

Universitatea Națională de Știință și Tehnologie POLITEHNICA București

Facultatea: Ingineria Sistemelor Biotehnice

Departamentul: Mecanica "Radu P. Voinea

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Gradul didactic: Conferențiar

L I S T A

lucrărilor științifice în domeniul disciplinelor din postul didactic

A. Teza de doctorat

Contribuții la studiul fenomenelor vibratorii privind utilajele din domeniul prelucrării produselor agricole, titlu de Doctor în domeniul Inginerie mecanică, septembrie 2011, Universitatea POLITEHNICA din București, Conducător Științific : Prof.Dr.Ing. Gheorghe VOICU

B. Cărți și capitole în cărți publicate în ultimii 10 ani

1. Capitole de carte publicate în : A New Environmental and Climatic Era, ISSN 1863-5520 ISSN 1863-5539 (electronic) Environmental Science and Engineering ISBN 978-3-031-55447-6 ISBN 978-3-031-55448-3 (eBook) <https://doi.org/10.1007/978-3-031-55448-3>, editura Springer:
 - Ionel Pisa , Dorel Stoica, Composition of Flue Gases pag. 1- 24
 - Gheorghe Lazaroiu, Dorel Stoica Cooling, Water of the Sources with Thermodynamic Cycle, Consumption and Limitation of Environmental Pollution pag 25 – 44
 - Gheorghe Lazaroiu, Lucian Mihaescu, Ionel Balcu, Dorel Stoica, Decarbonization of Combustion Gases by Methanization pag 45 – 62
 - Dorel Stoica , Gheorghe Lazaroiu , Vibrations in the Operation of Energy Equipment, pag 155 – 172
 - Gheorghe Lazaroiu, Lucian Mihaescu, Ion Ion, Elena-Adriana Jarcu, Dorel Stoica, Biomass Utilization for Energy Production , pag 173 - 216
2. Ploșceanu B., **Stoica D.**, *Elemente de mecanică newtoniană*, Editura Politehnica Press, 2018, ISBN 978-606-515-804-7, (225 pag.).
3. **Stoica D.**, Constantin G.A., *Notiuni de cinematică și dinamică* - Editura Matrix Rom Bucuresti, 2017, ISBN:978-606-25-0337-6, (145 pag.).
4. **Stoica D.**, *Contributions to physico-mathematical modelling of a separation machine with suspended vibratory conical sieve* – Editura Lap Lambert Academic Publishing, 2019, ISBN 978-620-0-09521-3, (73 pag.).
5. **Stoica D.**, *The working process of a suspended vibratory conical sieve*- Editura Lap Lambert Academic Publishing, 2019, ISBN: 978-620-0-11327-6, (105 pag.).

C. Lucrări indexate ISI/BDI publicate în ultimii 10 ani

1. Lăzăroiu Gheorghe, Mihăescu Lucian, Stoica Dorel, Năstasă (Băcăran) Florentina-Cătălina, The Transition to an Eco-Friendly City as a First Step Toward Climate Neutrality with Green Hydrogen, *Technologies* 2025, 13(3), 95; <https://doi.org/10.3390/technologies13030095>, WOS:001454188800001, Q1, IF = 4.2
2. Cristian Valentin Strejoiu, Mohammed Gmal Osman, Dorel Stoica, Cornel Panait, Gheorghe Lăzăroiu, Study of Energy Distribution in a Photovoltaic Park in Tulcea County, Romania, *Processes* 2025, 13(2), 533; <https://doi.org/10.3390/pr13020533>, Q2, IF = 2.8
3. Stoica D., Mihăescu L., Lăzăroiu Gh., Lăzăroiu G.C., The Technical and Economic Aspects of Integrating Energy Sectors for Climate Neutrality, *Sustainability* 2024, 16(18), 8070; <https://doi.org/10.3390/su16188070>, WOS:001323047000001, Q2, IF = 3.3
4. Stoica D., Mihăescu L., Lăzăroiu Gh., Lăzăroiu G.C., Green Hydrogen, a Solution for Replacing Fossil Fuels to Reduce CO₂ Emissions, *Processes* 2024, 12(8), 1651; <https://doi.org/10.3390/pr12081651>, WOS:001306717600001, Q2, IF = 2.8
5. Stoica D., Mihăescu L., Lăzăroiu Gh., Lăzăroiu G.C., The Storage Process of Electric Energy Produced from Renewable Sources from Hydrogen to Domestic Hot Water Heating, *Processes* 2024, 12(5), 1024; <https://doi.org/10.3390/pr12051024>, WOS:001231283900001, Q2, IF = 2.8
6. Lazaroiu Gh., Mihaescu L., Grigoriu R.M., Negreanu P.G., Stoica D., Possibilities of Climate Control of Poultry Complexes through Co-Combustion of Poultry Waste–Solid Biomass for Agriculture in Romania, *Agriculture* 2024, 14(3), 428; <https://doi.org/10.3390/agriculture14030428>, WOS:001191711300001, Q1, IF=3.3
7. Stoica D., Mohammed G.O., Strejoiu C.V., Lazaroiu Gh., Exploring Optimal Charging Strategies for Off-Grid Solar Photovoltaic Systems: A Comparative Study on Battery Storage Techniques, *Batteries* 2023, 9(9), 470; <https://doi.org/10.3390/batteries9090470>, WOS:001078926700001, Q2, IF = 4.6 (anul 2024)
8. Mohammed Gmal Osman, Gheorghe Lazaroiu, Shadia Hamad, Hazmoune Messaoud, Debbache Mohamed, Dorel Stoica, Analysis of Photovoltaic Systems with Battery Storage, Electric Vehicle Charging, and Smart Energy Management, *Sustainability* 2025, 17(9), 3887; <https://doi.org/10.3390/su17093887>, Q2, IF = 3.3
9. Stoica D., Voicu Gh., Popa L., Constantin G.A., Tudor P., Assessment indices for the efficiency of the separation process on a sieve with conical separation surface, *INMATEH – Agricultural Engineering*, vol. 60, no.1 / 2020, pp 193-200, <https://api.inmateh.eu/public/uploads/60-22-Stoica-Dorel2f5d1d3d-6a4b-427f-9008-ce5c85a06da6.pdf>, WOS:000535690100022, IF = 0.6
10. Lazea M., Constantin G. A., Stoica D., Voicu Gh., Fem structural analysis for wear parts supporting counterpressure plate from a municipal solid waste truck, *Revista Română de Materiale / Romanian Journal of Materials* 2020, 50 (2), 283 – 293 <http://solacolu.chim.upb.ro/pg283-293.pdf>, WOS:000538152900016, IF = 0.6
11. Stoica D., Duțu I.C., Voicu Gh., Duțu M.F., Influence of the oscillation, frequency on the separation process at the conical sieves - 46. Symposium "Actual Tasks on Agricultural Engineering", Opatija, Croatia, 2018, pp 149- 155; <https://www.cabidigitallibrary.org/doi/full/10.5555/20183183913>, WOS:000506355900014

12. STOICA D., VOICU GH., MOISE V., CONSTANTIN G.A., CARP CIOCARDIA D., Kinematic-structural analysis of actuating mechanism of a conical sieve with oscillating movement. – Proceedings of the 43rd International Symposium on Agricultural Engineering, Actual Tasks on Agricultural Engineering, Opatija, Croatia, 24-27 February 2015, pp. 525-535; https://atae.agr.hr/49th_ATAE_proceedings.pdf, **WOS:000373450700047**
13. Lucian Mihăescu; Ionel Pișă; Gabriel P. Negreanu; Dorel Stoica; Gheorghe Lăzăroi; Iulia Simion, Vegetable biomass – source of green hydrogen production through gasification, 2024 9th International Conference on Energy Efficiency and Agricultural Engineering (EE&AE), Ruse, Bulgaria, 2024, pp. 1-6, <https://ieeexplore.ieee.org/document/10600631>, DOI: 10.1109/EEAE60309.2024.10600631. **WOS:001298137300136**
14. CONSTANTIN G.A., VOICU GH., IPATE G., MUȘUROI G., ȘTEFAN E. M., MUNTEANU M.G., STOICA D., Influence of motion type on granulometric distribution grist obtained from some varieties of wheat and corn - 47th Symposium "Actual Tasks on Agricultural Engineering", Opatija, Croatia, pp 409 – 417, 2019, <http://atae.agr.hr/proceedings.htm>, **WOS:000472729500042**
15. Moise V., Voicu Gh., Lazea M., Stoica D., Popa L., Tudor P., Ungureanu L., Kinerostatic analysis of the precompaction mechanism in municipal solid waste collecting equipment, INMATEH – Agricultural Engineering, vol. 60, no.1 / 2020, pp 295-302, (Indexare SCOPUS), <https://inmateh.eu/volumes/volume-60--no1--2020/article/60-33-kinetostatic-analysis-of-the-precompaction-mechanism-in-municipal-solid-waste-collecting-e> , **WOS:000535690100033**, IF = 0.6
16. VOICU GH., CONSTANTIN G.A., PLOȘCEANU B., ȘTEFAN E.M., VOICU P., STOICA D., Vibratory movement analysis of plansifters from milling plants.– Proceedings of the 43rd International Symposium on Agricultural Engineering, Actual Tasks on Agricultural Engineering, Opatija, Croatia, 24-27 February 2015, pp. 395-404. http://atae.agr.hr/Zbornik_2015.pdf , **WOS:000373450700035**
17. Strejoiu Cristian-Valentin; Osman Mohammed Gmal; Lazaroiu Gheorghe; Stoica Dorel; Panait Cornel, Efficiency Evaluation and Performance Analysis of a Photovoltaic Park Connected to a 20 kV Distribution Network in Galati County, Romania, 2024 9th International Conference on Energy Efficiency and Agricultural Engineering (EE&AE) , DOI: 10.1109/EEAE60309.2024.10600539, **WOS:001298137300046**
18. Mihăescu, L , Lăzăroi, G.C, Stoica, D, Jarcu, Elena Adriana, Mohammed Gmal Osman, articularities of hydrogen combustion in a non-premixed diffusive regime with accompanying air jets, either coaxial or parallel, Proceedings of 24th International Multidisciplinary Scientific GeoConference SGEM 2024 Vienna, Austria, from 28th November to 1st December 2024,
19. Stoica Dorel; Pisa, Ionel; Pop, Elena; Negreanu, Gabriel; Jarcu, Elena Adriana; Ion, Ion, Comparative results between densified agricultural and woody biomass in fixed bed combustion, Technium, 2023, Vol 14, p18, https://www.researchgate.net/publication/374566864_Comparative_results_between_densified_agricultural_and_woody_biomass_in_fixed_bed_combustion

20. Lucian Mihaescu; Dorel Stoica; Gheorghe Lazaroiu; Elena-Adriana Jarcu, Stages of Hydrogen Implementation for a Green City of the Future, Published in: 2023 IEEE International Smart Cities Conference (ISC2), <https://ieeexplore.ieee.org/document/10293636>
21. Carmen Otilia Rusănescu, Marin Rusănescu, Dorel Stoica, The impact pollution with material particles on vegetable components., Journal article: Uttar Pradesh Journal of Zoology, 29 March 2021, Vol. 42, No. 6, 12-19 ref. 24 ref. <https://mbimph.com/index.php/UPJOZ/article/view/2011>
22. Stoica D. , Voicu Gh., Constantin G.A., Tudor P., Analysis of vibrations of conical sieves with oscillating motion using labview, U.P.B. Sci. Bull., Series D, Vol.82, Iss. 1, 2020; ISSN 1454-2358 https://www.scientificbulletin.upb.ro/rev_docs_arhiva/rez922_238803.pdf
23. Stoica D. , Gheorghe C., Process Study on the Work of a Dough Kneader with a Planetary Motion of the Kneading Arm - Magazine of Hydraulics, Pneumatics, Tribology, Ecology, Sensorics, Mechatronics (No. 1/2015), ISSN 1453 – 7303 , pp 40-45. Revista Hidraulica: Ebsco Publishing, ProQuest, Ulrichs web, Gif , <http://hidraulica.fluidas.ro/2015/nr1/40-45.pdf>.
24. Marcu D., Semenescu A., Ioana A., Stoica D., Solea R., FORECASTS ON THE EVOLUTION OF THE TITANIUM MARKET USING THE STATISTICAL-MATHEMATICAL FORECASTING METHODS. Geolinks International Conference, Section ENVIRONMENTAL ECONOMICS Plovdiv, Bulgaria, 05-07 october 2020, https://www.researchgate.net/publication/351681015_FORECASTS_ON_THE_EVOLUTION_OF_THE_TITANIUM_MARKET_USING_THE_STATISTICAL-MATHEMATICAL_FORECASTING_METHODS
25. Rusănescu C.O., Biriş S.Ş., Paraschiv G., Begea M., Voicu Gg., Rusănescu M., Cîrîc A., Stoica D., Țucureanu M.C., Evaluation of environmental impact by using control list, 7th International Conference on Thermal Equipment, Renewable Energy and Rural Development. Conference Proceedings is indexed (BDI) in EBSCO Publishing Databases and INDEX COPERNICUS INTERNATIONAL, pp 331-334, <http://www.tererd.pub.ro/wp-content/uploads/2015/01/Proceedings-TE-RE-RD-2018-CD-ROM.pdf>
26. Stoica D., Voicu Gh., Duțu I.C., Duțu M.F., Sort variation process of power flow in a conical sieve oscillating, 7th International Conference on Thermal Equipment, Renewable Energy and Rural Development. Conference Proceedings is indexed (BDI) in EBSCO Publishing Databases and INDEX COPERNICUS INTERNATIONAL, pp 367-372, <http://www.tererd.pub.ro/wp-content/uploads/2015/01/Proceedings-TE-RE-RD-2018-CD-ROM.pdf>
27. Stoica D., Voicu Gh., Duțu I.C., Constantin G.A., Vibratory phenomenons in cleaning equipments of agricultural products with oscillating plane sieves and vibratory conical sieves, International Conference on Thermal Equipment, Renewable Energy & Rural Development. 2017, pp 463-468, <http://www.tererd.pub.ro/wp-content/uploads/2017/04/International-Conference-TE-RE-RD-2017-Printed-Proceedings.pdf>

E. Brevete obținute în întreaga activitate

1. INSTALAȚIE DE CAPTARE A DIN GAZELE DE ARDERE PRIN TEHNOLOGIA GAZEIFICĂRII CU PAT FIX DE MANGAL, A/00199, 2024, autori: Lăzăroiu Gheorghe, Pișă Ionel, Mihăescu Lucian, Tilici Rodica-Manuela, Stoica Dorel, Locul de munca la data creării invenției: Universitatea Națională de Știință și Tehnologie POLITEHNICA din București
2. Instalație de îmbogățire a aerului pentru combustie cu oxigen provenit de la un generator de ozon, A/00158/ 06 mai 2025, Lăzăroiu George Cristian, Pișă Ionel, Mihăescu Lucian, Pop Elena, Stoica Dorel
3. Ambrazură pentru structurarea aerodinamicii jeturilor difuzive la un arzător pentru hidrogen, A/00608, din 11 octombrie 2024, autori: Lăzăroiu George Cristian, Pișă Ionel, Mihăescu Lucian, Stoica Dorel, Locul de munca la data creării invenției: Universitatea Națională de Știință și Tehnologie POLITEHNICA din București
4. MODUL DE ARZĂTOR CH_4/H_2 PENTRU INSTALAȚIILE REZIDENȚIALE DINTR-UN SMART CITY, A/00239, din 16 mai 2023, autori Lăzăroiu Gheorghe, Pișă Ionel, Ștefănescu Alina Elena, Negreanu Gagriel-Paul, Mihăescu Lucian, Stoica Dorel, Locul de munca la data creării invenției: Universitatea Politehnica din București

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Semnătura: