

# Dirch Hjorth H Petersen

## List of Publications by Citations

**Source:** <https://exaly.com/author-pdf/6849893/dirch-hjorth-h-petersen-publications-by-citations.pdf>

**Version:** 2024-04-28

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.

The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

69

papers

1,280

citations

22

h-index

33

g-index

71

ext. papers

1,519

ext. citations

3.6

avg, IF

4

L-index

#	Paper	IF	Citations
69	Graphene conductance uniformity mapping. <i>Nano Letters</i> , <b>2012</b> , 12, 5074-81	11.5	112
68	Graphene mobility mapping. <i>Scientific Reports</i> , <b>2015</b> , 5, 12305	4.9	75
67	Mapping the electrical properties of large-area graphene. <i>2D Materials</i> , <b>2017</b> , 4, 042003	5.9	75
66	Reversible hysteresis inversion in MoS2 field effect transistors. <i>Npj 2D Materials and Applications</i> , <b>2017</b> , 1,	8.8	67
65	Micro-four-point probe Hall effect measurement method. <i>Journal of Applied Physics</i> , <b>2008</b> , 104, 013710	2.5	61
64	Electrically continuous graphene from single crystal copper verified by terahertz conductance spectroscopy and micro four-point probe. <i>Nano Letters</i> , <b>2014</b> , 14, 6348-55	11.5	59
63	Graphene transport properties upon exposure to PMMA processing and heat treatments. <i>2D Materials</i> , <b>2014</b> , 1, 035005	5.9	56
62	Atomic Layer Deposition of Ruthenium with TiN Interface for Sub-10 nm Advanced Interconnects beyond Copper. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2016</b> , 8, 26119-26125	9.5	55
61	Accurate microfour-point probe sheet resistance measurements on small samples. <i>Review of Scientific Instruments</i> , <b>2009</b> , 80, 053902	1.7	45
60	Terahertz wafer-scale mobility mapping of graphene on insulating substrates without a gate. <i>Optics Express</i> , <b>2015</b> , 23, 30721-9	3.3	37
59	Comparative study of size dependent four-point probe sheet resistance measurement on laser annealed ultra-shallow junctions. <i>Journal of Vacuum Science &amp; Technology B</i> , <b>2008</b> , 26, 362		35
58	Optimized Laser Thermal Annealing on Germanium for High Dopant Activation and Low Leakage Current. <i>IEEE Transactions on Electron Devices</i> , <b>2014</b> , 61, 4047-4055	2.9	32
57	Topology optimized electrothermal polysilicon microgrippers. <i>Microelectronic Engineering</i> , <b>2008</b> , 85, 1096-1099	2.5	31
56	Review of electrical characterization of ultra-shallow junctions with micro four-point probes. <i>Journal of Vacuum Science and Technology B: Nanotechnology and Microelectronics</i> , <b>2010</b> , 28, C1C27-C1C33	1.3	30
55	Ultra Shallow Arsenic Junctions in Germanium Formed by Millisecond Laser Annealing. <i>Electrochemical and Solid-State Letters</i> , <b>2011</b> , 14, H39		30
54	Quality assessment of terahertz time-domain spectroscopy transmission and reflection modes for graphene conductivity mapping. <i>Optics Express</i> , <b>2018</b> , 26, 9220-9229	3.3	27
53	Electrothermal microgrippers for pick-and-place operations. <i>Microelectronic Engineering</i> , <b>2008</b> , 85, 1128-1130	1.3	27

52	Epitaxial integration of nanowires in microsystems by local micrometer-scale vapor-phase epitaxy. <i>Small</i> , <b>2008</b> , 4, 1741-6	11	26
51	Theoretical analysis of a dual-probe scanning tunneling microscope setup on graphene. <i>Physical Review Letters</i> , <b>2014</b> , 112, 096801	7.4	24
50	Static contact micro four-point probes with . <i>Microelectronic Engineering</i> , <b>2008</b> , 85, 1092-1095	2.5	24
49	Fabrication of CVD graphene-based devices via laser ablation for wafer-scale characterization. <i>2D Materials</i> , <b>2015</b> , 2, 045003	5.9	23
48	Quality assessment of graphene: Continuity, uniformity, and accuracy of mobility measurements. <i>Nano Research</i> , <b>2017</b> , 10, 3596-3605	10	22
47	Study of the Roughness in a Photoresist Masked, Isotropic, SF <sub>6</sub> -Based ICP Silicon Etch. <i>Journal of the Electrochemical Society</i> , <b>2006</b> , 153, G1051	3.9	21
46	Accurate Sheet Resistance Measurement on Ultra-Shallow Profiles. <i>Materials Research Society Symposia Proceedings</i> , <b>2006</b> , 912, 1		19
45	Electrical Homogeneity Mapping of Epitaxial Graphene on Silicon Carbide. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2018</b> , 10, 31641-31647	9.5	18
44	Manipulation and in situ transmission electron microscope characterization of sub-100 nm nanostructures using a microfabricated nanogripper. <i>Journal of Micromechanics and Microengineering</i> , <b>2010</b> , 20, 035009	2	17
43	Batch fabrication of nanopatterned graphene devices via nanoimprint lithography. <i>Applied Physics Letters</i> , <b>2017</b> , 111, 193103	3.4	16
42	Sensitivity study of micro four-point probe measurements on small samples. <i>Journal of Vacuum Science and Technology B: Nanotechnology and Microelectronics</i> , <b>2010</b> , 28, C1C34-C1C40	1.3	15
41	Systematic study of shallow junction formation on germanium substrates. <i>Microelectronic Engineering</i> , <b>2011</b> , 88, 347-350	2.5	14
40	Sensitivity of resistive and Hall measurements to local inhomogeneities: Finite-field, intensity, and area corrections. <i>Journal of Applied Physics</i> , <b>2014</b> , 116, 133706	2.5	13
39	Fundamental size limitations of micro four-point probes. <i>Microelectronic Engineering</i> , <b>2009</b> , 86, 987-990	2.5	12
38	Contactless graphene conductance measurements: the effect of device fabrication on terahertz time-domain spectroscopy. <i>International Journal of Nanotechnology</i> , <b>2016</b> , 13, 591	1.5	11
37	Sensitivity of resistive and Hall measurements to local inhomogeneities. <i>Journal of Applied Physics</i> , <b>2013</b> , 114, 163710	2.5	11
36	Customizable in situ TEM devices fabricated in freestanding membranes by focused ion beam milling. <i>Nanotechnology</i> , <b>2010</b> , 21, 405304	3.4	11
35	Ultra-high aspect ratio replaceable AFM tips using deformation-suppressed focused ion beam milling. <i>Nanotechnology</i> , <b>2013</b> , 24, 465701	3.4	10

34	Revealing origin of quasi-one dimensional current transport in defect rich two dimensional materials. <i>Applied Physics Letters</i> , <b>2014</b> , 105, 053115	3.4	10
33	Graphene antidot lattice transport measurements. <i>International Journal of Nanotechnology</i> , <b>2017</b> , 14, 226	1.5	9
32	Micro Four-Point Probe with High Spatial Resolution for Ion Implantation and Ultra-Shallow Junction Characterization <b>2008</b> ,		8
31	Exploring conductivity in ex-situ doped Si thin films as thickness approaches 5 nm. <i>Journal of Applied Physics</i> , <b>2019</b> , 125, 225709	2.5	7
30	Sensitivity analysis explains quasi-one-dimensional current transport in two-dimensional materials. <i>Physical Review B</i> , <b>2014</b> , 90,	3.3	7
29	Advanced carrier depth profiling on Si and Ge with micro four-point probe. <i>Journal of Vacuum Science &amp; Technology B</i> , <b>2008</b> , 26, 317		7
28	Width-Dependent Sheet Resistance of Nanometer-Wide Si Fins as Measured with Micro Four-Point Probe. <i>Physica Status Solidi (A) Applications and Materials Science</i> , <b>2018</b> , 215, 1700857	1.6	6
27	Fast micro Hall effect measurements on small pads. <i>Journal of Applied Physics</i> , <b>2011</b> , 110, 033707	2.5	6
26	Junction leakage measurements with micro four-point probes <b>2012</b> ,		6
25	Enhanced thermally aided memory performance using few-layer ReS <sub>2</sub> transistors. <i>Applied Physics Letters</i> , <b>2020</b> , 116, 052104	3.4	5
24	<b>2014</b> ,		5
23	Electrical characterization of InGaAs ultra-shallow junctions. <i>Journal of Vacuum Science and Technology B: Nanotechnology and Microelectronics</i> , <b>2010</b> , 28, C1C41-C1C47	1.3	5
22	Mesoscopic current transport in two-dimensional materials with grain boundaries: Four-point probe resistance and Hall effect. <i>Journal of Applied Physics</i> , <b>2016</b> , 120, 134303	2.5	5
21	Breakthrough in current-in-plane tunneling measurement precision by application of multi-variable fitting algorithm. <i>Review of Scientific Instruments</i> , <b>2017</b> , 88, 095005	1.7	4
20	Three-way flexible cantilever probes for static contact. <i>Journal of Micromechanics and Microengineering</i> , <b>2011</b> , 21, 085003	2	4
19	Wafer-scale graphene quality assessment using micro four-point probe mapping. <i>Nanotechnology</i> , <b>2020</b> , 31, 225709	3.4	3
18	Optimization of FIB milling for rapid NEMS prototyping. <i>Microelectronic Engineering</i> , <b>2011</b> , 88, 2671-2674.5		3
17	Electrical characterization of single nanometer-wide Si fins in dense arrays. <i>Beilstein Journal of Nanotechnology</i> , <b>2018</b> , 9, 1863-1867	3	3

16	Qualitative analysis of scanning gate microscopy on epitaxial graphene. <i>2D Materials</i> , <b>2019</b> , 6, 025023	5.9	2
15	Characterization of positional errors and their influence on micro four-point probe measurements on a 100 nm Ru film. <i>Measurement Science and Technology</i> , <b>2015</b> , 26, 095005	2	2
14	Hall effect measurement for precise sheet resistance and thickness evaluation of Ruthenium thin films using non-equidistant four-point probes. <i>AIP Advances</i> , <b>2018</b> , 8, 055206	1.5	2
13	Effective electrical resistivity in a square array of oriented square inclusions. <i>Nanotechnology</i> , <b>2021</b> , 32, 185706	3.4	2
12	Vibration tolerance of micro-electrodes. <i>Journal of Micromechanics and Microengineering</i> , <b>2018</b> , 28, 095010		2
11	Characterization of magnetic tunnel junction test pads. <i>Journal of Applied Physics</i> , <b>2015</b> , 118, 143901	2.5	1
10	Microprobe metrology for direct sheet resistance and mobility characterization <b>2012</b> ,		1
9	In Situ Tuning of Focused-Ion-Beam Defined Nanomechanical Resonators Using Joule Heating. <i>Journal of Microelectromechanical Systems</i> , <b>2011</b> , 20, 1074-1080	2.5	1
8	Micro-cantilevers for non-destructive characterization of nanoglass uniformity <b>2011</b> ,		1
7	Determination of the temperature coefficient of resistance from micro four-point probe measurements. <i>Journal of Applied Physics</i> , <b>2021</b> , 129, 165105	2.5	1
6	Towards diamond micro four-point probes. <i>Micro and Nano Engineering</i> , <b>2019</b> , 5, 100037	3.4	0
5	Electrical Contact Formation in Micro Four-Point Probe Measurements. <i>Physica Status Solidi (A) Applications and Materials Science</i> , <b>2020</b> , 217, 1900579	1.6	0
4	A variable probe pitch micro-Hall effect method. <i>Beilstein Journal of Nanotechnology</i> , <b>2018</b> , 9, 2032-2039;		0
3	3 $\sigma$ correction method for eliminating resistance measurement error due to Joule heating. <i>Review of Scientific Instruments</i> , <b>2021</b> , 92, 094711	1.7	0
2	Apparent size effects on dopant activation in nanometer-wide Si fins. <i>Journal of Vacuum Science and Technology B: Nanotechnology and Microelectronics</i> , <b>2021</b> , 39, 023202	1.3	
1	Four-probe sensing of temperature during Joule heating of silicon. <i>Review of Scientific Instruments</i> , <b>2021</b> , 92, 014903	1.7	