

Niclas Roxhed

List of Publications by Year in descending order

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Version: 2024-02-01

78
papers

2,879
citations

172457
29
h-index

175258
52
g-index

80
all docs

80
docs citations

80
times ranked

3541
citing authors

#	ARTICLE	IF	CITATIONS
1	Oral delivery of systemic monoclonal antibodies, peptides and small molecules using gastric auto-injectors. <i>Nature Biotechnology</i> , 2022, 40, 103-109.	17.5	64
2	Semi-automated preparation of fine-needle aspiration samples for rapid on-site evaluation. <i>Lab on A Chip</i> , 2022, , .	6.0	1
3	Blood cell quantification on dry blood samples: toward patient-centric complete blood counts. <i>Bioanalysis</i> , 2022, 14, 693-701.	1.5	1
4	First Micro Swirl Nozzle for Fast Drug Delivery to the Lung. , 2021, , .		0
5	A microneedle platform for buccal macromolecule delivery. <i>Science Advances</i> , 2021, 7, .	10.3	70
6	Large-area integration of two-dimensional materials and their heterostructures by wafer bonding. <i>Nature Communications</i> , 2021, 12, 917.	12.8	99
7	3D-Printing Enables Fabrication of Swirl Nozzles for Fast Aerosolization of Water-Based Drugs. <i>Journal of Microelectromechanical Systems</i> , 2021, 30, 181-183.	2.5	2
8	Multianalyte serology in home-sampled blood enables an unbiased assessment of the immune response against SARS-CoV-2. <i>Nature Communications</i> , 2021, 12, 3695.	12.8	32
9	A microfluidic device for TEM sample preparation. <i>Lab on A Chip</i> , 2020, 20, 4186-4193.	6.0	9
10	Ingestible transiently anchoring electronics for microstimulation and conductive signaling. <i>Science Advances</i> , 2020, 6, eaaz0127.	10.3	35
11	A Self-Sealing Spray Nozzle for Aerosol Drug Delivery. <i>Journal of Microelectromechanical Systems</i> , 2020, 29, 182-189.	2.5	5
12	Vertical integration of microchips by magnetic assembly and edge wire bonding. <i>Microsystems and Nanoengineering</i> , 2020, 6, 12.	7.0	5
13	Large-Scale Integration of 2D Material Heterostructures by Adhesive Bonding. , 2020, , .		4
14	Transfer printing of nanomaterials and microstructures using a wire bonder. <i>Journal of Micromechanics and Microengineering</i> , 2019, 29, 125014.	2.6	1
15	A Blood Hematocrit Test Strip. , 2019, , .		0
16	Demonstration of the First Self-Sealing Aerosol Spray Nozzle for Medical Drug Delivery. , 2019, , .		1
17	Wafer-Scale Transfer of Graphene by Adhesive Wafer Bonding. , 2019, , .		7
18	A luminal unfolding microneedle injector for oral delivery of macromolecules. <i>Nature Medicine</i> , 2019, 25, 1512-1518.	30.7	167

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19	An Autonomous Microfluidic Device for Generating Volume-Defined Dried Plasma Spots. <i>Analytical Chemistry</i> , 2019, 91, 7125-7130.	6.5	21
20	Wafer-Level Vacuum Sealing by Transfer Bonding of Silicon Caps for Small Footprint and Ultra-Thin MEMS Packages. <i>Journal of Microelectromechanical Systems</i> , 2019, 28, 460-471.	2.5	20
21	Evaluation of a Volumetric Dried Blood Spot Card Using a Gravimetric Method and a Bioanalytical Method with Capillary Blood from 44 Volunteers. <i>Analytical Chemistry</i> , 2019, 91, 5558-5565.	6.5	18
22	A gastric resident drug delivery system for prolonged gram-level dosing of tuberculosis treatment. <i>Science Translational Medicine</i> , 2019, 11, .	12.4	38
23	An ingestible self-orienting system for oral delivery of macromolecules. <i>Science</i> , 2019, 363, 611-615.	12.6	287
24	Wearable All-Solid-State Potentiometric Microneedle Patch for Intradermal Potassium Detection. <i>Analytical Chemistry</i> , 2019, 91, 1578-1586.	6.5	116
25	Real-time intradermal continuous glucose monitoring using a minimally invasive microneedle-based system. <i>Biomedical Microdevices</i> , 2018, 20, 101.	2.8	116
26	A Miniaturized Amperometric Hydrogen Sulfide Sensor Applicable for Bad Breath Monitoring. <i>Micromachines</i> , 2018, 9, 612.	2.9	9
27	High-Yield Passive Plasma Filtration from Human Finger Prick Blood. <i>Analytical Chemistry</i> , 2018, 90, 13393-13399.	6.5	42
28	Gas diffusion and evaporation control using EWOD actuation of ionic liquid microdroplets for gas sensing applications. <i>Sensors and Actuators B: Chemical</i> , 2018, 267, 647-654.	7.8	9
29	Prolonged energy harvesting for ingestible devices. <i>Nature Biomedical Engineering</i> , 2017, 1, .	22.5	148
30	Ultra-miniaturization of a planar amperometric sensor targeting continuous intradermal glucose monitoring. <i>Biosensors and Bioelectronics</i> , 2017, 90, 577-583.	10.1	46
31	Flexible and Stretchable Microneedle Patches with Integrated Rigid Stainless Steel Microneedles for Transdermal Biointerfacing. <i>PLoS ONE</i> , 2016, 11, e0166330.	2.5	59
32	A wafer-level liquid cavity integrated amperometric gas sensor with ppb-level nitric oxide gas sensitivity. <i>Journal of Micromechanics and Microengineering</i> , 2015, 25, 105013.	2.6	9
33	Integrating MEMS and ICs. <i>Microsystems and Nanoengineering</i> , 2015, 1, .	7.0	242
34	Dry reagent storage in dissolvable films and liquid triggered release for programmed multi-step lab-on-chip diagnostics. , 2015, , .		1
35	An amperometric nitric oxide sensor with fast response and ppb-level concentration detection relevant to asthma monitoring. <i>Sensors and Actuators B: Chemical</i> , 2015, 209, 639-644.	7.8	39
36	High-Aspect-Ratio Through Silicon Vias for High-Frequency Application Fabricated by Magnetic Assembly of Gold-Coated Nickel Wires. <i>IEEE Transactions on Components, Packaging and Manufacturing Technology</i> , 2015, 5, 21-27.	2.5	34

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37	Nanopore arrays in a silicon membrane for parallel single-molecule detection: fabrication. <i>Nanotechnology</i> , 2015, 26, 314001.	2.6	20
38	A disposable sampling device to collect volume-measured DBS directly from a fingerprick onto DBS paper. <i>Bioanalysis</i> , 2015, 7, 2085-2094.	1.5	56
39	The effect of drying on the homogeneity of DBS. <i>Bioanalysis</i> , 2015, 7, 1977-1985.	1.5	30
40	CMOS-Integrated Si/SiGe Quantum-Well Infrared Microbolometer Focal Plane Arrays Manufactured With Very Large-Scale Heterogeneous 3-D Integration. <i>IEEE Journal of Selected Topics in Quantum Electronics</i> , 2015, 21, 30-40.	2.9	35
41	A novel constant flow regulation principle for compact breath diagnostics. , 2014, , .		1
42	Temporary Wafer Bonding and Debonding for 3D Integration Using an Electrochemically Active Polymer Adhesive. <i>ECS Journal of Solid State Science and Technology</i> , 2014, 3, P115-P121.	1.8	4
43	Oxidation of nanopores in a silicon membrane: self-limiting formation of sub-10 nm circular openings. <i>Nanotechnology</i> , 2014, 25, 355302.	2.6	5
44	A MEMS-based passive air flow regulator for handheld breath diagnostics. <i>Sensors and Actuators A: Physical</i> , 2014, 215, 65-70.	4.1	3
45	A MEMS-based passive hydrocephalus shunt for body position controlled intracranial pressure regulation. <i>Biomedical Microdevices</i> , 2014, 16, 529-536.	2.8	7
46	Intradermal Insulin Delivery. <i>Journal of Diabetes Science and Technology</i> , 2014, 8, 453-457.	2.2	31
47	Very large scale heterogeneous integration (VLSHI) and wafer-level vacuum packaging for infrared bolometer focal plane arrays. <i>Infrared Physics and Technology</i> , 2013, 60, 251-259.	2.9	18
48	A compact passive air flow regulator for portable breath diagnostics. , 2013, , .		1
49	Temporary wafer bonding and debonding by an electrochemically active polymer adhesive for 3D integration. , 2013, , .		2
50	Low temperature adhesive wafer bonding using OSTE(+) for heterogeneous 3D MEMS integration. , 2013, , .		0
51	Pt-Al₂O₃ dual layer atomic layer deposition coating in high aspect ratio nanopores. <i>Nanotechnology</i> , 2013, 24, 015602.	2.6	42
52	A MEMS-based passive hydrocephalus shunt with adaptive flow characteristics. , 2013, , .		0
53	Wafer-Level Vacuum Sealing by Coining of Wire Bonded Gold Bumps. <i>Journal of Microelectromechanical Systems</i> , 2013, 22, 1347-1353.	2.5	5
54	Micromechanical Process Integration and Material Optimization for High Performance Silicon-Germanium Bolometers. <i>Materials Research Society Symposia Proceedings</i> , 2012, 1437, 66.	0.1	1

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55	Wafer-level heterogeneous 3D integration for MEMS and NEMS. , 2012, , .		5
56	Hermetic integration of liquids using high-speed stud bump bonding for cavity sealing at the wafer level. Journal of Micromechanics and Microengineering, 2012, 22, 045021.	2.6	8
57	Batch Transfer of Radially Expanded Die Arrays for Heterogeneous Integration Using Different Wafer Sizes. Journal of Microelectromechanical Systems, 2012, 21, 1077-1083.	2.5	7
58	Very high aspect ratio through-silicon vias (TSVs) fabricated using automated magnetic assembly of nickel wires. Journal of Micromechanics and Microengineering, 2012, 22, 105001.	2.6	31
59	Electrochemically Assisted Maskless Selective Removal of Metal Layers for Three-Dimensional Micromachined SOI RF MEMS Transmission Lines and Devices. Journal of Microelectromechanical Systems, 2011, 20, 899-908.	2.5	16
60	Toward 17Åµm pitch heterogeneously integrated Si/SiGe quantum well bolometer focal plane arrays. Proceedings of SPIE, 2011, , .	0.8	7
61	High-performance infrared micro-bolometer arrays manufactured using very large scale heterogeneous integration. , 2011, , .		3
62	Static Zero-Power-Consumption Coplanar Waveguide Embedded DC-to-RF Metal-Contact MEMS Switches in Two-Port and Three-Port Configuration. IEEE Transactions on Electron Devices, 2010, 57, 1659-1669.	3.0	26
63	Low-cost uncooled microbolometers for thermal imaging. Proceedings of SPIE, 2010, , .	0.8	13
64	High-performance quantum-well silicon-germanium bolometers using IC-compatible integration for low-cost infrared imagers. , 2009, , .		13
65	Wafer bonding with nano-imprint resists as sacrificial adhesive for fabrication of silicon-on-integrated-circuit (SOIC) wafers in 3D integration of MEMS and ICs. Sensors and Actuators A: Physical, 2009, 154, 180-186.	4.1	39
66	Membrane-sealed hollow microneedles and related administration schemes for transdermal drug delivery. Biomedical Microdevices, 2008, 10, 271-279.	2.8	82
67	Painless Drug Delivery Through Microneedle-Based Transdermal Patches Featuring Active Infusion. IEEE Transactions on Biomedical Engineering, 2008, 55, 1063-1071.	4.2	121
68	Mechanically tri-stable SPDT metal-contact MEMS switch embedded in 3D transmission line. , 2007, , .		3
69	MEMS for medical technology applications. , 2007, , .		1
70	Coplanar-waveguide embedded mechanically-bistable DC-to-RF MEMS switches. , 2007, , .		11
71	Mechanically tri-stable SPDT metal-contact MEMS switch embedded in 3D transmission line. , 2007, , .		4
72	A method for tapered deep reactive ion etching using a modified Bosch process. Journal of Micromechanics and Microengineering, 2007, 17, 1087-1092.	2.6	53

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73	Penetration-Enhanced Ultrasharp Microneedles and Prediction on Skin Interaction for Efficient Transdermal Drug Delivery. <i>Journal of Microelectromechanical Systems</i> , 2007, 16, 1429-1440.	2.5	153
74	Tapered Deep Reactive Ion Etching: Method and Characterization. , 2007, , .		6
75	Novel Microneedle Patches for Active Insulin Delivery are Efficient in Maintaining Glycaemic Control: An Initial Comparison with Subcutaneous Administration. <i>Pharmaceutical Research</i> , 2007, 24, 1381-1388.	3.5	103
76	A compact, low-cost microliter-range liquid dispenser based on expandable microspheres. <i>Journal of Micromechanics and Microengineering</i> , 2006, 16, 2740-2746.	2.6	15
77	A liquid-triggered liquid microvalve for on-chip flow control. <i>Sensors and Actuators B: Chemical</i> , 2004, 100, 463-468.	7.8	63
78	A fast passive and planar liquid sample micromixer. <i>Lab on A Chip</i> , 2004, 4, 214-219.	6.0	70