

**Autorul tezei de abilitare:** Conf. dr. ing. Cătană Dorin-Ioan

**Titlul tezei de abilitare:** Contribuții privind creșterea competitivității sculelor din oțeluri aliate

**Domeniul:** Inginerie Industrială

## LISTA DE LUCRĂRI

### LUCRĂRI RELEVANTE

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1. **Catana D.** – *Thermomechanical treatment influence on the high-speed steel hardness and wear*, Universal Journal of Materials Science, Vol. 3 (3), pp. 44-48, 2015, ISSN 2331-6691 print, ISSN 2331-6705 online, DOI: 10.13189/ujms.2015.0
2. **Catana D.** – *Risk factors combating of the work environment*, Lambert Academic Publishing, Saarbrucken, Germany, ISBN 978-3-659-26421-4, 2014,
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4. **Catana D.** – *Plastic deformation speed influence on HS2-9-1-8 high-speed steel plastic deformation strength*, Metalurgia International Vol. XVII, no. 5, pp. 21-24, 2012, ISSN 1582-2214
5. **Catana D.** – *Dependence between deformation speeds and high speed steel plastic deformation strength*, Metalurgia Internațional Vol. XVI, no. 3, pp. 68-70, 2011, ISSN 1582-2214
6. **Catana D.** – *Traction behaviour simulation of spot welded*, DAAAM International Scientific Book 2010, pp. 575-582, B. Katalinic (Ed.), Published by DAAAM International, ISBN 978-3-901509-74-2, ISSN 1726-9687, Vienna, Austria DOI: 10.2507 / daaam.scibook.2010.50
7. **Catana D.,** Catana D-A – *Statistical weights method to assessment global risk level*, 8<sup>th</sup> International Scientific Conference – Health, work and social responsibility, University Urbaniana, Rome, Italy, 28.09.-02.10.2010
8. **Catana D.** – *Possibilities of simulation of the axials deformation for the butt head welding*, Buletinul Institutului Politehnic din Iași Tomul L(LIV) Fascicula Vb, 2006, pp. 1135-1140, ISSN 1011-2855

### TEZA DE DOCTORAT

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### BREVETE

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### CĂRȚI / CAPITOLE DE CĂRȚI

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1. **Catana D.** – *Risk factors combating of the work environment*, Lambert Academic Publishing, Saarbrucken, Germany, 2014, ISBN 978-3-659-26421-4
2. **Catana D.** – *Evaluarea riscului în securitatea și sănătatea ocupațională*, Editura Lux Libris, Brașov, 2013, ISBN 978-973-131-254-5
3. **Catana D.** – *Procesarea materialelor avansate*, Editura Lux Libris, Brașov, 2002, ISBN 973-9428-73-8
4. **Catana D.** – *Tehnologia materialelor – Teste*, Editura Universității “Transilvania” Brașov, 2001, ISBN 973-8124-10-7
5. **Catana D., s. a.** – *Tehnologia Materialelor (Tehnologii Industriale)*, Editura Universității “Transilvania” Brașov, 1999, ISBN 973-9474-38-1

6. Eftimie L., Dinescu I, **Catana D.** – *Tehnologia Materialelor (Tehnologii Secundare)*, Editura Lux Libris, Braşov, 1998, ISBN 973-9240-55-0
7. Dinescu I., Eftimie L., **Catana D.** – *Tehnologia Materialelor (Tehnologii de Bază)*, Editura Lux Libris, Braşov, 1997, ISBN 973-9240-17-8

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1. **Catana D.** – *Influence of the heat treatments on the wear-resistant steels properties*, Bulletin of the Transilvania University of Brasov, Vol. 8 (57), No. 2, pp. 87-92, 2015, Series I, Engineering Sciences, ISSN 2065-2119 (print), ISSN 2065-2127 (CD-ROM)
2. **Catana D.** – *Thermomechanical treatment influence on the high-speed steel hardness and wear*, Universal Journal of Materials Science, Vol. 3 (3), pp. 44-48, 2015, ISSN 2331-6691 print, ISSN 2331-6705 online, DOI: 10.13189/ujms.2015.030302, BDI-EBSCO
3. **Catana D.** – *Study regarding industrial noise reduction with sound absorbing screens*, Bulletin of the Transilvania University of Brasov, Series I: Engineering Sciences, Vol. 6 (55), No. 1, pp. 89-94, 2013, ISSN 2065-2119 (print), ISSN 2065-2127 (CD-ROM)
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7. **Catana D.** – *High speed steel HS 2-9-1-8 (W 1.3247) plastic deformation strength*, Metalurgia International Vol. XVI, no. 2, pp. 80-83, 2011, ISSN 1582-2214
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11. **Catana D., Catana D.A.** – *Temperature and speed influence on plastic deformation strength of high speed steel*, Annals of DAAAM for 2009 & Proceedings of the 20<sup>th</sup> International DAAAM Symposium “Intelligent Manufacturing & Automation: Theory, Practice & Education” 25-28<sup>th</sup> November, Vienna, Austria – published by DAAAM International Vienna – editor B. Katalinic ISSN 1726-9679, ISBN 978-3-901509-70-4
12. **Catana D.** –  *Casting method influence on microstructure and mechanical properties of the antifriction alloys*, Metalurgia International Vol. XIV (Special issue no. 3), pp. 161-164, 2009, ISSN 1582 – 2214
13. **Catana D.** – *Traction behaviour simulation of spot welded joints*, Annals of DAAAM for 2008 & Proceedings of the 19th International DAAAM Symposium “Intelligent Manufacturing & Automation: Focus Next Generation of Intelligent Systems and Solution” 22/25th October 2008, Trnava, Slovakia – published by DAAAM International Vienna – editor B. Katalinic ISSN 1726-9679, ISBN 978-3-901509-68-1
14. **Catana D., Machedon-Pisu T.** – *The simulation of behavior at traction of spots welded joints*, Sudura nr. XIII 2-2003, ISSN 1453-0384, 2003

15. Novac Gh., Markos Z., Baltes L., **Catana D.** – *Possibilities for increasing of carbon steel performances by superficial heat treatments in plasma*, *Tratamente termice si ingineria suprafetelor*, 2003, ISSN 1221-5678

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2. Catana D-A., **Catana D.** – *Casting method influence on microstructure of antifriction alloys*, The Seventh International Congress in Materials Science and Engineering Iasi, May 28<sup>th</sup>-31<sup>st</sup>, 2009, Bulletin of the Polytechnic Institute of Iasi, Tomul LV (LIX), Fasc. 1, Published by the “Gheorghe Asachi” Technical University of Iasi, Editor Iulian Ionita, 2009, pp. 185-188, ISSN 1453-1690
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4. **Catana D.**, Trif N, – *The simulation of deformation at traction of spots welded joints*, 3<sup>rd</sup> International Conference Research and Development in Mechanical Industry RaDMI 2003 Herceg Novi Serbia and Montenegro
5. **Catana D.**, Eftimie L. – *Study regarding the repression in the case of nonuniform plastic deformation*, The 10-th International DAAAM Symposium “Intelligent Manufacturing & Automation: Past-Present-Future”, DAAAM International Vienna, Vienna University of Technology and Austrian Society of Engineers and Architects OiaV 1848, Austria, 21-23.10.1999, Vol. XXVI, ISBN 3-901509-10-0
6. **Catana D.**, s. a. – *The determination of the nodal point coordinates forming the slipping lines field using the numerical method*, International Computer Science Conference, University of Miskolc, 24-26.02.1998, Hungary
7. **Catana D.**, Eftimie L. – *The influence of microstructure on part hardness during the double-layer metal coating in vibrating field*, International Conference of PhD Students, University of Miskolc, 11-18.08.1997, Hungary
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**ALTE LUCRĂRI / REALIZARI RELEVANTE**

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1. **Catana D.** – *Researches regarding the influence of the heat treatments with solar energy on the alloy steels properties*, 7<sup>th</sup> Frame Work Programme of the EU și Ministerio de Economía y Competitividad Spain EU-DG RTD’s – The European Solar Research Infrastructure for Concentrated Solar Power – Grant Agreement no. 312643 (coordonator contract de cercetare)

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