

Niels Bent Larsen

List of Publications by Year in descending order

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Version: 2024-02-01

111
papers

5,187
citations

116194

36
h-index

104191

69
g-index

115
all docs

115
docs citations

115
times ranked

7808
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|--|-----|-----------|
| 1 | Cell Motility as Persistent Random Motion: Theories from Experiments. <i>Biophysical Journal</i> , 2005, 89, 912-931. | 0.2 | 250 |
| 2 | Transport Mechanisms of Alkanethiols during Microcontact Printing on Gold. <i>Journal of Physical Chemistry B</i> , 1998, 102, 3324-3334. | 1.2 | 242 |
| 3 | Characterization of Ultrathin Poly(ethylene glycol) Monolayers on Silicon Substrates. <i>Langmuir</i> , 2001, 17, 1457-1460. | 1.6 | 232 |
| 4 | Single-molecule denaturation mapping of DNA in nanofluidic channels. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2010, 107, 13294-13299. | 3.3 | 183 |
| 5 | Lifetimes of organic photovoltaics: Combining chemical and physical characterisation techniques to study degradation mechanisms. <i>Solar Energy Materials and Solar Cells</i> , 2006, 90, 2793-2814. | 3.0 | 170 |
| 6 | Optical waveguide sensor for on-line monitoring of bacteria. <i>Optics Letters</i> , 2003, 28, 1233. | 1.7 | 168 |
| 7 | Highly Stretchable and Conductive Polymer Material Made from Poly(3,4-ethylenedioxythiophene) and Polyurethane Elastomers. <i>Advanced Functional Materials</i> , 2007, 17, 3069-3073. | 7.8 | 164 |
| 8 | Microfluidic Networks Made of Poly(dimethylsiloxane), Si, and Au Coated with Polyethylene Glycol for Patterning Proteins onto Surfaces. <i>Langmuir</i> , 2001, 17, 4090-4095. | 1.6 | 161 |
| 9 | Nanoconfinement-Enhanced Conformational Response of Single DNA Molecules to Changes in Ionic Environment. <i>Physical Review Letters</i> , 2007, 99, 058302. | 2.9 | 161 |
| 10 | Order in Microcontact Printed Self-Assembled Monolayers. <i>Journal of the American Chemical Society</i> , 1997, 119, 3017-3026. | 6.6 | 158 |
| 11 | Self-Assembly of Regioregular, Amphiphilic Polythiophenes into Highly Ordered π -Stacked Conjugated Polymer Thin Films and Nanocircuits. <i>Journal of the American Chemical Society</i> , 1998, 120, 7643-7644. | 6.6 | 141 |
| 12 | Biomimetic Polymer Nanostructures by Injection Molding. <i>Macromolecular Materials and Engineering</i> , 2003, 288, 76-83. | 1.7 | 135 |
| 13 | Effect of Solvents and Concentration on the Formation of a Self-Assembled Monolayer of Octadecylsiloxane on Silicon (001). <i>Langmuir</i> , 2003, 19, 1182-1188. | 1.6 | 134 |
| 14 | Confinement Spectroscopy: Probing Single DNA Molecules with Tapered Nanochannels. <i>Nano Letters</i> , 2009, 9, 1382-1385. | 4.5 | 118 |
| 15 | Stereolithographic hydrogel printing of 3D culture chips with biofunctionalized complex 3D perfusion networks. <i>Lab on A Chip</i> , 2017, 17, 4273-4282. | 3.1 | 112 |
| 16 | Conductive Polymer Functionalization by Click Chemistry. <i>Macromolecules</i> , 2008, 41, 4321-4327. | 2.2 | 110 |
| 17 | Decoupled Phase Transitions and Grain-Boundary Melting in Supported Phospholipid Bilayers. <i>Physical Review Letters</i> , 2005, 94, 025701. | 2.9 | 95 |
| 18 | Demonstration of reverse symmetry waveguide sensing in aqueous solutions. <i>Applied Physics Letters</i> , 2002, 81, 2166-2168. | 1.5 | 92 |

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|----|--|------|-----------|
| 19 | Monitoring of living cell attachment and spreading using reverse symmetry waveguide sensing. Applied Physics Letters, 2005, 86, 071101. | 1.5 | 89 |
| 20 | Injection molding of high aspect ratio sub-100 nm nanostructures. Journal of Micromechanics and Microengineering, 2013, 23, 025003. | 1.5 | 89 |
| 21 | Reverse-symmetry waveguides: theory and fabrication. Applied Physics B: Lasers and Optics, 2002, 74, 383-393. | 1.1 | 88 |
| 22 | Effects of Colistin on Surface Ultrastructure and Nanomechanics of Pseudomonas aeruginosa Cells. Langmuir, 2009, 25, 3728-3733. | 1.6 | 85 |
| 23 | Injection molded nanofluidic chips: Fabrication method and functional tests using single-molecule DNA experiments. Lab on A Chip, 2011, 11, 303-308. | 3.1 | 83 |
| 24 | Directed self-organization of single DNA molecules in a nanoslit via embedded nanopit arrays. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 79-84. | 3.3 | 82 |
| 25 | Light-Induced Local Heating for Thermophoretic Manipulation of DNA in Polymer Micro- and Nanochannels. Nano Letters, 2010, 10, 826-832. | 4.5 | 78 |
| 26 | Deep-probe metal-clad waveguide biosensors. Biosensors and Bioelectronics, 2007, 22, 1282-1288. | 5.3 | 77 |
| 27 | Spatially Selective Functionalization of Conducting Polymers by "Electroclick" Chemistry. Advanced Materials, 2009, 21, 4483-4486. | 11.1 | 71 |
| 28 | On the injection molding of nanostructured polymer surfaces. Polymer Engineering and Science, 2006, 46, 160-171. | 1.5 | 70 |
| 29 | In-chip fabrication of free-form 3D constructs for directed cell migration analysis. Lab on A Chip, 2013, 13, 4800. | 3.1 | 59 |
| 30 | Fabrication of reverse symmetry polymer waveguide sensor chips on nanoporous substrates using dip-floating. Journal of Micromechanics and Microengineering, 2005, 15, 1260-1264. | 1.5 | 47 |
| 31 | Complex Surface Concentration Gradients by Stenciled "Electro Click Chemistry". Langmuir, 2010, 26, 16171-16177. | 1.6 | 45 |
| 32 | Fabrication of all-polymer freestanding waveguides. Journal of Micromechanics and Microengineering, 2003, 13, 419-424. | 1.5 | 44 |
| 33 | Three-Dimensional Super-Resolution Imaging Using a Row "Column Array. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2020, 67, 538-546. | 1.7 | 44 |
| 34 | Nanostructures for all-polymer microfluidic systems. Microelectronic Engineering, 2010, 87, 1379-1382. | 1.1 | 42 |
| 35 | Surface morphology of PS "PDMS diblock copolymer films. Journal of Electron Spectroscopy and Related Phenomena, 2001, 121, 93-110. | 0.8 | 40 |
| 36 | Direct Fast Patterning of Conductive Polymers Using Agarose Stamping. Advanced Materials, 2007, 19, 3261-3265. | 11.1 | 39 |

| # | ARTICLE | IF | CITATIONS |
|----|--|-----|-----------|
| 37 | Designing CAF-adjuvanted dry powder vaccines: Spray drying preserves the adjuvant activity of CAF01. <i>Journal of Controlled Release</i> , 2013, 167, 256-264. | 4.8 | 38 |
| 38 | Synthesis, Properties, and Langmuir-Blodgett Film Studies of an Ionic Dye Terminated Rigid Conducting Oligomer. <i>Langmuir</i> , 2003, 19, 7873-7880. | 1.6 | 36 |
| 39 | Injection molded chips with integrated conducting polymer electrodes for electroporation of cells. <i>Journal of Micromechanics and Microengineering</i> , 2010, 20, 055010. | 1.5 | 36 |
| 40 | On-Demand Reversible UV-Triggered Interpenetrating Polymer Network-Based Drug Delivery System Using the Spiropyran-Merocyanine Hydrophobicity Switch. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 3591-3604. | 4.0 | 36 |
| 41 | Structure and dynamics of lipid monolayers: implications for enzyme catalysed lipolysis. <i>Nature Structural and Molecular Biology</i> , 1995, 2, 395-401. | 3.6 | 35 |
| 42 | The recognition of adsorbed and denatured proteins of different topographies by β_2 integrins and effects on leukocyte adhesion and activation. <i>Biomaterials</i> , 2005, 26, 3039-3053. | 5.7 | 34 |
| 43 | Absolute Refractive Index Determination by Microinterferometric Backscatter Detection. <i>Analytical Chemistry</i> , 2003, 75, 1946-1953. | 3.2 | 32 |
| 44 | Lubricating Effect of Thin Films of Styrene- <i>b</i> -Dimethylsiloxane Block Copolymers. <i>Langmuir</i> , 1999, 15, 3859-3865. | 1.6 | 31 |
| 45 | Protein aggregation and degradation during iodine labeling and its consequences for protein adsorption to biomaterials. <i>Analytical Biochemistry</i> , 2007, 361, 120-125. | 1.1 | 31 |
| 46 | Micropatterning of Functional Conductive Polymers with Multiple Surface Chemistries in Register. <i>Langmuir</i> , 2012, 28, 6502-6511. | 1.6 | 31 |
| 47 | Electrical and optical properties of thin indium tin oxide films produced by pulsed laser ablation in oxygen or rare gas atmospheres. <i>Applied Surface Science</i> , 1999, 142, 248-252. | 3.1 | 27 |
| 48 | Comparison of clinical grade type 1 polarized and standard matured dendritic cells for cancer immunotherapy. <i>Vaccine</i> , 2013, 31, 639-646. | 1.7 | 27 |
| 49 | Competitive protein adsorption to polymer surfaces from human serum. <i>Journal of Materials Science: Materials in Medicine</i> , 2008, 19, 2179-2185. | 1.7 | 26 |
| 50 | Fluorination of polymethylmethacrylate with tetrafluoroethane using DC glow discharge plasma. <i>Applied Surface Science</i> , 2008, 254, 5722-5726. | 3.1 | 25 |
| 51 | Detection and Localization of Ultrasound Scatterers Using Convolutional Neural Networks. <i>IEEE Transactions on Medical Imaging</i> , 2020, 39, 3855-3867. | 5.4 | 25 |
| 52 | Integration of conducting polymer network in non-conductive polymer substrates. <i>Synthetic Metals</i> , 2006, 156, 1203-1207. | 2.1 | 24 |
| 53 | Fast prototyping of injection molded polymer microfluidic chips. <i>Journal of Micromechanics and Microengineering</i> , 2010, 20, 015020. | 1.5 | 24 |
| 54 | 3D Printed Hydrogel Multiassay Platforms for Robust Generation of Engineered Contractile Tissues. <i>Biomacromolecules</i> , 2020, 21, 356-365. | 2.6 | 24 |

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|----|--|-----|-----------|
| 55 | Deposition and characterization of ITO films produced by laser ablation at 355 nm. <i>Applied Physics A: Materials Science and Processing</i> , 2002, 74, 147-152. | 1.1 | 23 |
| 56 | Protein and cell patterning in closed polymer channels by photoimmobilizing proteins on photografted poly(ethylene glycol) diacrylate. <i>Biomicrofluidics</i> , 2014, 8, 064127. | 1.2 | 23 |
| 57 | Leaky Optoelectrical Fiber for Optogenetic Stimulation and Electrochemical Detection of Dopamine Exocytosis from Human Dopaminergic Neurons. <i>Advanced Science</i> , 2019, 6, 1902011. | 5.6 | 23 |
| 58 | Electron Transfer Reactions of Self-Assembled Monolayers of Thio(Phenylacetylene) <i>n</i> -Substituted Chiral Metal ⁺ Salen Complexes. <i>Langmuir</i> , 2002, 18, 2795-2799. | 1.6 | 22 |
| 59 | Langmuir-Blodgett Films of a Functionalized Molecule with Cross-Sectional Mismatch Between Head and Tail. <i>Science</i> , 1994, 264, 1301-1304. | 6.0 | 21 |
| 60 | The Effects of Collagen Type I Topography on Myoblasts In Vitro. <i>Connective Tissue Research</i> , 2004, 45, 238-247. | 1.1 | 21 |
| 61 | Embedded 3D Printing in Self-Healing Annealable Composites for Precise Patterning of Functionally Mature Human Neural Constructs. <i>Advanced Science</i> , 2022, 9, . | 5.6 | 21 |
| 62 | Quantification of grafted poly(ethylene glycol)-silanes on silicon by time-of-flight secondary ion mass spectrometry. <i>Journal of Mass Spectrometry</i> , 2002, 37, 699-708. | 0.7 | 20 |
| 63 | An all-polymer micropump based on the conductive polymer poly(3,4-ethylenedioxythiophene) and a polyurethane channel system. <i>Journal of Micromechanics and Microengineering</i> , 2007, 17, 860-866. | 1.5 | 20 |
| 64 | Multimaterial hydrogel with widely tunable elasticity by selective photopolymerization of PEG diacrylate and epoxy monomers. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , 2016, 54, 1195-1201. | 2.4 | 20 |
| 65 | Lateral and Vertical Quantification of Spin-Coated Polymer Films on Silicon by TOF-SIMS, XPS, and AFM. <i>Journal of Physical Chemistry B</i> , 2002, 106, 13114-13121. | 1.2 | 19 |
| 66 | Micropatterning of a stretchable conductive polymer using inkjet printing and agarose stamping. <i>Synthetic Metals</i> , 2007, 157, 961-967. | 2.1 | 19 |
| 67 | Topology optimization and 3D printing of large deformation compliant mechanisms for straining biological tissues. <i>Structural and Multidisciplinary Optimization</i> , 2021, 63, 1351-1366. | 1.7 | 19 |
| 68 | Solvent Composition Directing Click-Functionalization at the Surface or in the Bulk of Azide-Modified PEDOT. <i>Macromolecules</i> , 2011, 44, 495-501. | 2.2 | 18 |
| 69 | Autocrine CCL19 blocks dendritic cell migration toward weak gradients of CCL21. <i>Cytotherapy</i> , 2016, 18, 1187-1196. | 0.3 | 18 |
| 70 | Ordering of the Disk-like 2,3,6,7,10,11-Hexakis(hexylthio)triphenylene in Solution and at a Liquid-Solid Interface. <i>Langmuir</i> , 1996, 12, 1690-1692. | 1.6 | 17 |
| 71 | Fabrication of an all-polymer electrochemical sensor by using a one-step hot embossing procedure. <i>Microelectronic Engineering</i> , 2010, 87, 1239-1241. | 1.1 | 17 |
| 72 | One-step polymer surface modification for minimizing drug, protein, and DNA adsorption in microanalytical systems. <i>Lab on A Chip</i> , 2013, 13, 669-675. | 3.1 | 17 |

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|----|---|------|-----------|
| 73 | Human cytomegalovirus chemokine receptor US28 induces migration of cells on a CX3CL1-presenting surface. <i>Journal of General Virology</i> , 2013, 94, 1111-1120. | 1.3 | 17 |
| 74 | Protein Inâ€Mold Patterning. <i>Advanced Materials</i> , 2008, 20, 1825-1829. | 11.1 | 16 |
| 75 | Generating substrate bound functional chemokine gradients in vitro. <i>Biomaterials</i> , 2009, 30, 5305-5311. | 5.7 | 16 |
| 76 | Micropatterned Carbon-on-Quartz Electrode Chips for Photocurrent Generation from Thylakoid Membranes. <i>ACS Applied Energy Materials</i> , 2018, 1, 3313-3322. | 2.5 | 16 |
| 77 | Enhanced transduction of photonic crystal dye lasers for gas sensing via swelling polymer film. <i>Optics Letters</i> , 2011, 36, 1392. | 1.7 | 15 |
| 78 | Efficient large volume electroporation of dendritic cells through micrometer scale manipulation of flow in a disposable polymer chip. <i>Biomedical Microdevices</i> , 2011, 13, 383-392. | 1.4 | 15 |
| 79 | Facile Photoimmobilization of Proteins onto Low-Binding PEG-Coated Polymer Surfaces. <i>Biomacromolecules</i> , 2014, 15, 894-899. | 2.6 | 15 |
| 80 | Highly sensitive biosensing based on interference from light scattering in capillary tubes. <i>Applied Physics Letters</i> , 2006, 89, 151108. | 1.5 | 14 |
| 81 | Dual-Material 3D-Printed Intestinal Model Devices with Integrated Villi-like Scaffolds. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 58434-58446. | 4.0 | 14 |
| 82 | Directed self-assembly of amphiphilic regioregular polythiophenes on the nanometer scale. <i>Synthetic Metals</i> , 1999, 102, 1502-1505. | 2.1 | 13 |
| 83 | Microwave assisted click chemistry on a conductive polymer film. <i>Synthetic Metals</i> , 2011, 161, 812-816. | 2.1 | 13 |
| 84 | Hydrogen silsesquioxane mold coatings for improved replication of nanopatterns by injection molding. <i>Journal of Micromechanics and Microengineering</i> , 2015, 25, 035018. | 1.5 | 13 |
| 85 | 3D printed calibration micro-phantoms for super-resolution ultrasound imaging validation. <i>Ultrasonics</i> , 2021, 114, 106353. | 2.1 | 11 |
| 86 | Imaging therapeutic peptide transport across intestinal barriers. <i>RSC Chemical Biology</i> , 2021, 2, 1115-1143. | 2.0 | 10 |
| 87 | X-ray diffraction and molecular-dynamics studies: Structural analysis of phases in diglyceride monolayers. <i>Physical Review E</i> , 1998, 57, 3153-3163. | 0.8 | 9 |
| 88 | 3D Printed Flow Phantoms with Fiducial Markers for Super-Resolution Ultrasound Imaging. , 2018, , . | | 9 |
| 89 | Confinement dependent chemotaxis in two-photon polymerized linear migration constructs with highly definable concentration gradients. <i>Biomedical Microdevices</i> , 2015, 17, 30. | 1.4 | 8 |
| 90 | Ultrasound Multiple Point Target Detection and Localization using Deep Learning. , 2019, , . | | 7 |

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| 91 | Three-dimensional chemical and physical analysis of the degradation mechanisms in organic photovoltaics. , 2006, , . | | 6 |
| 92 | The lamellar period in symmetric diblock copolymer thin films studied by neutron reflectivity and AFM. Applied Surface Science, 1999, 142, 608-613. | 3.1 | 5 |
| 93 | Data-driven modeling of nano-nose gas sensor arrays. Proceedings of SPIE, 2010, , . | 0.8 | 5 |
| 94 | History and Latest Advances in Flow Estimation Technology: From 1-D in 2-D to 3-D in 4-D. , 2019, , . | | 5 |
| 95 | Micro-Drilling of Polymer Tubular Ultramicroelectrode Arrays for Electrochemical Sensors. Sensors, 2013, 13, 6319-6333. | 2.1 | 4 |
| 96 | 3-D Super Resolution Imaging using a 62+62 Elements Row-Column Array. , 2019, , . | | 4 |
| 97 | Reverse Symmetry Waveguide for Optical Biosensing. , 2005, , 279-301. | | 4 |
| 98 | Nanoimprinted polymer chips for light induced local heating of liquids in micro- and nanochannels. , 2010, , . | | 3 |
| 99 | Cell culture plastics with immobilized interleukinâ€4 for monocyte differentiation. Journal of Biomedical Materials Research - Part A, 2011, 96A, 372-383. | 2.1 | 3 |
| 100 | Multiplexed Dosing Assays by Digitally Definable Hydrogel Volumes. Advanced Healthcare Materials, 2016, 5, 244-254. | 3.9 | 3 |
| 101 | Surface modification of polystyrene by blending substituted styrene copolymers. Journal of Polymer Science, Part B: Polymer Physics, 2001, 39, 1046-1054. | 2.4 | 2 |
| 102 | Polymer-coated vertical-cavity surface-emitting laser diode vapor sensor. , 2010, , . | | 2 |
| 103 | 3D Printed Calibration Micro-phantoms for Validation of Super-Resolution Ultrasound Imaging. , 2019, , . | | 2 |
| 104 | High Resolution Dual Material Stereolithography for Monolithic Microdevices. Advanced Materials Technologies, 0, , 2101180. | 3.0 | 2 |
| 105 | Wafer scale coating of polymer cantilever fabricated by nanoimprint lithography. , 2010, , . | | 1 |
| 106 | Fast prototyping of conducting polymer microelectrodes using resistance-controlled high precision drilling. Microelectronic Engineering, 2011, 88, 2589-2592. | 1.1 | 1 |
| 107 | Exploration of two methods for quantitative Mitomycin C measurement in tumor tissue in vitro and in vivo. Biological Procedures Online, 2013, 15, 12. | 1.4 | 1 |
| 108 | Large-Scale mRNA Transfection of Dendritic Cells by Electroporation in Continuous Flow Systems. Methods in Molecular Biology, 2016, 1428, 151-161. | 0.4 | 1 |

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|-----|--|----|-----------|
| 109 | Light harvesting and energy transfer in large multidomain molecules. , 2005, , . | | 0 |
| 110 | Selective gas sensing for photonic crystal lasers. , 2011, , . | | 0 |
| 111 | Reverse Symmetry Waveguide for Optical Biosensing. , 2005, , 279-301. | | 0 |