# Takatoki Yamamoto

## List of Publications by Year in Descending Order



| | | | |
|---|---|---|---|
| 67 papers | 1,225 citations | 16 h-index | 34 g-index |
| 79 ext. papers | 1,392 ext. citations | 3.1 avg, IF | 4.32 L-index |

| # | Paper | IF | Citations |
|---|---|---|---|
| 67 | Measurement of low-grade inflammation of the esophageal mucosa with electrical conductivity shows promise in assessing PPI responsiveness in patients with GERD. *American Journal of Physiology - Renal Physiology*, **2021**, 321, G29-G40 | 5.1 | 1 |
| 66 | Chemical Lift-Off Process Using Acetone Ink for Easy Fabrication of Metallic Nano/Microstructures. *International Journal of Automation Technology*, **2020**, 14, 229-237 | 0.8 | 0 |
| 65 | Single-Molecule Detection of DNA in a Nanochannel by High-Field Strength-Assisted Electrical Impedance Spectroscopy. *Micromachines*, **2019**, 10, | 3.3 | 1 |
| 64 | Fabrication of an Anti-Reflective and Super-Hydrophobic Structure by Vacuum Ultraviolet Light-Assisted Bonding and Nanoscale Pattern Transfer. *Micromachines*, **2018**, 9, | 3.3 | 4 |
| 63 | Damage-less Handling of Exosomes Using an Ion-depletion Zone in a Microchannel. *Analytical Sciences*, **2018**, 34, 875-880 | 1.7 | 13 |
| 62 | Subsurface investigation of the surface modification of polydimethylsiloxane by 172-nm vacuum ultraviolet irradiation using ToF-SIMS and VUV spectrometry. *Surface and Interface Analysis*, **2018**, 50, 752-756 | 1.5 | 2 |
| 61 | Vacuum ultraviolet light assisted bonding and nanoscale pattern transfer method for polydimethylsiloxane. *Microelectronic Engineering*, **2017**, 176, 116-120 | 2.5 | 3 |
| 60 | Solid state direct bonding of polymers by vacuum ultraviolet light below 160 nm. *Applied Surface Science*, **2017**, 419, 319-327 | 6.7 | 7 |
| 59 | Development of Virus Concentration Device by Controlling Ion Depletion Zone for Ultrasensitive Virus Sensing. *Electronics and Communications in Japan*, **2017**, 100, 56-63 | 0.4 | 1 |
| 58 | Initial Evaluation of the Continuous Sampling Method using Liquid-gate Realized by Porous Membrane and Hydrophilic/Hydrophobic Interface. *IEEJ Transactions on Sensors and Micromachines*, **2017**, 137, 169-173 | 0.2 | |
| 57 | Development of Virus Concentration Device by Controlling Ion Depletion Zone for Ultra-sensitive Virus Sensing. *IEEJ Transactions on Sensors and Micromachines*, **2016**, 136, 363-369 | 0.2 | |
| 56 | Fabrication Method for Moth-eye Structure Made of Glass Using Vacuum Ultraviolet Light Vitrification of Silicone. *IEEJ Transactions on Sensors and Micromachines*, **2016**, 136, 488-492 | 0.2 | |
| 55 | Quantification of Virus Particles Using Nanopore-Based Resistive-Pulse Sensing Techniques. *Frontiers in Microbiology*, **2016**, 7, 1500 | 5.7 | 47 |
| 54 | A Novel Fabrication Technique for Liquid-Tight Microchannels by Combination of a Paraffin Polymer and a Photo-Curable Silicone Elastomer. *Materials*, **2016**, 9, | 3.5 | 5 |
| 53 | Nanometer-level high-accuracy molding using a photo-curable silicone elastomer by suppressing thermal shrinkage. *RSC Advances*, **2015**, 5, 10172-10177 | 3.7 | 16 |
| 52 | Study of Metal Etching Using Ozone Water. *Electrical Engineering in Japan (English Translation of Denki Gakkai Ronbunshi)*, **2015**, 193, 65-72 | 0.4 | |
| 51 | Single-molecule Measurement and Its Application by Electric Impedance Spectroscopy Using Nanochannel. *Bunseki Kagaku*, **2015**, 64, 431-440 | 0.2 | 1 |

| | | | |
|---|---|---|---|
| 50 | Nanoscale three-dimensional optical visualization method for a deformation of elastomer printing plate to realize soft nano-printing technology. *Surface and Interface Analysis*, **2015**, 47, 723-727 | 1.5 | 6 |
| 49 | Nonlinear electrical impedance spectroscopy of viruses using very high electric fields created by nanogap electrodes. *Frontiers in Microbiology*, **2015**, 6, 940 | 5.7 | 9 |
| 48 | Conformation dependent non-linear impedance response of DNA in nanofluidic device **2015**, | | 2 |
| 47 | Rapid fabrication technique of nano/microfluidic device with high mechanical stability utilizing two-step soft lithography. *Sensors and Actuators B: Chemical*, **2014**, 201, 407-412 | 8.5 | 20 |
| 46 | Optical property of metallic nanodot arrays fabricated by combination of nano plastic forming and thermal dewetting method. *Transactions of the JSME (in Japanese)*, **2014**, 80, MN0272-MN0272 | 0.2 | |
| 45 | Direct Evaluation of the Electrokinetic Properties of Electrolytes in a Nanochannel using Electrical Impedance Spectroscopy. *Israel Journal of Chemistry*, **2014**, 54, 1607-1614 | 3.4 | 1 |
| 44 | Effects of Morphology of Nanodots on Localized Surface Plasmon Resonance Property. *International Journal of Automation Technology*, **2014**, 8, 74-82 | 0.8 | 7 |
| 43 | Fabrication of Gold Nanodot Array on Plastic Films for Bio-sensing Applications. *Procedia CIRP*, **2013**, 5, 47-52 | 1.8 | 9 |
| 42 | Direct measurement of electric double layer in a nanochannel by electrical impedance spectroscopy. *Microfluidics and Nanofluidics*, **2013**, 14, 983-988 | 2.8 | 20 |
| 41 | Solid-state bonding of silicone elastomer to glass by vacuum oxygen plasma, atmospheric plasma, and vacuum ultraviolet light treatment. *Surface and Interface Analysis*, **2013**, 45, 817-822 | 1.5 | 8 |
| 40 | Modification of the glass surface property in PDMS-glass hybrid microfluidic devices. *Analytical Sciences*, **2012**, 28, 39-44 | 1.7 | 16 |
| 39 | Single molecular level analysis and processing in nanochannels. *Frontiers in Bioscience - Scholar*, **2012**, 4, 1461-74 | 2.4 | |
| 38 | Nanoscale etching and flattening of metals with ozone water. *Nano Letters*, **2012**, 12, 3158-61 | 11.5 | 4 |
| 37 | Application of cell-free expression of GFP for evaluation of microsystems. *Frontiers in Bioscience - Landmark*, **2012**, 17, 1931-9 | 2.8 | 2 |
| 36 | Study of Metal Etching using Ozone Water. *IEEJ Transactions on Sensors and Micromachines*, **2012**, 132, 413-419 | 0.2 | |
| 35 | Study on 172-nm vacuum ultraviolet light surface modifications of polydimethylsiloxane for micro/nanofluidic applications. *Surface and Interface Analysis*, **2011**, 43, 1271-1276 | 1.5 | 20 |
| 34 | Electroactive microwell arrays for highly efficient single-cell trapping and analysis. *Small*, **2011**, 7, 3239-47 | 7.1 | 74 |
| 33 | A microfluidic in situ analyzer for ATP quantification in ocean environments. *Lab on A Chip*, **2011**, 11, 3508-15 | 7.2 | 30 |

| | | | |
|---|---|---|---|
| 32 | Integrated in situ genetic analyzer for microbiology in extreme environments. *RSC Advances*, **2011**, 1, 1567 | 3.7 | 13 |
| 31 | An electroactive microwell array for trapping and lysing single-bacterial cells. *Biomicrofluidics*, **2011**, 5, 24114 | 3.2 | 20 |
| 30 | A rapid method for optimizing running temperature of electrophoresis through repetitive on-chip CE operations. *International Journal of Molecular Sciences*, **2011**, 12, 4271-81 | 6.3 | 2 |
| 29 | Direct Bonding between Silicone and Glass by Atmospheric-Pressure Surface Modification. *IEEJ Transactions on Sensors and Micromachines*, **2011**, 131, 159-164 | 0.2 | 1 |
| 28 | Nanofluidic single-molecule sorting of DNA: a new concept in separation and analysis of biomolecules towards ultimate level performance. *Nanotechnology*, **2010**, 21, 395502 | 3.4 | 20 |
| 27 | Pneumatic handling of droplets on-demand on a microfluidic device for seamless processing of reaction and electrophoretic separation. *Electrophoresis*, **2010**, 31, 3719-26 | 3.6 | 6 |
| 26 | Microfluidic Device with Integrated Glucose Sensor for Cell-Based Assay in Toxicology. *Journal of Robotics and Mechatronics*, **2010**, 22, 594-600 | 0.7 | 4 |
| 25 | On-chip Glucose Sensor for Online Measurement of Cell Activities. *IEEJ Transactions on Sensors and Micromachines*, **2010**, 130, 476-483 | 0.2 | 0 |
| 24 | Measurements of Nonlinear Electrical Impedances by Virtue of Induced Conformational Changes in DNAs. *Journal of Robotics and Mechatronics*, **2010**, 22, 601-607 | 0.7 | 0 |
| 23 | On-chip single embryo coculture with microporous-membrane-supported endometrial cells. *IEEE Transactions on Nanobioscience*, **2009**, 8, 318-24 | 3.4 | 15 |
| 22 | Biomolecular nano-flow-sensor to measure near-surface flow. *Nanoscale Research Letters*, **2009**, 5, 296-301 | 3 | |
| 21 | Development of On-chip Coculture System for Cytotoxicity Test Using Caco-2 and Hep G2. *IEEJ Transactions on Sensors and Micromachines*, **2009**, 129, 252-258 | 0.2 | 1 |
| 20 | Study of Automated Embryo Manipulation Using Dynamic Microarray:Trapping, Culture and Collection. *IEEJ Transactions on Sensors and Micromachines*, **2009**, 129, 245-251 | 0.2 | 2 |
| 19 | Design Optimization and Evaluation of a Bioluminescence Detection Part on a Microfluidic Device for in situ ATP Quantification. *IEEJ Transactions on Sensors and Micromachines*, **2009**, 129, 73-76 | 0.2 | 5 |
| 18 | An integrated microfluidic system for long-term perfusion culture and on-line monitoring of intestinal tissue models. *Lab on A Chip*, **2008**, 8, 741-6 | 7.2 | 219 |
| 17 | Enhanced maintenance and functions of rat hepatocytes induced by combination of on-site oxygenation and coculture with fibroblasts. *Journal of Biotechnology*, **2008**, 133, 253-60 | 3.7 | 53 |
| 16 | Polymerase chain reaction-based biochemical logic gate coupled with cell-free transcription-translation of green fluorescent protein as a report gate. *Chemical Communications*, **2008**, 3771-3 | 5.8 | 7 |
| 15 | Evaluation of cell-free protein synthesis using PDMS-based microreactor arrays. *Analytical Sciences*, **2008**, 24, 243-6 | 1.7 | 12 |

| | | | |
|---|---|---|---|
| 14 | Stable immobilization of rat hepatocytes as hemispheroids onto collagen-conjugated poly-dimethylsiloxane (PDMS) surfaces: importance of direct oxygenation through PDMS for both formation and function. *Biotechnology and Bioengineering*, **2008**, 99, 1472-81 | 4.9 | 55 |
| 13 | Active immobilization of biomolecules on a hybrid three-dimensional nanoelectrode by dielectrophoresis for single-biomolecule study. *Nanotechnology*, **2007**, 18, 495503 | 3.4 | 14 |
| 12 | Microfluidic Perfusion Culture of Human Hepatocytes. *Journal of Robotics and Mechatronics*, **2007**, 19, 550-556 | 0.7 | 3 |
| 11 | Controlling the expression ratio of two proteins by inserting a terminator between the two genes. *Nucleic Acids Symposium Series*, **2006**, 329-30 | | |
| 10 | Development of Micro Perfusion Cell Culture Device to Create In Vivo-Like Environments for Long-Period and Real-Time Monitoring of Cells Activities **2006**, | | 1 |
| 9 | Development of microfluidic device for electrical/physical characterization of single cell. *Journal of Microelectromechanical Systems*, **2006**, 15, 287-295 | 2.5 | 34 |
| 8 | Chemical delivery microsystem for single-molecule analysis using multilaminar continuous flow. *Enzyme and Microbial Technology*, **2006**, 39, 519-525 | 3.8 | 7 |
| 7 | Development of a Platform for Single-molecular Dynamics Study-Manipulations and Analysis using Microfluidic Devices and Nano-electrodes-. *Hyomen Kagaku*, **2006**, 27, 102-107 | | |
| 6 | Microfabricated flow-through device for DNA amplification–towards in situ gene analysis. *Chemical Engineering Journal*, **2004**, 101, 151-156 | 14.7 | 89 |
| 5 | PDMS-glass hybrid microreactor array with embedded temperature control device. Application to cell-free protein synthesis. *Lab on A Chip*, **2002**, 2, 197-202 | 7.2 | 101 |
| 4 | Integration of gene amplification and capillary gel electrophoresis on a polydimethylsiloxane-glass hybrid microchip. *Electrophoresis*, **2001**, 22, 328-33 | 3.6 | 138 |
| 3 | Development of Hybrid Microreactor for Protein Synthesis. *IEEJ Transactions on Sensors and Micromachines*, **2001**, 121, 163-168 | 0.2 | |
| 2 | . *IEEE Transactions on Industry Applications*, **2000**, 36, 1010-1017 | 4.3 | 71 |
| 1 | Molecular surgery of DNA **1998**, 3202, 228 | | 2 |