

**Autorul tezei de abilitare:** Conf. Dr. ing. STANCIU Mariana Domnica

**Titlul tezei de abilitare:** Comportamentul mecanic al structurilor complexe lignocelulozice de tip Helmholtz

**Domeniul:** Inginerie Mecanică

## LISTA DE LUCRĂRI

### LUCRĂRI RELEVANTE

1. Stanciu M.D., Şova D., Savin A., Iliaş N., Gorbacheva Galina, Physical and Mechanical Properties of Ammonia- Treated Black Locust Wood, *Polymers* 2020, 12, 377; (FI= 3.426; SRI=1.9) doi:10.3390/polym12020377, <https://www.mdpi.com/2073-4360/12/2/377>
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3. Stanciu M.D., Bucur V., Munteanu M.V., Georgescu S.V., Năstac S.M. Moisture induced deformation in the neck of a classical guitar, in *Holzforschung*, 2019, Vol 73(4):371-379 (FI=2.079, SRI=1.448); <https://www.degruyter.com/document/doi/10.1515/hf-2018-0021/html>
4. Stanciu M.D, Bucur V., Valcea C. S., Savin A., Sturm R., (2018) Oak particles size effects on viscous-elastic properties of wood polyester resin composite submitted to ultraviolet radiation, *Wood Sci Technol* 52 (2): 365-382 (2018) (FI=1,706; SRI=2,454) <https://link.springer.com/article/10.1007/s00226-017-0971-0>
5. Stanciu, M.D.; Mihălcică, M.; Dinulică, F.; Nauncef, A.M.; Purdoi, R.; Lăcătuş, R.; Gliga, G.V. X-ray Imaging and Computed Tomography for the Identification of Geometry and Construction Elements in the Structure of Old Violins. *Materials* 2021, 14, 5926. <https://www.mdpi.com/1996-1944/14/20/5926> (FI=3.623/2020)
6. Stanciu M.D., Teodorescu Draghicescu H., Vlase S, Degradation of Mechanical Properties of Pine Wood Under Symmetric Axial Cyclic Loading Parallel to Grain, *Polymers*, 2020, 12(10), 2176 (FI= 3.426; SRI=1.9) DOI10.3390/polym12102176, WOS:000586968800001, <https://www.mdpi.com/2073-4360/12/10/2176>
7. Stanciu M.D., Teodorescu Draghicescu H., Rosca I.C., Mechanical Properties of GFRPs Exposed to Tensile, Compression and Tensile-Tensile Cyclic Tests, *Polymers*, 2021 13(6), 898 (FI=4.329, SRI=2.037) doi 10.3390/polym13060898, WOS:000651942300001, <https://www.mdpi.com/2073-4360/13/6/898>
8. Dinulica F., Stanciu M.D., Savin A. Correlation between Anatomical Grading and Acoustic-Elastic Properties of Resonant Spruce Wood Used for Musical Instruments, *Forests*, 2021, 12(8), 1122 (FI=2.634, SRI=1.314) doi 10.3390/f12081122, WOS:000689061500001, <https://www.mdpi.com/1999-4907/12/8/1122>
9. Mihalcică M., Stanciu M.D., Năstac S.M., Dinulica F., Nauncef A.M., Roşca I.C., Savin A., Signature Modes of Old and New Violins with Symmetric Anatomical Wood Structure, *Appl. Sci.* 2021, 11(23), 11297 (FI=2.679/2020); <https://doi.org/10.3390/app112311297>
10. Plescan C, Stanciu M.D., Szasz M. The Effect of Internal Pressure on Radial Strain of Steel Pipe Subjected to Monotonic and Cyclic Loading, *Materials* 2019, 12, 2849 (FI=2.972; SRI=1.405), <https://www.mdpi.com/1996-1944/12/18/2849>

### TEZA DE DOCTORAT

**Titlul:** Cercetări privind optimizarea formei și structurii plăcilor compozite lignocelulozice supuse la solicitări ciclice, cu aplicații la instrumentele muzicale

**Domeniul:** inginerie mecanică

**Conducător științific:** prof. univ. dr. ing. Curtu Ioan

**Data și locul susținerii publice:** 18.07.2009, Universitatea Transilvania din Brașov, Facultatea de Inginerie Mecanică

## BREVETE

1) CBI A/00560/23.07.2014 (BI RO130753A0): Plăci fonoabsorbante și termoizolante obținute din deșeuri reciclate de ABS în proporție de 90%-100% și procedeu de obținere, COȘEREANU Camelia, Lica Dumitru, Brenci Lumini a - Maria, Fotin Adriana Curtu Ioan, Stanciu M.D. <http://pub.osim.ro/publication-server/pdf-document?PN=RO130753%20RO%20130753&iDocId=7765&iepatch=.pdf>

2) CBI A/00729/27.09.2018 (RO133205A0) Stand și metodă de testare reologică a structurilor de chitară, Stanciu M.D., Coșereanu C., Cerbu C., Munteanu V., Georgescu S., Vlase S. <http://pub.osim.ro/publication-server/pdf-document?PN=RO133205%20RO%20133205&iDocId=11694&iepatch=.pdf>

## CĂRȚI / CAPITOLE DE CĂRȚI

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2. **Stanciu M.D.**, Terciu O.M., Curtu I., (2014) Compozite Lignocelulozice – Aplicatii in Industria Automobilelor, Ed. Universitatii Transilvania din Brasov, ISBN 978-606-19-0518-8, DOI: 10.13140/2.1.2368.0323, p. 238
3. Curtu I., **Stanciu M.D.**, Ilias N.T. Epopeea lemnului in cultura si civilizatie – capitol carte, Planeta Pământ – Planeta Vie vol II, Ed. AGIR, Bucuresti, Romania, 2015, ISBN 978-973-720-582-7, 26 pagini (p. 310 – 333) (capitol carte)
4. **Stanciu M.D.**, Curtu I., (2013) Reologie – suport de curs prima parte, Editura Universitatii Transilvania din Brasov, 167 p, ISBN: 978-606-19-0351-1 (gen), 978-606-19-0352-8 (Partea I)
5. **Stanciu M.D.**, Curtu I., (2015) Reologia Lemnului – suport de curs Partea a II-a, Editura Universitatii Transilvania din Brasov, 218p, ISBN: 978-606-19-0351-1 (gen), 978-606-19-0633-8 (Partea a II-a)
6. **Stanciu M.D.**, Curtu I., (2015) Reologia Materialelor de construcții – suport de curs Partea a III-a, Editura Universității Transilvania din Brașov, 200p, ISBN: 978-606-19-0351-1 (gen), 978-606-19-0634-5 (Partea a III-a)
7. **Stanciu M.D.**, Vlase S., Marin M., Vibration Analysis of a Guitar considered as a Symmetrical Mechanical System in Symmetry in Applied Continuous Mechanics, Eds. Marin M, Băleanu D., Vlase S. MDPI St. Alban-Anlage 66, 4052 Basel, Elveția, p. 103 – 119 (capitol carte).

## ARTICOLE ÎN REVISTE

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2. **Stanciu M.D.**, Savin A., Nastac S.M, (2018) *Mechanical and surface properties of lignocellulosic fibres reinforced composites*, in Strojniški vestnik - Journal of Mechanical Engineering

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<https://robots.iopscience.iop.org/article/10.1088/1757-899X/997/1/012105>
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8. **Stanciu M.D.**, Barsanescu P., Goanta V., Savin A. Experimental determination of stress and strain states of the guitar's wood structure, MODTECH INTERNATIONAL CONFERENCE - MODERN TECHNOLOGIES IN INDUSTRIAL ENGINEERING VIII, IOP Conference Series- Materials Science and Engineering, 2020, 916, 012113, DOI10.1088/1757-899X/916/1/012113, WOS:000625330000113, <https://iopscience.iop.org/article/10.1088/1757-899X/916/1/012113>
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11. Faktorová D., Savin A, Steigmann R, **Stanciu M D**, Špániková G, *Numerical and experimental investigation of metamaterial structures used in non-destructive dielectric material testing*, IOP Conf. Series: Materials Science and Engineering 564 (2019) 012036 IOP Publishing doi:10.1088/1757-899X/564/1/012036 (<https://iopscience.iop.org/issue/1757-899X/564/1>)
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#### ALTE LUCRĂRI / REALIZĂRI RELEVANTE

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Data: 03.01.2022

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