Universitatea Tehnică din Cluj-Napoca
Facultatea de Inginerie Electrică
Departamentul de Electrotehnică şi Măsurări
Concurs pentru ocuparea postului de **Conferenţiar**, poziţia 25

Candidat: Bogdan ȚEBREAN
Funcţia actuală: **Şef de lucrări, Dr. ing.**

LISTA DE LUCRĂRI

A. Lista celor 10 lucrări, în extras, considerate de candidat a fi cele mai relevante pentru realizările profesionale proprii

B. Teza de doctorat

C. Cărţi şi capitole în cărţi

D. Lucrări ştiinţifice publicate în reviste de prestigiu sau volume ale manifestărilor naţionale sau internaţionale

I. Articole in reviste cotate si in volumele unor manifestari stiintifice indexate ISI proceedings

ISI Journals (reviste cotate ISI):

ISI Proceedings (volume ale unor manifestări indexate ISI):

II. Articole in reviste si volumele unor manifestari stiintifice indexate in alte baze de date internationale (BDI)

E. Granturi / proiecte câştigate prin competiţie

I. Director/responsabil proiecte naţionale câştigate prin competiţie

II. Membru în echipă proiecte naţionale

F. Burse de cercetare post-doctorale

A. Lista celor 10 lucrări considerate de candidat a fi cele mai relevante pentru realizările profesionale proprii:

1. **Bogdan ȚEBREAN**, Radu SILAGHI-DUMITRESCU, Titus Eduard CRIȘAN - Modelling of the Coplanar Capacitors for Dermal or Transdermal Drug Delivery System Monitoring, Proceedings of the Romanian Academy, Series A, volume 14, nr. 2/2013, pp.134-143, ISSN: 1454-9069
2. Ioan G. TARNOVAN, **Bogdan ȚEBREAN**, Titus E. CRISAN - Hall Effect Transducers Used in the Parameter Extraction of Captors Having Elastic Cantilever Beam. Proceedings of the 2007 IEEE Sensors Applications Symposium, IEEE Catalog Number 07EX1546, ISBN 1-4244-0678-1, San-Diego, USA, 6-8 February 2007
3. Septimiu CRISAN, **Bogdan ȚEBREAN**, Titus E. CRISAN - Multimodal Liveness Detection System for Hand Vein Biometrics, 2018 IEEE International, Symposium on Medical Measurements and Applications (MeMeA 2018), ISBN 978-1-5386-3393-9

4. **Bogdan ȚEBREAN**, Septimiu CRISAN, Ioan TÂRNOVAN, Titus CRISAN, Low Cost Command and Control System for Automated Infusion Devices." International Conference on Advancements of Medicine and Health Care through Technology; 12th-15th October 2016, Cluj-Napoca, Romania, Book Series: IFMBE Proceedings, Vol. 59, pp. 81-84, 2017 Springer.
5. **Bogdan ȚEBREAN**, Radu SILAGHI-DUMITRESCU, Titus E. CRIȘAN – Modelling of a capsule for controlled slow delivery, monitored via a capacitive method, ACTA ELECTROTEHNICA, vol. 53, nr. 4, 2012, pp. 323, ISSN 1841-3323
6. **Bogdan ȚEBREAN**, Septimiu CRIȘAN, Valentin ZAHARIA, Titus E. CRIȘAN, Capacitive Method for Drug Release Monitoring in Dermal Patches, Acta Electrotehnica, 2014, Vol. 55 Issue 3/4, p115-119, ISSN 1841-3323
7. Ioan G. TARNOVAN, **Bogdan ȚEBREAN**, Titus E. CRISAN - Shock Transducer with Hall Sensing Element, Proceedings of the 15th IMEKO TC4 Symposium on Novelties in Electrical Measurements and Instrumentation, ISBN 978-973-667-260-6, Iasi, Romania, 19-21 September 2007
8. **Bogdan ȚEBREAN**, Septimiu CRISAN, Valentin D. ZAHARIA, Titus E. CRISAN, Capacitive Monitoring of a Tubular Layered Substance Delivery System, International Conference on Advancements of Medicine and Health Care through Technology; 5th – 7th June 2014, Cluj-Napoca, Romania, IFMBE Proceedings - Springer International Publishing, Volume 44, 2014, pg. 197-202, DOI 10.1007/978-3-319-07653-9_40
9. **Bogdan ȚEBREAN**, Septimiu CRISAN, Titus E. CRISAN - Modeling of a Controlled Drug Delivery Capsule, 2018 IEEE International, Symposium on Medical Measurements and Applications (MeMeA 2018), ISBN 978-1-5386-3393-9
10. **B. ȚEBREAN**, S. CRISAN, C. MURESAN, T. E. CRISAN - Coplanar capacitive matrix structures used for monitoring the recovery of burn injuries, 22nd IMEKO TC4 International Symposium and 20th International Workshop on ADC Modelling and Testing 2017: Supporting World Development Through Electrical and Electronic Measurements, Vol. 2017-September, 2017, Pag. 385-390, Code 134087

B. Teza de doctorat

„Cercetări privind măsurarea şocurilor şi vibraţiilor mecanice cu senzori Hall"
conducător ştiinţific : Prof.dr.ing. Ioan Gavril Tarnovan
Universitatea Tehnica din Cluj-Napoca
Susţinere publică: 27.09.2008

C. Cărţi şi capitole în cărţi

1. **B. ȚEBREAN** - „Utilizarea senzorilor cu effect Hall în măsurarea șocurilor mecanice", UTPRESS, ISBN 978-606-737-284-7, Cluj-Napoca, 2018;

2. **B. ȚEBREAN** - „Utilizarea structurilor capacitive în măsurări biomedicale", UTPRESS, ISBN 978-606-737-342-4, Cluj-Napoca, 2019;

3. Rodica HOLONEC, **B. ȚEBREAN**, Ghe. TODORAN, I.G. TARNOVAN - ,, Electronic Measurements-Laboratory Manual", UTPRESS, ISBN 978-973-662-600-5, Cluj-Napoca, 2010;

4. S. CRIȘAN, **B. ȚEBREAN**, T.E. CRIȘAN - ,,Senzori integrați – îndrumător de laborator", Editura Mediamira, ISBN 978-973-712-357-1, Cluj-Napoca, 2017.

D. Lucrări ştiinţifice publicate în reviste de prestigiu sau volume ale manifestărilor naţionale sau internaţionale

I. Articole in reviste cotate si in volumele unor manifestări științifice indexate în baza de date ISI Web of Knowledge– reasearcherID: D-1341-2015

ISI Journals (reviste cotate ISI):

1. **Bogdan ȚEBREAN**, Radu SILAGHI-DUMITRESCU, Titus Eduard CRIȘAN - Modelling of the Coplanar Capacitors for Dermal or Transdermal Drug Delivery System Monitoring, Proceedings of the Romanian Academy, Series A, volume 14, nr. 2/2013, pp.134-143, ISSN: 1454-9069
2. Septimiu Crisan, **Bogdan ȚEBREAN** „Low Cost, High Quality Vein Pattern Recognition Device with Liveness Detection. Workflow and Implementations", Measurement, Volume 108, Pages 207-216, Elsevier, 2017

ISI Proceedings (volume ale unor manifestări indexate ISI):

1. **Bogdan ȚEBREAN**, Septimiu CRISAN, Ioan TÂRNOVAN, Titus CRISAN, Low Cost Command and Control System for Automated Infusion Devices." International Conference on Advancements of Medicine and Health Care through Technology; 12th-15th October 2016, Cluj-Napoca, Romania, Book Series: IFMBE Proceedings, Vol. 59, pp. 81-84, 2017 Springer.
2. Ioan G. TARNOVAN, **Bogdan ȚEBREAN**, Titus E. CRISAN - Hall Effect Transducers Used in the Parameter Extraction of Captors Having Elastic Cantilever Beam. Proceedings of the 2007 IEEE Sensors Applications Symposium, IEEE Catalog Number 07EX1546, ISBN 1-4244-0678-1, San-Diego, USA, 6-8 February 2007
3. Septimiu CRISAN, Ioan G. TARNOVAN, **Bogdan ȚEBREAN**, Titus E. CRISAN - Correlation of Near and Far Infrared Vein Recognition for Unified Processing and Simulation, XIX IMEKO World Congress, Fundamental and Applied Metrology, Lisbon, Portugal, (September 2009)
4. Septimiu CRISAN, Ioan G. TARNOVAN, **Bogdan ȚEBREAN**, Titus E. CRISAN - Optical Multi-touch System for Patient Monitoring and Medical Data Analysis, in INTERNATIONAL CONFERENCE ON ADVANCEMENTS OF MEDICINE AND HEALTH CARE THROUGH TECHNOLOGY, vol. 26, pp. 279-282, 2009, ISSN 1680-0737
5. Septimiu CRISAN, Ioan G. TARNOVAN, **Bogdan ȚEBREAN**, Titus E. CRISAN - Hand Vein Biometric Authentication in Optical Multi-Touch Systems, International Conference on Advancements of Medicine and Health Care through Technology MediTech, Cluj-Napoca, Romania (29 August-2 September 2011), vol. 36, pp. 124-127, 2011, ISBN:978-3-642-22585-7

II. Articole in reviste si volumele unor manifestari stiintifice indexate in alte baze de date internationale (BDI)

1. **Bogdan ȚEBREAN**, Septimiu CRISAN, Titus E. CRISAN - Modeling of a Controlled Drug Delivery Capsule, 2018 IEEE International, Symposium on Medical Measurements and Applications (MeMeA 2018), ISBN 978-1-5386-3393-9
2. Septimiu CRISAN, **Bogdan ȚEBREAN**, Titus E. CRISAN - Multimodal Liveness Detection System for Hand Vein Biometrics, 2018 IEEE International, Symposium on Medical Measurements and Applications (MeMeA 2018), ISBN 978-1-5386-3393-9
3. **B. ȚEBREAN**, S. CRISAN, C. MURESAN, T. E. CRISAN - Coplanar capacitive matrix structures used for monitoring the recovery of burn injuries, 22nd IMEKO TC4 International Symposium and 20th International Workshop on ADC Modelling and Testing 2017: Supporting World Development Through Electrical and Electronic Measurements, Vol. 2017-September, 2017, Pag. 385-390, Code 134087
4. Andrei CATINEAN, **Bogdan ȚEBREAN**, Radu BOGDAN, Titus E. CRISAN - Fiber optic pressure sensor, 22nd IMEKO TC4 International Symposium and 20th International Workshop on ADC Modelling and Testing 2017: Supporting World Development Through Electrical and Electronic Measurements, Vol. 2017-September, 2017, Pag. 360-366, Code 134087

5. Calin MURESAN, Radu A. MUNTEANU, Florin DRAGAN, Adrian O. MARZA, **Bogdan ȚEBREAN** - Application for Implementing the p-q Theory in a Three Phase System, Proceedings of the 6th International Conference on Modern Power Systems MPS2015, 18-21 May 2015, Cluj-Napoca, Romania, Acta Electrotehnica, 2015, Vol. 56 Issue 3, pp.192-199, ISSN 1841-3323
6. Septimiu CRISAN, **Bogdan ȚEBREAN**, Simina EMERICH, Optimized Vein Pattern Recognition for Biometric Applications– a Modern Approach, 14th IMEKO TC10 Workshop on Technical Diagnostics - "NEW PERSPECTIVES IN MEASUREMENTS, TOOLS AND TECHNIQUES FOR SYSTEM'S RELIABILITY, MAINTAINABILITY AND SAFETY" Milan, Italy, June 27-28, 2016, ISBN 978-92-990073-9-6
7. Valentin D. ZAHARIA, Septimiu CRIȘAN, **Bogdan ȚEBREAN**, Vadim T. POPA, Radu A. MUNTEANU, „Sensorial System for Visually Impaired Individuals", International Conference on Advancements of Medicine and Health Care through Technology; 5th–7th June 2014, Cluj-Napoca, Romania; pp. 173-176; Springer International Publishing, 2014
8. **Bogdan ȚEBREAN**, Septimiu CRISAN, Valentin D. ZAHARIA, Titus E. CRISAN, Capacitive Monitoring of a Tubular Layered Substance Delivery System, International Conference on Advancements of Medicine and Health Care through Technology; 5th – 7th June 2014, Cluj-Napoca, Romania, IFMBE Proceedings - Springer International Publishing, Volume 44, 2014, pg. 197-202, DOI 10.1007/978-3-319-07653-9_40
9. Titus E. CRISAN, Andrei CATINEAN, **Bogdan ȚEBREAN**, Septimiu CRIȘAN**,** Analysis of inherent perturbations modeling on optical fibers. Acta Electrotehnica. 2014, Vol. 55 Issue 1/2, pp.60-64, ISSN 1841-3323
10. **Bogdan ȚEBREAN**, Septimiu CRIȘAN, Radu BOGDAN, Titus E. CRIŞAN, Low Cost GSM Detector, Acta Electrotehnica. 2014, Vol. 55 Issue 1/2, pp.56-59, ISSN 1841-3323
11. **Bogdan ȚEBREAN**, Septimiu CRIȘAN, Valentin ZAHARIA, Titus E. CRIŞAN, Capacitive Method for Drug Release Monitoring in Dermal Patches, Acta Electrotehnica, 2014, Vol. 55 Issue 3/4, p115-119, ISSN 1841-3323
12. Valentin ZAHARIA, Dan M. IUDEAN, **Bogdan ȚEBREAN,** Florin. DRAGAN, Titus .E. CRISAN – Implementing a Distributed Measurement System – a Case Study, ACTA ELECTROTEHNICA, vol. 55, nr. 3-4, 2014, pp.127-130, ISSN 1841-3323
13. Calin MURESAN, **Bogdan ȚEBREAN,** Adrian O. MARZA, Dan IUDEAN– LabView Application for Implementing the Instantaneous Power Theory in a Three Phase System, ACTA ELECTROTEHNICA, vol. 55, nr. 3-4, 2014, pp.120-126, ISSN 1841-3323
14. **Bogdan ȚEBREAN**, Radu SILAGHI-DUMITRESCU, Titus E. CRIȘAN – Modelling of a capsule for controlled slow delivery, monitored via a capacitive method, ACTA ELECTROTEHNICA, vol. 53, nr. 4, 2012, pp. 323, ISSN 1841-3323
15. **Bogdan ȚEBREAN**, Septimiu CRISAN, Ioan G. TARNOVAN, Titus E. CRISAN - Novel Drug Delivery Systems – Method Review, ACTA ELECTROTEHNICA, vol. 52, nr. 1, 2011, pg. 49, ISSN 1841-3323
16. **Bogdan ȚEBREAN**, Ioan G. TARNOVAN – Some Aspects Concerning Designing and Manufacturing of Shock Detectors with Analogical Hall Sensors, ACTA ELECTROTEHNICA, vol. 49, nr 1, 2008, pp. 102, ISSN 1841-3323
17. **Bogdan ȚEBREAN**, Ioan G. TARNOVAN, Titus E. CRISAN – Response Analysis of Hall-based Mechanical Shock Transducer, ACTA ELECTROTEHNICA, vol. 49, nr. 4, 2008, pp. 480, ISSN 1841-3323
18. Ioan G. TARNOVAN, **Bogdan ȚEBREAN**, Titus E. CRISAN - Shock Transducer with Hall Sensing Element, Proceedings of the 15th IMEKO TC4 Symposium on Novelties in Electrical Measurements and Instrumentation, ISBN 978-973-667-260-6, Iasi, Romania, 19-21 September 2007
19. Ioan G. TARNOVAN, **Bogdan ȚEBREAN** - Galvanomagnetic Sensors with Applications In The Measurement Of Non-Electrical Quantities: A Review, ACTA ELECTROTEHNICA, vol. 48, nr 1, 2007, pg. 76, ISSN 1841-3323
20. Ioan G. TARNOVAN, **Bogdan TEBREAN** - Galvanomagnetic Sensors with Applications in the Measurement of Electrical Quantities: A Review, ACTA ELECTROTEHNICA, vol. 47, nr 3, 2006, pp. 174, ISSN 1841-3323

E. Granturi / proiecte câştigate prin competiţie

I. Director/responsabil proiecte naţionale câştigate prin competiţie

Proiect de cercetare 430/2007 CNCSIS tip TD, Titlu proiect: „Cercetari in domeniul traductoarelor galvanomagnetice cu aplicatii in masurari electrice"

Director Grant: Ing. Bogdan ŢEBREAN

II. Membru în echipă proiecte nationale

Grant CNCSIS tip A, cod 1229/2006, **Titlu grant:** „Modelarea matematica a senzorilor cu fibre optice utilizand metoda elementelor finite"

Director Grant: Prof. dr. ing. Ioan G. Târnovan

Grant PN-II IDEI 616/2009 cod 180, **Titlu Grant:** „Metode de masurare in spectrul infrarosu cu aplicatii in sistemele biomedicale si de securitate"

Director Grant: Conf. Dr. Ing. Titus E. Crişan

Grant PN-II TE 306/2105, Titlu grant: „Platformă pentru studiul și dezvoltarea aplicațiilor de analiză optică a modelului venelor periferice superficiale în biometrie și biomedicină"

Director Grant: S.l. Dr. Ing. Septimiu Crişan

F. Burse de cercetare

1. **Bursa de cercetare post-doctorala „**Cercetari privind utilizarea nanostructurilor poroase in constructia capsulelor cu eliberare controlata a substantelor in functie de diversi stimuli captati prin intermediul biosenzorilor" cod contract POSDRU/89/1.5/S/60189: *Programe postdoctorale pentru dezvoltare durabilă într-o societate bazată pe cunoaştere,* Universitatea Babeş-Bolyai, Cluj-Napoca, Romania.
   Intervalul de derulare al contractului: 2011 –2013.