

Universitatea „Aurel Vlaicu” din Arad Facultatea de Inginerie

Departamentul A.I.I.T.T.

S.L. dr. ing. Babanatsas Theoharis

L I S T A
lucrărilor științifice

A. Cărți si capitole în cărți

1. Compunerea și construcția mașinilor-unelte,curs, 2002 Editura Universitatii „Aurel Vlaicu”Arad, Glăvan Dan Ovidiu, **Babanatsas Theoharis**, ISBN 973-99086-8-3 255 pag
2. Proiectarea asistată de calculator-curs Editura Universitatii „Aurel Vlaicu”Arad, Glăvan Dan Ovidiu, **Babanatsas Theoharis**, 2014, ISBN978-973-712-7 153 pag
3. Indrumător de Laborator CAM- Strunjire Editura Universitatii „Aurel Vlaicu”Arad 2013, Glăvan Dan Ovidiu, **Babanatsas Theoharis** ISBN 978-973-752-711-0 114 pag
4. Indrumător de Laborator CAM- Frezare 2014 Editura Universitatii „Aurel Vlaicu”Arad 2013, Glăvan Dan Ovidiu, **Babanatsas Theoharis** ISBN 978-973-752-714-1 188 pag
5. Indrumător de Laborator Bazele generării suprafețelor pe mașini-unelte Editura Universitatii „Aurel Vlaicu”Arad 2015, **Babanatsas Theoharis** , Glăvan Dan Ovidiu ISBN: 978-973-752-731-8 80 pag
6. Ghidul materialelor în design Editura Universitatii „Aurel Vlaicu”Arad,2016 ISBN 978-973-752- 772-1 Glăvan Dan Ovidiu, **Babanatsas Theoharis**, Merce Roxana Mihaela, Glăvan Rodica Adriana 259 pag
7. Welcome in the world of o and 1 in cutting processing machines The book ok CAD/CAM engineer Editura Universitatii „Aurel Vlaicu”Arad,2016, ISBN 978-973-752-771-4, Dan Ovidiu Glavan, **Babanatsas Theoharis** 148 pag
8. Materiale avansate in design Editura Universitatii „Aurel Vlaicu”Arad Nr CNCSIS 218 2018 ISBN 978-073-752-785-1. Glăvan Dan Ovidiu, Popa Alexandru, **Babanatsas Theoharis**, Merce Roxana Mihaela 314 pag
9. Calculul Si Optimizarea Parametrilor Proceselor Tehnologice de Prelucrare Prin Așchiere. Editura Universitatii „Aurel Vlaicu”Arad Nr CNCSIS 218,2016 ISBN 978-973-752-937-4. 2024 Mircea Raul-Bogdan, Glăvan Dan Ovidiu, **Theoharis Babanatsas**.

B. Lucrări indexate ISI/BDI

Lucrări ISI

În reviste:

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

În Proceedings

9. D. O. Glavan, **T. Babanatsas** and R. M. Babanatis Merce: " 3D modeling of olive tree and simulating the harvesting forces", MSE 2017 8th International Conference on Manufacturing Science and Education – MSE, Vol. 121, 2017. Indexat ISI: WOS:000435283800116
10. D. O. Glavan, **T. Babanatsas**: "Tool machinery vibrations frames comparison concerning welded or moulded manufacturing structures", MSE 2017 "Trends in New Industrial Revolution, 121, 2017. Indexat ISI: WOS:000435283800005
11. R M Babanatis Merce, **T Babanatsas** and D O Glăvan, *Experimental study on the automatic selection of olives*, 9th International Conference on Manufacturing Science and Education – MSE, Vol. 290, 2019
12. **T Babanatsas**, D O Glăvan, R M Babanatis Merce and A Glavan, *Study of Forces Influencing the Shaking Parameters in Mechanized / Robot-assisted Harvesting of Olives*, 9th International Conference on Manufacturing Science and Education – MSE, Vol. 290, 2019

13. M Szabo, R M Babanatis-Merce, I Barbu, **T Babanatsas** and L Jitaru, *The study of the traction behaviour of knitted structures with controlled dimensional stability*, IOP Conf. Series: Materials Science and Engineering Vol. 591, 2019
14. M Szabo, R M Babanatis-Merce, I Barbu, **T Babanatsas** and L Jitaru, *The study of the traction behaviour of knitted structures with controlled dimensional stability*, IOP Conf. Series: Materials Science and Engineering Vol. 591, 2019
15. R M Babanatis Merce, **T Babanatsas**, S Maris, D Tucu and O C Ghergan, *Study of an automatic olives sorting system*, Proceedings 46th International Symposium: Actual tasks on agricultural engineering, Opatija, Croatia, pp.485-490, 2018
16. **T Babanatsas**, D O Glavan, R M Babanatis Merce, M Borzan, I Radu and S A Maris, *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
17. D O Glavan, **T Babanatsas**, M Borzan, I Radu and R M Babanatis Merce, *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

Lucrări indexate BDI

1. **T Babanatsas**, R M Babanatis Merce, D O Glăvan and A Glăvan, *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
2. **T Babanatsas**, D O Glăvan, R M Babanatis Merce and S A Maris, *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
3. D O Glăvan, **T Babanatsas**, R M Babanatis Merce and A Glăvan, *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
4. D O Glăvan, **T Babanatsas** and R M Babanatis Merce, *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
5. D O Glăvan, **T Babanatsas** and R M Babanatis Merce, *Comparative research bedframe behavior on a lathe normal variations caused molded or welded to the requests of forced vibrations*, Annals of the University of Petroșani, Mechanical Engineering, vol 17, 2015, pag 47- 52, ISSN 1454- 9166, indexată B+
6. **T Babanatsas**, D O Glăvan, and R M Babanatis Merce, *The compared dynamic study of a normal parallel lathe frame made in the welded version and casted version*, Annals of the University of Petroșani, Mechanical Engineering, vol 17, 2015, pag 21-26, ISSN 1454-9166, indexată B+
7. D O Glăvan, **T Babanatsas** and R M Babanatis Merce, *Study of harvesting methods and necessity of olive harvesting robot*, ANNALS of Faculty Engineering Hunedoara – International Journal of Engineering, Tome XIV, 2016, ISSN 1584-2673, indexată B+
8. **T Babanatsas**, D O Glăvan and R M Babanatis Merce, *Concept of an automating olive harvesting system*, ACTA TECHNICA CORVINIENSIS – Bulletin of Engineering, Tome IX, 2016, ISSN: 2067 – 380, indexată B+

9. D O Glăvan, **T Babanatsas** and R M Babanatis Merce, *The case for the wireless ad hoc system for positioning and its use in sports*, ANNALS of Faculty Engineering Hunedoara – International Journal of Engineering, Tome XV, 2017, ISSN 1584-2673, indexată B+
10. Mircea R. B., Lile R., Tucu D., Gal L., **Babanatsas T.** *Mathematical Modelling Designed for Monitoring Traceability and Quality Statistical Control in Romanian SMEs*. Valahian Journal of Economic Studies, 14(1), 25–36, 2023.
11. Nechifor A. C., Mircea R., D. O. Glăvan, **T. Babanatsas**. Integrated operational structure for monitoring traceability and quality statistical control in sme's. ANNALS OF FACULTY ENGINEERING HUNEDOARA – INTERNATIONAL JOURNAL OF ENGINEERING. ISSN- 2601 – 2332, 2024
12. Nechifor A. C., Mircea R., D. O. Glăvan, **T. Babanatsas**. Analysis of the impact of quality costs in the manufacturing processes of Romanian companies. ANNALS OF FACULTY ENGINEERING HUNEDOARA – INTERNATIONAL JOURNAL OF ENGINEERING. ISSN- 1584-2665, 2024
13. Babanatsas, T.; Babanatis-Merce, R. M. A Conceptual Model for Eco-Friendly Low-Cost Counter-Drone Defence Using Biodegradable Sticky Microfibers. Preprints 2025, 2025091486. <https://doi.org/10.20944/preprints202509.1486.v1>
14. Babanatsas, T.; Babanatis-Merce, R. M. Study of the Possibility of a Conceptual Framework for Digital Twin and Cyber-Physical Systems to Enhance Sustainable Agricultural Management. Preprints 2025, 2025071473. <https://doi.org/10.20944/preprints202507.1473.v1>
15. Babanatsas, T.; Babanatis-Merce, R. M. Study of the Possibility of Implementing the Prediction of Wear of Car Parts Based on Quality and Use Patterns Through IoT Technologies. Preprints 2025, 2025030990. <https://doi.org/10.20944/preprints202503.0990.v1>

C. Lucrări publicate în reviste și volume de conferințe cu referenți (neindexate)

1. „Ghidajele circulare și precizia lor” Glăvan Dan, Babanatsas Theoharisautor publicată în cadrul Sesiunii de Comunicări Științifice a Universității “Aurel Vlaicu” Arad, mai, 2000 https://scholar.google.com/citations?view_op=view_citation&hl=en&user=sIBXGsUAAA&sortby=title&citation_for_view=sIBXGsUAAA&maZDTaKrznsC
2. „Sisteme de comandă în cazul comenzii adaptive și a copierii” Glăvan Dan, Babanatsas Theoharis publicată în cadrul Sesiunii de Comunicări Științifice a Universității “Aurel Vlaicu” Arad, mai, 2000 https://scholar.google.com/citations?view_op=view_citation&hl=en&user=sIBXGsUAAA&sortby=title&citation_for_view=sIBXGsUAAA&M3NEmzRMikIC
3. Copierea în condițiile comenzii adaptive D Glăvan, I Radu, B Theoharis Sesiunea anuală cu participare internațională IMT Oradea, 2002 https://scholar.google.com/citations?view_op=view_citation&hl=en&user=sIBXGsUAAA&cstart=20&pagesize=80&sortby=title&citation_for_view=sIBXGsUAAA&RGFaLdJalmkC
4. Experimentarea regimului variabil și a comenzii adaptive D Glăvan, B Theoharis Sesiunea jubiliara de comunicări științifice cu participare internațională “30 ANI DE INVATAMANT SUPERIOR DE STAT IN ARAD” ARAD, 2002 https://scholar.google.com/citations?view_op=view_citation&hl=en&user=sIBXGsUAAA&cstart=20&pagesize=80&sortby=title&citation_for_view=sIBXGsUAAA&NaGl4SEjCO4C

5. Tehnologia de realizare a ghidajelor circulare D Glăvan, B Theoharis Sesiunea jubiliara de comunicari stiintifice cu participare internationala "30 ANI DE INVATAMANT SUPERIOR DE STAT IN ARAD" ARAD, 2002
https://scholar.google.com/citations?view_op=view_citation&hl=en&user=sIBXGsUAAAJ&cstart=100&pagesize=100&sortby=title&citation_for_view=sIBXGsUAAAJ:J_g5lvAfSwC
6. „Contributions to the concept and manufacture of a dive harvesting robot” D Glăvan, B Theoharis Conferința națională de robotică, Craiova 17-19 oct.2002
https://scholar.google.com/citations?view_op=view_citation&hl=en&user=sIBXGsUAAAJ&sortby=title&citation_for_view=sIBXGsUAAAJ:ns9cj8mVeAC
7. „Considerente noi în cazul comenzii adaptive și a copierii” Dan Glăvan, Babanatis Theoharis Symposium Research and Education in Innovation Era, 3rd Ed., Section Engineering, Arad – 2008 ISSN 1842-9718.
https://scholar.google.com/citations?view_op=view_citation&hl=en&user=sIBXGsUAAAJ&cstart=20&pagesize=80&sortby=title&citation_for_view=sIBXGsUAAAJ:H_oB7MX3m0LUC
8. „Studiul asupra formelor ghidajelor” Dan Glăvan, Babanatsas Theoharis Symposium Research and Education in Innovation Era, 3rd Ed., Section Engineering, Arad – 2008 ISSN 1842-9718.
https://scholar.google.com/citations?view_op=view_citation&hl=en&user=sIBXGsUAAAJ&cstart=100&pagesize=100&sortby=title&citation_for_view=sIBXGsUAAAJ:ufrVoPGSRksC
9. „STUDY ON IMPROVING PERFORMANCE PETROL SUPERCHARGED ENGINES” Dan GLĂVAN, Babanatis Theoharis, Mortoiu Doina, Igret Sorin International Symposium Research and Education in Innovation Era, 4 th Ed., Section Engineering – 2012
https://scholar.google.com/citations?view_op=view_citation&hl=en&user=sIBXGsUAAAJ&cstart=100&pagesize=100&sortby=title&citation_for_view=sIBXGsUAAAJ:zA6iFVUQeVQC3
10. „PROTOTYPING METHODS FOR CONSTRUCTION OF PHYSICAL OBJECTS” Glăvan Dan, Babanatsas Theoharis, Mortoiu Doina International Symposium Research and Education in Innovation Era, 4 th Ed., Section Engineering – 2012
https://scholar.google.com/citations?view_op=view_citation&hl=en&user=sIBXGsUAAAJ&cstart=20&pagesize=80&sortby=title&citation_for_view=sIBXGsUAAAJ:u_35RYKgDlwC
11. „ALTERNATIV METHODES TO BUILDING PHYSICAL MODELS USING PROTOTYPING METHODS” Glăvan Dan, Babanatsas Theoharis, Mortoiu Doina International Symposium Research and Education in Innovation Era, 4 th Ed., Section Engineering – 2012
https://scholar.google.com/citations?view_op=view_citation&hl=en&user=sIBXGsUAAAJ&sortby=title&citation_for_view=sIBXGsUAAAJ:fPk4N6BV_jEC
12. „BUILDING PHYSICAL MODELS. 3D PRINTING VS CONVENTIONAL TECHNOLOGIES” Glăvan Dan, Babanatis Theoharis, Nortoiu Doina Symposium Research and Education in Innovation Era, 4 th Ed., Section Engineering – 2012
https://scholar.google.com/citations?view_op=view_citation&hl=en&user=sIBXGsUAAAJ&cstart=20&pagesize=80&sortby=title&citation_for_view=sIBXGsUAAAJ:4OULZ7Gr8RgC

