

LISTĂ GRANTURI, PATENTE SI PUBLICAȚII REPREZENTATIVE

COORDONARE GRANTURI DE CERCETARE INTERNAȚIONALE:

1. 2020-2023 – **Director** al grantului internațional “Improving Cancer Diagnostics in Flexible Endoscopy using Artificial Intelligence and Medical Robotics – IDEAR”, NORWAY Grants 2019 – RO-NO-2019-0138, Contract 19/2020 finanțat de Norvegia.
2. 2014-2017 – **Director** al grantului de cercetare internațional “Navigation system for confocal laser endomicroscopy to improve optical biopsy of peripheral lesions in the lungs - NAVICAD”, finanțat prin Mecanismul Financiar SEE 2009-2014, EEA-JRP-RO-NO-2013-1-0123, Contract: 3SEE/23.06.2014.

COORDONARE GRANTURI DE CERCETARE NAȚIONALE:

1. 2020-2022 – **Director** al grantului “Innovative endo-navigation robotic system”, PED-2019-5842, PN-III-P2-2.1-PED-2019-2449, finanțat de UEFISCDI.
2. 2017-2019 - **Director** al grantului de cercetare "Dispozitiv inovativ portabil de insuflare, pentru oprirea hemoragiei abdominale necontrolate in cazuri de trauma in mediul civil si militar - PAID", Contract No. PED244/2017, PN-III-P2-2.1-PED-2016-1587.
3. 2016-2020 – **Co-Director** al grantului de cercetare “Consolidarea capacitatii de cercetare-dezvoltare in imagistica si tehnologie avansata pentru proceduri medicale minim invazive - iMTECH”, ID P_37_357, Cod SMIS: 103633, Contract nr. 65/08-09-2016, finanțat de Ministerul Fondurilor Europene in cadrul POC.
4. 2014-2016 – **Responsabil Partener** in cadrul grantului de cercetare “Bypass Gastroenteral Pentru Pacienții Obezi Și Diabetici Bazat Pe Intervenții Minimal Invazive Endoscopice (GEMINI)”, finanțat de Ministerul Educației si Cercetării Contract No. PN-II-PT-PCCA-2013-4-1257, Nr. 12/2014.
5. 2014-2016 – **Responsabil Partener** in cadrul grantului de cercetare “Sistem medical inovativ pentru monitorizarea tensiunilor interne in tesutul tumoral in scopul imbunatatirii tratamentului oncologic (TUMORSENSE)”, finanțat de Ministerul Educației si Cercetării Contract No. PN-II-PT-PCCA-2013-4-1105.
6. 2012-2015 – **Director** al grantului "Image and electromagnetic guided innovative system for transbronchial biopsy (TRANS-BITE)", finanțat de Ministerul Educației si Cercetării Contract No. 87/2012.
7. 2012-2015 – **Responsabil partener** in grantul "Hyperthermic magnetic nanoparticle ablation of liver and pancreatic tumors (NANO-ABLATION)", finanțat de Ministerul Educației si Cercetării, Contract No. PN-II-PT-PCCA-2011-3.1-0252.
8. 2010-2012 – **Director** al grantului “Sistem inovativ pentru diagnosticul precoce, stadializarea exactă și monitorizarea tratamentului pacienților cu tumori digestive și bronhopulmonare (TRIGGER)”, cofinanțat din Fondul Social European de Dezvoltare Regională prin Programul Operațional Sectorial “Creșterea Competitivității Economice” în baza contractului nr. 285/16-12-2010, ID nr 983 Cod SMIS-CSNR 19782.
9. 2007-2009 – **Director** al grantului “Perfecționarea artroplastiei de revizie a articulației șoldului în urma evaluării biomecanice utilizând modelele computaționale parametrizate, adaptabile la pacient”, finanțat de CNCIS, nr. Contract 29C/08.05.2007.
10. 2006-2008 - **Responsabil științific** pentru Universitatea din Craiova in cadrul proiectului CEEEX “Îmbunătățirea pe termen lung a calității vieții pacienților cu artroplastii, prin creșterea duratei de funcționalitate a endoprotezelor”, finanțat de Ministerul Educației si Cercetării, nr. contract 131/2006.
11. 2006-2008 - **Responsabil științific** pentru Universitatea din Craiova in cadrul proiectului CEEEX “Managementul individualizat al recuperării mobilitatii pacientilor cu patologii neurologice si ortopedice prin prisma unor metodologii de cercetare interdisciplinare”, finanțat de Ministerul Educației si Cercetării, nr. contract 107/2006.
12. 2004–2006 - **Director** al grantului „Metoda computationally pentru evaluarea capacitatii hemodinamice si de distributie a oxigenului in retelele microvasculare construite pentru ingineria tesuturilor”, finanțat de Academia Română, Contract nr 125/2.09.2005.
13. 2004 - 2006 - **Director** al grantului „Studii prin metoda elementelor finite privind influența formei și a materialului asupra performanțelor în utilizare a endoprotezele de genunchi”, finanțat de CNCIS, Contract nr. 27661/14.03.2005.

14. 2002-2004 - **Director** al grantului „*Model biomecanic virtual pentru investigarea, studiul cinematic și optimizarea protezelor utilizate în corectarea deficiențelor locomotorii*”, finanțat de CNCSIS, nr. contract 33547-2003, cod 298 AT.

PARTICIPĂRI ÎN GRANTURI INTERNAȚIONALE

1. 2013-2016 – NCN (**National contact node**) FP7-HEALTH-2013-INNOVATION-1 grant: “Roadmap for Research and Innovation in Health Technology – ITECH”, supported by European Commission, FP7 Directorate-General for Research & Innovation [RTD] [2013-2016] CSA-SA 602667-2.
2. 2007-2011 – **cercetător** în grantul “*Image-Guided Transbronchial Biopsy with Novel Biopsy Device*”, în colaborare cu ISIS Center, Georgetown University, Washington, SUA, și Catholic University, Washington USA, finanțat de TATRC BAA, SUA.
3. 2006-2007 – **cercetător** în cadrul grantului „*Periscopic Spine Surgery*”, Georgetown University, Washington, SUA, Nr Grant: DAMD17-99-1-9022 finanțat de U.S. Army.
4. 2001-2002 - **cercetător** în cadrul grantului “*High-Fidelity Synthetic Human Torso for Training and Evaluation of Urologic Laparoscopic Skills*”, Johns Hopkins University, USA, finanțat de “American Foundation for Urologic Disease”, SUA, Nr. grant: PHD0103.
5. 2002- **cercetător** în cadrul grantului “*Multi-Imager Compatible Robot for Precise Prostate Access*”, Johns Hopkins University, USA, finanțat de National Institute of Health – National Cancer Institute, SUA Nr. grant 1R21CA088232-01A1

CAPITOLE DE CĂRȚI LA EDITURI INTERNAȚIONALE:

1. G. Gruionu, L.G. Gruionu, G. Velmahos, Cap: The Winning Team: Science, Knowledge, Industry, and Information, The Modern Hospital: Patients Centered, Disease Based, Research Oriented, Technology Driven, Editors: Latifi, Rifat, Pag. 175-186, Springer, ISBN 978-3-030-01394-3, 2019.
2. Gabriel Benga, Oana Gingu, Ion Ciupitu, **Lucian Gruionu**, Ileana Pascu and Jose Calderon Moreno (2010). Processing and Laser Micromachining of HAP Based Biocomposites, Engineering the Future, Laszlo Dudas (Ed.), ISBN: 978-953-307-210-4, Sciyo, Available from: <http://www.intechopen.com/articles/show/title/processing-and-laser-micromachining-of-hap-based-biocomposites>

ARTICOLE ȘTIINȚIFICE ÎN JURNALE ȘI CONFERINTE INTERNAȚIONALE – selecție din ultimii 10 ani:

- 1 Anca Loredana Udristoiu, Daniela Stefanescu, Gabriel Gruionu, Lucian Gheorghe Gruionu, Andreea Valentina Iacob, John Gasdal Karstensen, Peter Vilman, Adrian Saftoiu, Deep Learning Algorithm for the Confirmation of Mucosal Healing in Crohn's Disease, Based on Confocal Laser Endomicroscopy Images, Deep Learning Algorithm for the Confirmation of Mucosal Healing in Crohn's Disease, Based on Confocal Laser Endomicroscopy Images, 2021/3/12, Vol. 30, Nr. 1, pg. 59-65.
- 2 Elena Codruta Constantinescu, Anca-Loredana Udriștoiu, Ștefan Cristinel Udriștoiu, Andreea Valentina Iacob, Lucian Gheorghe Gruionu, Gabriel Gruionu, Larisa Săndulescu, Adrian Săftoiu, Transfer learning with pre-trained deep convolutional neural networks for the automatic assessment of liver steatosis in ultrasound images, Medical Ultrasonography, 2020/12/29.
- 3 Silviu Daniel Preda, Cătălin Ciobîrcă, Gabriel Gruionu, Andreea Șoimu Iacob, Konstantinos Sapalidis, Lucian Gheorghe Gruionu, Ștefan Castravete, Ștefan Pătrașcu, Valeriu Șurlin, Preoperative Computer-Assisted Laparoscopy Planning for the Minimally Invasive Surgical Repair of Hiatal Hernia, Diagnostics (Basel) 2020 Aug 21;10(9): E621. doi: 10.3390/diagnostics10090621. (IF=3.11).
- 4 Udriștoiu, Anca-Loredana; Stanca, Ariana Elena; Ghenea, Alice Elena; Vasile, Corina Maria; Popescu, Mihaela; Udriștoiu, Ștefan Cristinel; Iacob, Andreea Valentina; Castravete, Ștefan; Gruionu, Lucian Gheorghe; Gruionu, Gabriel, Skin Diseases Classification Using Deep Learning Methods, Current health sciences journal, Volume:46 Issue:2 Pages:136-140, DOI:10.12865/CHSJ.46.02.06 (1/10*60=6).
- 5 Ștefan Castravete, Dumitru Mazilu, Lucian Gheorghe Gruionu, Cristian Militaru, Sebastian Militaru, Anca-Loredana Udriștoiu, Andreea Valentina Iacob, Gabriel Gruionu, Finite Element Analysis of a Novel Aortic Valve Stent, Current Health Sciences Journal, V46, 3, 290, 2020.

- 6 Gruionu Lucian Gheorghe, Constantinescu Cătălin, Iacob Andreea, Gruionu Gabriel, "Robotic System for Catheter Navigation during Medical Procedures", Applied Mechanics and Materials, ISSN: 1662-7482, Vol. 896, pp 211,2020, Trans Tech Publications Ltd, Switzerland.
- 7 Gruionu, Gabriel; Gruionu, Lucian Gheorghe; Duggan, Michael; et al. Driven, Editors: Latifi, Rifat, Pag. 175-186, Springer, ISBN 978-3-030-01394-3, 2019. Feasibility of a Portable Abdominal Insufflation Device for Controlling Intraperitoneal Bleeding After Abdominal Blunt Trauma, SURGICAL INNOVATION, Volume: 26 Issue: 6 Pages: 662-667, 2019 (IF=1.472) (1/6*200=33.33).
- 8 Udristoiu, A; Gruionu, LG; Gruionu, G; Iacob, AV; Burtea, DE; Ungureanu, BS; Costache, MI; Popescu, CF; Saftoiu, A, "Real-time differential diagnosis of focal pancreatic masses based on convolutional neural networks and advanced endoscopic ultrasound imaging combining gray-scale, color doppler, contrast-enhancement and elastography", GASTROINTESTINAL ENDOSCOPY, Volume: 89 Issue: 6 Pages: AB80-AB80 Supplement: S, DOI: 10.1016/j.gie.2019.04.059, Jun 2019.
- 9 Cazacu, IM; Udristoiu, A; Gruionu, LG; Iacob, A; Gruionu, G; Saftoiu, A; "Artificial intelligence in pancreatic cancer: Toward precision diagnosis", ENDOSCOPIC ULTRASOUND, Volume: 8 Issue: 6 Pages: 357-359, 2019.
- 10 Gruionu Lucian Gheorghe, Constantinescu Catalin, Soimu-Iacob Andreea, Ciobirca Catalin, Udristoiu Anca, Pastrama Stefan Dan, Gruionu Gabriel, "Semi-automatic guidance of a biopsy catheter to peripheral airways targets using a novel robotic and computer navigation system", Materials Today - Proceedings, Volume: 12 Pages: 304-308, Part: 2, 2019
- 11 Lucian Gheorghe Gruionu, Cătălin Constantinescu, Cătălin Ciobircă, Andreea Soimu (Iacob), Anca Loredana Udristoiu, Adrian Săftoiu, Gabriel Gruionu, "Robotic and Electromagnetic Navigation System for Automatic Guidance of Biopsy Catheters to Peripheral Pulmonary Airway Targets", Computer Assisted Radiology and Surgery, Berlin, 2018.
- 12 Lucian Gruionu, Catalin Ciobirca, Anca Udristoiu, Andreea Soimu, Valeriu Surlin, Stefan Patrascu, Gabriel Gruionu, "Innovative portable insufflation device to stop uncontrolled abdominal bleeding", WCB 2018 - 8th World Congress of Biomechanics, Dublin 2018.
- 13 Catalin Ciobirca, Anca Udristoiu, Gabriel Gruionu, Andreea Soimu, Valeriu Surlin, Stefan Patrascu, Calin Tiu, Lucian Gheorghe Gruionu, "Planning and simulation software for laparoscopic surgery", European Association for Endoscopic Surgery and other Interventional Techniques - 26th Congress 2018, London, 2018.
- 14 Constantinescu Catalin, Lucian Gruionu, Cerbulescu Catalin, "Low cost and easy to use programmable driver for DC micromotors used in high precision multi axis motion system", May 2017, DOI10.1109/CarpathianCC.2017.7970397, Conference: 2017 18th International Carpathian Control Conference (ICCC).
- 15 Ciobirca C, Gruionu G, Lango T, Leira HO, Gruionu LG, Amundsen T, Nutu E, Pastrama SD, "An algorithm to obtain a theoretical model of the bronchial tree", MATERIALS TODAY-PROCEEDINGS, Volume: 4 Issue: 5 Pages: 5761-5766 Part: 1, Published: 2017
- 16 Gruionu G, Bazou D, Mainmon N, Lenco M, Gruionu L, Huang P, Munn L, "Implantable tissue isolation chambers for in vivo tumor dynamics analysis", Biomedical Engineering Society Annual Conference, Phoenix, USA, 2017.
- 17 Nicolae Scarisoreanu, Lucian Gruionu, Gabriel Gruionu. Novel Biocompatible Piezoelectric Microsensor for Cancer and Soft Tissue Treatment Monitoring. BMES Annual Meeting, Phoenix, AZ, SUA.
- 18 Erlend Fagertun Hofstad, Hanne Sorger, Janne Beate Lervik Bakeng, Lucian Gruionu, Håkon Olav Leira, Tore Amundsen and Thomas Langø, "Intraoperative localized constrained registration in navigated bronchoscopy", MEDICAL PHYSICS, DOI: 10.1002/mp.12361, Volume 44, Issue 8, August 2017, Pages 4204–4212.
- 19 Gruionu L.G., Streba C., Săftoiu A., Lango T., Gruionu G., „Evaluation of a novel navigation system for bronchoscopy using a deformable lung phantom”, Computer Assisted Radiology and Surgery, Barcelona, 2017.
- 20 Ciobirca C., Udristoiu A., Lango T., Pastrama S., Gruionu G., Gruionu L., „Virtual bronchoscopy and path planning without tracheobronchial tree segmentation”, Computer Assisted Radiology and Surgery, Barcelona, 2017.
- 21 Costin Teodor Streba, Ana Maria Gîltan, Ioana Andreea Gheonea, Alin Demetrian, Andreea-Valentina Şoimu, Adrian Săftoiu, Gabriel Gruionu, Lucian Gheorghe Gruionu, Utility of confocal laser endomicroscopy in pulmonology and lung cancer, Rom J Morphol Embryol 2016, 57(4):1221–1227.
- 22 Catalin Ciobirca, Teodoru Popa, Gabriel Gruionu, Thomas Lango, Hakon Olav Leira, Stefan Dan Pastrama, Lucian Gheorghe Gruionu, " Virtual bronchoscopy method based on marching cubes and an efficient collision detection and resolution algorithm", Ciência & Tecnologia dos Materiais 28 (2016) 162–166.
- 23 N. D. Scarisoreanu, F. R. Craciun, V. Ion, R. Birjega, A. Bercea, V. Dinca, M. Dinescu, L. E. Sima, M. Icriverzi, A. Roseanu, L. G. Gruionu, G. Gruionu, "Lead-Free Piezoelectric (Ba,Ca)(Zr,Ti)O₃ Thin Films for Biocompatible and Flexible Devices" ACS Appl. Mater. Interfaces, 9 (1), pp 266–278, 2017, DOI: 10.1021/acscami.6b14774.

- 24 D. Coman, A. Saftoiu, L. Gruionu, "Finite elements analysis of a hybrid radiofrequency/magnetic nanoparticles ablation", ADEM 2016 International Conference – Advances in Engineering and Management", pg. 45-46, D.T. Severin, Romania.
- 25 C. Ciobirca, G. Gruionu, T. Lango, H. Olav Leira, S. D. Pastrama, L. G. Gruionu, T. Popa, Three dimensional data generation and graphical representation of theoretical tracheobronchial trees and lung models, Computer Assisted Radiology and Surgery, Heidelberg. Germany, 2016.
- 26 Lucian Gheorghe Gruionu, Adrian Săftoiu, Gabriel Gruionu, "A novel fusion imaging system for endoscopic ultrasound", Endoscopic Ultrasound, 5(1):35-42, 2016. doi: 10.4103/2303-9027.175882. (ISI Impact Factor: 1.353).
- 27 Gabriel Gruionu, Despina Bazoo, Nir Maimon, Mara Onita-Lenco, Lucian G. Gruionu, Peigen Huang, Lance L. Munn, "Implantable Tissue Isolation Chambers for Analyzing Tumor Dynamics In Vivo", Lab on a Chip, DOI: 10.1039/C6LC00237D, 2016 (ISI Impact Factor: 6.115)
- 28 Daniela Stefanescu, Costin Streba, Elena Tatiana Cartana, Adrian Saftoiu, Gabriel Gruionu, Lucian Gheorghe Gruionu, "Computer aided diagnosis for confocal laser endomicroscopy", PlosONE, <http://dx.doi.org/10.1371/journal.pone.0154863> (IF: 3.234)
- 29 L.G. Gruionu, A. Săftoiu, T. Popa, C. Ciobârcă, C.T. Streba, Ana-Maria Ionciță, G. Gruionu, "Feasibility Study of a Novel Navigation System for Biopsy of Peripheral Lesions in the Lungs", Current Health Sciences Journal, Vol. 42, No. 1, pg. 76-81, 2016, DOI: 10.12865/CHSJ.42.01.11.
- 30 Adriana Ciocâlțeu, Adrian Săftoiu, Daniel Pirici, Claudia-Valentina Georgescu, Tatiana Cârțână, Dan Ionuț Gheonea, Lucian Gheorghe Gruionu, Cosmin Gabriel Cristea, Gabriel Gruionu, "Tumor neoangiogenesis detection by confocal laser endomicroscopy and Anti-CD105 antibody: Pilot study", World Journal of Gastrointestinal Oncology, 7(11): 361–368, 2015.
- 31 Catalin Ciobirca, Teodoru Popa, Gabriel Gruionu, Thomas Lango, Hakon OlavLeira, Stefan Dan Pastrama, Lucian Gheorghe Gruionu, "Virtual bronchoscopy method based on marching cubes algorithm" ICSAAM 2015, The 6th International Conference on Structural Analysis of Advanced Materials08 - 11 September 2015, Porto, Portugal.
- 32 Horia Petrescu, Emil Nutu, Daniel Vlasceanu, Lucian Gruionu, Stefan Dan Pastrama, "Development of a finite element model for lung tumor displacements during breathing", 32nd Danubia-Adria Symposium on Advances in Experimental Mechanics, Starý Smokovec, Slovakia, 2015.
- 33 Catalin Ciobirca, Gabriel Gruionu, Teodoru Popa, Stefan Dan Pastrama, Thomas Lango, Hakon Olav Leira, Lucian Gheorghe Gruionu, "Collision detection algorithm for improved electromagnetic tracking navigation in bronchoscopy", Design of Medical Devices - Europe Edition Sept. 8-9, 2015, Vienne.
- 34 Horia-Alexandru Petrescu, Daniel Vlasceanu, Stefan Dan Pastrama and Lucian Gruionu, "Numerical analysis for determining the displacements of a lung tumor", Key Engineering Materials Vol. 638 (2015) pp. 177-182, Trans Tech Publications, Switzerland, doi:10.4028/www.scientific.net/KEM.638.177
- 35 A. Ciocalteu, A. Saftoiu, T. Cartana, I. Cherciu, L. Gruionu, D. Pirici, C. Georgescu, G. Gruionu, "Feasibility study for the evaluation of morphopatological pattern of neoangiogenesis in human colorectal cancer using confocal laser endomicroscopy and targeted anti-cd105 antibodies", 22nd United European Gastroenterology Week Vienna, Austria, 2014.
- 36 Lucian Gheorghe Gruionu, Teodor Popa, Catalin Ciobîrca, Adrian Saftoiu, Costin Streba, Ana-Maria Ioncica, Thomas Langø, Gabriel Gruionu, "A novel fusion imaging guiding system for bronchoscopy", Design of Medical Devices - Europe Edition Oct. 22-24, 2014, Delft.
- 37 A. Ciocalteu, A. Saftoiu, T. Cartana, L. Gruionu, D. Pirici, C. Georgescu, C. Georgescu, D. Gheonea, G. Gruionu, "Evaluation of New Morphometric Parameters of Neoangiogenesis in Human Colorectal Cancer Using, Confocal Laser Endomicroscopy (CLE) and Targeted Panendothelial Markers", PLOS ONE, V9, I3, P1-6, 2014, <http://dx.plos.org/10.1371/journal.pone.0091084>.
- 38 Georgeanu V., Atasiei T. Gruionu L., „Periprosthetic Bone Remodelling in Total Knee Arthroplasty”, MAEDICA – a Journal of Clinical Medicine 2014; 9(1): 56-61.
- 39 Orban H, Stan G, Gruionu L, Orban C., "Stress distribution on a valgus knee prosthetic inclined interline -- a finite element analysis", Chirurgia, 2013 Jan-Feb; 108(1):91-3.
- 40 Stan G, Orban H, Gruionu L, Gheorghe P., "Coronal malposition effects in total knee arthroplasty: a finite element analysis", Eur J Orthop Surg Traumatol. 2013 Aug; 23(6):685-90. doi: 10.1007/s00590-012-1051-7.
- 41 GRUIONU G, Gruionu LG, Bazou D, Munn LL. "Selective Vascular Blockage by Multiphoton Laser Ablation Causes Flow-Induced Remodeling in Tumor Blood Vessels", BMES Annual Meeting, Seattle, USA, 2013.
- 42 GRUIONU G, Gruionu LG, Munn LL. "Flow-Induced Structural Adaptation of Tumor Vasculature by Selective Micro-Laser Ablation", FASEB Journal, Experimental Biology Conference, Boston, USA, 2013.

- 43 GRUIONU G, T. Cârțână, L. Gruionu, D. I. Gheonea, D. Pirici, A. Saftoiu, "Feasibility Study for the Use of Confocal Laser Endomicroscopy (CLE) for the Morphometric Evaluation of Microvessels in Human Colorectal Biopsy Samples with Targeted Anti-CD31 Antibodies", *Cajal International Symposium*. Bucharest, Romania, 2012.
- 44 Caroline Ewertsen, Adrian Saftoiu, Lucian Gruionu, Michael Bachmann Nielsen, "Real-time image fusion involving diagnostic ultrasound", *American Journal of Roentgenology*, vol. 200 no. 3 W249-W255, 2013, doi:10.2214/AJR.12.8904.
- 45 Tatiana Cârțâna, Adrian Saftoiu, Lucian Gruionu, Dan Ionut Gheonea, Daniel Pirici, Claudia - Valentina Georgescu, Adriana Ciocâlțeu, Gabriel Gruionu, " Confocal Laser Endomicroscopy for the Morphometric Evaluation of Microvessels in Human Colorectal Cancer Using Targeted Anti-CD31 Antibodies", *PLOS ONE – issue 12*, vol. 7, 2012.
- 46 Lucian Gruionu, D. Pirici, D.I. Gheonea, T. Cartana, A. Saftoiu, L. L. Munn, Gabriel Gruionu, "Clinical and Theoretical Model for Monitoring the Effect of Anti-Angiogenic Tumor Therapy Efficiency in Human Colorectal Biopsy", *Biomedical Engineering Society Meeting (BMES)*, Atlanta, 2012.
- 47 L. Gruionu, A. Săftoiu, A. Iordache, A.M. Ioncică, D. Burtea, D. Dumitrescu, „Feasibility study of tridimensional co-registration of endoscopic ultrasound and dynamic spiral computer tomography procedures for real-time evaluation of tumor angiogenesis in lung cancer patients”, *19th United European Gastroenterology Week*, Stockholm 2011.
- 48 T. Cârțâna, L. Gruionu, D. I. Gheonea, D. Pirici, G. Gruionu, A. Săftoiu, „Feasibility study for the use of confocal laser microscopy for the morphometric evaluation of microvessels in human colorectal biopsy samples with targeted anti-cd31 antibodies”, *19th United European Gastroenterology Week*, Stockholm 2011.
- 49 L. Gruionu, A. Saftoiu, A. Iordache, A. Ioncica, D. Burtea, G. Gruionu, „Electromagnetically Guided Hybrid Imaging System for Endoscopic Ultrasound Tumor Biopsy Procedures”, *Biomedical Engineering Society Annual Meeting*, Hartford, Connecticut, USA, 2011.
- 50 L. Gruionu, A. Saftoiu, A. Iordache, A.M. Ioncica, D. Burtea, D. Dumitrescu, „Feasibility Study of Tridimensional Co-Registration of Endoscopic Ultrasound and Dynamic Spiral Computer Tomography Procedures for Real-Time Evaluation of Tumor Angiogenesis”, *Gastrointestinal Endoscopy Vol. 73*, Issue 4, Supplement, Page AB370, 2011.
- 51 F. Manstad-Hulaas, G. A. Tangen, L. Gruionu, P. Aadahl, T. A. N. Hernes, „*Three-Dimensional Endovascular Navigation with Electromagnetic Tracking – Ex Vivo and In Vivo Accuracy*”, *Journal of Endovascular Therapy*, Vol. 18, pg. 230-240, 2011.
- 52 S. Badaan, D. Petrisor, C. Kim, P. Mozer, D. Mazilu, L. Gruionu, A. Patriciu, K. Cleary, D. Stoianovici, „*Does Needle Rotation Improve Lesion Targeting?*”, *International Journal of Medical Robotics and Computer Assisted Surgery*, 7(2): 138–147, DOI: 10.1002/rcs.381, 2011, Factor Impact relativ: 1.
- 53 Marin Didu, Lucian Gruionu, Radu Stefan and Cristian Ghermec, „*High Resistance Porous Pieces Obtained by PM, Reinforced with Metallic Yarns*”, *Materials Science Forum Vol. 672*, pp 327-330, Trans Tech Publications, 2011.

PATENTE NAȚIONALE ȘI INTERNAȚIONALE ACORDATE:

1. Rotating needle driver and apparatuses and methods related thereto,
D Stoianovici, D Petrisor, D Mazilu, A Patriciu, L Gruionu,
US Patent 10,646,295
2. Systems for abdominal wall lifting and needle insertion
G Velmahos, G Gruionu, LG Gruionu
US Patent 10,064,695
3. Sistem pentru vizualizare și ghidare în timpul procedurilor de endoscopie
Lucian Gheorghe Gruionu, Adrian Saftoiu, Gabriel Gruionu, Ana Maria Ioncica, Daniela Elena Burtea
RO127716A0