

**PORTOFOLIU DE LUCRĂRI ȘTIINȚIFICE RELEVANTE\*  
- domeniul Inginerie Industrială -**

**Conf.Univ. Dr. Ing. GHINEA Mihalache**  
Universitatea Națională de Știință și Tehnologie POLITEHNICA  
din București  
Facultatea de Inginerie Industrială și Robotică  
Departamentul de Roboți și Sisteme de Producție

**A. TEZE DE DOCTORAT**

**A1. CERCETĂRI TEORETICE ȘI EXPERIMENTALE PRIVIND UTILIZAREA  
CERAMICII TEHNICE ÎN CONSTRUCȚIA DE MAȘINI-UNELTE,**

Teză de doctorat, Universitatea POLITEHNICA din București, iulie, 1999

**B. ARTICOLE**

**Ba. Articole publicate în Reviste de Specialitate indexate ISI**

**Ba.01. Ghinea Mihalache,** Agud, Mihai, Bodog, Mircea, Agud, Mark Antonio - *Pneumatic cylinders controlled by two different controllers, Arduino and MyRIO: An educational approach*, In: International Journal of Education and Information Technologies, **2022**, Vol.15, pp.110-120, doi: 10.46300/9109.2022.16.12, ISSN: 2074-1316 JCR: Q3, JCI: 0,37, Indexat: Web of Science (ESCI), WOS:000782282600003.

**Ba.02.** Adamik, A, Ghinea, V.M., **Ghinea, M.**, Nowicki, M. – *Mapping the maturity of SMART WORLD trends as a tool for developing business excellence and reducing organizational complexity*, In: Management & Marketing – Challenges for the Knowledge Society, **2022**, Vol17(2), pp. 193-219, doi: 10.2478/mmcks-2022-0011, eISSN: 2069-8887, JCR: Q2, JCI:0,64, Indexat: Web of Science (ESCI), SCOPUS, EBSCO, DOAJ, WOS: :000825194800006.

**Ba.03.** Viorel Chihaiia, **Mihalache Ghinea**, Stefan Chihaiia, Andreea Neacsu – *Mathematical Chemistry Approaches for Computer-Aid Design of Free-Shaped Structures in Architecture and Construction Engineering*, In: Mathematics (MPDI) **2022**, Vol. 10, 4415. <https://doi.org/10.3390/math10234415>, JCR: Q1, WOS:000896332700001.

**Ba.05. Ghinea M.**, Agud M., Bodog M. – *Simulation of Pneumatic Systems Using Automation Studio software Platform*, In: International Journal of Simulation Modelling, vol.19(**2020**), no.4, pp 655-666, ISSN 1726-4529, <https://doi.org/10.2507/IJSIMM19-4-541>, 2019 Impact factor 2,492, Scopus CiteScore 2019:3,8, Indexat în: WOS, Science Citation Index Expanded, ProQuest-CSA, SCOPUS, INSPEC/IET, CrossRef, Ulrich's Periodicals Directory, WOS:000598123300010.

**Ba.07.** Bisu, C., **Ghinea, M.**, Gerard, A., Zapciu, M.Anica, M. *Dynamic Behavior Analysis of a Spindle of Machine Tool*, In: Journal Mechanique-Industries, Mechanique-Industries, Vol.12, Issue 6, pp. 459-467, **2011**. Factor de impact 0.127, ISSN:1296-2139, WOS:000299981700004.

**Bb. Articole publicate în Reviste de Specialitate indexate BDI**

**Bb.01. Mihalache Ghinea**, Gicu Calin Deac, Crina Narcisa Georgescu, *Improving the Quality of Image in Virtual Reality Applications for Industry*, In: International Journal of Computers, Vol 1, 284-289, **2016**, ISSN 2367-8895, Indexat in: Index Copernicus, EBSCO.

**Bb.02. Ghinea Mihalache**, Agud Mihai, Ioana-Loredana Nica, Daniel Stanciu-Robert, Ungureanu Liviu – *Advantages and Disadvantages of the Pure Pneumatic Motor Used on Compressed Air Cars*, In: Research and Science Today Supplement No. 2/2017, Supp. No. 2/**2017**, pp.213-224, ISSN-e: 2344 – 0007 ISSN-L: 2344 – 0007, Indexat în: DOAJ, EBSCO, ProQUEST, Index Copernicus, WorldCat, Ulrichsweb

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\* extras din lista de lucrări

**Bb.06.** Cristina, P., Traian, A., **Ghinea, M.**, *Data Transfer Between CAD and CAE*, În: Academic Journal of Manufacturing Engineering, vol. 4, no.2, Vol. 5, No. 2/2007, ISSN: 1583-7904, p. 79-85, CNCSIS categoria B, cod 127, **2007**

**Bb.07.** **Ghinea, M.**, Predinca, N., Pupăză, C. *The Influence of the Lathe Performances of the Ceramic Bearings Used at the Main Spindle*, În: Academic Journal of Manufacturing Engineering, vol. 5, no.2/2007, ISSN: 1843-2522, p.53-59, **2007**, BDI: CNCSIS categoria B+, cod 127.

### **Bc. Articole publicate în Reviste de Specialitate neindexate**

**Bc.01.** **Ghinea Mihalache**, Marinică (Stan) Anca – *Virtual Immersion Utilization for Improving Perception of the 3D Prototypes*, În: Research and Science Today Supplement No. 2/2017, Supp. No. 2/**2017**, pp.239-244, ISSN-e: 2344 – 0007 ISSN-L: 2344 – 0007, indexat în: DOAJ, EBSCO, ProQUEST, Index Copernicus, WorldCat, Ulrichsweb

**Bc.02.** Gicu-Calin Deac, Cicerone Laurentiu Popa, **Mihalache Ghinea**, Costel Emil Cotet, Nicoleta Carutasu, *Development and Implementation of Software Solutions for WEEE Identification, Weighing and Sorting*, În: Research and Science Today Supplement No. 2/2017, Supp. No. 2/**2017**, pp.225-231, ISSN-e: 2344 – 0007 ISSN-L: 2344 – 0007, indexat în: DOAJ, EBSCO, ProQUEST, Index Copernicus, WorldCat, Ulrichsweb

**Bc.03.** Predinca, N. **Ghinea, M.** *The Generation of Main Spindle For HSC*, În: International Conference on Manufacturing Science and Education Challenges of the European Integration, 6-7 noiembrie, **2003**, Sibiu.

**Bc.04.** Ispas, C., **Ghinea, M.** *The Experimental Researches Regarding Dynamical Behavior of Machine – Tools Main Spindle with Ceramic Bearings*, În: TCMM, nr. 40, Editura Tehnică, București, **2000**.

**Bc.06.** Ispas, C., Predinca, N., **Ghinea, M.**, Dogariu, C. *Soluții de creștere a performanțelor arborilor principali ai mașinilor-unelte utilizând rulmenți ceramici*. În: Construcția de mașini, **2000** (52), nr. 9.

**Bc.07.** **Ghinea, M.**, Vieru, A. *A New Method to Improve the Processing Conditions for Advanced Ceramics and Glass: part II – Characteristics Features of the New Disk and Experimental Work*. În: INTERCERAM - International Ceramic Review, Verlag Schmid GmbH, Germany, Vol.50 (1), pp. 22-25, **2001**, ISSN 0020-5214.

### **Bd. Articole publicate în Volumele unor Conferințe Științifice Internaționale indexate ISI**

**Bd.02.** **Mihalache Ghinea**, Dinu Frunză, Jean-Rémy Chardonnet, Frédéric Merienne, Andras Kemeny - *Perception of Absolute Distances Within Different Visualization Systems: HMD and CAVE*, In: De Paolis L., Bourdot P. (eds) *Augmented Reality, Virtual Reality, and Computer Graphics*. AVR **2018**. Lecture Notes in Computer Science, vol 10850. Springer International Publishing, ISBN - 978-3-319-95269-7, [https://doi.org/10.1007/978-3-319-95270-3\\_10](https://doi.org/10.1007/978-3-319-95270-3_10), Indexat in SpringerLink, WOS:000468541000010

**Bd.06.** Popescu, D., **Ghinea, M.**, Chircor, L. *An Assessment of Geometrical Features for a New Rapid Prototyping Benchmark Part*, Edited by: Katalinc, B Conference: 19th International Symposium of the Danube-Adria-Association-for-Automation-and-Manufacturing Location: Trnava, Slovakia, Date: Oct. 22-25, 2008 Annals of DAAAM for **2008** & Proceedings of the 19th International DAAAM Symposium Book Series: Annals of DAAAM and roceedings Pages: 1123-1124 , Published: 2008 WOS:000262860100561.

**Bd.08.** **Ghinea, M.**; Lombardi, F. *Dynamical aspects regarding ceramic ball bearings used at machine tools main spindle*, Edited by: Katalinic, B Conference: 15th International Symposium of the Danube-Adria-Association-for-Automation-and-Manufacturing, Vienna, Austria, Nov. 03-06, **2004**, Annals of DAAAM for 2004 & Proceedings of the 15th International DAAAM Symposium:

Intelligent Manufacturing & Automation: Globalisation – Technology - Men – Nature, Pages: 131-132 Published: 2004, [WOS:000245331600066](#).

**Bd.09.** Ispas, C; **Ghinea, M** *Experimental researches regarding the thermal behavior of the machine-tools main spindle with ceramics bearings*, Book Group Author(s): TTP Conference: 7th Conference of the European-Ceramic-Society Location: Brugge, Belgium, Sep. 09-13, **2001** Sponsor(s): European Ceram Soc; Belgian Ceram Soc EURO CERAMICS VII, PT 1-3 Book Series: Key Engineering Materials Vol. 206-2 Pages 941-944 Published 2002, [WOS:000172651400230](#).

### **Be. Articole publicate în Volumele unor Conferințe Științifice Internaționale indexate BDI**

**Be.01. Ghinea, M.,** Deac, G.C., Georgescu, C.N. – *Training application for Industries by Means of Virtual Reality Technology*, In WSEAS Transactions on Computer Research, ISSN / E-ISSN: 1991-8755 / 2415-1521, Volume 5, **2017**, Art. #6, pp. 42-50. *Indexat in: CiteSeerx, CrossRef, Genamics JournalSeek, Index Copernicus, Inspec The IET, Ulrich's International Periodicals Directory*, <https://www.wseas.org/multimedia/journals/computerresearch/2017/a125818-074.php>

**Be04.** M. Ghinea *et al* **2021** The Importance of Virtual Immersion in the Rapid Prototyping of Industrial Products, *J. Phys.: Conf. Ser.* **1935 012010**, DOI [10.1088/1742-6596/1935/1/012010](https://doi.org/10.1088/1742-6596/1935/1/012010) Elsevier SCOPUS

**Be08. Mihalache Ghinea,** Gicu Calin Deac, Crina Narcisa Georgescu, *Improving the Quality of Image in Virtual Reality Application for Industry*, International Journal of Computers, Volume 1, **2016**, ISSN 2367-8895, <http://www.iaras.org/iaras/journals/ijc>

**Be.09. Ghinea, M.,** Avram, C., Enciu, G., Dobrescu, T. *The Simulation of the Stepper Motor with Variable Reluctance by MATLAB-SIMULINK*; Proceedings of the 1st International Conference on Mechanical and Robotics Engineering; Vouliagmeni, Athens, Greece, May 14-16, **2013**; in RECENT ADVANCES in ROBOTICS, AERONAUTICAL and MECHANICAL ENGINEERING (4) ISSN: 2227-4596 ISBN: 978-1-61804-185-2, Published by WSEAS Press, [www.wseas.org](http://www.wseas.org), pp.106-111, 2013. Indexare GETINFO, GOOGLE SCHOLAR.

**Be.11. Bălan, E.,** Constantin, G., Nae, L., **Ghinea, M.** *Finite Element Method used for Determination of the Elastic Deformations of Movable Headstock Assembly*, Proceedings of the 1st International Conference on Industrial and Manufacturing Technologies (INMAT'13); Vouliagmeni, Athens, Greece May 14-16, 2013; in: RECENT ADVANCES in INDUSTRIAL and MANUFACTURING TECHNOLOGIES,(5) ISSN: 2227-4596, ISBN: 978-1-61804-186-9, Published by WSEAS Press, [www.wseas.org](http://www.wseas.org), pp. 138-143, **2013**. Indexare GETINFO, GOOGLE SCHOLAR.

**Be.14. Ghinea, M.,** Dobrescu, T., Nicolescu, A., Enciu, G. *The Importance of a Postprocessor in Data Transfer from APT Format (CAD) in ISO Format Used by HEIDENHAIN ITNC 530*, ANNALS of DAAAM for 2010 & PROCEEDINGS of the 21<sup>st</sup> International DAAAM Symposium „Intelligent Manufacturing & Automation: Focus on Interdisciplinary Solutions”, 20-23 October 2010, Zadar, Croatia, ISSN 1726-9687 ISBN 978-3-901509-73-5, Editor B. Katalinic, Published by DAAAM International, Vienna, Austria 2010, pag. 0347 - 0348, **2010**.

**Be.16.** Dobrescu, T., **Ghinea, M.,** Enciu, G. Nicolescu, A. *Electrolytic In-Process Dressing (ELID) Grinding for Silicon Wafers*, ANNALS of DAAAM for 2010 & PROCEEDINGS of the 21<sup>st</sup> International DAAAM Symposium „Intelligent Manufacturing & Automation: Focus on Interdisciplinary Solutions”, 20-23 October **2010**, Zadar, Croatia, ISSN 1726-9687 ISBN 978-3-901509-73-5, Editor B. Katalinic, Published by DAAAM International, Vienna, Austria 2010, pag. 0587 - 0588, 2010.

**Be.19.** Ivan, I., Enciu, G., **Ghinea, M.** *Some Quality Aspects Regarding Advanced Ceramics Mechanical Parts for Precision Machinery*, (2008) 0651-0652, Annals of DAAAM for 2007 & Proceedings of the 19<sup>th</sup> International DAAAM Symposium, ISBN 978-3-901509-68-1, ISSN 1726-9679, pp. 326, 22-25th October **2008**, Slovak University of Technology, Trnava, Slovakia.

**Bf. Articole publicate în Volumele unor Conferințe Științifice Internaționale neindexate**

**Bf.01. Ghinea Mihalache, Marinică (Stan) Anca** – *Virtual Immersion Utilization for Improving Perception of the 3D Prototypes*, In Research and Science Today Supplement No. 2/2017, Supp. No. 2/2017, pp.239-244, ISSN-e: 2344 – 0007 ISSN-L: 2344 – 0007, *Indexat in DOAJ, EBSCO, ProQUEST, Index Copernicus, WorldCat, Ulrichsweb*  
<file:///C:/Users/User/Downloads/28.%20Mihalache%20and%20Anca%20-%20VIRTUAL%20IMMERSION%20UTILIZATION%20FOR%20IMPROVING%20PERCEPTION%20OF%20THE%203D%20PROTOTYPES.pdf>

**Bf.03. Ghinea, M.,** Deac, G.C., Georgescu, C.N. – *Training application for Industries by Means of Virtual Reality Technology*, Proceedings of the International Conference on Augmented Reality for Technical Antrepreneurs (ARTE'16), April, 1st, 2016, Bucharest, Romania, pp.33-46, Editura Printech, ISBN 978-606-23-0563-5.

**Bf.04. Ghinea, M.,** Deac, G.C., Georgescu, C.N. – *Developing E-learning platforms through Integration of 3D Vritual Immersion Into Users World-A New Concept*, Proceedings of the International Conference on Augmented Reality for Technical Antrepreneurs (ARTE'16), April, 1st, 2016, Bucharest, Romania, pp.73-82, Editura Printech, ISBN 978-606-23-0563-5.

**Bf.05. F. Lombardi, M. Ghinea** *THE INFLUENCE OF THE CERAMICS MATERIALS USED AT THE MAIN SPINDLE BEARINGS ON THE MACHINE-TOOLS PERFORMANCES*, Proceedings of the 11th International Scientific Conference ACHIEVEMENTS IN MECHANICAL & MATERIALS ENGINEERING, Scientific Research in Warsaw, Poland, pp 319-324, December 15-18, 2002.

**C. CĂRȚI**

**Ca. Cărți publicate în Edituri Naționale cu ISBN și în edituri recunoscute CNCISIS**

**Ca.01. Ghinea, M.,** Deac, C., Deac, G. *Teoria și concepția platformelor e-Learning*, Ed. BREN, 2015, ISBN 978-606-610-162-2, Cod CNCISIS 96, 160 pag.

**Ca.02. Ghinea, M.** – *Ceramica tehnică utilizată în mecanică*, Ed. BREN, București 2015 ISBN -978-606-610-161-5 Cod CNCISIS B+ 96, 265 pag.

**D. CULEGERI ȘI ÎNDRUMARE**

**Da. Lucrări publicate în Edituri Naționale cu ISBN**

**Da.01. Ghinea, M.,** Deac, C., Deac, G. *Realizarea platformelor E-learning - Indrumar de laborator*, Ed. BREN, 2015, ISBN 978-606-610-163-9 Cod CNCISIS 96, 140 pag.

**Dd.02. Predincea, N., Bălan, E., Ghionea, A., Ghinea, M.,** Străjescu, E., Pupăză, C., Drăghici, M., Gândilă, S., Moraru, G. *Procedee de prelucrare prin așchiere. Îndrumar de Laborator*, Ed. BREN, 2002, ISBN 973-9493-39-4, Cod CNCISIS 96, 368 pag.

Data: 07.08.2023

Conf.Univ. Dr. Ing. **GHINEA Mihalache**

