

"Aurel Vlaicu" University of Arad  
Faculty of Engineering  
Department of AIITT  
**PhD. Eng. Babanatis Merce Roxana Mihaela**

**LIST  
scientific works**

**A. Books and book chapters**

1. D. Glavan, T. Babanatsas, **R. M. Merce**, Ghidul Materialelor în Design – Universitatea Aurel Vlaicu Arad,, ISBN 978-973-752-772-1, **2016**
2. Glavan Dan Ovidiu, Popa Alexandru, Babanatsas Theoharis, **Merce Roxana Mihaela**. Materiale avansate în design. Editura Universitatii „Aurel Vlaicu”Arad, 2018 ISBN 978-973-752-785-1., 2018.

**B. ISI/BDI indexed works**

**Scientific papers published in Web of Science-WoS (ISI) indexed journals**

1. Glavan, D. O., Ursu-Fischer, N., Babanatsas, T., Radu, I. and **Babanatis Merce, R. M.**: "Tool machinery frames comparison: welded or molded structures", Acta Technica Napocensis, Series: Applied Mathematics, Mechanics and Engineering, 61, Issue IV, 2018 (WOS:000453442200004)
2. Glavan, D. O., Babanatsas, T. , Ciupan, C., **Babanatis Merce, R. M.**, Radu, I. and Gaspar, M. C.: " Processing precision on turning machine with inclined bed frame", Acta Technica Napocensis, Series: Applied Mathematics, Mechanics and Engineering, 61, Issue IV, 2018 (WOS:000453442200005)
3. **Babanatis Merce, R. M.**, Babanatsas, T. and Glavan, D. O.: "Value analysis of harvesting systems for olives", Acta Technica Napocensis, Series: Applied Mathematics, Mechanics and Engineering, 62, Issue I, 2019 (WOS:000464577100025)
4. Glăvan, D., Babanatsas, T., Glavan, A., **Babanatis-Merce, R. M.**, Radu, I., Gaspar, M...: " Study of the manufacturing precision on turning machine with inclined bed frame in real time of processing", Acta Technica Napocensis, Series: Applied Mathematics, Mechanics and Engineering, 62, Issue I, 2019 (WOS:000464577100011)
5. Babanatsas, T., **Babanatis Merce, R. M.**, Glavan, D. O. and Komjaty: A."Experimental study on decreasing the damage to the olive tree during mechanized harvesting", Acta Technica Napocensis, Series: Applied Mathematics, Mechanics and Engineering, 62, Issue I, 2019 (WOS:000464577100026)

6. **Babanatis Merce, R. M.**, Babanatsas, T., Glavan, D. O., Mircea, R., Glavan, A.I., Bucevschi, A., Gaspar, M.C.: "Programming optical sensors to increase performance of olive sorting system", Acta Technica Napocensis, Series: Applied Mathematics, Mechanics and Engineering, 64, Issue 1, 2021 (WOS:000694719400012)
7. **Babanatis Merce, R. M.**, Babanatsas, T., Glavan, D. O., Glavan, A.I., Bucevschi, A., and Gaspar, M.C.: "Automated tool for olive color recognition in sorting system development", Acta Technica Napocensis, Series: Applied Mathematics, Mechanics and Engineering, 64, Issue 1, 2021 (WOS:000694719400012)
8. Babanatsas, T., Sanda, G., **Babanatis-Merce, R.M.**, Sanda, C.M.. " Value analysis on olive sorting methods", Acta Technica Napocensis, Series: Applied Mathematics, Mechanics and Engineering, 64, Issue 3, 2021 (WOS:000729656100008)

**Scientific works published in the volumes of indexed scientific events (Proceedings). Web of Science-WoS (ISI) Proceedings**

1. Glavan, D. O., Babanatsas, T., **Babanatis Merce, R. M.**: " 3D modeling of olive tree and simulating the harvesting forces", MSE 2017 "Trends in New Industrial Revolution, 121, 2017 (WOS:000435283800116)
2. **Babanatis Merce, R. M.**, Babanatsas, T., Maris, S., Tucu, D. and Ghergan, O. C.: "Study of an automatic olives sorting system", 46th Symposium on Actual Tasks on Agricultural Engineering, Zagreb, 46, pp 485-490, 2018 (WOS:000506355900049)
3. Ghergan, O. C., Tucu, D., Iusco, A., Draghicescu, D., **Babanatis Merce, R. M.**: " Small greenhouse robotized solutions: state of the art and future perspectives", 47th Symposium on Actual Tasks on Agricultural Engineering, Zagreb, 47, pp 267-276, 2019 (WOS:000472729500027)
4. Szabo, M., **Babanatis Merce, R. M.**, Barbu, I., Babanatsas, T., Jitaru, L.: " The study of the traction behaviour of knitted structures with controlled dimensional stability", 7th International Conference on Modern Technologies in Industrial Engineering (ModTech), IOP Conference Series-Materials Science and Engineering, 2019 (WOS:000562929900098)
5. Szabo, M., **Babanatis Merce, R. M.**, Barbu, I., Babanatsas, T., Jitaru, L.: " Study of dimensional changes during washing process for 1:1 interlock cotton yarns", 7th International Conference on Modern Technologies in Industrial Engineering (ModTech), IOP Conference Series-Materials Science and Engineering, 2019 (WOS:000562929900099)
6. Babanatsas, T., Glavan, D. O., **Babanatis Merce, R. M.** and Glavan A.: " Study of Forces Influencing the Shaking Parameters in Mechanized / Robot-assisted Harvesting of Olives", MSE 2019, Trends in New Industrial Revolution, 290, 2019 (WOS:000569367700034)
7. **Babanatis Merce, R. M.**, Babanatsas T., and Glavan, D. O.: " Experimental study on the automatic selection of olives", MSE 2019, Trends in New Industrial Revolution, 290, 2019 (WOS:000569367700053)

**Scientific works published in the volumes of indexed scientific events (Proceedings). BDI (with BDI specification)**

1. Babanatsas, T. **Babanatis Merce, R. M.**, Glăvan, D. O. and Glăvan A. „Contributions to optimization of storage and transporting industrial goods”, IOP Conference Series: Materials Science and Engineering- International Conference on Applied Science, Hunedoara– ICAS, Vol. 294, 2017 (SCOPUS)
2. Babanatsas, T., Glăvan, D. O., **Babanatis Merce, R. M.** and Maris, S. A. „Modelling in 3D the olive trees cultures in order to establish the forces (interval) needed for automatic harvesting”, IOP Conference Series: Materials Science and Engineering- International Conference on Applied Science, Hunedoara– ICAS, Vol. 294, 2017 (SCOPUS)
3. Glăvan, D. O., Babanatsas, T., **Babanatis Merce, R. M.** and Glăvan A. „Comparative study of tool machinery sliding systems; comparison between plane and cylindrical basic shapes”, IOP Conference Series: Materials Science and Engineering- International Conference on Applied Science, Hunedoara– ICAS, Vol. 294, 2017 (SCOPUS)
4. Babanatsas, T. Glavan, D. O., **Babanatis Merce, R. M.**, Borzan, M., Radu I. and Maris, S. A.. „Harvesting olive tree using accurate vibrations generated by a robotic system”, IOP Conference Series: Materials Science and Engineering- International Conference on Applied Science, Vol. 393, 2018 (SCOPUS)
5. Glavan, D. O., Babanatsas, T. Borzan, M., Radu, I. and **Babanatis Merce, R. M.** „Considerations about command system for lathes with numerical controls, adaptive controls and copying system with hydraulic modules or computer assisted”, IOP Conference Series: Materials Science and Engineering- International Conference on Applied Science, Vol. 393, 2018 (SCOPUS)

**C. Works published in journals and conference volumes with referees (not indexed)  
- Magazines**

**Date:**  
20.09.2024

**Signature:**