# Michel Godin

List of Publications by Year
in descending order



| 46 | 3,034 | 24 | 47 |
|---|---|---|---|
| papers | citations | h-index | g-index |
| | | 257101 | 214527 |

| 49 | 49 | 49 | 3872 |
|---|---|---|---|
| all docs | docs citations | times ranked | citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Weighing of biomolecules, single cells and single nanoparticles in fluid. Nature, 2007, 446, 1066-1069. | 13.7 | 1,089 |
| 2 | Using buoyant mass to measure the growth of single cells. Nature Methods, 2010, 7, 387-390. | 9.0 | 338 |
| 3 | Surface Stress, Kinetics, and Structure of Alkanethiol Self-Assembled Monolayers. Langmuir, 2004, 20, 7090-7096. | 1.6 | 167 |
| 4 | Measuring the mass, density, and size of particles and cells using a suspended microchannel resonator. Applied Physics Letters, 2007, 91, 123121. | 1.5 | 159 |
| 5 | Cantilever-based sensing: the origin of surface stress and optimization strategies. Nanotechnology, 2010, 21, 075501. | 1.3 | 117 |
| 6 | Quantitative surface stress measurements using a microcantilever. Applied Physics Letters, 2001, 79, 551-553. | 1.5 | 86 |
| 7 | Precise control of the size and noise of solid-state nanopores using high electric fields. Nanotechnology, 2012, 23, 405301. | 1.3 | 78 |
| 8 | Integrating nanopore sensors within microfluidic channel arrays using controlled breakdown. Lab on A Chip, 2015, 15, 1407-1411. | 3.1 | 67 |
| 9 | Microcantilever-Based Sensors:â€‰ Effect of Morphology, Adhesion, and Cleanliness of the Sensing Surface on Surface Stress. Analytical Chemistry, 2007, 79, 8136-8143. | 3.2 | 64 |
| 10 | A differential microcantilever-based system for measuring surface stress changes induced by electrochemical reactions. Sensors and Actuators B: Chemical, 2005, 107, 233-241. | 4.0 | 53 |
| 11 | A complete analysis of the laser beam deflection systems used in cantilever-based systems. Ultramicroscopy, 2007, 107, 422-430. | 0.8 | 53 |
| 12 | Structural and mechanical remodeling of the cytoskeleton maintains tensional homeostasis in 3D microtissues under acute dynamic stretch. Scientific Reports, 2020, 10, 7696. | 1.6 | 49 |
| 13 | Redox-Induced Surface Stress of Polypyrrole-Based Actuators. Journal of Physical Chemistry B, 2005, 109, 17531-17537. | 1.2 | 44 |
| 14 | Three dimensional spatial separation of cells in response to microtopography. Biomaterials, 2013, 34, 8097-8104. | 5.7 | 43 |
| 15 | A microscale anisotropic biaxial cell stretching device for applications in mechanobiology. Biotechnology Letters, 2014, 36, 657-665. | 1.1 | 43 |
| 16 | Hollow core photonic crystal fiber as a reusable Raman biosensor. Optics Express, 2013, 21, 12340. | 1.7 | 42 |
| 17 | Optofluidic label-free SERS platform for rapid bacteria detection in serum. Sensors and Actuators B: Chemical, 2019, 300, 126907. | 4.0 | 40 |
| 18 | Label-Free Microelectronic PCR Quantification. Analytical Chemistry, 2006, 78, 2526-2531. | 3.2 | 37 |

| # | Article | IF | Citations |
|---|---|---|---|
| 19 | Combined in situ micromechanical cantilever-based sensing and ellipsometry. Review of Scientific Instruments, 2003, 74, 4902-4907. | 0.6 | 35 |
| 20 | Manipulating Electrical and Fluidic Access in Integrated Nanoporeâ€Microfluidic Arrays Using Microvalves. Small, 2017, 13, 1602601. | 5.2 | 30 |
| 21 | Identifying Structure in Short DNA Scaffolds Using Solid-State Nanopores. ACS Sensors, 2017, 2, 1814-1820. | 4.0 | 30 |
| 22 | Monitoring of heparin and its low-molecular-weight analogs by silicon field effect. Proceedings of the National Academy of Sciences of the United States of America, 2006, 103, 13374-13379. | 3.3 | 29 |
| 23 | Calibrating laser beam deflection systems for use in atomic force microscopes and cantilever sensors. Applied Physics Letters, 2006, 88, 083108. | 1.5 | 28 |
| 24 | Integrated microelectronic device for label-free nucleic acid amplification and detection. Lab on A Chip, 2007, 7, 347. | 3.1 | 27 |
| 25 | Cellular orientation is guided by strain gradients. Integrative Biology (United Kingdom), 2017, 9, 607-618. | 0.6 | 27 |
| 26 | Microfluidic cell volume sensor with tunable sensitivity. Lab on A Chip, 2012, 12, 3016. | 3.1 | 25 |
| 27 | Programmable DNA Nanoswitch Sensing with Solid-State Nanopores. ACS Sensors, 2019, 4, 2458-2464. | 4.0 | 23 |
| 28 | Field-Flow Fractionation and Hydrodynamic Chromatography on a Microfluidic Chip. Analytical Chemistry, 2013, 85, 5981-5988. | 3.2 | 19 |
| 29 | DNA Capture by Nanopore Sensors under Flow. Analytical Chemistry, 2020, 92, 8108-8116. | 3.2 | 19 |
| 30 | A vacuum-actuated microtissue stretcher for long-term exposure to oscillatory strain within a 3D matrix. Biomedical Microdevices, 2018, 20, 43. | 1.4 | 18 |
| 31 | Deterministic paracrine repair of injured myocardium using microfluidic-based cocooning of heart explant-derived cells. Biomaterials, 2020, 247, 120010. | 5.7 | 16 |
| 32 | Mechanical stretch sustains myofibroblast phenotype and function in microtissues through latent TGF-Î²1 activation. Integrative Biology (United Kingdom), 2020, 12, 199-210. | 0.6 | 15 |
| 33 | Quantifying the volume of single cells continuously using a microfluidic pressure-driven trap with media exchange. Biomicrofluidics, 2014, 8, 011101. | 1.2 | 13 |
| 34 | Mass-based readout for agglutination assays. Applied Physics Letters, 2007, 91, . | 1.5 | 12 |
| 35 | Using the fringing electric field in microfluidic volume sensors to enhance sensitivity and accuracy. Applied Physics Letters, 2012, 101, . | 1.5 | 12 |
| 36 | Strategies for controlling egress of therapeutic cells from hydrogel microcapsules. Journal of Tissue Engineering and Regenerative Medicine, 2019, 13, 612-624. | 1.3 | 12 |

| # | Article | IF | Citations |
|---|---|---|---|
| 37 | Using active microfluidic flow focusing to sort particles and cells based on high-resolution volume measurements. Microelectronic Engineering, 2014, 118, 35-40. | 1.1 | 11 |
| 38 | Physical confinement signals regulate the organization of stem cells in three dimensions. Journal of the Royal Society Interface, 2016, 13, 20160613. | 1.5 | 11 |
| 39 | Fine-tuning the Size and Minimizing the Noise of Solid-state Nanopores. Journal of Visualized Experiments, 2013, , e51081. | 0.2 | 10 |
| 40 | Time dependent stress relaxation and recovery in mechanically strained 3D microtissues. APL Bioengineering, 2020, 4, 036107. | 3.3 | 10 |
| 41 | Measuring Single-Cell Phenotypic Growth Heterogeneity Using a Microfluidic Cell Volume Sensor. Scientific Reports, 2018, 8, 17809. | 1.6 | 9 |
| 42 | Digital counting of nucleic acid targets using solid-state nanopores. Nanoscale, 2020, 12, 17833-17840. | 2.8 | 8 |
| 43 | Measuring mechanodynamics in an unsupported epithelial monolayer grown at an airâ€"water interface. Molecular Biology of the Cell, 2017, 28, 111-119. | 0.9 | 3 |
| 44 | Time dependence of cellular responses to dynamic and complex strain fields. Integrative Biology (United Kingdom), 2019, 11, 4-15. | 0.6 | 3 |
| 45 | Hollow core photonic crystal fiber as a robust Raman biosensor. Proceedings of SPIE, 2013, , . | 0.8 | 2 |
| 46 | Nanopore Sensors: Manipulating Electrical and Fluidic Access in Integrated Nanoporeâ€Microfluidic Arrays Using Microvalves (Small 10/2017). Small, 2017, 13, . | 5.2 | 2 |