

FISA INDIVIDUALA DE CALCUL - INDICATORI CNATDCU

Conform Anexa nr. 17 - COMISIA INGINERIE MECANICĂ, MECATRONICĂ ȘI ROBOTICĂ

Domeniul: INGINERIE MECANICA, MECATRONICA SI ROBOTICA

Cadrul didactic: **HANCU OLIMPIU**
 Functia: **Sef de lucrari**
 Departamentul: **Mecatronica si Dinamica Masinilor**
 Facultatea: **Mecanica**

Indicatorul C2.1 - Calitatea resursei umane

Criteriul CDI			Criteriul DID			Criteriul RIA		
Indicatori cu contribuție principală (obligatorie) în criteriu								
Rezultate și comunicări publicate ca articole științifice (CDI-ART)	Minim CNATDCU	Punctaj	Manuale - suport curs, format tipărit sau format electronic (DID-MSC)	Minim CNATDCU	Punctaj	Management proiecte: a) Director grant național sau internațional, sau responsabil partener în consorțiul (RIA-GRA); b) Director contracte cu beneficiari din mediul economic (RIA-CTR)	Minim CNATDCU	Punctaj
	3	21.00		3	5.28		3	4.26
Indicatori cu contribuție complementară în criteriu								
a) Brevete de invenție (CDI-BRV)	2	6.20	a) Laboratoare / standuri pentru activități didactice (DID-LAB)	2	7.00	Activitate de cercetare – dezvoltare – inovare în cadrul granturilor / proiectelor	2	18.75
b) Produse, tehnologii și servicii inovative (CDI-PTS)			b) Platforme informatiche educaționale (DID-PIE)					
c) Monografii de specialitate (CDI-MON)								
TOTAL	5	27.20		5	12.28		5	23.00

Indicatorul C2.2 - Impactul activitatii stiintifice

Baza de date	Web of Knowledge	Scopus	Google Scholar
h-index	2	3	7

Data: 02.06.2017

Sef lucr.dr.ing. Olimpiu HANCU

*Decan,
Prof.dr.ing. Cristian DUDESCU*

**Director departament,
Prof.dr.ing. Mircea BARA**

A. Articole științifice publicate în reviste de specialitate cotate ISI, sau în reviste/volume indexate ISI sau BDI (Factorul de impact corectat ia în considerare articolele în publicații indexate BDI sau indexate ISI (fără factor de impact) prin valoarea de prag 0.1)

Poz.	Lucrări științifice publicate / Citări	Factor impact (+0.1 BDI)	Punctaj CDI-ART
A1	Ciprian Lapusan, Radu Balan, Olimpiu Hancu, Ciprian Rad, Rapid Control Prototyping in the Development of Home Energy Management Systems, Applied Mechanics and Materials, Vol. 659, pp. 395-400, 2014.	0.100	0.100
A2	C.-R., Rad, O., Hancu, V., Mătieș, C., Lăpușan, (2014), Parameter Identification and Modeling of a Pneumatic Proportional Valve with Applicability in Control Design of Servo-Pneumatic Systems, Advanced Concepts in Mechanical Engineering – ACME 2014, June 12-13, Iași, Romania, Applied Mechanics and Materials, Vol. 658, pp. 700-705.	0.100	0.100
A3	C.-R., Rad, O., Hancu, C., Lăpușan, (2014), Gray-Box Modeling and Closed-Loop Temperature Control of a Thermotronic System, The 11th IFToMM International Symposium on Science of Mechanisms and Machines, Mechanisms and Machine Science Series, Vol. 18, pp. 197-207, DOI: 10.1007/978-3-319-01845-4_20, Springer International Publishing Switzerland, ISBN: 978-3-319-01844-7.	0.100	0.100
A4	V., Mătieș, O., Hancu, C.-R., Rad, L., Dache, (2014), Considerations Regarding the Process of Integration the Mechanisms in the Structure of the Mechatronic Systems, The 11th IFToMM International Symposium on Science of Mechanisms and Machines, Mechanisms and Machine Science Series, Vol. 18, pp. 503-513, DOI: 10.1007/978-3-319-01845-4_50, Springer International Publishing, ISBN: 978-3-319-01844-7.	0.100	0.100
A5	C., Lăpușan, V., Mătieș, O., Hancu, C.-R., Rad, (2012), Mechatronic Concepts in Design and Control of a Teleoperated Robot, MTM and Robotics 2012 - Joint International Conference of the 11th International Conference on Mechanisms and Mechanical Transmissions/International Conference on Robotics, June 6-8, Clermont Ferrand, France, Applied Mechanics and Materials, Vol. 162, pp. 575-582.	0.100	0.100
A6	C.-R., Rad, V., Mătieș, O., Hancu, C., Lăpușan, (2012), Hardware-In-The-Loop (HIL) Simulation Used for Testing Actuation System of a 2-DOF Parallel Robot, MTM and Robotics 2012 - Joint International Conference of the 11th International Conference on Mechanisms and Mechanical Transmissions/International Conference on Robotics, June 6-8, Clermont Ferrand, France, Applied Mechanics and Materials, Vol. 162, pp. 334-343.	0.100	0.100
A7	Radu Balan, Vistrian Maties, Victor Hodor, Olimpiu Hancu, Sergiu Stan, Applications of a model based predictive control to heat-exchangers, Control & Automation, 2007. MED'07. Mediterranean Conference on Control & Automation, IEEE INSPEC Accession Number: 9826103, DOI: 10.1109/MED.2007.4433679, Publisher:IEEE.	0.100	0.100
A7-C1	Edris Ebrahimzadeha, Paul Wildinga, David Frankmanb, Farhad Fazlollahia, Larry L. Baxter, Theoretical and experimental analysis of dynamic plate heat exchanger: Non-retrofit configuration, Applied Thermal Engineering, Volume 93, 25 January 2016, Pages 1006–1019.	3.269	3.369
A7-C2	E Ebrahimzadeh, P Wilding, D Frankman, F Fazlollahi, , Larry L. Baxter, Theoretical and experimental analysis of dynamic heat exchanger: Retrofit configuration, Energy, Elsevier, Volume 96, 1 February 2016, Pages 545-560.	4.810	4.910
A8	C., Lăpușan, V., Mătieș,, R., Bălan, O., Hancu, C.-R., Rad, (2010), Integrated approach for designing a 6-UPS parallel robot, IEEE International Conference on Automation, Quality and Testing, Robotics (AQTR), vol. 1, May 28-30, 2010, Cluj-Napoca, Romania, pp.1-4.	0.100	0.100
A9	Lapusan C., Balan R., Hancu O., Online system identification in thermal response of real buildings, Annals of DAAAM for 2010 & Proceedings of the 21st International DAAAM Symposium, Volume 21, No. 1, ISSN 1726-9679 ISBN 978-3-901509-73-5.	0.100	0.100
A10	R. Balan, O. Hancu, C. Lapusan, S.-D. Stan, R.C. Donca, V.Muresan, MODELLING, IDENTIFICATION AND TEMPERATURE CONTROL OF A HOUSE, Annals of DAAAM for 2010 & Proceedings of the 21st International DAAAM	0.100	0.100

	Symposium, Volume 21, No. 1, ISSN 1726-9679, ISBN 978-3-901509-73-5.		
A11	Hancu, O., Maties, V., Balan, R., Lapusan, C., (2009) - Model-based velocity control of electrohydraulic servo systems, Proceedings of the 8th WSEAS International Conference on Signal Processing, Robotics and Automation "Recent Advances in Signal Processing, Robotics and Automation", pp. 53-56, Cambridge, UK, February 21-23, 2009, ISBN: 978-960-474-054-3, ISSN:1790-5117.	0.100	0.100
A12	Hancu, O., Maties, V., Balan, R., Teutan, E. (2008) - Model-Based Impedance Control for Serial Robots Teleoperation, The 19th International Daaam Symposium " Intelligent Manufacturing & Automation: Focus On Next Generation Of Intelligent Systems And Solutions", 22-25th October 2008, Trnava, Slovakia, ISSN 1726-9679, ISBN 978-3-901509-68-1.	0.100	0.100
A13	Balan R., Hancu O., Stan S., Lapusan C., Donca R., Application of a Model Based Predictive Control Algorithm for Building Temperature Control, Proceedings of the 3rd WSEAS International Conference on Energy Planning, Energy Saving, Environmental Education (Source: Energy Problems and Environmental Engineering, Pages: 97-101 Published: 2009)	0.100	0.100
A13-C1	Kubalčík, Marek, and Vladimír Bobál. "Techniques for predictor design in multivariable predictive control." WSEAS Transactions on Systems and Control 6.9 (2011): 349-360.	0.100	0.100
A13-C2	Kubalčík, Marek, and Vladimír Bobál. "Adaptive predictive control of three-tank-system." Proceedings of the 29th IASTED International Conference. Vol. 675. No. 037. 2010.	0.100	0.100
A13-C3	Antos, Jan, and Marek Kubalcik. "Analysis of some aspects of optimization problem in predictive control." INTERNATIONAL JOURNAL OF MATHEMATICAL MODELS AND METHODS IN APPLIED SCIENCES, Vol 8 , 2014	0.100	0.100
A14	Hancu, O., Maties, V., Balan, R. (2008) - Optimal control design approach based on a multipoint approximation method, IEEE International Conference on Automation, Quality and Testing, Robotics, AQTR 2008, 22-25 May 2008, Volume: 2, pp. 285-290, Cluj-Napoca, ISBN: 978-1-4244-2576-1, Digital Object Identifier: 10.1109/AQTR.2008.4588839.	0.100	0.100
A15	Lapusan C, Maties V., Balan R., Hancu O., Stan S., Lates R., Rapid control prototyping using Matlab and dSpace. Application for a planar parallel robot, Proceedings of IEEE International Conference on Automation, Quality and Testing, Robotics (AQTR 2008)	0.100	0.100
A15-C1	Juhász, László, Axel Kiffe, and Jürgen Maas. "FPGA-based interface for control of a hybrid micropositioning stage." Industrial Electronics, 2009. IECON'09. 35th Annual Conference of IEEE. IEEE, 2009.	0.100	0.100
A15-C2	Zhang Libin, Pu A London, "Rocket upper stage star tracker / Gyro Attitude real-time simulation system" Journal of Chinese Inertial Technology, 18.5 (2010): 585-590.	0.100	0.100
A15-C3	Liu Han, Control system design based on a high-speed high-precision parallel robot dSPACE, Journal of Electronic design Engineering, 2014	0.100	0.100
A16	R Balan, V Maties, Olimpiu Hancu, S Stan - Applications for nonlinear processes using a predictive control algorithm, Communications, Control and Signal Processing, Vol. 1-3 Pages: 709-714, 2008. ISCCSP 2008, DOI:10.1109/ISCCSP.2008.4537315	0.100	0.100
A17	R Bălan, V Mătieș, O Hancu, SD Stan, Integration of Microcontroller System Design In Mechatronic Education-Low Cost Solutions, 12th IFToMM World Congress, Besançon (France), 2007.	0.1	0.1
A18	Radu Balan, Vistrian Maties, Olimpiu Hancu, Sergiu Stan, Lăpușan Ciprian - A predictive control algorithm-some applications for nonlinear processes, Control & Automation, Mediterranean Conference on Control & Automation, Vols 1-4 Pages: 1326-1331, 2007. MED'07, DOI:10.1109/MED.2007.4433747, Print ISBN:978-1-4244-1282-2	0.100	0.100
A19	Radu Balan, Vistrian Maties, Victor Hodor, Olimpiu Hancu, Sergiu Stan - Applications of a model based predictive control to heat-exchangers, Control & Automation, 2007. MED'07, DOI:10.1109/MED.2007.44336, Print ISBN:978-1-4244-1282-2.	0.100	0.100

A19-C1	Naif B. Almutairi * and Mohamed Zribi, Control of a Plate Heat Exchanger Using the Terminal Sliding Mode Technique, Ind. Eng. Chem. Res., 2012, 51 (12), pp.4610–4623, DOI:10.1021/ie201545z, Publication Date (Web): March 1, 2012	2.235	2.235
A19-C2	Wu, H., Chen, W., Li, M., and Wang, X., "Temperature Control of Water with Heating, Cooling and Mixing in a Process with Recycle Loop," SAE Technical Paper 2014-01-0652, 2014, doi:10.4271/2014-01-0652.	0.100	0.100
A20	Balan R., Maties, V., Hancu O., Stan S., Lapusan C., Modeling and control of an electric arc furnace, Proceedings of the 2007 Mediterranean Conference on Control and Automation, Vols 1-4 Pages: 938-943, DOI:10.1109/MED.2007.4433737, Print ISBN:978-1-4244-1282-2	0.100	0.100
A20-C1	Wang, Yan, et al. "Modeling of electrode system for three-phase electric arc furnace." Journal of Central South University of Technology 17 (2010): 560-565.	0.100	0.100
A20-C2	Haapala, Karl R., et al. "Development and Application of Models for Steelmaking and Casting Environmental Performance." Journal of Manufacturing Science and Engineering 134.5 (2012): 051013.	0.883	0.883
A20-C3	Yan, L. I., et al. "Model predictive control synthesis approach of electrode regulator system for electric arc furnace." Journal of Iron and Steel Research, International 18.11 (2011): 20-25.	0.313	0.313
A20-C4	Er-wei Bai, "Minimizing Energy Cost in Electric Arc Furnace Steel Making by Optimal Control Designs," Journal of Energy, vol. 2014, Article ID 620695, 9 pages, 2014. doi:10.1155/2014/620695	0.100	0.100
A20-C5	Brusa, Eugenio GM. "Analysis of Stiffening Effect and Rupture in Dynamics of Graphite Electrodes of the Electric Arc Furnace." ASME 2014 12th Biennial Conference on Engineering Systems Design and Analysis. American Society of Mechanical Engineers, 2014.	0.100	0.100
A20-C6	Brusa, Eugenio GM, and Stefano Morsut. "Mechatronic Modeling and Optimization of the Structural Layout of the Electric Arc Furnace." ASME 2014 12th Biennial Conference on Engineering Systems Design and Analysis. American Society of Mechanical Engineers, 2014.	0.100	0.100
A20-C7	Shabib, G. "MODELING AND SIMULATION OF FUZZY PID CONTROLLERS FOR A SUBMERGED ARC FERROSILICON FURNACE.", Journal of Engineering Sciences, Vol. 40, No. 3, pp.781 -797, May 2012	0.100	0.100
A20-C8	Wang Yan Mao Zhizhong Tianhui Xin Li Yan Yuan Ping, "Modeling of electrode system for three-phase electric arc furnace." Journal of Central South University, 17.3 (2010): 560-565.	0.100	0.100
A20-C9	Brusa, Eugenio GM, and Stefano Morsut. "Design and Structural Optimization of the Electric Arc Furnace Through a Mechatronic-Integrated Modeling Activity." IEEE/ASME Transactions on Mechatronics, 2014	3.752	3.752
A20-C10	Hongru, Li, et al. "A hybrid simulation model of AC electric arc furnace." Control and Decision Conference (CCDC), 2012 24th Chinese. IEEE, 2012.	0.100	0.100
A21	Balan R., Maties V., Hancu O., Stan S., Lapusan C., Nonlinear control using a model based predictive control algorithm, Proceedings of the 2007 International Symposium on Computational Intelligence in Robotics and Automation, Pages: 203-208, 2007.	0.100	0.100
A22	Ciprian Lapusan, Olimpiu Hancu, Ciprian Rad, Liliana Dache, Vistrian Maties, Integrated learning platform based on lego NXT and Matlab for teaching mechatronics, 2016 8th International Conference on Electronics, Computers and Artificial Intelligence (ECAI), INSPEC Accession Number: 16692474, DOI: 10.1109/ECAI.2016.7861145, Publisher: IEEE.	0.1	0.1
A23	Radu Balan, Vistrian Maties, Olimpiu Hancu, Sergiu Stan - A Model Predictive Control Algorithm Applied To Non-Linear Processes, PAMM, Special Issue: GAMM Annual Meeting 2006 – Berlin, Volume 6, Issue 1, pages 797–798, December 2006, DOI: 10.1002/pamm.200610378	0.100	0.100

A24	Hancu O., Mătieş V., Bălan, R., (2006) - Modeling, simulation and control a hydraulic servo system, PAMM • Proc. Appl. Math. Mech. 6, 811–812 (2006) / DOI 10.1002/pamm.200610385, Copyright © 2006 WILEY-VCH Verlag GmbH & Co. KGaA, Weinheim.(ISI Proceeding), 2006.	0.100	0.100
A24-C1	Schkoda, R.F., Hall, T. - Hydraulic spool valve modeling for system level analysis, American Control Conference (ACC), 2014, Page(s):2504 - 2510 ISSN :0743-1619 Print ISBN:978-1-4799-3272-6 INSPEC Accession Number:14468305 Conference Location :Portland, OR DOI:10.1109/ACC.2014.6858612 Publisher:IEEE	0.100	0.100
A25	R Balan, Vistrian Maties, Olimpiu Hancu, Sergiu Stan - A predictive control approach for the inverse pendulum on a cart problem, Published in: Mechatronics and Automation, 2005 IEEE International Conference (Volume:4, Pages: 2026-2031) , Print ISBN:0-7803-9044-X INSPEC, Accession Number:8939358, DOI:10.1109/ICMA.2005.1626874 Publisher:IEEE	0.100	0.100
A25-C1	R Banavar, B Dey, Stabilizing a flexible beam on a cart: A distributed port-hamiltonian approach, Journal of Nonlinear Science April 2010, Volume 20, Issue 2, pp 131-151, Date: 08 Dec 2009	2.168	2.168
A25-C2	Hamza, M. ,Zaka-ur-Rehman ; Zahid, Q. ; Tahir, F. ; Khalid, Z. Real-Time Control of an Inverted Pendulum: A Comparative Study, Published in: Frontiers of Information Technology (FIT), 2011, Date of Conference: 19-21 Dec.2011 , Page(s):183 – 188 Print ISBN:978-1-4673-0209-8 INSPEC Accession Number:12493040 Conference Location :Islamabad DOI:10.1109/FIT.2011.41	0.100	0.100
A25-C3	A.M. Almeshala, K.M. Goherb, M.O. Tokhia –Dynamic modelling and stabilization of a new configuration of two-wheeled machines, Robotics and Autonomous Systems, Volume 61, Issue 5, May 2013, Pages 443–472.	1.759	1.759
A25-C4	Marami, B. ,Bigdeli, N. ,Haeri, M. –Active Queue Management of TCP/IP Networks Using Rule-Based Predictive Control, Published in: Industrial Electronics, 2007. ISIE 2007. IEEE International Symposium on, 4-7 June 2007 Page(s):77 – 82 E-ISBN :978-1-4244-0755-2, Print ISBN:978-1-4244-0754-5, INSPEC Accession Number:9642641 DOI:10.1109/ISIE.2007.4374577	0.100	0.100
A25-C5	TCS Wibowo, N Saad, MN Karsiti, The simulation of MISO MPC for gaseous pilot plant control with presence of measurement noise, Published in: Intelligent and Advanced Systems, 2007. ICIAS 2007, 25-28 Nov. 2007, Page(s):1107 – 1110 E-ISBN :978-1-4244-1356-0 Print ISBN:978-1-4244-1355-3, INSPEC Accession Number:10368646, Conference Location :Kuala Lumpur DOI:10.1109/ICIAS.2007.4658556	0.100	0.100
A25-C6	A.M.Almeshal; K.M.Goher; A.N.K. Nasir; M.O.Tokhi, Steering and dynamic performance of a new configuration of a wheelchair on two wheels in various indoor and outdoor environments, 2013 18th International Conference on Methods & Models in Automation & Robotics (MMAR), INSPEC Accession Number: 13933282, DOI: 10.1109/MMAR.2013.6669910, Publisher: IEEE	0.100	0.100
A25-C7	Tri Chandra S. Wibowo; Nordin Saad; Mohd Noh Karsiti, The simulation of MISO MPC for gaseous pilot plant control with presence of measurement noise, 2007 International Conference on Intelligent and Advanced Systems, INSPEC Accession Number: 10368646, DOI: 10.1109/ICIAS.2007.4658556, Publisher: IEEE.	0.100	0.100
A25-C8	Sidharth Joshi; Abhaya Pal Singh, Comparison of the performance of controllers for under-actuated systems, 2016 IEEE 1st International Conference on Power Electronics, Intelligent Control and Energy Systems (ICPEICES), INSPEC Accession Number: 16673162, DOI: 10.1109/ICPEICES.2016.7853055, Publisher: IEEE.	0.100	0.100
A26	R. Bălan, V. Mătieş, O Hancu - Model predictive control of nonlinear processes using on-line simulation, Proceedings of International Conference on Automation, Quality and Testing, Robotics, AQTR 2004.	0.100	0.100
A27	C.-R., Rad, O., Hancu, V., Mătieş, (2014). Experimental Identification of Dead Volume in Pneumatic Linear Drives, Romanian Review Precision Mechanics, Optics & Mechatronics, No. 45, pp. 49-53, ISSN: 2247-7063.	0.100	0.100
A28	Ciprian Lapusan, Radu Balan, Olimpiu Hancu, Alin Plesa, Development of a Multi-Room Building Thermodynamic Model Using Simscape Library, Energy Procedia, Volume 85, Pages 320-328, Publisher Elsevier	0.1	0.1

A29	Lapusan C., Maties V., Balan R., Hancu O., Modeling and simulation methods for designing mechatronic systems, Journal of Engineering Studies and Research, Volume 16 (2010) No. 4	0.100	0.100
A30	Lapusan C., Maties V., Hancu O., Workspace Analysis and Design of a 6 DOF Parallel Robot, Proceedings of the 8th WSEAS International Conference on Signal Processing, Robotics and Automation 2009.	0.100	0.100
A30-C1	Lei Jingtao, Hu Lei, Cao Yuanlong, Wang Tianmiao, "Mobility and constant-orientation workspace analysis of 4UPS-UPU parallel mechanism.", Journal High Technology Letters, 2 (2014): 124-130.	0.100	0.100
A31	Lapusan C., Maties V., Balan R., Hancu O., Rapid Control Prototyping in design process of mechatronic systems, Proceedings of the 5th International Conference on Robotics and Automation Systems 2010, Vol. 166, Pag. 247-252, Trans Tech Publications, 2010.	0.100	0.100
A31-C1	Oftadeh, Reza, et al. "Unified framework for rapid prototyping of linux based real-time controllers with matlab and simulink." Advanced Intelligent Mechatronics (AIM), 2012 IEEE/ASME International Conference on. IEEE, 2012.	0.100	0.100
A31-C2	Březina, Lukas, et al. "Delta robot design." Solid State Phenomena. Vol. 198. 2013.	0.100	0.100
A31-C3	R. Oftadeh, M. M. Aref, R. Ghabcheloo, and J. Mattila, "System Integration for Real-time Mobile Manipulation," International Journal of Advanced Robotic Systems, vol. 11, Mar 2014.	0.715	0.715
A32	O. Hancu, M. Simion and C. Lăpușan – Hybrid Analytical Analysis in the Design of Mechatronic Systems, Mechatronics and Robotics, Applied Mechanics and Materials Vol. 762, pag.243, ISBN-13: 978-3-03835-444-4, ISSN: 1660-9336, 2015	0.100	0.100
A32-C1	L. Cristea, M.C. Luculescu, S.C. Zamfira, A.L. Boer,S. Pop, Multiple criteria analysis of remotely piloted aircraft systems for monitoring the crops vegetation status, IOP Conf. Series: Materials Science and Engineering, vol. 147 (2016), 012059 doi:10.1088/1757-899X/147/1/012059.	0.100	0.100
A33	C.-R., Rad, O., Hancu, I.-A., Takacs and G., Olteanu, (2015). Smart Monitoring of Potato Crop: A Cyber-Physical System Architecture Model in the Field of Precision Agriculture, Agriculture and Agricultural Science Procedia, Volume 6, 2015, Pages 73-79, ISSN 2210-7843, http://dx.doi.org/10.1016/j.aaspro.2015.08.041 .	0.100	0.100
A33-C1	Filipe T. Oliveira, Sérgio A. Leitão, Adelino S. Nabais, Rita M. Ascenso, João R. Galvão, (2016). Greenhouse with Sustainable Energy for IoT, Technological Innovation for Cyber-Physical Systems, 7th IFIP WG 5.5/SOCOLNET Advanced Doctoral Conference on Computing, Electrical and Industrial Systems, DoCEIS 2016, Costa de Caparica, Portugal, April 11-13, 2016, Proceedings, Springer International Publishing, pp. 416-424, DOI: 10.1007/978-3-319-31165-4_39.	0.100	0.100
A33-C2	A. Chougule, VK Jha, D. Mukhopadhyay, (2016). Using IoT for Integrated Pest Management , IEEE International Conference on Internet of Things and Applications (IOTA) Maharashtra Institute of Technology, Pune, India 22 Jan - 24 Jan, pp. 1-6.	0.100	0.100
A33-C3	A. Sajid, H. Abbas, K. Saleem, (2016). Cloud-Assisted IoT-Based SCADA Systems Security: A Review of the State of the Art and Future Challenges, IEEE Access, Volume 4, pp. 1375 - 1384, ISSN : 2169-3536, DOI: 10.1109/ACCESS.2016.2549047.	0.100	0.100
A33-C4	Nansen Liu, Weixing Cao, Yan Zhu, Jingchao Zhang, Fangrong Pang and Jun Ni, Node Deployment with k-Connectivity in Sensor Networks for Crop Information Full Coverage Monitoring, Sensors 2016, 16(12), 2096; doi:10.3390/s16122096.	2.133	2.133
A33-C5	Erick Fernando; Setiawan Assegaff; A H Hetty Rohayani, Trends information technology in E-agriculture: A systematic literature review, 2016 3rd International Conference on Information Technology, Computer, and Electrical Engineering (ICITACEE), INSPEC Accession Number: 16791822 DOI: 10.1109/ICITACEE.2016.7892470, Publisher: IEEE.	0.100	0.100

A33-C6	Beata Mrugalska, Magdalena K. Wyrwicka, Towards Lean Production in Industry 4.0, Procedia Engineering, Volume 182, 2017, Pages 466–473, https://doi.org/10.1016/j.proeng.2017.03.135 .	0.100	0.100
A33-C7	An investigation for benefits of cyber-physical systems in higher education courses, Published in 2016, 15th International Conference on Information Technology Based Higher Education and Training (ITHET), INSPEC Accession Number: 16502941, DOI: 10.1109/ITHET.2016.7760734, Publisher: IEEE.	0.100	0.100
A34	R Bălan, V Mătieș, O Hancu, A control algorithm for non-linear processes using on-line simulation and rule based control, Balan R., Mătieș V., Hancu O., 2004, In Proceedings of International Conference of Intelligent Engineering Systems, INES 2004, 19-21 Sept 2004, Cluj-Napoca, Romania, pp. 497-502.	0.100	0.100
A35	Maties, V; Balan, R; Hancu, O; et al., Mechatronic technology and education-world experience, 3rd Balkan Region Conference on Engineering Education, Conference Proceedings, Pages: 157-160. Published: 2005	0.1	0.1
A36	Maties, V; Balan, R; Hancu, O; et al., Mechatronic philosophy a challenge for new horizons opening in the study of mechanisms, Eleventh World Congress in Mechanism and Machine Science, Vols 1-5, Proceedings Pages: 1363-1367. Published: 2004.	0.1	0.1
A37	Balan, R; Maties, V; Hancu, O; et al. , The measure of humidity and temperature using smart sensors Source: Actual Tasks on Agricultural Engineering, Proceedings, Volume: 34, Pages: 329-336. Published: 2006	0.1	0.1
A38	C.-R., Rad, O., Hancu, An improved nonlinear modelling and identification methodology of a servo-pneumatic actuating system with complex internal design for high-accuracy motion control applications, Simulation Modelling Practice and Theory , Volume 75, June 2017, Pages 29–47, https://doi.org/10.1016/j.simpat.2017.03.008	1.574	1.574
Total punctaj criteriul CDI-ART			30.711

B. Brevete

Nr.crt.	Brevete de inventie	0	Punctaj CDI-BRV
1	Brevet de invenție nr. 103548 din 28.01.2009, cu titlul Laborator portabil pentru educație mecatronică, titulari ai brevetului: Mătieș, V., Bălan, R., Rusu, C., Hancu, O., Lăpușan, C., Besoiu, S.	National	1.00
Total punctaj criteriul CDI-BRV			1.00

C. Monografii sau capitole în monografii de specialitate

Nr.	Monografii sau capitole în monografii de specialitate	Nr. pag.	Punctaj CDI-MON
1	Hancu, O., Maties, V., Balan, R., Stan, S., Lapusan, C. (2007) Chapter 46: Mechatronic approach for design and control of a hydraulic 3-DOF parallel robot, Vol. 6, ISSN 1726-9687, ISBN 3-901509-60-7, Editor: B. Katalinic, hard cover, Publisher DAAAM International Vienna, Vienna, 2007.	12	1.200

2	Lapusan C., Maties V., Balan R, Stan S., Hancu O. - Chapter 8, An integrated approach for modeling mechatronic systems, Vol. 6, ISSN 1726-9687, ISBN 3-901509-60-7, Editor: B. Katalinic, hard cover, Publisher DAAAM International Vienna, Vienna, 2007	12	1.200
3	Mătieș, V., Hancu, O., Rad, C.-R., (2013). Mechatronic Platforms for Transdisciplinarity Learning, Transdisciplinarity Theory & Practice by Basarab Nicolescu & Atila Ertas (Editors), pp. 103-118, theATLAS Publishing, ISBN: 0-9778129-6-0.	15	1.500
4	O.Hancu, V. Maties, Platforme mecatronice pentru educație și cercetare, Capitol 5 - Standarde europene privind ocupatia de mecatronist, Editura Todesco, ISBN 978-973-7695-79-6, 2009.	16	0.320
5	Platforme mecatronice pentru educație și cercetare, Capitol 9 - Educatie și cercetare mecatronica la Universitatea Tehnica din Cluj-Napoca, Contribuție Hancu O. la Cap.9 (9.4, 9.9), Editura Todesco, ISBN 978-973-7695-79-6, 2009	10	0.2
6	C.Lapusan, R.Balan, O.Hancu, V.Maties, Cap 4 - Proiectarea Integrată și Interfațarea Sistemelor Mecatronice; în Platforma Națională de Mecatronica, Ed. UT Press, 2016.	39	0.780
Total punctaj criteriul CDI-MON			5.2

Total punctaj criteriul CDI: 21.118+1+5.2 = 27.318

D. Manuale suport de curs

Nr. Crt.	Manuale suport de curs	Pagini	Punctaj DID-MSC
1	Hancu O., Rad C-R., Controlere logice programabile: Programarea și dezvoltarea aplicațiilor industriale, Suport de curs pentru disciplina "Controlere logice programabile", Editura UT Press, Cluj-Napoca, 2017, ISBN 978-606-737-232-8. (Contributie O.Hancu: Cap.1-Cap.6 și Cap.7 aplicatia A1, 206 pagini)	206	4.12
2	MĂTIEȘ, V., BĂLAN, R., HANCU, O., GLIGA, A.,(2003) Hidronica. Aplicații, Editura Todesco, Cluj-Napoca, ISBN 973-8198-60-7. (Contributie O.Hancu: Cap1-Cap.4, 58 pagini, respectiv Cap.6 aplicatiile A1-A7, 35 pagini)	58	1.160
Total punctaj criteriul DID-MSC			5.28

E. Standuri/laboratoare pentru activități didactice

Nr.crt	Standuri/laboratoare pentru activități didactice	Indrumator/ pag	Punctaj DID-LAB
1	Laborator disciplina Hidronica si Pneutronica – STUDIUL CARACTERISTICII AMPLIFICATORULUI PROPORTIONAL (I), Stand Hidraulica propotionala (publicat in "Hidronica. Aplicații", Editura Todesco, Cluj-Napoca, ISBN 973-8198-60-7)	5	1
2	Laborator disciplina Hidronica si Pneutronica – STUDIUL CARACTERISTICII AMPLIFICATORULUI PROPORTIONAL (I II), Stand Hidraulica propotionala (publicat in "Hidronica. Aplicații", Editura Todesco, Cluj-Napoca, ISBN 973-8198-60-7)	5	1
3	Laborator disciplina Hidronica si Pneutronica – CURBELE CARACTERISTICE ALE SUPAPEI PROPORTIONALE LIMITATOARE DE PRESIUNE, Stand Hidraulica propotionala (publicat in "Hidronica. Aplicații", Editura Todesco, Cluj-Napoca, ISBN 973-8198-60-7)	3	1
4	Laborator disciplina Hidronica si Pneutronica –CARACTERISTICA STATICĂ A DISTRIBUITORULUI PROPORTIONAL 4/3, Stand Hidraulica propotionala (publicat in "Hidronica. Aplicații", Editura Todesco, Cluj-Napoca, ISBN 973-8198-60-7)	4	1
5	Laborator disciplina Hidronica si Pneutronica – REGLAREA VITEZEI DE AVANS (I), Stand Hidraulica propotionala (publicat in "Hidronica. Aplicații", Editura Todesco, Cluj-Napoca, ISBN 973-8198-60-7)	7	1
6	Laborator disciplina Hidronica si Pneutronica – REGLAREA VITEZEI DE AVANS (II), Stand Hidraulica propotionala (publicat in "Hidronica. Aplicații", Editura Todesco, Cluj-Napoca, ISBN 973-8198-60-7)	7	1
7	Laborator disciplina Hidronica si Pneutronica –COMPENSAREA HIDRAULICĂ A VARIAȚIEI SARCINII, Stand Hidraulica propotionala (publicat in "Hidronica. Aplicații", Editura Todesco, Cluj-Napoca, ISBN 973-8198-60-7)	4	1
Total punctaj criteriu DID-LAB			7

Total punctaj criteriu DID: $5.28+7 = 12.28$

F. Contribuție principală în calitate de director proiect/grant

Nr. crt	Titlul proiectului/grantului/Perioada/ Beneficiar	Tip proiect	Valoare totală	Valoare încasată	Punctaj RIA
1	Proiectarea, realizarea și experimentarea unui sistem mecatronic de monitorizare multispectrală a stării de vegetație a culturilor agricole, PN-II-PT-PCCA-2013-4, Contract 225/2014, durata contractului: 01.07.2014 - 30.09.2017, Responsabil proiect, Partener 2 - S.I.dr.ing. Hancu Olimpiu	RIA-GRA	250000 (RON)	212900	4.258
Total punctaj criteriu RIA - Indicatori principali					4.258

G. Contribuție complementara - membru echipă cercetare grant/proiect

Nr. crt	Titlul proiectului/grantului / Perioada / Beneficiar	Tip proiect	Valoare totală	Valoare incasata	Punctaj RIA
1	"Mainstreaming the model for flexible industrial training" (MoFIT2), Proiect LEONARDO DA VINCI (LDV II), nr. IE/04/B/F/PP-153207 (www.mofit.net), 2004-2006. Responsabil UTCN: Prof. Dr. Ing. Vistrian Mătieș.	RIA-GRA	34000 (EUR)	34000	0.850
2	Implementarea efectului de memorie a formei în sisteme mecatronice inteligente utilizând aliaje avansate obținute prin metalurgia pulberilor- AFMF", Proiect PN2-Parteneriate, Nr. 72-224/2008, Responsabil proiect UTCN: Prof.dr.ing. Vistrian Maties, Valoare contract 78339 RON	RIA-GRA	78339 (RON)	78339	0.392
3	Proiect național de cercetare: Sisteme mecatronice de acționare realizate cu noi tipuri de actuatori pentru aplicații în robotică și în alte domenii, grant PN II (2007-2010) Program 4, membru în colectivul de cercetare, perioada 2006-2010, 171129/2007 Director proiect Prof.dr.ing.Vistrian Maties	RIA-GRA	1031253 (RON)	1031253	5.156
4	Proiect național de cercetare: Creșterea eficienței conversiei energiei solare în platforme fotovoltaice orientabile, PNII, Program Parteneriate nr. 21-003/18.09.2007, membru colectiv cercetare, perioada: 2007-2010; 21003/2007 Responsabil UTCN: Prof.dr.ing. Vistrian Maties	RIA-GRA	149600 (RON)	149600	0.748
5	Proiect național de cercetare: Sisteme mecanice noi pentru creșterea eficienței conversiei energiei solare în energie electrică - MECSOL-PV, CEEX nr. 752/2006, membru colectiv cercetare, perioada: 2006-2007; Responsabil UTCN: Prof.dr.ing. Vistrian Maties	RIA-GRA	200200 (RON)	200200	1.001
6	Platformă de simulare, control și testare cu aplicații în mecatronică - CONMEC, Contract CEEX 2006-2008, Director de proiect: prof.dr.ing Radu Balan	RIA-GRA	637500 (RON)	637500	3.188
7	Cercetari privind controlul avansat cu aplicații în mecatronică, Contract IDEI-CNCSIS, 2007-2010, Director de proiect: prof.dr.ing Radu Balan	RIA-GRA	711930 (RON)	711930	3.560
8	DEHEMS (2008-2011), FP7-Comisia Europeană, Responsabil UTCN, prof.dr.ing Radu Balan (Buget: 781017,60 lei, prin conversie din EUR)	RIA-GRA	138058 (EUR)	138058	3.451
9	Studiu privind modernizarea controlului topirii în cuptorul cu arc electric KGYV-5t în vederea optimizării consumului energetic, Contract 40/14.04.2005 între Universitatea Tehnică din Cluj-Napoca și Rominserv SA București	RIA-CTR	16000 (RON)	16000	0.400

10	Sisteme pneumatice avansate de acționare precisă în robotică și în alte aplicații industriale bazate pe dezvoltarea de noi tipuri de servodistribuitoare proporționale în concepție mecatronică”, SPASERVODIST, CEEX 89/2006, Conducător proiect: Universitatea „POLITEHNICA” București, director proiect: prof.dr.ing. Nicolae Alexandrescu. Partener UTCN, director: prof.dr.ing. Vistrian Mătieș	RIA-CTR	720000 (RON)	720000	3.6
Total punctaj criteriul RIA - indicatori complementari					22.346

Total punctaj criteriul RIA: 4.258 + 18.746 = 23.004

Data: 02.06.2017

Sef.lucr.dr.ing. Hancu Olimpiu

