

LISTA DE LUCRARI
Șl.dr.ing. ANCA Denisa-Elena

Lucrari reprezentative

1. Iuliana Stan, **Denisa-Elena Anca***, Iulian Riposan, Stelian Stan, **Solidification pattern of 4.5% Si ductile iron in metal mould versus sand mould castings**, Journal of Thermal Analysis and Calorimetry, Vol.148, No. 5, 2023, DOI10.1007/s10973-022-11832-4, **Wos:00090560260000**, ***Corresponding Author** Recenzii/Indexari: [ISI-Web of Science/Science Citation Index Expanded]
2. I. Stan, Chisamera, M; Lascu R; Cariga C, Stefan E; Stan S, **Anca Denisa**; Riposan, I. **High temperature oxidation of inoculated high Si/SiMo ductile cast irons in air and combustion atmospheres**, China foundry, Volume 21, Issue 5, Page 555-562, **Wos: 001312314200001** Recenzii/Indexari: [ISI-Web of Science/Science Citation Index Expanded]
3. Stan, I; **Anca, Denisa***; Stan, S; Riposan, I; **Solidification Pattern of Si-Alloyed, Inoculated Ductile Cast Irons, Evaluated by Thermal Analysis**, Metals, Volume: 11 Issue: 5, Article Number: 846, DOI: 10.3390/met11050846, Published:MAY 2021, **Wos:000662601100001**, ***Corresponding Author** Recenzii/Indexari: [ISI-Web of Science/Science Citation Index Expanded]
4. **Anca, Denisa**; Stan, I; Chisamera, M; Riposan; Stan, S; **Experimental Study Regarding the Possibility of Blocking the Diffusion of Sulfur at Casting-Mold Interface in Ductile Iron Castings**, COATINGS, Volume: 11 Issue: 6 Article Number: 673, DOI: 10.3390/coatings11060673, 2021, **Wos:000665363600001**, Recenzii/Indexari: [ISI-Web of Science/Science Citation Index Expanded]
5. **Denisa Anca**, M. Chisamera, S. Stan, I. Stan, I. Riposan, **Sulfur and Oxygen Effects on High-Si Ductile Iron Casting Skin Formation**, Coatings, Volume: 10, Issue: 7, Pages: 618-618, 2020, **Wos:000557659100001**, Recenzii/Indexari: [ISI-Web of Science/Science Citation Index Expanded]
6. **Denisa Anca**, M. Chisamera, S. Stan, Stan, Iuliana, I. Riposan, **Control of the Mg-Treated Iron Casting Skin Formation by S-Diffusion Blocking at the Metal-Mould Interface**, Coatings, Vol: 10 Issue: 7 Pages: 680-680, 2020, **Wos:000556367100001**, <https://doi.org/10.3390/coatings10070680>, Recenzii/Indexari: [ISI-Web of Science/Science Citation Index Expanded]
7. Iulian Riposan, Stelian Stan, **Denisa Anca***, Eduard Stefan, Iuliana Stan, Mihai Chisamera, **Structure Characteristics of High-Si Ductile Cast Irons**, International Journal of Metalcasting, Volume 17, Issue 4, 2023, **Wos:000910773500002**, ***Corresponding Author** Recenzii/ Indexari: [ISI-Web of Science/Science Citation Index Expanded]; BEST SCIENTIFIC PAPER AWARD – GOLD – 74th World Foundry Congress, Busan, Korea, 2022

I. TEZA (E) DE DOCTORAT (T)

T.1 Cercetări privind fenomenul demodificării superficiale a pieselor turnate din fontă, Universitatea POLITEHNICA din Bucuresti, 2014, Conducător Științific: Prof.Dr.Ing. Mihai Chișamera

II. CĂRȚI PUBLICATE (C)

Ca – Cărți / cursuri (manuale) pentru uzul studenților, publicate în edituri recunoscute.

Ca.1 -

III. ALTE MATERIALE PUBLICATE (I, D)

I - Culegeri și Îndrumare

I.1 Denisa Anca, Stiinta si Ingineria Materialelor, suport electronic laborator, <https://curs.upb.ro/2024/course/view.php?id=10596>

I.2 Denisa Anca, Procedee tehnologice de procesare a materialelor metalice I, suport electronic laborator, <https://curs.upb.ro/2024/mod/folder/view.php?id=155471>

I.3 Denisa Anca, Procedee de elaborare a materialelor metalice II, suport electronic de curs, <https://curs.upb.ro/2024/course/view.php?id=10185>

I.4 Denisa Anca, Procedee de elaborare a materialelor metalice II, suport electronic laborator, <https://curs.upb.ro/2024/course/view.php?id=10185>

IV. ARTICOLE / STUDII IN EXTENSO PUBLICATE (R,V)

Ris - Reviste de specialitate de circulație internațională recunoscute

Ris.1 D. Anca, M. Chisamera, S. Stan, I.Stan*, I. Riposan, *Sulfur and Oxygen Effects on High-Si Ductile Iron Casting Skin Formation*, COATINGS, Volume: 10 Issue: 7 Pages: 618-618, Published: JUL 2020, Accession Number: **Wos:000557659100001**, [ISI-Web of Science /Scien. Cit.Index Exp.], Q2, <https://doi.org/10.3390/coatings10070618>; **FI. 2.9; Q2**

Ris.2 D. Anca, M. Chisamera, S. Stan, I.Stan*, I. Riposan, *Control of the Mg-Treated Iron Casting Skin Formation by S-Diffusion Blocking at the Metal-Mould Interface*, COATINGS, Volume: 10 Issue: 7 Pages: 680-680, Published: JUL 2020, Accession Number: **Wos:000556367100001**, [ISI-Web of Science /Scien. Cit.Index Exp.], Q2, <https://doi.org/10.3390/coatings10070680>; **FI. 2.9; Q2**

Ris.11 Iuliana Stan, Denisa-Elena Anca, Iulian Riposan, Stelian Stan*, *Solidification pattern of 4.5% Si ductile iron in metal mould versus sand mould castings*, Journal of Thermal Analysis and Calorimetry, Vol.148, No. 5, 2023, DOI10.1007/s10973-022-11832-4, **Wos:000905602600005**, Recenzii/Indexari: [ISI-Web of Science/Science Citation Index Expanded]; **FI. 3.2; Q1**

Ris.12 Iulian Riposan, Stelian Stan, Denisa Anca, Eduard Stefan, Iuliana Stan, Mihai Chisamera, *Structure Characteristics of High-Si Ductile Cast Irons*, International Journal of Metalcasting, 2023, 10.1007/s40962-022-00938-y, **Wos:000910773500000**, Recenzii/Indexari: [ISI-Web of Science/Science Citation Index Expanded]; **FI. 2.6; Q2**

Ris.13 Iulian Riposan, **Denisa Anca**, Iuliana Stan, Mihai Chisamera, Stelian Stan*, *Graphite Nodularity Evaluation in High-Si Ductile Cast Irons*, Materials 15 (21), 7685, 2022, 10.3390/ma15217685 **Wos:000881174400001**, Recenzii/Indexari: [ISI-Web of Science/Science Citation Index Expanded]; **FI. 3.1; Q1**

Ris.14 DE Anca, I Stan, I Riposan, S Stan, *Graphite compactness degree and nodularity of high-Si ductile iron produced via permanent mold versus sand mold casting*, Materials 15 (8), 2712, 2022, 10.3390/ma15082712, **Wos:000786296900001**, Recenzii/Indexari: [ISI-Web of Science/Science Citation Index Expanded]; **FI. 3.1; Q1**

Ris.15 Anca, D; Stan, I; Chisamera, M; Riposan; Stan, S; *Experimental Study Regarding the Possibility of Blocking the Diffusion of Sulfur at Casting-Mold Interface in Ductile Iron Castings*, COATINGS, Volume: 11 Issue: 6 Article Number: 673, DOI: 10.3390/coatings11060673, Published:JUN 2021, Type:Article, **Wos:000665363600001**, Recenzii/Indexari: [ISI-Web of Science/Science Citation Index Expanded]; **FI. 2.9; Q2**

Ris.16 Stan, Iuliana; **Anca, D**; Stan, S; Riposan, I; *Solidification Pattern of Si-Alloyed, Inoculated Ductile Cast Irons, Evaluated by Thermal Analysis*, METALS, Vol: 11 Issue: 5, Article Number: 846, DOI: 10.3390/met11050846, Published:MAY 2021, **Wos:000662601100001**, Recenzii/Indexari: [ISI-Web of Science/Science Citation Index Expanded]; **FI. 2.6; Q2**

Ris.17 Stan, Iuliana; Chisamera, M; Lascu, R; Cariga, C; Stefan, E; Stan, S; **Anca, Denisa**; Riposan, I, *High temperature oxidation of inoculated high Si/SiMo ductile cast irons in air and combustion atmospheres*, CHINA FOUNDRY Volume 21 Issue 5 Page 555-562, DOI10.1007/s41230-024-4063-0, **Wos:001312314200001**, Recenzii/Indexari: [ISI-Web of Science/Science Citation Index Expanded]; **FI. 1.7; Q2**

Rns - Reviste de specialitate de circulație națională recunoscute de CNCSIS

Rns.1 Lavinia Marilena Harcea, **Denisa-Elena Anca**, Valentin Uță, Iulian Riposan, *Structural Characteristics of Re-Inoculated Grey Cast Irons*, Scientific Bulletin of University „Politehnica” of Bucharest, Series B, Vol. 75, Iss. 2, 2013, pp. 99-108, ISSN 1454-2331, Categoria B+, cod CNCSIS 50. Indexari Revista - BDI: INSPEC; SCOPUS, CAMBRIDGE SCIENTIFIC ABSTRACTS, CHEMICAL ABSTRACTS, METAL ABSTRACTS, ENGINEERING VILLAGE, PUBLICATION IN ENGINEERING, COMPENDEX, METADEX.

Rns.2 Denisa Anca, Elena Panciu, Mihai Chișamera, *The Influence of Modifying Potential in the Superficial Layer of the Iron Castingst- Sulphur and Oxygen Additions Effect*. New Trends in Environmental and Materials Engineering International Conference, TEME 2013, 28 – 30th October 2013, Galați, România; *The annals of “Dunarea de jos” University of Galati. Special issue, TEME 2013*. ISSN 1453 – 083X, pp. 23-27. CNCSIS Code: 215 [B+]. Recenzii/Indexari: CSA-CAMBRIDGE SCIENTIFIC ABSTRACTS, EBSCO, COPERNICUS.

Rns.3 Elena Panciu, **Denisa Anca**, Mihai Chișamera, *The Influence of Silicon on the Phase Quantities Resulted on the Grey Cast Iron Solidification*. New Trends in Environmental and Materials Engineering International Conference, TEME 2013, 28 – 30th

October 2013, Galați, România; The annals of “Dunarea de jos” University of Galati. Special issue, TEME 2013. ISSN 1453 – 083X, pp. 42-48. CNCSIS Code: 215 [B+]. Recenzii/Indexari: CSA-CAMBRIDGE SCIENTIFIC ABSTRACTS, EBSCO, COPERNICUS.

Rns.4 Denisa Anca, Elena Panciu, Mihai Chișamera, *The Influence of Different Coatings on the Graphite Degeneration in the Superficial Layer of Iron Castings*. UgalMat 2014, 29 – 31 May 2014, Galați, România; The annals of “Dunarea de jos” University of Galati. Fascicle IX. Metallurgy and Materials Science N0.2– 2014. ISSN 1453 – 083X, pp. 68-72. CNCSIS Code: 215 [B+]. Recenzii/Indexari: CSA-CAMBRIDGE SCIENTIFIC ABSTRACTS, EBSCO, COPERNICUS.

Rns.5 Elena Panciu, **Denisa Anca**, *The Influence of Pouring Temperature and the Filling Level of the Cup Samples on the Cooling Curves Parameters at Cast Iron Solidification*, Advanced Materials Research, Vol 1128, 2015, pp 26-34, ISSN 1662-8985. The 9th International Conference on Materials Science and Engineering – BraMat2015, 5-7 March 2015, Brașov. Solid State Phenomena, ISSN: 1012-0394, ISSN/ISO: Solid State Phenomena, 2014. Trans Tech. Publications, Switzerland, <https://doi.org/10.4028/www.scientific.net/AMR.1128.26> Recenzii/Indexari: CSA-CAMBRIDGE SCIENTIFIC ABSTRACTS.

Vis- Volumele unor manifestări științifice internaționale recunoscute, organizate în țară și străinătate, indexate ISI

Vis.1 Denisa Anca, Mihai Chișamera, *Graphite Morfology in Mg Treated Iron-Sulphur and Oxygen Effect*, *Metalurgia International*, Vol. XVIII, No. 5, 2013, pp. 37-42, ISSN 1582-2214. 8th International Conference on Materials Science & Engineering – BraMat 2013, 28 February – 2 March 2013, Brașov, România, Accession Number: **WOS:000315611900007**, Recenzii/Indexari: [ISI-Web of Science/Science Citation Index Expanded] Recenzii/Indexari: SCOPUS.

Vis.17 Denisa Anca, Elena Panciu, Mihai Chișamera, *The Influence of Sulphur and Oxygen Additions in Mg-Treated Iron on the Cooling Curves Parameters*. 5th International Conference on Advanced Materials and Structures - AMS '13, Timișoara, 24 - 25 October 2013, pp 49-54, Solid State Phenomena, ISSN: 1012-0394, ISSN/ISO: Solid State Phenomena, 2014. Trans Tech. Publications, Switzerland, DOI: 10.4028/www.scientific.net/SSP.216.49, **WOS:000347924100009**, Recenzii/Indexari: ISI (ISTP, CPCI, Web of Science), Elsevier SCOPUS, Ei Compendex (CPX), Cambridge Scientific Abstracts (CSA), Chemical Abstracts (CA), Institution of Electrical Engineers (IEE), Google Scholar.

Vi - Volumele unor manifestări științifice internaționale recunoscute, organizate în țară și străinătate;

Vi.1 Anca Denisa-Elena, L.M. Harcea, V. Uță, M. Chișamera. *Influența sulfului și oxigenului asupra morfologiei grafitului în fontele modificate*. CNT21-International Foundry Conference, June 2012, Iași, Romania, Paper P2.

Vi.2 L.M. Harcea, **Anca Denisa-Elena**, V. Uță, I. Riposan. *Structural Characteristics of Re-inoculated Grey Cast Irons*. CNT21-International Foundry Conference, June 2012, Iasi, Romania, Paper P3.

Vi.3 V. Uță, L.M. Harcea, **Anca Denisa-Elena**, I. Riposan. *Holding Time Influence on the Chill Tendency and Structure of Ductile Irons*. CNT21-International Foundry Conference, June 2012, Iasi, Romania, Paper P4.

Vi.4 L. Harcea, **Anca Denisa-Elena**, V. Uță. *The Influence of the Holding Period on the Modifying Effect Concerning Grey Cast Iron*, prezentare în plen, Conferință: *INnovation and Collaboration in Engineering Research*, Bucharest 02-04th, July 2012.

Vi.5 **Anca Denisa-Elena**, M. Chișamera, *Graphite Morfology in Mg Trated Iron-Sulphur and oxygen effect*. 8th International Conference on Materials Science & Engineering – BraMat 2013, 28 February – 2 March 2013, Brașov, România, Paper I.P.1.

Vi.6 **Anca Denisa-Elena**, E. Panciu, M. Chișamera, *The Influence of Sulphur and Oxygen Additions in Mg-treated Iron on the Cooling Curves Parameters*. 5th International Conference on Advanced Materials and Structures - AMS '13, 24 - 25 October 2013, Timișoara, România, Paper P03.

Vi.7 E. Panciu, **Anca Denisa-Elena**, M. Chișamera, *The Influence of Silicon on the Phase Quantities Resulted on the Grey Cast Iron Solidification*. New Trends in Environmental and Materials Engineering International Conference, TEME 2013, 28 – 30th October 2013, Galati, Romania, Paper P6.

Vi.8 **Anca Denisa-Elena**, E. Panciu, M. Chișamera, *The Influence of Modifying Potential on the Graphite Morphology in the Superficial Layer of the Iron Castings*. New Trends in Environmental and Materials Engineering International Conference, TEME 2013, 28 – 30th October 2013, Galati, Romania, Paper P33.

Vi.9 **Anca Denisa-Elena**, E. Panciu, M. Chișamera, *The influence of different coatings on the graphite degeneration in the superficial layer of the iron*. The VI th edition of international conference UgalMat2014, 29 – 30th May 2014, Galati, Romania, Paper P6.

Vi.10 Elena Panciu, **Anca Denisa-Elena**, *The Influence of Pouring Temperature and the Filling Level of the Cup Samples on the Cooling Curves Parameters at Cast Iron Solidification*. The 9th International Conference on Materials Science and Engineering – BraMat2015, 5-7 March 2015, Brașov, România, Paper.

Vi.11 **Anca Denisa-Elena**, *Cercetări privind posibilitățile de reducere a efectului de demodificare superficială prin utilizarea unor vopsele de protecție*. Editia a I-a a workshopului tematic – Tendințe noi în Procesarea Materialelor Metalice, 10 Decembrie 2018, București, România.

Vi.12 **Anca Denisa-Elena**, Mihai Chișamera, *Graphite Morfology in Mg Trated Iron*, Editia a II-a a workshopului tematic – Tendințe noi în Procesarea Materialelor Metalice, 21-22 Martie 2019, București, România.

Vi.13 **Denisa Anca**, Mihai Chișamera, Stelian Stan, Iulian Riposan, *Role of Sulphur in Graphite Degeneration in the Superficial Layer of High Si, Mg - treated Cast Irons*, EUROMAT2019 [European Congress and Exhibition on Advanced Materials and Processes], 1-5 September 2019, Stockholm, Sweden, Symposia: B9. Advanced Cast Irons, ID: 13299, E-Poster [<http://euromat2019.fems.eu>] (acceptat).

Vi.14 Denisa Anca, Mihai Chisamera, Stelian Stan, Iulian Riposan, *Graphite degeneration in High Si, Mg-treated iron castings – sulphur and oxygen addition effects*, 2nd Carl Loper CAST IRON SYMPOSIUM [Latest Advances and Application on Cast Iron], September 30th and October 1st 2019, Bilbao, Spain [www.azterlan.es] (acceptat).

Vi.15 I. Riposan, D. Anca, S. Stan, I. Stan, M. Chisamera. *Graphite Nodularity Evaluation in High-Si Ductile Cast Irons*. The 13th European Cast Iron Meeting (ECIMM 2022), 19 – 20 May 2022, Södertälje, Sweden

Vi.16 I. Riposan, D. Anca, S. Stan, I. Stan, M. Chisamera. *Metal mold solidification of high-Si ductile irons / Strjevanje sive litine s kroglastim grafitom z visoko vsebnostjo Si v kovinski formi*. The 62nd International Foundrymen Conference, 14-16 September 2022, Portoroz, Slovenia (Plenary Lecture), (CD-Proceedings)

Vi.17 I. Riposan, D. Anca, S. Stan, I. Stan, M. Chisamera. *Structure characteristics of 4.5%Si un-inoculated ductile cast iron produced in permanent mold versus sand mold castings*. The 62nd International Conference “Solidification and Crystallization of Metals 2022”, September 28-30, 2022, Gliwice, Poland (Plenary Lecture) (CD-Proceedings).

Vi.18. I. Riposan, S. Stan, D. Anca, E. Stefan, I. Stan, M. Chisamera. *Structure Characteristics of High-Si Ductile Cast Irons*. The 74th World Foundry Congress (WFC), 16-20.10.2022, Busan, Korea (Invited Paper, 1-0181), organized by the WFO-World Foundry Organization (CD-Proceedings). **THE BEST SCIENTIFIC PAPER AWARD-GOLD.**

Vi.19 I. Riposan, D.E. Anca, S. Stan, I. Stan, M. Chisamera. *Structure Characteristics of Si/Si-Mo Ductile Irons Solidified on a Metallic Chill*. International Symposium on the Science and Processing of Cast Iron (SPCI-XIII), June 23-26, 2024, Krakow, Poland. Book of Abstracts, Session 3, Paper No. 31.

Vi.20 I. Stan, M. Chisamera, C. Cariga, E. Stefan, S. Stan, D. Anca, I. Riposan. *Oxidation Behaviour of Inoculated Si/SiMo Spheroidal (Ductile) Cast Iron*. Proceedings of the 75th World Foundry Congress, October 25-30, 2024, Deyang, China, pp. 35-36.

Vi.21 I. Riposan, S. Stan, Iuliana Stan, Denisa Anca, Eduard Stefan, Mihai Chisamera. Ferritic high-si ductile cast irons – performance materials. Conferinta Internationala - Zilele Academiei de Stiinte Tehnice din Romania, XIX, 19-20.09.2024, Craiova, Romania.

Vi.22 I. Riposan, I. Stan, S. Stan, D E Anca, E. Stefan, M. Chisamera. *Slightly Irregular Spheroidal Graphite (Type-V, ISO) - Typical Graphite Morphology for High-Si Ductile Cast Irons*. The 3rd Carl R. Loper Conference on Processing of Metallic Materials through Casting and Solidification, Sept. 22-25, 2024, Brasov, Romania.

Vi.23 I. Stan, M. Chisamera, R. Lascu, C. Cariga, E. Stefan, S. Stan, D. Anca, I. Riposan. *Oxidation Behaviour of Inoculated Si/SiMo Spheroidal Graphite (Ductile) Cast Irons*. ROMAT2024, November 2024, Bucuresti, Romania.

Vi.24 D. Anca, I. Stan, C. Cariga, R. Lascu, M. Apostol, I. Riposan, S. Stan. *The Influence of the Solidification Cooling Rate on the Structure Characteristics of High-Si*

Ductile Cast irons. ROMAT2022, 2022, Bucuresti, Romania.

Vi.25 I. Stan, **D.E Anca***, R.A. Tudoran, A. Stan, C.C. Matias (Gabor), I. Riposan, M. Chisamera, C.S. Stan and D.C. Apostol (Scarlat), *Research regarding obtaining si-alloyed ductile iron castings*, ROMAT2024, November 2024, Bucuresti, Romania

Vi.26 **D.E Anca**, I. Stan*, M. Chisamera, R.A. Tudoran, A. Stan, C.C. Matias (Gabor), I. Riposan, C.S. Stan and D.G. Petre, *Research regarding sulfur diffusion in ductile iron castings*, ROMAT2024, November 2024, Bucuresti, Romania

Vi.27 I.Stan, **D.E Anca***, I. Riposan, M. Chisamera, R.A. Tudoran, A. Stan, C.C. Matias (Gabor), *Experimental study regarding the possibility to limiting the graphite degeneration phenomenon in ductile iron castings using protective coatings*, ROMAT2024, November 2024, Bucuresti, Romania

Vi.28 A. E. Mihai*, **E. D. Anca**, I. Stan and C.S. Stan, *The procedure for drawing up specifications bonnet forged semi-finished products of a694 f65 with special purpose for oil and gas industry*, ROMAT2024, November 2024, Bucuresti, Romania

V. CONTRACTE ȘI RAPOARTE ȘTIINȚIFICE (P,F)

P – Proiecte de cercetare-dezvoltare – inovare obținute prin competiție, pe bază de contract/grant, în țară/străinătate (**Pn** – naționale, **Pi** - internaționale).

VI. COMUNICĂRI ȘTIINȚIFICE NEPUBLICATE (E)

E – Lucrări prezentate la diferite seminarii/expoziții, conferințe, etc.

E.1 Anca Denisa-Elena. *Cercetări privind fenomenul demodificării superficiale a pieselor turnate din fontă.* Sesiune Științifică Doctoranzi POSDRU ID76903. Ianuarie 2014, București.

Link platformă CRESCDI: <https://crescdi.pub.ro/#/profile/39317>

20.06.2025

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