

Technical University of Cluj-Napoca

Faculty of Industrial Engineering, Robotics and Production Management

Department: Design Engineering and Robotics

Competition for the position of: Professor, position 9

Disciplines: Reliability, maintenance and safety in the exploitation of industrial robotic systems (eng.); Reliability, maintenance and safety in the exploitation of industrial robotic systems; Machine tools and manufacturing equipment (eng.).

Post published in the Official Monitor of Romania no. 438 din 29.11.2023.

LIST OF PUBLICATIONS

Assoc.Prof.Eng. Bogdan MOCAN, PhD

The most relevant publications in the context of the competition (max. 10)

- 1 Patent: **Mocan B.**, Bintintan, V., Instrument Laparoscopic pentru Localizarea Extralumenală Precisă a Unei Tumori Colorectale, Nr. brevet: RO 131186 B1/29.04.2021.
- 2 Patent: **Mocan B.**, Mocan, M., Dispozitiv pentru Realizarea Puncției Arteriale în Vederea Prelevării Unei Probe de Sânge din Artera Radială, Nr. brevet: RO 133031 B1/30.06.2023.
- 3 Fulea M, **Mocan B.**, Dragomir M, Murar M. On Increasing Service Organizations' Agility: An Artifact-Based Framework to Elicit Improvement Initiatives. *Sustainability*. 2023; 15(13):10189. <https://doi.org/10.3390/su151310189> (IF: 2023 3.889, Q2)
- 4 **Mocan, B.**; Schonstein, C.; Murar, M.; Neamtu, C.; Fulea, M.; Mocan, M.; Dragan, S.; Feier, H. Upper-Limb Robotic Exoskeleton for Early Cardiac Rehabilitation Following an Open-Heart Surgery - Mathematical Modelling and Empirical Validation. *Mathematics* 2023, 11(7), 1598; <https://doi.org/10.3390/math11071598>. (IF: 2023 2,59, Q1) <https://www.mdpi.com/2227-7390/11/7/1598>
- 5 **Mocan, B.**, Mocan, M., Fulea, M., Murar, M., Feier, H. Home-Based Robotic Upper Limbs Cardiac Telerehabilitation System. *International Journal of Environmental Research and Public Health*. 2022; 19 (18):11628 <https://doi.org/10.3390/ijerph191811628> (IF 2022 4,614, Q1).
- 6 Calborean, A., Macavei, S., **Mocan, B.** et al. Non-invasive laparoscopic detection of small tumors of the digestive tract using inductive sensors of proximity. *Sci Rep* **12**, issue **1**, 760 (2022). <https://doi.org/10.1038/s41598-022-04822-x>
ISSN: 2045-2322; Nature-Scientific Reports, IF 2021 4.996, Q1; CiteScore: 5.134, Q1).
- 7 **Mocan, B.**; Schonstein, C.; Neamtu, C.; Murar, M.; Fulea, M.; Comes, R.; Mocan, M. CardioVR-ReTone—Robotic Exoskeleton for Upper Limb Rehabilitation following Open Heart Surgery: Design, Modelling, and Control. *Symmetry* 2022, 14, 81. <https://doi.org/10.3390/sym14010081>
ISSN: 2073-8994; (IF 2021 2,940, Q2; CiteScore: 3.4, Q1).
- 8 Mocan, M., Vlaicu, S.I., Farcaș, A.D., Feier, H., Dragan, S., and **Mocan, B.**, Cardiac Rehabilitation Early after Sternotomy Using New Assistive VR-Enhanced Robotic Exoskeleton—Study Protocol for a Randomised Controlled Trial, *Int. J. Environ. Res. Public Health* 2021, 18, no 22, 11922. <https://doi.org/10.3390/ijerph182211922>, 2021, EISSN 1660-4601 (IF 2021 3.390, Q1).
- 9 Bințișan, V., Calborean, A., Mocan, M., Macavei, S., Cordoș, A., Ciuce, C., Bințișan, A., Chira, R., Nagy, G., Surlin, V., Timofte, D., Nickel, F., Mueller, B., Dindelegan, G., Ciuce, C., Brad, S., Murar, M., **Mocan, B.**, New inductive proximity sensor platform for precise localization of small colorectal tumors, *Materials Science and Engineering: C - MATERIALS FOR BIOLOGICAL APPLICATIONS*, Volume 106, Article 110146, 2020, ISSN 0928-4931, (<https://doi.org/10.1016/j.msec.2019.110146>), (IF 2020 7.328, CiteScore 11.5, Q1).
- 10 Calborean, A., Macavei, S., Mocan, M., Ciuce, C., Cordoș, A., Bintintan, A., Chira, R., Pestean, C., Pop, O., Barbu-Tudoran, L., Dindelegan, G., Surlin, V., Nickel, F., **Mocan, B.**, Bintintan, V., Laparoscopic compatible device incorporating inductive proximity sensors for precise detection of gastric and colorectal small tumors, *Surgical Oncology*, V. 35, pp. 504-514, (<https://doi.org/10.1016/j.suronc.2020.10.012>), December 2020, ISSN 0960-7404 (IF 2020 3.4, CiteScore 3.4, Q2).

PhD thesis

- 1 **Cercetări și Contribuții privind Proiectarea Orientată și Îmbunătățirea Performanțelor Sistemelor Robotizate de Sudare cu Arc Electric**
Data susținerii publice: **13.01.2012**
Ordinul Ministrului Educației, Cercetării, Tineretului și Sportului: **3639 din 27.03.2012**

Patents

1. **Mocan B.**, Bintintan, V., Instrument Laparoscopic pentru Localizarea Extralumenală Precisă a Unei Tumori Colorectale, Nr. brevet: RO 131186 B1/29.04.2021.
2. **Mocan B.**, Mocan, M., Dispozitiv pentru Realizarea Puncției Arteriale în Vederea Prelevării Unei Probe de Sânge din Artera Radială, Nr. brevet: RO 133031 B1/30.06.2023.

Books

A. Books/chapters published in national publishing houses recognized by CNCIS

- 1 Murar, M., **Mocan, B.**, s.a., Automate programabile logice și interfețe om-mașină, Editura UTPress, ISBN 978-606-737-246-5, 120 pg., Cluj-Napoca, 2023.
- 2 **Mocan, B.**, Brad, S., Fulea, M., Murar, M., Stan, A., Timoftei, S., *Multidisciplinary Design of Industrial Robotic Automation Solutions - Practical Guide For Students* - Editura UTPress, ISBN 978-606-737-246-5, 240 pg., Cluj-Napoca, 2018.
- 3 **Mocan, B.**, Timoftei, S., Stan, A., Fulea, M., RobotStudio® - Simulation of industrial automation processes and offline programming of ABBs robots - Practical guide for students - Editura UTPress, ISBN 978-606-737-254-0, 140 pg., Cluj-Napoca, 2017.
- 4 **Mocan, B.**, Brad, S., Fulea, M., *Automatizarea și Robotizarea Fabricației Structurilor Sodate*, Editura UTPress, ISBN 978-606-737-052-2, 290 pg., Cluj-Napoca, 2015.
- 5 Fulea, M., Brad, S., **Mocan, B.**, *Evaluarea excelenței organizaționale*, Editura UTPress, ISBN 978-606-737-065-2, 174 pg., Cluj-Napoca, 2015.
- 6 Brad, S., Brad, E., **Mocan, B.**, Fulea, M., *Tools and Methods of Competitive Design in Robotics*, Editura UT Press, ISBN 978-606-737-067-6, 183 pg., Cluj-Napoca, 2015.
- 7 Fulea, M., Brad, S., **Mocan, B.**, Murar, M., *Ingineria Dezvoltării Competitive a Produselor și Serviciilor Inovative*, Editura UT Press, ISBN 978-606-737-066-9, 52 pg., Cluj-Napoca, 2015.
- 8 Blebea, I., **Mocan, B.**, Steopan A., *Fiabilitatea, Mentenabilitatea și Siguranța Sistemelor de Producție*, Editura UT Press, ISBN 978-973-662-842-9, 292 pg., Cluj-Napoca, 2013.
- 9 **Mocan, B.**, *Sisteme Robotizate de Sudare cu Arc Electric – Proiectarea orientată și îmbunătățirea performanțelor sistemelor robotizate de sudare cu arc electric*, Editura UT Press, ISBN 978-973-662-881-8, 308 pg., Cluj-Napoca, 2013.
- 10 Brad, S., **Mocan, B.**; Duca, A., Brad, E., *Robotizarea Asistată de Calculator a Fabricației. Fundamentele Utilizării Mediului Workspace de Simulare și Programare Off-Line a Sistemelor de Fabricație Robotizate*, Editura UT Press, ISBN 978-973-662-361-5, 213 pg., Cluj-Napoca, 2008.
- 11 Brad, S., Ciupan, C., Pop, L., **Mocan, B.**, Fulea, M., *Manualul de Bază al Managerului de Produs în Ingineria și Managementul Inovației*, Ed. Economică, 700 pg., ISBN 973-709-265-1 / 978-973-709-265-6, București, 2006.
- 12 Brad, S., Brad, E., **Mocan, B.**, *Basic Tools of Competitive Design in Robotics – Student Guide for Practical Application*, Editura UT Pres, ISBN 973-662-161-8, 112 pg., Cluj-Napoca, 2005.

A. Books/chapters published in international publishing houses recognized by CNCIS (ISI Book)

- 1 Steopan M., **Mocan B.**, Florin P., Bucur M., Ispas V. (2021) Design and Development of a Robotic Hexapod Platform for Educational Purposes. In: Lovasz EC., Maniu I., Doroftei I., Ivanescu M., Gruescu CM. (eds) *New Advances in Mechanisms, Mechanical Transmissions and Robotics*. MTM&Robotics 2020. Mechanisms and Machine Science, vol 88. Springer, Cham. https://doi.org/10.1007/978-3-030-60076-1_9

Print ISBN 978-3-030-60075-4; Online ISBN 978-3-030-60076-1; pp. 91-103.

- 2 **Mocan B.**, Fulea M., Murar M., Steopan M., Mocan M. (2021) Automatic Arterial Puncture Sensorial Device for Fast Arterial Blood Gas Sampling from Radial Artery During Covid-19 Pandemic. In: Lovasz EC., Maniu I., Doroftei I., Ivanescu M., Gruescu CM. (eds) New Advances in Mechanisms, Mechanical Transmissions and Robotics. MTM&Robotics 2020. Mechanisms and Machine Science, vol 88 Springer, Cham. https://doi.org/10.1007/978-3-030-60076-1_48
Print ISBN 978-3-030-55060-8; Online ISBN 978-3-030-55061-5; pp. 533-542.
- 3 Patcas R., **Mocan B.**, Fulea M., Murar M., Steopan M. (2020) Design and Development of a Mobile Robot Equipped with Perception Systems for Autonomous Navigation. In: Pisla D., Corves B., Vaida C. (eds) New Trends in Mechanism and Machine Science. EuCoMeS 2020. Mechanisms and Machine Science, vol 89. Springer, Cham. https://doi.org/10.1007/978-3-030-55061-5_10
Print ISBN 978-3-030-60075-4; Online ISBN 978-3-030-60076-1; pp. 78-85.

Scientific articles

A. Articles in ISI journals (Q1 or Q2)

- 1 Fulea M, **Mocan B.**, Dragomir M, Murar M. On Increasing Service Organizations' Agility: An Artifact-Based Framework to Elicit Improvement Initiatives. Sustainability. 2023; 15(13):10189. <https://doi.org/10.3390/su151310189> (IF: 2023 3.889, Q2)
- 2 **Mocan, B.**; Schonstein, C.; Murar, M.; Neamtu, C.; Fulea, M.; Mocan, M.; Dragan, S.; Feier, H. Upper-Limb Robotic Exoskeleton for Early Cardiac Rehabilitation Following an Open-Heart Surgery - Mathematical Modelling and Empirical Validation. Mathematics 2023, 11(7), 1598; <https://doi.org/10.3390/math11071598>. (IF: 2023 2,59, Q1)
<https://www.mdpi.com/2227-7390/11/7/1598>
- 3 **Mocan, B.**, Mocan, M., Fulea, M., Murar, M., Feier, H. Home-Based Robotic Upper Limbs Cardiac Telerehabilitation System. International Journal of Environmental Research and Public Health. 2022; 19 (18):11628 <https://doi.org/10.3390/ijerph191811628> (IF 2022 4,614, Q1)
- 4 Calborean, A., Macavei, S., **Mocan, B. et al.** Non-invasive laparoscopic detection of small tumors of the digestive tract using inductive sensors of proximity. *Sci Rep* **12**, issue **1**, 760 (2022). <https://doi.org/10.1038/s41598-022-04822-x>
ISSN: 2045-2322; Nature-Scientific Reports, IF 2021 4.996, Q1; CiteScore: 5.134, Q1)
- 5 **Mocan, B.**; Schonstein, C.; Neamtu, C.; Murar, M.; Fulea, M.; Comes, R.; Mocan, M. CardioVR-ReTone—Robotic Exoskeleton for Upper Limb Rehabilitation following Open Heart Surgery: Design, Modelling, and Control. Symmetry 2022, 14, 81. <https://doi.org/10.3390/sym14010081>
ISSN: 2073-8994; (IF 2021 2,940, Q2; CiteScore: 3.4, Q1)
- 6 Mocan, M., Vlaicu, S.I., Farcaş, A.D., Feier, H., Dragan, S., and **Mocan, B.**, Cardiac Rehabilitation Early after Sternotomy Using New Assistive VR-Enhanced Robotic Exoskeleton—Study Protocol for a Randomised Controlled Trial, Int. J. Environ. Res. Public Health 2021, 18, no 22, 11922. <https://doi.org/10.3390/ijerph182211922>, 2021, EISSN 1660-4601 (IF 2021 3.390, Q1)
- 7 Binţinţan, V., Calborean, A., Mocan, M., Macavei, S., Cordoş, A., Ciuce, C., Binţinţan, A., Chira, R., Nagy, G., Surlin, V., Timofte, D., Nickel, F., Mueller, B., Dindelegan, G., Ciuce, C., Brad, S., Murar, M., Mocan, B., New inductive proximity sensor platform for precise localization of small colorectal tumors, Materials Science and Engineering: C -MATERIALS FOR BIOLOGICAL APPLICATIONS, Volume 106, Article 110146, 2020, ISSN 0928-4931, (<https://doi.org/10.1016/j.msec.2019.110146>), (IF 2020 7.328, CiteScore 11.5, Q1)
- 8 Calborean, A., Macavei, S., Mocan, M., Ciuce, C., Cordos, A., Bintintan, A., Chira, R., Pestean, C., Pop, O., Barbu-Tudoran, L., Dindelegan, G., Surlin, V., Nickel, F., Mocan, B., Bintintan, V., Laparoscopic compatible device incorporating inductive proximity sensors for precise detection of gastric and colorectal small tumors, Surgical Oncology, V. 35, pp. 504-514, (<https://doi.org/10.1016/j.suronc.2020.10.012>), December 2020, ISSN 0960-7404 (IF 2020 3.4, CiteScore 3.4, Q2)

A. Articles in ISI journals

- 1 **Mocan, B.**, Fulea, M., Murar, M., Chereches, I. A., Marian, S., Robotic Cell Customization Using Augmented Reality, *Acta Technica Napocensis, Series: Applied Mathematics, Mechanics and Engineering*, Vol 64, No 4s (2021), pp. 725-732, December 2021; ISSN: 1221-5872.
- 2 Fulea, M., Kis, M., Blagu, D., **Mocan, B.**, Artifact-Based Approach to Improve Internal Process Quality Using Interaction Design Principles, *Acta Technica Napocensis, Series: Applied Mathematics, Mechanics and Engineering*, Vol 64, No 4s (2021), pp. 697-706, December 2021; ISSN: 1221-5872.
- 3 **Mocan, B.**, Neamtu, C., Fulea, M., Murar, M., Comes, R., Jac, M., Feier, H., Mocan, M., CardioVR-ReTone – 14 DoFs Upper-Body Robotic Exoskeleton Designed to Support Cardiac Rehabilitation, *Acta Technica Napocensis, Series: Applied Mathematics, Mechanics and Engineering*, Vol 64, No 3 (2021), pp. 379-388, 2021; ISSN: 1221-5872.
- 4 **Mocan, B.**, Fulea, M., A.D., FĂRCAȘ, M., Mocan, Exoskeleton Robotic Systems Used as a Tool for Cardiac Rehabilitation, *Acta Technica Napocensis, Series: Applied Mathematics, Mechanics and Engineering*, Vol 62, No 3 (Sept. 2019), pp. 411-416, 2019; ISSN: 1221-5872; WOS:000489767000007.
- 5 **Mocan, B.**, Fulea, M., Mocan, M., Bintintan, V., A Robotic Helping Hand to the Detection of Small Colorectal Tumours in Laparoscopic Surgery, *Acta Technica Napocensis, Series: Applied Mathematics, Mechanics and Engineering*, Vol 62, No 1 (March 2019), pp. 91-98, 2019.
- 6 Mocan, M., **Mocan, B.**, Cardiac rehabilitation for older patients with cardiovascular pathology using robotic systems - A survey, *Balneo Research Journal*, ISSN: 2069-7597/eISSN: 2069-7619, Vol.10, No.1, February 2019, pp. 33-36, 2019 (DOI: 10.12680/balneo.2019.236)
- 7 Mocan, M., Chiorescu, R., Banc, O.N., **Mocan, B.**, Anton, F., Stoia, M., Farcas, A.D., Cardiac rehabilitation protocols outcome in frail patients undergoing transcatheter aortic valve implantation, *Balneo Research Journal*, ISSN: 2069-7597/eISSN: 2069-7619, Vol.9, No.4, December 2018, pp. 401-405, 2018 (DOI: 10.12680/balneo.2018.220)
- 8 **Mocan, B.**, Brad, S., Fulea, M., Murar, M., Brad, E., Safety Management Within a Robotic Manufacturing System Through Layout Design, *Acta Technica Napocensis, Series: Applied Mathematics, Mechanics and Engineering*, Vol 61, No 3 Special Issue (September 2018), pp. 137-146, 2018; WOS:000451702200018
- 9 Fulea, M., Brad, S., **Mocan, B.**, Murar, M., Framework for Building a Service Vision Statement, *Acta Technica Napocensis, Series: Applied Mathematics, Mechanics and Engineering*, Vol 61, No 3 Special Issue, (September 2018), pp. 75-84, 2018, WOS:000451702200011
- 10 Bartha, L., Fulea, M., **Mocan, B.**, EXPRESS-CAR-HIRE - A NEW CONCEPT FOR ELECTRIC VEHICLE HIRING WITHIN AIRPORT TERMINALS, *Environmental Engineering and Management Journal*, February 2018, Vol.17, No. 2, 273-283, ISI journal, (IF 1.186, Q4), 2018; eISSN: 1843-3707; WOS:000427084800004
- 11 **B. Mocan**, V. V. Bintintan, S. Brad, C. Ciuce, M. Mocan, M. Murar, Development of a Robotic Driven Handheld Laparoscopic Instrument for Non-invasive Intraoperative Detection of Small Endoluminal Digestive Tumors, *New Trends in Medical and Service Robots - Human Centered Analysis, Control and Design*, Springer International Publishing, V. 39, pp 197-210, 2016.
- 12 Brad, S., **Mocan, B.**, Brad, E., Fulea, M., Environmentally Sustainable Economic Growth, *Amfiteatru Economic*, 18(42), pp. 446-461, (IF 0,564), 2016
- 13 **Mocan, B.**, Fulea, M., Olaru, M. and Buchmüller, M., From Intuitive Programming of Robotic Systems to Business Sustainability of Manufacturing SMEs. *Amfiteatru Economic*, 18(41), pp. 215-231, (IF 0,564), 2016.
- 14 Fulea M., Tanaselea, C., **Mocan, B.**, Murar, M., Algorithm for Automatically Generating the Robot Program for a Reconfigurable Palletising Application, *Acta Technica Napocensis, Series: Applied Mathematics, Mechanics and Engineering*, vol. 58, Issue IV, pp. 579-584, 2015.
- 15 Olaru, M., Dinu V., Keppler, T., **Mocan, B.**, Mateiu, A., STUDY ON THE OPEN INNOVATION PRACTICES IN ROMANIAN SMEs, *Amfiteatru Economic*, 17 (Special No. 9), ISSN: 1582 – 9146, pp. 1129-1141, (IF 0,564), 2015

A. Articles in ISI Proceedings indexed volumes

- 1 Steopan M., **Mocan B.**, Florin P., Bucur M., Ispas V. (2021) Design and Development of a Robotic Hexapod Platform for Educational Purposes. In: Lovasz EC., Maniu I., Doroftei I., Ivanescu M., Gruescu CM. (eds) *New Advances in Mechanisms, Mechanical Transmissions and Robotics. MTM&Robotics 2020. Mechanisms and Machine Science*, vol 88. Springer, Cham.

https://doi.org/10.1007/978-3-030-60076-1_9

Print ISBN 978-3-030-60075-4; Online ISBN 978-3-030-60076-1; pp. 91-103.

- 2 **Mocan B.**, Fulea M., Murar M., Steopan M., Mocan M. (2021) Automatic Arterial Puncture Sensorial Device for Fast Arterial Blood Gas Sampling from Radial Artery During Covid-19 Pandemic. In: Lovasz EC., Maniu I., Doroftei I., Ivanescu M., Gruescu CM. (eds) *New Advances in Mechanisms, Mechanical Transmissions and Robotics*. MTM&Robotics 2020. Mechanisms and Machine Science, vol 88 Springer, Cham. https://doi.org/10.1007/978-3-030-60076-1_48
Print ISBN 978-3-030-55060-8; Online ISBN 978-3-030-55061-5; pp. 533-542.
- 3 Patcas R., **Mocan B.**, Fulea M., Murar M., Steopan M. (2020) Design and Development of a Mobile Robot Equipped with Perception Systems for Autonomous Navigation. In: Pislă D., Corves B., Vaida C. (eds) *New Trends in Mechanism and Machine Science*. EuCoMeS 2020. Mechanisms and Machine Science, vol 89. Springer, Cham. https://doi.org/10.1007/978-3-030-55061-5_10
Print ISBN 978-3-030-60075-4; Online ISBN 978-3-030-60076-1; pp. 78-85.
- 4 **Mocan, B.**; Osan, C.; Fulea, M.; Chis, I.A.; Timoftei, S.; Sarb, A., An Integrated Model for Solving Cell Formation Problem and Robot Scheduling Using Timed Petri Nets, 2016 International Conference on Production Research - Africa, Europe and the Middle East (ICPR-AEM) / 4th International Conference on Quality and Innovation in Engineering and Management (QIEM), July 25-30, 2016, Cluj-Napoca, Romania, pp. 91-96, ISBN: 978-606-737-180-2, (2016).
Mocan, M.; Rahaian, R.; **Mocan, B.**; Blaga, S.N.; Multi-Marker Evaluation of the Cardio-Metabolic Risk, 85th Congress of the European-Atherosclerosis-Society (EAS), Prague, CZECH REPUBLIC, APRIL 23-26, V. 263, pp. E201-E202, ISSN: 0021-9150, 2017 (DOI: 10.1016/j.atherosclerosis.2017.06.650)
- 5 Fulea, M.; **Mocan, B.**; Brad, E.; Homorodean, D., Designing the Usability of an Innovation Management Assessment Software Platform, 2016 International Conference on Production Research - Africa, Europe and the Middle East (ICPR-AEM) / 4th International Conference on Quality and Innovation in Engineering and Management (QIEM), July 25-30, 2016, Cluj-Napoca, Romania, pp. 340-345, ISBN: 978-606-737-180-2, (2016).
- 6 Brad, S., **Mocan, B.**, Brad, E., Fulea, M., TRIZ to Support Blue-design of Products, *Procedia CIRP*, Volume 39, pp. 125-131, 2016.
- 7 **Mocan, B.**, Fulea, M., Brad, S. Designing a Multimodal Human-Robot Interaction Interface for an Industrial Robot, *Proceedings of 24th International Conference on Robotics in Alpe-Adria-Danube Region (RAAD), ADVANCES IN ROBOT DESIGN AND INTELLIGENT CONTROL*, V. 371, pp. 255-263, SPRINGER-VERLAG BERLIN, HEIDELBERGER PLATZ 3, D-14197 BERLIN, GERMANY, 2016 (DOI: 10.1007/978-3-319-21290-6_26)
- 8 Mocan, M., **Mocan, B.**, Blaga, S.N., Mechanical conditions around neovessels in popliteal atherosclerotic plaques – An analysis using finite element method, *The 84th European Society of Atherosclerosis (EAS) Congress, Atherosclerosis*; 252, pp. 164–pp. 165, Innsbruck, Austria, 2016.
<http://www.sciencedirect.com.ezproxy.umf.ro/science/article/pii/S0021915016310875>
- 9 **Mocan. B.**, Fulea, M., Olaru, M., Buchmüller, M., *Paradigm Shift in Robotic Systems Programming for Increasing Business Sustainability*, BASIQ 2015 International Conference "New Trends in Sustainable Business and Consumption", Bucharest, ISSN 2457-483X ISSN-L 2457-483X, pp. 338-345, 2015
- 10 Brad, S., **Mocan, B.**, Brad, E., Fulea, M., *Vectors of Innovation for Balancing Economic Growth and Sustainable Development*, BASIQ 2015 International Conference "New Trends in Sustainable Business and Consumption", Bucharest, ISSN 2457-483X ISSN-L 2457-483X, pp. 457-464, 2015
- 11 Olaru, M., Dinu V., Keppler, T., **Mocan, B.**, Mateiu, A., *Study on the Adoption of Open Innovation Principles by the Romanian SMEs*, BASIQ 2015 International Conference "New Trends in Sustainable Business and Consumption", Bucharest, ISSN 2457-483X ISSN-L 2457-483X, pp. 400-407, 2015
- 12 **Mocan, B.**, Fulea, M., Brad, E. and Brad, S., *State-of-the-Art and Proposals on Reducing Energy Consumption in the Case of Industrial Robotic Systems*, *Proceedings of the 2014 International Conference on Production Research – Regional Conference Africa, Europe and the Middle East; 3rd International Conference on Quality and Innovation in Engineering and Management*, Cluj-Napoca, Romania, 1-5 July, ISBN: 978-973-662-978-5, pp. 328-334, 2014.
- 13 Fulea, M., Ilies, A., Brad, S., Brad, E., **Mocan, B.**, Murar, M., *An Innovative Approach on Prioritizing Internal Improvement Projects within SMEs*, *Proceedings of the 2014 International Conference on Production Research – Regional Conference Africa, Europe and the Middle East; 3rd International Conference on Quality and Innovation in Engineering and Management*, Cluj-Napoca, Romania, 1-5 July, ISBN: 978-973-662-978-5, pp. 200-206, 2014.
- 14 Brad, S., Fulea M., **Mocan, B.**, Brad, E., Systematic Innovation for Improving Competitiveness of a Master

- Study Program, Proceedings of International Conference on Engineering & Business Education, Innovation and Entrepreneurship, ISBN 978-606-12-0369-7; ISSN 1843-6730, Indexată ISI, pp. 365-368, 18-21 October 2012.
- 15 Fulea, M., **Mocan, B.**, Brad, S., A Formal Approach of Managing Information Related to an Integrated Management System, Proceedings of The 1st International Conference on Quality and Innovation in Engineering and Management, ISBN 978-973-662-614-2, Indexată ISI, pp. 81-84, 2011.
 - 16 Fulea, M., **Mocan, B.**, Brad, S., An Ontology-Based Approach of Guiding the Innovation Process Within SMEs, Proceedings of The 1st International Conference on Quality and Innovation in Engineering and Management , ISBN 978-973-662-614-2, Indexată ISI, pp. 281-284, 2011.
 - 17 **Mocan, B.**, Fulea, M., Brad, S., Reliability Assessment of Lean Manufacturing Systems, Proceedings of The 1st International Conference on Quality and Innovation in Engineering and Management , ISBN 978-973-662-614-2, , Indexată ISI, pp. 127-130, 2011.
 - 18 Brad, S., Brad, E., **Mocan, B.**, Bringing the Edge of Competitiveness into Engineering Design Education: the UTCN Experience, Proceedings of the Balkan Region Conference on Engineering and Business Education & International Conference on Engineering and Business Education, ISBN 978-973-739-848-2; ISSN 1843-6730, Indexată ISI, pp. 363-368, 15th-17th October 2009.
 - 19 Brad, S., Fulea, M., **Mocan, B.**, Duca, A., Brad, E., Software Platform for Supporting Open Innovation, Int. Conf. AQTR2008, Cluj-Napoca, ISBN 978-1-4244-2576-1, pp. 224-229, (<http://ieeexplore.ieee.org/xpl>), Indexată ISI și IEEE Xplore, 2008.
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B. Articles in journals or proceedings of scientific events indexed in other international databases (e.g. SCOPUS, Google Scholar and Springerlink)

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