

# Frank Sonntag

## List of Publications by Year in descending order

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Version: 2024-02-01

39  
papers

2,407  
citations

430874

18  
h-index

345221

36  
g-index

40  
all docs

40  
docs citations

40  
times ranked

3223  
citing authors

#	ARTICLE	IF	CITATIONS
1	New joining and automation approaches for multilayer-based manufacturing of complex, customized microsystems. , 2022, , .		0
2	Enhanced structural maturation of human induced pluripotent stem cell-derived cardiomyocytes under a controlled microenvironment in a microfluidic system. Acta Biomaterialia, 2020, 102, 273-286.	8.3	48
3	A microphysiological system to investigate the pressure dependent filtration at an artificial glomerular kidney barrier. Current Directions in Biomedical Engineering, 2019, 5, 389-391.	0.4	4
4	Multiple method micromachining laser platform for fabricating anti-counterfeit elements with multiple-scaled features. Optics and Laser Technology, 2019, 115, 465-476.	4.6	7
5	Microphysiological system for heart tissue - going from 2D to 3D culture. Current Directions in Biomedical Engineering, 2019, 5, 269-272.	0.4	0
6	Universal LIMS based platform for the automated processing of cell-based assays. Current Directions in Biomedical Engineering, 2019, 5, 437-439.	0.4	1
7	Detection and identification of <i>Staphylococcus aureus</i> using magnetic particle enhanced surface plasmon spectroscopy. Engineering in Life Sciences, 2018, 18, 263-268.	3.6	7
8	Bloch surface wave label-free and fluorescence platform for the detection of VEGF biomarker in biological matrices. Sensors and Actuators B: Chemical, 2018, 255, 2143-2150.	7.8	25
9	Label-Free Monitoring of Human IgG/Anti-IgG Recognition Using Bloch Surface Waves on 1D Photonic Crystals. Biosensors, 2018, 8, 71.	4.7	6
10	Bloch surface wave enhanced biosensor for the direct detection of Angiopoietin-2 tumor biomarker in human plasma. Biomedical Optics Express, 2018, 9, 529.	2.9	19
11	Detection of soluble ERBB2 in breast cancer cell lysates using a combined label-free/fluorescence platform based on Bloch surface waves. Biosensors and Bioelectronics, 2017, 92, 125-130.	10.1	41
12	A novel technique based on Bloch surface waves sustained by one-dimensional photonic crystals to probe mass transport in a microfluidic channel. Sensors and Actuators B: Chemical, 2017, 247, 532-539.	7.8	11
13	Ultrasensitive SPR detection of miRNA <sup>93</sup> using antibody <sup>9</sup> enhanced and enzymatic signal amplification. Engineering in Life Sciences, 2017, 17, 1264-1270.	3.6	8
14	Closed-loop control system for well-defined oxygen supply in micro-physiological systems. Current Directions in Biomedical Engineering, 2017, 3, 363-366.	0.4	1
15	Universal Micromachining Platform and Basic Technologies for the Manufacture and Marking of Microphysiological Systems. Micromachines, 2017, 8, 246.	2.9	7
16	Bloch Surface Waves Biosensors for High Sensitivity Detection of Soluble ERBB2 in a Complex Biological Environment. Biosensors, 2017, 7, 33.	4.7	10
17	Hypoxia-on-a-chip. Current Directions in Biomedical Engineering, 2016, 2, 71-75.	0.4	9
18	Detection of miRNA using a surface plasmon resonance biosensor and antibody amplification. Current Directions in Biomedical Engineering, 2016, 2, 135-138.	0.4	12

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19	3D printing â€“ a key technology for tailored biomedical cell culture lab ware. <i>Current Directions in Biomedical Engineering</i> , 2016, 2, 105-108.	0.4	4
20	Design, characterization, and modeling of microcirculation systems with integrated oxygenators. <i>Journal of Sensors and Sensor Systems</i> , 2016, 5, 221-228.	0.9	8
21	Chip-based human liverâ€™intestine and liverâ€™skin co-cultures â€“ A first step toward systemic repeated dose substance testing in vitro. <i>European Journal of Pharmaceutics and Biopharmaceutics</i> , 2015, 95, 77-87.	4.3	171
22	A four-organ-chip for interconnected long-term co-culture of human intestine, liver, skin and kidney equivalents. <i>Lab on A Chip</i> , 2015, 15, 2688-2699.	6.0	662
23	Multilayer based lab-on-a-chip-systems for substance testing. , 2015, , .		3
24	Biosensing platform combining label-free and labelled analysis using Bloch surface waves. , 2015, , .		6
25	Label-Free Detection of Tumor Angiogenesis Biomarker Angiopoietin 2 Using Bloch Surface Waves on One Dimensional Photonic Crystals. <i>Journal of Lightwave Technology</i> , 2015, 33, 3385-3393.	4.6	26
26	Purification and immunodetection of the complete recombinant HER-2[neu] receptor produced in yeast. <i>Protein Expression and Purification</i> , 2015, 105, 61-70.	1.3	5
27	Multilayer-based lab-on-a-chip systems for perfused cell-based assays. <i>Advanced Optical Technologies</i> , 2014, 3, 515-521.	1.7	7
28	Fabrication of porous scaffolds by three-dimensional plotting of a pasty calcium phosphate bone cement under mild conditions. <i>Journal of Tissue Engineering and Regenerative Medicine</i> , 2014, 8, 682-693.	2.7	108
29	Well-ordered biphasic calcium phosphateâ€™alginate scaffolds fabricated by multi-channel 3D plotting under mild conditions. <i>Journal of Materials Chemistry B</i> , 2013, 1, 4088.	5.8	88
30	â€™Phytochipâ€™™: On-chip detection of phytopathogenic RNA viruses by a new surface plasmon resonance platform. <i>Journal of Virological Methods</i> , 2013, 189, 80-86.	2.1	19
31	A dynamic multi-organ-chip for long-term cultivation and substance testing proven by 3D human liver and skin tissue co-culture. <i>Lab on A Chip</i> , 2013, 13, 3538.	6.0	396
32	Integrating biological vasculature into a multi-organ-chip microsystem. <i>Lab on A Chip</i> , 2013, 13, 3588.	6.0	155
33	Direct comparison of the performance of Bloch surface wave and surface plasmon polariton sensors. <i>Sensors and Actuators B: Chemical</i> , 2012, 174, 292-298.	7.8	218
34	â€™Human-on-a-chipâ€™™ Developments: A Translational Cutting-edge Alternative to Systemic Safety Assessment and Efficiency Evaluation of Substances in Laboratory Animals and Man?. <i>ATLA Alternatives To Laboratory Animals</i> , 2012, 40, 235-257.	1.0	153
35	Surface plasmon resonance platform technology for multiâ€™parameter analyses on polymer chips. <i>Engineering in Life Sciences</i> , 2011, 11, 566-572.	3.6	41
36	A compact and rapid aptasensor platform based on surface plasmon resonance. <i>Engineering in Life Sciences</i> , 2011, 11, 573-579.	3.6	20

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37	DNA microarrays for hybridization detection by surface plasmon resonance spectroscopy. Biosensors and Bioelectronics, 2010, 26, 1543-1547.	10.1	25
38	Design and prototyping of a chip-based multi-micro-organoid culture system for substance testing, predictive to human (substance) exposure. Journal of Biotechnology, 2010, 148, 70-75.	3.8	62
39	Surface Modification of Polymers by using Excimer Laser for Biomedical Applications. Plasma Processes and Polymers, 2007, 4, S416-S418.	3.0	10