8.0	4
47	A comparative study of five physiological key parameters between four different human trophoblast-derived cell lines. <i>Scientific Reports</i> , 2017, 7, 5892.	3.3	119
48	Simultaneous Determination of Oxygen and pH Inside Microfluidic Devices Using Core-Shell Nanosensors. <i>Analytical Chemistry</i> , 2016, 88, 9796-9804.	6.5	40
49	Cell Microarrays for Biomedical Applications. <i>Methods in Molecular Biology</i> , 2016, 1368, 273-291.	0.9	10
50	Microfluidic Impedimetric Cell Regeneration Assay to Monitor the Enhanced Cytotoxic Effect of Nanomaterial Perfusion. <i>Biosensors</i> , 2015, 5, 736-749.	4.7	40
51	Automated, Miniaturized, and Integrated Quality Control-on-Chip (QC-on-a-Chip) for Cell-Based Cancer Therapy Applications. <i>Frontiers in Materials</i> , 2015, 2, .	2.4	22
52	Recent advances and future applications of microfluidic live-cell microarrays. <i>Biotechnology Advances</i> , 2015, 33, 948-961.	11.7	57
53	Zirconium dioxide nanolayer passivated impedimetric sensors for cell-based assays. <i>Sensors and Actuators B: Chemical</i> , 2015, 213, 35-44.	7.8	21
54	Anisotropic Crystalline Protein Nanolayers as Multifunctional Biointerface for Patterned Cultures of Adherent and Non-Adherent Cells in Microfluidic Devices. <i>Advanced Materials Interfaces</i> , 2015, 2, 1400309.	3.7	16

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55	Multi-layered, membrane-integrated microfluidics based on replica molding of a thiolâ€ene epoxy thermoset for organ-on-a-chip applications. <i>Lab on A Chip</i> , 2015, 15, 4542-4554.	6.0	98
56	Microfluidic platforms for advanced risk assessments of nanomaterials. <i>Nanotoxicology</i> , 2015, 9, 381-395.	3.0	47
57	Microfluidic Platform for Multiplexed Cell Sampling and Time-Resolved SPR-Based Cytokine Sensing. <i>IFMBE Proceedings</i> , 2015, , 785-788.	0.3	4
58	Crystalline Bacterial Protein Nanolayers for Cell Micropatterning. <i>IFMBE Proceedings</i> , 2015, , 337-340.	0.3	2
59	Recent Advances of Biologically Inspired 3D Microfluidic Hydrogel Cell Culture Systems. <i>HSOA Journal of Cell Biology & Cell Metabolism</i> , 2015, 2, 1-14.	0.2	9
60	Lab-on-a-chip technologies for stem cell analysis. <i>Trends in Biotechnology</i> , 2014, 32, 245-253.	9.3	110
61	Influence of HepG2 cell shape on nanoparticle uptake. <i>Microscopy Research and Technique</i> , 2014, 77, 560-565.	2.2	8
62	Monitoring cellular stress responses using integrated high-frequency impedance spectroscopy and time-resolved ELISA. <i>Analyst</i> , 2014, 139, 5271-5282.	3.5	14
63	Exploitation of S-Layer Anisotropy: pH-Dependent Nanolayer Orientation for Cellular Micropatterning. <i>ACS Nano</i> , 2013, 7, 8020-8030.	14.6	29
64	Microfluidic oxygen imaging using integrated optical sensor layers and a color camera. <i>Lab on A Chip</i> , 2013, 13, 1593.	6.0	83
65	Standardization of microfluidic cell cultures using integrated organic photodiodes and electrode arrays. <i>Lab on A Chip</i> , 2013, 13, 785-797.	6.0	28
66	Nanobiotechnology advanced antifouling surfaces for the continuous electrochemical monitoring of glucose in whole blood using a lab-on-a-chip. <i>Lab on A Chip</i> , 2013, 13, 1780.	6.0	71
67	Monitoring Dynamic Interactions of Tumor Cells with Tissue and Immune Cells in a Lab-on-a-Chip. <i>Analytical Chemistry</i> , 2013, 85, 11471-11478.	6.5	39
68	Characterization of Double Layer Alterations Induced by Charged Particles and Proteinâ€™Membrane Interactions Using Contactless Impedance Spectroscopy. <i>Journal of Physical Chemistry B</i> , 2012, 116, 10461-10469.	2.6	5
69	Improving the measurement sensitivity of interdigital dielectric capacitors (IDC) by optimizing the dielectric property of the homogeneous passivation layer. <i>Sensors and Actuators B: Chemical</i> , 2012, 162, 418-424.	7.8	7
70	Rapid liposome quality assessment using a lab-on-a-chip. <i>Lab on A Chip</i> , 2011, 11, 2753.	6.0	16
71	3D numerical simulation of a lab-on-a-chipâ€™increasing measurement sensitivity of interdigitated capacitors by passivation optimization. <i>Lab on A Chip</i> , 2011, 11, 1318.	6.0	20
72	Monitoring cellular stress responses to nanoparticles using a lab-on-a-chip. <i>Lab on A Chip</i> , 2011, 11, 2551.	6.0	45

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73	Oxygen imaging in microfluidic devices with optical sensors applying color cameras. <i>Procedia Engineering</i> , 2010, 5, 456-459.	1.2	8
74	Development of a Disposable Microfluidic Biochip for Multiparameter Cell Population Measurements. <i>Analytical Chemistry</i> , 2009, 81, 8503-8512.	6.5	38
75	Microfluidic Systems for Pathogen Sensing: A Review. <i>Sensors</i> , 2009, 9, 4804-4823.	3.8	239
76	Detection of viruses with molecularly imprinted polymers integrated on a microfluidic biochip using contact-less dielectric microsensors. <i>Lab on A Chip</i> , 2009, 9, 3549.	6.0	89
77	Microplate-Compatible Biamperometry Array for Parallel 48-Channel Amperometric or Coulometric Measurements. <i>Analytical Chemistry</i> , 2008, 80, 2988-2992.	6.5	7
78	Development of a microfluidic biochip for online monitoring of fungal biofilm dynamics. <i>Lab on A Chip</i> , 2007, 7, 1723.	6.0	67
79	Capillary Electrophoresis Chips with a Sheath-Flow Supported Electrochemical Detection System. <i>Analytical Chemistry</i> , 2004, 76, 3749-3755.	6.5	89
80	Rapid identification of viable <i>Escherichia coli</i> subspecies with an electrochemical screen-printed biosensor array. <i>Biosensors and Bioelectronics</i> , 2003, 18, 907-916.	10.1	71