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# Thu Hang Bui

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**Adresă:** Strada Fabricii de Cărămidă 14, 400228, Cluj-Napoca, România (Acasă)

## ● **EXPERIENȚA PROFESIONALĂ**

09/2020 – ÎN CURS Cluj-Napoca, România

**CADRU DIDACTIC ASOCIAȚ** UNIVERSITATEA BABES BOLYAI

01/2019 – 05/2019 Hanoi, Vietnam

**LECTOR** FAC. OF ELECTS. AND TELECOMS., UNI. OF ENG. AND TECH

2014 – 2018 Delft, Țările de Jos

**CERCETATOR** TU DELFT

2011 – 2014 Hanoi, Vietnam

**ASISTENT UNIVERSITAR** FAC. OF ELECTS. AND TELECOMS., UNI. OF ENG. AND TECH.

## ● **EDUCAȚIE ȘI FORMARE PROFESIONALĂ**

2014 – 2018 Delft, Țările de Jos

**PHD MICROELECTRONICA** TU Delft

2011 – 2013 Hanoi, Vietnam

**M.ENG. ELECTRONICA SI TELECOMUNICATII** Fac. of Elects. and Telecoms., Uni. of Eng. and Tech.

09/2010 – 12/2010 Gwangju, Coreea de Sud

**GIST SCHOLARSHIP** Gwangju Institute of Science and Technology

2005 – 2010 Hanoi, Vietnam

**B.ENG. ELECTRONICA SI TELECOMUNICATII** Fac. Elects. and Telecoms., Hanoi Uni. of Sci. and Tech.

## ● **COMPETENȚE LINGVISTICE**

Limbă(i) maternă(e): **VIETNAMEZĂ**

Altă limbă (Alte limbi):

	<b>COMPREHENSIUNE</b>		<b>VORBIT</b>		<b>SCRIS</b>
	Comprehensiune orală	Citit	Exprimare scrisă	Conversație	
<b>ROMANA</b>	B1	B1	B1	B1	B1
<b>ENGLEZA</b>	C1	C1	C1	C1	

Niveluri: A1 și A2 Utilizator de bază B1 și B2 Utilizator independent C1 și C2 Utilizator experimentat

## ● COMPETENȚE DIGITALE

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### Competențe digitale – Rezultatele testelor

 Educația în domeniul informației și al datelor	<b>NIVEL AVANSAT</b>	Nivelul 5 / 6
 Comunicare și colaborare	<b>NIVEL AVANSAT</b>	Nivelul 5 / 6
 Crearea de conținut digital	<b>NIVEL AVANSAT</b>	Nivelul 5 / 6
 Siguranță	<b>NIVEL INTERMEDIAR</b>	Nivelul 4 / 6
 Soluționarea problemelor	<b>NIVEL AVANSAT</b>	Nivelul 5 / 6

Rezultatele autoevaluării [self-assessment](#) bazate pe [Cadrul european al competențelor digitale 2.1](#)

## ● INFORMAȚII SUPLIMENTARE

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### PUBLICAȚII

#### Attenuation Coefficient for Surface Acoustic Waves in Fluid Region – 2012

Vietnam Journal of Mechanics, ISSN: 0866 7136, vol. 34, no. 4, pp. 225-236, 2012

Bui Thu Hang, Bui Duc Tung, Nguyen Tien Dat and Chu Duc Trinh

#### Three-axis piezoresistive accelerometer with adjustable axial resolutions – 2012

Vietnam Journal of Mechanics, ISSN: 0866 7136, vol. 34, no. 1, pp. 45-54, 2012

Bui Thu Hang, Tran Duc Tan and Chu Duc Trinh,

#### An optimization of IDTs for surface acoustic wave sensor – 2015

Int. J. Nanotechnology, 2015 Vol.12, No.5/6/7, pp.485 – 495, ISBN: 1475-7435

Thu Hang Bui, Tung Bui Duc and Trinh Chu Duc

#### Microfluidic Injector Simulation with F-SAW Sensor for 3D Integration – 2015

IEEE Trans. on Instrumentation & Measurement, Vol. 64, No. 4, pp. 849 - 856, Apr. 2015. DOI: 10.1109/TIM.2014.2366975, ISSN: 0018-9456

Thu Hang Bui, Tung Bui Duc and Trinh Chu Duc

#### A mixing surface acoustic wave device for liquid sensing applications: Design, simulation, and analysis

Journal of Applied Physics, 120, 074504 (2016), DOI: <http://dx.doi.org/10.1063/1.4961214>

ThuHang Bui, Bruno Morana, Tom Scholtes, Trinh Chu Duc, and Pasqualina M. Sarro

#### Liquid Identification by a Micro-electro-mechanical Interdigital Transducer – 2017

Analyst, 2017, DOI: <http://dx.doi.org/10.1039/c6an01804a>

ThuHang Bui, Bruno Morana, Atef B. Akhnoukh, Trinh Chu Duc, and Pasqualina M. Sarro

#### Effect of Droplet Shrinking on Surface Acoustic Wave Response in Microfluidic Applications – 2017

Applied Surface Science, 2017, DOI: <https://doi.org/10.1016/j.apsusc.2017.07.140>

ThuHang Bui, V. Nguyen, S. Vollebregt, B. Morana, H. van Zeijl, T. Chu Duc, and Pasqualina M. Sarro

#### Design and Numerical Study on a Microfluidic System for Circulating Tumor Cells Separation From Whole Blood Using Magnetophoresis and Dielectrophoresis Techniques

– 2022

Biochemical Engineering Journal, 7/2022. DOI: <https://doi.org/10.1016/j.bej.2022.108551>

B.A. Hoang, H. Tran T., T.H. Nguyen, N.T. Pham, T.H. Bui, H.N. Nguyen, T.T. Bui, D.T. Chu, Q.L. Do

## **Development of a wireless passive capacitively coupled contactless conductivity detection (WPC4D) for fluidic flow detection utilizing 3D printing and PCB technologies**

Instrumentation Science & Technology, 2/2023. DOI: <https://doi.org/10.1080/10739149.2023.2182791>

Bao-Anh Hoang, Van-Anh Bui, Kien Do Trung, Hang Bui Thu, Trinh Chu Duc, Tung Thanh Bui, Loc Do Quang

## **Design and analysis of a novel complex impedance sensing approach for fluidic flow detection utilizing the C4D technique**

Modelling and Simulation in Materials Science and Engineering, 2023

Bao-Anh Hoang, Van-Anh Bui, Kien Do Trung, Hang Bui Thu, Trinh Chu Duc, Tung Thanh Bui & Loc Do Quang

## **Numerical calculation and analysis of a novel complex impedance sensing approach for in-flow droplet detection utilizing the C4D technique**

Modelling and Simulation in Materials Science and Engineering, 8/2023

NVPhu, HB Anh, TT Hang, NT Hang, BT Hang, and DQ Loc

## **Numerical analysis of dielectrophoresis-based microfluidic chip with a facing-electrode design for cell separation**

- 2023

Journal of Biosystems Engineering,

M. C. Nguyen; H. T. Nguyen; YV. Tran ; N. T. Vu; T.H. Bui; D.T. Chu; T. T. Bui; C.-P. Jen; Q. L. Do

## **CONFERINȚE ȘI SEMINARE**

2014 – Japan

**Focused surface acoustic wave devices for pressure sensing at inkjet nozzle** 8th International Symposium on Organic Molecular Electronics (ISOME 2014)

2012 – Hanoi, Vietnam

**R-SAW Analysis on Single-Crystal AlN Substrate for Liquid Sensors** Proceedings of ICEMA 2012, August 16-17, 2012, Hanoi, ISBN: 978-604-913-097-7, pp. 13-18

2012 – Taiwan

**3-D Finite Element Modeling of SAW sensing system for liquids** IEEE/ASME Int. Conf. on Advanced Intelligent Mechatronics 2012, Kaohsiung, Taiwan, July 11-14, pp. 782 – 787, ISSN: 2159-6247, Print ISBN: 978-1-4673-2575-

2013 – USA

**Multilayer SAW device for flow rate sensing in a microfluidic channel** IEEE-Sensors2013, Maryland, USA, November 3-6, pp. 487-490, ISBN: 978-1-4673-4642-9/13

2013 – Vietnam

**An optimization of IDTs for surface acoustic wave sensor** Proceedings of IWNA 2013, November 14-16, 2013, Vung Tau, Vietnam, pp. 159-162

2014

**Microfluidic Injector Simulation with SAW Sensor for 3D Integration** IEEE-Sensors Applications Symposium 2014, Queenstown, New Zealand, February 18-20, pp. 213-218, ISBN: 978-1-4799-2179-9/14

2014 – Vietnam

**Effect of the focused surface acoustic wave devices on the microfluidic channel** Proceedings of ICEMA 2014, pp.221-225

2014 – Valencia, Spanish

**Associated IDTs in Surface Acoustic Wave Devices for Closed-loop Control Inkjet System** IEEE-Sensors2014, Spanish, Nov. 3-5, pp. 1936-1939, ISBN: 978-1-4799-0162-3/14

2015 – Korea

**SAW device for liquid vaporization rate and remaining molecule sensing** IEEE-Sensors2015, Korea, Nov. 1-4, ISBN: 978-1-4799-8203-5/15

2016 – China

**A novel mixing surface acoustic wave device for liquid sensing application** 2016 IEEE 29<sup>th</sup> International Conference on Micro Electro Mechanical Systems (IEEE MEMS), China, ISBN: 978-1-5090-1973-1/16.

2016 – USA

**Effect of the Interruption of the Propagation Path on the Response of Surface Acoustic Wave Transducers** IEEE-Sensors2016, USA, Oct 30 – Nov 2, pp. 745-747

2022

**A combination of dielectrophoresis and magnetophoresis for microfluidic separation of circulating tumor cells from whole blood** ICERA2022 (5th International Conference on Engineering and Research Application)

2023 – Romania

**Assessment of cracks in beams using changes in the measured frequencies and Particle Swarm Optimization** Vibroengineering Procedia, 20/10/2023 <https://doi.org/10.21595/vp.2023.23684>