

Lars Montelius

List of Publications by Citations

Source: <https://exaly.com/author-pdf/2185474/lars-montelius-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.

124
papers

4,431
citations

36
h-index

63
g-index

131
ext. papers

4,724
ext. citations

4
avg, IF

4.79
L-index

#	Paper	IF	Citations
124	Nanowire Arrays Defined by Nanoimprint Lithography. <i>Nano Letters</i> , 2004 , 4, 699-702	11.5	346
123	Electrical properties of dislocations and point defects in plastically deformed silicon. <i>Physical Review B</i> , 1985 , 32, 6571-6581	3.3	259
122	Axonal outgrowth on nano-imprinted patterns. <i>Biomaterials</i> , 2006 , 27, 1251-8	15.6	253
121	Improving stamps for 10 nm level wafer scale nanoimprint lithography. <i>Microelectronic Engineering</i> , 2002 , 61-62, 441-448	2.5	214
120	Gallium phosphide nanowires as a substrate for cultured neurons. <i>Nano Letters</i> , 2007 , 7, 2960-5	11.5	165
119	Local probe techniques for luminescence studies of low-dimensional semiconductor structures. <i>Journal of Applied Physics</i> , 1998 , 84, 1715-1775	2.5	146
118	In vitro sliding of actin filaments labelled with single quantum dots. <i>Biochemical and Biophysical Research Communications</i> , 2004 , 314, 529-34	3.4	122
117	Size effect on Young's modulus of thin chromium cantilevers. <i>Applied Physics Letters</i> , 2004 , 85, 3555-3557	3.4	108
116	Nanoimprint lithography at the 6 in. wafer scale. <i>Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena</i> , 2000 , 18, 3557		102
115	Fifteen-piconewton force detection from neural growth cones using nanowire arrays. <i>Nano Letters</i> , 2010 , 10, 782-7	11.5	98
114	Ultrasensitive mass sensor fully integrated with complementary metal-oxide-semiconductor circuitry. <i>Applied Physics Letters</i> , 2005 , 87, 043507	3.4	89
113	Fabrication of quantum devices by Ångström-level manipulation of nanoparticles with an atomic force microscope. <i>Applied Physics Letters</i> , 1998 , 72, 548-550	3.4	81
112	Axonal guidance on patterned free-standing nanowire surfaces. <i>Nanotechnology</i> , 2008 , 19, 345101	3.4	75
111	Silanized surfaces for in vitro studies of actomyosin function and nanotechnology applications. <i>Analytical Biochemistry</i> , 2003 , 323, 127-38	3.1	69
110	Actin filament guidance on a chip: toward high-throughput assays and lab-on-a-chip applications. <i>Langmuir</i> , 2006 , 22, 7286-95	4	68
109	Actomyosin motility on nanostructured surfaces. <i>Biochemical and Biophysical Research Communications</i> , 2003 , 301, 783-8	3.4	67
108	Nanowire-based electrode for acute in vivo neural recordings in the brain. <i>PLoS ONE</i> , 2013 , 8, e56673	3.7	64

107	Large scale nanolithography using nanoimprint lithography. <i>Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena</i> , 1999 , 17, 2961		64
106	Direct observation of the tip shape in scanning probe microscopy. <i>Applied Physics Letters</i> , 1993 , 62, 2628-2630	3.0	64
105	Rat sciatic nerve regeneration through a micromachined silicon chip. <i>Biomaterials</i> , 1997 , 18, 75-80	15.6	59
104	Covalent immobilization of molecularly imprinted polymer nanoparticles on a gold surface using carbodiimide coupling for chemical sensing. <i>Journal of Colloid and Interface Science</i> , 2016 , 461, 1-8	9.3	58
103	Implementation of molecularly imprinted polymer beads for surface enhanced Raman detection. <i>Analytical Chemistry</i> , 2015 , 87, 5056-61	7.8	57
102	Guiding motor-propelled molecules with nanoscale precision through silanized bi-channel structures. <i>Nanotechnology</i> , 2005 , 16, 710-717	3.4	55
101	Nanoimprint- and UV-lithography: Mix&Match process for fabrication of interdigitated nanobiosensors. <i>Microelectronic Engineering</i> , 2000 , 53, 521-524	2.5	51
100	Selective spatial localization of actomyosin motor function by chemical surface patterning. <i>Langmuir</i> , 2006 , 22, 7302-12	4	49
99	Shear stress measurements on InAs nanowires by AFM manipulation. <i>Small</i> , 2007 , 3, 1398-401	11	48
98	Nanoimprinted passive optical devices. <i>Nanotechnology</i> , 2002 , 13, 581-586	3.4	47
97	Chalcogens in germanium. <i>Physical Review B</i> , 1988 , 37, 6916-6928	3.3	45
96	Fabrication of Si-based nanoimprint stamps with sub-20 nm features. <i>Microelectronic Engineering</i> , 2002 , 61-62, 449-454	2.5	43
95	Friction measurements of InAs nanowires on silicon nitride by AFM manipulation. <i>Small</i> , 2009 , 5, 203-7	11	42
94	. <i>IEEE Transactions on Advanced Packaging</i> , 2005 , 28, 547-555		42
93	Lift-off process for nanoimprint lithography. <i>Microelectronic Engineering</i> , 2003 , 67-68, 203-207	2.5	42
92	Covalent immobilization of molecularly imprinted polymer nanoparticles using an epoxy silane. <i>Journal of Colloid and Interface Science</i> , 2015 , 445, 277-284	9.3	41
91	Rectifying and sorting of regenerating axons by free-standing nanowire patterns: a highway for nerve fibers. <i>Langmuir</i> , 2009 , 25, 4343-6	4	41
90	Nanowire biocompatibility in the brain--looking for a needle in a 3D stack. <i>Nano Letters</i> , 2009 , 9, 4184-90	11.5	40

89	Lithography of high spatial density biosensor structures with sub-100 nm spacing by MeV proton beam writing with minimal proximity effect. <i>Nanotechnology</i> , 2004 , 15, 223-226	3.4	38
88	Resonators with integrated CMOS circuitry for mass sensing applications, fabricated by electron beam lithography. <i>Nanotechnology</i> , 2005 , 16, 98-102	3.4	36
87	Fabrication and mechanical characterization of ultrashort nanocantilevers. <i>Applied Physics Letters</i> , 2003 , 83, 990-992	3.4	35
86	Adhesion of coagulase-negative staphylococci and adsorption of plasma proteins to heparinized polymer surfaces. <i>Biomaterials</i> , 1994 , 15, 805-14	15.6	34
85	Fabrication and characterization of bilayer metal wire-grid polarizer using nanoimprint lithography on flexible plastic substrate. <i>Microelectronic Engineering</i> , 2011 , 88, 3108-3112	2.5	32
84	Gallium phosphide nanowire arrays and their possible application in cellular force investigations. <i>Journal of Vacuum Science & Technology B</i> , 2009 , 27, 3092		32
83	Transparent and flexible, nanostructured and mediatorless glucose/oxygen enzymatic fuel cells. <i>Journal of Power Sources</i> , 2015 , 294, 501-506	8.9	31
82	Polymer stamps for nanoimprinting. <i>Microelectronic Engineering</i> , 2002 , 61-62, 393-398	2.5	31
81	Fabrication and characterization of a nanosensor for admittance spectroscopy of biomolecules. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 1995 , 13, 1755-1760	2.9	31
80	Stark effect in individual luminescent centers observed by tunneling luminescence. <i>Applied Physics Letters</i> , 1996 , 68, 60-62	3.4	30
79	The influence of nanoparticles on enzymatic bioelectrocatalysis. <i>RSC Advances</i> , 2014 , 4, 38164-38168	3.7	29
78	A comparison of thermally and photochemically cross-linked polymers for nanoimprinting. <i>Microelectronic Engineering</i> , 2003 , 67-68, 266-273	2.5	29
77	Classification of motor commands using a modified self-organising feature map. <i>Medical Engineering and Physics</i> , 2005 , 27, 403-13	2.4	29
76	Design of atto-vial based recombinant antibody arrays combined with a planar wave-guide detection system. <i>Proteomics</i> , 2007 , 7, 540-547	4.8	27
75	Diffusion dynamics of motor-driven transport: gradient production and self-organization of surfaces. <i>Langmuir</i> , 2008 , 24, 13509-17	4	26
74	Single-electron devices via controlled assembly of designed nanoparticles. <i>Microelectronic Engineering</i> , 1999 , 47, 179-183	2.5	26
73	Fabrication of cantilever based mass sensors integrated with CMOS using direct write laser lithography on resist. <i>Nanotechnology</i> , 2004 , 15, S628-S633	3.4	24
72	Perforated silicon nerve chips with doped registration electrodes: in vitro performance and in vivo operation. <i>IEEE Transactions on Biomedical Engineering</i> , 1999 , 46, 1065-73	5	24

71	Photoconjugation of Molecularly Imprinted Polymer Nanoparticles for Surface-Enhanced Raman Detection of Propranolol. <i>ACS Applied Materials & Interfaces</i> , 2015 , 7, 27479-85	9.5	22
70	Novel CH ₄ /H ₂ metalorganic reactive ion etching of Hg _{1-x} Cd _x Te. <i>Applied Physics Letters</i> , 1991 , 59, 1752-1754	3.4	21
69	Towards a nano-traffic system powered by molecular motors. <i>Microelectronic Engineering</i> , 2003 , 67-68, 899-904	2.5	20
68	Single InP/GaN quantum dots studied by scanning tunneling microscopy and scanning tunneling microscopy induced luminescence. <i>Applied Physics Letters</i> , 2002 , 80, 494-496	3.4	20
67	Nano-Optical Studies of Individual Nanostructures. <i>Japanese Journal of Applied Physics</i> , 1995 , 34, 4392-4397	3.4	20
66	Nanoimprint lithography for the fabrication of interdigitated cantilever arrays. <i>Nanotechnology</i> , 2006 , 17, 1906-1910	3.4	19
65	Guiding Molecular Motors with Nano-Imprinted Structures. <i>Japanese Journal of Applied Physics</i> , 2005 , 44, 3337-3340	1.4	19
64	Characterization of the Mn acceptor level in GaAs. <i>Journal of Applied Physics</i> , 1988 , 64, 1564-1567	2.5	19
63	Nanofluidics in hollow nanowires. <i>Nanotechnology</i> , 2010 , 21, 155301	3.4	18
62	Process development and characterization of antisticking layers on nickel-based stamps designed for nanoimprint lithography. <i>Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena</i> , 2004 , 22, 3283		17
61	Mechanical tuning of tunnel gaps for the assembly of single-electron transistors. <i>Applied Physics Letters</i> , 1999 , 75, 1461-1463	3.4	17
60	Nano-aperture fabrication for single quantum dot spectroscopy. <i>Nanotechnology</i> , 2003 , 14, 675-679	3.4	16
59	Image widening not only a question of tip sample convolution. <i>Applied Physics Letters</i> , 1995 , 66, 1068-1070	3.4	16
58	Hole ionization of Mn-doped GaAs: Photoluminescence versus space-charge techniques. <i>Physical Review B</i> , 1989 , 40, 5598-5601	3.3	16
57	Electrochemical Investigation of Nickel Pattern Electrodes in H ₂ /H ₂ O and CO/CO ₂ Atmospheres. <i>Journal of the Electrochemical Society</i> , 2010 , 157, B1588	3.9	15
56	Development and characterization of silane antisticking layers on nickel-based stamps designed for nanoimprint lithography. <i>Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena</i> , 2005 , 23, 575		15
55	Controlled short-linkage assembly of functional nano-objects. <i>Applied Surface Science</i> , 2014 , 300, 22-28	6.7	14
54	Low temperature Ga surface diffusion from focused ion beam milled grooves. <i>Nanotechnology</i> , 2009 , 20, 325304	3.4	14

53	Low-temperature luminescence due to minority carrier injection from the scanning tunneling microscope tip. <i>Ultramicroscopy</i> , 1992 , 42-44, 210-214	3.1	14
52	Molecularly imprinted nanostructures by nanoimprint lithography. <i>Analyst, The</i> , 2010 , 135, 1219-23	5	13
51	Evidence for a substitutional Mg acceptor level in silicon. <i>Physical Review B</i> , 1988 , 38, 10483-10489	3.3	13
50	Bias-controlled friction of InAs nanowires on a silicon nitride layer studied by atomic force microscopy. <i>Physical Review B</i> , 2010 , 82,	3.3	12
49	Self-organization of motor-propelled cytoskeletal filaments at topographically defined borders. <i>Journal of Biomedicine and Biotechnology</i> , 2012 , 2012, 647265		12
48	Quantitation of bacterial adhesion to polymer surfaces by bioluminescence. <i>Zentralblatt Fur Bakteriologie: International Journal of Medical Microbiology</i> , 1998 , 287, 7-18		12
47	Nanoimprint in PDMS on glass with two-level hybrid stamp. <i>Microelectronic Engineering</i> , 2008 , 85, 210-213	3.5	12
46	Fluorescence microscopy for quality control in nanoimprint lithography. <i>Microelectronic Engineering</i> , 2003 , 67-68, 623-628	2.5	12
45	Fabrication and characterization of a molecular adhesive layer for micro- and nanofabricated electrochemical electrodes. <i>Microelectronic Engineering</i> , 2003 , 67-68, 887-892	2.5	12
44	Nanoimprint lithography for fabrication of three-terminal ballistic junctions in InP/GaInAs. <i>Nanotechnology</i> , 2002 , 13, 666-668	3.4	12
43	Attoval-based antibody nanoarrays. <i>Proteomics</i> , 2009 , 9, 5406-13	4.8	11
42	Negative UVNIL (NUVNIL) A mix-and-match NIL and UV strategy for realisation of nano- and micrometre structures. <i>Microelectronic Engineering</i> , 2009 , 86, 654-656	2.5	11
41	Protein depositions on one hydrocephalus shunt and on fifteen temporary ventricular catheters. <i>Acta Neurochirurgica</i> , 1997 , 139, 734-42	3	11
40	Characterisation of nano-interdigitated electrodes. <i>Journal of Physics: Conference Series</i> , 2008 , 100, 052045	3.5	11
39	Phospholipid vesicle adsorption measured in situ with resonating cantilevers in a liquid cell. <i>Nanotechnology</i> , 2005 , 16, 1512-1516	3.4	11
38	High-fluence Co implantation in Si, SiO ₂ /Si and Si ₃ N ₄ /Si. <i>Nuclear Instruments & Methods in Physics Research B</i> , 1999 , 159, 142-157	1.2	11
37	Comparative friction measurements of InAs nanowires on three substrates. <i>Journal of Applied Physics</i> , 2010 , 108, 094307	2.5	10
36	A new multifunctional platform based on high aspect ratio interdigitated NEMS structures. <i>Nanotechnology</i> , 2009 , 20, 175502	3.4	9

35	High-fluence Co implantation in Si, SiO ₂ /Si and Si ₃ N ₄ /Si. <i>Nuclear Instruments & Methods in Physics Research B</i> , 1999 , 159, 133-141	1.2	9
34	Hydrogen-like excited states of a deep donor in germanium. <i>Solid State Communications</i> , 1985 , 54, 863-865		9
33	Surface-enhanced Raman scattering on dual-layer metallic grating structures. <i>Science Bulletin</i> , 2010 , 55, 2643-2648		8
32	Multi-frequency response from a designed array of micromechanical cantilevers fabricated using a focused ion beam. <i>Nanotechnology</i> , 2006 , 17, 5233-5237	3.4	8
31	Benchmarking of 50nm features in thermal nanoimprint. <i>Journal of Vacuum Science & Technology B</i> , 2007 , 25, 2373		8
30	Large-area nanoimprint fabrication of sub-100-nm interdigitated metal arrays 2000 ,		8
29	Molecularly selective nanopatterns using nanoimprint lithography: A label-free sensor architecture). <i>Journal of Vacuum Science and Technology B: Nanotechnology and Microelectronics</i> , 2011 , 29, 011021	1.3	7
28	Magnetostatic interactions in planar ring-like nanoparticle structures. <i>Thin Solid Films</i> , 2006 , 515, 731-734.	2.2	7
27	Epitaxially overgrown, stable WTe ₂ /As Schottky contacts with sizes down to 50 nm. <i>Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena</i> , 2002 , 20, 580		7
26	Scalable, high performance, enzymatic cathodes based on nanoimprint lithography. <i>Beilstein Journal of Nanotechnology</i> , 2015 , 6, 1377-84	3	6
25	Nanomodified surfaces and guidance of nerve cell processes. <i>Journal of Vacuum Science & Technology B</i> , 2008 , 26, 2558-2561		6
24	High-fluence Co implantation in Si, SiO ₂ /Si and Si ₃ N ₄ /Si. <i>Nuclear Instruments & Methods in Physics Research B</i> , 1999 , 159, 158-165	1.2	6
23	Efficient methods of nanoimprint stamp cleaning based on imprint self-cleaning effect. <i>Nanotechnology</i> , 2011 , 22, 185301	3.4	5
22	Nanoimprint-induced effects on electrical and optical properties of quantum well structures. <i>Microelectronic Engineering</i> , 2003 , 67-68, 214-220	2.5	5
21	Investigation of polymethylmethacrylate resist residues using photoelectron microscopy. <i>Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena</i> , 2002 , 20, 1139		5
20	STM-based luminescence spectroscopy on single quantum dots. <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , 1996 , 42, 82-87	3.1	5
19	AFM-based manipulation of InAs nanowires. <i>Journal of Physics: Conference Series</i> , 2008 , 100, 052051	0.3	4
18	The electron capture cross section of Se ⁺ in silicon. <i>Semiconductor Science and Technology</i> , 1988 , 3, 847-853		4

17	Assembly and analysis of quantum devices using SPM based methods. <i>Microelectronics Reliability</i> , 1998 , 38, 943-950	1.2	3
16	Scanning probe microscopy characterisation of masked low energy implanted nanometer structures. <i>Nuclear Instruments & Methods in Physics Research B</i> , 2001 , 173, 447-454	1.2	3
15	Metal silicides as a novel electrode material in electrochemical sensors. <i>Sensors and Actuators B: Chemical</i> , 2000 , 70, 83-86	8.5	3
14	Coulomb effects on charged, buried metal disks at room temperature. <i>Applied Physics Letters</i> , 1998 , 72, 2610-2612	3.4	3
13	Understanding mechanical properties of nanostructures using Euler-Bernoulli theory. <i>Nanotechnology</i> , 2007 , 18, 255502	3.4	2
12	Piezoresonance driver for positioning scanning probe microscopes in a wide temperature range. <i>Ferroelectrics</i> , 2001 , 258, 47-52	0.6	2
11	Ultrahigh vacuum scanning probe investigations of metal induced void formation in SiO ₂ /Si(111). <i>Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena</i> , 2002 , 20, 226		2
10	Nanoelectrochemical transducers for (bio-) chemical sensor applications fabricated by nanoimprint lithography 2004 , 73-74, 837-837		2
9	Concept for assembling individual nanostructure-based components into complex devices. <i>Journal of Vacuum Science and Technology B: Nanotechnology and Microelectronics</i> , 2015 , 33, 062202	1.3	1
8	Electromechanical Behavior of Interdigitated SiO ₂ Cantilever Arrays. <i>Chinese Physics Letters</i> , 2010 , 27, 028503	1.8	1
7	EBL/NIL fabrication and characterization of interdigitated electrodes for potential application in combinatorial studies.. <i>Materials Research Society Symposia Proceedings</i> , 2007 , 1024, 1		1
6	Nanotechnology for Biomedical Devices 2007 ,		1
5	Reactive polymers: a route to nanoimprint lithography at low temperatures 2003 , 5037, 203		1
4	Nanoimprint technology for fabrication of three-terminal ballistic junction devices in GaInAs/InP. <i>Microelectronic Engineering</i> , 2003 , 67-68, 196-202	2.5	1
3	The influence of the RC product on capture cross section measurements in semiconductors. <i>Semiconductor Science and Technology</i> , 1988 , 3, 839-846	1.8	1
2	Wafer Scale Nanoimprint Lithography. <i>Nanostructure Science and Technology</i> , 2003 , 77-101	0.9	1
1	Luminescence Spectroscopy on Individual Nanostructures and Impurity Atoms Using Stm and Sem. <i>Materials Research Society Symposia Proceedings</i> , 1994 , 375, 157		