

Activitatea științifică

Lucrări indexate ISI/BDI

- **Articole publicate 134 din care: 23 in reviste ISI, 23 ISI Proceedings, 21 în reviste BDI, 12 BDI Proceedings iar 55 în reviste și volumele unor manifestări științifice neindexate**

1. Socalici, A; Ardelean, E; Pascu, L; Putan, V, Friction and Wear Behaviour of Composite Materials Containing Organic Components, MATERIALE PLASTICE 54(2), pp: 269-273, 2017, ISI Journal, FI 0,778.
2. Ardelean, E; Socalici, A; Pascu, L; Putan, V, Laboratory Researches Regarding Wear of the Composite Materials for Making Brake Shoes, MATERIALE PLASTICE 54(2), pp: 203-206, 2017, ISI Journal, FI 0,778.
3. Socalici, A; Ardelean, E., Strugariu, L., Research on the possibilities of sustainable use of powdery waste, Environmental Engineering and Management Journal, 15(1), 2016, pp.207-212, ISI Journal, FI 1,096
4. Socalici, A; Ardelean, E., Crisan, E., Heput, T., Research on the increase of the reaction surface of self-reducing briquettes, Environmental Engineering and Management Journal, 15(2), 2016, pp.443-451, ISI Journal, FI 1,096
5. Ardelean E, Ardelean M, Drăgoi F, Popa E, Study on continuous casting of steel by sizes, Solid State Phenomena, 2012, nr.188, pg.285-292, indexat ISI.
6. Ardelean E, Ardelean M, Josan A, Pinca C., Contribution on the influence of steel ladle processing (LF) upon the nitrogen removal rate, 2013 International Conference on Applied Sciences, Wuhan, China, 2014, indexat ISI.
7. Ardelean E, Ardelean M, Hărău C, Crișan E., Researches on the production of self-reducing briquettes from waste containing iron and carbon, 2013 International Conference on Applied Sciences, Wuhan, China, 2014, indexat ISI.
8. Dragoi, F; Socalici, A; Ardelean, E; Popa, E; Heput, T, Researches on the influence of the slags formed in the installations on the hydrogen removal efficiency, Revista de Metalurgia, 47(6), 2011, pp.477-484, ISI Journal, FI 0,202
9. Socalici A., Heput T., Ardelean M., Ardelean E., Putan V., Researches regarding practical application of deferrised steelshop slags in agriculture, Journal of Environmental Protection and Ecology, 1, 2010, pp.227-237, ISI Journal, FI 0,178
10. Socalici A., Heput T., Ardelean E., Ardelean M., Research regarding using the wastes with carbon content in siderurgical industry, Journal of Environmental Protection and Ecology, 2, 2010, pp.465-470, ISI Journal, FI 0,178
11. Ardelean Marius, Socalici Ana, Heput Teodor, Ardelean Erika, Research on obtaining lubricating powder from various types of wastes, Journal of Environmental Protection and Ecology, 2, 2010, pp.593-600, ISI Journal, FI 0,178
12. Ardelean E, Ardelean M, Socalici A, Heput T, Recycling of slag from the aluminium industry to steel refining, Journal of Environmental Protection and Ecology, 2, 2010, pp.635-642, ISI Journal, FI 0,178
13. Ardelean E, Ardelean M, Heput T, Socalici A, Possibilities of recycling the lime-dolomite plant dust, Journal of Environmental Protection and Ecology, 1, 2010, pp.217-226, ISI Journal, FI 0,178
14. Lupu, O., L. Zgripcea, A. Socalici, E. Ardelean, Recovery and valorification of iron from industrial waste, 7th International Conference on Advanced Materials and Structures AMS18, 28-31 Martie 2018, Timișoara, România, ISI Proceedings
15. Socalici A., Pascu, L., Ardelean E., Popa, E, Researches on obtaining composite materials to be used in manufacturing brake pads, International Conference on Applied Sciences, IOP Conference Series-Materials Science and Engineering ICAS, June 03-05, 2015, Military Econ Acad Wuhan, Wuhan, PEOPLES R CHINA, Volume 106, 2015, pp. 012015, ISI Proceedings
16. Cănda L, Heput T, Ardelean E, Methods for recovering precious metals from industrial waste, International Conference On Applied Sciences 2015 (ICAS2015), Book Series: IOP Conference Series-Materials Science and Engineering, 2016, indexată ISI.
17. Ardelean E, Ardelean M, Heput T, Lăscuțoni A, Technological aspects at continuous casting of semi-finished products with phi 270mm, International Conference On Applied Sciences 2014 (ICAS2014), Book Series: IOP Conference Series-Materials Science and Engineering, 2015, indexată ISI.
18. Lăscuțoni A, Ardelean E, Heput T, Thermal Optimization of Steel at Continuous Casting, Proceedings Of The International Conference Of Numerical Analysis And Applied Mathematics 2014 (ICNAAM-2014), Book Series: AIP Conference Proceedings, 2015, indexată ISI.
19. Ardelean E, Heput T, Vătășescu M, Crișan E, Researches regarding the influence of vacuum parameters on the efficiency of gas removal from the liquid steel, Proceedings of AMS14, Solid State Phenomena, 2016, indexată BDI.
20. Cănda L, Ardelean E, Preliminary experimental research for silver recovery from radiographic films, INTERNATIONAL CONFERENCE ON APPLIED SCIENCES (ICAS2016) Book Series: IOP Conference

Lucrări publicate în reviste și volume de conferințe cu referenți (neindexate)

1. Socalici A., Ardelean E., Hepuț T., Ardelean M., Research regarding pulverous ferrous waste processing by pelletizing, *International Journal of Energy and Environment*, 6(3), pp.334-341, 2012, Scholar Google
2. Todoruț, A., Strugariu, L., Hepuț, T., Socalici, A., Ardelean, E., Research to Improving the Micropelleting Process on Agglomerated Technological Flow, *Annals of Faculty Engineering Hunedoara – International Journal of Engineering*, 9(3), pp.203-207, 2011, B+, Scholar Google
3. Socalici A., Hepuț T., Ardelean E., Ardelean M., Research on drug specific electrodes type EBT electric arc furnace, *Annals of Faculty Engineering Hunedoara – International Journal of Engineering*, 9(3), pp.123-126, 2011, B+, Scholar Google
4. Hepuț T., Ardelean E., Socalici A., Ardelean M., Experiments and results regarding the use foamed slags at the steel elaboration in electric arc furnaces, *Annals of Faculty Engineering Hunedoara – International Journal of Engineering*, 9(2), pp.109-112, 2011, B+, Scholar Google
5. Ardelean E., Ardelean M., Socalici A., Hepuț T., Researches in laboratory phases regarding to capitalization of ferrous pulverous waste in pellets, *International Symposium on Advanced Engineering and Applied Management - 40th Anniversary in Higher Education*, Section 5, Hunedoara, 2010, pp.125-131, Scholar Google
6. Ardelean E., Ardelean M., Heput T., Socalici A., Benea Laura, Research concerning to the possibility of use the sideritic residue for production of clinker, *Annals of Faculty Engineering Hunedoara – International Journal of Engineering*, 8(3), pp. 86- 91, 2010, B+, Scholar Google
7. Hepuț T., Socalici A., Ardelean E., Ardelean M., Environment ecological process in Hunedoara area through reinsertion in economic circuit of scrap and pulverous waste, *Annals of Faculty Engineering Hunedoara – International Journal of Engineering*, 7(3), pp.299- 302, 200, B+, Scholar Google
8. Socalici A., Ardelean E., Heput T., Ardelean M., Possibilities of Turning into Account Steel Plant Powdery Wastes, *The 3th International Conference on Energy, Environment, Devices, Systems, Communications, Computers (INEEE 12), Mathematical Modeling and Simulation in Applied Sciences*, Rovaniemi, Finland, 2012, pp.129-133, Scholar Google
9. Socalici A., Hepuț Teodor., Ardelean E., Ardelean M., Researches regarding the recovery of small and powder ferrous wastes within iron-and-steel industry, *6th IASME / WSEAS International Conference on Energy & Environment Cambridge, United Kingdom*, 25 february 2011, pp.282-287, SCOPUS
10. A. Socalici, T. Hepuț, E. Ardelean, M. Ardelean, Valorization of Powdery Ferrous Wastes in the Context of Sustainable Development, *6th WSEAS International Conference on Energy, Environment, Ecosystems and Sustainable Development - EEESD'10, Timișoara, Romania*, 2010, pp.153-157, SCOPUS
11. A. Socalici, T. Hepuț, E. Ardelean, M. Ardelean, Researches Regarding the Obtaining of Active Slag by Using Reactive Admixtures Produced from Ferrous and Basic Scrap, *6th WSEAS International Conference on Energy, Environment, Ecosystems and Sustainable Development - EEESD'10, Timișoara, Romania*, 2010, pp.158-163, SCOPUS
12. Ardelean M., Hepuț T., Ardelean E., Socalici A., Hight productivity instalation for the recovery of waste by briqueting of powder, *International Symposium on Advanced Engineering and Applied Management - 40th Anniversary in Higher Education*, Section 5, Hunedoara, 2010, pp.1-6, Scholar Google
13. Socalici A., Ardelean E., Ardelean M., Hepuț T., Researches regarding the peletizing process of ferrous pulverous waste, *International Symposium on Advanced Engineering and Applied Management - 40th Anniversary in Higher Education*, Section 5, Hunedoara, 2010, pp.47-50, Scholar Google
14. Socalici A., Harau C., Heput T., Ardelean E., Development of Small and Powdery Waste Management, *6th International Conference on Management, Marketing and Finances (MMF '12), Applied Mathematics and Economics*, Vouligmeni Beach, Athens, Greece, 2012, pp.156-160, Scholar Google.
15. Ardelean E, Hărău C, Ardelean M, The Integrated Urban Waste Management in Romania, *The 3 th International Conference on Energy, Environment, Devices, Systems, Communications, Computers (INEEE 12), Mathematical Modeling and Simulation in Applied Sciences*, Rovaniemi, Finland, pag. 154-157, 2011.
16. Lăscuțoni Alina, Ardelean Erika, A STUDY OF STEEL THERMAL REGIME IN THE CONTINUOUS CASTING TUNDISH, *Annals of the Faculty of Engineering Hunedoara - International Journal of Engineering*, XII (4) / 1584-2673, 173-177, 2014, SCOPUS.
17. Lăscuțoni Alina, Ardelean Erika, Heput Teodor, OPTIMIZATION OF HEAT TRANSFER ON DISTRIBUTOR, DEPENDING ON THE THICKNESS OF POWDER COATING USING SURFACE ANSWER METHOD, *Annals of the Faculty of Engineering Hunedoara - International Journal of Engineering*, XII (3) / 1584-2673, 303-306, 2014, SCOPUS.

18. Ardelean Erika, Hepuț Teodor, Vătășescu Mihaela, Crișan Eugen, Researches regarding the influence of vacuum parameters on the efficiency of gas removal from the liquid steel, Proceedings of AMS14, Solid State Phenomena, vol. 254, 218-223, 2016, SCOPUS.
19. Cănda Letiția, Ardelean Erika, Ardelean Marius, Strugariu Laura, Preliminary tests for precious metals recovery from sideritic waste, Proceedings of AMS14, Solid State Phenomena, vol. 254, 182-187, 2016, SCOPUS.
20. Putan Vasile, Putan Adriana, Ardelean Erika, Influence of the addition of a reducing mixture slag and duration of treatment on the desulphurisation and deoxidation efficiency, Proceedings of AMS14, Solid State Phenomena, vol. 254, 144-148, 2016, SCOPUS.

Brevete

1. Brevet nr. 126946/30.01.2014, Teodor Hepuț, Ana Socalici, Erika Ardelean, Marius Ardelean, Nicolae Constantin, Miron Buzduga, Radu Buzduga, Bricheță tubulară din deșeuri feroase pulverulente, RO126946-A0, RO126946-A8, RO126946-B1, titulari: Universitatea Politehnica Timisoara, Universitatea Politehnica Bucuresti, Centrul de Cercetare, Proiectare si Productie Refractare Alba Iulia, indexat ISI
2. Brevet nr. 127756/30.08.2019 - Teodor Hepuț, Eugen Crișan, Erika Ardelean, Ana Socalici, Marius Ardelean, Bricheță cilindrică multicavă din deșeuri feroase pulverulente, RO127756-A0, RO127756-A8, titular: Universitatea Politehnica din Timisoara, indexat ISI

Granturi și contracte de cercetare

- Granturi de cercetare științifică câștigate prin competiție: **3** din care **1** director
- Granturi de cercetare științifică câștigate prin competiție: **16** din care **1** director
 - Grant Nr. 41, Practical application of deferrized steelshop slags in agriculture/ Valorificarea în agricultură a zgurilor de oțelărie deferizate, 2007, Balkan Environmental Association; director grant: Conf.dr.ing. Socalici Ana
 - Grant Nr.46, Decreasing of environment pollution degree through the siderite waste capitalization for production cement, Balkan Environmental Association, 2008, director grant: Prof.dr.ing. Hepuț Teodor
 - Grant Nr.40, *The impact of lime-dolomite plants upon the environment and the possibility of reducing the ecological risk in these regions* Impactul fabricilor de var-dolomită asupra mediului și posibilități de reducere a riscului ecologic în aceste zone, Balkan Environmental Association, 2007, director grant: Conf.dr.ing. Ardelean Erika
 - Grant Nr.24, Research regarding the recycling of the steel plant dust in siderurgic industry/Cercetări privind reciclarea prafului de oțelărie în industria siderurgică, Balkan Environmental Association, 2004, director grant: Prof.dr.ing. Hepuț Teodor
 - Nr.71-044, Tehnologii avansate de conducere a proceselor industriale de calire superficiala a pieselor incalzite inductiv, 2010, Programul 4 „Parteneriate in domenii prioritare” 2007-2013, director grant: Conf.dr.ing. Socalici Ana
 - Nr.31-098, Prevenirea si combaterea poluarii in zonele industriale siderurgice, energetice si miniere prin reciclarea deseurilor marunte si pulverulente, Programul 4 „Parteneriate in domenii prioritare” 2007-2013, director grant: Prof.dr.ing. Hepuț Teodor
 - Nr. 3196, Cercetări și experimentări privind îmbunătățirea structurii semifabricatelor turnate continuu, Programul Excelență – Proiect de cercetare pentru tineri cercetători – ET, 2005/2006/2007, director grant: Conf.dr.ing. Socalici Ana
 - Nr.32940, Cercetări și experimentări privind îmbunătățirea structurii lingourilor de oțel aliat, CNCSIS Grant AT, 2004, director grant: Conf.dr.ing. Socalici Ana
 - Nr.33550, Cercetări și experimentări privind îmbunătățirea structurii lingourilor de oțel, CNCSIS Grant AT, 2003, director grant: Conf.dr.ing. Socalici Ana
 - Nr. 233, Tehnologie integrată de obținere a unor surse energo-tehnologice neconvenționale utilizate ca materii prime la elaborarea oțelului, Programul Excelență – Proiect de cercetare-dezvoltare complex, 2006/2007/2008, director grant: Prof.dr.ing. Hepuț Teodor
 - Nr. 232, Noi materiale refractare cu funcții complexe utilizate în industria oțelului, realizate prin tehnologii moderne, Programul Excelență – Proiect de cercetare-dezvoltare complex, 2006/2007/2008, director grant: Prof.dr.ing. Hepuț Teodor
 - Nr. 3194, *Optimizarea regimului termic al oțelului pe traseul cuptor-agregat de tratament secundar-instalație de turnare continuă*, Programul Excelență – Proiect de cercetare pentru tineri cercetători – ET, 2005/2006/2007, director grant: Conf.dr.ing. Ardelean Erika
 - Școala universitară de formare inițială și continuă a personalului didactic și a trainerilor din domeniul specializărilor tehnice și inginerești – DidaTec, POSDRU/87/1.3/S/60891, Programul de Formare în blended-learning și tehnologii educaționale moderne pentru învățământ universitar, Coordonator:

Universitatea Tehnică din Cluj-Napoca; Parteneri - Universitatea Transilvania din Braşov, Universitatea „Politehnica” Timişoara. 2012-2013, Coordonator UPT – Prof.dr.ing Radu Vasii, Ardelean Erika – membru grup tinta

- “Cresterea atractivitatii si performantei programelor de formare doctorala si postdoctorala pentru cercetatori in stiinte ingineresti - ATTRACTING”, Cod Contract: POSDRU/159/1.5/S/137070 Coordonator Universitatea Politehnica Timişoara, Parteneri - Universitatea Politehnica din Bucureşti, Universitatea Transilvania Braşov şi Universitatea Tehnică Cluj-Napoca, 2014-2015, Prof. Univ. Dr. Ing. Toma-Leonida Dragomir, Managerul proiectului, Ardelean Erika - Expert pe termen scurt
 - “Insertie activă pe piaţa muncii prin FORMare profesională inovativă în domeniul INGineriei - FORMING”, Cod Contract: POSDRU/125/5.1/S/134003 Coordonator Universitatea Politehnica din Bucuresti, Parteneri: Universitatea Politehnica Timisoara, Universitatea ”Lucian Blaga” din Sibiu, Universitatea Tehnică “Gheorghe Asachi” din Iaşi, The Red Point S.A, Ascendo, 2015-2016; Responsabil UPT prof.dr.ing. George Draghici, Ardelean Erika – Formator
 - Asigură-ţi Viitorul prin Educaţie şi Antreprenoriat / AVEA, Nr. 39168 / 29.05.2019, Coordonator Universitatea Politehnica Timişoara, 2019-2020, Manager proiect Prof.dr.ing. Sorin Herban, Ardelean Erika – membru grup ţintă
- **Impactul cercetării**
 - ISI: H – index: 4
 - SCOPUS: H – index: 6
 - Google Scholars: H – index: 7