

Activitate științifică și de cercetare

Dr. Ing. Dan Moldovanu

Lista lucrărilor relevante selectate:

1. **Dan Moldovanu**, Nicolae Burnete, Kocsis Levente Botond, Doru Baldean, EVALUATION OF REGULATED AND NON-REGULATED POLLUTANT EMISSIONS AT COLD START AND DURING WARM-UP FOR A COMPRESSION IGNITED ENGINE THAT WORKS WITH BLENDS, Congresul AMMA 2013, publicat în INMATEH 2014, Agricultural and Mechanical Engineering.
2. **Dan Moldovanu**, Florin MARIASIU, Bogdan VARGA, THE INFLUENCES OF AIR TEMPERATURE ON THE INTAKE PROCESS BY NUMERICAL SIMULATION, International Conference Motor Vehicle & Transportation - MVT 2012, 7-9 November 2012 Timisoara, Lucrare nr. MVT20126006, 7 pag, 11 ref biblio, <http://annals.fih.upt.ro/pdf-full/2013/ANNALS-2013-2-17.pdf>.
3. **Dan Moldovanu**, Florin Mariașiu. "Numerical analysis of the injection law influence on NOx emissions for a compression ignited engine." In MATEC Web of Conferences, vol. 184, p. 01019. EDP Sciences, **2018**, ISI Proceedings, Scopus
4. **Dan Moldovanu**, Nicolae Burnete, Sanda Bodea; STUDIES REGARDING MODEL BUILDING FOR ENGINE PROCESS SIMULATION IN AVL FIRE, The 10th international automotive congress CAR 2011, lucrare nr CAR2011_1296, 5 pag, 3 ref. Biblio
5. **Dan Moldovanu**, Nicolae Burnete, CFD SIMULATION OF A SINGLE CYLINDER RESEARCH ENGINE WORKING WITH BIODIESEL, Thermal Science, International Scientific Journal, **citation impact factor 0.838**. Data acceptare: 2012-01-07, Referinta DOI: 10.2298/TSCII11004021M.
6. Florin Mariasiu, Nicolae Vlad Burnete, **Dan Moldovanu**, Bogdan O. Varga, Calin Iclodean, Levente Kocsis, EFFECTS OF BIOETHANOL ULTRASONIC GENERATED AEROSOLS APPLICATION ON DIESEL ENGINE PERFORMANCES, Thermal Science, International Scientific Journal, **citation impact factor 1,222**. Data acceptare: 2015-07-20, Referinta DOI: 10.2298/TSCII140703108M.
7. **Dan Moldovanu**, Florin Mariașiu, INFLUENCES OF CHEMICAL CHARACTERISTICS AND NANOADDITIVE PARTICIPATION ON RAW VEGETABLE OILS' TRIBOLOGICAL PROPERTIES, The Brazilian Society of Mechanical Sciences and Engineering **2017**, DOI 10.1007/s40430-017-0740-x, **ISI factor 1.235**.

8. Motogna, M. S., **Moldovanu, D.**, & Mariasiu, F. (2018). Numerical Analysis of Fuel Flow Patterns at the Nozzle Exit Considering Different Fuels and Operating Parameters of a Diesel Engine. Transactions of FAMENA, 42(4), 63-74, **ISI factor 0.797**, - autor corespondent.
9. **Dan Moldovanu**, Doru-Laurean Baldean, Nicolae-Vlad Burnete, And Bogdan-Manolin Jurchis. "Advanced strategies for investigation of internal combustion engine." (2018).
10. **Dan Moldovanu**, Florin Mariașiu, and Norbert Bagameri. "Influence of swirl and tumble motion inside the combustion chamber of a compression ignited engine on vertices formation." In MATEC Web of Conferences, vol. 184, p. 01022. EDP Sciences, **2018**, ISI Proceedings, Scopus.

Teză de doctorat:

Simularea proceselor funcționale ale unui motor cu ardere internă ce funcționează cu biocombustibili – susținută în 2011.

Lista de cărți publicate:

- 1) **Moldovanu Dan**, Teoria sistemelor și Automatizări, 2019, Ed. Napoca Star, 101 pag., ISBN 978-606-690-924-2, 2019.
- 2) **Moldovanu Dan**, Teoria Automatizării Componentelor Autovehiculelor/ Theory and Automation of Automotive Components, Vol. 1, Ed. Napoca Star, ISBN general: 978-606-690-922-8, ISBN Vol. I.: 978-606-690-923-5, 2019.
- 3) **Moldovanu Dan**, Varga Bogdan Ovidiu, Vlad Nicolae, Tehnici de Diagnosticare – Îndrumător de Laborator, 118 pag., Ed. RisoPrint, ISBN: 978-973-53-2365-3, 2019.
- 4) Varga Bogdan Ovidiu, **Moldovanu Dan**, Mariașiu Florin, Iclodean Calin Doru, MODELING AND SIMULATION FOR ELECTRIC VEHICLE APPLICATIONS – CHAPTER: SIMULATION IN THE LOOP OF ELECTRIC VEHICLES, **Intech**, edited by: Mohamed Amine Fakhfakh, pag 11-32, **2016**, ISBN: 978-953-51-4819-7, DOI: 10.5772/64295.
<https://www.intechopen.com/books/modeling-and-simulation-for-electric-vehicle-applications/simulation-in-the-loop-of-electric-vehicles>
- 5) Bogdan Ovidiu Varga, Florin Mariasiu, **Dan Moldovanu**, Calin Iclodean, ELECTRIC AND PLUG-IN HYBRID VEHICLES, Advanced Simulation Methodologies, 525 pagini, **2015**, Ed. Springer International Publishing, ISBN: 978-3-319-18638-2 (Print) 978-3-319-18639-9 (Online).
<https://www.springer.com/gp/book/9783319186382>

- 6) **Dan Moldovanu**, STUDIUL INFLUENTELOR ASUPRA PROCESELOR DIN MOTOARELE CU ARDERE INTERNĂ, 59 pagini, **2014**, Cluj-Napoca, Editura UTPRESS, ISBN: 978-606-737-019-5, format electronic.
<https://biblioteca.utcluj.ro/files/carti-online-cu-coperta/019-5.pdf>

Participare în colective de cercetare:

Director de proiect:

- 1) **Contract cu TVA 12564/20.05.2019** – Evaluarea unui combustibil din punctul de vedere al consumului de combustibil, putere efectivă, moment efectiv, consum specific efectiv, Valoare contract 16.100 Euro.
- 2) **Nanolub** – Posibilități de dezvoltare a unor lubrifianți biodegradabili pe bază de nanomateriale, Proiecte Intern de Cercetare-Dezvoltare-Inovare ale Universității Tehnice din Cluj-Napoca competiția 2014-2015 CI 27126/2014, 22.350 lei.

Membru:

- 1) **PN-III-P2-2.1-CI-2018-1227, VINEFUEL** Îmbunătățirea eficienței de consum a tractoarelor în agregat cu echipamentele fitosanitare, utilizate în plantațiile viticole din podgoria Târnave, **director Lect. PhD. Eng. Adela Borzan**
- 2) **Contract cu TVA 17433/17.07.2018** în domeniul cercetării, testare motoare cu ardere internă pentru evidențierea depunerilor pe piesele motorului – **director Prof. Dr. Ing. Bogdan Varga**
- 3) **Contract cu TVA 14120/2018 (cu Banca Europeană de Investiții, Jaspers - Joint Assistance to Support Projects in European Regions)** în vederea elaborării caietelor de sarcini pentru achiziționarea de material rulant (Autobuze electrice, Tramvaie, Troleibuze) pentru localități din România – **director Prof. Dr. Ing. Bogdan Varga**
- 4) Grant **POC-A1-A1.2.3-G-2015**, ID P_40_333, “Advanced Technologies for Smart Urban Vehicles - URBIVEL”. Project Partnerships for knowledge, Director: Prof.dr.ing. Claudia Steluța MARTIS, budget 3.300.000 Euro, 2016-2018.

- 5) **Contract cu TVA 18887/02.08.2017** în domeniul cercetării combustibililor și a performanțelor acestora în exploatare (Testarea 100.Plus)– **director Prof. Dr. Ing. Bogdan Varga**
- 6) Studii ale unui motor cu aprindere prin comprimare cu injecție directă de motorină și etanol, Proiecte Intern de Cercetare-Dezvoltare-Inovare ale Universității Tehnice din Cluj-Napoca competiția 2017-2018, 16672/12.07.2017, - **director Sef Lucr.dr.ing. Nicolae Vlad BURNETE**
- 7) Creșterea eficienței energetice a bioalcoolor prin procedeu inovativ de fumigare, Proiecte Intern de Cercetare-Dezvoltare-Inovare al Universității Tehnice din Cluj-Napoca competiția 2015-2016, **C.I. 11/1.2./2015**, - **director Sef Lucr.dr.ing. Doru BĂLDEAN**
- 8) **Contract cu TVA 71/2013** în domeniul cercetării combustibililor și a performanțelor acestora în exploatare LUK Oil – **director Prof. Dr. Ing. Bogdan Varga**
- 9) **EnergEcoFarm 2007** – Studii privind utilizarea combustibililor pe bază de uleiuri vegetale ca și sursă de energie regenerabilă pentru fermele agricole – **director Prof. Dr. Ing. Nicolae Burnete**

Lista de lucrări științifice publicate:

- 1) **Dan Moldovanu**, B.O. Varga, F. Mariasiu, C. Iclodean, N.V. Burnete, L. Mihali, S. Ola, „Van Dynamics Performance Analysis for Different Battery Pack Placement”, Proceedings of International Congress AMMA 2018 /ISBN 978-3-319-94408-1, 2018.
- 2) **Dan Moldovanu**, Doru-Laurean Baldean, Nicolae-Vlad Burnete, And Bogdan-Manolin Jurchis. "Advanced strategies for investigation of internal combustion engine." (2018).
- 3) **Dan Moldovanu**, Florin Mariașiu, and Norbert Bagameri. "Influence of swirl and tumble motion inside the combustion chamber of a compression ignited engine on vertices formation." In MATEC Web of Conferences, vol. 184, p. 01022. EDP Sciences, 2018, ISI Proceedings, Scopus.
- 4) **Dan Moldovanu**, Florin Mariașiu. "Numerical analysis of the injection law influence on NOx emissions for a compression ignited engine." In MATEC Web of Conferences, vol. 184, p. 01019. EDP Sciences, 2018, ISI Proceedings, Scopus.

- 5) **Dan Moldovanu**, Florin Mariașiu, INFLUENCES OF CHEMICAL CHARACTERISTICS AND NANOADDITIVE PARTICIPATION ON RAW VEGETABLE OILS' TRIBOLOGICAL PROPERTIES, The Brazilian Society of Mechanical Sciences and Engineering **2017**, DOI 10.1007/s40430-017-0740-x, **ISI factor 1.235**.
- 6) **Dan Moldovanu**, Adela-Ioana Borzan, CONAT 2016 International Congress of Automotive and Transport Engineering, Studies Regarding the INFLUENCE OF THE SQUISH IN-CYLINDER MOVEMENT OF THE AIR IN A DIESEL ENGINE, pag 17-23, 2016.
<http://aspekt.unitbv.ro/jspui/handle/123456789/2064>
- 7) **Dan Moldovanu**, Adela-Ioana Borzan, ESFA EAEC 2015 European Automotive Congress, THEORETICAL AND PRACTICAL ANALYSIS OF THE IN-CYLINDER TUMBLE MOTION, Lucrare nr. EAEC-ESFA'15 055-FEP, Proceedings of the European Automotive Congress EAEC-ESFA 2015, pag 595-603, Ed. Springer International Publishing, ISBN: 978-3-319-27275-7 (Print) 978-3-319-27276-4 (Online), DOI 10.1007/978-3-319-27276-4_55.
- 8) **Dan Moldovanu**, D.- L. Baldean, F., Gaspar, L. – B., Kocsis, Adela-Ioana Borzan, N. – V. Burnete, M. – A. Crisan, ESFA EAEC 2015 European Automotive Congress, RESEARCH REVIEW OF THE POSSIBILITY AND CONDITIONS FOR INCREASING THE ENERGY EFFICIENCY IN AUTOMOTIVE ENGINES BY INOVATING AND INFLUENCING THE OPERATIONAL PROCESSES, Lucrare nr. EAEC-ESFA'15 025B-FEP, Ed. Politehnica Press, Bucuresti, 2015.
- 9) **Dan Moldovanu**, Florin Mariașiu, THE POTENTIAL OF MECHANICAL SYSTEMS LUBRICANTS USING NANOBASED ADDITIVES, Lucrare susținută la SMAT 2014, International Congress Science and Management of Automotive and Transportation Engineering, 23-25 Oct. 2014, Craiova, cod lucrare SMAT2014-MT40.
- 10) **Dan Moldovanu**, Levente Botond Kocsis, IMPLEMENTATION OF NRSC TEST AND ECE 324 POWER CYCLE IN PUMA AUTOMATION SYSTEM, Lucrare susținută la SMAT 2014, International Congress Science and Management of Automotive and Transportation Engineering, 23-25 Oct. 2014, Craiova, cod lucrare SMAT2014-60.
- 11) **Dan Moldovanu**, Nicolae Burnete, Kocsis Levente Botond, Doru Baldean, EVALUATION OF REGULATED AND NON-REGULATED POLLUTANT EMISSIONS AT COLD START AND DURING WARM-UP FOR A COMPRESSION IGNITED ENGINE THAT WORKS WITH BLENDS, Congresul AMMA 2013, publicat în INMATEH 2014, Agricultural and Mechanical Engineering.
- 12) **Dan Moldovanu**, Florin MARIASIU, Bogdan VARGA, THE INFLUENCES OF AIR TEMPERATURE ON THE INTAKE PROCESS BY NUMERICAL SIMULATION, International Conference Motor Vehicle & Transportation - MVT 2012, 7-9 November 2012 Timisoara, Lucrare nr. MVT20126006, 7 pag, 11 ref biblio, <http://annals.fih.upt.ro/pdf-full/2013/ANNALS-2013-2-17.pdf>.

- 13) **Dan Moldovanu**, Nicolae Burnete, POSIBILITĂȚI DE SIMULARE CFD, Revista Ingineria Automobilului, Nr 21. Decembrie-Ianuarie 2012, Pag 20-21.
- 14) **Dan Moldovanu**, Nicolae Burnete, Sanda Bodea; STUDIES REGARDING MODEL BUILDING FOR ENGINE PROCESS SIMULATION IN AVL FIRE, The 10th international automotive congress CAR 2011, lucrare nr CAR2011_1296, 5 pag, 3 ref. biblio.
- 15) **Dan Moldovanu**, Nicolae Burnete, CFD SIMULATION OF A SINGLE CYLINDER RESEARCH ENGINE WORKING WITH BIODIESEL, Thermal Science, International Scientific Journal, **citation impact factor 0.838**. Data acceptare: 2012-01-07, Referinta DOI: 10.2298/TSCI111004021M.
- 16) **Dan Moldovanu**, Nicolae Burnete, Studies regarding the tumble motion of the air inside a combustion chamber, Conferinta PRODOC, 2011.
- 17) **Dan Moldovanu**, Kocsis Levente Botond, Doru Baldean, Studies of the influence parameters on the performance of the engine using AVL BOOST, CONAT 2010, 11th International Congress, 27-29 October 2010, Brasov, Romania, Vol. V, Section 4, Advanced Engineering Methods, pag 179-182, ISSN 2069-0401, Transilvania University Press.
- 18) **Dan Moldovanu**, Doru Baldean, Kocsis Levente, Introduction to SimulationX software, ICOME, International conference of mechanical engineering, 27-30 april, 2010, Craiova, Romania, ISBN-978-606-510-878-3.
- 19) **Dan Moldovanu** , Studies of automotive suspension with SimulationX software, in ACTA mecanica, Tehnical University of Cluj-Napoca, Cluj-Napoca, Romania. Anul 1 nr. 1, 2. ISSN 2066-9577, 2009.
- 20) **Dan Moldovanu**, Nicolae BURNETE, Doru BALDEAN, Emilian Borza, Analysis and evaluation of a one-cylinder engine that works with gasoline combined with ethanol and methanol, ESFA 2009, the 8th International conference, fuel economy, safety and reliability of motor vehicles, 12-14 November, 2009 – București, Romania. Vol. 2, ISSN 2067-1083.
- 21) Motogna, M. S., **Moldovanu, D.**, & Mariasiu, F. (2018). Numerical Analysis of Fuel Flow Patterns at the Nozzle Exit Considering Different Fuels and Operating Parameters of a Diesel Engine. Transactions of FAMENA, 42(4), 63-74, **ISI factor 0.797**, - autor corespondent.
- 22) Bagameri, Norbert, Bogdan Varga, Aron Csato, and **Dan Moldovanu**. "Comparative analysis of automatic transmission and manual transmission behaviour on the worldwide harmonized light duty test cycle." In MATEC Web of Conferences, vol. 184, p. 01020. EDP Sciences, 2018 ISI Proceedings, Scopus – **autor corespondent**.
- 23) Bagameri, Norbert, Bogdan Varga, Aron Csato, and **Dan Moldovanu**. "Optimization of shifting strategy for a dual clutch transmission through

- mathematical model." In MATEC Web of Conferences, vol. 184, p. 01021. EDP Sciences, 2018, ISI Proceedings, Scopus – **autor corespondent**.
- 24) Baldean, Doru, **Dan Moldovanu**, and Adela-Ioana Borzan. "Contribution to experimental research of alternate fuel fumigation in single cylinder research diesel engine." In MATEC Web of Conferences, vol. 184, p. 01017. EDP Sciences, **2018**, ISI Proceedings, Scopus.
- 25) Baldean, Doru-Laurean, Bogdan-Ovidiu Varga, **Dan Moldovanu**, Levente Kocsis, and Adela Borzan. "Contributions in developing advanced engineering methods for researching the NVH aspects in Porsche Cayman operation conditions at Technical University from Cluj-Napoca." *INGINERIA AUTOMOBILULUI* 47 (**2018**): 5-8.
- 26) Gaspar, Ferenc, Teodora Deac, Lucian V. Fehete Tutunaru, and **Dan Moldovanu**. "Experimental study on the sun tracking ability of a spherical solar collector." *Energy Procedia* 85 (2016): 220-227, Scopus.
- 27) Doru Baldean, Nicolae Vlad Burnete, **Dan Moldovanu**, Ferenc Gaspar, Adela Ioana Borzan, Mihai Aurel Crişan, CONAT 2016 International Congress of Automotive and Transport Engineering, Experimental Research Regarding the Possibility of Biofuel Fumigation Supply Method on a Single Cylinder Compression Ignited Engine, DOI: 10.1007/978-3-319-45447-4_30, 2016.
- 28) N.V. Burnete, C. Iclodean, **D. Moldovanu**, N. Filip, CONAT 2016 International Congress of Automotive and Transport Engineering, Direct Injection of Diesel and Ethanol in a Diesel Engine - A Numerical Analysis, ISBN* 978-3-319-45447-4, pag 379-386, 2016.
http://link.springer.com/chapter/10.1007/978-3-319-45447-4_43
- 29) Adela-Ioana Borzan, Bogdan Varga, Doru Baldean, **Dan Moldovanu**, A XV-a Conferință internațională – multidisciplinară, "Profesorul Dorin Pavel - fondatorul hidroenergeticii românești, EXPERIMENTAL RESEARCHES OF CF MOTO 500-5A/L7E ATV'S DYNAMICS IN THE CASE OF TRAILER TOW, Vol 30, 399-408, 2016.
- 30) Adela-Ioana Borzan, Doru Baldean, **Dan Moldovanu**, A XV-a Conferință internațională – multidisciplinară, "Profesorul Dorin Pavel - fondatorul hidroenergeticii românești, CONTRIBUȚII LA CERCETAREA EXPERIMENTALĂ A CONSUMULUI DE COMBUSTIBIL LA AUTOVEHICULUL RENAULT KANGOO, Vol 30, 381-392, 2016.
- 31) Lucian Crisan-Lupa, Doru Baldean, **Dan Moldovanu**, A XV-a Conferință internațională – multidisciplinară, "Profesorul Dorin Pavel - fondatorul hidroenergeticii românești, THE STUDY TROUGH MODELING OF AFTER-TREATMENT SYSTEM FOR EXHAUST GASES FROM INTERNAL COMBUSTION ENGINES, Vol 30, 369-374, 2016, DOI https://doi.org/10.1007/978-3-319-27276-4_44.

- 32) N. Burnete, **D. Moldovanu**, D. Băldeanu, L. B. Kocsis, ESFA EAEC 2015 European Automotive Congress, STUDIES REGARDING THE INFLUENCE OF EXHAUST BACKPRESSURE ON THE PERFORMANCES OF A COMPRESSION IGNITED ENGINE, Lucrare nr. EAEC-ESFA'15 013-APT, Proceedings of the European Automotive Congress EAEC-ESFA 2015, pag 141-149, Ed. Springer International Publishing, ISBN: 978-3-319-27275-7 (Print) 978-3-319-27276-4 (Online), DOI 10.1007/978-3-319-27276-4_13.
- 33) L. B. Kocsis, **D. Moldovanu**, D.L. Băldean, ESFA EAEC 2015 European Automotive Congress, THE INFLUENCE OF EXHAUST BACKPRESSURE UPON THE TURBOCHARGER'S BOOST PRESSURE, Lucrare nr. EAEC-ESFA'15 034-APT, Proceedings of the European Automotive Congress EAEC-ESFA 2015, pag 367-374, Ed. Springer International Publishing, ISBN: 978-3-319-27275-7 (Print) 978-3-319-27276-4 (Online), DOI 10.1007/978-3-319-27276-4_34.
- 34) L. Vasile, C. Lupa, Adela-Ioana Borzan, **D. Moldovanu**, L., B. Kocsis, ESFA EAEC 2015 European Automotive Congress, RESEARCH APPLIED TO EXHAUST GAS AFTERTREATMENT SYSTEMS IN 1.6L ZSG 416 FORD ENGINE, Lucrare nr. EAEC-ESFA'15 044-APT, Proceedings of the European Automotive Congress EAEC-ESFA 2015, pag 475-484, Ed. Springer International Publishing, ISBN: 978-3-319-27275-7 (Print) 978-3-319-27276-4 (Online), DOI 10.1007/978-3-319-27276-4_44.
- 35) N.V. Burnete, N. Filip, **D. Moldovanu**, ESFA EAEC 2015 European Automotive Congress, IMPROVED COMBUSTION IN A DIESEL ENGINE BYDIESEL-ETHANOL INJECTION – A NUMERICAL ANALYSIS, Lucrare nr. EAEC-ESFA'15 021B-FEP, Ed. Politehnica Press, Bucuresti, 2015.
- 36) Florin Mariasiu, Nicolae Vlad Burnete, **Dan Moldovanu**, Bogdan O. Varga, Calin Iclodean, Levente Kocsis, EFFECTS OF BIOETHANOL ULTRASONIC GENERATED AEROSOLS APPLICATION ON DIESEL ENGINE PERFORMANCES, Thermal Science, International Scientific Journal, **citation impact factor 1,222**. Data acceptare: 2015-07-20, Referinta DOI: 10.2298/TSCI140703108M.
- 37) Ioan-Adrian Todoruț, István Barabás, Nicolae Cordoș, **Dan Moldovanu**, Monica Bălcău, THE EVALUATION OF KINEMATIC MEASURES WITHIN THE PROCESS OF OVERTAKING MOTOR VEHICLES, 15 pag, ACTA TECHNICA NAPOCENSIS, Journal of Environmental Engineering and Sustainable Development Entrepreneurship, AMMA 2013 Congress Special Issue, 2014, http://cpadd.utcluj.ro/fileadmin/Revista_CPADDD/Editie_speciala/Special_Edition_AMMA_reduced_size.pdf
- 38) Doru Băldean, Nicolae Burnete, **Dan Moldovanu**, Levente Kocsis COMPARATIVE INVESTIGATION OF OPACITY FORMATION IN

COMBUSTION CHAMBER OF COMPRESION IGNITION ENGINE RUNNING ON DIESEL FUEL AND B20 BLEND, 10 pag., ACTA TECHNICA NAPOCENSIS, Journal of Environmental Engineering and Sustainable Development Entrepreneurship, 2014, http://cpadd.utcluj.ro/fileadmin/Revista_CPADDD/Vol_2_nr_4/EESDE_vol_2_nr_4_reduced_size.pdf

- 39) Nicolae Burnete, **Dan Moldovanu**, Doru Baldean, STUDIES AND RESEARCHES REGARDING THE INFLUENCE OF LUBRICATING OIL TEMPERATURE ON DIESEL ENGINES, International Conference Motor Vehicle & Transportation - MVT 2012, 7-9 November 2012 Timisoara, Lucrare nr. MVT20121001.
- 40) Varga Bogdan Ovidiu, Nicolae Burnete, Karamoustas Dimitrios, Nor Crisan, Vlad Nicolae, **Dan Moldovanu**; „AUTOMATIC GEARBOX TESTBED DESIGNED FOR OPTIMIZATION TESTING AND DEVELOPMENT” The 10th international automotive congress CAR 2011, lucrare nr CAR2011_1307, 5 pag, 3 ref. biblio.
- 41) Levente Kocsis, Kurt Prevedel, Nicolae Burnete, Dan Moldovanu, „IMPROVING TRANSIENT RESPONSE OF SI TURBOCHARGED ENGINES” The 10th international automotive congress CAR 2011, lucrare nr CAR2011_1299, 5 pag, 3 ref. biblio.
- 42) Nicolae Burnete, Florin Mariasiu, Bogdan Varga, **Dan Moldovanu**, Tiberiu Budisan, Calin Iclodean, Martin Horea, „CONSIDERATIONS ABOUT FUEL QUALITY USED IN MOTOR VEHICLES” The 10th international automotive congress CAR 2011, lucrare nr CAR2011_1300, 6 pag, 3 ref. biblio.
- 43) Mariaşiu Florin, **Moldovanu Dan**, THE MANAGEMENT CONCEPT FOR AGRICULTURAL AND FOOD INDUSTRY MACHINERY DESIGN USING SYSTEMIC INDICATORS, Tractors and power machines, Vol.14.No.1.p.93-98, 2009.
- 44) Mariaşiu Florin, **Moldovanu Dan**, Kocsis Levente, CFD SIMULATION OF ULTRASONIC CONDITIONING INFLUENCES ON BIODIESEL INJECTION PROCESS, Research Journal of Agricultural Science, 43 (1), 2011.
- 45) Mariaşiu Florin, Nicolae Burnete, **Moldovanu Dan**, THE CATALYTIC CONVERTER CHANNELS CONSTRUCTION INFLUENCE ON DIESEL PARTICULATE FILTERS (DPF) FUNCTIONING PARAMETERS Research Journal of Agricultural Science, 43 (1), NaviSad2011.
- 46) Baldean, Doru, **Moldovanu, Dan**, Experimental research of the braking behavior of dacia logan vehicle with Bosch ABS 8.0 system, in ACTA mecanica, Tehnical University of Cluj-Napoca, Cluj-Napoca, Romania. Anul 1 nr. 1, 2. ISSN 2066-9577, NaviSad2010.
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- 51) Nicolae BURNETE, Bogdan VARGA, **Dan Moldovanu**, Emilian Borza, Doru BALDEAN, PROCESS INVESTIGATION POSSIBILITIES OF AN INTERNAL COMBUSTION ENGINE, ESFA 2009, the 8th INTERNATIONAL CONFERENCE, fuel economy, SAFETY AND reliability of motor vehicles, 12-14 November, 2009 – București, Romania. Vol. 2, ISSN 2067-1083. <http://esfa2009.upb.ro/>
- 52) Doru BALDEAN, Cristina-Andreea Marc, **Dan Moldovanu**, Experimental research concerning ABS influence upon stopping distance of seat leon, **ESFA 2009, the 8th INTERNATIONAL CONFERENCE, fuel economy, SAFETY AND reliability of motor vehicles, 12-14 November, 2009 – București, Romania.** Vol. 2, Section B: Automotive safety and comfort, ISSN 2067-1083.
- 53) Doru BALDEAN, Nicolae BURNETE, **Dan Moldovanu**, Emilian Borza, Research possibilities of biofuels use in diesel engines through simulation, **ESFA 2009, the 8th INTERNATIONAL Conference, fuel economy, SAFETY AND reliability of motor vehicles, 12-14 November, 2009 – București, Romania.** Vol. 2, Section D: New materials and technologies, ISSN 2067-1083.