

**Fișa de verificare a criteriului**  
**„Activitate didactică și profesională” (DID – A1)**  
 Standarde minimale pentru domeniile științifice “Inginerie mecanică, mecatronică și robotică”:

**Criteriul DID „Activitate didactică și profesională” (DID – A1)**

|  |        |   |                            |                |
|--|--------|---|----------------------------|----------------|
| Manuale, suport de curs conform fișei de concurs   | A 1.1. | Format tipărit/electronic, min. 100 pag.  | Coordonator/<br>Prim autor | N 1.1. = număr |
|  |        |   | Co-autor                   | N 1.2. = număr |
|  |        | Format electronic disponibil pe platforma universității/departamentului/autor         |                            | N 1.3. = număr |
| Material didactic/dezvoltare laboratoare/aplicații | A 1.2. | Standuri laborator (construcție/modernizări_ certificate de directorul de departament |                            | N 2.1. = număr |
|  |        | Îndrumar laborator, carte/aplicații, format tipărit sau electronic, (autor/co-autor)  |                            | N 2.2. = număr |
|  |        | Aplicatie informatică educațională  |                            | N 2.3. = număr |

**DID –A1.1.**

| Nr. crt.                         | Manuale, suport de curs conform fișei de concurs  | Punctaj  |
|----------------------------------|---|----------|
| <b>A 1.1.</b>                    |   |          |
| 1<br>A 1.1.                      | <b>M.Mihălcică, (2020) MATLAB si programare pentru viitori ingineri ,</b> Ed. Universitatii Transilvania din Braşov ISBN:978-606-19-1248-3 nr. pag.120<br><a href="https://intranet.unitbv.ro/Portals/0/UserFiles/User56867/dovada_N1_item_1.pdf">https://intranet.unitbv.ro/Portals/0/UserFiles/User56867/dovada_N1_item_1.pdf</a>                                       | N 1.1.=1 |
| 2<br>A 1.1.                      | <b>M.Mihălcică, (2020) Metode numerice cu MATLAB pentru ingineri,</b> Ed Univ. Transilvania din Braşov ISBN: 978-606-19-1249-0 nr. pag. 150<br><a href="https://intranet.unitbv.ro/Portals/0/UserFiles/User56867/dovada_N1_item_2.pdf">https://intranet.unitbv.ro/Portals/0/UserFiles/User56867/dovada_N1_item_2.pdf</a>  | N 1.1.=1 |
| 3<br>A 1.1.                      | <b>S.Vlase, S.Lache,H.Theodorescu,M.L.Scutaru,M.Mihalca,M.V.Munteanu (2015), Probleme de mecanică statică,</b> Ed. Univ. Transilvania din Brasov ISBN: 978-606-19-0684-0, nr. pag. :175<br><a href="https://intranet.unitbv.ro/Portals/0/UserFiles/User56867/dovada_statica.pdf">https://intranet.unitbv.ro/Portals/0/UserFiles/User56867/dovada_statica.pdf</a>          | N 1.2.=1 |
| 4<br>A 1.1.                      | <b>S.Vlase, S.Lache,H.Theodorescu,M.L.Scutaru,M.Mihalca,M.V.Munteanu (2015), Probleme de mecanică cinematică,</b> Ed. Univ. Transilvania din Brasov ISBN: 978-606-19-0685-7, nr. pag. :153<br><a href="https://intranet.unitbv.ro/Portals/0/UserFiles/User56867/dovada_cinematica.pdf">https://intranet.unitbv.ro/Portals/0/UserFiles/User56867/dovada_cinematica.pdf</a> | N 1.2.=1 |
| 5<br>A 1.1.                      | <b>S.Vlase, S.Lache, H.Theodorescu, M.L.Scutaru, M.Mihalca, M.V.Munteanu (2015), Probleme de mecanică dinamică,</b> Ed. Univ. Transilvania din Brasov ISBN: 978-606-19-0686-4, nr. pag. :264<br><a href="https://intranet.unitbv.ro/Portals/0/UserFiles/User56867/dovada_dinamica.pdf">https://intranet.unitbv.ro/Portals/0/UserFiles/User56867/dovada_dinamica.pdf</a>   | N 1.2.=1 |
| 6<br>A1.1.                       | <b>M. Mihălcică, (2011) Metode Numerice în MATLAB, Ghid practic de laborator,</b> Editura Lux Libris ISBN: 978-973-131-130-2 nr. pag. 149<br><a href="https://www.worldcat.org/title/1288698479">https://www.worldcat.org/title/1288698479</a>  | N 1.3.=1 |
| <b>N.1.1=2; N.1.2.=3 N.1.3=1</b> |   |          |
| <b>TOTAL A.1.1.= 6</b>           |   |          |

## A.1.2. DID

| Material didactic/dezvoltare laboratoare/aplicații |   |                                  |
|--|---|----------------------------------|
| 1<br>A 1.2.  | Stand de testare statică și dinamică a viorilor<br>Anul realizării: 2023 An apariție 2023<br><a href="https://intranet.unitbv.ro/Portals/0/UserFiles/User56867/Adeverinta_stand_de_lab_1.pdf">https://intranet.unitbv.ro/Portals/0/UserFiles/User56867/Adeverinta_stand_de_lab_1.pdf</a>                                      | N 2.1=1                          |
| 2<br>A 1.2.  | Stand de cercetare a fenomenului de îmbătrânire artificială la radiații ultraviolete<br>Anul realizării: 2023 An apariție 2023<br><a href="https://intranet.unitbv.ro/Portals/0/UserFiles/User56867/Adeverinta_stand_de_lab_2.pdf">https://intranet.unitbv.ro/Portals/0/UserFiles/User56867/Adeverinta_stand_de_lab_2.pdf</a> | N 2.1=1                          |
| 3<br>A 1.2.  | Stand pentru studiul experimental al centroidelor<br>Anul realizării: 2017 An apariție: 2017<br><a href="https://intranet.unitbv.ro/Portals/0/UserFiles/User56867/Adeverinta_lucr_lab_mecanica_colectiv.pdf">https://intranet.unitbv.ro/Portals/0/UserFiles/User56867/Adeverinta_lucr_lab_mecanica_colectiv.pdf</a>           | N 2.1.=1                         |
| 4<br>A 1.2.  | Stand pentru compunerea oscilațiilor armonice rectangulare<br>Anul realizării: 2017 An apariție: 2017<br><a href="https://intranet.unitbv.ro/Portals/0/UserFiles/User56867/Adeverinta_lucr_lab_mecanica_colectiv.pdf">https://intranet.unitbv.ro/Portals/0/UserFiles/User56867/Adeverinta_lucr_lab_mecanica_colectiv.pdf</a>  | N 2.1=1                          |
| 5<br>A 1.2.  | Stand pentru cinematica inversă<br>Anul realizării: 2017 An apariție: 2017<br><a href="https://intranet.unitbv.ro/Portals/0/UserFiles/User56867/Adeverinta_lucr_lab_mecanica_colectiv.pdf">https://intranet.unitbv.ro/Portals/0/UserFiles/User56867/Adeverinta_lucr_lab_mecanica_colectiv.pdf</a>                             | N 2.1=1                          |
| 6<br>A 1.2.  | S.Vlase, M.L. Scutaru, S. Lache, M. Mihalca, V.M. Munteanu, C. Itu, M. Velea, M.N. Guiman, R. Szava (2021) <i>MECANICĂ : îndrumar de laborator</i> , Ed. Univ. Transilvania din Brașov ISBN: 978-606-19-1103-5<br><a href="https://www.worldcat.org/title/1288698233">https://www.worldcat.org/title/1288698233</a>           | N 2.2=1                          |
|  |   | N2.1=5; N2.2=1,<br>Total A.1.2=6 |

| Criteria                                  | Indicatori | Condiții minime profesor | Punctaj îndeplinit |
|---|------------|--------------------------|--------------------|
| Activitatea didactică/profesională<br>A 1 | A 1.1.     | N1                       | 2                  |
|   |            | N1.1.                    | 1                  |
|   |            | N.1.3.                   | 1                  |
|   | A 1.2.     | N 2.                     | 4                  |
|   |            | N 2.1.                   | 2                  |

Conform punctajului obținut pentru criteriul „Activitatea didactică/profesională” (A1), în conformitate cu prevederile Anexei nr. 6129/2016 la Ordinul Ministrului, îmi permit să apreciez că CRITERIUL DE EVALUARE A1 ESTE ÎNDEPLINIT.

Data: 07.05.2023

Candidat, Conf. Univ. Dr. Ing. Mihălcică Mircea



**Fișa de verificare a criteriului  
„Activitate de cercetare științifică” (CDI - A2)**

Standarde minimale pentru domeniile științifice „Inginerie mecanică, mecatronică și robotică”:

**Criteriul CDI „Activitate de cercetare științifică” (CDI A2)**

|  |          |  |       |   |
|--|----------|--|-------|---|
| Articole și publicații științifice indexate WOS, unde n este nr. autori; FI este factorul de impact                                      | A 2.1.   | Autor corespondent/prim autor                    | n ≤ 3 | P 1.1. = $2*(0,2+FI)$                     |
|  |          |  | n ≥ 4 | P 1.2. = $2*3*(0,2+FI)/n$                 |
|  | Co-autor |  | n ≤ 3 | P 1.3. = $0,2+FI$                         |
|  |          |  | n ≥ 4 | P 1.4. = $3*(0,2+FI)/n$                   |
| Articole și publicații științifice BDI neincluse la A 2.1.   | A 2.2.   | Autor corespondent/prim autor                    |       | N 3.1. = număr                            |
|  |          | Co-autor   |       | N 3.2. = număr                            |
| Brevete invenții indexate  | A 2.3.   | Internationale indexate WOS – Derwent Innovation |       | P 2.1 = același calcul cu A2.1. cu FI=2   |
|  |          | Naționale indexate OSIM                          |       | P 2.2 = același calcul cu A2.1. cu FI=0,5 |
| Produse, tehnologii, platforme și servicii inovative (validate conform procedurilor specifice unităților de învățământ sau de cercetare) | A 2.4.   | Coordonator/Prim autor                           |       | N 4.1. = număr                            |
|  |          | Co-autor   |       | N 4.2. = număr                            |
| Monografii, cărți de specialitate tipărite sau format electronic (min. 100 pag)  | A 2.5.   | Coordonator/Prim autor                           |       | N 4.3. = număr                            |
|  |          | Co-autor   |       | N 4.4. = număr                            |

**CDI-ART WOS**

| Nr. crt.   | Titlul articolului   | Punctaj                          |
|--|--|----------------------------------|
| <i>A 2.1. articole publicate în reviste cotate WOS</i> |  |                                  |
| <i>Articole tip P1.1.</i>                              |  |                                  |
| 1.<br>P1.1.  | <b>Mihălcică M</b> , Stanciu MD, Vlase S. Frequency Response Evaluation of Guitar Bodies with Different Bracing Systems. Symmetry. 2020; 12(5):795. <a href="https://doi.org/10.3390/sym12050795">https://doi.org/10.3390/sym12050795</a> (FI 2021=2.94)   | $P1.1=2*(0.2+2.94)=6.28$         |
| 2<br>P1.1.   | <b>Mihălcică M</b> , Vlase S, Păun M. The Use of Structural Symmetries of a U12 Engine in the Vibration Analysis of a Transmission. Symmetry. 2019; 11(10):1296. <a href="https://doi.org/10.3390/sym11101296">https://doi.org/10.3390/sym11101296</a> (FI 2021=2.94)                                | $P1.1.=2*(0.2+2.94)=6.28$        |
|  | <b>Total P1.1.</b>   | <b>12.56</b>                     |
| <i>Articole tip P1.2.</i>                              |  |                                  |
| 1.<br>P1.2   | Munteanu MV, <b>Mihălcică M.</b> (autor corespondent), Itu C, Vlase S, Scutaru ML. Mechanical design of interaction chamber for the ELIADE array at ELI-NP. AIP Advances. 2020 Feb 1;10(2):025129. <a href="https://doi.org/10.1063/1.5129317">https://doi.org/10.1063/1.5129317</a> (FI 2021=1.697) | $P.1.2=2*3*(0.2+1.697)/5=2.2764$ |
| 2<br>P1.2.   | <b>Mihălcică M</b> , Stanciu MD, Nastac SM, Dinulică F, Nauncef AM, Roșca IC, Savin A. Signature Modes of Old and New Violins with Symmetric Anatomical Wood   | $P.1.2=2*3*(0.2+2.838)/7=2.604$  |

|                           |  |                                 |
|---------------------------|--|---------------------------------|
|                           | Structure. Applied Sciences. 2021; 11(23):11297.<br><a href="https://doi.org/10.3390/app112311297">https://doi.org/10.3390/app112311297</a> (FI 2021=2.838)  |                                 |
| 3<br>P1.2.                | Stanciu MD, <b>Mihălcică M.</b> (autor corespondent), Dinulică F, Nauncef AM, Purdoiu R, Lăcătuș R, Gliga GV. X-ray Imaging and Computed Tomography for the Identification of Geometry and Construction Elements in the Structure of Old Violins. Materials. 2021; 14(20):5926.<br><a href="https://doi.org/10.3390/ma14205926">https://doi.org/10.3390/ma14205926</a> (FI 2021=3.748)   | $P.1.2=2*3*(0.2+3.748)/7=3.384$ |
|                           | <b>Total P1.2.</b>   | <b>8.2644</b>                   |
| <i>Articole tip P1.3.</i> |  |                                 |
| 1.<br>P1.3                | Vlase S, <b>Mihălcică M.</b> , Scutaru ML. Determining the Functional Parameters of a Simple Speed Regulator. RIAV 2019; 16, 10-14.<br><a href="http://www.rjav.sra.ro/index.php/rjav/article/view/90">http://www.rjav.sra.ro/index.php/rjav/article/view/90</a> (FI 2021=0)   | $P.1.3=0.2+0=0.2$               |
|                           | <b>Total P1.3.</b>   | <b>0.2</b>                      |
| <i>Articole tip P1.4.</i> |  |                                 |
| 1.<br>P1.4.               | Stanciu MD, Roșca IC, <b>Mihălcică M.</b> , Bucur V. Dynamic response of wooden plates in different stages of guitar manufacturing. Eur. J. Wood Prod. 2022; 80, 997–1013. <a href="https://doi.org/10.1007/s00107-022-01817-3">https://doi.org/10.1007/s00107-022-01817-3</a> (FI 2021=2.528)   | $P.1.4.=3*(0.2+2.528)/4=2.046$  |
| 2.<br>P1.4                | Nastac SM, Gliga VG, <b>Mihălcică M.</b> , Nauncef AM, Dinulica F, Campean M. Correlation between Acoustic Analysis and Psycho-Acoustic Evaluation of Violins. Applied Sciences. 2022; 12(17):8620.<br><a href="https://doi.org/10.3390/app12178620">https://doi.org/10.3390/app12178620</a> (FI 2021=2.838)   | $P.1.4.=3*(0.2+2.838)/6=1.519$  |
| 3.<br>P1.4                | Teodorescu-Draghicescu H, Vlase S, Stanciu MD, Curtu I, <b>Mihălcică M.</b> Advanced pultruded glass fibers-reinforced isophthalic polyester resin. Mater. Plast. 2015 Mar 1;52(1):62-4.<br><a href="https://revmaterialeplastice.ro/pdf/TEODORESCU%20H.pdf%201%2015.pdf">https://revmaterialeplastice.ro/pdf/TEODORESCU%20H.pdf%201%2015.pdf</a> (FI 2021=0.782)  | $P.1.4=3*(0.2+0.782)/5=0,5892$  |
| 4.<br>P1.4                | Vlase S, Danasel C, Scutaru ML, Mihalcica M. Finite element analysis of a two-dimensional linear elastic systems with a plane "rigid motion". Rom. J. Phys. 2014 Jan 1;59(5-6):476-87.<br><a href="https://rjp.nipne.ro/2014_59_5-6/RomJPhys.59.p476.pdf">https://rjp.nipne.ro/2014_59_5-6/RomJPhys.59.p476.pdf</a> (FI 2021=1.662)  | $P.1.4=3*(0.2+1.662)/4=1.3965$  |
| 5.<br>P1.4                | Vlase S, Purcarea R, Teodorescu-Draghicescu H, Calin MR, Szava I, <b>Mihălcică M.</b> Behavior of a new Heliopol/Stratimat300 composite laminate. Optoelectronics and Advanced Materials-Rapid Communications. 2013 Jul 1;7(7-8):569-72.<br><a href="https://oam-rc.inoe.ro/articles/behavior-of-a-new-heliopolstratimat300-composite-laminate/fulltext">https://oam-rc.inoe.ro/articles/behavior-of-a-new-heliopolstratimat300-composite-laminate/fulltext</a> (FI 2021=0.556)  | $P.1.4=3*(0.2+0.556)/6=0.378$   |
| 6.<br>P1.4                | Niculiță C, Vlase S, Bencze A, <b>Mihălcică M.</b> , Calin MR, Serbina L. Optimum stacking in a multi-ply laminate used for the skin of adaptive wings. Optoelectronics and Advanced Materials-Rapid Communications. 2011 Nov 23;5(November 2011):1233-6.<br><a href="https://oam-rc.inoe.ro/articles/optimum-stacking-in-a-multi-ply-laminate-used-for-the-skin-of-adaptive-wings/fulltext">https://oam-rc.inoe.ro/articles/optimum-stacking-in-a-multi-ply-laminate-used-for-the-skin-of-adaptive-wings/fulltext</a> (FI 2021=0.556) | $P.1.4=3*(0.2+0.556)/6=0.378$   |

|  |   |                               |
|--|---|-------------------------------|
| 7.<br>P1.4   | Modrea A, Vlase S, Teodorescu-Draghicescu H, <b>Mihălcică M</b> , Calin MR, Astalos C. Properties of advanced new materials used in automotive engineering. Optoelectronics and Advanced Materials-Rapid Communications. 2013 Jun 12;7(May-June 2013):452-5.<br><a href="https://oam-rc.inoe.ro/articles/properties-of-advanced-new-materials-used-in-automotive-engineering/fulltext">https://oam-rc.inoe.ro/articles/properties-of-advanced-new-materials-used-in-automotive-engineering/fulltext</a> (FI 2021=0.556) | $P.1.4=3*(0.2+0.556)/6=0.378$ |
|  | <b>Total P1.4.</b>  | <b>6.6874</b>                 |
| <b>Conform factorilor de impact ai revistelor în 2021:</b><br>P.1.1=12.560<br>P.1.2=8.2644<br>P.1.3=0,2000<br>P.1.4.=6.6847<br><b>TOTAL A.2.: 27.7091 puncte</b> |   |                               |

A.2.2. **CDI-ART BDI**

| <i>articole susținute la conferințe indexate ISI Proceedings</i> |  |          |
|--|--|----------|
| <b>Articole A2.2., tip N3.1.</b>                                 |  |          |
| 1.<br>N3.1   | <b>Mihălcică M</b> , Modrea A, Munteanu V, Burca I. Tracking Kinematic Gait Parameters During the Recovery of Motor Function After Total Knee Arthroplasty. Procedia Technology. 2016 Jan 1;22:670-6.<br><a href="https://www.sciencedirect.com/science/article/pii/S2212017316001419">https://www.sciencedirect.com/science/article/pii/S2212017316001419</a>   | <b>1</b> |
| 2.<br>N3.1   | Mihălcică M, Stanciu MD, Dinulica F, Savin A, Bucur V. The Effect of Resonance Wood Quality on Violins Vibration. In Recent Trends in Wave Mechanics and Vibrations: Proceedings of WMVC 2022 2022 Oct 7 (pp. 873-881). Cham: Springer International Publishing.<br><a href="https://link.springer.com/chapter/10.1007/978-3-031-15758-5_90">https://link.springer.com/chapter/10.1007/978-3-031-15758-5_90</a>  | <b>1</b> |
| 3.<br>N3.1   | <b>Mihălcică M</b> , Nauncef AM, Gliga VG, Stanciu MD, Nastac SM, Campean M. Correlation Between Dynamic Features of Unvarnished and Varnished New Violins and Their Acoustic Perceptual Evaluation. In Recent Trends in Wave Mechanics and Vibrations: Proceedings of WMVC 2022 2022 Oct 7 (pp. 857-864). Cham: Springer International Publishing.<br><a href="https://link.springer.com/chapter/10.1007/978-3-031-15758-5_88">https://link.springer.com/chapter/10.1007/978-3-031-15758-5_88</a> | <b>1</b> |
| 4.<br>N3.1   | <b>Mihălcică M</b> , Stanciu MD, Teodorescu HD, Iftimie N. Evaluation Of Viscous-Elastic Properties Of Resonance Maple Wood, ModTEch 2022, International Journal of Modern Manufacturing Technologies Volume 14, Issue 2, Pages 145 – 150, 2022<br><a href="https://www.ijmmt.ro/vol14no22022/15_Mircea_Mihalcica.pdf">https://www.ijmmt.ro/vol14no22022/15_Mircea_Mihalcica.pdf</a>   | <b>1</b> |
| 5.<br>N3.1   | <b>Mihălcică M</b> , Gliga VG, Campean M, Cretu NC, Nauncef AM, Steigmann R. Psycho-Acoustic Assessment Of Violins With Different Anatomical Features Of Wood, ModTEch 2022, International Journal of Modern Manufacturing Technologies Volume 14, Issue 3, Pages 158 – 163, 2022<br><a href="https://ijmmt.ro/vol14no32022/23_Mircea_Mihalcica.pdf">https://ijmmt.ro/vol14no32022/23_Mircea_Mihalcica.pdf</a>   | <b>1</b> |
| 6.<br>N3.1   | <b>Mihălcică M</b> , Nicoară D, Niculiță C, Cîndea I, Pirnă I. Elder Monitoring Using Modern Data Transmission Technologies, Proceedings Of The 2nd International Conference On  | <b>1</b> |

|                                   |   |  |
|-----------------------------------|---|--|
|                                   | Environmental And Geological Science And Engineering: Advances In Environmental And Geological Science And Engineering 2009<br><a href="https://intranet.unitbv.ro/Portals/0/UserFiles/User1122/WSEAS_2_BV2009.pdf">https://intranet.unitbv.ro/Portals/0/UserFiles/User1122/WSEAS_2_BV2009.pdf</a>  |  |
|                                   | <b>Total N.3.1.</b>   | <b>6</b>   |
| <b>Articole A 2.2., tip N3.2.</b> |   |  |
| 1.<br>N3.2                        | Itu C, Scutaru ML, Modrea A, <b>Mihălcică M.</b> Traction characteristics for the components of a composite sandwich used to build high-rigidity circular plates. Procedia Manufacturing. 2019 Jan 1;32:268-77.<br><a href="https://www.sciencedirect.com/science/article/pii/S2351978919302483">https://www.sciencedirect.com/science/article/pii/S2351978919302483</a>  | <b>1</b>   |
| 2.<br>N3.2                        | Scutaru ML, <b>Mihălcică M.</b> , Modrea A, Purcarea R, Scarlatescu D. An advanced high rigidity thin sandwich composite laminate with COREMAT and dissimilar skins. Procedia Manufacturing. 2018 Jan 1;22:35-40.<br><a href="https://www.sciencedirect.com/science/article/pii/S2351978918303019">https://www.sciencedirect.com/science/article/pii/S2351978918303019</a>  | <b>1</b>   |
| 3.<br>N3.2                        | Itu C, Vlase S, Scutaru ML, Pena CS, Borza PN, <b>Mihălcică M.</b> Universal Absorber Applied to NVH in EV's Powertrain. In Acoustics and Vibration of Mechanical Structures—AVMS-2017: Proceedings of the 14th AVMS Conference, Timisoara, Romania, May 25–26, 2017 2018 (pp. 361-366). Springer International Publishing.<br><a href="https://link.springer.com/chapter/10.1007/978-3-319-69823-6_42">https://link.springer.com/chapter/10.1007/978-3-319-69823-6_42</a>  | <b>1</b>   |
| 4.<br>N3.2                        | Modrea A, Gheorghe V, Sandu V, Teodorescu-Draghicescu H, <b>Mihălcică M.</b> , Scutaru ML. Study of a New Composite Material Rt800 Reinforced with Polyte 440-M888 in Endurance Conditions. Procedia Technology. 2016 Jan 1;22:182-6.<br><a href="https://www.sciencedirect.com/science/article/pii/S2212017316000438">https://www.sciencedirect.com/science/article/pii/S2212017316000438</a>  | <b>1</b>   |
| 5.<br>N3.2                        | Tofan MC, Burcă I, <b>Mihălcică M.</b> , Secară E, Hisom R, Popa I. Mathematical models for the human body motions analysis. In The 13th International Conference Modtech, Modern Technologies, Quality and Innovation, New face of TMCR, Iasi-Chișinau, ISSN (pp. 2066-3919).<br><a href="http://www.modtech.tuiasi.ro/2009/publication/T/Tofan_Mihai_A2.pdf">http://www.modtech.tuiasi.ro/2009/publication/T/Tofan_Mihai_A2.pdf</a>   | <b>1</b>   |
| 6.<br>N3.2                        | Chiru A, Pirna I, Candea I, Niculita C, <b>Mihălcică M.</b> , Bencze A. Satellite orbital instability generated by the perturbing factors. Annals of DAAAM & Proceedings. 2009 Jan 1:1025-7.<br><a href="https://go.gale.com/ps/i.do?id=GALE%7CA224712704&amp;sid=googleScholar&amp;v=2.1&amp;it=r&amp;linkaccess=abs&amp;issn=17269679&amp;p=AONE&amp;sw=w&amp;userGroupName=anon%7Eecdbf5f2">https://go.gale.com/ps/i.do?id=GALE%7CA224712704&amp;sid=googleScholar&amp;v=2.1&amp;it=r&amp;linkaccess=abs&amp;issn=17269679&amp;p=AONE&amp;sw=w&amp;userGroupName=anon%7Eecdbf5f2</a> | <b>1</b>   |
| 7.<br>N3.2                        | Dumitru N, Secară E, <b>Mihălcică M.</b> Study of rotor-bearing systems using Campbell diagram. In Proceedings of the 1st International Conference on Manufacturing Engineering, Quality and Production Systems 2009 Sep (Vol. 2).<br><a href="https://www.researchgate.net/publication/266298337_Study_of_Rotor-Bearing_Systems_Using_Campbell_Diagram">https://www.researchgate.net/publication/266298337_Study_of_Rotor-Bearing_Systems_Using_Campbell_Diagram</a>   | <b>1</b>   |
|                                   | <b>Total N3.2.</b>  | <b>7</b>   |
|                                   |   | N3.1=6<br>N3.2=7<br><b>Total A.2.2 N3.1.+N3.2.=13 puncte</b> |

**A.2.3. CDI-BRV**

| Nr. crt.                    | Titlul brevetului   | Punctaj  |
|-----------------------------|---|----------|
| 1<br>A 2.3.                 | Propunere de brevet: A06004/04.10.2022 STAND ȘI METODA DE TESTARE STATICĂ ȘI DINAMICĂ A VIORILOR, autori: Stanciu M.D., Gliga V.Gh., Mihălcică M., Cherdivar A., Năstac S., Câmpean M., Dinulică F. | 0        |
| <b>Total puncte CDI-BRV</b> |   | <b>0</b> |

**A. 2.5. CDI-MON**

| Nr. crt.                    | Titlul monografiei   | Punctaj          |
|-----------------------------|--|------------------|
| 1<br>A 2.5.                 | Stanciu MD (coordonator), <b>Mihălcică M (coordonator)</b> , ș.a. Dinamica viorii, Ed. Universității Transilvania din Brașov, ISBN: 978-606-19-1517-0202, p. 305<br><a href="https://intranet.unitbv.ro/Portals/0/UserFiles/User1444/carte_dovada.pdf">https://intranet.unitbv.ro/Portals/0/UserFiles/User1444/carte_dovada.pdf</a>        | 1                |
| 2<br>A 2.5.                 | <b>Mihălcică M</b> , Cristea M. Metode de captură și analiză a datelor în biomecanică, Ed. Universității Transilvania din Brașov, ISBN 978-606-19-1615-3, p.175<br><a href="https://intranet.unitbv.ro/Portals/0/UserFiles/User56867/monografie_2023.pdf">https://intranet.unitbv.ro/Portals/0/UserFiles/User56867/monografie_2023.pdf</a> | 1                |
| 3<br>A 2.5.                 | Burcă I, Vlase S, Făgăraș PS, <b>Mihălcică M</b> . Biomecanica mișcărilor atletice, Ed. Universității Transilvania din Brașov, ISBN: 978-606-19-0306-1, p. 250<br><a href="https://www.worldcat.org/title/1310201192">https://www.worldcat.org/title/1310201192</a>  | 1                |
| <b>Total puncte CDI-MON</b> |  | <b>N.4.3. =3</b> |

| Criteriu                               |               | Indicatori | Condiții minime profesor | Punctaj îndeplinit |
|--|---------------|------------|--------------------------|--------------------|
| Activitatea de cercetare<br><b>A 2</b> | A 2.1.+A 2.3. | P1+P2      | 10                       | <b>27.7091</b>     |
|  |               | P1         | 6                        | <b>27.7091</b>     |
|  | A 2.2.        | N3.        | 10                       | <b>13</b>          |
|  |               | N3.1.      | 5                        | <b>6</b>           |
|  | A 2.4.+A 2.5. | N4.        | 2                        | <b>3</b>           |
|  |               | N4.3       | 1                        | <b>2</b>           |

Conform punctajului obținut pentru criteriul „Activitate de cercetare științifică” (A2), în conformitate cu prevederile Anexei nr. 6129/2016 la Ordinul Ministrului, îmi permit să apreciez că CRITERIUL DE EVALUARE **A2** ESTE ÎNDEPLINIT.

Data: 07.05.2023

Candidat,

Conf. Univ. Dr. Ing. **Mihălcică Mircea**

**Fișa de verificare a criteriului**  
**„Recunoașterea și impactul activității” (RIA – A3)**  
 Standarde minimale pentru domeniile științifice „Inginerie mecanică, mecatronică și robotică”:

**Criteriul RIA „Recunoașterea și impactul activității” (RIA A3)**

|   |        |  |   |
|---|--------|--|---|
| Atragere resurse financiare prin proiecte/granturi/contracte cu terți   | A 3.1. | Director sau responsabil partener la grant/proiect câștigat prin competiție națională sau internațională             | $S1^{(6)}$ = sumă echivalentă în mii euro |
|   |        | Membri în echipă la grant/proiect câștigat prin competiție națională sau internațională, proiecte/contracte cu terți | $S2^{(7)}$ = sumă echivalentă în mii euro |
| Prezentarea /Diseminarea rezultatelor: prezență la manifestări științifice, în calitate de autor, co-autor la lucrări, profesor invitat | A 3.2. | Congrese/conferințe/workshop-uri internaționale, profesor invitat la universități/institute din străinătate          | N 5 = număr                               |
| Citări în publicații BDI (se exclud autocitările)   | A 3.3. | C1 – număr de citări<br>$S_{IF}$ – suma factorilor de impact al publicațiilor WOS în care apar citările              | $C=C1+ S_{IF}$                            |

**RIA – Proiecte contracte A 3.1.**

| Nr. crt.  | Proiecte/granturi/contracte cu terți   | Punctaj   |
|---|--|---|
| <b>A 3.1. Membru în echipă la grant/proiect</b> |  |   |
| 1<br>A 3.1.                                     | Dezvoltarea de componente din materiale compozite avansate cu aplicații în industria auto, civilă și militară, perioada:2012-2014, finanțator: Fonduri Structurale, Programul Operațional Sectorial Creșterea Competitivității prin CDI, Operațiunea 2.1.1: Proiecte de CD în parteneriat între Universități / Institute de Cercetare și Întreprinderi, Nr Contract: proiect nr. 1132/cod SMIS: 35420, suma 1380000 lei<br><a href="https://intranet.unitbv.ro/Portals/0/UserFiles/User56867/adev_proiect1_opt.pdf">https://intranet.unitbv.ro/Portals/0/UserFiles/User56867/adev_proiect1_opt.pdf</a>   | $S2 = 18,149$   |
| 2<br>A 3.1.                                     | PN-III-P2-2.1-PED-2019-2148, contract: PED 568/2020 Modele inovative de viori comparabile acustic și estetic cu viorile de patrimoniu – MINOVIS, Perioada: 2020 – 2022; Finantator: UEFISCDI, suma: 600000 lei<br><a href="https://intranet.unitbv.ro/Portals/0/UserFiles/User56867/Repartizarea_punctelor_FRACS2020_PED568.pdf">https://intranet.unitbv.ro/Portals/0/UserFiles/User56867/Repartizarea_punctelor_FRACS2020_PED568.pdf</a><br><a href="https://intranet.unitbv.ro/Portals/0/UserFiles/User56867/Repartizarea_punctelor_FRACS2021_PED568.pdf">https://intranet.unitbv.ro/Portals/0/UserFiles/User56867/Repartizarea_punctelor_FRACS2021_PED568.pdf</a> | $S2 = 1.8$<br>(2020) + 4.0<br>(2021)+10<br>(2022)= 15.8 |



|                            |  |                 |
|----------------------------|--|-----------------|
|                            | <a href="https://intranet.unitbv.ro/Portals/0/UserFiles/User56867/Repartizare_puncte_MINOVIS.pdf">https://intranet.unitbv.ro/Portals/0/UserFiles/User56867/Repartizare_puncte_MINOVIS.pdf</a>  |                 |
| 3<br>A.3.1                 | PN-III-P4-PCE-2021-0885, contract PCE 61/2022 Analiza calitativă, dinamică și acustică a sistemelor anizotrope cu interfețe modificate – ACADIA<br>Perioada: 2022 – 2024; Finantator: UEFISCDI, suma: 1200000 lei<br><a href="https://intranet.unitbv.ro/Portals/0/UserFiles/User56867/Repartizare_puncte_ACADIA.pdf">https://intranet.unitbv.ro/Portals/0/UserFiles/User56867/Repartizare_puncte_ACADIA.pdf</a> | S2=20<br>(2022) |
| <b>Total A3.1 : 53.949</b> |  |                 |

## A.3.2. RIA – Conferințe/Congrese

| Prezentarea /Diseminarea rezultatelor: prezență la manifestări științifice, în calitate de autor, co-autor la lucrări, profesor invitat |  |   |
|---|--|---|
| 1<br>A 3.2.   | <p><b>Mihălcică M</b>, Stanciu MD, Dinulica F, Savin A, Bucur V. The Effect of Resonance Wood Quality on Violins Vibration. InRecent Trends in Wave Mechanics and Vibrations: Proceedings of WMVC 2022 2022 Oct 7 (pp.873-881). Cham: Springer International Publishing.<br/><a href="https://link.springer.com/chapter/10.1007/978-3-031-15758-5_90">https://link.springer.com/chapter/10.1007/978-3-031-15758-5_90</a></p> <p><b>Mihălcică M</b>, Nauncef AM, Gliga VG, Stanciu MD, Nastac SM, Campean M. Correlation Between Dynamic Features of Unvarnished and Varnished New Violins and Their Acoustic Perceptual Evaluation. InRecent Trends in Wave Mechanics and Vibrations: Proceedings of WMVC 2022 2022 Oct 7 (pp.857-864). Cham: Springer International Publishing.<br/><a href="https://link.springer.com/chapter/10.1007/978-3-031-15758-5_88">https://link.springer.com/chapter/10.1007/978-3-031-15758-5_88</a></p> | 1 |
| 2<br>A 3.2.   | <p><b>Mihălcică M</b>, Stanciu MD, Teodorescu HD, Iftimie N. Evaluation Of Viscous-Elastic Properties Of Resonance Maple Wood, ModTEch 2022, International Journal of Modern Manufacturing Technologies Volume 14, Issue 2, Pages 145 – 150, 2022<br/><a href="https://www.ijmmt.ro/vol14no22022/15_Mircea_Mihalcica.pdf">https://www.ijmmt.ro/vol14no22022/15_Mircea_Mihalcica.pdf</a></p> <p><b>Mihălcică M</b>, Gliga VG, Campean M, Cretu NC, Nauncef AM, Steigmann R. Psycho-Acoustic Assessment Of Violins With Different Anatomical Features Of Wood, ModTEch 2022, International Journal of Modern Manufacturing Technologies Volume 14, Issue 3, Pages 158 – 163, 2022<br/><a href="https://ijmmt.ro/vol14no32022/23_Mircea_Mihalcica.pdf">https://ijmmt.ro/vol14no32022/23_Mircea_Mihalcica.pdf</a></p>  | 1 |
| 3.<br>A3.2.   | <p><b>Mihălcică M</b>, Modrea A, Munteanu V, Burca I. Tracking Kinematic Gait Parameters During the Recovery of Motor Function After Total Knee Arthroplasty. Procedia Technology. 2016 Jan 1;22:670-6.<br/><a href="https://www.sciencedirect.com/science/article/pii/S2212017316001419">https://www.sciencedirect.com/science/article/pii/S2212017316001419</a></p>  | 1 |
| 4<br>A 3.2.   | <p><b>Mihălcică M</b>, Nicoară D, Niculiță C, Cândea I, Pirnă I. Elder Monitoring Using Modern Data Transmission Technologies, Proceedings Of The 2nd International Conference On Environmental And Geological Science And Engineering: Advances In Environmental And Geological Science And Engineering 2009<br/><a href="https://intranet.unitbv.ro/Portals/0/UserFiles/User1122/WSEAS_2_BV2009.pdf">https://intranet.unitbv.ro/Portals/0/UserFiles/User1122/WSEAS_2_BV2009.pdf</a></p>  | 1 |

|              |  |   |
|--------------|--|---|
| 5<br>A 3.2.  | Itu C, Scutaru ML, Modrea A, <b>Mihălcică M</b> . Traction characteristics for the components of a composite sandwich used to build high-rigidity circular plates. Procedia Manufacturing. 2019 Jan 1;32:268-77.<br><a href="https://www.sciencedirect.com/science/article/pii/S2351978919302483">https://www.sciencedirect.com/science/article/pii/S2351978919302483</a>  | 1 |
| 6<br>A 3.2.  | Itu C, Vlase S, Scutaru ML, Pena CS, Borza PN, <b>Mihălcică M</b> . Universal Absorber Applied to NVH in EV's Powertrain. In Acoustics and Vibration of Mechanical Structures—AVMS-2017: Proceedings of the 14th AVMS Conference, Timisoara, Romania, May 25–26, 2017 2018 (pp. 361-366). Springer International Publishing.<br><a href="https://link.springer.com/chapter/10.1007/978-3-319-69823-6_42">https://link.springer.com/chapter/10.1007/978-3-319-69823-6_42</a>  | 1 |
| 7<br>A 3.2.  | Modrea A, Gheorghe V, Sandu V, Teodorescu-Draghicescu H, <b>Mihălcică M</b> , Scutaru ML. Study of a New Composite Material Rt800 Reinforced with Polyte 440-M888 in Endurance Conditions. Procedia Technology. 2016 Jan 1;22:182-6.<br><a href="https://www.sciencedirect.com/science/article/pii/S2212017316000438">https://www.sciencedirect.com/science/article/pii/S2212017316000438</a>  | 1 |
| 8<br>A 3.2.  | Tofan MC, Burcă I, <b>Mihălcică M</b> , Secară E, Hisom R, Popa I. Mathematical models for the human body motions analysis. In The 13th International Conference Modtech, Modern Technologies, Quality and Innovation, New face of TMCR, Iasi-Chișinau, ISSN (pp. 2066-3919).<br><a href="http://www.modtech.tuiasi.ro/2009/publication/T/Tofan_Mihai_A2.pdf">http://www.modtech.tuiasi.ro/2009/publication/T/Tofan_Mihai_A2.pdf</a>   | 1 |
| 9<br>A 3.2.  | Chiru A, Pirna I, Candea I, Niculita C, Mihălcică M, Bencze A. Satellite orbital instability generated by the perturbing factors. Annals of DAAAM & Proceedings. 2009 Jan 1:1025-7.<br><a href="https://go.gale.com/ps/i.do?id=GALE%7CA224712704&amp;sid=googleScholar&amp;v=2.1&amp;it=r&amp;linkaccess=abs&amp;issn=17269679&amp;p=AONE&amp;sw=w&amp;userGroupName=anon%7Eecdbf5f2">https://go.gale.com/ps/i.do?id=GALE%7CA224712704&amp;sid=googleScholar&amp;v=2.1&amp;it=r&amp;linkaccess=abs&amp;issn=17269679&amp;p=AONE&amp;sw=w&amp;userGroupName=anon%7Eecdbf5f2</a> | 1 |
| 10<br>A 3.2. | Dumitru N, Secară E, <b>Mihălcică M</b> . Study of rotor-bearing systems using Campbell diagram. In Proceedings of the 1st International Conference on Manufacturing Engineering, Quality and Production Systems 2009 Sep (Vol. 2).<br><a href="https://www.researchgate.net/publication/266298337_Study_of_Rotor-Bearing_Systems_Using_Campbell_Diagram">https://www.researchgate.net/publication/266298337_Study_of_Rotor-Bearing_Systems_Using_Campbell_Diagram</a>   | 1 |
| 11<br>A 3.2. | Scutaru ML, <b>Mihălcică M</b> , Modrea A, Purcarea R, Scarlatescu D. An advanced high rigidity thin sandwich composite laminate with COREMAT and dissimilar skins. Procedia Manufacturing. 2018 Jan 1;22:35-40.<br><a href="https://www.sciencedirect.com/science/article/pii/S2351978918303019">https://www.sciencedirect.com/science/article/pii/S2351978918303019</a>  | 1 |
| 12<br>A 3.2. | <b>Mihălcică M</b> , Munteanu MV, Secară E, Burcă I, Petric L. Methods for human motion capture and analysis. In The 3rd International Conference on "Research & Innovation in Engineering" COMAT 2010 (Vol. 3, pp. 164-167).<br><a href="https://scholar.google.com/scholar?cluster=15181187934851664983&amp;hl=en&amp;oi=scholar">https://scholar.google.com/scholar?cluster=15181187934851664983&amp;hl=en&amp;oi=scholar</a>   | 1 |
| 13<br>A 3.2. | <b>Mihălcică M</b> , Guiman V, Munteanu V. A cheap and portable motion analysis system. In The 5th International Conference "Advanced Composite Materials Engineering" and The 3rd International Conference "Research & Innovation in Engineering" COMAT 2014 Ed. Comat, Brașov, 2014 (pp. 109-111).   | 1 |

|                                  |   |   |
|----------------------------------|---|---|
|                                  | <p><b>Mihălcică M</b>, Guiman V, Munteanu V. Using curve fitting as a method to analyze motion analysis data for sports. In The 5th International Conference "Advanced Composite Materials Engineering" and The 3rd International Conference "Research &amp; Innovation in Engineering" <b>COMAT 2014</b> Ed. Comat, Braşov, 2014 (pp. 115-117).</p> <p><b>Mihălcică M</b>, Guiman V, Munteanu V. Using motion analysis software to gather sports experimental data. In The 5th International Conference "Advanced Composite Materials Engineering" and The 3rd International Conference "Research &amp; Innovation in Engineering" <b>COMAT 2014</b> Ed. Comat, Braşov, 2014 (pp. 112-114).</p> <p><a href="http://193.254.231.99/jspui/handle/123456789/537/browse?type=author&amp;order=ASC&amp;rpp=20&amp;value=MIHALCICA%2C+Mircea">http://193.254.231.99/jspui/handle/123456789/537/browse?type=author&amp;order=ASC&amp;rpp=20&amp;value=MIHALCICA%2C+Mircea</a></p> |   |
| 14<br>A 3.2.                     | <p><b>Mihălcică M</b>, Burcă I. Using Inexpensive Motion Analysis Tools To Analyze The Free Throw In Juvenile Basketball, <b>COMAT 2016</b>;39-41</p> <p><a href="http://193.254.231.99/jspui/handle/123456789/2108">http://193.254.231.99/jspui/handle/123456789/2108</a></p>  | 1 |
| 15<br>A 3.2.                     | <p><b>Mihălcică M</b>, Niculita C, Petric L. Methods of identifying aggressors in armed robberies using their physical dimensions, <b>COMEC 2009</b>; 446-448</p> <p><a href="http://aspekt.unitbv.ro/jspui/handle/123456789/1146">http://aspekt.unitbv.ro/jspui/handle/123456789/1146</a></p>  | 1 |
| 16<br>A 3.2.                     | <p>Vrabie RC, <b>Mihălcică M</b>. Analyzing Ski Jumping In An Inexpensive Way, <b>COMAT 2020</b>;257-259</p> <p>Pavilescu R, <b>Mihălcică M</b>. An Inexpensive Analysis System Using Digital Image Correlation, <b>COMAT 2020</b>;235-238</p> <p><a href="http://193.254.231.99/jspui/handle/123456789/2553">http://193.254.231.99/jspui/handle/123456789/2553</a></p>   | 1 |
| 17<br>A 3.2.                     | <p><b>Mihălcică M</b>, Palfi B. Experimental System For The Analysis Of The Standing Long Jump, <b>COMAT 2018</b>;65-68</p> <p><b>Mihălcică M</b>, Bîrsa M. A Simple System To Help Find Natural Talents In Juvenile Basketball, <b>COMAT 2018</b>;69-71</p> <p><a href="http://193.254.231.99:8080/jspui/handle/123456789/2288">http://193.254.231.99:8080/jspui/handle/123456789/2288</a></p>   | 1 |
| 18<br>A 3.2.                     | <p><b>Mihălcică M</b>. A Study On The Correlation Between Step Length And The Femur-Tibia Ratio, <b>COMEC 2017</b> vol.I;155-158</p> <p>Orbok Z, <b>Mihălcică M</b>. The Capture And Analysis Of Posture Parameters Related To Sitting On A Chair, <b>COMEC 2017</b> vol. I;152-154</p> <p><a href="http://193.254.231.99:8080/jspui/handle/123456789/2196">http://193.254.231.99:8080/jspui/handle/123456789/2196</a></p>  | 1 |
| 19<br>A 3.2.                     | <p>Teodorescu-Draghicescu H, Vlase S, Luca Motoc D, <b>Mihălcică M</b>. Cte's Polynomial Curves Of A Thin Composite Sandwich, <b>COMEC 2015</b>; 197-201</p> <p><a href="http://193.254.231.99/jspui/handle/123456789/1912">http://193.254.231.99/jspui/handle/123456789/1912</a></p>   | 1 |
| 20<br>A 3.2.                     | <p><b>Mihălcică M</b>. Using Motion Variance As A Parameter For Human Identification In A Gait Analysis System, <b>COMEC 2011</b> I;23 – 24</p> <p><a href="http://193.254.231.99/jspui/handle/123456789/876">http://193.254.231.99/jspui/handle/123456789/876</a></p>  | 1 |
| <b>Total A.2.2 N 5=20 puncte</b> |   |   |

**A 3.3. RIA-Citări**

| Nr. crt.    | Citări în publicații BDI (se exclud autocitările)   | Punctaj                                      |
|-------------|---|--|
| 1<br>A 3.3. | <p>Titlul citat: Teodorescu-Draghicescu H, Vlase S, Stanciu MD., Curtu I, <b>Mihălcică M.</b> Advanced pultruded glass fibers-reinforced isophthalic polyester resin, , Materiale Plastice 52 (1), 2015, p. 62-64, WOS:000351194900016, <a href="https://revmaterialeplastice.ro/pdf/TEODORESCU%20H.pdf%201%2015.pdf">https://revmaterialeplastice.ro/pdf/TEODORESCU%20H.pdf%201%2015.pdf</a></p> <p><b>Citări:</b></p> <ol style="list-style-type: none"> <li>Vlase, S.; Marin M., Finite Element Method-Based Dynamic Response of Micropolar Polymers with Voids, Polymers, 2021, 13(21): 3727; WOS:000726548800001 <a href="https://www.mdpi.com/2073-4360/13/21/3727">https://www.mdpi.com/2073-4360/13/21/3727</a>, (FI=4.329/2021)</li> <li>Rudenko A, Biryukov A, Kerzhentsev O, Fediuk R, Vatin N, Vasilev Y, Klyuev S, Amran M, Szelag M. Nano- and Micro-Modification of Building Reinforcing Bars of Various Types. Crystals. 2021; 11(4):323. WOS:000642956000001 <a href="https://doi.org/10.3390/cryst11040323">https://doi.org/10.3390/cryst11040323</a> (FI=2.589/2021)</li> <li>Katouzian M, Vlase S, Scutaru ML. Finite Element Method-Based Simulation Creep Behavior of Viscoelastic Carbon-Fiber Composite. Polymers. 2021; 13(7):1017. WOS:000638778500001 <a href="https://doi.org/10.3390/polym13071017">https://doi.org/10.3390/polym13071017</a> (FI=4.329/2021)</li> <li>Marin, M., Öchsner, A., Ellahi, R. et al. A semigroup of contractions in elasticity of porous bodies. Continuum Mech. Thermodyn. 33, 2027–2037 (2021). WOS:000627688000001 <a href="https://doi.org/10.1007/s00161-021-00992-7">https://doi.org/10.1007/s00161-021-00992-7</a> (FI=3.822/2021)</li> <li>Katouzian M, Vlase S. Creep Response of Carbon-Fiber-Reinforced Composite Using Homogenization Method. Polymers. 2021; 13(6):867. WOS:000651998900001 <a href="https://doi.org/10.3390/polym13060867">https://doi.org/10.3390/polym13060867</a> (FI=4.329/2021)</li> <li>Rozylo P, Falkowicz K, Wysmulski P, Debski H, Pasnik J, Kral J. Experimental-Numerical Failure Analysis of Thin-Walled Composite Columns Using Advanced Damage Models. Materials. 2021; 14(6):1506. WOS:000640051300001, <a href="https://doi.org/10.3390/ma14061506">https://doi.org/10.3390/ma14061506</a> (FI=3.623/2020)</li> <li>Gheorghe V, Scutaru ML, Ungureanu VB, Chircan E, Ulea M. New Design of Composite Structures Used in Automotive Engineering. Symmetry. 2021; 13(3):383. WOS:000634223800001 <a href="https://doi.org/10.3390/sym13030383">https://doi.org/10.3390/sym13030383</a>, (FI=2.713/2021)</li> <li>Katouzian M, Vlase S. Creep Response of Neat and Carbon-Fiber-Reinforced PEEK and Epoxy Determined Using a Micromechanical Model. Symmetry. 2020; 12(10):1680. WOS:000586952500001, <a href="https://doi.org/10.3390/sym12101680">https://doi.org/10.3390/sym12101680</a> (FI=2.645/2019 sau FI=2.713/2021)</li> <li>Szavá RI, Szavá I, Vlase S, Modrea A. Determination of Young's Moduli of the Phases of Composite Materials Reinforced with Longitudinal Fibers, by Global Measurements. Symmetry. 2020; 12(10):1607. WOS:000585516300001 <a href="https://doi.org/10.3390/sym12101607">https://doi.org/10.3390/sym12101607</a> (FI=2.645/2019 sau FI=2.713/2021)</li> <li>Park, S.Y., Song, Y.S. Fabrication and Analysis of Long Fiber Reinforced Polypropylene Prepared via Injection Molding. Macromol. Res. 28, 714–720 (2020). WOS:000552203300004 <a href="https://doi.org/10.1007/s13233-020-8090-4">https://doi.org/10.1007/s13233-020-8090-4</a> (FI=2.047/2020 sau FI=2.227/2021)</li> <li>Scarlatescu D.D., Itu C., Modrea A., Herbert H. Stresses in a Water Supply Network's Elbow in Case of Burial in Ground and Anchorage in Concrete, 3TH INTERNATIONAL CONFERENCE INTERDISCIPLINARITY IN ENGINEERING (INTER-ENG 2019), Procedia Manufacturing, 46:70-77, WOS:000582466200011 <a href="https://www.sciencedirect.com/science/article/pii/S2351978920308830">https://www.sciencedirect.com/science/article/pii/S2351978920308830</a> (FI=0)</li> <li>Toderita A., Vlase S., Reliability Study on PUR Injection Machine, Procedia Manufacturing, Volume 46, 2020, Pages 885-890,ISSN 2351-9789, <a href="https://doi.org/10.1016/j.promfg.2020.05.004">https://doi.org/10.1016/j.promfg.2020.05.004</a>. WOS:000582466200125 <a href="https://www.sciencedirect.com/science/article/pii/S2351978920314529">https://www.sciencedirect.com/science/article/pii/S2351978920314529</a> (FI=0)</li> <li>Arina Modrea, Violeta Mihaela Munteanu, Iulian Pruncu, Using the Symmetries in the Civil Engineering. An overview, Procedia Manufacturing, Volume 46, 2020, Pages 906-913,ISSN 2351-9789, <a href="https://doi.org/10.1016/j.promfg.2020.05.007">https://doi.org/10.1016/j.promfg.2020.05.007</a>. WOS:000582466200128 (<a href="https://www.sciencedirect.com/science/article/pii/S2351978920314554">https://www.sciencedirect.com/science/article/pii/S2351978920314554</a>) (FI=0)</li> </ol> | C1=24<br>S <sub>IF</sub> =33.071<br>C=57.071 |

|             |  |  |
|-------------|--|--|
|             | <p>14. Itu C, Öchsner A, Vlase S, Marin MI. Improved rigidity of composite circular plates through radial ribs. Proceedings of the Institution of Mechanical Engineers, Part L: Journal of Materials: Design and Applications. 2019;233(8):1585-1593. doi:10.1177/1464420718768049, WOS:000476523700008<br/> <a href="https://journals.sagepub.com/doi/abs/10.1177/1464420718768049?journalCode=pila">https://journals.sagepub.com/doi/abs/10.1177/1464420718768049?journalCode=pila</a> (FI=0)</p> <p>15. Scărlătescu Dd, Vlase S., Crișan A., Modrea A. Traction tests to determine the behavior of the materials used in water supply networks, ACTA TECHNICA NAPOCENSIS SERIES-APPLIED MATHEMATICS MECHANICS AND ENGINEERING, 2019, 62(1):175-182, WOS:000464577100024, <a href="https://atna-mam.utcluj.ro/index.php/Acta/article/view/1142">https://atna-mam.utcluj.ro/index.php/Acta/article/view/1142</a>, (FI=0)</p> <p>16. Itu C, Vlase S, Scutaru ML, Modrea A, Bending behavior of a high rigidity plate made by a composite panel, Procedia Manufacturing, Volume 32, 2019, Pages 144-150, ISSN 2351-9789, <a href="https://doi.org/10.1016/j.promfg.2019.02.195">https://doi.org/10.1016/j.promfg.2019.02.195</a>. WOS:000471295800021<br/> <a href="https://www.sciencedirect.com/science/article/pii/S235197891930229X">https://www.sciencedirect.com/science/article/pii/S235197891930229X</a> (FI=0)</p> <p>17. Itu C, Modrea A, Scutaru ML, Hebert H, Bending behavior of a circular composite panels used in civil engineering, Procedia Manufacturing, Volume 32, 2019, Pages 151-160, ISSN 2351-9789, WOS:000471295800022<br/> <a href="https://doi.org/10.1016/j.promfg.2019.02.196">https://doi.org/10.1016/j.promfg.2019.02.196</a>. (FI=0)</p> <p>18. Modrea A., Hebert H, Scărlătescu DD, FEM Applied to Determine the Stress-strain Field in the Tubes of the Water Supply Networks, Procedia Manufacturing, Volume 32, 2019, Pages 187-193, ISSN 2351-9789, <a href="https://doi.org/10.1016/j.promfg.2019.02.201">https://doi.org/10.1016/j.promfg.2019.02.201</a>. WOS:000471295800027, (FI=0)</p> <p>19. Scutaru L.M., Itu C., Marin M, Grif HS, Bending Tests Used to Determine the Mechanical Properties of the Components of a Composite Sandwich Used in Civil Engineering, Procedia Manufacturing, Volume 32, 2019, Pages 259-267, ISSN 2351-9789, WOS:000471295800038<br/> <a href="https://doi.org/10.1016/j.promfg.2019.02.212">https://doi.org/10.1016/j.promfg.2019.02.212</a>. (FI=0)</p> <p>20. Itu C., Scutaru ML, Modrea A, Mihălcică M, Traction characteristics for the components of a composite sandwich used to build high-rigidity circular plates, Procedia Manufacturing, Volume 32, 2019, Pages 268-277, ISSN 2351-9789, WOS:000471295800039<br/> <a href="https://doi.org/10.1016/j.promfg.2019.02.213">https://doi.org/10.1016/j.promfg.2019.02.213</a>. (FI=0)</p> <p>21. Teodorescu-Draghicescu, H. Scarlatescu, D. Vlase, S. Scutaru, M.L., Nastac, C. (2018) <i>Advanced high-density polyethylene used in pipelines networks</i>, Procedia Manufacturing 22, p. 27-34, WOS:000456199200004,<br/> <a href="https://www.sciencedirect.com/science/article/pii/S2351978918303007">https://www.sciencedirect.com/science/article/pii/S2351978918303007</a> (FI=0)</p> <p>22. Modrea A, Teodorescu-Draghicescu H, Szava I, Szava R, Galfi B, Advanced Heliopol/Stratimat Composite Laminate Material Behavior under Cyclic Bending Loads, Procedia Engineering, Volume 181, 2017, Pages 175-181, ISSN 1877-7058, WOS:000404612700024,<br/> <a href="https://doi.org/10.1016/j.proeng.2017.02.426">https://doi.org/10.1016/j.proeng.2017.02.426</a>.<br/> <a href="https://www.sciencedirect.com/science/article/pii/S187770581731010X">https://www.sciencedirect.com/science/article/pii/S187770581731010X</a> (FI=0)</p> <p>23. Teodorescu-Draghicescu H., Gheorghe V, Munteanu R, Szava I, Modrea A, Advanced RT300 Glass Fabric/Polylite Composite Laminate Simulation, Procedia Engineering, Volume 181, 2017, Pages 293-299, ISSN 1877-7058, WOS:000404612700041<br/> <a href="https://doi.org/10.1016/j.proeng.2017.02.392">https://doi.org/10.1016/j.proeng.2017.02.392</a>.<br/> <a href="https://www.sciencedirect.com/science/article/pii/S187770581730975X">https://www.sciencedirect.com/science/article/pii/S187770581730975X</a> (FI=0)</p> <p>24. Modrea, A. Szava, R., Niculita, C. Scutaru, M.L., (2017) <i>New Plain 200 Epoxy Based Carbon Prepregs</i>, Procedia Engineering 181, p. 351-356 WOS:000404612700049 FI=0,<br/> <a href="https://www.sciencedirect.com/science/article/pii/S1877705817309839">https://www.sciencedirect.com/science/article/pii/S1877705817309839</a></p> |  |
| 2<br>A 3.3. | <p>Titlu citat: <b>Mihălcică M, Stanciu MD, Vlase S. Frequency Response Evaluation of Guitar Bodies with Different Bracing Systems Symmetry. 2020; 12(5):795.</b><br/> <a href="https://doi.org/10.3390/sym12050795">https://doi.org/10.3390/sym12050795</a>, WOS:000540226400113</p> <p><b>Citări</b></p> <p>1. Viala R, Placet V, Cogan S, Model-based evidence of the dominance of the guitar brace design over material and climatic variability for dynamic behaviors,</p>  | C1=4<br>S <sub>IF</sub> =7.192<br>C=11.192 |

|             |   |  |
|-------------|---|--|
|             | <p>Applied Acoustics, Volume 182, 2021, 108275, ISSN 0003-682X, <a href="https://doi.org/10.1016/j.apacoust.2021.108275">https://doi.org/10.1016/j.apacoust.2021.108275</a>. WOS:000687528600058 (<a href="https://www.sciencedirect.com/science/article/pii/S0003682X21003698">https://www.sciencedirect.com/science/article/pii/S0003682X21003698</a>) (FI=2.639/2021)</p> <p>2. Salvi, D; Gonzalez S., Antonacci, F., Sarti, A. Modal analysis of free archtop guitar top plates, The Journal of the Acoustical Society of America 150 (2), 1505 (2021); <a href="https://doi.org/10.1121/10.0005937">https://doi.org/10.1121/10.0005937</a>, WOS:000691415800002, (FI=1.84/2021)</p> <p>3. Marin M, Băleanu D, Vlase S. Composite Structures with Symmetry. Symmetry. 2021; 13(5):792. <a href="https://doi.org/10.3390/sym13050792">https://doi.org/10.3390/sym13050792</a>, WOS:000654605700001, (FI=2.713/2021)</p> <p>4. Woodhouse J., Politzer D., Mansour H. Acoustics of the banjo: measurements and sound synthesis, ACTA ACUSTICA, WOS:000636748200001, <a href="https://acta-acustica.edpsciences.org/articles/aacus/full_html/2021/01/aacus200052/aacus200052.html">https://acta-acustica.edpsciences.org/articles/aacus/full_html/2021/01/aacus200052/aacus200052.html</a> (FI=0)</p>   |  |
| 3<br>A 3.3. | <p>Titlu citat: <b>Mihălcică M, Vlase S, Păun M.</b> The Use of Structural Symmetries of a U12 Engine in the Vibration Analysis of a Transmission. Symmetry. 2019; 11(10):1296. <a href="https://doi.org/10.3390/sym11101296">https://doi.org/10.3390/sym11101296</a> WOS: 000495457600110</p> <p><b>Citări</b></p> <p>Vlase S, Marin M, Deaconu O. Vibration Properties of a Concrete Structure with Symmetries Used in Civil Engineering. Symmetry. 2021; 13(4):656. <a href="https://doi.org/10.3390/sym13040656">https://doi.org/10.3390/sym13040656</a> (FI=2.94/2021)</p> <p>Qiu Q, Chen X, Yang C, Feng P. Classification and Effects of Symmetry of Mechanical Structure and Its Application in Design. Symmetry. 2021; 13(4):683. <a href="https://doi.org/10.3390/sym13040683">https://doi.org/10.3390/sym13040683</a> (FI=2.94/2021)</p> <p>Vlase S, Marin M, Scutaru ML, Pruncu C. Vibration Response of a Concrete Structure with Repetitive Parts Used in Civil Engineering. Mathematics. 2021; 9(5):490. <a href="https://doi.org/10.3390/math9050490">https://doi.org/10.3390/math9050490</a> (FI=2.592/2021)</p>   | <p>C1=3<br/>S<sub>IF</sub>=8.472<br/>C=11.472</p>  |
| 4<br>A 3.3. | <p>Titlu citat: Stanciu MD, Mihălcică M, Dinulică F, Nauncef AM, Purdoiu R, Lăcătuș R, Gliga GV. X-ray Imaging and Computed Tomography for the Identification of Geometry and Construction Elements in the Structure of Old Violins. Materials. 2021; 14(20):5926. <a href="https://doi.org/10.3390/ma14205926">https://doi.org/10.3390/ma14205926</a></p> <p><b>Citări</b></p> <p>Dinulica F, Savin A, Stanciu MD. Physical and Acoustical Properties of Wavy Grain Sycamore Maple (<i>Acer pseudoplatanus</i> L.) Used for Musical Instruments. Forests. 2023; 14(2):197. <a href="https://doi.org/10.3390/f14020197">https://doi.org/10.3390/f14020197</a> (FI=3.282/2021)</p> <p>Čufar K, Demšar B, Beuting M, Balzano A, Škrk N, Krže L, Merela M. Dendrochronological Dating and Provenancing of String Instruments. J Vis Exp. 2022 Oct 6;(188). doi: 10.3791/64591. Erratum in: J Vis Exp. 2023 Feb 8;(192): PMID: 36282699. <a href="https://pubmed.ncbi.nlm.nih.gov/36282699/">https://pubmed.ncbi.nlm.nih.gov/36282699/</a> (FI=1.424/2021)</p> <p>Mariana Domnica Stanciu, Florin Dinulică, Voichi a Bucur, Vasile Ghiorghe Gliga, Silviu Marian Nastac, Mihaela Câmpăan, Changing the vibrational behavior of the wooden thin arched plates— The maestro violins experimental study case, Thin-Walled Structures, Volume 174, 2022, 109042, ISSN 0263-8231, <a href="https://doi.org/10.1016/j.tws.2022.109042">https://doi.org/10.1016/j.tws.2022.109042</a>. (FI=5.881/2021)</p> | <p>C1=3<br/>S<sub>IF</sub>=10.587<br/>C=13.587</p> |
| 5<br>A.3.3. | <p>Titlu citat: Mihălcică M, Stanciu MD, Nastac SM, Dinulică F, Nauncef AM, Roșca IC, Savin A. Signature Modes of Old and New Violins with Symmetric Anatomical Wood Structure. Applied Sciences. 2021; 11(23):11297. <a href="https://doi.org/10.3390/app112311297">https://doi.org/10.3390/app112311297</a></p> <p><b>Citări</b></p> <p>Mariana Domnica Stanciu, Florin Dinulică, Voichi a Bucur, Vasile Ghiorghe Gliga, Silviu Marian Nastac, Mihaela Câmpăan, Changing the vibrational behavior of the wooden thin arched plates— The maestro violins experimental study case, Thin-Walled Structures, Volume 174, 2022, 109042, ISSN 0263-8231, <a href="https://doi.org/10.1016/j.tws.2022.109042">https://doi.org/10.1016/j.tws.2022.109042</a>. (FI=5.881/2021)</p>   | <p>C1=1<br/>S=5.881<br/>C=6.881</p>                |

|                    |   |                  |
|--------------------|---|------------------|
| 6<br>A.3.3.        | <p>Titlu citat: Vlase S, Danasel C, Scutaru ML, <b>Mihalcica M</b>. Finite element analysis of a two-dimensional linear elastic systems with a plane "rigid motion". Rom. J. Phys. 2014 Jan 1;59(5-6):476-87.</p> <p><a href="https://rjp.nipne.ro/2014_59_5-6/RomJPhys.59.p476.pdf">https://rjp.nipne.ro/2014_59_5-6/RomJPhys.59.p476.pdf</a></p> <p>Citări C1=23</p> <p><a href="https://intranet.unitbv.ro/Portals/0/UserFiles/User56867/citari_4.pdf">https://intranet.unitbv.ro/Portals/0/UserFiles/User56867/citari_4.pdf</a></p>   | C1=23            |
| 7<br>A.3.3.        | <p>Titlu citat: Vlase S, Purcarea R, Teodorescu-Draghicescu H, Calin MR, Szava I, <b>Mihălcică M</b>. Behavior of a new Heliopol/Stratimat300 composite laminate. Optoelectronics and Advanced Materials–Rapid Communications. 2013 Jul 1;7(7-8):569-72.</p> <p><a href="https://oam-rc.inoe.ro/articles/behavior-of-a-new-heliopolstratimat300-composite-laminate/fulltext">https://oam-rc.inoe.ro/articles/behavior-of-a-new-heliopolstratimat300-composite-laminate/fulltext</a></p> <p>Citări C1=22</p> <p><a href="https://intranet.unitbv.ro/Portals/0/UserFiles/User56867/citari_4.pdf">https://intranet.unitbv.ro/Portals/0/UserFiles/User56867/citari_4.pdf</a></p>  | C1=22            |
| 8<br>A.3.3.        | <p>Titlu citat: Modrea A, Vlase S, Teodorescu-Draghicescu H, <b>Mihălcică M</b>, Calin MR, Astalos C. Properties of advanced new materials used in automotive engineering. Optoelectronics and Advanced Materials–Rapid Communications. 2013 Jun 12;7(May-June 2013):452-5.</p> <p><a href="https://oam-rc.inoe.ro/articles/properties-of-advanced-new-materials-used-in-automotive-engineering/fulltext">https://oam-rc.inoe.ro/articles/properties-of-advanced-new-materials-used-in-automotive-engineering/fulltext</a></p> <p>Citări C1=23</p> <p><a href="https://intranet.unitbv.ro/Portals/0/UserFiles/User56867/citari_4.pdf">https://intranet.unitbv.ro/Portals/0/UserFiles/User56867/citari_4.pdf</a></p>               | C1=23            |
| 9<br>A.3.3.        | <p>Titlu citat: Niculiță C, Vlase S, Bencze A, <b>Mihălcică M</b>, Calin MR, Serbina L. Optimum stacking in a multi-ply laminate used for the skin of adaptive wings. Optoelectronics and Advanced Materials–Rapid Communications. 2011 Nov 23;5(November 2011):1233-6.</p> <p><a href="https://oam-rc.inoe.ro/articles/optimum-stacking-in-a-multi-ply-laminate-used-for-the-skin-of-adaptive-wings/fulltext">https://oam-rc.inoe.ro/articles/optimum-stacking-in-a-multi-ply-laminate-used-for-the-skin-of-adaptive-wings/fulltext</a></p> <p>Citări C1=24</p> <p><a href="https://intranet.unitbv.ro/Portals/0/UserFiles/User56867/citari_4.pdf">https://intranet.unitbv.ro/Portals/0/UserFiles/User56867/citari_4.pdf</a></p> | C1=24            |
| <b>Total A.3.3</b> |   | <b>C=192.194</b> |

| Criteria   | Indicatori | Condiții minime profesor | Punctaj îndeplinit |         |
|--|------------|--------------------------|--------------------|---------|
| <b>Recunoașterea și impactul activității" (A3)</b> | A 3.1.     | S1+S2                    | 50                 | 53.969  |
|  | A 3.2.     | N5                       | 10                 | 20      |
|  | A 3.3.     | C                        | 25                 | 192.194 |

Conform punctajului obținut pentru criteriul „Recunoașterea și impactul activității” (RIA A3), în conformitate cu prevederile Anexei nr. 6129/2016 la Ordinul Ministrului, îmi permit să apreciez că CRITERIUL DE EVALUARE A3 ESTE ÎNDEPLINIT.

Data: 07.05.2023

Candidat,

Conf. Univ. Dr. Ing. **Mihălcică Mircea**

