Stefan Giselbrecht

List of Publications by Year
in descending order

65 papers	2,036 citations	331642 21 h-index	254170 43 g-index
70 all docs	70 docs citations	70 times ranked	3003 citing authors

#	Article	IF	Citations
1	Revisiting lab-on-a-chip technology for drug discovery. Nature Reviews Drug Discovery, 2012, 11, 620-632.	46.4	422
2	Colorectal tumor-on-a-chip system: A 3D tool for precision onco-nanomedicine. Science Advances, 2019, 5, eaaw1317.	10.3	143
3	Overlooked? Underestimated? Effects of Substrate Curvature on Cell Behavior. Trends in Biotechnology, 2019, 37, 838-854.	9.3	107
4	3D tissue culture substrates produced by microthermoforming of pre-processed polymer films. Biomedical Microdevices, 2006, 8, 191-199.	2.8	100
5	Thermoforming of Filmâ€Based Biomedical Microdevices. Advanced Materials, 2011, 23, 1311-1329.	21.0	98
6	A chip-based platform for the in vitro generation of tissues in three-dimensional organization. Lab on A Chip, 2007, 7, 777-785.	6.0	96
7	Advances in DNA-directed immobilization. Current Opinion in Chemical Biology, 2014, 18, 8-15.	6.1	90
8	Flexible fluidic microchips based on thermoformed and locally modified thin polymer films. Lab on A Chip, 2008, 8, 1570.	6.0	69
9	Automated feature detection and imaging for high-resolution screening of zebrafish embryos. BioTechniques, 2011, 50, 319-324.	1.8	65
10	Development of an Automated Imaging Pipeline for the Analysis of the Zebrafish Larval Kidney. PLoS ONE, 2013, 8, e82137.	2.5	60
11	Rapid prototyping of microstructures in polydimethylsiloxane (PDMS) by direct UV-lithography. Lab on A Chip, 2011, 11, 1368.	6.0	48
12	Grow with the Flow: When Morphogenesis Meets Microfluidics. Advanced Materials, 2019, 31, e1805764.	21.0	42
13	Fabrication of cell container arrays with overlaid surface topographies. Biomedical Microdevices, 2012, 14, 95-107.	2.8	40
14	Photolithographic Patterning of 3Dâ€Formed Polycarbonate Films for Targeted Cell Guiding. Advanced Materials, 2015, 27, 2621-2626.	21.0	36
15	The Chemistry of Cyborgsâ€"Interfacing Technical Devices with Organisms. Angewandte Chemie - International Edition, 2013, 52, 13942-13957.	13.8	35
16	Microthermoforming as a novel technique for manufacturing scaffolds in tissue engineering (CellChipsÂ®). IET Nanobiotechnology, 2004, 151, 151.	2.1	33
17	The three-dimensional cultivation of the carcinoma cell line HepG2 in a perfused chip system leads to a more differentiated phenotype of the cells compared to monolayer culture. Biomedical Materials (Bristol), 2008, 3, 034120.	3.3	30
18	Promotion of osteoblast differentiation in 3D biomaterial micro-chip arrays comprising fibronectin-coated poly(methyl methacrylate) polycarbonate. Biomaterials, 2011, 32, 8947-8956.	11.4	30

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19	Liquid polystyrene: a room-temperature photocurable soft lithography compatible pour-and-cure-type polystyrene. Lab on A Chip, 2014, 14, 2698-2708.	6.0	30
20	Microcavity arrays as an in vitro model system of the bone marrow niche for hematopoietic stem cells. Cell and Tissue Research, 2016, 364, 573-584.	2.9	30
21	3D alveolar in vitro model based on epithelialized biomimetically curved culture membranes. Biomaterials, 2021, 266, 120436.	11.4	29
22	3D Lung-on-Chip Model Based on Biomimetically Microcurved Culture Membranes. ACS Biomaterials Science and Engineering, 2022, 8, 2684-2699.	5.2	27
23	Differences in morphogenesis of 3D cultured primary human osteoblasts under static and microfluidic growth conditions. Biomaterials, 2014, 35, 3208-3219.	11.4	24
24	Microthermoforming of nanostructured polymer films: a new bonding method for the integration of nanostructures in 3-dimensional cavities. Microsystem Technologies, 2010, 16, 1221-1231.	2.0	22
25	Intestinal Organoid Culture in Polymer Filmâ€Based Microwell Arrays. Advanced Biology, 2020, 4, e2000126.	3.0	22
26	Microthermoforming of flexible, not-buried hollow microstructures for chip-based life sciences applications. IET Nanobiotechnology, 2004, 151, 163.	2.1	21
27	Mechanical Properties of Bioengineered Corneal Stroma. Advanced Healthcare Materials, 2021, 10, e2100972.	7.6	21
28	Biofunctional Micropatterning of Thermoformed 3D Substrates. Advanced Functional Materials, 2014, 24, 442-450.	14.9	19
29	Spatially controlled cell adhesion on three-dimensional substrates. Biomedical Microdevices, 2010, 12, 787-795.	2.8	18
30	Characterization of a chip-based bioreactor for three-dimensional cell cultivation via Magnetic Resonance Imaging. Zeitschrift Fur Medizinische Physik, 2013, 23, 102-110.	1.5	18
31	Reversing Epithelial Polarity in Pluripotent Stem Cell-Derived Intestinal Organoids. Frontiers in Bioengineering and Biotechnology, 2022, 10, 879024.	4.1	16
32	DNA-SMART: Biopatterned Polymer Film Microchannels for Selective Immobilization of Proteins and Cells. Small, 2017, 13, 1603923.	10.0	15
33	SCREENED: A Multistage Model of Thyroid Gland Function for Screening Endocrine-Disrupting Chemicals in a Biologically Sex-Specific Manner. International Journal of Molecular Sciences, 2020, 21, 3648.	4.1	15
34	The famousversusthe inconvenient - or the dawn and the rise of 3D-culture systems. World Journal of Stem Cells, 2009, 1, 43.	2.8	15
35	Closer to Natureâ€"Bioâ€inspired Patterns by Transforming Latent Lithographic Images. Advanced Materials, 2011, 23, 4873-4879.	21.0	13
36	Novel three-dimensional Boyden chamber system for studying transendothelial transport. Lab on A Chip, 2012, 12, 829.	6.0	12

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37	Numerics made easy: solving the Navierâ€“Stokes equation for arbitrary channel cross-sections using Microsoft Excel. Biomedical Microdevices, 2016, 18, 52.	2.8	12
38	Challenges to, and prospects for, reverse engineering the gastrointestinal tract using organoids. Trends in Biotechnology, 2022, 40, 932-944.	9.3	12
39	Chips for Biomaterials and Biomaterials for Chips: Recent Advances at the Interface between Microfabrication and Biomaterials Research. Advanced Healthcare Materials, 2021, 10, e2100371.	7.6	11
40	A New Microengineered Platform for 4D Tracking of Single Cells in a Stemâ€Cellâ€Based In Vitro Morphogenesis Model. Advanced Materials, 2020, 32, e1907966.	21.0	10
41	Fabrication of a self-assembled honeycomb nanofibrous scaffold to guide endothelial morphogenesis. Biofabrication, 2020, 12, 045001.	7.1	10
42	Nanoscale Topographies for Corneal Endothelial Regeneration. Applied Sciences (Switzerland), 2021, 11, 827.	2.5	7
43	Assessment of Cellâ€“Material Interactions in Three Dimensions through Dispersed Coaggregation of Microsized Biomaterials into Tissue Spheroids. Small, 2022, 18, .	10.0	7
44	Microfabrication of Chip-sized Scaffolds for Three-dimensional Cell cultivation. Journal of Visualized Experiments, 2008, , .	0.3	6
45	A Microcavity Array-Based 3D Model System of the Hematopoietic Stem Cell Niche. Methods in Molecular Biology, 2019, 2017, 85-95.	0.9	6
46	From Mice to Men: Generation of Human Blastocyst-Like Structures In Vitro. Frontiers in Cell and Developmental Biology, 2022, 10, 838356.	3.7	6
47	FURTHER DEVELOPMENT OF MICROSTRUCTURED CULTURE SYSTEMS AND THEIR USE IN TISSUE ENGINEERING. Biomedizinische Technik, 2002, 47, 373-376.	0.8	5
48	From Snapshots to Development: Identifying the Gaps in the Development of Stem Cellâ€based Embryo Models along the Embryonic Timeline. Advanced Science, 2021, 8, 2004250.	11.2	5
49	Ten steps to investigate a cellular system with mathematical modeling. PLoS Computational Biology, 2021, 17, e1008921.	3.2	5
50	Chip-based Three-dimensional Cell Culture in Perfused Micro-bioreactors. Journal of Visualized Experiments, 2008, , .	0.3	4
51	Mechanistic Computational Models of Epithelial Cell Transporters-the Adorned Heroes of Pharmacokinetics. Frontiers in Pharmacology, 2021, 12, 780620.	3.5	4
52	The Galapagos Chip Platform for Highâ€Throughput Screening of Cell Adhesive Chemical Micropatterns. Small, 2022, 18, e2105704.	10.0	4
53	Polystyrene Pocket Lithography: Sculpting Plastic with Light. Advanced Materials, 2022, 34, e2200687.	21.0	3
54	Multiscale Microstructure for Investigation of Cellâ€“Cell Communication. Small Methods, 2020, 4, 2000647.	8.6	2

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55	Measurement of Biomimetic Deposition of Calcium Phosphate in Real Time Using Complex Capacitance. Physica Status Solidi (A) Applications and Materials Science, 2021, 218, 2000672.	1.8	2
56	Thin fluorinated polymer film microcavity arrays for 3D cell culture and label-free automated feature extraction. Biomaterials Science, 2021, 9, 7838-7850.	5.4	2
57	The Influence of OAT1 Density and Functionality on Indoxyl Sulfate Transport in the Human Proximal Tubule: An Integrated Computational and In Vitro Study. Toxins, 2021, 13, 674.	3.4	1
58	Modeling indoxyl sulfate transport in a bioartificial kidney: Two-step binding kinetics or lumped parameters model for uremic toxin clearance?. Computers in Biology and Medicine, 2021, 138, 104912.	7.0	1
59	Fabrication of Advanced Microcontainer Arrays for Perfused 3D Cell Culture in Microfluidic Bioreactors. , 2013, , 81-104.		0
60	Organotypic tissue models in MRI method development. Zeitschrift Fur Medizinische Physik, 2014, 24, 89-90.	1.5	0
61	Microfluidic Devices: DNA-SMART: Biopatterned Polymer Film Microchannels for Selective Immobilization of Proteins and Cells (Small 17/2017). Small, 2017, 13, .	10.0	0
62	Protocol for intelligent high-content screening of zebrafish embryos on a standard widefield screening microscope. BioTechniques, 2017, 62, xx.	1.8	0
63	Singleâ€Cell Tracking: A New Microengineered Platform for 4D Tracking of Single Cells in a Stemâ€Cellâ€Based In Vitro Morphogenesis Model (Adv. Mater. 24/2020). Advanced Materials, 2020, 32, 2070182.	21.0	0
64	Novel 3D-Model for the Hematopoietic Stem Cell Niche Using MSC in a KITChip Based Bioreactor. Blood, 2011, 118, 1331-1331.	1.4	0
65	Understanding The Marrow Niche: Advanced 3D Model System Allows Functional Analysis Of The Interaction With Human Hematopoietic Progenitor Cells. Blood, 2013, 122, 2462-2462.	1.4	0