

Application of power line communication technology in street lighting control

Farkas, Tekla D.; Kiraly, Tamás; **Pardy, Tamas;** Rang, Toomas; **Rang, Galina** International journal of design and nature and ecodynamics 2018 / p. 176–186 : ill <https://doi.org/10.2495/DNE-V13-N2-176-186> [Journal metrics at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

Can 3D printing bring droplet microfluidics to every lab? - A systematic review

Gyimah, Nafisat; Scheler, Ott; **Rang, Toomas;** Pardy, Tamas Micromachines 2021 / art. 339 <https://doi.org/10.3390/mi12030339> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Chemical heating for non-instrumented nucleic acid amplification on lab-on-a-chip devices

Pardy, Tamas Proceedings of the 8th Annual Conference of the Estonian National Doctoral School in Information and Communication Technologies : December 5-6, 2014, Rakvere 2014 / p. 95-98 : ill

Cogniflow-drop : integrated modular system for automated generation of droplets in microfluidic applications

Jõemaa, Rauno; **Gyimah, Nafisat;** Ashraf, Kanwal; **Pärnamets, Kaiser;** Zaft, Alexander; **Scheler, Ott;** Rang, Toomas; **Pardy, Tamas** IEEE Access 2023 / p. 104905-104929 <https://doi.org/10.1109/ACCESS.2023.3316726>

Compact empirical model for droplet generation in a Lab-on-Chip cytometry system

Pärnamets, Kaiser; Udál, Andres; **Koel, Ants;** Pardy, Tamas; **Gyimah, Nafisat;** Rang, Toomas IEEE Access 2022 / p. 127708-127717 <https://doi.org/10.1109/ACCESS.2022.3226623> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Decentralized distributed data structure for bioanalytical laboratory setups

Ashraf, Kanwal; Le Moullec, Yannick; **Pardy, Tamas** 8th ACM Celebration of Women in Computing : womENCourage 2021, 22-24 September, 2021, Czech Republic 2021 / 2 p. : ill https://womencourage.acm.org/2021/wp-content/uploads/2021/07/59_extendedabstract.pdf

Decentralized distributed data structure for bioanalytical laboratory setups : [poster]

Ashraf, Kanwal; Le Moullec, Yannick; **Pardy, Tamas** 2021 / 1 p. : ill https://womencourage.acm.org/2021/wp-content/uploads/2021/07/59_poster.pdf

Design of Cyber Bio-analytical Physical Systems : formal methods, architectures, and multi-system interaction strategies

Ashraf, Kanwal; Le Moullec, Yannick; **Pardy, Tamas;** Rang, Toomas Microprocessors and microsystems 2023 / art. 104780, 14 p. : ill <https://doi.org/10.1016/j.micpro.2023.104780>

Development of a low-cost, wireless smart thermostat for isothermal DNA amplification in lab-on-a-chip devices

Pardy, Tamas; Sink, Henri; **Koel, Ants;** Rang, Toomas Micromachines 2019 / art. 437, 13 p. : ill <https://doi.org/10.3390/mi10070437> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Development of automated detection and wireless reporting for a handheld point-of-care test

Pardy, Tamas; Filograno, Leonardo; Baumann, Cindy; **Rang, Toomas** 2020 17th Biennial Baltic electronics conference, Tallinn, Estonia, October 6-8, 2020 : proceedings 2021 / 4 p. : ill <https://doi.org/10.1109/BEC49624.2020.9276773>

Development of temperature control solutions for non-instrumented nucleic acid amplification tests (NINAAT)

Pardy, Tamas; Rang, Toomas; Tulp, Indrek Micromachines 2017 / p. 1-11 : ill <http://dx.doi.org/10.3390/mi8060180>

Digital twin for controlled generation of water-in-oil microdroplets with required size

Gyimah, Nafisat; Scheler, Ott; **Rang, Toomas;** Pardy, Tamas 2022 23rd International Conference on Thermal, Mechanical and Multi-Physics Simulation and Experiments in Microelectronics and Microsystems (EuroSimE), 25-27 April 2022, St Julian, Malta : proceedings 2022 / p. 85-91 <https://doi.org/10.1109/EuroSimE54907.2022.9758876>

Finite element modelling for the optimization of microheating in disposable molecular diagnostics

Pardy, Tamas; Rang, Toomas; Tulp, Indrek International journal of computational methods and experimental measurements 2017 / p. 13-22 : ill <http://dx.doi.org/10.2495/CMEM-V5-N1-13-22>

Finite element modelling for the optimization of microheating in disposable molecular diagnostics [Electronic resource]

Pardy, Tamas; Rang, Toomas; Tulp, Indrek 14th International Conference on Simulation and Experiments in Heat Transfer and its Applications : Heat Transfer 2016 : 7-9 September, 2016 Ancona, Italy : unedited papers 2016 / p. [144-155] : ill. [USB]

Finite element modelling of the resistive heating of disposable molecular diagnostics devices

Pardy, Tamas; Rang, Toomas; Tulp, Indrek Computational methods and experimental measurements XVII 2015 / p. 381-391 : ill <http://dx.doi.org/10.2495/CMEM150341>

In-situ thermal performance monitoring of Pharma 4.0 Flow Bioreactors

Hegedus, Kristof; Hantos, Gusztav; **Pardy, Tamas;** Ender, Ferenc 2020 26th International Workshop on Thermal Investigations of ICs and Systems (THERMINIC) 2020 / 4 p. : ill <https://doi.org/10.1109/THERMINIC49743.2020.9420529>

Instrument-free Lab-on-a-Chip DNA amplification test for pathogen detection [Online resource]

Pardy, Tamas; Rang, Toomas; Kremer, Clemens; Tulp, Indrek BEC 2018 : 2018 16th Biennial Baltic Electronics Conference (BEC) : proceedings of the 16th Biennial Baltic Electronics Conference, October 8-10, 2018 2018 / 4 p. : ill
<https://doi.org/10.1109/BEC.2018.8600991>

Integrated self-regulating resistive heating for isothermal nucleic acid amplification tests (NAAT) in Lab-on-a-Chip (LoC) devices

Pardy, Tamas; Tulp, Indrek; Kremer, Clemens; **Rang, Toomas;** Stewart, Ray PLoS ONE 2017 / p. 1-11 : ill
<https://doi.org/10.1371/journal.pone.0189968>

Joint optimization via deep reinforcement learning in wireless networked controlled systems

Ashraf, Kanwal; Le Moullec, Yannick; Pardy, Tamas; Rang, Toomas IEEE Access 2022 / p. 67152-67167
<https://doi.org/10.1109/ACCESS.2022.3185244> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Low-cost open-source flow velocity sensor for droplet generators

Prabatama, Nicky Andre; **Jõemaa, Rauno;** Hegedus, Kristof; **Pardy, Tamas** 2022 18th Biennial Baltic Electronics Conference (BEC) 2022 / 4 l. <https://doi.org/10.1109/BEC56180.2022.9935606>

Low-cost, portable dual-channel pressure pump for droplet microfluidics

Jõemaa, Rauno; Grosberg, Martin; Rang, Toomas; Pardy, Tamas 2022 45th Jubilee International Convention on Information, Communication and Electronic Technology (MIPRO), 23-27 May 2022, Opatija, Croatia : proceedings 2022 / p. 205-211 : ill
<https://doi.org/10.23919/MIPRO55190.2022.9803371>

Microheating solution for molecular diagnostics devices = Mikrosoojendamine molekulaardiagnostika seadistes

Pardy, Tamas 2018 <https://digi.lib.ttu.ee/i/?9249>

Model-based system architecture for event-triggered wireless control of bio-analytical devices

Ashraf, Kanwal; Le Moullec, Yannick; Pardy, Tamas; Rang, Toomas 2021 24th Euromicro Conference on Digital System Design (DSD), 01-03 September 2021 2021 / p. 465–471 : ill <https://doi.org/10.1109/DSD53832.2021.00076>

Modelling and experimental characterisation of self-regulating resistive heating elements for disposable medical diagnostics devices

Pardy, Tamas; Rang, Toomas; Tulp, Indrek Materials characterization VII 2015 / p. 263-271 : ill

Modelling and experimental characterisation of thermoelectric heating for molecular diagnostics devices

Pardy, Tamas; Rang, Toomas; Tulp, Indrek BEC 2016 : 2016 15th Biennial Baltic Electronics Conference : proceedings of the 15th Biennial Baltic Electronics Conference : Tallinn University of Technology, October 3-5, 2016, Tallinn, Estonia 2016 / p. 27-30 : ill
http://www.eester.ee/record=b2150914*est

Numerical simulations of wideband SiC N-N heterostructure diode

Patankar, Udayan Sunil; Koel, Ants; Pardy, Tamas LAEDC 2020 : Latin American Electron Devices Conference, San José, Costa Rica, February 25-28, 2020 2020 / 4 p <https://doi.org/10.1109/LAEDC49063.2020.9073489>

Open source hardware cost-effective imaging sensors for high-throughput droplet microfluidic systems

Pärnamets, Kaiser; Koel, Ants; Pardy, Tamas; Rang, Toomas Proceedings of 26th International Conference : ELECTRONICS 2022 2022 / 6 p <https://doi.org/10.1109/IEEECONF55059.2022.9810383>

Optical detection methods for high-throughput fluorescent droplet microflow cytometry

Pärnamets, Kaiser; Pardy, Tamas; Koel, Ants; Rang, Toomas; Scheler, Ott; Le Moullec, Yannick; Afrin, Fariha Micromachines 2021 / art. 345, 20 p. : ill <https://doi.org/10.3390/mi12030345> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

PID controller tuning optimization using genetic algorithm for droplet size control in microfluidics

Gyimah, Nafisat; Jõemaa, Rauno; Pärnamets, Kaiser; Scheler, Ott; Rang, Toomas; Pardy, Tamas 2022 18th Biennial Baltic Electronics Conference (BEC) 2022 / 6 p <https://doi.org/10.1109/BEC56180.2022.9935596>

Polymer nanofiber deposition in lab-on-a-chip devices by electrospinning

Pardy, Tamas; Jõemaa, Rauno; Ender, Ferenc; **Rang, Toomas;** Hegedus, Kristof; Balogh-Weiser, Diana 2020 17th Biennial Baltic electronics conference, Tallinn, Estonia, October 6-8, 2020 : proceedings 2020 / 4 p. : ill
<https://doi.org/10.1109/BEC49624.2020.9277494>

Simulations of wide bandgap SiC N-N heterostructure diode

Patankar, Udayan Sunil; Koel, Ants; Pardy, Tamas 2020 IEEE International Conference on Consumer Electronics (ICCE), Las Vegas, NV, USA, January 4-6, 2020 2020 / 4 p <https://doi.org/10.1109/ICCE46568.2020.9043130>

A survey on the roles of communication technologies in IoT-based personalized healthcare applications

Alam, Muhammad Mahtab; Malik, Hassan; Khan, Muhidul Islam; Pardy, Tamas; Kuusik, Alar; Le Moullec, Yannick IEEE

Access 2018 / p. 36611-36631 : ill <https://doi.org/10.1109/ACCESS.2018.2853148> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Thermal analysis of a disposable, instrument-free DNA amplification lab-on-a-chip platform

Pardy, Tamas; Rang, Toomas; Tulp, Indrek Sensors 2018 / art. 1812, 13 p. : ill <https://doi.org/10.3390/s18061812> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)