



Curriculum vitae Europass

Informații personale

Nume / Prenume **Teodor Lucian GRIGORIE**

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Naționalitate

Data nașterii

Sex

Experiența profesională

Perioada **03.10.2022 - prezent**

Funcția sau postul ocupat **Profesor universitar**

Activități și responsabilități principale **Activitate didactică și de cercetare științifică**

Numele și adresa angajatorului **Universitatea Națională de Știință și Tehnologie Politehnica București, Facultatea de Inginerie Aerospațială**

Tipul activității sau sectorul de activitate **Învățământ superior**

Perioada **15.02.2021 -02.10.2022**

Funcția sau postul ocupat **Profesor universitar**

Activități și responsabilități principale **Activitate didactică și de cercetare științifică**

Numele și adresa angajatorului **Academia Tehnica Militara „Ferdinand I”, Facultatea de Aeronave și Autovehicule Militare, Departamentul de Sisteme Integrate de Aviație și Mecanică, București**

Tipul activității sau sectorul de activitate **Învățământ superior**

Perioada **01.10.2018 -14.02.2021**

Funcția sau postul ocupat **Cercetător Științific Gradul I**

Activități și responsabilități principale **Cercetare științifică**

Numele și adresa angajatorului **Academia Tehnica Militara „Ferdinand I”, Facultatea de Aeronave și Autovehicule Militare, Centrul de Excelență în Sisteme Autopropulsate și Tehnologii pentru Apărare și Securitate, București**

Tipul activității sau sectorul de activitate **Învățământ superior**

Perioada **12.11.2020 pana in prezent**

Funcția sau postul ocupat **Director Școala Doctorală de Inginerie Aerospațială - Universitatea Națională de Știință și Tehnologie Politehnica București**

Activități și responsabilități principale **Management activitate Școala Doctorală**

Numele și adresa angajatorului **IOSUD Universitatea Națională de Știință și Tehnologie Politehnica București, Școala Doctorală a Facultății de Inginerie Aerospațială**

Tipul activității sau sectorul de activitate **Învățământ superior**

Perioada **2017 pana in prezent**

Funcția sau postul ocupat **Conducator de doctorat**

Activități și responsabilități principale **Coordonare studenti doctoranzi**

Numele și adresa angajatorului **IOSUD Universitatea Națională de Știință și Tehnologie Politehnica București, Școala Doctorală a Facultății de Inginerie Aerospațială**

Tipul activității sau sectorul de activitate **Învățământ superior**

Perioada **01.01.2014 pana in prezent**

Funcția sau postul ocupat **Profesor asociat**

Activități și responsabilități principale **Cercetare stiintifica**

Numele și adresa angajatorului **Ecole de Technologie Supérieure in Montréal, Québec, Canada**

Tipul activității sau sectorul de activitate **Învățământ superior**

Perioada **01.10.2009 – 01.10.2018**

Funcția sau postul ocupat **Conferentiar universitar**

Activități și responsabilități principale **Activitate didactică și de cercetare științifică**

Numele și adresa angajatorului **Universitatea din Craiova, Facultatea de Inginerie Electrica, Departamentul de Inginerie Electrica, Energetica si Aerospațială**

Tipul activității sau sectorul de activitate **Învățământ superior**

Perioada	01.10.2005 – 01.10.2009
Funcția sau postul ocupat	<i>Lector universitar</i>
Activități și responsabilități principale	Activitate didactică și de cercetare științifică
Numele și adresa angajatorului	Universitatea din Craiova, Facultatea de Electrotehnica, Catedra de Avionica
Tipul activității sau sectorul de activitate	Învățământ superior
Perioada	01.10.2001 – 01.10.2005
Funcția sau postul ocupat	<i>Asistent universitar</i>
Activități și responsabilități principale	Activitate didactică și de cercetare științifică
Numele și adresa angajatorului	Universitatea din Craiova, Facultatea de Electrotehnica, Catedra de Avionica
Tipul activității sau sectorul de activitate	Învățământ superior
Perioada	01.10.1998 – 01.10.2001
Funcția sau postul ocupat	<i>Preparator universitar</i>
Activități și responsabilități principale	Activitate didactică și de cercetare științifică
Numele și adresa angajatorului	Universitatea din Craiova, Facultatea de Electrotehnica, Catedra de Bazele Electrotehnicii
Tipul activității sau sectorul de activitate	Învățământ superior
Educație și formare	
Perioada	2017
Calificarea / diploma obținută	Abilitat în Domeniul de studii universitare de doctorat <i>Inginerie Aerospațială</i> , Atestat de Abilitare (ordinul MEN 5103/28.09.2017)
Principalele subiecte / competențe profesionale dobândite	Titlul tezei de abilitare: <i>Sensing, actuation and control in the next generation of aerospace systems</i> . Conducere de doctorat în Domeniul de studii universitare de doctorat <i>Inginerie Aerospațială</i>
Numele și tipul instituției de învățământ	Universitatea Politehnica București, Facultatea de Inginerie Aerospațială, București, România
Nivelul în clasificarea națională	Categoria I - Universitate de Cercetare Avansată și Educație
Perioada	Octombrie 2001 - octombrie 2006 (forma de pregătire - fără frecvență)
Calificarea / diploma obținută	Doctor în Domeniul <i>Inginerie Aerospațială</i> , Diploma de Doctor, Emisă de Ministerul Educației și Cercetării din România în baza OMEC nr. 632/21.03.2007.
Principalele subiecte / competențe profesionale dobândite	Titlul tezei de doctorat: <i>Sisteme de navigație inertială strap-down cu senzori opto-electronici</i>
Numele și tipul instituției de învățământ	Universitatea Politehnica București, Facultatea de Inginerie Aerospațială, București, România
Nivelul în clasificarea națională	Categoria I - Universitate de Cercetare Avansată și Educație
Perioada	1998-1999
Calificarea / diploma obținută	Studii Aprofundate în Domeniul <i>Inginerie Aerospațială</i> , Diploma de Studii Aprofundate, Emisă de Ministerul Educației Naționale din România. Eliberată de Universitatea din Craiova.
Principalele subiecte / competențe profesionale dobândite	Specializarea absolvită: <i>Sisteme complexe de stabilizare, navigație și dirijare aerospațială</i> Profilul: <i>Aeronave</i>
Numele și tipul instituției de învățământ	Universitatea din Craiova, Facultatea de Electrotehnica, Craiova, România
Nivelul în clasificarea națională	Categoria a II-a - Universitate de Educație și Cercetare Științifică
Perioada	1993-1998
Calificarea / diploma obținută	Inginer în Domeniul <i>Inginerie Aerospațială</i> , Diploma de Licență, Emisă de Ministerul Educației Naționale din România. Eliberată de Universitatea din Craiova.
Principalele subiecte / competențe profesionale dobândite	Specializarea absolvită: <i>Echipamente și Instalații de Bord</i> Profilul: <i>Aeronave</i>
Numele și tipul instituției de învățământ	Universitatea din Craiova, Facultatea de Electrotehnica, Craiova, România
Nivelul în clasificarea națională	Categoria a II-a - Universitate de Educație și Cercetare Științifică
Cursuri de perfecționare la nivel internațional	- „ <i>GNSS Positioning: Theory and Practice</i> ”, 07.06.2016-09.06.2016, Prague, Czech Republic, in the professional training program of e-KnoT project, European Global Navigation Satellite Systems Agency (GSA); - „ <i>Vulnerabilities of GNSS</i> ”, 18.10.2016-20.10.2016, Torino, Italy, in the professional training program of e-KnoT project, European Global Navigation Satellite Systems Agency (GSA); - „ <i>Fundamentals of GNSS</i> ”, 10.04.2017-12.04.2017, Astri Polska, Warsaw, Poland, in the professional training program of e-KnoT project, European Global Navigation Satellite Systems Agency (GSA); - „ <i>Multi-Sensors Navigation</i> ”, 22.05.2017-24.05.2017, Prague, Czech Republic, in the professional training program of e-KnoT project, European Global Navigation Satellite Systems Agency (GSA);
Aptitudini și competențe personale	
Limba maternă	Română
Limba(i) străină(e) cunoscută(e)	

Autoevaluare	Înțelegere				Vorbire				Scriere	
Nivel european	Ascultare		Citire		Participare la conversație		Discurs oral		Exprimare scrisă	
Engleza	C2	Utilizator experimentat	C2	Utilizator experimentat	C2	Utilizator experimentat	C2	Utilizator experimentat	C1	Utilizator experimentat
Franceza	B2	Utilizator independent	B2	Utilizator independent	B2	Utilizator independent	B2	Utilizator independent	B2	Utilizator independent
Competențe și abilități sociale	Abilitatea de a lucra in diferite echipe de cercetare stiintifica									
Competențe și aptitudini manageriale	A se vedea Anexa 1									
Competențe și aptitudini tehnice	- Cercetare fundamentala, cercetare aplicativa, proiectare asistata de calculator si optimizare, punere in functiune si service pentru echipamente si aparate de bord: senzori si traductoare de presiune, de debit, de temperatura si de turatie; aparate pentru determinarea altitudinii, a vitezei, a numarului Mach, a directiei de zbor; centrale aerodinamice; centrale de cap si de verticala; mijloace de masurare electrice si electronice specifice echipamentelor de bord; filtre pasive pentru componente armonice; filtre electrice active; alte circuite electrice pentru aplicatii diverse; - Cercetare fundamentala, cercetare aplicativa, proiectare asistata de calculator, punere in functiune si service pentru controlul automat al sistemelor liniare si neliniare, in varianta clasica (control cu legi PID), sau utilizand logica fuzzy si neural networks: echipamente si sisteme ambarcabile clasice, echipamente si sisteme neconventionale: senzori MEMS, MOEMS, NEMS, NOEMS, sau smart-material actuators, cu aplicabilitate directa in morphing aircraft; - Cercetare fundamentala, cercetare aplicativa, proiectare asistata de calculator si optimizare, punere in functiune si service pentru echipamente si sisteme de navigatie aerospatiale: navigatori inertiali strap-down, GPS, sisteme integrate GPS-INS (cu senzori clasici sau neconventionali), sisteme de pozitionare prin metode acustice; - Analiza numerica si simbolic-numerica a echipamentelor si sistemelor ambarcabile, liniare sau neliniare; - Instrumentare; achiziție, stocare si prelucrarea numerica a semnalelor; analiza on-line si off-line a semnalelor; - Elaborare de programe dedicate, de calcul si optimizare, pentru aplicatii diverse in ingineria aerospatiala: sisteme de bord si navigatie aerospatiala, control automat al sistemelor liniare si neliniare, monitorizare si arhivare a parametrilor functionali in echipamente complexe.									
Competențe de utilizare a calculatorului	MATLAB, PASCAL, MULTISIM, MAPLE, MATHEMATICA, AUTOCAD, COREL, VISIO									
Membru in comisii CNATCDU	Președintele <i>Comisiei de Inginerie Aerospațială, Autovehicule și Transporturi a CNATDCU</i>, pentru mandatul 2020-2024 Membru în <i>Panelul din domeniul fundamental „Științe ingineresti” al CNATDCU</i>, pentru mandatul 2020-2024 Membru în <i>Comisia de Inginerie Aerospațială, Autovehicule și Transporturi a CNATDCU - Comisia de Contestatii</i>, pentru mandatul 2016-2020									
Membru in Asociatii	AIAA (<i>American Institute of Aeronautics and Astronautics</i>), IEEE (<i>Institute of Electrical and Electronics Engineers</i>), CASI (<i>Canadian Aeronautics and Space Institute</i>), IAENG (<i>International Association of Engineers</i>), INSTICC (<i>Institute for Systems and Technologies of Information, Control and Communication</i>).									
Stagii postdoctorale	Département en génie de la production automatisée, Laboratoire de Recherche en Commande Active, Avionique et Aéroserveoélasticité (LARCASE), Université du Québec, École de technologie supérieure - ETS en Montréal, Canada.									
Premii obtinute	<i>Premiul al II-lea la Olimpiada Nationala de Fizica si calificarea in probele de baraj pentru Olimpiada Internationala de Fizica</i> – doi ani consecutiv. Premiul a fost oferit de Ministerul Invatamantului din Romania (1991/1992, 1992/1993). <i>Troisième prix pour le projet CRIAQ 7.1 a l'occasion de la 10ieme anniversaire de CRIAQ</i>, le 16 mars 2012 - <i>offert a l'équipe travaillant sur le projet CRIAQ 7.1</i>: L'Amélioration de l'écoulement laminaire sur une voilure aéroélastique, dirigé entre 2006 et 2009 par professeure Ruxandra Botez, Département de génie de la production automatisée, École de technologie Supérieure, Montréal, Québec, Canada <i>Deuxième prix pour le projet CRIAQ MDO-505 a l'occasion du Forum CRIAQ</i>, le 17 avril 2014 - <i>offert a l'équipe travaillant sur le projet CRIAQ MDO-505</i>: Architectures et technologies déformables pour l'amélioration des performances des ailes (2012-2015) dirigé par professeure Ruxandra Botez, Département de génie de la production automatisée, École de technologie Supérieure, Montréal, Québec, Canada <i>Premio Venezia du Chambre de commerce italienne au Canada - Édition 2015, catégorie Scientifique et Académique, pour le projet CRIAQ MDO-505</i>, le 28 mai 2015 - <i>offert a l'équipe travaillant sur le projet CRIAQ MDO-505</i>: Architectures et technologies déformables pour l'amélioration des performances des ailes (2012-2015) dirigé par professeure Ruxandra Botez, Département de génie de la production automatisée, École de technologie Supérieure, Montréal, Québec, Canada <i>2017 AMERICAN ROMANIAN ACADEMY OF ARTS AND SCIENCES „Morphing Wing Modeling and Simulation” Award for CRIAQ MDO 505 Team led by Dr. Botez</i>: Teodor Lucian Grigorie, M. J. Tchatchuneg Kammegne, Andreea Koreanschi, Oliviu Sugar Gabor, Mohamed Guezguez, Yvan Tondji, Mahmood Mamou, Youssef Mébarki, ÉTS, Canada, for the presentation „Experiments on a Real Aircraft Morphing Wing” <i>„Certificate of Outstanding Contribution in Reviewing”</i> awarded in January, 2017 to Lucian Grigorie <i>in recognition of the contributions made to the quality of the journal AEROSPACE SCIENCE AND TECHNOLOGY</i>. The Editors of AEROSPACE SCIENCE AND TECHNOLOGY, Elsevier, Amsterdam, Netherlands									

„Certificate of Reviewing” awarded in May, 2016 to Lucian Grigorie in recognition of the review made for the journal *CHINESE JOURNAL OF AERONAUTICS*. The Editors of *CHINESE JOURNAL OF AERONAUTICS*, Elsevier, Amsterdam, Netherlands

Premiul al III-lea pentru Excelență în Cercetare acordat de ANCS (Autoritatea Națională pentru Cercetare Științifică) în anul 2007 la secțiunea “Cercetare complexa - proiect de dezvoltare”, pentru colectivul de realizare a proiectului: Noi metode, tehnologii ecologice și concepte de soluții aplicabile conform standardelor europene, de creștere a calității energiei electrice - (2005-2008). Proiect CEEEX, Nr. 100/2005. Responsabil proiect: Prof. dr. ing. Petre-Marian Nicolae, Universitatea din Craiova.

Premiul al III-lea pentru Excelență în Cercetare acordat de către ANCS (Autoritatea Națională pentru Cercetare Științifică) în anul 2006 la secțiunea “Proiect cu dezvoltare tehnologică”, pentru colectivul de realizare a proiectului: Dezvoltarea și elaborarea unor tehnologii electrice noi având ca scop modernizarea transportului în comun cu troleibuz în concordanță cu standardele europene. Contract 7C23/2004 - PNCDI, Programul AMTRANS, Responsabil proiect: Prof. dr. ing. Petre-Marian Nicolae, Universitatea din Craiova.

Premiul I la Olimpiada Județeană de Fizică, Dolj, România. Membru al lotului olimpic de fizică al județului Dolj și participant la olimpiada națională de fizică. Premiile au fost oferite de Inspectoratul Județean Dolj din partea Ministerului Învățământului din România (1989/1990, 1990/1991, 1991/1992, 1992/1993).

Premiul UEFISCDI/PN II, Program Resurse umane - Competiția “Premierea rezultatelor cercetării” 2013 pentru lucrarea: *Automatic Control of Aircraft in Longitudinal Plane During Landing*, *IEEE Transactions on Aerospace & Electronic Systems*, vol. 49, nr. 2, 2013, pp. 1338-1350, autori: R. Lungu, M. Lungu, T.L. Grigorie. Cod proiect: PN-II-RU-PRECISI-2013-7-4184.

Premiul UEFISCDI/PN II, Program Resurse umane - Competiția “Premierea rezultatelor cercetării” 2013 pentru lucrarea: *ALSSs with Conventional and Fuzzy Controllers Considering Wind Shear and Gyro Errors*, *Journal of Aerospace Engineering*, vol. 26, nr. 4, 2013, pp. 794-813, autori: R. Lungu, M. Lungu, T.L. Grigorie. Cod proiect: PN-II-RU-PRECISI-2013-7-3994.

Premiul UEFISCDI/PN III, Subprogramul I.1. Resurse umane - Competiția “Premierea rezultatelor cercetării - articole” 2017 pentru lucrarea: *Proportional fuzzy feed-forward architecture control validation by wind tunnel tests of a morphing wing*, *Chinese Journal of Aeronautics*, vol. 30, nr. 2, 2017, pp. 561-576, autori: M.J.T. Kammegne, R.M. Botez, T.L. Grigorie, M. Mamou, Y. Mébarki. Cod proiect: PN-III-P1-I.1-PRECISI-2017-20037.

Premiul UEFISCDI/PN III, Subprogramul I.1. Resurse umane - Competiția “Premierea rezultatelor cercetării - articole” 2020 pentru lucrarea: *Design and experimental testing of a control system for a morphing wing model actuated with miniature BLDC motors*, *Chinese Journal of Aeronautics*, vol. 33, nr. 4, 2020, pp. 1272-1287, autori: T.L. Grigorie, S. Khan, R.M. Botez, M. Mamou, Y. Mébarki. Cod proiect: PN-III-P1-I.1-PRECISI2020-45945.

Burse de studiu internaționale

Bursa postdoctorală de excelență pentru cercetători straini, oferită de Gouvernement du Canada, Ministère de l'Éducation, du Loisir et du Sport (2008)

Burse de perfecționare în cercetare, oferite de Agence Universitaire de la Francophonie (AUF) pentru stagii de cercetare la École de technologie supérieure à Montréal, Québec, Canada (2005, 2007, 2011)

Bursa de cercetare la nivel doctoral, oferită de Laboratoire de Recherche en Commande Active, Avionique et Aéroserveoélasticité (LARCASE) de l'École de technologie supérieure à Montréal, Québec, Canada (2005)

Bursa de cercetare la nivel postdoctoral, oferită de Agence Universitaire de la Francophonie (AUF) pentru un stagiu de cercetare efectuat la École de technologie supérieure à Montréal, Québec, Canada (2008-2009)

Burse de cercetare la nivel postdoctoral, oferite de Laboratoire de Recherche en Commande Active, Avionique et Aéroserveoélasticité (LARCASE) de l'École de technologie supérieure à Montréal, Québec, Canada (2007-2012).

Recenzor

Reviste ISI

1) *Chinese Journal of Aeronautics*, ISSN: 1000-9361; 2) *Mechatronics*, ISSN: 0957-4158; 3) *Transactions of the Institute of Measurement and Control*. ISSN: 0142-3312; 4) *International Journal of Electronics*. ISSN: 0020-7217; 5) *Latin American Journal of Solids and Structures*. ISSN: 1679-7825; 6) *Aerospace Science and Technology*. ISSN: 1270-9638; 7) *IEEE Sensors Journal*. ISSN: 1530-437X; 8) *Tribology International*, ISSN: 0301-679X; 9) *Journal of Sensors*. ISSN: 1687-725X; 10) *Sensors*. ISSN: 1424-8220; 11) *Journal of Aerospace Engineering*. ISSN: 0893-1321; 12) *Information Fusion*. ISSN: 1566-2535, eISSN: 1872-6305; 13) *Mathematical problems in engineering*. ISSN: 1024-123X, eISSN: 1563-5147; 14) *Sensors and Actuators A-Physical*. ISSN: 0924-4247; 15) *Optics Communications*. ISSN: 0030-4018; 16) *International Journal of Aerospace Engineering*. ISSN: 1687-5966, eISSN: 1687-5974; 17) *Journal of Mechanical Science and Technology*. ISSN: 1738-494X, eISSN: 1976-3824; 18) *Energies*. ISSN: eISSN: 1996-1073; 19) *Water*. ISSN: eISSN: 2073-4441; 20) *Journal of Control Science and Engineering*. ISSN: 1687-5249, eISSN: 1687-5257; 21) *Journal of aerospace technology and management*. ISSN: 1984-9648, eISSN: 2175-9146; 22) *Journal of Electrical and Computer Engineering*. ISSN: 2090-0147, eISSN: 2090-0155; 23) *Aerospace*. ISSN: 2226-4310.

Reviste BDI/ Proceedings ISI și BDI

- 4 Jurnale indexate BDI și 8 Conferințe Internaționale cu Proceedings indexat BDI;
- 14 Conferințe Internaționale cu Proceedings indexat ISI;

Alte reviste și conferințe

- 1 Jurnal și 17 Conferințe Internaționale cu Proceedings în curs de indexare/neindexat

Membru in comitetul stiintific / editor	- 27 Conferinte Internationale cu Proceedings indexat ISI; - 7 Jurnale / Journal Special Issue Indexate BDI si 21 Conferinte cu Proceedings indexat BDI; - 10 Jurnale neindexate si 80 Conferinte cu Proceedings in curs de indexare / neindexat;
Publicatii	Scurta descriere: <i>Participarea in 43 de granturi/proiecte de cercetare nationale si internationale (Anexa 1); 3 carti, 2 monografii si 2 indrumare de laborator</i> in edituri recunoscute CNCIS; 7 capitol de carte publicate de Springer-Verlag, Elsevier si InTech; 1 carte editata , publicata in editura straina; peste 250 articole stiintifice din care 96 lucrari indexate ISI Web (36 in jurnale ISI si 60 in ISI proceedings) , 94 lucrari indexate in baze de date internationale recunoscute CNATDCU (17 in jurnale BDI si 77 in BDI proceedings) , peste 60 de lucrari publicate in reviste sau proceedings-uri indexate in alte baze de date sau neindexate.
ORCID ID	https://orcid.org/0000-0001-9907-4314
Web of Science Researcher ID	B-7416-2011 (https://publons.com/researcher/1431478/teodor-lucian-grigorie/)
Scopus Author ID	14019389000 (https://www.scopus.com/authid/detail.uri?authorId=14019389000)
UEFISCDI ID (UEF-ID)	U-1700-030A-2340 (https://www.brainmap.ro/teodor-lucian-grigorie)
Google Academic profile	https://scholar.google.ro/citations?hl=ro&user=efCxKL8AAAAJ
Anexe	Anexa 1. Experienta manageriala - selectie din granturile/proiectele de cercetare; Anexa 2. Produse concepute/realizate si valorificate; Anexa 3. Lista publicatiilor (selectie - Articole publicate in jurnale indexate ISI)

Anexa 1. Experienta manageriala

Am condus si/sau am participat ca membru in **43** de granturi/proiecte de cercetare nationale si internationale dupa cum urmeaza: **5** proiecte de cercetare internationale anuale (director de proiect), **5** granturi de cercetare internationale multianuale (membru al echipei de cercetare), **3** granturi de cercetare nationale (director de proiect), **1** grant de cercetare national (responsabil de proiect) si **29** de granturi/proiecte nationale multianuale (membru al echipei de cercetare).

Proiecte Internationale

1. *Navigateurs inertiels à composants liés, à prix bas et hautes performances, basées sur la fusion adaptive dans des dispositions redondantes de nano et micro capteurs inertiels (2011).* (**Director de proiect**)

Lucrari semnificative publicate: 1 ISI Proceedings paper (cod A56 in lista de lucrari); 1 BDI Proceedings paper (cod A146).

Proiectul a fost finanțat de l'Agence Universitaire de la Francophonie in urma unei competitii și realizat în colaborare cu Universite du Quebec, Ecole de Technologie Supérieure, Montreal, Canada care, conform angajamentului din propunerea de proiect, a asigurat accesul directorului de proiect la intrega sa infrastructura de cercetare. Durata proiectului a fost de 1 luna calendaristica, fondurile puse la dispozitie de catre AUF ajungand la aproximativ 2.000 EUR.

2. *La conception, la simulation numérique et l'optimisation d'un accéléromètre MEMS capacitif utilisé en applications aérospatiales (2008-2009).* (**Director de proiect**)

Lucrari semnificative publicate: 2 ISI Proceedings papers (A79, A80), care totalizeaza 18 ISI Journals citations si 11 BDI Journals citations.

Proiectul a fost finanțat de l'Agence Universitaire de la Francophonie in urma unei competitii și realizat în colaborare cu Universite du Quebec, Ecole de Technologie Supérieure, Montreal, Canada care, conform angajamentului din propunerea de proiect, a asigurat accesul directorului de proiect la intrega sa infrastructura de cercetare. Durata proiectului a fost de 10 luni calendaristice, fondurile puse la dispozitie de catre AUF ajungand la aproximativ 14.000 EUR.

3. *La fusion en réseaux redondants des capteurs optoélectroniques miniaturisées des systèmes de navigation par inertie (2008).* (**Director de proiect**)

Lucrari semnificative publicate: 1 ISI Journal paper (A24); 1 ISI Proceedings paper (A81).

Finantarea, avand forma unei burse postdoctorale de cercetare, a fost obtinuta in urma unei competitii de proiecte de cercetare lansata in 2007 in cadrul Merit Scholarship Program for Foreign Students (PBEEE) (*Postdoctoral fellowship scholarships - V2*), organizat de catre Fonds de recherche du Québec - Nature et technologies si Ministère de l'Éducation, du Loisir et du Sport du Canada. In urma evaluarii, propunerea de proiect s-a clasat pe primul loc. Proiectul a fost realizat în colaborare cu Universite du Quebec, Ecole de Technologie Supérieure, Montreal, Canada pe durata unui an calendaristic, institutia Canadiana asigurand, conform angajamentului din propunerea de proiect, accesul directorului de proiect la intrega sa infrastructura de cercetare. Fondurile puse la dispozitie de catre finantator, Ministère de l'Éducation, du Loisir et du Sport du Canada, s-au ridicat la 35.000 CAD.

4. *Étude expérimentale pour l'estimation et la compensation de la dépendance avec la température du biais d'un accéléromètre en utilisant des techniques de la logique neuro-flou (2007).* Proiect finantat de Agence Universitaire de la Francophonie (AUF) si realizat in colaborare cu Universite du Quebec, Montreal, Canada. (**Director de proiect**)

Lucrari semnificative publicate: 1 ISI Journal paper (A29).

Proiectul a fost finanțat de l'Agence Universitaire de la Francophonie in urma unei competitii și realizat în colaborare cu Universite du Quebec, Ecole de Technologie Supérieure, Montreal, Canada, care, conform angajamentului din propunerea de proiect, a asigurat accesul directorului de proiect la intrega sa infrastructura de cercetare. Durata proiectului a fost de 1 luna calendaristica, fondurile puse la dispozitie de catre AUF ajungand la aproximativ 2.000 EUR.

5. *Etude numérique et expérimental d'un algorithme d'attitude pour un système inertiel à composants liés (2005).* (**Director de proiect**)

Lucrari semnificative publicate: 1 ISI Journal paper (A30); 1 ISI Proceedings paper (A87).

Proiectul a fost finanțat de l'Agence Universitaire de la Francophonie in urma unei competitii și realizat în colaborare cu Universite du Quebec, Ecole de Technologie Supérieure, Montreal, Canada, care, conform angajamentului din propunerea de proiect, a asigurat accesul directorului de proiect la intrega sa infrastructura de cercetare. Durata proiectului a fost de 1 luna calendaristica, fondurile puse la dispozitie de catre AUF ajungand la aproximativ 2.000 EUR.

6. *Canada research chair in technologies for aircraft modeling and simulation (2011-2025).* Proiect coordonat de Université du Québec, Ecole de Technologie Supérieure, Montréal, Canada si finantat de Natural Sciences and Engineering Research Council of Canada (NSERC). (**Membru al echipei de cercetare**)

7. *Architectures et technologies déformables pour l'amélioration des performances des ailes (CRIAQ MDO-505; 2012-2015).* Proiect coordonat de Université du Québec, Ecole de Technologie Supérieure, Montréal, Canada în colaborare cu l'École Polytechnique de Montréal, Laboratoire d'aérodynamique du Conseil National de Recherche du Canada – Institut de recherche en aérospatiale (CNRC-IRA), Bombardier Aerospace Inc.,

Thales Aerospace, Université Frederico II de Naples, CIRA si Alenia (**Membru al echipei de cercetare**)

8. *Études d'optimisation des trajectoires pour des avions verts* (2009-2012). Proiectul a fost coordonat de Université du Québec, Montréal, Canada in colaborare cu CMC Electronique – Esterline, parte a *Network of Centers of Excellence* condusa de *Green Aviation Research and Development Network (GARDN)* si finantata de guvernul canadian. (**Membru al echipei de cercetare**)
9. *Amélioration de l'écoulement laminaire sur une voilure aéroélastique* (2006-2009). Proiect coordonat de Université du Québec, Ecole de Technologie Supérieure (ETS), Montréal, Canada in colaborare cu École Polytechnique de Montréal, Laboratoire d'aérodynamique du Conseil National de Recherche du Canada – Institut de recherche en aérospatiale (CNRC-IRA), Bombardier Aerospace Inc., Thales Aerospace si finantat de CRIAQ (Consortium de recherche et d'innovation en aérospatiale au Québec). (**Membru al echipei de cercetare**)
10. *L'étude des interactions adverses des systèmes de commande active sur la structure flexible de l'avion F/A-18*. (2002-2007). Proiect coordonat de Université du Québec, Montréal, Canada in colaborare cu NASA Dryden Flight Research Center, Edwards, California, USA si finantat de CRSNG (Conseil de recherches en sciences naturelles et en génie du Canada) si MRST (Ministère de la Recherche, de la Science et de la Technologie). (**Membru al echipei de cercetare**)

Proiecte Nationale – Director de proiect

1. *Navigatori inertiali strap-down de inalta precizie, bazati pe conectarea si integrarea adaptiva a nano si micro senzorilor inertiali in retele low-cost, cu grad ridicat de redundanta* - (2010-2013). Proiect nr. 1/28.07.2010 (Cod TE_102). Programul PN II – Resurse Umane - Proiecte de cercetare pentru stimularea constituirii de tinere echipe de cercetare independente - tip TE. Autoritatea Contractantă: Unitatea Executivă pentru Finanțarea Învățământului Superior și a Cercetării Științifice Universitare (UEFISCSU). Contractor: Universitatea din Craiova (partener unic). Valoarea contractului: 644.560 lei. Durata contractului: 36 luni.
Lucrari semnificative publicate: 4 ISI Journals papers (A12-A15); 7 ISI Proceedings papers (A57, A60, A62, A64-A67); 5 BDI Journals papers (A92, A93, A103-A105); 14 BDI Proceedings papers (A94, A114, A117-A121, A127, A128, A131-A133, A154, A157).
2. *Micro si nano senzori inteligenti, de precizie ridicata, pentru aplicatii spatiale de navigatie inertiala (SMARTSENSE)* - (2012-2015). Proiect nr. 27/19.11.2012 (cod 168). Programul de Cercetare-Dezvoltare-Inovare pentru Tehnologie Spațială și Cercetare Avansată – STAR al Agentiei Spatiale Romane (ROSA) in colaborare cu Agentia Spatiale Europeana (ESA). Autoritatea Contractantă: Agentia Spatiale Romana (ROSA). Contractor: Universitatea din Craiova (partener unic). Valoarea contractului: 799.989 lei. Durata contractului: 36 luni.
Lucrari semnificative publicate: 11 ISI Proceedings papers (A35, A41, A43, A46, A47, A49, A52-A55, A58); 3 BDI Journals papers (A91, A97, A98); 4 BDI Proceedings papers (A109, A112, A153, A163).
3. *Sisteme integrate de navigatie INS/GPS de inalta precizie si cost redus, bazate pe algoritmi inteligenti de fuziune a datelor* - (2015-2017). Proiect nr. 18/01.10.2015. Programul PN II – Resurse Umane - Proiecte de cercetare pentru stimularea constituirii de tinere echipe de cercetare independente - tip TE. Autoritatea Contractantă: Unitatea Executivă pentru Finanțarea Învățământului Superior, a Cercetării, Dezvoltării și Inovării (UEFISCDI). Contractor: Universitatea din Craiova (partener unic). Valoarea contractului: 550.000 lei. Durata contractului: 24 luni.
Lucrari semnificative publicate: 5 ISI Proceedings papers (A37-A40, A50); 1 BDI Journals paper (A106); 2 BDI Proceedings papers (A161, A162); 3 Other proceedings papers: (A213, A236, A241).

Proiecte Nationale - Responsabil de proiect

1. *Platforma software si hardware bazata pe controlul de tip backstepping si sistem de navigatie inertiala de tip strap-down pentru vehicule spatiale (BACKSPACE)* - (2022-2024). Proiect nr. 665 PED/2022. PN III, Program 2, Subprogram 2.1. Competitivitate prin cercetare, dezvoltare și inovare - Proiect Experimental - Demonstrativ, Domeniul 2 - Tehnologia informației și a comunicațiilor, spațiu și securitate. Autoritatea Contractantă: Unitatea Executivă pentru Finanțarea Învățământului Superior, a Cercetării, Dezvoltării și Inovării (UEFISCDI). Contractor: Universitatea din Craiova. Responsabil din partea Academiei Tehnice Militare „Ferdinand I” (partener unic al contractorului). Valoarea totala a contractului 598.795 lei. Valoarea contractului pentru Academia Tehnica Militara „Ferdinand I”: 200.000 lei. Durata contractului: 24 luni.

Anexa 2. Produse concepute/realizate si valorificate (selectie)

Elaborarea de metodici de proiectare si optimizare diverse, precum si proiecte de executie ale unor produse unicat, unele aflate in prezent in exploatare:

- produs prototip expus la TIB 2006, premiat cu Premiul III pentru Excelenta in Cercetare acordat de ANCS (Autoritatea Nationala a Cercetarii Stiintifice) pentru anul 2006 la sectiunea Proiect cu dezvoltare tehnologica, impreuna cu colectivul de realizare a proiectului 7C23/2004;
- algoritm de determinare a derivatelor de stabilitate ale aeronavelor pe baza de teste de zbor si de suflerie (instrument software - validat pentru F-18) (colaborare cu University of Quebec si NASA Dryden Flight Research Center - USA);
- model fizic pentru o aripa deformabila, echipata cu senzori de presiune optici sau Kulite si controlata in timp real prin tehnici clasice sau bazate pe retele neuro-fuzzy adaptive (colaborare cu University of Quebec, National Research Council of Canada, Ecole Polytechnique de Montreal - beneficiari Thales Canada si Bombardier Aeronautique Canada);
- modele ale smart-material actuators cu neuro-fuzzy, algoritmi de compensare a erorilor de temperatura ale senzorilor de presiune (instrumente software), controllere pentru smart-material actuators intr-o aplicatie de morphing wing (colaborare cu University of Quebec, National Research Council of Canada, Ecole Polytechnique de Montreal - beneficiari Thales Canada si Bombardier Aeronautique Canada);
- model fizic pentru o aripa deformabila, realizat pornind de la o aripa reala de avion, echipata cu senzori de presiune Kulite si motoare electrice miniaturizate, controlata in timp real prin tehnici clasice sau bazate pe fuzzy logic (colaborare cu University of Quebec, National Research Council of Canada, Ecole Polytechnique de Montreal, Université Frederico II de Naples, CIRA - beneficiari Thales Canada, Bombardier Aeronautique Canada, Alenia);
- platformă integrată autocontrolabilă, realizată cu componente de sertar (COTS), pentru monitorizarea în timp real a vehiculelor aeriene cu fuziunea datelor de la sistemul GPS și de la un sistem radio de determinare a direcției de zbor; platforme mobile 3D comandate si controlate computerizat, sistem de monitorizare a punctului de impact al bombelor de aviatie cu senzori acustici, sistem de vizualizare la sol a evolutiei aeronavei in zbor bazat pe comunicatie radio, navigatori inertiali strap-down miniaturizati (colaborari cu Centrul de cercetari si incercari in zbor Craiova);
- algoritmi de estimare si compensare a bias-ului accelerometrelor si girometrelor bazati pe tehnici neuro-fuzzy, algoritmi numerici de determinare a atitudinii de zbor a aeronavelor – instrumente software (colaborari cu University of Quebec);
- testere pentru o gama larga de echipamente si instalatii de bord, aflate in dotarea laboratoarelor Catedrei de Avionica a Universitatii din Craiova;
- instrumente software si platforme experimentale ce deservesc aproximativ 40 de lucrari de laborator aferente disciplinelor Sisteme de navigatie aerospatiale, Echipamente de bord si navigatie aeriana si Sisteme integrate de navigatie aerospatiale, de la ciclurile de licenta si master ale Domeniului Inginerie Aerospatiale, Universitatea din Craiova.

Anexa 3. Lista publicatiilor (selectie - Articole publicate in jurnale indexate ISI)

1. Mustata, M.S., **Grigorie, T.L.**, „A Low-Cost Redundant Attitude System for Small Satellites, Based on Strap-Down Inertial Techniques and Gyro Sensors Linear Clustering”, Published in APPLIED SCIENCES-BASEL (ISI Journal), Volume: 14, Issue: 15, AUG 2024, Article number: 6585,

2. Sterpu, D.A., Mariuta, D., **Grigorie, T.L.** „*A UDF-Based Approach for the Dynamic Stall Evaluation of Airfoils for Micro-Air Vehicles*”, Published in BIOMIMETICS (ISI Journal), Volume: 9, Issue: 6, JUN 2024, Article number: 339, DOI: 10.3390/biomimetics9060339, Document Type: Article, Accession Number: WOS: 001254625400001, eISSN: 2313-7673.
3. Alexa, O., Ciobotaru, T., Vinturis, V.M., Grigore, L.S., Tiganasu, D., **Grigorie, T.L.** „*A theoretical approach for modeling unmanned ground vehicle dynamics*”, Published in INGINERIA AUTOMOBILULUI (ISI Journal), Issue: 70, MAR 2024, Document Type: Article, Accession Number: WOS: 001186398200004, ISSN: 1842-4074.
4. **Grigorie, T.L.**, Botez, R.M. „*A Self-Tuning Intelligent Controller for a Smart Actuation Mechanism of a Morphing Wing Based on Shape Memory Alloys*”, Published in ACTUATORS (ISI Journal), Volume: 12, Issue: 3, SEP 2023, Article number: 350, DOI: 10.3390/act12090350, Document Type: Article, Accession Number: WOS:001071047000001, eISSN: 2076-0825.
5. Alexa, O., Ciobotaru, T., Grigore, L.S., **Grigorie, T.L.**, Stefan, A., Oncioiu, I., Priescu, I., Vladescu, C. „*A Review of Mathematical Models Used to Estimate Wheeled and Tracked Unmanned Ground Vehicle Kinematics and Dynamics*”, Published in MATHEMATICS (ISI Journal), Volume: 11, Issue: 17, SEP 2023, Article number: 3735, DOI: 10.3390/math11173735, Document Type: Review, Accession Number: WOS: 001062835400001, eISSN: 2227-7390.
6. **Grigorie, T.L.**, Khan, S., Botez, R.M., Mamou, M., Mebarki, Y. „Design and experimental testing of a control system for a morphing wing model actuated with miniature BLDC motors”, Published in CHINESE JOURNAL OF AERONAUTICS (ISI Journal), Volume: 33, Issue: 4, APR 2020, Pages: 1272-1287, DOI: 10.1016/j.cja.2019.08.007, Document Type: Article, Accession Number: WOS: 000552306000002, ISSN: 1000-9361, eISSN: 2588-9230.
7. Hashemi, S.M., Botez, R.M., **Grigorie, T.L.** „New Reliability Studies of Data-Driven Aircraft Trajectory Prediction”, Published in AEROSPACE (ISI Journal), Volume: 7, Issue: 10, OCT 2020, Pages: 1-19, DOI: 10.3390/aerospace7100145, Document Type: Article, Accession Number: WOS: 000584220700001, eISSN: 2226-4310.
8. Khan, S., **Grigorie, T.L.**, Botez, R.M., Mamou, M., Mebarki, Y. “Novel morphing wing actuator control-based Particle Swarm Optimisation”. Published in AERONAUTICAL JOURNAL (ISI Journal), Volume: 124, Issue: 1271, JAN 2020, Pages: 55-75, DOI: 10.1017/aer.2019.114, Document Type: Article, Accession Number: WOS: 000504356300004, ISSN: 0001-9240, eISSN: 2059-6464.
9. Khan, S., **Grigorie, T.L.**, Botez, R.M., Mamou, M., Mebarki, Y. “Fuzzy Logic-Based Control for a Morphing Wing Tip Actuation System: Design, Numerical Simulation, and Wind Tunnel Experimental Testing”, Published in BIOMIMETICS (ISI Journal), Volume 4 Issue 4, Article Number 65, November 2019, Pages: 1-21, DOI: 10.3390/biomimetics4040065, Document Type: Article, eISSN: 2313-7673
10. Kammegne, M.J.T., Botez, R.M., **Grigorie, T.L.**, Mamou, M., Mebarki, Y. “A new hybrid control methodology for a morphing aircraft wing-tip actuation mechanism”, Published in AERONAUTICAL JOURNAL (ISI Journal), Volume 123, Issue 1269, November 2019, Pages: 1757-1787, DOI: 10.1017/aer.2019.106, Document Type: Article, ISSN: 0001-9240, eISSN: 2059-6464.
11. Kammegne, M.J.T., Tondji, Y., Botez, R.M., **Grigorie, T.L.**, Mamou, M., Mebarki, Y. „New control methodology for a morphing wing demonstrator”, Published in PROCEEDINGS OF THE INSTITUTION OF MECHANICAL ENGINEERS PART G-JOURNAL OF AEROSPACE ENGINEERING (ISI Journal), Volume: 232, Issue: 8, JUN 2018, Pages: 1479-1494, DOI: 10.1177/0954410017699003, Document Type: Article, Accession Number: WOS:000433436100007, ISSN: 0954-4100, eISSN: 2041-3025.
12. Botez, R.M., Koreanschi, A., Gabor, O.S., Tondji, Y., Guezguez, M., Kammegne, J.T., **Grigorie, T.L.**, Sandu, D., Mebarki, Y., Mamou, M., Amoroso, F., Pecora, R., Lecce, L., Amendola, G., Dimino, I., Concilio, A. „Numerical and experimental transition results evaluation for a morphing wing and aileron system”, Published in AERONAUTICAL JOURNAL (ISI Journal), Volume: 122, Issue: 1251, MAY 2018, Pages: 747-784, DOI: 10.1017/aer.2018.15, Document Type: Article, Accession Number: WOS:000431481600004, ISSN: 0001-9240.
13. Kammegne, M.J.T., Botez, R.M., **Grigorie, T.L.**, Mamou, M., Mebarki, Y. „Proportional fuzzy feed-forward architecture control validation by wind tunnel tests of a morphing wing”, Published in CHINESE JOURNAL OF AERONAUTICS (ISI Journal), Volume: 30, Issue: 2, APR 2017, Pages: 561-576, DOI: 10.1016/j.cja.2017.02.001, Document Type: Article, Accession Number: WOS:000401138900009, ISSN: 1000-9361.
14. Kammegne, M.J.T., **Grigorie, T.L.**, Botez, R.M., Koreanschi, A. “Design and wind tunnel experimental validation of a controlled new rotary actuation system for a morphing wing application”, Published in PROCEEDINGS OF THE INSTITUTION OF MECHANICAL ENGINEERS PART G-JOURNAL OF AEROSPACE ENGINEERING (ISI Journal), Volume: 230, Issue: 1, JAN 2016, Pages: 132-145, DOI: 10.1177/0954410015588573, Document Type: Article, Accession Number: WOS:000367401400010, ISSN: 0954-4100, eISSN: 2041-3025.
15. Kammegne, M.J.T., **Grigorie, T.L.**, Botez, R.M., „Design, numerical simulation and experimental testing of a controlled electrical actuation system in a real aircraft morphing wing model”, Published in AERONAUTICAL JOURNAL (ISI Journal), Volume: 119, Issue: 1219, SEP 2015, Pages: 1047-1072, Document Type: Article, Accession Number: WOS:000361932800001, ISSN: 0001-9240.
16. **Grigorie, T.L.**, Botez, R.M., Popov, A.V., „How the Airfoil Shape of a Morphing Wing is Actuated and Controlled in a Smart Way”, Published in JOURNAL OF AEROSPACE ENGINEERING (ISI Journal), Volume: 28, Issue: 1, JAN 2015, Pages: 04014043-1 to 04014043-13, Article Number: UNSP 04014043, DOI: 10.1061/(ASCE)AS.1943-5525.0000372, Document Type: Article, Accession Number: WOS:000346341000003, ISSN: 0893-1321, eISSN: 1943-5525;
17. Lungu, R., Lungu, M., **Grigorie, T.L.**, „ALSs with Conventional and Fuzzy Controllers Considering Wind Shear and Gyro Errors”, Published in JOURNAL OF AEROSPACE ENGINEERING (ISI Journal), Volume: 26, Issue: 4, OCT 1 2013, Pages: 794-813, DOI: 10.1061/(ASCE)AS.1943-5525.0000207, Document Type: Article, Accession Number: WOS:000324469100015, ISSN: 0893-1321, eISSN: 1943-5525.
18. Lungu, M., Lungu, R., **Grigorie, T.L.** „Automatic Control of Aircraft in Longitudinal Plane During Landing”, Published in IEEE TRANSACTIONS ON AEROSPACE AND ELECTRONIC SYSTEMS (ISI Journal), Volume: 49, Issue: 2, APR 2013, Pages: 1338-1350, Document Type: Article, Accession Number: WOS: 000317667700045, ISSN: 0018-9251, eISSN: 1557-9603.
19. Edu, I.R., **Grigorie, T.L.**, Enache, A.C., Ancuta, F., Cepisca, C. “A redundant aircraft attitude system based on miniaturised gyro clusters data fusion by using Kalman filtering”, Published in UNIVERSITY POLITEHNICA OF BUCHAREST SCIENTIFIC BULLETIN SERIES C-ELECTRICAL ENGINEERING AND COMPUTER SCIENCE (ISI Journal), Volume: 75, Issue: 3, 2013, Pages: 183-198, Document Type: Article, Accession Number: WOS:000421739700016, ISSN 2286-3540
20. **Grigorie, T.L.**, Botez, R. M. „A new method to reduce the noise of the miniaturised inertial sensors disposed in redundant linear configurations”. Published in AERONAUTICAL JOURNAL (ISI Journal), Volume: 117, Issue: 1188, FEB 2013, Pages: 111-132, Document Type: Article, Accession Number: WOS: 000315548900001, ISSN: 0001-9240.
21. **Grigorie, T.L.**, Botez, R.M., Lungu, M., Edu, I.R., Obreja, R., “Micro-electromechanical systems gyro performance improvement through bias correction over temperature using an adaptive neural network-trained fuzzy inference system”, Published in PROCEEDINGS OF THE INSTITUTION OF MECHANICAL ENGINEERS PART G-JOURNAL OF AEROSPACE ENGINEERING (ISI Journal), Volume: 226, Issue: G9, SEP 2012, Pages: 1121-1138, DOI: 10.1177/0954410011417671, Document Type: Article, Accession Number: WOS:000307763200006, ISSN: 0954-4100.
22. **Grigorie, T.L.**, Popov, A.V., Botez, R.M., Mamou, M., Mebarki, Y., „A Hybrid Fuzzy Logic Proportional-Integral-Derivative and Conventional On-Off Controller for Morphing Wing Actuation using Shape Memory Alloy. Part 1: Morphing system mechanisms and controller architecture design”, Published in AERONAUTICAL JOURNAL (ISI Journal), Volume: 116, Issue: 1179, MAY 2012, Pages: 433-449, Document Type: Article, Accession Number: WOS: 000304724300001, ISSN: 0001-9240.
23. **Grigorie, T.L.**, Popov, A.V., Botez, R.M., Mamou, M., Mebarki, Y., „A Hybrid Fuzzy Logic Proportional-Integral-Derivative and Conventional On-Off Controller for Morphing Wing Actuation using Shape Memory Alloy. Part 2: Controller implementation and validation”, Published in

24. **Grigorie, T.L.**, Popov, A.V., Botez, R.M., Mamou, M., Mebarki, Y., „*On-off and proportional-integral controller for a morphing wing. Part 1: Actuation mechanism and control design*”, Published in PROCEEDINGS OF THE INSTITUTION OF MECHANICAL ENGINEERS PART G-JOURNAL OF AEROSPACE ENGINEERING (ISI Journal), Volume: 226, Issue: G2, FEB 2012, Pages: 131-145, DOI: 10.1177/0954410011408226, Document Type: Article, Accession Number: WOS:000299474000002, ISSN: 0954-4100.
25. **Grigorie, T.L.**, Popov, A.V., Botez, R.M., Mamou, M., Mebarki, Y., „*On-off and proportional-integral controller for a morphing wing. Part 2: control validation - numerical simulations and experimental tests*”, Published in PROCEEDINGS OF THE INSTITUTION OF MECHANICAL ENGINEERS PART G-JOURNAL OF AEROSPACE ENGINEERING (ISI Journal), Volume: 226, Issue: G2, FEB 2012, Pages: 146-162, DOI: 10.1177/0954410011408226, Document Type: Article, Accession Number: WOS:000299474000003, ISSN: 0954-4100.
26. Popov, A.-V., **Grigorie, T.L.**, Botez, R.M., Mamou, M., Mebarki, Y., „*Closed-Loop Control Validation of a Morphing Wing Using Wind Tunnel Tests*”, Published in JOURNAL OF AIRCRAFT (ISI Journal), Volume: 47, Issue: 4, JUL-AUG 2010, Pages: 1309-1317, DOI: 10.2514/1.47281, Document Type: Article, Accession Number: WOS:000280869500023, ISSN: 0021-8669.
27. Popov, A.-V., **Grigorie, T.L.**, Botez, R.M., Mamou, M., Mebarki, Y., „*Real Time Morphing Wing Optimization Validation Using Wind-Tunnel Tests*”, Published in JOURNAL OF AIRCRAFT (ISI Journal), Volume: 47, Issue: 4, JUL-AUG 2010, Pages: 1346-1355, DOI: 10.2514/1.47431, Document Type: Article, Accession Number: WOS:000280869500027, ISSN: 0021-8669.
28. Popov, A.V., **Grigorie, T.L.**, Botez, R.M., Mébarki, Y., Mamou, M., „*Modeling and testing of a morphing wing in open-loop architecture*”, Published in JOURNAL OF AIRCRAFT (ISI Journal), Volume: 47, Issue: 3, MAY-JUN 2010, Pages: 917-923, DOI: 10.2514/1.46480, Document Type: Article, Accession Number: WOS:000278831800018, ISSN: 0021-8669.
29. **Grigorie, T.L.**, Botez, R.M. „*New Adaptive Controller Method for SMA Hysteresis Modelling of a Morphing Wing*”, Published in AERONAUTICAL JOURNAL (ISI Journal), Volume: 114, Issue: 1151, JAN 2010, 13 pag., Document Type: Article, Accession Number: WOS:000275300400001, ISSN: 0001-9240.
30. **Grigorie, T.L.**, Botez, R.M. „*Modeling and numerical simulation of an algorithm for the inertial sensors errors reduction and for the increase of the strap-down navigator redundancy degree in a low cost architecture*”, Published in TRANSACTIONS OF THE CANADIAN SOCIETY FOR MECHANICAL ENGINEERING (ISI Journal), Volume: 34, Issue: 1, 2010, 16 pag., Document Type: Article, Accession Number: WOS:000278494700001, ISSN: 0315-8977.
31. **Grigorie, T.L.**, Botez, R.M., Popov, A.V. „*Adaptive Neuro-Fuzzy Controllers for an Open-Loop Morphing Wing System*”, Published in PROCEEDINGS OF THE INSTITUTION OF MECHANICAL ENGINEERS PART G-JOURNAL OF AEROSPACE ENGINEERING (ISI Journal), Volume: 223, Issue: G7, NOV 2009, Pages: 965-975, DOI: 10.1243/09544100JAERO487, Document Type: Article, Accession Number: WOS:000272494600011, ISSN: 0954-4100.
32. **Grigorie, T.L.**, Botez, R.M. „*Adaptive Neuro-Fuzzy Inference System based Controllers for Smart Material Actuator Modelling*”, Published in PROCEEDINGS OF THE INSTITUTION OF MECHANICAL ENGINEERS PART G-JOURNAL OF AEROSPACE ENGINEERING (ISI Journal), Volume: 223, Issue: G6, SEP 2009, Pages: 655-668, DOI: 10.1243/09544100JAERO522, Document Type: Article, Accession Number: WOS:000270763700006, ISSN: 0954-4100.
33. Popov, A.V., Botez, R.M., Mamou, M., **Grigorie, T.L.** „*Variations in Optical Sensor Pressure Measurements due to Temperature in Wind Tunnel Testing*”, Published in JOURNAL OF AIRCRAFT (ISI Journal), Volume: 46, Issue: 4, JUL-AUG 2009, Pages: 1314-1318, DOI: 10.2514/1.40715, Document Type: Article, Accession Number: WOS:000268906100023, ISSN: 0021-8669.
34. Botez, R.M., **Grigorie, T.L.**, Hiliuta, A., Ciocan, L. „*Rigid and Control Modes Aerodynamic Unsteady Forces Aeroservoelastic Modeling*”, Published in JOURNAL OF GUIDANCE CONTROL AND DYNAMICS (ISI Journal), Volume: 31, Issue: 5, SEP-OCT 2008, Pages: 1372-1385, DOI: 10.2514/1.32817, Document Type: Article, Accession Number: WOS: 000259265600019, ISSN: 0731-5090.
35. **Grigorie, T.L.**, Botez, R.M. „*The bias temperature dependence estimation and compensation for an accelerometer by use of the neuro-fuzzy techniques*”, Published in TRANSACTIONS OF THE CANADIAN SOCIETY FOR MECHANICAL ENGINEERING (ISI Journal), Volume: 32, Issue: 3-4, 2008, Pages: 383-400, Document Type: Article, Accession Number: WOS:000266691500005, ISSN: 0315-8977.
36. **Grigorie, T.L.**, Hiliuta, A., Botez, R.M., Aron, I. „*Numerical and experimental study of an algorithm of attitude for a strap-down inertial system*”, Published in TRANSACTIONS OF THE CANADIAN SOCIETY FOR MECHANICAL ENGINEERING (ISI Journal), Volume: 30, Issue: 3, 2006, Pages: 429-442, Document Type: Article, Accession Number: WOS: 000243098200009, ISSN: 0315-8977.

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06.10.2025

LISTA

lucrărilor științifice în domeniul disciplinelor din postul didactic

Lista a 10 lucrări reprezentative

1. **Grigorie, T.L.,** Botez, R.M. “*Adaptive Neuro-Fuzzy Inference System based Controllers for Smart Material Actuator Modelling*”, Published in PROCEEDINGS OF THE INSTITUTION OF MECHANICAL ENGINEERS PART G-JOURNAL OF AEROSPACE ENGINEERING (ISI Journal), Volume: 223, Issue: G6, SEP 2009, Pages: 655-668, DOI: 10.1243/09544100JAERO522, Document Type: Article, Accession Number: WOS:000270763700006, ISSN: 0954-4100. Publisher: PROFESSIONAL ENGINEERING PUBLISHING LTD, 1 BIRDCAGE WALK, WESTMINSTER SW1H 9JJ, ENGLAND. Impact factor 2009: 0.773
2. **Grigorie, T. L.,** Botez, R.M., Popov, A.V., „*How the Airfoil Shape of a Morphing Wing is Actuated and Controlled in a Smart Way*”, Published in JOURNAL OF AEROSPACE ENGINEERING (ISI Journal), Volume: 28, Issue: 1, JAN 2015, Pages: 04014043-1 to 04014043-13, Article Number: UNSP 04014043, DOI: 10.1061/(ASCE)AS.1943-5525.0000372, Document Type: Article, Accession Number: WOS:000346341000003, ISSN: 0893-1321, eISSN: 1943-5525, Publisher: ASCE-AMER SOC CIVIL ENGINEERS, 1801 ALEXANDER BELL DR, RESTON, VA 20191-4400 USA. Impact factor 2013: 0.926
3. Popov, A.-V., **Grigorie, T.L.,** Botez, R.M., Mamou, M., Mebarki, Y., „*Real Time Morphing Wing Optimization Validation Using Wind-Tunnel Tests*”, Published in JOURNAL OF AIRCRAFT (ISI Journal), Volume: 47, Issue: 4, JUL-AUG 2010, Pages: 1346-1355, DOI: 10.2514/1.47431, Document Type: Article, Accession Number: WOS:000280869500027, ISSN: 0021-8669, Publisher: AMER INST AERONAUT ASTRONAUT, 1801 ALEXANDER BELL DRIVE, STE 500, RESTON, VA 22091-4344 USA. Impact factor 2010: 0.552
4. **Grigorie, T.L.,** Popov, A.V., Botez, R.M., Mamou, M., Mebarki, Y., „*A Hybrid Fuzzy Logic Proportional-Integral-Derivative and Conventional On-Off Controller for Morphing Wing Actuation using Shape Memory Alloy. Part 1: Morphing system mechanisms and controller architecture design*”, Published in AERONAUTICAL JOURNAL (ISI Journal), Volume: 116, Issue: 1179, MAY 2012, Pages: 433-449, Document Type: Article, Accession Number: WOS: 000304724300001, ISSN: 0001-9240, Publisher: ROYAL AERONAUTICAL SOC, 4 HAMILTON PL, LONDON W1J 7BQ, ENGLAND. Impact factor 2012: 0.311
5. **Grigorie, T.L.,** Popov, A.V., Botez, R.M., Mamou, M., Mebarki, Y., „*A Hybrid Fuzzy Logic Proportional-Integral-Derivative and Conventional On-Off Controller for Morphing Wing Actuation using Shape Memory Alloy. Part 2: Controller implementation and validation*”, Published in AERONAUTICAL JOURNAL (ISI Journal), Volume: 116, Issue: 1179, MAY 2012, Pages: 451-465, Document Type: Article, Accession Number: WOS: 000304724300002, ISSN: 0001-9240, Publisher: ROYAL AERONAUTICAL SOC, 4 HAMILTON PL, LONDON W1J 7BQ, ENGLAND. Impact factor 2012: 0.311
6. **Grigorie, T.L.,** Botez, R.M., Popov, A.V. “*Adaptive Neuro-Fuzzy Controllers for an Open-Loop Morphing Wing System*”, Published in PROCEEDINGS OF THE INSTITUTION OF MECHANICAL ENGINEERS PART G-JOURNAL OF AEROSPACE ENGINEERING (ISI Journal), Volume: 223, Issue: G7, NOV 2009, Pages: 965-975, DOI: 10.1243/09544100JAERO487, Document Type: Article, Accession Number: WOS:000272494600011, ISSN: 0954-4100. Publisher: PROFESSIONAL ENGINEERING PUBLISHING LTD, 1 BIRDCAGE WALK, WESTMINSTER SW1H 9JJ, ENGLAND. Impact factor 2009: 0.773
7. **Grigorie, T.L.,** Botez, R. M. „*A new method to reduce the noise of the miniaturised inertial sensors disposed in redundant linear configurations*”. Published in AERONAUTICAL JOURNAL (ISI Journal), Volume: 117, Issue: 1188, FEB 2013, Pages: 111-132, Document Type: Article, Accession Number: WOS: 000315548900001, ISSN: 0001-9240. Publisher: ROYAL AERONAUTICAL SOC, 4 HAMILTON PL, LONDON W1J 7BQ, ENGLAND. Impact factor 2013: 0.336
8. **Grigorie, T.L.,** Botez, R.M., Lungu, M., Edu, I.R., Obreja, R., “*Micro-electromechanical systems gyro performance improvement through bias correction over temperature using an adaptive neural network-trained fuzzy inference system*”, Published in PROCEEDINGS OF THE INSTITUTION OF MECHANICAL ENGINEERS PART G-JOURNAL OF AEROSPACE ENGINEERING (ISI Journal), Volume: 226, Issue: G9, SEP 2012, Pages: 1121-1138, DOI: 10.1177/0954410011417671, Document Type: Article, Accession Number: WOS:000307763200006, ISSN: 0954-4100. Publisher: SAGE PUBLICATIONS LTD, 1 OLIVERS YARD, 55 CITY ROAD, LONDON EC1Y 1SP, ENGLAND. Impact factor 2012: 0.400
9. Botez, R.M., **Grigorie, T.L.,** Hiliuta, A., Ciocan, L. “*Rigid and Control Modes Aerodynamic Unsteady Forces Aeroservoelastic Modeling*”, Published in JOURNAL OF GUIDANCE CONTROL AND DYNAMICS (ISI Journal), Volume: 31, Issue: 5, SEP-OCT 2008, Pages: 1372-1385, DOI: 10.2514/1.32817, Document Type: Article, Accession Number: WOS: 000259265600019, ISSN: 0731-5090. Publisher: AMER INST AERONAUT ASTRONAUT, 1801 ALEXANDER BELL DRIVE, STE 500, RESTON, VA 22091-4344 USA. Impact factor 2009: 1.031
10. **Grigorie, T.L.,** Khan, S., Botez, R.M., Mamou, M., Mebarki, Y. „*Design and experimental testing of a control system for a morphing wing model actuated with miniature BLDC motors*”, Published in CHINESE JOURNAL OF AERONAUTICS (ISI Journal), Volume: 33, Issue: 4, APR 2020, Pages: 1272-1287, DOI: 10.1016/j.cja.2019.08.007,

Teza de doctorat

Titlul Tezei: „Sisteme de navigație inerțială strap-down cu senzori opto-electronici”,

Anul susținerii: 2006. Instituția gazdă: Universitatea Politehnica București, Facultatea de Inginerie Aerospațială;
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Teza de abilitare

Titlul Tezei: „Sensing, actuation and control in the next generation of aerospace systems”;

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Domeniul fundamental: Științe ingineresti, Domeniul de studii universitare de doctorat: Inginerie Aerospațială;

Conducător de doctorat afiliat la Școala Doctorală a Facultății de Inginerie Aerospațială, Universitatea Politehnica București.

Cărți

- C1. Negrea, P., **Grigorie, T.L.** “Tehnici de detecție și procesare a semnalelor în navigatorii MEMS-INS”. SITECH, Craiova, Romania, 2020, pp. 1-272, ISBN: 978-606-11-7338-9.
- C2. **Grigorie, T.L.**, Sandu, D.G. “Arhitecturi sinergice de sisteme de navigație cu componente inerțiale strap-down”. SITECH, Craiova, Romania, 2013, pp. 1-314, ISBN: 978-606-11-3770-1.
- C3. **Grigorie, T.L.**, Edu, I.R. “Aplicații de navigație inerțială cu senzori miniaturizați”. SITECH, Craiova, Romania, 2013, pp. 1-306, ISBN: 978-606-11-3084-9.
- C4. **Grigorie, T.L.** “Sisteme de navigatie inertiala strap-down. Studii de optimizare”. SITECH, Craiova, Romania, 2007, pp. 1-328, ISBN: 978-973-746-723-2.
- C5. Lungu, R., **Grigorie, T.L.** “Traductoare Accelerometrice si Girometrice”. SITECH, Craiova, Romania, 2005, pp. 1-206, ISBN: 973-657-777-5.

Capitole de cărți

- CC1. **Grigorie, T.L.**, Botez, R.M., Chapter 14 „New Applications of Fuzzy Logic Methodologies in Aerospace Field” in the book “Fuzzy Controllers, Theory and Applications”, edited by Teodor Lucian Grigorie, ISBN 978-953-307-543-3, Published by InTech, DOI: 10.5772/14540, pages 44 (253-296), February 28, Rijeka, Croatia, 2011
- CC2. **Grigorie, T.L.**, Popov, A.V., Botez, R.M., Mamou, M., Mébarki, Y., Chapter 4 „Design and Experimental Validation of a Combined PI and Bi-Positional Laws Controller for Delaying the Transition from Laminar Flow to Turbulent Flow Over a Morphing Wing” in the book “Informatics in Control, Automation and Robotics” from “Lecture Notes in Electrical Engineering” (LNEE) book series, edited by Juan Andrade Cetto, Jean-Louis Ferrier, and Joaquim Filipe, ISBN 978-3-642-19538-9, Volume 89, Part 2, DOI: 10.1007/978-3-642-19539-6_4, pages 26 (51-76), Published by Springer-Verlag, Berlin Heidelberg, 2011
- CC3. **Grigorie, T.L.**, Botez, R.M., Popov, A.V., Chapter 1 „Fuzzy logic control of a smart actuation system in a morphing wing” in the book “Fuzzy Controllers - Recent Advances in Theory and Applications”, edited by Sohail Iqbal, Nora Boumella and Juan Carlos Figueroa Garcia, ISBN 978-953-51-0759-0, published by InTech, DOI: 10.5772/48778, pages 22 (1-22), September 27, Rijeka, Croatia, 2012.
- CC4. **Grigorie, T.L.**, Botez, R.M., Chapter 11 “Modelling and simulation based Matlab/Simulink of a strap-down inertial navigation system’ errors due to the inertial sensors”, in the book “Matlab applications for the practical engineer”, edited by Kelly Bennett, ISBN 978-953-51-1719-3, Published by InTech, DOI: 10.5772/57583, pages 34 (305-338), 8 September, Rijeka, Croatia, 2014
- CC5. **Grigorie, T.L.**, Botez, R.M., Chapter 13 “Precision Improvement in Inertial Miniaturized Navigators Based on Fuzzy Logic Denoising of Sensors Signals” in the book „Modern Fuzzy Control Systems and Its Applications”, edited by S. Ramakrishnan, ISBN 978-953-51-3390-2, Print ISBN 978-953-51-3389-6, Published by: InTech,, DOI: 10.5772/67966, pages 22 (257-278), August 30, Rijeka, Croatia, 2017
- CC6. **Grigorie, T.L.**, Botez, R.M., Chapter 12 “Control Techniques for a Smart Actuated Morphing Wing Model: Design, Numerical Simulation and Experimental Validation”, in the book “Morphing Wing Technologies - Large Commercial Aircraft and Civil Helicopters”, edited by Antonio Concilio, Ignazio Dimino, Leonardo Lecce, and Rosario Pecora, ISBN: 978-0-08-100964-2, Published by: Elsevier Ltd., pages 47 (351-397), Oxford, UK, 2018
- CC7. Antofie, B.G., Larco, M.C., **Grigorie, T.L.** “Improvement of the Global Positioning Accuracy with Miniaturized Strap-Down INS Systems through Wavelet Filtering of Data from MEMS Inertial Sensors”, in the book “Wavelet Theory and Modern Applications”, edited by S. Ramakrishnan, ISBN: 978-0-85466-235-7, Print ISBN 978-0-85466-236-4, Published by: InTech, DOI: 10.5772/intechopen. 1003199, pages 20, November 21, Rijeka, Croatia, 2023

Cărți editate

- CE1. “Fuzzy Controllers, Theory and Applications”, Edited by **Teodor Lucian Grigorie**, ISBN 978-953-307-543-3, 382 pages, Publisher: InTech, Chapters published February 28, 2011 under CC BY-NC-SA 3.0 license, DOI: 10.5772/572.

Îndrumare de laborator

11. **Grigorie, T.L.** “Echipamente de bord și navigație aeriană. Îndrumar de laborator - partea a II-a”. SITECH, Craiova, Romania, 2013, pp. 1-180, ISBN: 978-606-11-3860-9.
12. **Grigorie, T.L.** “Sisteme de navigație aerospațială. Îndrumar de laborator”. SITECH, Craiova, Romania, 2008, pp. 1-146, ISBN: 978-973-746-786-7.

I. Articole publicate în reviste indexate ISI Web

11. Dinca, L.; Corcau, J.I.; **Grigorie, T.L.**; Cucu, A.A.; Vasilescu, B., „Studies on the Thermal Behavior of an Electro-Hydrostatic Servo Actuator”, Published in ACTUATORS (ISI Journal), Volume: 14, Issue: 2, FEB 2025, Article number: 48, Document Type: Article, Accession Number: WOS: 001429868900001, eISSN: 2076-0825. Publisher: MDPI MDPI AG, Grosspeteranlage 5, CH-4052 BASEL, SWITZERLAND. Impact factor 2024: 2.3
12. Feraru, M.D.; Mariuta, D.; Stoia-Djeska, M.; **Grigorie, T.L.**, „Numerical Investigation of an NACA 13112 Morphing Airfoil”, Published in BIOMIMETICS (ISI Journal), Volume: 9, Issue: 10, OCT 2024, Article number: 635, DOI: 10.3390/biomimetics9100635, Document Type: Article, Accession Number: WOS: 001341838200001, eISSN: 2313-7673. Publisher: MDPI MDPI AG, Grosspeteranlage 5, CH-4052 BASEL, SWITZERLAND. Impact factor 2024: 3.9
13. Mustata, M.S., **Grigorie, T.L.**, „A Low-Cost Redundant Attitude System for Small Satellites, Based on Strap-Down Inertial Techniques and Gyro Sensors Linear Clustering”, Published in APPLIED SCIENCES-BASEL (ISI Journal), Volume: 14, Issue: 15, AUG 2024, Article number: 6585, DOI: 10.3390/app14156585, Document Type: Article, Accession Number: WOS: 001286905600001, eISSN: 2076-3417. Publisher: MDPI MDPI AG, Grosspeteranlage 5, CH-4052 BASEL, SWITZERLAND. Impact factor 2023: 2.5
14. Sterpu, D.A., Mariuta, D., **Grigorie, T.L.**, „A UDF-Based Approach for the Dynamic Stall Evaluation of Airfoils for Micro-Air Vehicles”, Published in BIOMIMETICS (ISI Journal), Volume: 9, Issue: 6, JUN 2024, Article number: 339, DOI: 10.3390/biomimetics9060339, Document Type: Article, Accession Number: WOS: 001254625400001, eISSN: 2313-7673. Publisher: MDPI MDPI AG, Grosspeteranlage 5, CH-4052 BASEL, SWITZERLAND. Impact factor 2023: 3.4
15. Alexa, O., Ciobotaru, T., Vinturis, V.M., Grigore, L.S., Tiganasu, D., **Grigorie, T.L.**, „A theoretical approach for modeling unmanned ground vehicle dynamics”, Published in INGINERIA AUTOMOBILULUI (ISI Journal), Issue: 70, MAR 2024, Document Type: Article, Accession Number: WOS: 001186398200004, ISSN: 1842-4074. Publisher: SOC AUTOMOTIVE ENGINEERS ROMANIA SOC AUTOMOTIVE ENGINEERS ROMANIA, BUCURESTI 00000, ROMANIA. Impact factor 2023: 0.1
16. **Grigorie, T.L.**, Botez, R.M., „A Self-Tuning Intelligent Controller for a Smart Actuation Mechanism of a Morphing Wing Based on Shape Memory Alloys”, Published in ACTUATORS (ISI Journal), Volume: 12, Issue: 3, SEP 2023, Article number: 350, DOI: 10.3390/act12090350, Document Type: Article, Accession Number: WOS: 001071047000001, eISSN: 2076-0825. Publisher: MDPI MDPI AG, Grosspeteranlage 5, CH-4052 BASEL, SWITZERLAND. Impact factor 2023: 2.2
17. Alexa, O., Ciobotaru, T., Grigore, L.S., **Grigorie, T.L.**, Stefan, A., Oncioiu, I., Priescu, I., Vladescu, C., „A Review of Mathematical Models Used to Estimate Wheeled and Tracked Unmanned Ground Vehicle Kinematics and Dynamics”, Published in MATHEMATICS (ISI Journal), Volume: 11, Issue: 17, SEP 2023, Article number: 3735, DOI: 10.3390/math11173735, Document Type: Review, Accession Number: WOS: 001062835400001, eISSN: 2227-7390. Publisher: MDPI MDPI AG, Grosspeteranlage 5, CH-4052 BASEL, SWITZERLAND. Impact factor 2023: 2.3
18. **Grigorie, T.L.**, Khan, S., Botez, R.M., Mamou, M., Mebarki, Y., „Design and experimental testing of a control system for a morphing wing model actuated with miniature BLDC motors”, Published in CHINESE JOURNAL OF AERONAUTICS (ISI Journal), Volume: 33, Issue: 4, APR 2020, Pages: 1272-1287, DOI: 10.1016/j.cja.2019.08.007, Document Type: Article, Accession Number: WOS: 000552306000002, ISSN: 1000-9361, eISSN: 2588-9230, Publisher: ELSEVIER SCIENCE INC, STE 800, 230 PARK AVE, NEW YORK, NY 10169 USA. Impact factor 2019: 2.215
19. Hashemi, S.M., Botez, R.M., **Grigorie, T.L.**, „New Reliability Studies of Data-Driven Aircraft Trajectory Prediction”, Published in AEROSPACE (ISI Journal), Volume: 7, Issue: 10, OCT 2020, Pages: 1-19, DOI: 10.3390/aerospace7100145, Document Type: Article, Accession Number: WOS: 000584220700001, eISSN: 2226-4310, Publisher: MDPI, ST ALBAN-ANLAGE 66, CH-4052 BASEL, SWITZERLAND. Impact factor: 0
20. Khan, S., **Grigorie, T.L.**, Botez, R.M., Mamou, M., Mebarki, Y., „Novel morphing wing actuator control-based Particle Swarm Optimisation”. Published in AERONAUTICAL JOURNAL (ISI Journal), Volume: 124, Issue: 1271, JAN 2020, Pages: 55-75, DOI: 10.1017/aer.2019.114, Document Type: Article, Accession Number: WOS: 000504356300004, ISSN: 0001-9240, eISSN: 2059-6464, Publisher: CAMBRIDGE UNIV PRESS, EDINBURGH

21. Khan, S., **Grigorie, T.L.**, Botez, R.M., Mamou, M., Mebarki, Y. “*Fuzzy Logic-Based Control for a Morphing Wing Tip Actuation System: Design, Numerical Simulation, and Wind Tunnel Experimental Testing*“. Published in BIOMIMETICS (ISI Journal), Volume: 4, Issue: 4, DEC 2019, Article Number: 65, Pages: 1-22, DOI: 10.3390/biomimetics4040065, Document Type: Article, Accession Number: WOS: 000505524300006, eISSN: 2313-7673, Publisher: MDPI, ST ALBAN-ANLAGE 66, CH-4052 BASEL, SWITZERLAND. Impact factor: 0
22. Kammegne, M.J.T., Botez, R.M., **Grigorie, T.L.**, Mamou, M., Mebarki, Y. “*A new hybrid control methodology for a morphing aircraft wing-tip actuation mechanism*“. Published in AERONAUTICAL JOURNAL (ISI Journal), Volume: 123, Issue: 1269, NOV 2019, Pages: 1757-1787, DOI: 10.1017/aer.2019.106, Document Type: Article, Accession Number: WOS: 000511378600001, ISSN: 0001-9240, eISSN: 2059-6464, Publisher: CAMBRIDGE UNIV PRESS, EDINBURGH BLDG, SHAFTESBURY RD, CB2 8RU CAMBRIDGE, ENGLAND. Impact factor 2018: 0.976
23. Kammegne, M.J.T., Tondji, Y., Botez, R.M., **Grigorie, T.L.**, Mamou, M., Mebarki, Y. „*New control methodology for a morphing wing demonstrator*“, Published in PROCEEDINGS OF THE INSTITUTION OF MECHANICAL ENGINEERS PART G-JOURNAL OF AEROSPACE ENGINEERING (ISI Journal), Volume: 232, Issue: 8, JUN 2018, Pages: 1479-1494, DOI: 10.1177/0954410017699003, Document Type: Article, Accession Number: WOS:000433436100007, ISSN: 0954-4100, eISSN: 2041-3025, Publisher: SAGE PUBLICATIONS LTD, 1 OLIVERS YARD, 55 CITY ROAD, LONDON EC1Y 1SP, ENGLAND. Impact factor 2017: 1.038
24. Botez, R.M., Koreanschi, A., Gabor, O.S., Tondji, Y., Guezguez, M., Kammegne, J.T., **Grigorie, L.T.**, Sandu, D., Mebarki, Y., Mamou, M., Amoroso, F., Pecora, R., Lecce, L., Amendola, G., Dimino, I., Concilio, A. „*Numerical and experimental transition results evaluation for a morphing wing and aileron system*“, Published in AERONAUTICAL JOURNAL (ISI Journal), Volume: 122, Issue: 1251, MAY 2018, Pages: 747-784, DOI: 10.1017/aer.2018.15, Document Type: Article, Accession Number: WOS:000431481600004, ISSN: 0001-9240, eISSN: 2059-6464, Publisher: CAMBRIDGE UNIV PRESS, EDINBURGH BLDG, SHAFTESBURY RD, CB2 8RU CAMBRIDGE, ENGLAND. Impact factor 2017: 0.696
25. Kammegne, M.J.T., Botez, R.M., **Grigorie, T.L.**, Mamou, M., Mebarki, Y. „*Proportional fuzzy feed-forward architecture control validation by wind tunnel tests of a morphing wing*“, Published in CHINESE JOURNAL OF AERONAUTICS (ISI Journal), Volume: 30, Issue: 2, APR 2017, Pages: 561-576, DOI: 10.1016/j.cja.2017.02.001, Document Type: Article, Accession Number: WOS:000401138900009, ISSN: 1000-9361, Publisher: ELSEVIER SCIENCE INC, 360 PARK AVE SOUTH, NEW YORK, NY 10010-1710 USA. Impact factor 2017: 1.614 (Premiul UEFISCDI/PN III, Subprogramul 1.1/2017)
26. Kammegne, M.J.T., **Grigorie, T.L.**, Botez, R.M., Koreanschi, A. “*Design and wind tunnel experimental validation of a controlled new rotary actuation system for a morphing wing application*“, Published in PROCEEDINGS OF THE INSTITUTION OF MECHANICAL ENGINEERS PART G-JOURNAL OF AEROSPACE ENGINEERING (ISI Journal), Volume: 230, Issue: 1, JAN 2016, Pages: 132-145, DOI: 10.1177/0954410015588573, Document Type: Article, Accession Number: WOS:000367401400010, ISSN: 0954-4100, eISSN: 2041-3025. Publisher: SAGE PUBLICATIONS LTD, 1 OLIVERS YARD, 55 CITY ROAD, LONDON EC1Y 1SP, ENGLAND. Impact factor 2016: 0.809
27. Kammegne, M.J.T., **Grigorie, T.L.**, Botez, R.M., „*Design, numerical simulation and experimental testing of a controlled electrical actuation system in a real aircraft morphing wing model*“, Published in AERONAUTICAL JOURNAL (ISI Journal), Volume: 119, Issue: 1219, SEP 2015, Pages: 1047-1072, Document Type: Article, Accession Number: WOS:000361932800001, ISSN: 0001-9240, Publisher: ROYAL AERONAUTICAL SOC, 4 HAMILTON PL, LONDON W1J 7BQ, ENGLAND. Impact factor 2015: 0.537
28. **Grigorie, T. L.**, Botez, R.M., Popov, A.V., „*How the Airfoil Shape of a Morphing Wing is Actuated and Controlled in a Smart Way*“, Published in JOURNAL OF AEROSPACE ENGINEERING (ISI Journal), Volume: 28, Issue: 1, JAN 2015, Pages: 04014043-1 to 04014043-13, Article Number: UNSP 04014043, DOI: 10.1061/(ASCE)AS.1943-5525.0000372, Document Type: Article, Accession Number: WOS:000346341000003, ISSN: 0893-1321, eISSN: 1943-5525, Publisher: ASCE-AMER SOC CIVIL ENGINEERS, 1801 ALEXANDER BELL DR, RESTON, VA 20191-4400 USA. Impact factor 2015: 0.815
29. Lungu, R., Lungu, M., **Grigorie, T.L.**, „*ALs with Conventional and Fuzzy Controllers Considering Wind Shear and Gyro Errors*“, Published in JOURNAL OF AEROSPACE ENGINEERING (ISI Journal), Volume: 26, Issue: 4, OCT 1 2013, Pages: 794-813, DOI: 10.1061/(ASCE)AS.1943-5525.0000207, Document Type: Article, Accession Number: WOS:000324469100015, ISSN: 0893-1321, eISSN: 1943-5525, Publisher: ASCE-AMER SOC CIVIL ENGINEERS, 1801 ALEXANDER BELL DR, RESTON, VA 20191-4400 USA. Impact factor 2013: 0.926 (Premiul UEFISCDI/PN II - Competiția “Premierea rezultatelor cercetării”, 2013)
30. Lungu, M., Lungu, R., **Grigorie, T.L.** „*Automatic Control of Aircraft in Longitudinal Plane During Landing*“, Published in IEEE TRANSACTIONS ON AEROSPACE AND ELECTRONIC SYSTEMS (ISI Journal), Volume: 49, Issue: 2, APR 2013, Pages: 1338-1350, Document Type: Article, Accession Number: WOS: 000317667700045, ISSN: 0018-9251, eISSN: 1557-9603. Publisher: IEEE-INST ELECTRICAL ELECTRONICS ENGINEERS INC, 445 HOES LANE, PISCATAWAY, NJ 08855-4141 USA. Impact factor 2013: 1.394 (Premiul UEFISCDI/PN II - Competiția “Premierea rezultatelor cercetării”, 2013)
31. Edu, I.R., **Grigorie, T.L.**, Enache, A.C., Ancuta, F., Cepisca, C. “*A redundant aircraft attitude system based on miniaturised gyro clusters data fusion by using Kalman filtering*“, Published in UNIVERSITY POLITEHNICA OF BUCHAREST SCIENTIFIC BULLETIN SERIES C-ELECTRICAL ENGINEERING AND COMPUTER

- SCIENCE (ISI Journal), Volume: 75, Issue: 3, 2013, Pages: 183-198, Document Type: Article, Accession Number: WOS:000421739700016, ISSN 2286-3540. Publisher: POLYTECHNIC UNIV BUCHARESTSPLAIUL INDEPENDENTEI 313, SECTOR 6, BUCH 060042, ROMANIA. Impact factor 2023: 0.2
32. **Grigorie, T.L.**, Botez, R. M. „*A new method to reduce the noise of the miniaturised inertial sensors disposed in redundant linear configurations*”. Published in AERONAUTICAL JOURNAL (ISI Journal), Volume: 117, Issue: 1188, FEB 2013, Pages: 111-132, Document Type: Article, Accession Number: WOS: 000315548900001, ISSN: 0001-9240. Publisher: ROYAL AERONAUTICAL SOC, 4 HAMILTON PL, LONDON W1J 7BQ, ENGLAND. Impact factor 2013: 0.336
33. **Grigorie, T.L.**, Botez, R.M., Lungu, M., Edu, I.R., Obreja, R., “*Micro-electromechanical systems gyro performance improvement through bias correction over temperature using an adaptive neural network-trained fuzzy inference system*”, Published in PROCEEDINGS OF THE INSTITUTION OF MECHANICAL ENGINEERS PART G-JOURNAL OF AEROSPACE ENGINEERING (ISI Journal), Volume: 226, Issue: G9, SEP 2012, Pages: 1121-1138, DOI: 10.1177/0954410011417671, Document Type: Article, Accession Number: WOS:000307763200006, ISSN: 0954-4100. Publisher: SAGE PUBLICATIONS LTD, 1 OLIVERS YARD, 55 CITY ROAD, LONDON EC1Y 1SP, ENGLAND. Impact factor 2012: 0.400
34. **Grigorie, T.L.**, Popov, A.V., Botez, R.M., Mamou, M., Mebarki, Y., „*A Hybrid Fuzzy Logic Proportional-Integral-Derivative and Conventional On-Off Controller for Morphing Wing Actuation using Shape Memory Alloy. Part 1: Morphing system mechanisms and controller architecture design*”, Published in AERONAUTICAL JOURNAL (ISI Journal), Volume: 116, Issue: 1179, MAY 2012, Pages: 433-449, Document Type: Article, Accession Number: WOS: 000304724300001, ISSN: 0001-9240, Publisher: ROYAL AERONAUTICAL SOC, 4 HAMILTON PL, LONDON W1J 7BQ, ENGLAND. Impact factor 2012: 0.311
35. **Grigorie, T.L.**, Popov, A.V., Botez, R.M., Mamou, M., Mebarki, Y., „*A Hybrid Fuzzy Logic Proportional-Integral-Derivative and Conventional On-Off Controller for Morphing Wing Actuation using Shape Memory Alloy. Part 2: Controller implementation and validation*”, Published in AERONAUTICAL JOURNAL (ISI Journal), Volume: 116, Issue: 1179, MAY 2012, Pages: 451-465, Document Type: Article, Accession Number: WOS: 000304724300002, ISSN: 0001-9240, Publisher: ROYAL AERONAUTICAL SOC, 4 HAMILTON PL, LONDON W1J 7BQ, ENGLAND. Impact factor 2012: 0.311
36. **Grigorie, T.L.**, Popov, A.V., Botez, R.M., Mamou, M., Mebarki, Y., „*On-off and proportional-integral controller for a morphing wing. Part 1: Actuation mechanism and control design*”, Published in PROCEEDINGS OF THE INSTITUTION OF MECHANICAL ENGINEERS PART G-JOURNAL OF AEROSPACE ENGINEERING (ISI Journal), Volume: 226, Issue: G2, FEB 2012, Pages: 131-145, DOI: 10.1177/0954410011408226, Document Type: Article, Accession Number: WOS:000299474000002, ISSN: 0954-4100. Publisher: SAGE PUBLICATIONS LTD, 1 OLIVERS YARD, 55 CITY ROAD, LONDON EC1Y 1SP, ENGLAND. Impact factor 2012: 0.400
37. **Grigorie, T.L.**, Popov, A.V., Botez, R.M., Mamou, M., Mebarki, Y., “*On-off and proportional-integral controller for a morphing wing. Part 2: control validation - numerical simulations and experimental tests*”, Published in PROCEEDINGS OF THE INSTITUTION OF MECHANICAL ENGINEERS PART G-JOURNAL OF AEROSPACE ENGINEERING (ISI Journal), Volume: 226, Issue: G2, FEB 2012, Pages: 146-162, DOI: 10.1177/0954410011408226, Document Type: Article, Accession Number: WOS:000299474000003, ISSN: 0954-4100. Publisher: SAGE PUBLICATIONS LTD, 1 OLIVERS YARD, 55 CITY ROAD, LONDON EC1Y 1SP, ENGLAND. Impact factor 2012: 0.400
38. Popov, A.-V., **Grigorie, T.L.**, Botez, R.M., Mamou, M., Mebarki, Y., „*Closed-Loop Control Validation of a Morphing Wing Using Wind Tunnel Tests*”, Published in JOURNAL OF AIRCRAFT (ISI Journal), Volume: 47, Issue: 4, JUL-AUG 2010, Pages: 1309-1317, DOI: 10.2514/1.47281, Document Type: Article, Accession Number: WOS:000280869500023, ISSN: 0021-8669. Publisher: AMER INST AERONAUT ASTRONAUT, 1801 ALEXANDER BELL DRIVE, STE 500, RESTON, VA 22091-4344 USA. Impact factor 2010: 0.552
39. Popov, A.-V., **Grigorie, T.L.**, Botez, R.M., Mamou, M., Mebarki, Y., „*Real Time Morphing Wing Optimization Validation Using Wind-Tunnel Tests*”, Published in JOURNAL OF AIRCRAFT (ISI Journal), Volume: 47, Issue: 4, JUL-AUG 2010, Pages: 1346-1355, DOI: 10.2514/1.47431, Document Type: Article, Accession Number: WOS:000280869500027, ISSN: 0021-8669, Publisher: AMER INST AERONAUT ASTRONAUT, 1801 ALEXANDER BELL DRIVE, STE 500, RESTON, VA 22091-4344 USA. Impact factor 2010: 0.552
40. Popov, A.V., **Grigorie, T.L.**, Botez, R.M., Mébarki, Y., Mamou, M. „*Modeling and testing of a morphing wing in open-loop architecture*”, Published in JOURNAL OF AIRCRAFT (ISI Journal), Volume: 47, Issue: 3, MAY-JUN 2010, Pages: 917-923, DOI: 10.2514/1.46480, Document Type: Article, Accession Number: WOS:000278831800018, ISSN: 0021-8669, Publisher: AMER INST AERONAUT ASTRONAUT, 1801 ALEXANDER BELL DRIVE, STE 500, RESTON, VA 22091-4344 USA. Impact factor 2010: 0.552
41. **Grigorie, T.L.**, Botez, R.M. “*New Adaptive Controller Method for SMA Hysteresis Modelling of a Morphing Wing*”, Published in AERONAUTICAL JOURNAL (ISI Journal), Volume: 114, Issue: 1151, JAN 2010, 13 pag., Document Type: Article, Accession Number: WOS:000275300400001, ISSN: 0001-9240. Publisher: ROYAL AERONAUTICAL SOC, 4 HAMILTON PL, LONDON W1J 7BQ, ENGLAND. Impact factor 2010: 0.496
42. **Grigorie, T.L.**, Botez, R.M. “*Modeling and numerical simulation of an algorithm for the inertial sensors errors reduction and for the increase of the strap-down navigator redundancy degree in a low cost architecture*”, Published in TRANSACTIONS OF THE CANADIAN SOCIETY FOR MECHANICAL ENGINEERING (ISI Journal), Volume: 34, Issue: 1, 2010, 16 pag., Document Type: Article, Accession Number: WOS:000278494700001, ISSN: 0315-8977. Publisher: CSME TRANS., C/O P J ZSOMBOR-MURRAY, MC

43. **Grigorie, T.L.**, Botez, R.M., Popov, A.V. “*Adaptive Neuro-Fuzzy Controllers for an Open-Loop Morphing Wing System*”, Published in PROCEEDINGS OF THE INSTITUTION OF MECHANICAL ENGINEERS PART G-JOURNAL OF AEROSPACE ENGINEERING (ISI Journal), Volume: 223, Issue: G7, NOV 2009, Pages: 965-975, DOI: 10.1243/09544100JAERO487, Document Type: Article, Accession Number: WOS:000272494600011, ISSN: 0954-4100. Publisher: PROFESSIONAL ENGINEERING PUBLISHING LTD, 1 BIRDCAGE WALK, WESTMINISTER SW1H 9JJ, ENGLAND. Impact factor 2009: 0.773
44. **Grigorie, T.L.**, Botez, R.M. “*Adaptive Neuro-Fuzzy Inference System based Controllers for Smart Material Actuator Modelling*”, Published in PROCEEDINGS OF THE INSTITUTION OF MECHANICAL ENGINEERS PART G-JOURNAL OF AEROSPACE ENGINEERING (ISI Journal), Volume: 223, Issue: G6, SEP 2009, Pages: 655-668, DOI: 10.1243/09544100JAERO522, Document Type: Article, Accession Number: WOS:000270763700006, ISSN: 0954-4100. Publisher: PROFESSIONAL ENGINEERING PUBLISHING LTD, 1 BIRDCAGE WALK, WESTMINISTER SW1H 9JJ, ENGLAND. Impact factor 2009: 0.773
45. Popov, A.V., Botez, R.M., Mamou, M., **Grigorie, T.L.** “*Variations in Optical Sensor Pressure Measurements due to Temperature in Wind Tunnel Testing*”, Published in JOURNAL OF AIRCRAFT (ISI Journal), Volume: 46, Issue: 4, JUL-AUG 2009, Pages: 1314-1318, DOI: 10.2514/1.40715, Document Type: Article, Accession Number: WOS:000268906100023, ISSN: 0021-8669. Publisher: AMER INST AERONAUT ASTRONAUT, 1801 ALEXANDER BELL DRIVE, STE 500, RESTON, VA 22091-4344 USA. Impact factor 2009: 0.591
46. Botez, R.M., **Grigorie, T.L.**, Hiliuta, A., Ciocan, L. “*Rigid and Control Modes Aerodynamic Unsteady Forces Aeroservoelastic Modeling*”, Published in JOURNAL OF GUIDANCE CONTROL AND DYNAMICS (ISI Journal), Volume: 31, Issue: 5, SEP-OCT 2008, Pages: 1372-1385, DOI: 10.2514/1.32817, Document Type: Article, Accession Number: WOS: 000259265600019, ISSN: 0731-5090. Publisher: AMER INST AERONAUT ASTRONAUT, 1801 ALEXANDER BELL DRIVE, STE 500, RESTON, VA 22091-4344 USA. Impact factor 2009: 1.031
47. **Grigorie, T.L.**, Botez, R.M. “*The bias temperature dependence estimation and compensation for an accelerometer by use of the neuro-fuzzy techniques*”, Published in TRANSACTIONS OF THE CANADIAN SOCIETY FOR MECHANICAL ENGINEERING (ISI Journal), Volume: 32, Issue: 3-4, 2008, Pages: 383-400, Document Type: Article, Accession Number: WOS:000266691500005, ISSN: 0315-8977. Publisher: CSME TRANS., C/O P J ZSOMBOR-MURRAY, MC GILL UNIV, RM 454 THOMAS WORKMAN ENG BLDG 817 SHERBROOKE ST W, MONTREAL, PQ H3A 2K6, CANADA. Impact factor 2009: 0.195
48. **Grigorie, T.L.**, Hiliuta, A., Botez, R.M., Aron, I. “*Numerical and experimental study of an algorithm of attitude for a strap-down inertial system*”. Published in TRANSACTIONS OF THE CANADIAN SOCIETY FOR MECHANICAL ENGINEERING (ISI Journal), Volume: 30, Issue: 3, 2006, Pages: 429-442, Document Type: Article, Accession Number: WOS: 000243098200009, ISSN: 0315-8977, Publisher: CSME TRANS., C/O P J ZSOMBOR-MURRAY, MC GILL UNIV, RM 454 THOMAS WORKMAN ENG BLDG 817 SHERBROOKE ST W, MONTREAL, PQ H3A 2K6, CANADA. Impact factor 2009: 0.195

II. Articol publicat în proceedings indexate ISI Web

49. Brinza, I.O., **Grigorie, T.L.** “*Hybrid Laminar Flow Control Wing Demonstrator*”, AIAA SciTech Forum and Exposition, Orlando, Florida, USA, 8-12 January 2024. Published in AIAA SciTech Forum and Exposition, 2024, ISBN: 978-162410711-5, DOI: 10.2514/6.2024-2351, Document type: Conference Paper. Accession Number: WOS:001375987906036, ISBN: 978-1-62410-711-5. Publisher: AMER INST AERONAUTICS & ASTRONAUTICS1801 ALEXANDER BELL DR, STE 500, RESTON, VA 20191-4344 USA
50. Botez, R.M., **Grigorie, T.L.**, Khan, S., Mamou, M., Mebarki, Y. “*A smart controlled morphing wing experimental model with the structure based on a full-scaled portion of a real wing*”, AIAA Science and Technology Forum and Exposition, AIAA SciTech Forum 2021, Virtual, Online, 11-15 & 19-21 January, 2021. Published in AIAA Scitech 2021 Forum, (AIAA 2021-1836), 11 pag., doi: 10.2514/6.2021-1836. Accession Number: WOS:001409507005014, ISBN: 978-1-62410-609-5. Publisher: AMER INST AERONAUTICS & ASTRONAUTICS1801 ALEXANDER BELL DR, STE 500, RESTON, VA 20191-4344 USA
51. Ivan, A.N., Pandele, C.A., Ionescu, B., **Grigorie, T.L.** “*Analysis of the impact of GNSS disruptions on aircraft operations at Romanian airports*”. 12TH EASN INTERNATIONAL CONFERENCE ON "INNOVATION IN AVIATION & SPACE FOR OPENING NEW HORIZONS", Barcelona, SPAIN, OCT 18-21, 2022, Published in Journal of Physics Conference Series, Volume: 2526, 2023, DOI: 10.1088/1742-6596/2526/1/012096; Document Type: Proceedings Paper; Article Number: 012096, Accession Number: WOS:001052253100096, ISSN: 1742-6588; Publisher: IOP PUBLISHING LTDDRAC HOUSE, TEMPLE BACK, BRISTOL BS1 6BE, ENGLAND.
52. Hashemi, S.M., Botez, R.M., **Grigorie, T.L.**, „*Adaptive fuzzy control of chaotic flapping relied upon lyapunov-based tuning laws*”. AIAA AVIATION 2020 FORUM, Virtual, Online; 15 June 2020 through 19 June 2020; Code 241349, Volume 1 PartF, 2020, Pages 1-9. DOI: 10.2514/6.2020-3193. ISBN: 978-162410598-2, Document Type: Conference Paper. Accession Number: WOS:001396964405007. ISBN: 978-1-62410-598-2. Publisher: AMER INST AERONAUTICS & ASTRONAUTICS1801 ALEXANDER BELL DR, STE 500, RESTON, VA 20191-4344 USA

53. **Grigorie, T.L.**, Jula, N., Corcău, C.L., Adochiei, I.R., Larco, C., Mustață, S.M. “*A positioning mechanism based on MEMS-INS/GPS and ANFIS data fusion for urban life mobility improvement*”, 4th International Conference on Nanotechnologies and Biomedical Engineering (ICNBME 2019), Chisinau, Moldova, 18-21 September, 2019, Published in IFMBE Proceedings, Volume 77, 2020, Pages 767-773, DOI: 10.1007/978-3-030-31866-6_136; Document Type: Proceedings Paper; Accession Number: WOS: 000552314200136, ISBN: 978-3-030-31866-6; 978-3-030-31865-9, ISSN: 1680-0737; Publisher: SPRINGER, 233 SPRING STREET, NEW YORK, NY 10013, UNITED STATES.
54. Ciucu, R., Adochiei, F., Adochiei, I., Argatu, F., Larco, C.M., **Grigorie, T.L.** “*A Real-Time WebGL rendering pipeline for MRI using raycasting transfer functions*”, 4th International Conference on Nanotechnologies and Biomedical Engineering (ICNBME 2019), Chisinau, Moldova, 18-21 September, 2019, Published in IFMBE Proceedings, Volume 77, 2020, Pages 529-534, DOI: 10.1007/978-3-030-31866-6_95; Document Type: Proceedings Paper; Accession Number: WOS: 000552314200095, ISBN: 978-3-030-31866-6; 978-3-030-31865-9, ISSN: 1680-0737; Publisher: SPRINGER, 233 SPRING STREET, NEW YORK, NY 10013, UNITED STATES.
55. Corcau, J.I., Dinca, L., Adochiei, I.R., **Grigorie, T.L.** “*Modeling and simulation of an aerodrome electrical power source based on fuel cells*”, 7th E-Health and Bioengineering Conference (EHB 2019), Iasi, Romania, 21-23 November, 2019, Article number 8969870, Published in 2019 E-Health and Bioengineering Conference (EHB), Volume 77, 2020, Pages 529-534, DOI: 10.1109/EHB47216.2019.8969870; Document Type: Proceedings Paper; Accession Number: WOS: 000558648300002, ISBN: 978-1-7281-2603-6, ISSN: 2575-5137, eISSN: 2575-5145, Publisher: IEEE, 345 E 47TH ST, NEW YORK, NY 10017 USA.
56. Corcau, J.I., Dinca, L., **Grigorie, T.L.**, Tudosie, A.N. “*Fuzzy Energy Management for Hybrid Fuel Cell/Battery Systems for More Electric Aircraft*”, 1st International Conference on Applied Mathematics and Computer Science (ICAMCS), Rome, Italy, 27-29 January, 2017, Published in APPLIED MATHEMATICS AND COMPUTER SCIENCE, Book Series: AIP Conference Proceedings, Volume: 1836, Article Number: UNSP 020056-1, Pages: 020056-1-020056-8, DOI: 10.1063/1.4981996, Document Type: Proceedings Paper, Accession Number: WOS: 000409539000056, ISBN: 978-0-7354-1506-5, ISSN: 0094-243X. Publisher: AMER INST PHYSICS, 2 HUNTINGTON QUADRANGLE, STE 1N01, MELVILLE, NY 11747-4501 USA.
57. **Grigorie, T.L.**, Corcau, J.I., Tudosie, A.N. “*Identification and Compensation of the Temperature Influences in a Miniature Three-Axial Accelerometer Based on the Least Squares Method*”, 1st International Conference on Applied Mathematics and Computer Science (ICAMCS), Rome, Italy, 27-29 January, 2017, Published in APPLIED MATHEMATICS AND COMPUTER SCIENCE, Book Series: AIP Conference Proceedings, Volume: 1836, Article Number: UNSP 020057-1, Pages: 020057-1-020057-8, DOI: 10.1063/1.4981997, Document Type: Proceedings Paper, Accession Number: WOS:000409539000057, ISBN: 978-0-7354-1506-5, ISSN: 0094-243X. Publisher: AMER INST PHYSICS, 2 HUNTINGTON QUADRANGLE, STE 1N01, MELVILLE, NY 11747-4501 USA.
58. Gresita, C.I., Nica, D.C., **Grigorie, T.L.**, Maican, I. “*Analysis deformations of vertical and horizontal displacement vector to “valea de pesti” dam*”. 16th International Multidisciplinary Scientific GeoConference SGEM 2016, Albena, Bulgaria, 28 June - 7 July 2016. Published in INFORMATICS, GEOINFORMATICS AND REMOTE SENSING CONFERENCE PROCEEDINGS, SGEM 2016, VOL II, Book Series: International Multidisciplinary Scientific GeoConference-SGEM, 2016, Pages: 83-90, Document Type: Proceedings Paper, Accession Number: WOS:000395499500012, ISBN: 978-619-7105-59-9, ISSN: 1314-2704, Publisher: STEF92 TECHNOLOGY LTD, 1 ANDREY LYAPCHEV BLVD, SOFIA, 1797, BULGARIA.
59. **Grigorie, T.L.**, Corcau, C.L., Negrea, P., Sandu, D.G. “*Evaluation of an INS error model for miniaturized inertial sensors*”. 16th International Multidisciplinary Scientific GeoConference SGEM 2016, Albena, Bulgaria, 28 June - 7 July 2016. Published in INFORMATICS, GEOINFORMATICS AND REMOTE SENSING CONFERENCE PROCEEDINGS, SGEM 2016, VOL II, Book Series: International Multidisciplinary Scientific GeoConference-SGEM, 2016, Pages: 271-278, Document Type: Proceedings Paper, Accession Number: WOS:000395499500035, ISBN: 978-619-7105-59-9, ISSN: 1314-2704, Publisher: STEF92 TECHNOLOGY LTD, 1 ANDREY LYAPCHEV BLVD, SOFIA, 1797, BULGARIA.
60. **Grigorie, T.L.**, Corcau, C.L., Negrea, P., Sandu, D.G. “*GPS/INS integration - some current issues and development perspectives*”. 16th International Multidisciplinary Scientific GeoConference SGEM 2016, Albena, Bulgaria, 28 June - 7 July 2016. Published in INFORMATICS, GEOINFORMATICS AND REMOTE SENSING CONFERENCE PROCEEDINGS, SGEM 2016, VOL II, Book Series: International Multidisciplinary Scientific GeoConference-SGEM, 2016, Pages: 353-360, Document Type: Proceedings Paper, Accession Number: WOS:000395499500045, ISBN: 978-619-7105-59-9, ISSN: 1314-2704, Publisher: STEF92 TECHNOLOGY LTD, 1 ANDREY LYAPCHEV BLVD, SOFIA, 1797, BULGARIA.
61. **Grigorie, T.L.**, Sandu, D.G., Corcau, C.L. “*Numerical study of an error model for a strap-down INS*”, 8th Conference Application of Mathematics in Technical and Natural Sciences (AMiTaNS'16), Albena, Bulgaria, 22-27, June, 2016, Published in APPLICATION OF MATHEMATICS IN TECHNICAL AND NATURAL SCIENCES (AMITANS'16), Book Series: AIP Conference Proceedings, Volume: 1773, Article Number: 110005, 9 pag., DOI: 10.1063/1.4965009, 2016; Document Type: Proceedings Paper; Accession Number: WOS:000392692400055, ISBN: 978-0-7354-1431-0, ISSN: 0094-243X; Publisher: AMER INST PHYSICS, 2 HUNTINGTON QUADRANGLE, STE 1N01, MELVILLE, NY 11747-4501 USA.
62. **Grigorie, T.L.**, Sandu, D.G., “*MEMS INS/GPS integrated structure evaluation with experimental data*”, 7th International Conference on Information, Intelligence, Systems and Applications (IISA 2016), Chalkidiki, Greece,

- July 13-15, 2016, Published in 2016 7TH INTERNATIONAL CONFERENCE ON INFORMATION, INTELLIGENCE, SYSTEMS & APPLICATIONS (IISA), Book Series: International Conference Information Intelligence Systems and Applications, 2016, Pages: 101-109, DOI: 10.1109/IISA.2016.7785405, Document Type: Proceedings Paper, Accession Number: WOS:000392155300073, ISBN:978-1-5090-3429-1, ISSN: 2379-3732, Publisher: IEEE, 345 E 47TH ST, NEW YORK, NY 10017 USA.
63. **Grigorie, T.L.**, Gresita, C.I., Corcau, J.I., Dinca, L., Stancu, C.N. “*Temperature effects estimation and compensation in a miniature three-axial accelerometer by using fuzzy logic techniques*”. 16th International Multidisciplinary Scientific GeoConference SGEM 2016, Albena, Bulgaria, 28 June - 7 July 2016, Published in NANO, BIO AND GREEN - TECHNOLOGIES FOR A SUSTAINABLE FUTURE CONFERENCE PROCEEDINGS, SGEM 2016, VOL I, Book Series: International Multidisciplinary Scientific GeoConference-SGEM, 2016, Pages: 337-344, Document Type: Proceedings Paper, Accession Number: WOS:000391648800044, ISBN:978-619-7105-68-1, ISSN: 1314-2704, Publisher: STEF92 TECHNOLOGY LTD, 1 ANDREY LYAPCHEV BLVD, SOFIA, 1797, BULGARIA.
 64. Lungu, M., Lungu, R., **Grigorie, T.L.**, Preotu, O. “*The Influence of Atmospheric Turbulences on Aircraft Landing Process*”. International Conference on Applied and Theoretical Electricity - ICATE 2016, 6-8 Oct. 2016, Craiova, Romania, Published in 2016 INTERNATIONAL CONFERENCE ON APPLIED AND THEORETICAL ELECTRICITY (ICATE), Book Series: International Conference on Applied and Theoretical Electricity, 2016, 6 pag. Document Type: Proceedings Paper, Accession Number: WOS: 000390767500082, ISBN: 978-1-4673-8562-6, ISSN: 2376-4163. Publisher: IEEE, 345 E 47TH ST, NEW YORK, NY 10017 USA.
 65. Edu, I.R., Adochiei, F.C., **Grigorie, T.L.**, Pasarica, A., Jula, N., “*An Automated Inertial Indoor Positioning and Fall Detection System for Elder*”, 3rd International Conference on Nanotechnologies and Biomedical Engineering (ICNBME-2015), September 23-26, 2015, Chisinau, Republic of Moldova, Published in 3RD INTERNATIONAL CONFERENCE ON NANOTECHNOLOGIES AND BIOMEDICAL ENGINEERING, Book Series: IFMBE Proceedings, Volume: 55, 2016, Pages: 424-427, DOI: 10.1007/978-981-287-736-9_100, Document Type: Proceedings Paper, Accession Number: WOS:000367995500098, ISBN:978-981-287-736-9; 978-981-287-735-2, ISSN: 1680-0737, Publisher: SPRINGER, 233 SPRING STREET, NEW YORK, NY 10013, UNITED STATES.
 66. Corcau, J.I., Dinca, L., **Grigorie, T.L.**, Ureche, E., “*Multisim implementation and analysis of a DC to DC boost converter with two parallel stages*”, 2015 International Conference on Electrical Drives and Power Electronics (EDPE), Tatranská Lomnica, The High Tatras, Slovakia, 21-23 Sept. 2015, Published in 2015 INTERNATIONAL CONFERENCE ON ELECTRICAL DRIVES AND POWER ELECTRONICS (EDPE), 2015, Pages: 88-93, Document Type: Proceedings Paper, Accession Number: WOS:000380458300016, ISBN:978-1-4673-7376-0. Publisher: IEEE, 345 E 47TH ST, NEW YORK, NY 10017 USA.
 67. Dinca, L., Corcau, J.I., **Grigorie, T.L.**, Ureche, E., “*Improved DC to DC boost converter behavior by using a two stage voltage conversion*”, 2015 International Conference on Electrical Drives and Power Electronics (EDPE), Tatranská Lomnica, Slovakia, 21-23 Sept. 2015. Published in 2015 INTERNATIONAL CONFERENCE ON ELECTRICAL DRIVES AND POWER ELECTRONICS (EDPE), 2015, Pages: 470-475, Document Type: Proceedings Paper, Accession Number: WOS: 000380458300081, ISBN: 978-1-4673-7376-0, Publisher: IEEE, 345 E 47TH ST, NEW YORK, NY 10017 USA.
 68. **Grigorie, T.L.**, Edu, I.R., Adochiei, F.C. “*Inertial Positioning Precision Improvement through Sensors Denoising by Using Wavelet Functions Tuned with DTF Method*”, 6th International Conference on Information, Intelligence, Systems and Applications (IISA 2015), Corfu, Greece, July 6-8, 2015, Published in 2015 6TH INTERNATIONAL CONFERENCE ON INFORMATION, INTELLIGENCE, SYSTEMS AND APPLICATIONS (IISA), 2015, 6 pag., DOI: 10.1109/IISA.2015. 7388108, Document Type: Proceedings Paper, Accession Number: WOS: 000381572400155, Publisher: IEEE, 345 E 47TH ST, NEW YORK, NY 10017 USA.
 69. **Grigorie, T.L.**, Negrea, P., Cirstea, F. “*Modelling and Simulation of a Miniaturized Gyrometer*”. 2nd International Symposium on Physics and Technology of Sensors (ISPTS-2), 7-10 March 2015, Pune, India, Published in 2015 2nd International Symposium on Physics and Technology of Sensors, 2015, Pages: 162-168, DOI: 10.1109/ISPTS.2015.7220104, Document Type: Proceedings Paper, Accession Number: WOS: 000380572200036, ISBN:978-1-4673-8018-8. Publisher: IEEE, 345 E 47TH ST, NEW YORK, NY 10017 USA.
 70. Andruseac, G., **Grigorie, T.L.**, Adochiei, F.C., Rotaru, C., Pasarica, A., Hariton, C., Adochiei, I.R., “*A remote-controlled mobile platform for identifying indoor human in risk situations*”, International IEEE Conference on e-Health and Bioengineering (EHB 2015), 19-21 November, Iasi, Romania. Published in 2015 E-HEALTH AND BIOENGINEERING CONFERENCE (EHB), 2015, 4 pag., Document Type: Proceedings Paper, Accession Number: WOS:000380397900199, ISBN: 978-1-4673-7545-0. Publisher: IEEE, 345 E 47TH ST, NEW YORK, NY 10017 USA.
 71. Adochiei, I.R., **Grigorie, T.L.**, Negrea, P., Vidan, C., Jula, N., Adochiei, F.C., “*Assistive Inertial 3D Positioning MEMS System*”, International IEEE Conference on e-Health and Bioengineering (EHB 2015), 19-21 November, Iasi, Romania. Published in 2015 E-HEALTH AND BIOENGINEERING CONFERENCE (EHB), 2015, 4 pag., Document Type: Proceedings Paper, Accession Number: WOS:000380397900189, ISBN:978-1-4673-7545-0. Publisher: IEEE, 345 E 47TH ST, NEW YORK, NY 10017 USA.
 72. **Grigorie, T.L.**, Sandu, D.G., Negrea, P., Adochiei, I.R., Adochiei, F.C., “*Experimental Validation of a Low-Cost Integrated INS/GPS Navigator for Assistive Positioning*”, International IEEE Conference on e-Health and Bioengineering (EHB 2015), 19-21 November, Iasi, Romania. Published in 2015 E-HEALTH AND BIOENGINEERING CONFERENCE (EHB), 2015, 4 pag., Document Type: Proceedings Paper, Accession

73. Gresita, C.I., **Grigorie, T.L.**, „*A new approach related to the big structures real time monitoring*”, 15th International Multidisciplinary Scientific GeoConference & EXPO - SGEM 2015, Albena, Bulgaria, June 16-25, 2015. Published in INFORMATICS, GEOINFORMATICS AND REMOTE SENSING, VOL II (SGEM 2015), Book Series: International Multidisciplinary Scientific GeoConference-SGEM, 2015, Pages: 11-19, Document Type: Proceedings Paper, Accession Number: WOS: 000371600100002, ISBN: 978-619-7105-35-3, ISSN: 1314-2704. Publisher: STEF92 TECHNOLOGY LTD, 1 ANDREY LYAPCHEV BLVD, SOFIA, 1797, BULGARIA.
74. **Grigorie, T.L.**, Gresita, C.I., Grigorie, O. „*Inertial positioning improvement of a vehicle based inertial sensors denoising by using fuzzy logic data fusion*”, 15th International Multidisciplinary Scientific GeoConference & EXPO - SGEM 2015, Albena, Bulgaria, June 16-25, 2015. Published in NANO, BIO AND GREEN - TECHNOLOGIES FOR A SUSTAINABLE FUTURE, VOL I (SGEM 2015), Book Series: International Multidisciplinary Scientific GeoConference-SGEM, 2015, Pages: 91-98, Document Type: Proceedings Paper, Accession Number: WOS: 000371601900013, ISBN: 978-619-7105-42-1, ISSN: 1314-2704. Publisher: STEF92 TECHNOLOGY LTD, 1 ANDREY LYAPCHEV BLVD, SOFIA, 1797, BULGARIA.
75. Edu, I.R., **Grigorie, T.L.**, Adochiei, F.C., Rotaru, C., Jula, N. „*Inertial Sensor Signals Denoising with Directed Transfer Function*”, The 9th International Symposium on Advanced Topics in Electrical Engineering (ATEE 2015), May 7-9, 2015, Bucharest, Romania. Published in 2015 9TH INTERNATIONAL SYMPOSIUM ON ADVANCED TOPICS IN ELECTRICAL ENGINEERING (ATEE), 2015, Pages: 945-948, Document Type: Proceedings Paper, Accession Number: WOS: 000368159800175, ISBN: 978-1-4799-7514-3. Publisher: IEEE, 345 E 47TH ST, NEW YORK, NY 10017 USA.
76. **Grigorie, T.L.**, Negrea, P., Edu, I.R., Adochiei, F.C., „*Assistive Positioning System Based Inertial Techniques and Wavelet Denoising*”, 8TH ACM INTERNATIONAL CONFERENCE ON PERVASIVE TECHNOLOGIES RELATED TO ASSISTIVE ENVIRONMENTS (PETRA 2015), Corfu, Greece, July 1-3, 2015. Published in 8th ACM International Conference on Pervasive Technologies Related to Assistive Environments, PETRA 2015 Proceedings, art. no. a21, 4 pag., Document Type: Proceedings Paper, DOI: 10.1145/2769493.2769504, ISBN: 9781450334525, Accession Number: WOS:000619985600021, Publisher: ASSOC COMPUTING MACHINERY1515 BROADWAY, NEW YORK, NY 10036-9998 USA
77. **Grigorie, T.L.**, Sandu, D.G., Firanescu, M., Trusca, E., Grigorie, O. „*Control tuning in a closed loop capacitive MEMS accelerometer*”, 14th International Multidisciplinary Scientific GeoConference SGEM 2014, Albena, Bulgaria, 17-26 June, 2014, Published in GEOCONFERENCE ON NANO, BIO AND GREEN - TECHNOLOGIES FOR A SUSTAINABLE FUTURE, VOL I (SGEM 2014), Book Series: International Multidisciplinary Scientific GeoConference-SGEM, 2014, Pages: 45-52, Document Type: Proceedings Paper, Accession Number: WOS: 000366136600007, ISBN: 978-619-7105-20-9, ISSN: 1314-2704, Publisher: STEF92 TECHNOLOGY LTD, 1 ANDREY LYAPCHEV BLVD, SOFIA, 1797, BULGARIA.
78. **Grigorie, T.L.**, Edu, I.R., Adochiei, F.C., „*Trends in the development of miniature optical accelerometers*”, 14th International Multidisciplinary Scientific GeoConference SGEM 2014, Albena, Bulgaria, 17-26 June, 2014. Published in GEOCONFERENCE ON NANO, BIO AND GREEN - TECHNOLOGIES FOR A SUSTAINABLE FUTURE, VOL I (SGEM 2014), Book Series: International Multidisciplinary Scientific GeoConference-SGEM, 2014, Pages: 197-204, Document Type: Proceedings Paper, Accession Number: WOS: 000366136600028, ISBN: 978-619-7105-20-9, ISSN: 1314-2704, Publisher: STEF92 TECHNOLOGY LTD, 1 ANDREY LYAPCHEV BLVD, SOFIA, 1797, BULGARIA.
79. **Grigorie, T.L.**, Botez, R.M., „*Precision improvement of aircrafts attitude estimation through gyro sensors data fusion in a redundant inertial measurement unit*”, ACM/IEEE International Conference on Information Processing in Sensor Networks – IPSN 2014, Berlin, Germany, April 15-17, 2014, Published in PROCEEDINGS OF THE 13TH INTERNATIONAL SYMPOSIUM ON INFORMATION PROCESSING IN SENSOR NETWORKS (IPSN' 14), 2014, Pages: 301-302, Document Type: Proceedings Paper, Accession Number: WOS:000343592200038, ISBN:978-1-4799-3146-0, Publisher: IEEE, 345 E 47TH ST, NEW YORK, NY 10017 USA.
80. **Grigorie, T.L.**, Botez, R.M., „*A Redundant Aircraft Attitude System Based on Miniaturized Gyro Clusters Data Fusion*”. International conference on computer as a tool - EUROCON 2013, Zagreb, Croatia, July 1-4, 2013. Published in 2013 IEEE EUROCON, 2013, Pages: 1992-1999, Document Type: Proceedings Paper, Accession Number: WOS: 000343135600296, ISBN: 978-1-4673-2232-4; 978-1-4673-2230-0. Publisher: IEEE, 345 E 47TH ST, NEW YORK, NY 10017 USA.
81. **Grigorie, T.L.**, Negrea, P., Corcau, J., Dinca, L., Grigorie, O. „*A fuzzy logic control structure of a MEMS accelerometer*”, 13th International Multidisciplinary Scientific GeoConference SGEM 2013, Albena, Bulgaria, 16-22 June, 2013. Published in GEOCONFERENCE ON NANO, BIO AND GREEN - TECHNOLOGIES FOR A SUSTAINABLE FUTURE, Book Series: International Multidisciplinary Scientific GeoConference-SGEM, 2013, Pages: 3-10, Document Type: Proceedings Paper, Accession Number: WOS: 000365991700001, ISBN: 978-619-7105-06-3, ISSN: 1314-2704. Publisher: STEF92 TECHNOLOGY LTD, 1 ANDREY LYAPCHEV BLVD, SOFIA, 1797, BULGARIA.
82. Corcau, J.I., Dinca, L., **Grigorie, T.L.**, „*Automatic control of a boost dc-dc converter*”, 13th International Multidisciplinary Scientific GeoConference (SGEM 2013), Albena, Bulgaria, 16-22 June, 2013. Published in GEOCONFERENCE ON NANO, BIO AND GREEN - TECHNOLOGIES FOR A SUSTAINABLE FUTURE, Book Series: International Multidisciplinary Scientific GeoConference-SGEM, 2013, Pages: 585-592, Document

83. **Grigorie, T.L.**, Obreja, R., Corcau, J., Dinca, L., “*Matlab/Simulink software implementation and interfacing of a strap-down inertial attitude method*”, 38th Annual Conference of the IEEE Industrial Electronics Society - IECON 2012, Montreal, Quebec, Canada, 25-28 October, 2012. Published in 38TH ANNUAL CONFERENCE ON IEEE INDUSTRIAL ELECTRONICS SOCIETY (IECON 2012), Book Series: IEEE Industrial Electronics Society, 2012, Pages: 5457-5462, Document Type: Proceedings Paper, Accession Number: WOS: 000316962905061, ISBN: 978-1-4673-2421-2, ISSN: 1553-572X, Publisher: IEEE, 345 E 47TH ST, NEW YORK, NY 10017 USA.
84. Corcau, J., **Grigorie, T.L.**, Dinca, L., “*Simulation and analysis of a fuel cell/battery hybrid power supply for More-Electric Aircraft*”, 38th Annual Conference of the IEEE Industrial Electronics Society - IECON 2012, Montreal, Quebec, Canada, 25-28 October, 2012. Published in 38TH ANNUAL CONFERENCE ON IEEE INDUSTRIAL ELECTRONICS SOCIETY (IECON 2012), Book Series: IEEE Industrial Electronics Society, 2012, Pages: 5477-5481, Document Type: Proceedings Paper, Accession Number: WOS: 000316962905064, ISBN: 978-1-4673-2421-2, ISSN: 1553-572X, Publisher: IEEE, 345 E 47TH ST, NEW YORK, NY 10017 USA.
85. **Grigorie, T.L.**, Obreja, R., Sandu, D.G., Corcau, J.I., “*Allan Variance Analysis of the Miniaturized Sensors In A Strap-Down Inertial Measurement Unit*”, 12th International Multidisciplinary Scientific GeoConference - SGEM2012, June 17-23, 2012. Published in 12TH INTERNATIONAL MULTIDISCIPLINARY SCIENTIFIC GEOCONFERENCE, SGEM 2012, VOL. III, Book Series: International Multidisciplinary Scientific GeoConference-SGEM, 2012, Pages: 443-450, Document Type: Proceedings Paper, Accession Number: WOS: 000348533800059, ISSN: 1314-2704. Publisher: STEF92 TECHNOLOGY LTD, 1 ANDREY LYAPCHEV BLVD, SOFIA, 1797, BULGARIA.
86. Firanescu, M., Sandu, D.G., **Grigorie, T.L.** “*Influence determination of the special liquid fuel’s physical-chemical parameters over the dynamic behavior of surface-to-air missiles*”, 11th International Conference on Applied and Theoretical Electricity - ICATE 2012, Aerospace Engineering Section, Craiova, Romania, 25-27 October, 2012. Published in Proceedings of 2012 INTERNATIONAL CONFERENCE ON APPLIED AND THEORETICAL ELECTRICITY (ICATE), 2012, 5 pag., Document Type: Proceedings Paper, Accession Number: WOS:000332581900060, ISBN:978-1-4673-1810-5. Publisher: IEEE, 345 E 47TH ST, NEW YORK, NY 10017 USA.
87. Negrea, P., **Grigorie, T.L.** “*Mathematical modeling and numerical simulation of the detection unit in a miniaturized capacitive accelerometer*”, 11th International Conference on Applied and Theoretical Electricity – ICATE 2012, Aerospace Engineering Section, Craiova, Romania, 25-27 October, 2012. Published in Proceedings of 2012 INTERNATIONAL CONFERENCE ON APPLIED AND THEORETICAL ELECTRICITY (ICATE), 2012, 5 pag., Document Type: Proceedings Paper, Accession Number: WOS:000332581900067, ISBN:978-1-4673-1810-5. Publisher: IEEE, 345 E 47TH ST, NEW YORK, NY 10017 USA.
88. Edu I.R., **Grigorie T.L.**, Cepisca C., „*Kalman filtering of the miniaturized inertial sensors’ data for inertial navigation*”, 7th International Symposium on Advanced Topics in Electrical Engineering (ATEE), May 12-15, Bucharest, Romania, 2011. Published in 2011 7TH INTERNATIONAL SYMPOSIUM ON ADVANCED TOPICS IN ELECTRICAL ENGINEERING (ATEE), Book Series: International Symposium on Advanced Topics in Electrical Engineering, 2011, 6 pag., Document Type: Proceedings Paper, Accession Number: WOS:000310701200106, ISBN: 978-1-4577-0507-6, ISSN: 1843-8571. Publisher: UNIV POLITEHNICA BUCHAREST, FAC ELECTRICAL ENGINEERING, ATEE, SPLAIUL INDEPENDENTEI NO 313, SECTOR 1, BUCURESTI, 060042, ROMANIA.
89. Edu, I.R., Lita, D., Obreja, R., **Grigorie, T.L.**, “*Micro and nano multisensor data fusion for navigation applications: a review*”, International Multidisciplinary Scientific GeoConference & EXPO (SGEM 2011), Albena, Bulgaria, 19-25 June 2011. Published in 11TH INTERNATIONAL MULTIDISCIPLINARY SCIENTIFIC GEOCONFERENCE (SGEM 2011), VOL II, Book Series: International Multidisciplinary Scientific GeoConference-SGEM, 2011, Pages: 717-724, Document Type: Proceedings Paper, Accession Number: WOS: 000307366300094, ISSN: 1314-2704. Publisher: INT SCIENTIFIC CONFERENCE SGEM, KILMENT OHRIDSKY BLVD, SOFIA, 1797, BULGARIA.
90. Edu, I.R., Obreja, R., **Grigorie, T.L.** “*Miniaturised accelerometers architectures, development technologies and applications*”, International Multidisciplinary Scientific GeoConference & EXPO (SGEM 2011), Albena, Bulgaria, 19-25 June 2011. Published in 11TH INTERNATIONAL MULTIDISCIPLINARY SCIENTIFIC GEOCONFERENCE (SGEM 2011), VOL II, Book Series: International Multidisciplinary Scientific GeoConference-SGEM, 2011, Pages: 725-732, Document Type: Proceedings Paper, Accession Number: WOS: 000307366300095, ISSN: 1314-2704. Publisher: INT SCIENTIFIC CONFERENCE SGEM, KILMENT OHRIDSKY BLVD, SOFIA, 1797, BULGARIA.
91. Corcau, J.I., **Grigorie, T.L.**, Jula, N., Cepisca, C., Popoviciu, N., “*Dynamics and Control of Three-Phase Four-Leg Inverter*”, 9th WSEAS International Conference on Electronics, Hardware, Wireless and Optical Communications, Cambridge, ENGLAND, FEB 20-22, 2010. Published in EHAC'09: PROCEEDINGS OF THE 9TH WSEAS INTERNATIONAL CONFERENCE ON ELECTRONICS, HARDWARE, WIRELESS AND OPTIONAL COMMUNICATIONS, Book Series: Mathematics and Computers in Science and Engineering, 2010, Pages: 26-31, Document Type: Proceedings Paper, Accession Number: WOS: 000276843000003, ISBN: 978-960-474-155-7, ISSN: 1792-4308. Publisher: WORLD SCIENTIFIC AND ENGINEERING ACAD AND SOC, AG LOANNOU THEOLOGOU 17-23, 15773 ZOGRAPHOU, ATHENS, GREECE.

92. **Grigorie, T.L.**, Popov, A.V. Botez, R.M., Mamou, M., Mebarki, Y., “*A morphing wing used shape memory alloy actuators new control technique with bi-positional and PI laws optimum combination Part 1: Design Phase*”, 7th International Conference on Informatics in Control, Automation and Robotics. Location: Funchal, PORTUGAL, JUN 15-18, 2010. Published in ICINCO 2010: PROCEEDINGS OF THE 7TH INTERNATIONAL CONFERENCE ON INFORMATICS IN CONTROL, AUTOMATION AND ROBOTICS, VOL 1, 2010, Pages: 5-12, Document Type: Proceedings Paper, Accession Number: WOS: 000393353300007, ISBN: 978-989-8425-00-3. Publisher: INSTICC-INST SYST TECHNOLOGIES INFORMATION CONTROL & COMMUNICATION, AVENIDA D MANUEL L, 27A 2 ESQUERDO, SETUBAL, 2910-595, PORTUGAL.
93. **Grigorie, T.L.**, Popov, A.V. Botez, R.M., Mamou, M., Mebarki, Y., “*A morphing wing used shape memory alloy actuators new control technique with bi-positional and PI laws optimum combination Part 2: Experimental Validation*”, 7th International Conference on Informatics in Control, Automation and Robotics. Location: Funchal, PORTUGAL, JUN 15-18, 2010. Published in ICINCO 2010: PROCEEDINGS OF THE 7TH INTERNATIONAL CONFERENCE ON INFORMATICS IN CONTROL, AUTOMATION AND ROBOTICS, VOL 1, 2010, Pages: 13-19, Document Type: Proceedings Paper, Accession Number: WOS: 000393353300008, ISBN: 978-989-8425-00-3. Publisher: INSTICC-INST SYST TECHNOLOGIES INFORMATION CONTROL & COMMUNICATION, AVENIDA D MANUEL L, 27A 2 ESQUERDO, SETUBAL, 2910-595, PORTUGAL.
94. Popov, A.V., **Grigorie, T.L.**, Botez, R.M., Mamou, M., Mebarki, Y., “*Morphing wing real time optimization in wind tunnel tests*”, 7th International Conference on Informatics in Control, Automation and Robotics. Location: Funchal, PORTUGAL, JUN 15-18, 2010. Published in ICINCO 2010: PROCEEDINGS OF THE 7TH INTERNATIONAL CONFERENCE ON INFORMATICS IN CONTROL, AUTOMATION AND ROBOTICS, VOL 1, 2010, Pages: 114-124, Document Type: Proceedings Paper, Accession Number: WOS: 000393353300021, ISBN: 978-989-8425-00-3. Publisher: INSTICC-INST SYST TECHNOLOGIES INFORMATION CONTROL & COMMUNICATION, AVENIDA D MANUEL L, 27A 2 ESQUERDO, SETUBAL, 2910-595, PORTUGAL.
95. Popov, A.V., **Grigorie, T. L.**, Botez, R.M., Mamou, M., Mebarki, Y. “*Controller Optimization in Real Time for a Morphing Wing in a Wind Tunnel*”, 15th IEEE Mediterranean Electrotechnical Conference (MELECON 2010), 26-28 April 2010, Valletta, Malta. Published in MELECON 2010: THE 15TH IEEE MEDITERRANEAN ELECTROTECHNICAL CONFERENCE, Book Series: IEEE Mediterranean Electrotechnical Conference-MELECON, 2010, Pages: 107-112, DOI: 10.1109/MELCON.2010.5476329, Document Type: Proceedings Paper, Accession Number: WOS: 000286988200021, ISBN: 978-1-4244-5795-3, ISSN: 2158-8481. Publisher: IEEE, 345 E 47TH ST, NEW YORK, NY 10017 USA.
96. Lungu, R., Saurabh, K., Lungu, M., **Grigorie, T.L.** „*The use of the hierarchical structured dynamic inversion to the aircrafts longitudinal movement*”. International Conference on Circuits, Systems and Signals (IEEE.AM- CSS), Malta, September 15-17, 2010. Published in RECENT ADVANCES IN CIRCUITS, SYSTEMS AND SIGNALS, Book Series: International Conference on Circuits Systems Signals, 2010, Pages: 34-39, Document Type: Proceedings Paper, Accession Number: WOS: 000290360900019, ISBN: 978-960-474-226-4, ISSN: 1792-4324. Publisher: WORLD SCIENTIFIC AND ENGINEERING ACAD AND SOC, AG LOANNOU THEOLOGOU 17-23, 15773 ZOGRAPHOU, ATHENS, GREECE
97. **Grigorie, T.L.**, Corcau, J.I., Sandu, D.G., Lungu, M. “*Bi-Dimensional Position Detection Using TDOA Estimation through Cross Correlation of the Acoustic Signals. Part 1: Theoretical Background*”, 7th International Conference on ICT and Knowledge Engineering, Bangkok, Thailand, 1-3 Dec., 2009. Published in 7TH INTERNATIONAL CONFERENCE ON ICT AND KNOWLEDGE ENGINEERING, 2009, Pages: 28-32, DOI: 10.1109/ICTKE.2009.5397336, Document Type: Proceedings Paper, Accession Number: WOS: 000289534600005, ISBN: 978-1-4244-4513-4, Publisher: IEEE, 345 E 47TH ST, NEW YORK, NY 10017 USA.
98. Lungu, M., Lungu, R., Stoenescu, E., **Grigorie, T.L.** “*Prediction State Observer for the Longitudinal and Lateral Movements of an Aircraft*”, 11th WSEAS International Conference on Automatic Control, Modeling and Simulation (ACMOS '09), Istanbul, Turkey, May 30 - June 1, 2009. Published in PROCEEDINGS OF THE 11TH WSEAS INTERNATIONAL CONFERENCE ON AUTOMATIC CONTROL, MODELLING AND SIMULATION. Book Series: Electrical and Computer Engineering Series, 2009, Pages: 322-327, Document Type: Proceedings Paper, Accession Number: WOS: 000271276800048, ISBN: 978-960-474-082-6. Publisher: WORLD SCIENTIFIC AND ENGINEERING ACAD AND SOC, AG LOANNOU THEOLOGOU 17-23, 15773 ZOGRAPHOU, ATHENS, GREECE.
99. Corcau, J.I., Manolea, Gh., **Grigorie, T.L.**, Neaca, M.I. “*Performance Improvement of Three-Phase Boost Rectifier using PI Fuzzy Controller*”, 13th WSEAS International Conference on CIRCUITS, Part of the 13th WSEAS CSCC Multiconference, July 22-24, 2009 - Rhodes Island, Greece. Published in PROCEEDINGS OF THE 6TH WSEAS INTERNATIONAL CONFERENCE ON ENGINEERING EDUCATION: RECENT ADVANCES IN ENGINEERING EDUCATION, Book Series: Mathematics and Computers in Science and Engineering, 2009, Pages: 133-138, Document Type: Proceedings Paper, Accession Number: WOS: 000271229200019, ISBN: 978-960-474-100-7, ISSN: 1792-4308. Publisher: WORLD SCIENTIFIC AND ENGINEERING ACAD AND SOC, AG LOANNOU THEOLOGOU 17-23, 15773 ZOGRAPHOU, ATHENS, GREECE.
100. Corcau, J.I., Stoenescu, E., **Grigorie, T.L.** “*About of PI fuzzy controller in DC to DC power converters*”, The 8th WSEAS International Conference on Artificial Intelligence, Knowledge Engineering and Data Bases (AIKED'09), Cambridge, UK, February 21-23, 2009. Published in PROCEEDINGS OF THE 8TH WSEAS INTERNATIONAL CONFERENCE ON ARTIFICIAL INTELLIGENCE, KNOWLEDGE ENGINEERING AND DATA BASES. Book Series: Artificial Intelligence Series-WSEAS, 2009, Pages: 208-211, Document Type: Proceedings Paper,

101. Stoenescu, E., Corcau, J.I., **Grigorie, T.L.** "Static voltage stability analysis of a power system", The 4th IASME/WSEAS International Conference on Energy & Environment (EE'09), Cambridge, UK, February 24-26, 2009. Published in RECENT ADVANCES IN ENERGY AND ENVIRONMENT: PROCEEDINGS OF THE 4TH IASME/WSEAS INTERNATIONAL CONFERENCE ON ENERGY AND ENVIRONMENT (EE'09), Book Series: Energy and Environmental Engineering Series, 2009, Pages: 240-243, Document Type: Proceedings Paper, Accession Number: WOS: 000265673500034, ISBN: 978-960-474-055-0. Publisher: WORLD SCIENTIFIC AND ENGINEERING ACAD AND SOC, AG LOANNOU THEOLOGOU 17-23, 15773 ZOGRAPHOU, ATHENS, GREECE.
102. **Grigorie, T.L.** "The Matlab/Simulink modeling and numerical simulation of an analogue capacitive micro-accelerometer. Part 1: Open loop". The IEEE 4nd International Conference on Perspective Technologies and Methods in MEMS Design, Polyana, Ukraine, 21 - 24 mai, 2008. Published in PERSPECTIVE TECHNOLOGIES AND METHODS IN MEMS DESIGN, 2008, Pages: 105-114, DOI: 10.1109/MEMSTECH.2008.4558755, Document Type: Proceedings Paper, Accession Number: WOS: 000258327600033, ISBN: 978-966-2191-00-4. Publisher: LVIV POLYTECH NATL UNIV, 61 V CHOMOVOL AVE, LVOV 79058, UKRAINE.
103. **Grigorie, T.L.** "The Matlab/Simulink modeling and numerical simulation of an analogue capacitive micro-accelerometer. Part 2: Closed loop". The IEEE 4nd International Conference on Perspective Technologies and Methods in MEMS Design, Polyana, Ukraine, 21 - 24 mai, 2008. Published in PERSPECTIVE TECHNOLOGIES AND METHODS IN MEMS DESIGN, 2008, Pages: 115-121, DOI: 10.1109/MEMSTECH.2008.4558756, Document Type: Proceedings Paper, Accession Number: WOS: 000258327600034, ISBN: 978-966-2191-00-4. Publisher: LVIV POLYTECH NATL UNIV, 61 V CHOMOVOL AVE, LVOV 79058, UKRAINE.
104. **Grigorie, T.L.**, Jula, N., Cepisca, C., Racuciu, C. "Study of the positioning errors in a bidimensional horizontal strap-down inertial navigator generated by the inertial sensors". 8th WSEAS International Conference on Applied Informatics and Communications (AIC'08), Rhodes, Greece, August 20-22, 2008. Published in PROCEEDINGS OF THE 8TH WSEAS INTERNATIONAL CONFERENCE ON APPLIED INFORMATICS AND COMMUNICATIONS, PTS I AND II: NEW ASPECTS OF APPLIED INFORMATICS AND COMMUNICATIONS, Book Series: Recent Advances in Computer Engineering, 2008, Pages: 186-191, Document Type: Proceedings Paper, Accession Number: WOS: 000265456100029, ISBN: 978-960-6766-94-7, ISSN: 1790-5109. Publisher: WORLD SCIENTIFIC AND ENGINEERING ACAD AND SOC, AG LOANNOU THEOLOGOU 17-23, 15773 ZOGRAPHOU, ATHENS, GREECE.
105. **Grigorie, T.L.** "Some considerations concerning the influence of the inertial sensors errors on the solution of navigation for a bidimensional strap-down inertial navigation system". 5th IEEE Workshop on Positioning, Navigation and Communication 2008 (WPNC'08), Hannover, Germany, 27 March 2008. Published in WPNC'08: 5TH WORKSHOP ON POSITIONING, NAVIGATION AND COMMUNICATION 2008, WORKSHOP PROCEEDINGS, Book Series: Hannoversche Beitrage zur Nachrichtentechnik, Volume: 5, 2008, Pages: 149-156, DOI: 10.1109/WPNC.2008.4510369, Document Type: Proceedings Paper, Accession Number: WOS: 000255592200020, ISBN: 978-1-4244-1798-8, Publisher: IEEE, 345 E 47TH ST, NEW YORK, NY 10017 USA.
106. **Grigorie, T.L.** "An optimization procedure for a fiber optic accelerometer". 3rd International Conference on Perspective Technologies and Methods in MEMS Design, Polyana, Ukraine, 23 - 26 may, 2007. Published in Perspective Technologies and Methods in MEMS Design, 2007, Pages: 15-19, Document Type: Proceedings Paper, Accession Number: WOS: 000248945300003, ISBN: 978-966-553-614-7. Publisher: LVIV POLYTECH NATL UNIV, 61 V CHOMOVOL AVE, LVOV 79058, UKRAINE
107. **Grigorie, T.L.**, Sandu, D.G. "On the attitude errors when the quaternionic Wilcox method is used". IEEE Signal Processing Society - 49th International Symposium ELMAR-2007 focused on Mobile Multimedia, Zadar, Croatia, 12-14 September, 2007. Published in PROCEEDINGS ELMAR 2007, 2007, Pages: 79-84, Document Type: Proceedings Paper, Accession Number: WOS: 000256667800017, ISBN: 978-953-7044-05-3. Publisher: IEEE, 345 E 47TH ST, NEW YORK, NY 10017 USA.
108. **Grigorie, T.L.**, Sandu, D.G. "The influences of the gyro sensors' errors on the attitude calculus". IEEE Signal Processing Society - 49th International Symposium ELMAR-2007 focused on Mobile Multimedia, Zadar, Croatia, 12-14 September, 2007. Published in PROCEEDINGS ELMAR 2007, 2007, Pages: 85-92, Document Type: Proceedings Paper, Accession Number: WOS: 000256667800018, ISBN: 978-953-7044-05-3. Publisher: IEEE, 345 E 47TH ST, NEW YORK, NY 10017 USA.
109. Botez, R.M., Hiliuta, A, **Grigorie, T.L.** "Simulation method for rigid and control modes aeroservoelastic interactions". The 26th IASTED International Conference on Modeling, Identification, and Control - MIC 2007, Innsbruck, Austria, 12-14 February, 2007. Published in Proceedings of the 26th IASTED International Conference on Modelling, Identification, and Control, 2007, Pages: 229-233, Document Type: Proceedings Paper, Accession Number: WOS: 000246295700040, ISBN: 978-0-88986-633-1. Publisher: ACTA PRESS ANAHEIM, PO BOX 5124, ANAHEIM, CA 92814-5124 USA
110. **Grigorie, T.L.**, Sandu, D.G., Aron, I. "Navigation in non-inertial terrestrial frames using the attitude matrices". IEEE Signal Processing Society - 48th International Symposium ELMAR-2006 focused on Multimedia Systems and Applications, Zadar, Croatia, 7-9 June, 2006. Published in Proceedings ELMAR-2006, Pages: 205-209, DOI: 10.1109/ELMAR.2006.329550, Document Type: Proceedings Paper, Accession Number: WOS:

111. **Grigorie, T.L.**, Sandu, D.G. “*Numerical algorithm for navigation in Earth’s inertial system*”. 47th International Symposium ELMAR-2005 focused on Multimedia Systems and Applications, Zadar, Croatia, 8-10 juin, 2005. Published in Proceedings ELMAR-2005, 2005, Pages: 257-262, Document Type: Proceedings Paper, Accession Number: WOS: 000234256900061, ISBN: 953-7044-04-1. Publisher: CROATIAN SOCIETY ELECTRONICS MARINE, ELMAR, ZADAR, CROATIA

III. Articole publicate în reviste indexate BDI (baze de date recunoscute CNATDCU)

112. Adochiei, I.R., **Grigorie, T.L.**, Adochiei, F.C. „*Tuning of the wavelet filters for the IMU data based on the PDC method and the GPS solution in a bi-dimensional navigation application*”. Published in INCAS BULLETIN, Volume 11, Issue 3, 2019, Pages 3-14, Source Type: Journal, Document Type: Article, ISSN 2066-8201 (**Scopus**)
113. Vaduvescu, V.A., **Grigorie, T.L.**, Negrea, P., Corcau, C.L. „*Hardware structure for an INS/GPS integrated navigator*”. Published in INCAS BULLETIN, Volume 11, Issue 4, October-December 2019, Pages 203-213, Source Type: Journal, Document Type: Article, ISSN 2066-8201 (**Scopus**)
114. Negrea, P., Sepcu, C.L., Lungu, R., **Grigorie, T.L.** „*Mathematical modeling and numerical simulation of a vibrating MEMS gyro*”. Published in University POLITEHNICA of Bucharest “Scientific Bulletin”, Series D, Mechanical Engineering, Vol. 77, Iss. 4, 2015, pp. 3-14, Source Type: Journal, Document Type: Article, ISSN 1454-2358 (**Metadex, Scopus, MIAR**)
115. Sandu, D.G., Fuiorea, I., **Grigorie, T.L.** “*INS/GPS synergic navigator with Kalman filtering*”, Published in University POLITEHNICA of Bucharest “Scientific Bulletin”, Series D, Mechanical Engineering, Vol. 76, Iss. 2, 2014, pp. 11-22, Source Type: Journal, Document Type: Article, ISSN 1454-2358 (**Scopus**)
116. Lungu, M., Lungu, R., **Grigorie, T.L.** “*Automat control of the aircrafts’ lateral movement using the dynamic inversion*”, Published in World Academy of Science, Engineering and Technology, Volume 79, July 2011, Pp. 488-495, Source Type: Journal, Document Type: Article, ISSN: 2010-376X (**Scopus**)
117. **Grigorie, T.L.**, Dinca, L., Corcau, J., Grigorie, O. “*Aircrafts’ Altitude Measurement Using Pressure Information: Barometric Altitude and Density Altitude*”, Published in WSEAS Transactions on Circuits and Systems, Issue 7, Volume 9, July 2010, Pp. 503-512, Source Type: Journal, Document Type: Article, ISSN: 1109-2734 (**Scopus**)
118. **Grigorie, T.L.**, Jula, N., Cepisca, C., Racuciu, C., Raducanu, D. “*Evaluation Method of the Sensors Errors in an Inertial Navigation System*”, Published in WSEAS Transactions on Circuits and Systems, Issue 12, Volume 7, December 2008, Pp. 977-987, Source Type: Journal, Document Type: Article, ISSN: 1109-2734 (**Scopus**)
119. Edu, I.R., Adochiei, F.C., **Grigorie, T.L.**, Botez, R.M. “*Tuning of a Wavelet Filter for Miniature Accelerometers Denoising based Joint Symbolic Dynamics (JSD) Method*”. Published in INCAS BULLETIN, Volume 7, Issue 2, 2015, pp. 71-80, Source Type: Journal, ISSN 2066-8201 (**ProQuest, Index Copernicus, DOAJ**)
120. Edu, I.R., Adochiei, F.C., Obreja, R., Rotaru, C., **Grigorie, T.L.** „*Inertial sensor signals denoising with wavelet transform*”, Published in INCAS BULLETIN, Vol. 7, issue 1, 2015, pp. 57-64, Source Type: Journal, ISSN 2066–8201 (**DOAJ, WorldCat**)
121. Jula, N., Sofronia, A., **Grigorie, T.L.** “*Autonomous aerial surveillance system movement monitoring by using strap-down inertial techniques*”. 2nd International Conference Sea-Conf 2016, 12-14 May, Constanta, Romania, Published in “Mircea cel Batran” Naval Academy Scientific Bulletin, Volume XIX – 2016, Issue 1, pp. 226-234, DOI: 10.21279/1454-864X-16-I1-040, ISSN: 2392-8956 (**CrossRef, DOAJ**)
122. Jula, N., Sofronia, A., **Grigorie, T.L.** “*A new approach related to the corona discharge surveillance*”. 2nd International Conference Sea-Conf 2016, 12-14 May, Constanta, Romania, Published in “Mircea cel Batran” Naval Academy Scientific Bulletin, Volume XIX – 2016, Issue 2, pp. 225-230, DOI: 10.21279/1454-864X-16-I2-034, ISSN: 2392-8956 (**CrossRef, DOAJ**)
123. Lungu, R., Hiliuta, A., **Grigorie, T.L.** “*Study of an automatic control system with respect to compression degree of a supersonic aircraft compressor*”. In Sborník Vojenské akademie v Brně. Řada B (Technické a přírodní vědy), No. 1. Edition of Military Academy in Brno, Czech Republic, 1999, pp. 69-77, ISSN: 1211-1023 (**Compendex**)
124. Hiliută, A., **Grigorie, T.L.** “*The optimization of a closed-loop accelerometer*“. Electrical Engineering, Electronics, Automation (EEA). Electra – ICPE, Bucharest. No. 7-8, 2000, pp. 11-16, ISSN: 0376-4745 (**Inspecc, WorldCat**)
125. **Grigorie, T.L.**, Lungu, M., Edu, I.R., Obreja, R. “*Concepts for error modeling of miniature accelerometers used in inertial navigation systems*”. Published in Annals of the University of Craiova, Electrical Engineering series, No. 34, 2010, pp. 212-219, ISSN: 1842-4805 (**Index Copernicus, WorldCat**)
http://journals.indexcopernicus.com/issue.php?id=2823&id_issue=846408
126. **Grigorie, T.L.**, Lungu, M., Edu, I.R., Obreja, R., „*Closed loop high-precision accelerometer with smart control*”, Published in Scientific Bulletin of The “POLITEHNICA” University of Timișoara, Romania, Transactions on Automatic Control and Computer Science, Vol: 57(71), No: 1, March 2012, pp. 15-22, ISSN: 1224-600X (**Index COPERNICUS, VINITI, WorldCat**)
http://catalog.viniti.ru/srch_result.aspx?IRL=FETCH+QUERY%3d2276923+OBJ%3d00shxd9x+STYLE%3dFull1&TYP=FULL1
127. **Grigorie, T.L.**, Obreja, R., Edu, I.R., “*Redundant bi-dimensional SDINS based on inertial sensors data fusion*”,

- International Conference for Academic Disciplines, Vienna, Austria, 1-5 April 2012, Published in Academic Journal of Science AJS (UniversityPublications.net), Volume 01, Number 03, 2012, pp. 579–588, ISSN: 2165-6282 (**WorldCat, DOAJ, Index Copernicus**) <https://journals.indexcopernicus.com/search/details?id=21289>
128. **Grigorie, T.L.**, Sandu, D.G., Corcau, C.L. “*Modeling and analysis of the errors in a strap-down MEMS INS based quaternionic attitude evaluation*”. International Journal of Arts & Sciences (IJAS) International Conference for Engineering and Technology, 29 Nov. - 2 Dec. 2016, Freiburg, Germany. Published in Academic Journal of Science AJS (UniversityPublications.net), Volume 07, Number 02, 2017, pp. 117–132, ISSN: 2165-6282 (**WorldCat, ProQuest, Index Copernicus**) <https://journals.indexcopernicus.com/search/details?id=21289>

IV. Articole publicate în proceedings indexate BDI (baze de date recunoscute CNATDCU)

129. Lungu, M., **Grigorie, T.L.**, Butu, A.F., Wang, R. “*Automatic Attitude Control of the Launch Vehicles by means of the Backstepping Control Method*”, 2024 International Conference on Control, Automation and Diagnosis, ICCAD 2024, Paris, France, 15-17 May 2024, Published in 2024 International Conference on Control, Automation and Diagnosis, ISBN: 979-835036102-5, DOI: 10.1109/ICCAD60883.2024.10553773, Document type: Conference Paper (**Scopus**)
130. Adochiei, I.-R., **Grigorie, T.L.**, Adochiei, F.-C., Cristian, V., Jula, N. “*Towards Improved Assistive Inertial Positioning Solutions by Using Finely Tuned Wavelet Functions*”, 6th International Conference on Nanotechnologies and Biomedical Engineering, ICNBME 2023, Chisinau, Moldova, 20-23 September 2023, Published in IFMBE Proceedings, 2024, Volume: 91, Pages: 597 - 606, ISSN: 16800737, ISBN: 978-303142774-9, DOI: 10.1007/978-3-031-42775-6_63, Document type: Conference Paper (**Scopus**)
131. Antofie, B.G., Vidan, C., Bogliș, C.I., Larco, C.M., **Grigorie, T.L.** “*Wavelet denoising method for improving the accuracy of attitude determination in miniaturized space applications*”, 27th International Conference on System Theory, Control and Computing, ICSTCC 2023, Timisoara, Romania, 11-13 October 2023, Published in Proceedings of the 27th International Conference on System Theory, Control and Computing, Pages: 42-49, ISBN: 979-835033798-3, DOI: 10.1109/ICSTCC59206.2023.10308459, Document type: Conference Paper (**Scopus**)
132. Vidan, C., Ivanescu, G.-F., **Grigorie, T.L.** “*Ultra-wideband Received Signal Strength Analysis for UAV Indoor NLOS Navigation*”, 2023 Power Quality and Electromagnetic Compatibility at Low-Frequency, PQEMC-LF 2023, Craiova, Romania, 28-30 June 2023, Published in Proceedings of the PQEMC-LF 2023, Pages: 5-8, ISBN: 979-835034133-1, DOI: 10.1109/PQEMC-LF58184.2023.10211601, Document type: Conference Paper (**Scopus**)
133. Vidan, C., Popescu, I.-A., **Grigorie, T.L.** “*Conceptual Design of a Dual Battery Power Supply System for a Fixed-wing VTOL UAV*”, 13th International Symposium on Advanced Topics in Electrical Engineering, ATEE 2023, Bucharest, Romania, 23-25 March 2023, Published in Proceedings of 13th International Symposium on Advanced Topics in Electrical Engineering, ISBN: 979-835033193-6, DOI: 10.1109/ATEE58038.2023.10108114, Document type: Conference Paper (**Scopus**)
134. Dima, M., Racheru, M., Larco, C., **Grigorie, T.L.**, Pahonie, R. “*On-board three-axis video stabilization system using direct drive technology*”, 22nd International Multidisciplinary Scientific Geoconference: Nano, Bio, Green and Space - Technologies for a Sustainable Future, SGEM 2022, Vienna, Austria, 6-8 December 2022, Published in Proceedings of 22nd International Multidisciplinary Scientific GeoConference Surveying Geology and Mining Ecology Management, SGEM 2022, Volume: 22, Issue: 6.2, Pages: 9-14, DOI: 10.5593/sgem2022V/6.2/s24.02, ISSN: 13142704, Document type: Conference Paper (**Scopus**)
135. Larco, C., Grigorie, L., Mihai, R., Tofan-Negru, A., Pahonie, R. “*A miniaturised onboard platform for optic sensors stabilization on a small UAV platform*” 22nd International Multidisciplinary Scientific Geoconference: Nano, Bio, Green and Space - Technologies for a Sustainable Future, SGEM 2022, Vienna, Austria, 6-8 December 2022, Published in Proceedings of 22nd International Multidisciplinary Scientific GeoConference Surveying Geology and Mining Ecology Management, SGEM 2022, Volume: 22, Issue: 6.2, Pages: 479 - 486, DOI: 10.5593/sgem2022V/6.2/s27.61, ISSN: 13142704, Document type: Conference Paper (**Scopus**)
136. Nguyen, D.H., Kammegne, M.J.T., Botez, R.M., **Grigorie, T.L.** “*Open loop morphing wing architecture based ANFIS controller*”, AIAA Atmospheric Flight Mechanics Conference, AIAA Aviation and Aeronautics Forum and Exposition 2016, Washington D.C., 13-17 June 2016. Published in 16th AIAA Aviation Technology, Integration, and Operations Conference, 2016, 10 pag., ISBN: 9781624104404, Document Type: Conference Paper (**Scopus**)
137. **Grigorie, T.L.**, Botez, R.M., Popov, A.V. “*Self-adaptive morphing wing model, smart actuated and controlled by using a multiloop controller based on a laminar flow real time optimizer*”, 24th AIAA/AHS Adaptive Structures Conference, San Diego, California, USA, 4-8 January 2016. Published in 24th AIAA/AHS Adaptive Structures Conference, 2016, 12 pag., ISBN: 9781624103964, Document Type: Conference Paper (**Scopus**)
138. Kammegne, M.J.T., Khan, S., **Grigorie, T.L.**, Botez, R.M., “*New Methodology for the Controller of an Electrical Actuator for Morphing a Wing*”. The 23rd AIAA/ASME/AHS Adaptive Structures Conference, American Institute of Aeronautics and Astronautics AIAA Science and Technology Forum – SciTech 2015, Kissimmee, FL, USA, 5-9 January, 2015. Published in 23rd AIAA/AHS Adaptive Structures Conference, 2015, 12 pag., ISBN: 9781624103469, Document Type: Conference Paper (**Scopus**)
139. Kammegne, M.J.T., **Grigorie, T.L.**, Botez, R.M., Koreanschi, A. “*Design and Validation of a Position Controller in the Price-Paidoussis Wind Tunnel*”. The 33rd IASTED International Conference on Modelling, Identification and Control (MIC 2014), Innsbruck, Austria, February 17-19, 2014. Published in Proceedings of the IASTED

- International Conference on Modelling, Identification and Control, 2014, pp. 174-181. DOI: 10.2316/P.2014.809041, ISSN: 1025-8973, Document Type: Conference Paper (**Scopus, British Library**)
140. **Grigorie, T.L.**, Jula, N., Negrea, P., Obreja, R., Botez, R.M. “*Optimization of a smart accelerometer based on amplitude-frequency characteristics constraints*”. The 33rd IASTED International Conference on Modelling, Identification and Control (MIC 2014), Innsbruck, Austria, February 17-19, 2014. Published in Proceedings of the IASTED International Conference on Modelling, Identification and Control, 2014, pp. 115-120, DOI: 10.2316/P.2014.809057, ISSN: 1025-8973, Document Type: Conference Paper (**Scopus, British Library**)
 141. **Grigorie, T.L.**, Popov, A.V., Botez, R.M., “*Control strategies for an experimental morphing wing model*”, AIAA Aviation 2014, AIAA Atmospheric Flight Mechanics Conference, Atlanta, GA, 16-18 June, 2014. Published in AIAA AVIATION - 2014 AIAA Atmospheric Flight Mechanics Conference, 2014, 12 pag., ISBN: 978-162410294-3, Document Type: Conference Paper (**Scopus**)
 142. **Grigorie, T.L.**, Botez, R.M., „*Redundant Inertial Navigator for Robotic Applications*”, ICINCO 2013 - Tenth International Conference on Informatics in Control, Automation and Robotics. Reykjavík, Iceland, July 29-31, 2013. Published in ICINCO 2013 - Proceedings of the 10th International Conference on Informatics in Control, Automation and Robotics, 1, 2013, pp. 463-470, ISBN: 978-989-8565-70-9, Document Type: Conference Paper (**Scopus**)
 143. **Grigorie, T.L.**, Popov, A.V., Botez, R.M. “*Control of Actuation System Based Smart Material Actuators in a Morphing Wing Experimental Model*”, AIAA Atmospheric Flight Mechanics Conference, Session: AFM-17, Aeroservoelastic Control, Modeling, Simulation, and Optimization III, Boston, Massachusetts, USA, 19-22 August, 2013. Published in AIAA Atmospheric Flight Mechanics (AFM) Conference, 2013, 13 pag., Document Type: Conference Paper (**Scopus, British Library**)
 144. **Grigorie, T.L.**, Botez, R.M., Popov, A.V., “*Design and experimental validation of a control system for a morphing wing*”, AIAA Atmospheric Flight Mechanics Conference, Minneapolis, Minnesota, USA, 13-16 August 2012. Published in AIAA Atmospheric Flight Mechanics Conference, 2012, 11 pag., ISBN: 9781624101847, Document Type: Conference Paper (**Scopus**)
 145. Lungu, M., Lungu, R., **Grigorie, T.L.** “*Aircrafts State Estimation by using an Adaptive Observer for MIMO Linear Time Varying Systems*”, The 2012 International Conference on High Performance Computing & Simulation (HPCS 2012), Madrid, Spain, July 2-6, 2012. Published in Proceedings of the 2012 International Conference on High Performance Computing and Simulation, HPCS 2012, art. no. 6266987, 2012, pp. 648-653, DOI: 10.1109/HPCSim.2012.6266987, ISBN: 978-146732359-8, Document Type: Conference Paper (**Scopus**)
 146. **Grigorie T.L.**, Botez R.M., Sandu D.G., “*A numerical implemented method for the aircraft attitude determination*”, The 20th IASTED International Conference on Applied Simulation and Modelling, Naples, Italy, June 25-27, 2012. Published in Proceedings of the IASTED International Conference on Applied Simulation and Modelling, ASM 2012, pp. 142-149, DOI: 10.2316/P.2012.776033, ISBN: 978-0-88986-935-6, Document Type: Conference Paper (**Scopus**)
 147. **Grigorie, T.L.**, “*Bi-dimensional SDINS in horizontal plane with miniaturized redundant IMU*”, The 23rd IASTED International Conference on Modelling and Simulation - MS 2012, Banff, Canada, July 3-5, 2012. Published in Proceedings of the IASTED International Conference on Modelling and Simulation, 2012, pp. 231-238. DOI: 10.2316/P.2012.783069, ISSN: 1021-8181, ISBN: 9780889869264, Document Type: Conference Paper (**Scopus, British Library**)
 148. Lungu, M., Nikos, M.E. **Grigorie, T.L.**, „*Automat Control of the Flight Altitude Using the Dynamic Inversion and the Influence of Wind Shears and Sensors' Errors on the Aircrafts' Landing Process*”, 7th International Conference on Dynamical Systems and Control (CONTROL'11), July 1-3, Iasi, Romania, 2011. Published in Recent Researches in Computational Techniques, Non-Linear Systems and Control - Proc. of the 13th WSEAS Int. Conf. on MAMECTIS'11, NOLASC'11, CONTROL'11, WAMUS'11, 2011, pp. 97-104. ISBN: 978-161804011-4, Document Type: Conference Paper (**ACM Digital Library, Scopus**)
 149. Edu, I.R., Obreja, R., **Grigorie, T.L.**, “*Current technologies and trends in the development of gyros used in navigation applications - a review*”, Conference on Communications and Information Technology (CIT-2011), July, 14-16, Corfu, Greece, 2011. Published in Recent Researches in Communications and IT - Proc. of the 15th WSEAS Int. Conf. on Communications, Part of the 15th WSEAS CSCC Multiconference, Proc. of the 5th Int. Conf. on CIT'11, 2011, pp. 63-68, ISBN: 978-1-61804-018-3, pp. 63-68, Document Type: Conference Paper (**Scopus**)
 150. **Grigorie, T.L.**, Popov, A.V., Botez, R.M., Mamou, M., Mebarki, Y. „*Controller and Aeroelasticity Analysis for a Morphing Wing*”, AIAA Atmospheric Flight Mechanics Conference, Aug. 8-11, Portland, Oregon, SUA, 2011. Published in AIAA Atmospheric Flight Mechanics Conference, 2011, 14 pag., ISBN: 9781624101533, Document Type: Conference Paper (**Scopus**)
 151. **Grigorie, T. L.**, Popov, A.V., Botez, R.M., Mamou, M., Mebarki, Y., “*An Intelligent Controller based Fuzzy Logic Techniques for a Morphing Wing Actuation System using Shape Memory Alloy*”, 52nd AIAA/ASME/ASCE/AHS/ASC Structures, Structural Dynamics and Materials Conference, Denver, Colorado, USA, 4-7 April 2011. Published in Collection of Technical Papers AIAA/ASME/ASCE/AHS/ASC Structures, Structural Dynamics and Materials Conference, 2011, 12 pag., art. no. AIAA 2011-2133, DOI: 10.2514/6.20112133, ISSN: 0273-4508, ISBN: 978-160086951-8, Document Type: Conference Paper (**Scopus**)
 152. Dinca, L., Corcau, J.I., **Grigorie, T.L.**, “*Mathematical model and numerical simulations for mechanic-hydraulic*

- flow controller*”, 12th IEEE International Symposium on Computational Intelligence and Informatics (CINTI 2011), November 21-22, Budapest, Hungary, 2011. Published in 12th IEEE International Symposium on Computational Intelligence and Informatics, CINTI 2011 Proceedings, 2011, pp. 335-339, art. no. 6108525, DOI: 10.1109/CINTI.2011.6108525, ISBN: 978-145770045-3, Document Type: Conference Paper (**IEEEExplore, Scopus**)
153. **Grigorie, T.L.**, Popov, A.V., Botez, R.M., Mamou, M., Mebarki, Y., „*Intelligent control of a morphing wing. Part 2: validation phase*”, The Nineteenth IASTED International Conference on Applied Simulation and Modelling, Crete, Greece, June 22-24, 2011. Published in Proceedings of the IASTED International Conference on Applied Simulation and Modelling, ASM 2011, pp. 153-160, DOI: 10.2316/P.2011.715054, ISBN: 978-0-88986-893-9, Document Type: Conference Paper (**Scopus, British Library**)
 154. **Grigorie, T.L.**, Popov, A.V., Botez, R.M., Mamou, M., Mebarki, Y., „*Intelligent control of a morphing wing. Part 1: design phase*”, The Nineteenth IASTED International Conference on Applied Simulation and Modelling, Crete, Greece, June 22-24, 2011. Published in Proceedings of the IASTED International Conference on Applied Simulation and Modelling, ASM 2011, pp. 145-152, DOI: 10.2316/P.2011.715053, ISBN: 978-0-88986-893-9, Document Type: Conference Paper (**Scopus, British Library**)
 155. **Grigorie, T.L.**, Botez, R.M., „*Miniaturized inertial sensors’ noise reduction by using redundant linear configurations*”, The Nineteenth IASTED International Conference on Applied Simulation and Modelling, Crete, Greece, June 22-24, 2011. Published in Proceedings of the IASTED International Conference on Applied Simulation and Modelling, ASM 2011, pp. 74-81, DOI: 10.2316/P.2011.715051, ISBN: 978-0-88986-893-9, Document Type: Conference Paper (**Scopus, British Library**)
 156. **Grigorie, T.L.**, Edu, I.R., Corcau, J.I., “*Fuzzy logic denoising of the miniaturized inertial sensors in redundant configurations*”, 33rd International Conference on Information Technology Interfaces (ITI 2011), June 27-30, Cavtat, Croatia, 2011. Published in Proceedings of the International Conference on Information Technology Interfaces, ITI, 2011, pp. 521-526, art. no. 5974077, ISSN: 1330-1012, ISBN: 9789537138202, Document Type: Conference Paper (**Scopus, IEEEExplore, Inspec**)
 157. **Grigorie, T.L.**, Popov, A.V., Botez, R.M., Mamou, M., Mebarki, Y., „*A New Morphing Wing Mechanism Using Smart Actuators Controlled by a Self-Tuning Fuzzy Logic Controller*”, 11th AIAA Aviation Technology, Integration, and Operations (ATIO) Conference, 20-22 September, Virginia Beach, VA, SUA, 2011. Published in AIAA Centennial of Naval Aviation Forum "100 Years of Achievement and Progress", 2011, 12 pag., ISBN: 9781624101342, Document Type: Conference Paper (**Scopus**)
 158. Corcau, J.I., Dinca, L., **Grigorie, T.L.**, “*Fuzzy Logic Controller Development for a Solid Oxide Fuel Cell System*”, 12th IEEE International Symposium on Computational Intelligence and Informatics (CINTI 2011), November 21-22, Budapest, Hungary, 2011. Published in 12th IEEE International Symposium on Computational Intelligence and Informatics, CINTI 2011 - Proceedings, art. no. 6108487, pp. 139-142, DOI: 10.1109/CINTI.2011.6108487, ISBN: 9781457700453, Document Type: Conference Paper (**IEEEExplore, Scopus**)
 159. **Grigorie, T.L.**, Corcau, J.I., Lungu, M., Edu, I.R., Obreja R., “*Precision Improvement for a Tunneling Accelerometer by Using an Intelligent Controller to Close its Loop*”, 12th IEEE International Symposium on Computational Intelligence and Informatics (CINTI 2011), November 21-22, Budapest, Hungary, 2011. Published in 12th IEEE International Symposium on Computational Intelligence and Informatics, CINTI 2011 - Proceedings, art. no. 6108509, pp. 253-258, DOI: 10.1109/CINTI.2011.6108509, ISBN: 9781457700453, Document Type: Conference Paper (**IEEEExplore, Scopus**)
 160. Lungu, M., Lungu, R., **Grigorie, T.L.** “*Automatic command systems for the flight direction control during the landing process*”, 3rd IEEE International Symposium on Logistics and Industrial Informatics (LINDI), 25-27 Aug., Budapest, Hungary, 2011. Published in LINDI 2011 - 3rd IEEE International Symposium on Logistics and Industrial Informatics, Proceedings, art. no. 6031131, pp. 117-122, DOI: 10.1109/LINDI.2011.6031131, ISBN: 978-145771841-0, Document Type: Conference Paper (**IEEEExplore, Inspec, Scopus**)
 161. **Grigorie, T.L.**, Lungu, M., Edu, I.R., Obreja, R., “*Miniature accelerometer precision improvement using intelligent control*”, 6th IEEE International Symposium on Applied Computational Intelligence and Informatics (SACI), 19-21 May, Timisoara, Romania, 2011. Published in SACI 2011 - 6th IEEE International Symposium on Applied Computational Intelligence and Informatics, Proceedings, art. no. 5873040, pp. 421-426, DOI: 10.1109/SACI.2011.5873040, ISBN: 9781424491094, Document Type: Conference Paper (**IEEEExplore, Inspec, Scopus**)
 162. **Grigorie, T.L.**, Botez, R.M., “*Neuro-Fuzzy Controller for SMAs for a Morphing Wing Application*”, 51st AIAA/ASME/ASCE/AHS/ASC Structures, Structural Dynamics, and Materials Conference, 12-15 April, Orlando, Florida, USA, 2010. Published in Collection of Technical Papers AIAA/ASME/ASCE/AHS/ASC Structures, Structural Dynamics and Materials Conference, art. no. 2010-2745, 21 pag., ISSN: 0273-4508, ISBN: 978-160086742-2, Document Type: Conference Paper (**Scopus, British Library**)
 163. **Grigorie, T.L.**, Botez, R.M., “*Adaptive Neuro-Fuzzy Inference Controllers for Smart Material Actuators*”, 51st AIAA/ASME/ASCE/AHS/ASC Structures, Structural Dynamics, and Materials Conference, 12-15 April, Orlando, Florida, USA, 2010. Published in Collection of Technical Papers AIAA/ASME/ASCE/AHS/ASC Structures, Structural Dynamics and Materials Conference, art. no. 20102987, 23 pag., ISSN: 0273-4508, ISBN: 978-160086742-2, Document Type: Conference Paper (**Scopus**)
 164. Corcau, J.I., Coman, A., Dinca, L., **Grigorie, T.L.** „*Study of Fuzzy Logic Controller for ZCS Boost Converter*”, International Conference on Electrical Systems for Aircraft, Railway and Ship Propulsion - ESARS 2010, Bologna,

- Italy, October 19-21, 2010. Published in International Conference on Electrical Systems for Aircraft, Railway and Ship Propulsion, ESARS 2010, 4 pag., art. no. 5665233, DOI: 10.1109/ESARS.2010.5665233, ISBN: 978-142449094-3, Document Type: Conference Paper (**Scopus**)
165. Mamou, M., Mébarki, Y., Khalid, M., Genest, M., Coutu, D., Popov, A.V., Sainmont, C., Georges, T., **Grigorie, T.L.**, Botez, R.M., Brailovski, V., Terriault, P., Paraschivoiu, I., Laurendeau, E. „*Aerodynamic Performance Optimization of a Wind Tunnel Morphing Wing Model Subject to Various Cruise Flow Conditions*”, 27th International Congress of the Aeronautical Sciences, Nice, France, 19-24th September 2010. Published in 27th Congress of the International Council of the Aeronautical Sciences 2010, Vol. 2, ICAS 2010, pp. 1137-1161, ISBN: 978-161782049-6, Document Type: Conference Paper (**Scopus**)
 166. Corcau, J., Dinca, L., Stanga, A., **Grigorie, T.L.** „*Robust Control Design of Power System Stabilizer Using Fuzzy Logic Controller*”. 6th WSEAS International conference on dynamical systems and control (CONTROL '10), Kantaoui, Sousse, Tunisia, May 3-6, 2010. Published in 6th WSEAS International Conference on Dynamical Systems and Control, CONTROL '10, pp. 174-178, ISBN: 978-960-474-185-4, Document Type: Conference Paper (**Scopus**)
 167. Dinca, L., Corcau, J., **Grigorie, T.L.** „*Electro-Hydrostatic Servo-Actuators with Unilateral Rod Cylinder*”. 6th WSEAS International Conference on DYNAMICAL SYSTEMS and CONTROL (CONTROL '10), Kantaoui, Sousse, Tunisia, May 3-6, 2010. Published in 6th WSEAS International Conference on Dynamical Systems and Control, CONTROL '10, pp. 38-43, ISBN: 978-960-474-185-4, Document Type: Conference Paper (**Scopus**)
 168. **Grigorie, T.L.**, Lungu, M., Negrea, P., Baziukaite, D. „*The compensation of the thermocouples cold junction temperature variation errors using a neuro-fuzzy controller*”. International Conference on Applied Computer Science (IEEE.AM - ACS), Malta, September 15 – 17, 2010. Published in International Conference on Applied Computer Science Proceedings, 2010, pp. 72-77, ISSN: 1792-4863, ISBN: 978-960-474-225-7, Document Type: Conference Paper (**Scopus**)
 169. **Grigorie, T.L.**, Dinca, L., Corcau, J., Grigorie, O. „*The Density Altitude. Influence Factors and Evaluation*”. 6th WSEAS International Conference on DYNAMICAL SYSTEMS and CONTROL (CONTROL '10), Kantaoui, Sousse, Tunisia, May 3-6, 2010. Published in 6th WSEAS International Conference on Dynamical Systems and Control, CONTROL '10, pp. 44-48, ISBN: 978-960-474-185-4, Document Type: Conference Paper (**Scopus**)
 170. Popov, A.V., **Grigorie, T.L.**, Botez, R.M. „*Morphing Wing Control Validation during Bench Tests*”, The Eleventh IASTED International Conference on Signal and Image Processing (SIP 2009), Honolulu, Hawaii, USA 17-19 August, 2009. Published in Proceedings of the IASTED International Conference on Identification, Control, and Applications, ICA 2009, pp. 89-93, ISBN: 978-088986805-2, Document Type: Conference Paper (**Scopus**)
 171. **Grigorie, T.L.**, Popov, A.V., Botez, R.M., Youssef Mébarki, Mahmoud Mamou „*Modeling and testing of a morphing wing in open loop architecture*”, The Eleventh IASTED International Conference on Signal and Image Processing (SIP 2009), Honolulu, Hawaii, USA 17-19 August, 2009. Published in Proceedings of the IASTED International Conference on Identification, Control, and Applications, ICA 2009, pp. 22-30, ISBN: 978-088986805-2, Document Type: Conference Paper (**Scopus**)
 172. **Grigorie, T.L.** „*The mathematical modeling and numerical simulation of an open loop analogue capacitive micro-accelerometer*”. AIAA/IEEE 12th Saint Petersburg International Conference on Integrated Navigation Systems, Saint Petersburg, Russia, 23-25 may 2005. Published in 12th Saint Petersburg International Conference on Integrated Navigation Systems, ICINS 2005, pp. 321-323, ISBN: 5900780597;978-590078059-7, Document Type: Conference Paper (**Scopus**)
 173. **Grigorie, T.L.** „*A method of reduction of the errors due to numerical integration at a non-linear accelerometer used in a navigation system*”. 20th American Institute of Aeronautics and Astronautics (AIAA) International Communications Satellite Systems Conference and Exhibit, Montreal, Quebec, Canada, 12-15 may, 2002. Published in 20th AIAA International Communication Satellite Systems Conference and Exhibit, 2002, 4 pag., Document Type: Conference Paper (**Scopus**)
 174. **Grigorie, T.L.**, Sandu, D.G., Botez, R.M., „*A Redundant Aircraft Attitude System Based on Fuzzy Logic Data Fusion of the Miniaturized Inertial Sensors*”, AHS 70th Annual Forum and Technology Display, Montréal, Québec, May 20-22, 2014. Published in Annual Forum Proceedings - AHS International, Vol. 2, 2014, pp. 1611-1620. ISSN: 1552-2938, ISBN: 978-163266691-8, Document Type: Conference Paper (**Scopus, British Library**)
 175. Dinca, L., Coman, A., Corcau, J.I., **Grigorie, T.L.**, „*Some Fuzzy Controllers for Electro-Hydrostatic Servo-Actuator*”, International Conference on Electrical Systems for Aircraft, Railway and Ship Propulsion - ESARS 2010, Bologna, Italy, October 19-21, 2010. Published in International Conference on Electrical Systems for Aircraft, Railway and Ship Propulsion, ESARS 2010, art. no. 5665220, 4 pag., ISBN: 978-142449094-3, Document Type: Conference Paper (**IEEEExplore, Inspec, Scopus**)
 176. **Grigorie, T.L.**, Botez, R., Popov, A. „*Adaptive Neuro-Fuzzy Controllers for an Open Loop Morphing Wing System*”, AIAA Guidance, Navigation, and Control Conference, Session 51- GNC-31 - Intelligent Control in Aerospace Applications, 10 - 13 Aug 2009 - Chicago, Illinois, USA. Published in AIAA Guidance, Navigation, and Control Conference and Exhibit, 2009, art. no. 2009-5893, 19 pag., ISBN: 978-156347978-6, Document Type: Conference Paper (**Scopus**)
 177. Popov, A., Botez, R., Mamou, M., **Grigorie, T.L.** „*Temperature variation of optical sensors on a wing during wind tunnel tests*”, AIAA Guidance, Navigation, and Control Conference, Session 12- GNC-8 - Sensor Systems, 10 - 13 Aug 2009 - Chicago, Illinois, USA. Published in AIAA Guidance, Navigation, and Control Conference and

- Exhibit, 2009, art. no. 2009-5661, 12 pag., ISBN: 978-156347978-6, Document Type: Conference Paper (**Scopus**)
178. **Grigorie, T.L.**, Hiliuta, A. “*The optimization of a tunneling accelerometer used in spacecraft autonomous navigation system*”. The 19th AIAA International Communications Satellite Systems Conference, Toulouse, France, 17-20 April, 2001. Published on ICSSC-19 Proceedings - CD-ROM. 2001, 6 Pag., Shelfmark(s): 4538.723230V, UIN: ETOCCN058506058 (**British Library**)
179. Dinca, L., Corcau, J., **Grigorie, T.L.**, Tudosie, A., “*Considerations Concerning Modelling, Analysis and Design of a DC-DC Boost Converter using MULTISIM*”, 1st International Conference on Aeronautical and Mechanical Engineering (AEME '13), Vouliagmeni, Athens, Greece, May 14-16, 2013. Published in Recent advances in robotics, aeronautical and mechanical engineering; (MRERN '13), proceedings of the 1st international conference on aeronautical and mechanical engineering (AEME '13). 2013, pp. 201-206, ISBN: 978-1-61804-185-2, ISSN: 2227-4596, UIN: ETOCCN084886025 (**British Library**)
180. Corcau, J.I., Dinca, L., **Grigorie, T.L.**, Tudosie, A., “*Fuzzy Logic Control of Fuel Cell Based Power Source for Aerospace Applications*”, 1st International Conference on Aeronautical and Mechanical Engineering (AEME '13), Vouliagmeni, Athens, Greece, May 14-16, 2013. Published in Recent advances in robotics, aeronautical and mechanical engineering; (MRERN '13), proceedings of the 1st international conference on aeronautical and mechanical engineering (AEME '13). 2013, pp. 195-200, ISBN: 978-1-61804-185-2, ISSN: 2227-4596, UIN: ETOCCN084886012 (**British Library**)
181. **Grigorie, T.L.**, Negrea, P., Corcau, J., Tudosie, A., Dinca, L., “*About the Capacitive Sensing of the Acceleration in Miniaturized Strap-Down Inertial Navigation Systems*”, 1st International Conference on Aeronautical and Mechanical Engineering (AEME '13), Vouliagmeni, Athens, Greece, May 14-16, 2013. Published in Recent advances in robotics, aeronautical and mechanical engineering; (MRERN '13), proceedings of the 1st international conference on aeronautical and mechanical engineering (AEME '13). 2013, pp. 211-217, ISBN: 978-1-61804-185-2, ISSN: 2227-4596, UIN: ETOCCN084886048 (**British Library**)
182. **Grigorie, T.L.**, Botez, R.M., Sandu, D.G., Obreja, R., “*A redundant bi-dimensional inertial navigator in vertical plane*”, Recent Researches in Circuits and Systems, Kos Island, Greece, July 14-17, 2012. Published in International conference on circuits; Recent researches in circuits and systems, pp. 405-410, ISBN: 978-1-61804-108-1, UIN: ETOCCN083518491 (**British Library**)
183. Dinca, L., Corcau, J., **Grigorie, T.L.**, Jula, N., Mingireanu, F. “*Mathematical modeling and analysis of an electro-hydrostatic servo-actuator with brushless dc motor*”, WSEAS International Conferences-Cambridge, MA, USA, January 29-31, 2014. Published in Applied computer science; Modern computer applications in science and education; (ACS'14), Proceedings of the 2nd international conference on computer supported education (COSUE'14); 2014, pp. 157-163, ISBN: 978-960-474-363-6, UIN: ETOCCN086471760 (**British Library**)
184. Kammegne, M.J.T., Botez, R.M., **Grigorie, T.L.**, Mamou, M., Mebarki, Y. “*A wind tunnel tested control system for a morphing wing actuation mechanism*”, AIAA Atmospheric Flight Mechanics Conference, AIAA Aviation and Aeronautics Forum and Exposition 2016, Washington D.C., 13-17 June 2016. Published in Papers American Institute of Aeronautics and Astronautics. Papers 3100-3399(2016); 2016; pages: 333-345, Journal ISSN: 0065-8707, ETOCCN601678768, Shelfmark(s): 6369.400000, UIN: ETOCCN601678768 (**British Library, CrossRef**)
185. **Grigorie, T.L.** “*A software tool for the vehicles attitude determination by using strap-down inertial techniques*”, 10th World Congress on Computational Mechanics (WCCM 2012), São Paulo, Brazil, 8 -13 July, 2012. Published in Blucher Mechanical Engineering Proceedings, 2014, pp. 3194-3205, ISSN 2358-0828, DOI: 10.5151/meceng-wccm2012-19228, (**CrossRef**)
186. Kammegne, M.J.T., Nguyen, D.H., Botez, R.M., **Grigorie, T.L.** “*Control validation of a morphing wing in an open loop architecture*”, AIAA Modeling and Simulation Technologies Conference, Dallas, TX, 22-26 June, 2015. Published in AIAA Modeling and Simulation Technologies Conference, AIAA AVIATION Forum, (AIAA 2015-2499), 9 pag., doi: 10.2514/6.2015-2499 (**CrossRef**)
187. Khan, S., Botez, R.M., **Grigorie, T.L.** “*A New Method for Tuning PI Gains for Position Control of BLDC Motor Based Wing Morphing Actuators*”, AIAA Modeling and Simulation Technologies Conference, Dallas, TX, 22-26 June, 2015. Published in AIAA Modeling and Simulation Technologies Conference, AIAA AVIATION Forum, (AIAA 2015-2497), 13 pag., doi: 10.2514/6.2015-2497 (**CrossRef**)
188. Kammegne, M.J.T., Botez, R.M., **Grigorie, T.L.** “*Actuation mechanism control in a morphing application with a full-scaled portion of an aircraft wing*”, The 35th IASTED International Conference on Modelling, Identification and Control (MIC 2016), Innsbruck, Austria, February 15-16, 2016. Published in Proceeding (830) Modelling, Identification and Control / 834: Parallel and Distributed Computing and Networks / 835: Software Engineering, 6 pag., DOI: 10.2316/P.2016.830-031, ISBN: 978-1-5108-2110-1 (**Acta Press, CrossRef, WorldCat**)
189. **Grigorie, T.L.**, Corcau, C.L. „*Testing of a smart algorithm for GPS data prediction to fuse them with the high rate inertial data in a quaternionic MEMS-INS/GPS integrated navigator*”, 17th International Multidisciplinary Scientific GeoConference SGEM 2017, Albena, Bulgaria, 29 June - 5 July, 2017. Published in SGEM2017 Conference Proceedings, Vol. 17, Issue 22, pp. 593-600, DOI: 10.5593/sgem2017/22/S09.074, ISBN 978-619-7408-02-7 / ISSN 1314-2704 (**Scopus**)
190. **Grigorie, T.L.**, Sandu, D.G., Corcau, C.L. „*MEMS-INS/GPS data fusion with ANFIS for the prediction of the navigation solution errors during GPS outages*”, 17th International Multidisciplinary Scientific GeoConference SGEM 2017, Albena, Bulgaria, 29 June - 5 July, 2017. Published in SGEM2017 Conference Proceedings, Vol. 17, Issue 22, pp. 405-412, DOI: 10.5593/sgem2017/22/S09.051, ISBN 978-619-7408-02-7 / ISSN 1314-2704 (**Scopus**)

191. **Grigorie, T.L.**, Gresita, C.I., Corcau, J.I., Dinca, L. „*Real time temperature influences estimation and compensation in a miniature three-axial gyro detection unit*”, 17th International Multidisciplinary Scientific GeoConference SGEM 2017, Albena, Bulgaria, 29 June - 5 July, 2017. Published in SGEM2017 Conference Proceedings, Vol. 17, Issue 22, pp. 515-522, DOI: 10.5593/sgem2017/22/S09.064, ISBN 978-619-7408-02-7 / ISSN 1314-2704 (**Scopus**)
192. Gresita, C.I., **Grigorie, T.L.**, „*Systematic cadastre for agricultural land in Romania*”, 17th International Multidisciplinary Scientific GeoConference SGEM 2017, Albena, Bulgaria, 29 June - 5 July, 2017. Published in SGEM2017 Conference Proceedings, Vol. 17, Issue 23, pp. 673-678, DOI: 10.5593/sgem2017/23/S11.084, ISBN 978-619-7408-03-4 / ISSN 1314-2704 (**Scopus**)
193. Dinca, L., Corcau, J.I., **Grigorie, T.L.** „*Energy conversion systems for high altitude pseudo-satellites*”, 17th International Multidisciplinary Scientific GeoConference SGEM 2017, Albena, Bulgaria, 29 June - 5 July, 2017. Published in SGEM2017 Conference Proceedings, Vol. 17, Issue 42, pp. 223-230, DOI: 10.5593/sgem2017/42/S17.029, ISBN 978-619-7408-07-2 / ISSN 1314-2704 (**Scopus**)
194. Corcau, J.I., Dinca, L., **Grigorie, T.L.**, Ureche, E. „*Hybrid power source for pseudo-satellites*”, 17th International Multidisciplinary Scientific GeoConference SGEM 2017, Albena, Bulgaria, 29 June - 5 July, 2017. Published in SGEM2017 Conference Proceedings, Vol. 17, Issue 42, pp. 329-336, DOI: 10.5593/sgem2017/42/S17.041, ISBN 978-619-7408-07-2 / ISSN 1314-2704 (**Scopus**)
195. **Grigorie, T.L.**, Corcau, C.L. „*Evaluation with experimental data of an ANFIS based INS/GPS integrated navigator*”, 18th International Multidisciplinary Scientific Geoconference, SGEM 2018, Albena, Bulgaria, 2 - 8 July, 2018. Published in SGEM2018 Conference Proceedings, Vol. 18, Issue 22, pp. 781-788, DOI: 10.5593/sgem2018/2.2/S09.099, ISSN: 1314-2704 (**Scopus**)
196. **Grigorie, T.L.** „*Tuning and evaluation with experimental data of a smart algorithm for GPS data prediction to fuse them with the high rate INS data*”, 18th International Multidisciplinary Scientific Geoconference, SGEM 2018, Albena, Bulgaria, 2 - 8 July, 2018. Published in SGEM2018 Conference Proceedings, Vol. 18, Issue 22, pp. 1099-1106, DOI: 10.5593/sgem2018/2.2/S09.139, ISSN: 1314-2704 (**Scopus**)
197. **Grigorie, T.L.**, Corcau, C.L., Grigorie, O. „*Intelligent fusion of data in a low-cost INS/GPS integrated navigator*”, 19th International Multidisciplinary Scientific Geoconference, SGEM 2019, Albena, Bulgaria, 30 June - 6 July 2019. Published in SGEM2019 Conference Proceedings, Volume 19, Issue 2.2, Pages 175-182, DOI: 10.5593/sgem2019/2.2/S09.022, ISSN: 1314-2704 (**Scopus**)
198. **Grigorie, T.L.**, Tiganiuc, D., Gresita, C. „*Evaluation of the flight attitude with a low-cost gyro IMU in a redundant configuration*”, 19th International Multidisciplinary Scientific Geoconference, SGEM 2019, Albena, Bulgaria, 30 June - 6 July 2019. Published in SGEM2019 Conference Proceedings, Volume 19, Issue 2.2, Pages 117-126, DOI: 10.5593/sgem2019/2.2/S09.015, ISSN: 1314-2704 (**Scopus**)
199. Nguyen, D.H., Botez, R.M., **Grigorie, T.L.**, Mamou, M., Mébarki, Y. „*Control of a full-scale portion of a regional aircraft morphable wing*”, 30th International Conference on Adaptive Structures and Technologies, ICAST 2019; Concordia University Montreal; Canada; 7 October 2019 through 11 October 2019; Code 158177. Published in Proceedings of 30th International Conference on Adaptive Structures and Technologies, ICAST 2019, 2019, Pages 87-88, Source Type: Conference Proceeding, Document Type: Conference Paper, Volume Editors: Sedaghati R., Chen Y. Publisher: International Conference on Adaptive Structures and Technologies (**Scopus**)
200. Gresita, C.I., **Grigorie, T.L.** „*Monitoring of the vertical deformations of the dam with water intakes Rovinari, Gorj, Romania*”. 20th International Scientific GeoConference, SGEM 2020, Albena, Bulgaria, 16 - 25 August 2020. Published in SGEM2020 Conference Proceedings, Volume: 20, Issue 2.2, Pages: 95-102, DOI: 10.5593/sgem2020/2.2/s09.012, ISBN: 978-619-7603-07-1, ISSN: 1314-2704 (**CrossRef**)
201. **Grigorie, T.L.**, Gresita, C.I., Grigorie, O. „*Closed-loop controlled architecture of a mems capacitive accelerometer with square wave voltage signal excitation*”. 20th International Scientific GeoConference, SGEM 2020, Albena, Bulgaria, 16 - 25 August 2020. Published in SGEM2020 Conference Proceedings, Volume: 20, Issue 2.2, Pages: 35-43, DOI: 10.5593/sgem2020/2.2/s09.005, ISBN: 978-619-7603-07-1, ISSN: 1314-2704 (**CrossRef**)
202. Grigorie, T.L., Jula, N., Adochiei, I.R., Larco, C.M., Mihai, R.V., Pahonie, R.C., Mustata S. “*A MEMS-INS/GPS Positioning Device for Urban Life Mobility Improvement*”, 5th International Conference on Nanotechnologies and Biomedical Engineering, ICNBME 2021, Virtual, Online, 3-5 November, 2021. Published in IFMBE Proceedings, 2022, Volume 87, Pages 163-169, doi: 10.1007/978-3-030-92328-0_22, ISSN: 1680-0737, ISBN: 978-303092327-3 (**Scopus**)

V. Article publicate in reviste/proceedings neindexate

203. Kammege, M.J.T., Botez, R.M., **Grigorie, T.L.**, Mamou, M., Mebarki, Y., “*Aircraft energy consumption limitation through drag reduction based on morphing wing technology - a new multidisciplinary experimental model*”, International Conference & Workshop REMOO-2015, Science and engineering for reliable energy, 18-20 May 2016, Budva, Montenegro, 12 pp
204. **Grigorie, T.L.**, Negrea, P., Mirea, M.C. “*Controlled Architecture of a MEMS Capacitive Accelerometer in Closed Loop*”. 2nd International Symposium on Physics and Technology of Sensors (ISPTS-2), 7-10 March 2015, Pune, India.

205. Negrea, P., **Grigorie, T.L.**, Sandu, D.G. “*Modeling and Testing of a MEMS Strap-Down INS*”. 2015 IEEE International Conference on Engineering and Technology (ICETECH'15), 20th March 2015, Coimbatore, TN, India
206. Edu, I.R., Adochiei, F.C., Obreja, R., Rotaru, C., **Grigorie, T.L.** “*New Tuning Method of the Wavelet Function for Inertial Sensor Signals Denoising*”, 18th International Conference on Circuits, Systems, Communications and Computers (CSCC'14), Santorini Island, Greece, July 17-21, pp. 153-157, 2014, ISBN: 978-1-61804-240-8
207. **Grigorie, T.L.**, Botez, R.M., Sandu, D.G., Grigorie, O. „*Experimental Testing of a Data Fusion Algorithm for Miniaturized Inertial Sensors in Redundant Configurations*”, Proceedings of the 2014 International Conference on Mathematical Methods, Mathematical Models and Simulation in Science and Engineering (MMSSE '14) - EUROPMENT, ISBN: 978-1-61804-219-4, pp. 116-122, Interlaken, Switzerland, February 22-24, 2014
208. Sandu, D.G., **Grigorie, T.L.**, Dodu, P.E. “*Development of the Error Model for a Strap-Down Inertial Navigator*”, 1st International Conference New Challenges in Aerospace Sciences (NCAS 2013), Bucharest, 7-8 November, 2013, pp. 201-216, ISSN: 2344-4762, Editura PRINTECH
209. Negrea, P., Edu, I.R., **Grigorie, T.L.**, “*A Closed Loop Capacitive Miniaturized Accelerometer*”, 1st International Conference New Challenges in Aerospace Sciences (NCAS 2013), Bucharest, 7-8 November, 2013, pp. 185-188, ISSN: 2344-4762, Editura PRINTECH
210. Edu, I.R., Adochiei, F., Negrea, P., Obreja, R., Cepisca, C., **Grigorie, T.L.**, “*Fabrication Technologies for Miniaturized Accelerometers and Gyros*”, 1st International Conference New Challenges in Aerospace Sciences (NCAS 2013), Bucharest, 7-8 November, 2013, pp. 214-218, ISSN: 2344-4762, Editura PRINTECH
211. Corcau, J.I., Dinca, L., **Grigorie, T.L.**, “*Computerised Tester for Monitoring Inverters Dynamic Behaviour*”, 1st International Conference New Challenges in Aerospace Sciences (NCAS 2013), Bucharest, 7-8 November, 2013, pp. 180-184, ISSN: 2344-4762, Editura PRINTECH
212. Negrea, P., **Grigorie, T.L.**, Dinca, L., Corcau, J., “*Modeling and numerical simulation of an open-loop miniature capacitive accelerometer for inertial navigation applications*”, European Air & Space Conference (CEAS 2013), Linköping, Sweden, 16-19 September, 2013, ISBN: 978-91-7519-519-3, pp. 323-329
213. **Grigorie, T.L.**, Corcau, J., Edu, I., Grigorie, O., “*Fuzzy Logic Controller for a DC Motor Drive Used in a Bench Test Platform for Strap-Down Inertial Navigation Systems Sensors*”, International Conference on Aerospace and Mechanical Systems Engineering - ICAMSE 2013, Dubai, United Arab Emirates, March 05-06, 2013, ISSN: 2010-376X, pp. 179-182
214. **Grigorie, T.L.**, Edu, I.R., Obreja, R., Botez, R.M., “*An attitude software tool based on a matrix method*”, The ARA 36th International Congress, (Presses Internationales, Polytechnique Montreal), Bari, Italy, May 30-June 2, 2012, ISBN: 978-2-553-01635-6, pp. 113-116
215. **Grigorie T.L.**, Botez R.M., Sandu D.G., “*Navigation solution errors reduction through inertial sensors data fusion in a redundant bi-dimensional strap-down inertial navigator*”. 3rd International Conference on Engineering Optimization - EngOpt 2012, Rio de Janeiro, Brazil, 01-05 July, 2012, ISBN 978-85-7650-344-6, 7 pag.
216. **Grigorie, T.L.**, Lungu, M., Edu, I.R., Obreja, R., “*Influences of the miniaturised inertial sensors errors on the navigation solution in a bidimensional SDINS in vertical plane*”, 4th International Conference on Computational Mechanics and Virtual Engineering (COMEC2011), 20-22 October, Brasov, Romania, 2011, ISBN: 978-973-131-122-7, 6 pag.
217. **Grigorie, T.L.**, Lungu, M., Edu, I.R., Obreja, R., “*Concepts for error modeling of miniature gyros used in inertial navigation systems*”, Proceedings of the IEEE International Conference on Mechanical Engineering, Robotics and Aerospace (ICMERA 2010), Bucharest, 1-4 December, Section 4, 5 pag., ISBN: 978-1-4244-8867-4
218. **Grigorie, T.L.**, Lungu, M., Corcau, J.I., Edu, I.R., Obreja, R. “*Miniaturised Strap-Down Gyro Performance Improvement through On-Line Bias Correction over Temperature*”, Proceedings of the IEEE International Conference on Mechanical Engineering, Robotics and Aerospace (ICMERA 2010), Bucharest, 1-4 December, Section 4, 5 pag., ISBN: 978-1-4244-8867-4
219. **Grigorie, T.L.**, Corcau, J.I., Sandu, D.G., Lungu, M. “*Bi-Dimensional Position Detection Using TDOA Estimation through Cross Correlation of the Acoustic Signals. Part 2: Experimental testing and validation*”, Proceedings of the 7th International Conference on ICT and Knowledge Engineering, Siam University, Bangkok, Thailand, 1-3 Dec., 2009, pp. 33-37, ISBN: 978-1-4244-4513-4
220. Botez, R.M., **Grigorie, T.L.**, Popov, A.V. “*Laminar to Turbulent Flow Transition Control on a Morphing Wing Equipped with Smart Actuators and Optical Sensors*”. Applied Vehicle Technology Symposium on Morphing Vehicles (AVT-168/RSY 025) of NATO Research & Technology Organization, Evora, Portugal, 20-23 April, 2009 Published in Meeting Proceedings
221. Popov, A.V., Botez, R.M., Mamou, M., Mébarki, Y., Jahrhaus, B., Khalid, M., **Grigorie, T.L.** “*Drag Reduction by Improving Laminar Flows Past Morphing Configurations*”. Applied Vehicle Technology Symposium on Morphing Vehicles (AVT-168/RSY 025) of NATO Research & Technology Organization, Evora, Portugal, 20-23 April, 2009. Published in Meeting Proceedings
222. Botez, R.M., **Grigorie, T.L.**, Hiliuta, A. “*Analytical and simulation method validation for flutter aeroservoelasticity studies*”, Applied Vehicle Technology, AVT-154, Advanced Methods in Aeroelasticity NATO Meeting, Loen, Norway, 5-8 may, 2008, 32 pages. Published in Meeting Proceedings
223. **Grigorie, T.L.**, Botez, R.M. “*Neuro fuzzy techniques for an accelerometer bias temperature dependence estimation and compensation*”, International Conference on Avionics Systems, Hyderabad, India, 22-23 February,

224. **Grigorie, T.L.,** Sandu, D.G. “*About the navigation in terrestrial non-inertial frames using the attitude quaternions*”. The 38th International Scientific Symposium of the Military Equipment and Technologies Research Agency, Bucharest, Romania, 30 October, 2007
225. **Grigorie, T.L.,** Sandu, D.G. “*The Sagnac effect interpretations with applications in optoelectronic gyro sensors*”. The 38th International Scientific Symposium of the Military Equipment and Technologies Research Agency, Bucharest, Romania, 30 October, 2007
226. Botez, R.M., **Grigorie, T.L.,** Hiliuta, A, “*Rigid-control modes interactions for aeroservoelasticity studies*”. The 31st American Romanian Academy of Arts and Sciences ARA Congress, Brasov, Romania, 31 July - 5 august, 2007
227. **Grigorie, T.L.,** Sandu, D.G., Aron, I. “*Redundancy achievement and accelerometer’s noise reduction in low-cost strap-down inertial navigation systems*”. The AIAA/IEEE International Conference on Nonlinear Problems in Aviation and Aerospace ICNPAA, Budapest, Hungry, 21-23 June, 2006
228. **Grigorie, T.L.,** Sandu, D.G., Aron, I. “*Numerical simulation of a new strap-down attitude algorithm*”. The 37th International Scientific Symposium of the Military Equipment and Technologies Research Agency, Bucharest, 25-26 may, 2006
229. **Grigorie, T.L.** “*About the coordinate transformations used in strap-down inertial navigation*”. The XIXth Scientific Session with International Participation, "NAV-MAR-EDU 2005", Constanta, Romania, 2-4 june, 2005. Published on CD
230. **Grigorie, T.L.** “*On the solving of the differential quaternionic equation of attitude*”. The XIXth Scientific Session with International Participation, "NAV-MAR-EDU 2005", Constanta, Romania, 2-4 june, 2005. Published on CD
231. **Grigorie, T.L.** “*Rotations vectors and quaternions associated to the attitude changes in strap-down inertial systems*”. The 36th International Scientific Symposium of the Military Equipment and Technologies Research Agency, Bucharest, Romania, 26-27 may 2005, Vol. II, pp. 111-118
232. **Grigorie, T.L.** “*A solution of the attitude’s matriceal Poisson equation*”. The 36th International Scientific Symposium of the Military Equipment and Technologies Research Agency, Bucharest, Romania, 26-27 may 2005, Vol. II, pp. 53-60
233. Lungu, R., **Grigorie, T.L.** “*A calculation method of the compensation bridge of cold junctions temperature variation at the thermocouples*”. XIIth International Symposium on Electrical Apparatus and Technologies SIELA 2001, Plovdiv, Bulgaria, 31 may - 1 june, 2001, pp. 188-196
234. Lungu, R., **Grigorie, T.L.,** Lungu, M. “*Electronic control system of the aircraft pitch control linkage ratio*”. XIIth International Symposium on Electrical Apparatus and Technologies SIELA 2001, Plovdiv, Bulgaria, 31 may - 1 june, 2001, pp. 197-205
235. **Grigorie, T.L.,** Lungu, R. “*Measurement of the accelerations using a fiber Bragg grating transducer*”. The XXXIIth Scientific Session with International Participation of the Military Equipment and Technologies Research Agency, Bucharest, Romania, 12-13 April, 2001
236. Lungu, R., Dumitru, E., **Grigorie, T.L.** “*The automatic control of the longitudinal command transmission ratio for aircraft using the computer*”. The International Congress on Simulators and Simulations - Powerful Means Enabling Allied Forces to Reach Interoperability, Brno, Czech Republic, 3 - 5 may, 2001
237. Lungu, R., **Grigorie, T.L.** “*The gyrohorisons testing at transversal inclination*”. National Sessions of Scientific Communications - Aviation and Air Defense Academy “Henry Coanda”, Brasov, Romania, 16-17 November, 2000, pp. 201-207
238. Hiliuta, A., **Grigorie, T.L.** “*A method of the determination of the amplitude-frequency characteristics*”. The International Conference on Applied and Theoretical Electricity, Craiova, Romania, 25-26 may, 2000, pp. 284-287
239. Lungu, R., Hiliuta, A., **Grigorie, T.L.** “*The interferometric fiber optic gyroscope in closed loop*”. The International Conference SIELMEN’99, Chisinau, Moldova Republic, 8-9 October, 1999, pp. 83-88
240. Lungu, R., **Grigorie, T.L.** “*Dynamic characteristics of nonlinear gyrohorisons*”. The International Conference on Applied and Theoretical Electricity (ICATE), Craiova, Romania, 4-6 June, 1998, pp. 132-138
241. **Grigorie, T.L.,** Sandu, D.G., Corcau, C.L. “*Positioning errors prediction through MEMS-INS/GPS data fusion*”. 5th International Conference on Engineering & Technology, Computer, Basic & Applied Sciences (ECBA- 2016), Athens, Greece, December 15-16, 2016, ISBN: 978-969-683-123-5, 6 pag.
242. **Grigorie, T.L.,** Lungu, M., Edu, I.R., Obreja R., “*A tool for the aircrafts attitude determination*”, International Conference NAV-MAR EDU – 2011, Constanta, Romania, November 11-13, 2011, papers published in “Scientific Bulletin of Naval Academy”, ISSN: 1454 – 864X, Volume XIV, Issue no. 1/2011, pp. 56-63 (**ProQuest, DOAJ, WorldCat**)
243. **Grigorie, T.L.,** Popov, A.V., Botez, R.M., Mamou, M., Mebarki, Y., “*Application of Fuzzy Logic in the Design and Control of a Morphing Wing Using Smart Material Actuators*”. 58th CASI Aeronautics Conference – AERO 2011, 26-28 April, Montreal, Canada.
244. **Grigorie, T.L.,** Obreja, R., Botez, R.M., Sandu, D.G., “*Error model of a bidimensional SDINS in vertical plane*”, 58th CASI Aeronautics Conference – AERO 2011, 26-28 April, Montreal, Canada.
245. **Grigorie, T.L.,** Lungu, M., Edu, I.R., Obreja, R. “*Analysis of the Miniaturized Inertial Sensors Stochastic Errors with the Allan Variance Method: A Review*”, Proceedings of the International Conference of Aerospace Sciences

- “AEROSPATIAL 2010”, Bucharest, 20-21 October, 2010, Section 5, pp. 428-437, ISSN: 2067-8614 (**WorldCat**)
246. **Grigorie, T.L.**, Botez, R.M., Popov, A.V., “*Wind tunnel validation of a closed loop morphing wing system*”, Proceedings of the International Conference of Aerospace Sciences “AEROSPATIAL 2012”, ISSN: 2067-8614, pp. 205-211, Bucharest, 11-12 October, 2012 (**WorldCat**)
 247. Edu, I.R., Adochiei, F.C., Negrea, P., Rotaru, C., **Grigorie, T.L.**, “*Tuning Method of the Wavelet Function for Gyro Sensor Signals Denoising with Wavelet Transform*”, International Conference of Aerospace Sciences “AEROSPATIAL 2014”, 18 - 19 September, 2014, Bucharest, Romania, ISSN: 2067-8614, pp. 305-310 (**WorldCat**)
 248. **Grigorie, T.L.**, Popov, A.V., Botez, R.M., Mamou, M., Mebarki, Y., „*Smart concepts for actuation system and its control in a morphing wing*”, Proceedings of the XXXIInd “Caius Iacob” National Conference on Fluid Mechanics and its Technical Applications, September 29-30, Bucharest, Romania, 2011, ISSN: 2067-4414, pp. 87-100 (**WorldCat**)
 249. Popov, A.V., **Grigorie, T.L.**, Botez, R.M. “*Controller for a Morphing Wing on a Bench Test*”, AERO 2009 Conference, 13th CASI Aeronautics Conference and 56th Annual General Meeting, 17th Annual Conference of the CFD Society of Canada, Kanata, Ontario, Canada, 5 – 7 May, 2009
 250. **Grigorie, T.L.**, Sandu, D.G., Corcau, J.I. “*Impact point horizontal position estimation using an acoustic sensors system in a redundant configuration*”. Conference of the International Journal of Arts and Sciences, ISSN: 1943-6114, Vol. 1(16), Toronto, Ontario, Canada, 25-28 May, 2009 (**WorldCat**)
 251. Aron, I., **Grigorie, T.L.** “*Regimurile dinamice ale unui microaccelerometru*”. Electrotehnică, Electronică, Automatică. Nr. 4, 2004, pp. 23-27, ISSN: 1582-5175 (**WorldCat**)
 252. Aron, I., **Grigorie, T.L.** “*Simularea unui circuit de detecție din accelerometrele capacitive*”. Revista Electrotehnică, Electronică, Automatică. Nr. 3, 2004, pp. 1-6, ISSN: 1582-5175 (**WorldCat**)
 253. Aron, I., **Grigorie, T.L.** “*Detecția rotației cu girometrul laser*”. Revista Electrotehnică, Electronică, Automatică, Nr. 2, 2004, pp. 41-43, ISSN: 1582-5175 (**WorldCat**)
 254. Lungu, R., **Grigorie, T.L.** “*Un giometru interferometric cu fibră optică*”. Revista Electrotehnică, Electronică, Automatică, Nr. 7-8, 1999, pp. 9-13, ISSN: 0376-4745 (**WorldCat**)
 255. Sandu, D. G., **Grigorie, T.L.** “*Impact point determination for the air-dropped bombs by means of acoustic methods. Part 1: Case analyze and numerical simulation*”. Annals of the University of Craiova, Electrical Engineering series, No. 32, 2008, pp. 245-250, ISSN 1842-4805 (**WorldCat**)
 256. Sandu, D. G., **Grigorie, T.L.** “*Impact point determination for the air-dropped bombs by means of acoustic methods. Part 2: Experimental study*”. Annals of the University of Craiova, Electrical Engineering series, No. 32, 2008, pp. 251-256, ISSN 1842-4805 (**WorldCat**)
 257. **Grigorie, T.L.** “*About the dynamical regimes of the accelerometers*”. 7th International Conference on Applied and Theoretical Electricity (ICATE 2004), Băile Herculane, Romania, 14-15 October, 2004, pp. 535-538 (**WorldCat**)
 258. **Grigorie, T.L.**, Lungu, M., Georgescu, A. “*Aircraft’s attitude angles determination using board computer and strap-down rate gyros*”. 7th International Conference on Applied and Theoretical Electricity (ICATE 2004), Băile Herculane, Romania, 14-15 October, 2004, pp. 539-542 (**WorldCat**)
 259. Kammegne, M.J.T., Botez, R.M., Mamou, M., Mebarki, Y., Koreanschi, A., Sugar Gabor, O., **Grigorie, T.L.** “*Experimental wind tunnel testing of a new multidisciplinary morphing wing model*”. 18th International Conference on MATHEMATICAL METHODS, COMPUTATIONAL TECHNIQUES and INTELLIGENT SYSTEMS (MAMECTIS '16), Venice, Italy, January 29-31, 2016, published in „ADVANCES IN MATHEMATICS AND COMPUTER SCIENCE AND THEIR APPLICATIONS”, pp. 90-97, ISBN: 978-1-61804-360-3
 260. Kammegne, M.J.T., Botez, R.M., **Grigorie, T.L.**, Mamou, M., Mebarki, Y. „*A fuel saving way in aerospace engineering based on morphing wing technology - a new multidisciplinary experimental model*”, International Journal of Contemporary ENERGY, ISSN: 2363-6440, Vol. 2, No. 2, pp. 11-21, 2016 (**WorldCat, ResearchBib**)
 261. **Grigorie, T.L.**, Botez, R.M. “*Positioning Monitoring Improvement in a Horizontal Plane INS by Using Fuzzy Logic Data Fusion for Denoising of Inertial Sensors in Redundant Clusters*”, 19th International Conference on Circuits, Systems, Communications and Computers, (CSCC 2015), Zakynthos, Greece, July 16-20, 2015, INTERNATIONAL JOURNAL OF FUZZY SYSTEMS and ADVANCED APPLICATIONS, ISSN: 2313-0512, pp. 33-40, Volume 2, 2015 (**WorldCat**)
 262. **Grigorie, T.L.**, Botez, R.M., Edu, I.R., “*Attitude Estimation by Using a Minimum Variance Data Fusion Method in a Redundant Three-Axial Gyro MEMS Detection Unit*”, 2nd International Workshop on Numerical Modelling in Aerospace Sciences (NMAS 2014), Bucharest, Romania, ISSN: 2360–1809, 07 - 08 May 2014
 263. Botez, R.M., Koreanschi, A., Sugar Gabor, O., Mebarki, Y., Mamou, M., Tondji, Y., Brianchon, G., Tchatchueng, J., Guezguez, M., Flores Salinas, M., **Grigorie, T.L.**, Carranza, O., Amoroso, F., Pecora, R., Lecce, L., Amendola, G., Dimino, I., Concilio, A. “*Innovative Wing Tip Equipped with Morphing Upper Surface and Morphing Aileron for Greener Aviation*”, Greener Aviation 2016, October 11-13, 2016, Brussels, Belgium
 264. **Grigorie, T.L.**, Sandu, D.G. “*A validation platform for INS/GPS integrated navigators based on interest parameters real-time visualization*”, ISSC 2016 - International Conference the Logics of Image: Visualization, Iconicity, Imagination and Human Creativity, Santorini, 25-30 July 2016
 265. **Grigorie, T.L.**, Edu, I.R., Adochiei, F.C., Botez, R.M. “*Denoising of the gyro data for inertial positioning based JSD method and wavelet transform*”. 39th ARA (American Romanian Academy of Arts and Sciences) Congress,

266. **Grigorie, T.L.**, Sandu, D.G., Edu, I.R., “*Attitude estimation using redundant inertial systems and fuzzy techniques for data fusion*”, In “*Experience and realizations in the testing and evaluation of the aeronautics and military products*” workshop organized by the “In flight research and test center” Craiova, 29 May, 2014
267. **Grigorie, T.L.**, Sandu, D.G., Edu, I., Adochiei, F.C., Obreja R., “*A smart control structure of a closed-loop miniature accelerometer*”, International Journal of Arts & Sciences (IJAS) Conference, Paris, France, April 8-11, 2013
268. **Grigorie, T.L.**, Popov, A.V., Botez, R.M., Mamou, M., Mebarki, Y., “*Intelligent control of smart actuators in a new closed loop morphing wing mechanism*”, 22nd International Conference on Adaptive Structures and Technologies (ICAST2011), October 10-12, Corfu, Greece, 2011
269. **Grigorie, T.L.**, Corcau, C.L. “*ANFIS based algorithm for the prediction of low rate GPS data in an INS/GPS integrated navigator*”, 41st Congress of the American Romanian Academy of Arts and Sciences (ARA-2017), Craiova, Romania, July, 19-22, 2017
270. Botez, R.M., Tchatchueng Kammegne, M.J., **Grigorie, T.L.**, Mamou, M., Mebarki, Y., “*Wind tunnel testing of a morphing wing experimental model for a regional aircraft*”. In 8th European Aeronautics Days, Bucharest, Romania, May 27-30, 2019.

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