

Universitatea Nationala de Stiinta si Tehnologie POLITEHNICA din Bucuresti
Facultatea: Stiinta si Ingineria Materialelor
Departamentul: Stiinta materialelor metalice, Metalurgie fizică
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L I S T A

lucrărilor științifice în domeniul disciplinei din ultimii ani

A. Teza de doctorat „*Studiul proceselor fizico-chimice care au loc la nitrurarea în plasmă*”, Seria B – Nr. 0005130 / 23.11.2000 emisă de Universitatea POLITEHNICA din București pe baza hotărârii CNATDCU din data de 01.11.2000 și confirmat prin ordinul Ministrului Educației Nationale nr. 5201 din 23.11. 2000

B. Cărți si capitole în cărți publicate în ultimii 10 anii

1. S.Ciucă, I.Gherghescu - *Noțiuni de Ingineria Suprafețelor - Capitolul 3 (35 pagini) - Tratat de Știința și Ingineria Materialelor Metalice, vol.6, (pag.915-950)*, Ed.AGIR, Bucuresti,2014, ISBN: 978-973-720-533-9
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3. C.Gradinaru, A.Berbecaru, G.Coman, S.Ciucă, C.Giurconiu, A.Grecu, C.Predescu, A.Nicolae, EXPERTIZAREA DEGRADĂRII ECOSOCIOTEHNOLOGICE A MATERIALELOR METALICE, Editura PRINTECH, Bucuresti 2022, ISBN 978-606-23-1364-4, 173 pag.
4. A. Gherghescu, R. Dumitrescu, A. Robu, O. Trante, S.Ciucă *Tratamente termice*(116 pag) Editura PRINTECH, Bucuresti 2024, ISBN 978-606-23-1575-7

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15 Thermal Parameters Influence Assessed by Electrochemical Impedance Spectroscopy on a Ni50Ti48Nb2 Shape Memory Alloy By: Gherghescu, IA (Gherghescu, Ioana Arina)[1] ; Ionita, D (Ionita, Daniela)[2] ; **Ciucă, S (Ciucă, Sorin)**[1] ; Dumitrescu, RE (Dumitrescu, Ruxandra Elena)[1] REVISTA DE CHIMIE; IF=1.412; Accession Number: WOS:000425369600017 ISSN: 1583-3186 Volume: 48 Issue: 4 Pages: 412-421, published 2018

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27. Vectors of Sustainable Development and Global Knowledge in the Metallic Materials Industry in Romania By:Nicolae, M (Nicolae, Maria) [1] ; Sohaciu, MG (Sohaciu, Mirela Gabriela) [1] ; Dumitrescu, R (Dumitrescu, Ruxandra) [1] ; **Ciuca, S (Ciuca, Sorin)** [1] ; Nicolae, A (Nicolae, Avram) [1]]SUSTAINABILITY PublisherName MDPI Volume14m Issue16 Article Number9911 DOI10.3390/su1416991 PublishedAUG 2022Indexed2022-09-03Document Type Article WOS:000845305400001 eISSN 2071-1050 IF=3.889

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33. INFLUENCE OF MECHANICAL CHARACTERISTICS ON THE OPERATING BEHAVIOR OF COMPRESSORS INTAKE AND EXHAUST VALVES MADE OF INCONEL X750 SUPERALLOY Grecu, A (Grecu, Andrei) [11]; Coman, G (Coman, George) [11]; Berbecaru, A (Berbecaru, Andrei) [11]; Matei, E (Matei, Ecaterina) [11]; Gherghescu, I (Gherghescu, Ioana) [11]; Predescu, A (Predescu, Andra) [11]; Ciuca, S (Ciuca, Sorin) [11]; Predescu, C (Predescu, Cristian) [11] UNIVERSITY POLITEHNICA OF BUCHAREST SCIENTIFIC BULLETIN SERIES B-CHEMISTRY AND MATERIALS SCIENCE Volume85, issue 1, pp 177-188, published 2023, ISSN 1454-2331, WOS:000957802300014

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37. CORROSION BEHAVIOR IN AQUEOUS ENVIRONMENTS OF MARTENSITIC STAINLESS STEELS USED IN HYDROPOWER TURBINE BLADES, Coman, G (Coman, George) [11]; Berbecaru, A (Berbecaru, Andrei) [11]; Costea, MN (Costea, Marian Nicolae) [11]; Sohaciu, M (Sohaciu, Mirela) [11]; Matei, E (Matei, Ecaterina) [11]; Predescu, A (Predescu, Andra) [11]; Ciuca, S (Ciuca, Sorin) [11]; Predescu, C (Predescu, Cristian) [11], UNIVERSITY POLITEHNICA OF BUCHAREST SCIENTIFIC BULLETIN SERIES B-CHEMISTRY AND MATERIALS SCIENCE Volume86, issue 4, pp 203-216, published 2024, ISSN 1454-2331, WOS:001380943500015

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D. Lucrări publicate în ultimii ani în reviste și volume de conferințe cu referenți (neindexate)

- Selecție cu maximum 20 lucrări în volume de conferințe

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4.G. Coman, **S. Ciucă**, M. Sohaciu, E. Matei, A. Predescu, A. Berbecaru, C. Predescu, *Failure analysis of a metallic component used in hospital cooling equipment*, BiomMedD 2014, publicat în Key Engineering Materials, Vol. 638, pp. 310-315, 2015, Trans Tech Publications, Switzerland, ISBN: 978-3-03835-432-1

5.A. Berbecaru, **S. Ciucă**, A. Predescu, G. Coman, M. Sohaciu, M. G. Anton, C. Predescu, *Metallurgical characterization of the failed motor shaft component from an electric surgical motor used in orthopedic surgery*, BiomMedD 2014, Key Engineering Materials, Trans Tech Publications, Switzerland, Vol. 638, pp.327-332, 2015, ISSN: 978-3-03835-432-1

E. Brevete obținute în întreaga activitate

1.Procedeu și instalație de obținere a titanului metalic și a aliajelor de titan prin proces electrochimic , autori Vasile SOARE, Constatin GURGU, Marian BURADA, Ioan SURCEL, Mihail TARCOLEA, **Sorin CIUCA**, brevet nr. 123257/2007

2.Plasticizing composite mixture made of heavy alloys and process for making the same

- Patent Number(s): RO125606-A0 ; RO125606-A8
- Inventor(s): [CARCEANU I.](#), [NEDELICU I.](#), [NEDELICU D.](#), [CIUCĂ S.](#), [MUNTEANU M.](#), [PREDESCU C.](#), [SIMINEL M E.](#), [HRENIUC N. L.](#)
- Patent Assignee Name(s) and Code(s): ECOTRANSTECH SRL (ECOT-Non-standard)
- Derwent Primary Accession Number: 2010-K24447 [43]

3.Technology of manufacturing highly resisting rods of titanium micro-alloyed with si, for surgical applications

- Patent Number(s): RO127960-A2
- Inventor(s): [NEDELICU I.](#), [CARCEANU I.](#), [NEDELICU D.](#), [CIUCĂ S.](#), [MUNTEANU M.](#), [CIUCA I.](#), [BOLOLOIR V.](#), [SIMINEL M E](#)
- Patent Assignee Name(s) and Code(s): PRELUC METALURGICE PROD SRL (PREL-Non-standard)
- Derwent Primary Accession Number: 2013-C63693 [35]

4. Procedeu de nitrocarburare cu sau fara sulf, in mediu solid pulverulent, a unor produse metalice

- Brevet de inventie nr.132662 din 27/11/2020
- Titular: UTTIS INDUSTRIES SRL, Vidra IF, RO
- Inventatori: Cojocaru Mihai-Ovidiu, Druga Leontin-Nicolae, Pencea Ion, Branzei Mihai, **Ciucă Sorin**

Data: 15/09/2024

Semnătura: