





PERSONAL INFORMATION **Ciprian Iliescu**



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Sex M | Date of birth 16/04/1965 | Nationality Romanian

WORK EXPERIENCE

Jun 2019- Present

Researcher
National institute for Research and Development in Microtechnologies INCD IMT

- Apply for research grants and programmes in the national and European competition

Apr 2015-Apr 2019

Senior Research Scientist
BIGHEART, National University of Singapore, Singapore

- Projects related to:
 - Photonic PCR,
 - IoT PCR (collaboration with Northwester Polytechnic University, Xi'an, P.R. China)
 - Perfusion cell culture microfluidic chips,
 - Nuclei Acids Amplification and Testing using paper-based microfluidics.
- Other activities: setup Medical IC lab facilities

March 2017

Visiting Scientist National institute for Research and Development in Microtechnologies INCD IMT

- Project: Self-assembling of fluorescent nanoparticles using hydrodynamic focusing

May 2003 – Jan2017

Senior Research Scientist
Institute of Bioengineering and Nanotechnology, Singapore

- Successfully led and/or contributed to *CORE FUNDED GRANTED PROJECTS*:
 - Microneedle Array for Transdermal drug delivery - *Project leader* (budget 300K/year-5 years project)
 - Dielectrophoresis Cell-Bead Binding for Gene Extraction - *Project leader* (budget 300K/year-5 years project)
 - Drug Screening Platforms
 - Engineering Complex Tissues with Spatial and Temporal Control of Micro-Environmental Cues
 - Circulating Tumor Cells Isolation for Non-invasive Cancer Diagnostic and Monitoring
- External grants
 - JCO grant (with IMCB, Singapore) “Development of a Human Liver-Vascular Cell-Based Microfluidic Platform to Evaluate Anti-Atherogenic Effects of Nutraceutical” (300K\$)-Co-PI;(2014-2016)
 - Engage in the BMRC-SERC Joint Diagnostics Grant 2014-2016 (S\$10mil) related CTC's isolation
 - Bilateral Singapore-France research grant: (I was the PI from Singapore Institution): “Microfluidic Directed Self-Assembly of Viromimetic Nanomachines” under Merlion Program with CNRS-Paris (G. Tresset) 2010-2011,

- French grant: (PICS2014): Kinetically-controlled assembly of DNA-based nanoparticles by microfluidic device for gene delivery applications (2014-2017) – Investigator
- Industrial collaborative project (total budget ~\$10mil/5years): Deeply engage in an industrial collaboration with “Delta Electronics Inc” related POC for food safety Delta-IBN Life Science and Diagnostics Lab
- Industrial collaborative project with Johnson and Johnson- Investigator
- Managerial activity: Setup and manage the IBN- BioMEMS lab, (2003-2017)
- Training/courses: CITI Program University of Miami
Responsible Conduct Research,
Human Subject Research.

Jul 2010 – Jan 2014

Visiting PI and Scientific Director of “Micro and Nanofluidic Lab” National institute for Research and Development in Microtechnologies INCD IMT

- Grant: PI for an EU funded project of €1.5mil: “Microfluidic Factory for Assisted Self-Assembly of Nanosystems” €1.5mil: “Microfluidic Factory for Assisted Self-Assembly of Nanosystems” (MICRONANOFAB), POSCCE/665/12609/209/2010-2015),
- Managerial activities:
 - Setup & Lead the “Microfluidic & Nanofluidic Lab” (investments of €600K in IMT cleanroom facilities)
 - Lead the above-mentioned project
 - Organized a seminar on “Plasma processing and Wafer Bonding” (15 June 2011)
- Industrial related activity: Design and XeF₂ dry etching system

May 2001- May 2003

Post-Doctoral Fellow Micromachines Centre, School of Mechanical and Aerospace Engineering, Nanyang Technological University, Singapore

Mar 1990 – May 2001

Dipl. Engineer, IC’s Division, Baneasa S.A.

- Positions: *R & D Engineer, Process Engineer in different departments (Packaging, Wafer fab)*
- Main achievement: optimization and automatization of the IC packaging, setup fabrication of pressure sensors:
- Research grants: Successfully led and worked on 3 projects founded by Romanian Agency of Science

Jan 2000– Dec 2000

CEO and owner MicroSi SRL

- Spin-off with my PhD work
- Pressure sensors packaging

Oct 1989-Mar 1990

Dipl. Engineer SARO S.A. Târgoviste

- Design & process engineer in the “Tool engineering department”
- Improving mechanical design skills

EDUCATION AND TRAINING

- May 1999 **PhD, University “Politehnica” Bucharest, School of Mechanical Technology (TCM)**
Thesis: “Contribution on design and technology of silicon pressure sensors”
Supervisor : Prof. Dr. Tache Voicu
- July 1989 **MS, UPB, School of Mechanical Technology**
Final Year Project: “Application of holographic interferometry in mechanics”. Graduation score: 93%
Supervisor : Prof. Dr. Tache Voicu

TEACHING EXPERIENCE

- Lectures
 - **Summer School at Northwestern Polytechnic University, Xi’an, P.R. China** - “Introduction to Microfabrication” – 8 lectures of 2 hours with final assessments 27 July-9 August 2019.

- Industrial lecturer: "Mechatronics design" – National University of Singapore - MCH5004 (August 2004, August 2005 and August 2006).
- Industrial lecturer: "Microsensors and microactuators"- National University of Singapore – ME4284 (2005-2015)- 2 lectures every year one related to" Microfabrication" the other one related to my current research
- Lecturer - "Safety Training Course" (NTU 2001-2003)
- "Introduction in MEMS" (Course dedicated for training persons from industry and Polytechnics) (2001-2002).

Graduate students

- Involved in the supervision of Ph.D. students:
 - Liming Yu - National University of Singapore - (graduated in 2007)
 - Deepak Choudhury – National University of Singapore (graduated in 2012)
 - Wen Hao Tong - National University of Singapore (2015)
 - Fang Yu - National University of Singapore (2016)
- Co-supervisor for two "Master of Science" students: Jia-Shen Wei (NUS graduated in 2005), and Yang Jian Jun (NTU, graduated in 2003)
- Supervisor of one attachment student (Ph.D.) during GBP program: Felicia Celeste Loe (6 months)
- Supervisor of one attachment student (Master): Elena Barbarini (Italy)-6 months- "Polytechnico di Turin"

External evaluator
PhD thesis

1. Ville Saarela -Aalto University, Department of Materials Science and Engineering-2011,
2. Ling Siang Hooi -Nanyang Technological University, School of MAE, Singapore-2012,
3. Jaspreet Singh Kochhar -National University of Singapore-2013.
4. Ruchi Tiwari- Indian Institute of Technology, School of EEE, Delhi, India- 2014.
5. Lim Chun Ping – Nanyang Technological University, School of MAE-2015.
6. Li Hairui- National University of Singapore – Department of Pharmacy – 2016
7. Rebecca Soffe –School of Engineering, Royal Melbourne Institute of Technology (RMIT), Australia-2017
8. Peter Thrugood –School of Engineering, Royal Melbourne Institute of Technology (RMIT), Australia-2018
9. Lim Seng Han- National University of Singapore – Department of Pharmacy (2018)

External evaluator
Master thesis

1. Michael Kurdzinski–School of Engineering, Royal Melbourne Institute of Technology (RMIT), Australia (2017)

External evaluator
Qualification Exam PhD

1. Jaspreet Singh Kochhar – National University of Singapore – Department of Pharmacy (2010),
2. Li Hairui- National University of Singapore – Department of Pharmacy (2013, 2016),
3. Himanshu Kathuria- National University of Singapore – Department of Pharmacy (2015, 2017).
4. Lim Seng Han- National University of Singapore – Department of Pharmacy (2016)

Undergraduate
students

- FYP co-supervisor: 2006 (together with A/P Francis Tay - NUS): Ong Poh Lam, Ong Yan Ying, Chan Shen Jau; 2007(together with A/P Francis Tay – NUS): Maria Ong and Pan Yang; 2007 (together with A/P Daniel Poenar – NTU): Eun Tan Yu; 2008 (together with A/P Francis Tay – NUS): Hoirul Ismail B Ya'Akop
- IBN industrial attachment students (6 month): Jenny Puttri Halliman (NTU)- 2012, Anik Islam Badhan (NUS)-2015
- JC student: Zhao Feiyu (Nanyang Girls' High School), project "Nanoparticles synthesis using microfluidics"- Finalist in 2017 @ Singapore Science and Engineering Fair

PERSONAL SKILLS

Mother tongue(s)
Other language(s)

	Romanian				
	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
English	C1	C1	C1	C1	C1
French	A2	A2	A2	A2	A2

Levels: A1/2: Basic user - B1/2: Independent user - C1/2 Proficient user
Common European Framework of Reference for Languages

Computer skills	<ul style="list-style-type: none"> ▪ Proficiency in using L_EDIT computer assisted design for layout fabrication ▪ Proficiency in using COMSOL Multiphysics® development and simulation software package ▪ Good knowledge in using MS OFFICE, preparing presentations in Power Point, using the Excell datasheets etc
Communication skills	<ul style="list-style-type: none"> ▪ Good communication skills gained through project manager experience, laboratory and cleanroom management, interaction with student during different teaching programs, interaction with industrial partners or clinicians
Organisational / managerial skills	<ul style="list-style-type: none"> ▪ Lead different teams (industry and research) as previous mention,
Job-related skills	<ul style="list-style-type: none"> ▪ Expertise in design, production and maintenance for electronic, electrical and electro-mechanic equipment; including planning the logistic support for highly complex electronic and electromechanical systems. ▪ Expertise in smart greed development as well as good knowledge of Internet of Things conceptual design ▪ Expertise in the management of production and maintenance facilities. ▪ Expertise in operating, troubleshooting / maintenance for radio and wire communication equipment. ▪ Expertise in image acquisition, analysis and pattern recognition. ▪ Proficiency in electro magnetic wave measurements. ▪ Expertise in troubleshooting and maintenance of computer hardware.
Other skills	<ul style="list-style-type: none"> ▪ Good knowledge on European, Asian and Middle East culture and history. ▪ Good Writing and Presentation Skills

EXECUTIVE SUMMARY

- **Expertise in:** microfluidics, micro & nanofabrication, bioengineering, biophysics, lab-on-a chip.
- **Lead and work on different projects related to** MEMS, BioMEMS, Bioengineering,
- 99 journal articles (84 in peer review journals), 35 invited, keynote, plenary talks or seminars at international conferences, universities or research institutes, 119 paper presented at international conferences – please refer to the attached list of publications.
- **Member of Honor of the Academy of Romanian Scientists** (from June 2013)
- **Member of the Romanian National Council for Attesting Titles, Diplomas and Certificates**(2016-2018)
- **Member of the “Editorial board”:** Annals of the Academy of Romanian Scientists, Series on Science and Technology of Information (2009); Informacije MIDEM-Journal of Microelectronics, Electronic Components and Materials –Slovenia (2012); Journal of Fluids /Hindawi (2013-2017); Transactions on Fluid Mechanics/WSEAS (2013-2015).
- **Guest Editor** of a Special Issue in “Micromachines”(2019) together with Dr Guillaume Tresset (CNRS) and Luke Lee (Berkeley)
- **Referee reviewer** for 61 scientific journals: ACS Advanced Materials & Interfaces, Advances in High Energy Physics, AIP Advances, Analytical Chemistry, Analytical and Bioanalytical Chemistry, Applied Sciences (MPDI), Biofabrication, Biomicrofluidics, Biomedical Physics and Engineering Express, Biotechnology, BioTechniques, Chemica Oggi-Chemistry Today, Colloids and Surfaces A: Physicochemical and Engineering Aspects, Current Analytical Chemistry, Current Applied Physics, Current Drug Delivery, Electrophoresis, European J. Physics- Applied Physics, Expert Opinion On Drug Safety, Frontiers in Nutrition, Frontiers in Bioengineering, IEEE Sensors, Informacije MIDEM, Int. J. of Environmental Analytical Chemistry, Int. J. of Physical Sciences, Int. J. of Molecular Science, J. of Bioengineering, J. of Biological Engineering, J. of Electrochem. Soc., J. Electrical Engineering and Electronic Technology (JEEET), J. Electrostatics, J of Microelectromechanical Systems (JMEMS), J. of Fluids, J. Micromech. & Microeng., J. Nanoengineering & Nanosystems, J. Nanomaterials, J. Optoelectronics and Adv. Mat., J. Physics: Condensed Matter, J. Physics D: Applied Physics, J. Vacuum Science and Tech. A, J. Vacuum Science and Tech. B, J. od Visual Experiments (JOVE), Lab on a Chip, Microelectronic Engineering, Microsystem Technologies, Microfluidics & Nanofluidics, Micro & Nanosystems, Proc. of the Institution of Mechanical Engineers-Journal of Nanoeng. & Nanosystems, RSC Advances, Scientific Reports (Nature), Sensors & Actuators A: Physical, Sensors & Actuators B: Chemical, Sensors Journal (MPDI), Sensors and Materials, Smart Materials Research, Thin Solid Films, Therapeutic Delivery, Thermal Science, Trends in Analytical Chemistry, Water Research.
- **External reviewer (grant applications):** The Innovation and Technology Commission, (Hong Kong), QNRF (Qatar National Research Fund), ASTAR (Singapore), National Science Center - OPUS founding scheme (Poland), UEFISCDI (Romania), Swiss Cancer League.

- **3 Best Paper Awards** for papers presented at international conferences.
- **Member** of the “Scientific Committee” and “Session Chair” at different conferences
- **Figures of merit @27/09/2019:** (1) ISI Thomson: 2051 citations/121 documents, H-index: 29 (Researcher ID: B-8035-2008); (2) SCOPUS: 2387 citations/129 documents, H-index: 30 (Author ID: 8571916600) (3) Google Scholar: 3280 citations/167 documents, H-index: 34; Orcid ID: 0000-0001-7042-5248

PUBLICATIONS

JOURNAL PAPERS

Peer-reviewed publications under ISI-web of Science (*Legend: * = corresponding author*)

1. H. Zhu, P. Podesva, X. Liu, H. Zhang, T. Teply, Y. Xu, H. Chang, A. Qian, Y. Lei, Y. Li, A. Niculescu, C. Iliescu,* P. Neuzil, “IoT PCR for pandemic disease detection and its spread monitoring” *Sensors and Actuators B: Chemical*, 2019(article in press).
2. F. S. Iliescu, D.P. Poenar, F. Yu, M. Ni, K.H. Chan, I. Cima, H. Taylor, I. Cima, C. Iliescu,* “Recent advances in microfluidics methods in cancer liquid biopsy”, *Biomicrofluidics*, vol. 13, issue 4, art. no. 041503, 2019
3. F. S. Iliescu, D. Vrtačnik, P. Neuzil, C. Iliescu,* “Microfluidic technology for clinical applications of exosomes” *Micromachines*, vol. 10/ 6,2019, art. no. 392.
4. M. Ni S. Zhuo, C. Iliescu, P.T. So, J.S. Mehta, H. Yu, C. Hauser, “Self-assembling amyloid-like peptides as exogenous second harmonic probes for bioimaging applications,” *Journal of Biophotonics*, 2019.
5. F.S. Iliescu, W.J. Sim, H. Heidari, D.P. Poenar, J. Miao, H.K. Taylor, C. Iliescu,* “Highlighting the uniqueness in dielectrophoretic enrichment of circulating tumor cells,” *Electrophoresis*, 2019, vol.40/ 10, 2019, pp. 1457-1477.
6. H. Zhang, Y. Xu, Z. Fohlerova, H-L. Chang, C. Iliescu,* and P. Neuzil, “LAMP-on-a-chip: revising microfluidic platforms for loop-mediated DNA amplification,” *Trends in Analytical Chemistry*, vol. 113, 2019, pp. 44-53.
7. F.S. Iliescu, J.C.M. Teo, D. Vrtačnik, H. Taylor, C. Iliescu,* “Cell therapy using an array of ultrathin hollow microneedles,” *Microsystem Technologies*, vol. 24/ 7, 2018, pp. 2905-2912.
8. D. Resnik, M. Možek, B. Pečar, A. Janež, V. Urbančič, C. Iliescu, D. Vrtačnik “In vivo experimental study of noninvasive insulin microinjection through hollow Si microneedle array,” *Micromachines*, vol. 9/ 1, 2018, art. no: 40.
9. F. Yu, R. Deng, W.H. Tong, L. Huan, N. C. Way, A.I. Badhan, C. Iliescu,* H. Yu, “A perfusion incubator liver chip for 3D cell culture with application on chronic hepatotoxicity testing,” *Scientific Reports*, vol. 7, 2017, art. no: 14528.
10. M. Ni, G. Tresset, C. Iliescu,* Self-assembled polysulfone nanoparticles using microfluidic chip” *Sensors and Actuators B: Chemical*, vol. 252/ 2, 2017, pp. 458-462.
11. F. Yu, S. Zhou, Y. Qu, D. Choudhury, Z. Wang, C. Iliescu,* H. Yu, “On chip two-photon metabolic imaging for drug toxicity testing,” *Biomicrofluidics*, vol. 11/ 3, 2017, art. no. 034108.
12. F. Yu, F.S. Iliescu, C. Iliescu, * “A comprehensive review on perfusion cell culture systems” *Inf. Midem - J. Microelectron. Electron. Compon. Mater.*, vol. 46/ 4, 2016, pp. 163-175.
13. G. Tresset, C. Iliescu,* ”Microfluidics-Directed Self-Assembly of DNA-Based Nanoparticles,” *Inf. Midem - J. Microelectron. Electron. Compon. Mater.*, vol. 46/ 4, 2016, pp. 183-189.
14. I. Cima, S.L. Kong, I.B. Tan, W.M. Phyto, D. Lee, M. Hu, D. Sengupta, C. Iliescu, et al “Tumor-derived circulating endothelial cell clusters diagnostic for early colorectal cancer”, *Science Translational Medicine*, vol. 8/345, 2016, 345ra89.
15. L. Alhasan, A. Qi, A. Al-Aboodi, A.R. Rezk, P.P.Y. Chan, C. Iliescu, L.Y. Yeo “Rapid enhancement of cellular spheroid assembly by acoustically-driven microcentrifugation,” *ACS Biomaterials Science & Engineering*, vol. 2/6, 2016, pp. 1013–1022
16. W.H. Tong, F. Yu, J. Yan, X. Hong, N.H. Singh, S.R. Wang, B. Nugraha, L. Xia, E.L.S. Fong, C. Iliescu,* and H. Yu, “Constrained spheroids for prolonged hepatocyte cell culture,” *Biomaterials*, vol. 80, 2016, pp. 106-120.
17. C. Iliescu,* G. Tresset “Microfluidics-driven strategy for size-controlled DNA compaction by slow diffusion through water stream,” *Chemistry of Materials*, vol. 27/ 24, 2015, pp. 8193-8197.
18. H. Kathuria, J.S. Kochhar, M.H.M. Fong, M. Hashimoto, C. Iliescu, H. Yu, L. Kang, “Polymeric microneedle array fabrication by photolithography,” *Journal of Visualized Experiments (JoVE)*, issue 105, 2015.
19. C. Iliescu,* G. Xu, W.H. Tong, F. Yu, C.M. Bălan, G. Tresset and H. Yu “Cell patterning using a dielectrophoretic–hydrodynamic trap,” *Microfluidics and Nanofluidics*, vol. 19/ 2, 2015, pp. 363-373.
20. C. Iliescu, * C. Mărculescu, S. Venkataraman, B. Languille, H. Yu and G. Tresset “On-chip controlled surfactant–DNA coil–globule transition by rapid solvent exchange using hydrodynamic flow focusing,” *Langmuir*, vol. 30/44, 2014, pp. 13125–13136.
21. J.S. Kochhar, P. Anbalagan, S. B. Shelar, J.K. Neo, C. Iliescu, L. Kang “Direct microneedle array fabrication of a photomask to deliver collagen through skin,” *Pharmaceutical Research*, vol. 31/ 7, 2014, pp. 1724-1734.
22. D. P. Poenar, C. Iliescu,* J. Boulaire, H. Yu, “Label-free virus identification and characterization using electrochemical impedance spectroscopy,” *Electrophoresis*, vol. 35/2-3, 2014, pp. 433-440.
23. G. Tresset, C. Marculescu, A. Salonen, M. Ni, C. Iliescu,* “Fine control over the size of surfactant- polyelectrolyte nanoparticles by hydrodynamic flow focusing,” *Analytical Chemistry*, vol. 85/ 12, 2013, pp. 5850-5856.
24. I. Cima, C.W. Yee, F.S. Iliescu, W.M. Phyto, T. Lim, C. Iliescu, * M.H. Tan “Label-free isolation of circulating tumor cells in microfluidic devices: current research and perspectives,” *Biomicrofluidics*, vol. 7/ 1, 2013, art. no. 011810. (**in” top 20” most cited paper published in 2012-2013, top 5 most accessed articles in 2013and 2014**)
25. D. Choudhury, D. van Noort, C. Iliescu, B.X. Zheng, K.-L. Poon, S. Korzh, V. Korzh, H. Yu “Fish and Chips: A microfluidic perfusion platform for monitoring the development of early stage zebrafish embryos,” *Lab on a Chip* vol. 12/ 5, 2012, pp. 892-900.

26. C. Iliescu, * H. Taylor, M. Avram, J. Miao, S. Franssila, "A practical guide for the fabrication of microfluidic devices using glass and silicon," *Biomicrofluidics*, vol. 6, issue 1, 2012, art. no. 016505 (**In "Top 5" most read papers in Biomicrofluidics in 2012, in "top 10" most cited paper published in 2012-2013, in top 5 most accessed articles in 2012**)
27. H. Taylor, D. Boning, C. Iliescu "A razor-blade test of the demolding energy in a thermoplastic embossing process," *Journal of Micromechanics and Microengineering*, vol. 21/ 6, 2011, art. no. 067002.
28. D. Choudhury, X. Mo, C. Iliescu, L.L. Tan, W.H. Tong, H. Yu, Exploitation of chemical and physical constraints for 3D microtissue construction in microfluidics," *Biomicrofluidics*, vol. 5/ 2, 2011, art. no. 022203.
29. C. Iliescu, M. Avram, B. Chen, A. Popescu, V. Dumitrescu, D. P. Poenar, A. Sterian, D. Vrtacnik, S. Amon, P. Sterian, "Residual stress in thin films PECVD depositions: a review," *Journal of Optoelectronics and Advanced Materials*, vol. 10/4, 2011, pp. 387-394.
30. S. Zhang, W.H. Tong, B. Zheng, T.A.K. Susanto, L. Xia, C. Zhang, A. Ananthanarayanan, X. Tuo, S.R. Binte, R.R. Jia, C. Iliescu, et al, "A robust high-throughput sandwich cell-based drug screening platform," *Biomaterials*, vol. 32/ 4, 2011, pp. 1229-1241.
31. G.L. Xu, F.E.H. Tay, G. Tresset, F.S. Iliescu, A. Avram, C. Iliescu,* "Recent trends in dielectrophoresis", *Inf. Midem - J. Microelectron. Electron. Compon. Mater.*, vol. 40/ 4, 2010, pp. 253-262.
32. C. Iliescu, * G. Tresset, L. Yu, G. Xu, "3D dielectrophoretic chips: trapping and separation of cell populations," *Romanian Journal of Information Science and Technology (ROMJIST)*, vol. 13/1, 2010, pp. 49-64.
33. C. Iliescu, * G. Tresset, F.S. Iliescu, P.E. Sterian, "Live/dead cell assay based on dielectrophoresis on a chip," *UPB Scientific Bulletin-Series A-Applied Mathematics and Physics*, vol. 72/ 1, 2010, pp. 33-42.
34. B. Chen, J. Wei, C. Iliescu,* "Sonophoretic enhanced microneedles array (SEMA) - improving the efficiency of transdermal drug delivery," *Sensors and Actuators B: Chemical*, vol. 145/ 1, 2010, pp. 54-60.
35. C. Iliescu, * D.P. Poenar, S. T. Selvan, "Frequency dependence on the accuracy of electrical impedance spectroscopy measurements in microfluidic devices," *Journal of Micromechanics and Microengineering*, vol. 20/ 2, 2010, art. no. 022001.
36. C. Iliescu, * G. Tresset, G.L. Xu, "Dielectrophoretic field-flow method for separating particle populations in a chip with asymmetric electrodes," *Biomicrofluidics*, vol. 3/ 4, 2009, 044104.
37. M. Ni, W. H. Tong, D. Choudhury, N. A. A. Rahim, C. Iliescu* and H. Yu, "Cell culture on MEMS platforms: a review," *International Journal of Molecular Sciences*, vol. 10/ 12, 2009, pp. 5411-5441.
38. F.E.H. Tay, L. Yu, C. Iliescu, "Particle manipulation by miniaturized dielectrophoretic devices," *Defense Science Journal*, vol. 59/ 6, 2009, pp. 595-604.
39. F.S. Iliescu, A.R. Sterian, E. Barbarini, M. Avram, C. Iliescu* "Continuous separation of white blood cells from blood in a microfluidic device," *UPB Scientific Bulletin-Series A-Applied Mathematics and Physics*, vol. 71/ 4, 2009, pp. 21-30.
40. C. Iliescu, * G.L. Xu, E. Barbarini, M. Avram, A. Avram, "Microfluidic device for continuous magnetophoretic separation of white blood cells," *Microsystem Technologies*, vol. 15/ 8, 2009, pp. 1157-1162.
41. C. Iliescu, * J. Wei, B. Chen and P.L. Ong, "Silicon nitride membranes for cell culturing," *Romanian Journal of Information Science and Technology (ROMJIST)*, vol. 11/ 2, 2008, pp. 167-176.
42. M. Avram, A.M. Avram, A. Bragaru, A. Ghiu, C. Iliescu, "Plasma surface modification for selective hydrophobic control," *Romanian Journal of Information Science and Technology (ROMJIST)*, vol. 11/ 4, 2008, pp. 409-422.
43. B.T. Chen, J. Wei, F.E.H. Tay, Y.T. Wong, C. Iliescu, "Silicon microneedles array with biodegradable tips for transdermal drug delivery," *Microsystem Technologies*, vol.14/ 7, 2008, pp. 1015-1019.
44. C. Iliescu, * B. Chen, J. Wei and A.J. Pang, "Characterization of silicon carbide films deposited by Plasma Enhanced Chemical Vapor Deposition," *Thin Solid Films*, vol. 516/ 16, 2008, pp. 5189-5193.
45. J. Wei, P.L. Ong, F.E.H. Tay and C. Iliescu, "A new fabrication method of low stress PECVD SiN_x layers for biomedical application," *Thin Solid Films*, vol. 516/ 16, 2008, pp. 5181-5188.
46. H. Taylor, D. Boning, C. Iliescu, B.T. Chen, "Computationally efficient modeling of pattern dependencies in the micro-embossing of thermoplastic polymers," *Microelectronic Engineering*, vol. 85/ 5-6, 2008, pp. 1453-1456.
47. C. Iliescu, B.T. Chen, J.M. Miao, "On the wet etching of Pyrex glass," *Sensors and Actuators A: Physical*, vol. 143,/1, 2008, pp. 154-161.
48. C. Iliescu,* L.M. Yu, F.E.H. Tay, B.T. Chen, "Bidirectional field flow particle separation method in a dielectrophoretic chip with 3D electrodes," *Sensors and Actuators B: Chemical*, vol. 129/ 1, 2008, pp. 491-496. (
49. C. Iliescu,* B.T. Chen, D.P. Poenar and Y.Y. Lee, "PECVD amorphous Silicon Carbide membranes for cell culturing," *Sensors and Actuators B: Chemical*, vol. 129/ 1, 2008, pp. 404-411.
50. C. Iliescu,* B.T. Chen, "Thick and low stress PECVD amorphous silicon for MEMS applications," *Journal of Micromechanics and Microengineering*, vol. 18/ 1, 2008, pp. 15024(1-8).
51. L. Yu, C. Iliescu, * G. Xu and F.E.H. Tay, "Sequential field-flow cell separation method in a dielectrophoretic chip with 3D electrodes," *Journal of Microelectromechanical Systems (JMEMS)*, vol. 16/ 5, 2007, pp. 1120-1129.
52. D.P. Poenar, C. Iliescu, M. Carp, A.J. Pang, K.J. Leck, "Glass-based microfluidic device fabricated by Parylene wafer-to-wafer bonding for impedance spectroscopy," *Sensors and Actuators A: Physical*, vol. 139/ 1-2, 2007, pp. 162-171.
53. C. Iliescu,* G.L. Xu, P.L. Ong, K.J. Leck, "Dielectrophoretic separation of biological samples in a 3D filtering-chip," *Journal of Micromechanics and Microengineering*, vol. 17/ 7, 2007, pp. S128-S136.
54. C. Iliescu,* G. Tresset, G.L. Xu, "Continuous field-flow separation of particle populations in a dielectrophoretic chip with three dimensional electrodes," *Applied Physics Letters*, vol. 90/ 23, 2007, pp. 234104/1-3.
55. G. Tresset, C. Iliescu, "Electrical control of loaded biomimetic femtoliter vesicles in microfluidic system," *Applied Physics Letters*, vol. 90, issue 17, 2007, pp. 173901/1-3.
56. C. Iliescu, * G.L. Xu, F.C. Loe, P.L. Ong, F.E.H. Tay, "A 3-D dielectrophoretic filter chip," *Electrophoresis*, vol. 28/ 7, 2007, pp. 1107-1114.

57. C. Iliescu,* D.P. Poenar, M. Carp, F.C. Loe, "A microfluidic device for impedance spectroscopy analysis of biological samples," *Sensors and Actuators B: Chemical* vol. 123/ 1, 2007, pp. 168-176.
58. F.E.H. Tay, L. Yu, A.J. Pang, C. Iliescu, "Electrical and thermal characterization of a dielectrophoretic chip with 3D electrodes for cells manipulation," *Electrochimica Acta*, vol. 52/8, 2007, pp. 2862-2868.
59. C. Iliescu,* F.E.H. Tay, J. Miao, "Strategies in deep wet etching of Pyrex glass," *Sensors and Actuators A: Physical*, vol. 133/ 2, 2007, pp. 395-400.
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Other publications:

85. F.S. Iliescu, C. Iliescu,* "Circulating tumor cells isolation using on-chip dielectrophoretic platforms," *Annals of Academy of Romanian Scientists Series on Science and Technology of Information*, vol. 9/ 2, 2016, pp. 7-34.
86. F.S. Iliescu, D. Dumitrescu-Ionescu, M. Petrescu, C. Iliescu,* "A review on transdermal drug delivery using microneedles: current research and perspective," *Annals of Academy of Romanian Scientists Series on Science and Technology of Information*, vol. 7/ 1, 2014, pp. 7-34.

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96. C. Iliescu, T.T. Sun, J.M. Miao, and F.E.H. Tay, "Fabrication process of a capacitive microphone with p++ diaphragm and silicon bonded top-plate," *Int. J. of Comp. Eng. Sci. (IJCES)*, vol. 4/ 2, 2003, pp. 687-690.
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98. T.T. Sun, J. Miao, C. Iliescu, J.B. Sun and H. Zhu, "Study on sidewall roughness of silicon microtrench with a time multiplexed inductively coupled plasma etcher," *Int. J. of Comp. Eng. Sci. (IJCES)*, vol. 4/ 2, 2003, pp. 319-322.
99. G.L. Xu, F.E.H. Tay, Y.Z. Lao, C. Iliescu, Y.H. Yu, V. Luar, D. Hartono, and Y.Y. Lee, "A dielectrophoresis-based bio-sample preparation," *Int. J. of Comp. Eng. Sci. (IJCES)*, vol. 4/ 2, 2003, pp. 277-280.

Book chapters:

1. F. Lee, C. Iliescu, F. Yu, H. Yu, Chapter 3: "Constrained spheroids/organoids in perfusion culture" in "Methods in Cell Biology", Academic Press, vol. 146, pp. 43-65, (ISSN 0091-679X, ISBN 9780128142806) 2018.
2. F.S. Iliescu, I. Cima, D. Ionescu, C. Iliescu, * Chapter 5: "Marker-free isolation of CTCs using microfabricated platforms," in "Circulating Tumor Cells (CTC's): Detection methods, Health Impact and Emerging Clinical Challenges," (Ed. P.C. Ray) Nova Sci. Pub. Inc, 89-118 2016
3. C. Iliescu, * D.P. Poenar, Chapter 5: "PECVD amorphous silicon carbide (α -SiC) layers for MEMS applications" in "Physics and Technology of Silicon Carbide Devices" Intech (Edited by Yasuto Hijikata), pp. 131-148 (ISBN 978-953-51-0917-4), 2013.
4. C. Iliescu, * A. Avram, Chapter 13: "Metallization over no planar surfaces" in "Chemical Mineralogy, Smelting and Metallization" (Editors: E.D. McLaughlin and L.A. Breaux), Nova Science Publishers Inc, (ISBN: 978-1-60692-853-0), pp. 289-314, 2009.
5. A. Avram, M. Avram, M. Volmer, D.P. Poenar, C. Iliescu, "Magnetic-based microfluidic platform for biomolecular separation" pp. 9-25, in "New applications of Micro and Nanotechnologies (Editors: M. Zaharescu, L. Giurgiu, D. Dascalu), Romanian Academy Ed., 2009.
6. C. Iliescu, * J. Miao, Chapter 5: A review on wet etching of glass, pp. 155-185 in "Glass Materials Research Progress." (Editors: J.C. Wolf and L. Lange), Nova Science Publishers Inc, (ISBN 978-1-60456-578-2), 2008.

Invited talks at international conferences:

1. C. Iliescu, G. Tresset, M. Ni, C. Marculescu, DNA compaction using microfluidics for gene therapy" 1st Bucharest Polymer Conference, 6-8 June 2018, Bucharest, Romania, (plenary speaker)
2. C. Iliescu, G. Tresset, M. Ni, C. Marculescu, "Strategies in microfluidic self-assembly of nanoparticles" 8th IEEE International Nanoelectronics Conference (INEC), 3-5 January 2018, Kuala Lumpur, Malaysia (invited speaker).
3. C. Iliescu, "Fine control of DNA compaction using microfluidics", Lab-on a Chip Asia, Microfluidics, POCD & Organ-on-a-Chip, 5-6 December 2016, Singapore (invited speaker).
4. C. Iliescu, F. Yu, H. Yu, "On-Chip Incubator for 3D Hepatocyte Cell Culture" – "Microfluidics and Biosensors Workshop" Int. Conf. on Microelectronics, Devices and Materials (MIDEM'16), Ankaron, Slovenia, 28-30 September 2016, (invited speaker-workshop)
5. C. Iliescu, F. Yu, H. Yu, "Microfluidic-assisted constrained spheroids for long term cell culture," presented at 7th Australia-New Zealand Nano-Microfluidics Symposium, 21-23 March 2016, Brisbane, Australia (invited speaker).
6. C. Iliescu, F. Yu, H. Yu, "Microfluidic platforms for drug screening," presented at 38th Int. Semiconductor Conf., Sinaia, Romania, 12-14 October 2015, (invited speaker).
7. C. Iliescu, C. Marculescu, A. Salonen, M. Ni, G. Tresset, "Nanoparticles synthesis by electrostatic interaction in microfluidic devices," presented at 36th Int. Semiconductor Conf., Sinaia, Romania, 14-16 October 2013, (invited speaker).
8. D. Van Norrt, D. Choudhury, C. Iliescu, H. Yu "In Vivo drug testing in microfluidics on Zebrafish embryo," International Conference on Materials for Advanced Technology (ICMAT 2011), Symposium G: NEMS/MEMS and microTAS, Singapore, 26 June-1 July 2011 (invited speaker).
9. C. Iliescu, "Transdermal drug delivery as a microfabrication process," Singapore Symposium on Drug Delivery System, 13-15 May 20011 (keynote speaker)

10. C. Iliescu, M. Avram, B. Chen, A. Avram, A. Popescu, V. Dumitrescu, D.P. Poenar, A. Sterian, P. Sterian "Considerations regarding residual stress in thin films PECVD depositions," The 2nd International Colloquium "Physics of Materials" 7-9 October 2010, Bucharest, Romania (*invited speaker*)
11. C. Iliescu, "Recent trends in dielectrophoresis," presented at Int. Conf. on Microelectronics, Devices and Materials (MIDEM'10), Slovenia, 29-30 September 2010, (*invited speaker*)
12. C. Iliescu, "Transdermal drug delivery: a microfabrication approach," Dynamic nanosystems: from concept to applications (workshop) – Bucharest Romania, 21-24 September 2010 (*invited speaker*).
13. C. Iliescu, B. Chen, J. Wei, Z. Yue "Transdermal drug delivery: microfabrication insights," presented at 32nd Int. Semiconductor Conf., Sinaia, Romania, 12-14 October 2009, (*invited speaker*).
14. C. Iliescu, B. Chen, J. Wei and F.E.H. Tay "Microneedles array with biodegradable tips for transdermal drug delivery," Smart Materials, Nano-, and Micro-Smart Systems 2008, Melbourne, Australia, 9-12 December 2008 (*invited speaker*).
15. H. Taylor, C. Iliescu, M. Ni, Y. C. Lam and C. Xing, D. Boring, "Modeling pattern dependencies in the micro-scale embossing of polymeric layers," Smart Materials, Nano-, and Micro-Smart Systems 2008, Melbourne, Australia, 9-12 December 2008 (*invited speaker*).
16. B. Chen, F.E.H. Tay and C. Iliescu "Development of thick film PECVD Amorphous silicon with low stress for MEMS applications," Smart Materials, Nano-, and Micro-Smart Systems 2008, Melbourne, Australia, 9-12 December 2008 (*invited speaker*).
17. C. Iliescu, "Dielectrophoresis from 2D to 3D, from micro to nano," presented at "Nanoscience and Nanotechnology Workshop"- Bucharest, Romania, 17-19 September 2008 (organized by IMT Bucharest and Romanian Academy) (*invited speaker-workshop*).
18. C. Iliescu, G.L. Xu, P.L. Ong, L. Yu, F.E.H. Tay, F.S. Iliescu, G. Tresset, "Manipulation of biological samples using electric field", at 30th Int. Semiconductor Conf., Sinaia, Romania, 15-17 October 2007, (*invited speaker*).
19. C. Iliescu, G.L. Xu, P.L. Ong, G. Tresset, L. Yu, F.E.H. Tay, F. Loe, "Dielectrophoresis from 2D to 3D" presented at International Conference on Materials for Advanced Technology ICMAT 2007- Symposium H, Singapore, 1-6 July 2007 pp. 8-11 (*keynote speaker*).
20. C. Iliescu, J. Wei, B. Chen, P.L. Ong and F.E.H. Tay "Low stress silicon nitride layers for MEMS applications," presented at Smart Materials, Nano-, and Micro-Smart Systems 2006, Adelaide, Australia, 10-13 December 2006. (*keynote speaker*).
21. C. Iliescu, "Microfluidics in glass: technologies and applications," presented at Int. Conf. on Microelectronics, Devices and Materials (MIDEM'06), Slovenia, 13-15 September 2006 (*invited talk - workshop*).
22. F.E.H. Tay, C. Iliescu and L. Yu, "Cell manipulation in dielectrophoretic (DEP) chip with 3D electrode," presented at International Society of Electrochemistry, ISE Spring Meeting 2006, Singapore, 17–20 April 2006 (*invited speaker*).
23. C. Iliescu, F.E.H. Tay, G.L. Xu and L.M. Yu, "Cell separation technique in dielectrophoretic chip with bulk electrode," presented at Microelectronics, MEMS, and Nanotechnology 2005, Brisbane, Australia, 11-14 December 2005 (*keynote speaker*) -
24. C. Iliescu, B.T. Chen, F.E.H. Tay, G.L. Xu and J. Miao, "Characterization of deep wet etching of glass," presented at Microelectronics, MEMS, and Nanotechnology, Brisbane, Australia, 11-14 December 2005. (*invited speaker*).
25. C. Iliescu and F.E.H. Tay, "Wet etching of glass," presented at Int. Semiconductor Conf. – CAS 2005 28th Edition, and Sinaia, Romania, 2-4 October 2005 (*plenary speaker*)

Invited Seminars:

26. C. Iliescu, "Microfluidic-assisted constrained spheroids cell culture" Laboratoire de Physique des Solides, Université Paris-Saclay, CNRS, 19 July 2019, France
27. C. Iliescu, "Microfluidics in cell culture and gene therapy"- Northwestern Polytechnic University, 2 Nov. 2018, Xi'an, P.R. China.
28. C. Iliescu, "DNA compaction using hydrodynamic flow focusing" – Yale-NUS College, 18 August 2017, Singapore.
29. C. Iliescu, "Self-assembled nanoparticle using microfluidics"- Babes- Bolyai University, 28 March 2017. Cluj-Napoca, Romania.
30. C. Iliescu, "Microfluidics in Silicon and Glass: Technologies and Applications," SIMTech Microfluidics Seminar, 6 March 2013, Singapore
31. C. Iliescu, "Microfluidics in drug discovery," University of Ljubljana, 19 Oct. 2012, Slovenia
32. C. Iliescu, "Dielectrophoresis in microfluidic devices," Laboratoire de Physique des Solides, Université Paris-Sud, CNRS, 20 April 2011, France
33. C. Iliescu, "BioMEMS research in IBN," National Institute of Research and Development in Microtechnology (IMT), 27 Sept. 2010, Romania.
34. C. Iliescu, "Transdermal drug delivery: microfabrication insights," invited talk, "Materials week"- Republic Polytechnic, 12 May 2009,
35. C. Iliescu, "BioMEMS research in IBN," Polytechnic University of Bucharest, Department of Physics 2, 16 Sept. 2008, Bucharest, Romania.

CO-EDITOR:

1. F.E.H. Tay, J. Miao, *J. Bergstrom* and C. Iliescu, "International MEMS Conference 2006", Journal of Physics: Conferences Series, vol. 34.
2. C. Iliescu, G. Tresset, L. Lee, Special Issue "Micromachines" (MPDI) "Nanoparticles in Microfluidics" (2019- 10 articles)

CONFERENCES:

1. C. Iliescu, C Marculescu, G. Tresset, "Romanian-France collaboration on DNA compaction using microfluidics" Autumn Meeting of the Academy of Romanian Scientists, 20-21 March 2019, Brasov.
2. R. B. Abdul Razar, S. S. M. Wong, S. Gunaseelan, C. Iliescu, J. J.E. Chua, "Microfluidics to study the role of intracellular transport in neuromuscular junction formation" 3rd Health technology Symposium, 1-2 July 2019, Singapore
3. C. Iliescu, F. Yu, H. Yu, "On-chip incubator for constrained liver spheroids" 5th International Conference "Implementation of Microreactor Technology in Biotechnology" - IMTB 2019, 19-22 May 2019, Cavtat, Croatia.
4. C. Iliescu, F.S. Iliescu, F. Yu, "Liver-on-a-chip", Spring Meeting of the Academy of Romanian Scientists, 23-24 March 2017, Bucharest.
5. G. Tresset, C. Iliescu, C. Mărculescu, S. Venkataraman, B. Languille, and M. Ni, "Microfluidics-direct assembly of DNA-based nanoparticles," The 4th International Soft Matter Conference (ISMC2016), 12-16 September 2016, Grenoble, France.

6. C. Iliescu, C. Mărculescu, M. Ni, B. Languille, S. Venkataraman, and G. Tresset, "A microfluidic method for fine control of surfactant-DNA nanoparticles" 6th ANZNMF Symposium, 31 March– 2 April 2015, Melbourne, Victoria, Australia.
7. Y. Fang, Y. Qu, S.M. Zhuo, D. Choudhury, Z.P. Wang, C. Iliescu and H. Yu. "On Chip Two-photon Metabolic Imaging for Drug Toxicity Testing," Lab-on-a Chip, Microfluidics & Microarray World Congress, September 18-19, 2014, San Diego, California, USA
8. C. Iliescu, C. Maraculescu, D. Resnik, and D. Vrtacnik, "Characterization of TEOS thin film deposition in PECVD reactors," Proc. of 50th Int. Conf. on Microelectronics, Devices and Materials (MIDEM'14), Slovenia, 8-10 Oct. 2014, Ljubljana, Slovenia, pp. 199-202.
9. C. Iliescu, G. Tresset, C. Marculescu, A. Salonen and M. Ni, "Libraries of surfactant-polyelectrolyte nanoparticles by hydrodynamic flow focusing," 3rd NanoToday Conference 8-11 Dec. 2013, Singapore.
10. C. Iliescu, G. Tresset, C. Marculescu, M. Ni, A. Salonen, "Surfactant-Polyelectrolyte nanoparticles fabricated using microfluidic devices," 1st IBN Int. Symposium, 11-13 Jan. 2013, Singapore.
11. F.S. Iliescu, A. P. Bobei, P. Sterian, C. Iliescu, "A parallel between transdermal drug delivery and microtechnology," 3rd Int. Col. "Physics of Materials" (PM-3), 15-16 Nov. 2012, University "Politehnica" of Bucharest, Romania
12. C. Maraculescu, C. Balan, G. Tresset, M. Ni, C. Iliescu "Synthesis of polymeric nanoparticles using hydrodynamic focusing in a microfluidic device," Proc. of the 48th Int. Conf. on Microelectronics, Devices and Materials (MIDEM'12), Slovenia, 19-21 Sept. 2012, Otocec, Slovenia, pp. 199-202.
13. F.S. Iliescu, C. Iliescu, "Approaching transdermal drug delivery as a micro-fabrication process," Proc. of the 48th Int. Conf. on Microelectronics, Devices and Materials (MIDEM'12), Slovenia, 19-21 Sept. 2012, Otocec, Slovenia pp. 194-198.
14. C. Balan, C. Marculescu, C. Iliescu, "Micro-PIV measurements for hydrodynamic characterizations of microfluidic flows," Proc. of the 35th Int. Semiconductor Conf., Sinaia, Romania, 11-13 Oct. 2012, pp. 247-250 (*in IEEE-library*).
15. L. Zhu, W.H. Tong, Y-C. Toh, D. Choudhury, Z.F. Wang, C. Iliescu, H. Yu, "Enhance microfeature on glass-silicon microfluidic channel of 3D hepatocyte cell culture device," 9th World Biomaterial Congress, 1-5 June 2012, Chendu, China
16. C.M. Balan, M. Avram, A. Avram, G. Xu, R. Deng, C. Iliescu, "A 3D chaotic microfluidic mixer," 22nd edition of Micromechanics and Microsystem Technology European Workshop, 19-22 June 2011, Tonsberg, Norway.
17. D. Choudhury, D. van Noort, C. Iliescu, B. Zheng, K-L. Poon, S. Korzh, V. Korzh, H. Yu "Fish-Chip: A microfluidic device for studying drug toxicity in developing Zebra fish embryos," The 6th Int. Conf. on Microtechnologies in Medicine and Biology, MMB 2011 Conference, Lucerne Switzerland, 4-6 May 2011
18. D. Choudhury, D. Van Nort, C. Iliescu, H. Yu, "Fish on Chip: A microfluidic platform for *in vivo* drug studies in developing fish embryo," The 2nd Conf. on Advances in Microfluidics and Nanofluidics & Asia-Pacific International Symposium on Lab on Chip, Singapore, 5–7 Jan. 2011.
19. M. Avram, A.M. Avram, A. Bragaru, B. Chen, D.P. Poenar, C. Iliescu, "Low stress PECVD amorphous Silicon Carbide for MEMS applications," Proc. of the 33rd Int. Semiconductor Conf., Sinaia, Romania, 11-13 Oct. 2010 (*in IEEE-library*).
20. C. Iliescu, G. Tresset, G. Xu, "Cell sorting in a dielectrophoretic device with asymmetric electrodes," 32nd Int. Semiconductor Conf., Sinaia, Romania, 12-14 Oct. 2009.
21. N.A.A. Rahim, C. Iliescu, R. Kamm, H. Yu, "Microfluidic device captures correlation between hMSC differentiation capacity and migration activity" World Stem Cell Submit, Baltimore, Maryland, USA, 21-23 Sept. 2009.
22. B. Chen, C. Iliescu, "Microfabricated silicon carbide membrane as cell culture platform," 1st Nanotoday Conference, Singapore, 2-5 Aug. 2009.
23. C. Iliescu, G. Xu E. Barbarini, M. Avram and F.S. Iliescu, "Paramagnetic microchip for high gradient separation of blood cell," Smart Materials, Nano-, and Micro-Smart Systems 2008, Melbourne, Australia, 9-12 Dec. 2008. (*in SPIE library*)
24. J. Wei, B. Chen, D.P. Poenar, Y.Y. Lee and C. Iliescu, "Low-stress PECVD amorphous silicon carbide (α -SiC) layers for biomedical application," Smart Materials, Nano-, and Micro-Smart Systems 2008, Melbourne, Australia, 9-12 Dec. 2008. (*in SPIE library*)
25. M. Avram, C. Iliescu, M. Volmer and A. Avram "Microfluidic device for magnetic separations in lab-on-a-chip systems," 21st International Microprocesses and Nanotechnology Conference (MNC 2008), 27-30 October 2008, Fukuoka, Japan.
26. M. Avram, C. Iliescu, M. Volmer, F.S. Iliescu, A.M. Avram, "Microfluidic device for biocells manipulation and measurement," Proc. of the 31st Int. Semiconductor Conf., Sinaia, Romania, 12-15 Oct. 2008, vol. 1, pp. 91-94 (*in IEEE-library*).
27. M. Avram, C. Iliescu, M. Volmer and A. Avram, "Magnetic microfluidic device for biological analysis in lab-on-a-chip systems," Proc. of the 34th International Conference on Micro- and Nano-Engineering, Athens, Greece, 15–19 Sept. 2008, paper no. 543.
28. E. Barbarini, M. Avram, A.R. Sterian, G. Xu and C. Iliescu, "Theoretical and experimental considerations regarding magnetic separation in microfluidic devices," 8th World Congress on Computational Mechanics (WCCM8) and 5th European Congress on Computational Applied Sciences and Engineering, Venice, Italy, 30 June-4 July 2008.
29. C. Iliescu, E. Barbarini, G. Xu, M. Avram, A. Avram, "Microfluidic device for continuous magnetophoretic separation of red blood cells," Proc. of Design, Test, Integration and Packaging (DTIP) 2008, 9-11 April 2008, Nice, France.
30. C. Iliescu, J. Wei, P.L. Ong, B. Chen, "Low stress PECVD SiN_x process for biomedical application," Proc. of the 30th Int. Semiconductor Conf., Sinaia, Romania, 15-17 Oct. 2007, vol. 1, pp. 139-142 (*in IEEE-library*).
31. M. Avram, M.A. Avram, A. Bragaru, A. Ghiu, C. Iliescu, "Plasma surface modification of polymer substrate for selective hydrophobic control," 30th Int. Semiconductor Conf., Sinaia, Romania, 15-17 Oct. 2007, vol. 1, pp. 91-94 (*in IEEE-library*).
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