



Curriculum vitae Europass

Informații personale

Nume / Prenume **OLARU DUMITRU**

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Nationality Româna

Date of birth [REDACTED]

Gender Barbat

Locul de muncă vizat / Domeniul ocupațional

Universitatea Tehnică "Gheorghe Asachi" din Iași, Facultatea de mecanică, Departamentul de Inginerie Mecanică, Mecatronică și Robotică,

Titular cursuri de:

Tribologie -anul II Mecanică, Tribologia sistemului roată – șină – anul II Master STCF,
Tribotehnica sistemelor mecanice-anul IV IM

Educație

Experiența profesională

Dates	01/08/1975 - 01/02/1979
Occupation or position held	INGINER MECANIC
Main activities and responsibilities	ACTIVITATI DE PROIECTARE SI DE PRODUCTIE
Name and address of employer	IMN- GALATI; TEROM- IASI,
Type of business or sector	INGINER MECANIC
Dates	01/02/1979 - 01/10/1986
Occupation or position held	ASISTENT UNIVERSITAR
Main activities and responsibilities	ACTIVITATI DIDACTICE SI DE CERCETARE
Name and address of employer	INSTITUTUL POLITEHNIC IASI BLD. COPOU, IASI (Romania)
Type of business or sector	ACTIVITATI DIDACTICE SI DE CERCETARE
Dates	01/10/1986 - 01/10/1993
Occupation or position held	SEF LUCRARI
Main activities and responsibilities	ACTIVITATI DIDACTICE SI DE CERCETARE
Name and address of employer	INSTITUTUL POLITEHNIC IASI BLD. COPOU, IASI (ROMANIA)
Type of business or sector	ACTIVITATI DIDACTICE SI DE CERCETARE
Dates	01/10/1993 - 01/10/1999
Occupation or position held	CONFERENTIAR UNIVERSITAR



Main activities and responsibilities	ACTIVITATI DIDACTICE SI DE CERCETARE
Name and address of employer	UNIVERSITATEA TEHNICA "GHEORGHE ASACHI" 61-63, BLD. D. MANGERON, 700050 IASI (Romania)
Type of business or sector	ACTIVITATI DIDACTICE SI DE CERCETARE
Dates	01/10/1999 → PREZENT: PROFESOR UNIVERSITAR
Occupation or position held	15/11/2016 → PREZENT: PROFESOR UNIVERSITAR EMERIT
Main activities and responsibilities	ACTIVITATI DIDACTICE, DE CERCETARE SI MANAGEMENT LA FACULTATEA DE MECANICA; Profesor conducător de doctorat din 2004 cu 12 teze de doctorat susținute și confirmate până în prezent; Prodecan facultate: 1997-2004; Sef catedra OMM: 2008-2012; Sef Departament IMMR: 2012-2016; Prodecan Facultatea de Mecanică: 04.2016 – 07.2020 ACTIVITATI DE MANAGEMENT LA U.T.IASI; MEMBRU IN SENATUL U.T.IASI: 2008-2012; MEMBRU IN SENATUL U.T.IASI: 04.2016-01. 2020. Președinte Comisie de Invățământ a Senatului; ACTIVITATI IN COMISII LA MECS Membru în CNATDCU Comisia 17- Inginerie Mecanică – 2007-2010; Membru în CNATDCU Comisia 17- Inginerie Mecanică – 05.2016 – 09.2018;
Name and address of employer	UNIVERSITATEA TEHNICA "GHEORGHE ASACHI" DIN IASI FACULTATEA DE MECANICĂ 53, BLD.Prof. Dr. Doc. D. MANGERON, 700050 IASI
Type of business or sector	ACTIVITATI DIDACTICE, DE CERCETARE, DE MANAGEMENT
Educație și formare	
Dates	01/10/1970 - 01/07/1975
Title of qualification awarded	INGINER
Principal subjects / occupational skills covered	INGINERIE MECANICA
Name and type of organisation providing education and training	INSTITUTUL POLITEHNIC IASI, FACULTATEA DE MECANICA (UNIVERSITATE) BLD. COPOU, IASI (Romania)
Dates	01/10/1985 - 15/07/1992
Title of qualification awarded	DOCTORAT
Principal subjects / occupational skills covered	ORGANE DE MASINI SI TRIBOLOGIE
Name and type of organisation providing education and training	INSTITUTUL POLITEHNIC IASI, FACULTATEA DE MECANICA (UNIVERSITATE) BLD.COPOU, IASI (Romania)
Dates	4-19 iulie 1994
Title of qualification awarded	CURSURI DE SPECIALIZARE
Principal subjects / occupational skills covered	DESIGN FOR QUALITY
Name and type of organisation providing education and training	UNIVERSITATEA DIN BOLONIA - ITALIA
Dates	Iulie – Septembrie 2001 (3 luni)
Title of qualification awarded	SPECIALIZARE CU BURSA DAAD
Principal subjects / occupational skills covered	TRIBOLOGY OF LINEAR GUIDANCE SYSTEMS



Name and type of organisation providing education and training

HTW des Saarlandes, Saarbrucken, Germania; INA Homburg, Germania

Dates

August – Septembrie 2004 (2 luni)

Title of qualification awarded

SPECIALIZARE CU BURSA DAAD

Principal subjects / occupational skills covered

TRIBOLOGY OF MECHATRONICS MICROSYSTEMS

Name and type of organisation providing education and training

HTW des Saarlandes, Saarbrucken, Germania;

Aptitudini și competențe personale

Limba maternă

ROMANA

Other language(s)

Self-assessment

European level (*)

English

French

Understanding				Speaking				Writing	
Listening		Reading		Spoken interaction		Spoken production			
B1	Independent user	B1	Independent user	B1	Independent user	B1	Independent user	B1	Independent user
A2	Basic User	A2	Basic User	A2	Basic User	A2	Basic User	A2	Basic User

(*) [Common European Framework of Reference \(CEF\) level](#)

Social skills and competences

Spirit de echipa;

Capacitate de adaptare la medii multiculturale obtinuta prin stagii de cercetare si vizite la universitati din strainatate (University of Bologna, HTW des Saarlandes, INSA Lyon, Twente University)

Capacitate buna de comunicare.

Organisational skills and competences

PRODECAN DE FACULTATE ,SEF CATEDRA , DIRECTOR DEPARTAMENT, MEMBRU IN SENATUL U.T.IASI, MEMBRU IN COMISIE CNATDCU, EVALUATOR CNC SIS

Technical skills and competences

COMPETENTE IN URMATOARELE DOMENII:

ORGANE DE MASINI,

TRIBOLOGIE, BIOTRIBOLOGIE, MICROTRIBOLOGIE;

MECATRONICA, MICROSISTEME MECATRONICE;

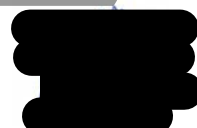
CONDUCATOR DE DOCTORAT IN DOMENIUL INGINERIE MECANICA CU 12 TEZE SUSTINUTE

Computer skills and competences

O BUNA STAPANIRE A UTILITARELOR:(Word™, Excel™PowerPoint™, MathCAD)

Annexes

- Autor și co-autor la 10 manuale și monografii dintre care două monografii au primit Premiul Academiei Române (Rumnenți. Proiectare și tehnologie vol. I și Vol.II, Coordonator prof. Mihai Gafițanu, Ed. Tehnică, București,1985);
- Autor și co-autor la 19 articole publicate în reviste WOS cu factor de impact (**Wear, Tribology Letters, International Tribology, Lubrication Science, Sensors,Tribology Transaction, Materials Science and Engineering: C, Mechanism and Machine Theory**);
- Autor și co-autor la 56 lucrări indexate ISI și SCOPUS în perioada (2005- 2022), în volume ale unor conferințe internaționale: ACME 2010, 2012, 2014, 2016, 2018, 2020, 2022-Iași, IMANEE-2021 -Iași MODTECH 2011-Rep. Moldova, MODTECH 2012 Sinaia, IEEE –EHB 2011, 2013-Iași, MECAHITECH 2010-Bucuresti; **DIPRE 2012**

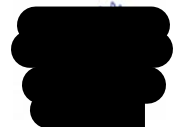


Galați;

- Autor și co-autor la peste 50 lucrări publicate în volume ale unor conferințe internaționale de tribologie: BALKANTRIB'20-Belgrad, ROTRIB'2019-Cluj Napoca, BALKANTRIB 2014-Sinaia, ROTRIB 2010-IASI, ROTRIB 2007- București, ROTRIB 2003 Galați, Colviul Internațional de Tribologie- Esslingen, Germania: 2002, 2000, 1998, 1996; BALKANTRIB 1999 Sinaia, NORDTRIB 1994-Uppsala, EUROTRIB 1993 Budapesta,
- Autor și co-autor la peste 80 lucrări publicate în reviste românești și în volume ale unor conferințe naționale neindexate BDI.
- **145 citări în publicații ISI din care 112 citări sunt în reviste ISI cu factor de impact.**
- Punctaj total conform Anexa 17, CNATDCU (O.M. 6129/20.12.2016) = **761,796**
-
- **h-index WOS =6; h-index Scopus = 9, h-index Google Scholar = 11**

A. Lista lucrărilor publicate în reviste ISI cu factor de impact

1. **D.N.Olaru** and M.D.Gafitanu: *Starvation in Ball Bearings*, **Wear**,170 (1993),219-234;
2. **D.N.Olaru** and M.D.Gafitanu: *Lubrication Safety in High-Speed Ball Bearings*, **Lubrication Science**, 9-4, August 1997, pp 365- 389;
3. **D.N.Olaru** and M.D.Gafitanu: *A New Methodology to Estimate Starvation in Ball Bearings* , **Tribotest Journal**,4-1,1997,p.93- 106;
4. M.D.Gafitanu, **D.N.Olaru** und M.C.Cocea: *Die Verluste Wegen Der Reibung In Radial-Axial –Kugellagern Bei Hohen Drehzahlen*, **Wear**, 160 (1993), 51-60;
5. Bercea,I., Cretu,Sp., Bercea,M. **Olaru, D.N.**; *Simulating Roller- Cage Pocket Friction in a Tapered Roller Bearing*, **European Journal Mech.Engineering**.vol.43, No.4,1998,p.189-194;
6. Bercea, M. Bercea, I. **Olaru, D.,N.**, Nelias, D.: *Polyethylene as an Additive for Minearl Oils- Part I: Influence of the Polymer Concentration on the Film-Forming Properties in Rolling Bearings*, **STLE -TRIBOLOGY TRANSACTIONS** , Vol.42, 1999, 4, p.851-859;
7. Bercea, M., Bercea, I.,Nelias,D.,**Olaru, D.N.**.:*TheTribological Behavior of Mineral Oils Additived with Polyethylene*, **LUBRICATION SCIENCE** ,11-3, May 1999 (11), p.247-270;
8. Gh. Manolache, Sp. Cretu, **D.N.Olaru**, C.G. Bujoreanu, *A study of thermal phenomena in the piston-ring and cylinder-sleeve tribosystem of an internal combustion engine and flash temperature calculation*, **LUBRICATION SCIENCE**, 12-2, Feb. 2000, p.115-131.
9. C.Oprișan, **D.N.Olaru**, D.Leohchi, *A New Method to Simulate the Elastic Interactions in the Tribosystems of a Multi-Bar Mechanism*, **TRIBOTEST JOURNAL**, 9-2, December 2002 (9), p.157-169.
10. O. Dodun, **D. Olaru**, G. Nagiț, F. Negoescu and M. Coteață, *Experimental study regarding electrostatic spray coating of solid lubricant for gears*, **INTERNATIONAL JOURNAL OF MATERIAL FORMING, Volume 1, Supplement 1** (2008), **1335-1338**, (SpringerLink)
11. **Olaru, D.N**; Stamate, C; Prisacaru, G. - *Rolling Friction in a MicroTribosystem*, **TRIBOLOGY LETTERS**, Volume: 35, Issue: 3, 2009, Pages: 205-210;
12. **Dumitru N. Olaru**, Ciprian Stamate, Alina Dumitrascu, Gheorghe Prisacaru - *New microtribometer for rolling friction.*, **WEAR**, Volume 271, Issues 5–6, 22 June 2011, Pages 842-852
13. V. Cârlescu, **D. Olaru**, F. Breabăn, Gh. Prisăcaru - *Comparative study of electromechanical response in some dielectric elastomers*, **JOURNAL OF OPTOELECTRONICS AND ADVANCED MATERIALS**, Vol.13, 2011.
14. Iuliana Rotaru, Carmen Bujoreanu, Adrian Bele, Maria Cazacu, **Dumitru Olaru**, *Experimental testing on free vibration behaviour for silicone rubbers proposed within lumbar disc prosthesis*, **Materials Science and Engineering: C**, Volume 42, September (2014), Pages 192-198.
15. Mihaela Rodica D. Bălan, Vasile Ciprian Stamate, Luc Houpert, **Dumitru N. Olaru**, *The influence of the lubricant viscosity on the rolling friction torque*,**TRIBOLOGY INTERNATIONAL** 72 (2014) 1–12;
16. Rotaru Iuliana, **Olaru Dumitru**, *Mechanical behaviour of p (HEMA)hydrogel for disc prosthesis on lumbar spine*, **JOURNAL OF OPTOELECTRONICS AND ADVANCED MATERIALS**, 2014, Vol. 16, No. 7-8, pp. 881 – 886.
17. **Dumitru N. Olaru**,Mihaela Rodica D. Bălan, Ana Tufescu,Vlad Cârlescu,Gheorghe Prisacaru, *Influence of the cage on the friction torque in low loaded thrust ball bearings operating in lubricated conditions*, **TRIBOLOGY INTERNATIONAL**, Volume 107, March 2017, Pages 294–305,(Online 11,2016),<http://www.sciencedirect.com/science/article/pii/S0301679X16304704>.
18. Vlad Cârlescu, **Dumitru N. Olaru**, Gheorghe Prisacaru, Cezar Oprisan and José Machado, *Sensors and Actuators on Determining Parameters for Being Considered in Selection of Elastomers for Biomimetic Hands*, **SENSORS**, (2017),



19. Andrei Popescu, Luc Houpert, **Dumitru N Olaru**, *Four approaches for calculating power losses in an angular contact ball bearing*, **MECHANISM AND MACHINE THEORY**, (2020), vol.144 ,103669

B1. Lista principalelor lucrări publicate în volume indexate BDI (ISI +SCOPUS)

1. **D Olaru**, GC Puiu, LC Balan, V Puiu, *A New Model to Estimate Friction Torque in a Ball Screw System*, **Product Engineering**, 2005, pp 333-346.
2. M Baiceanu, P Flores, C Oprisan, **D Olaru**, Study of the Contact Force Model on the Dynamic Response of a Four-Bar Mechanism with Clearance Joints, **New Trends in Mechanism and Machine Science Mechanisms and Machine Science**, Volume 7, 2013, pp 541-548,
3. Balan Mihaela Rodica , Vasile Ciprian Stamate, Luc Houpert, Ana Tufescu, **N. Dumitru Olaru**, *Influence of the Geometry on the Rolling Friction Torque in Lubricated Ball-Race Contacts*, **Applied Mechanics and Materials-Advanced Concepts in Mechanical Engineering I**, Vol.658,(2014), pp. 271-276.
4. C. Bujoreanu, R. Monoranu, C. Știrbu, **D. Olaru**, *Some Dynamic Behaviour Aspects Related to a Vehicle Suspension*, **Applied Mechanics and Materials**, ISSN 1662-7482, Vols. 809-810, pp. 1049-1054, Nov. (2015),
5. I. P. Tărăboanță, V. Paleu, C. Bujoreanu, M. Benchea, **D. Olaru**, Some Considerations on Vibration Diagnose of Miniature Ball Bearings, **Applied Mechanics and Materials**, ISSN 1662-7482 Vols. 809-810, pp. 670-675, Nov. (2015),
6. Carlescu Vlad, G Prisacaru, **ND Olaru**, *FEM Simulation on Uniaxial Tension of Hyperelastic Elastomers*, **Applied Mechanics and Materials-Advanced Concepts in Mechanical Engineering II**, Vol.659,(2014),pp. 57-62.
7. Bujoreanu Carmen, Monoranu Razvan, **Olaru N. Dumitru**, *Study on the Defects Size of Ball Bearings Elements Using Vibration Analysis*, **Applied Mechanics and Materials**, Vol. 658 (2014) p. 289-294, Trans Tech Publications.
8. C. Dumitrascu, G. Ianus, **D.N. Olaru**, *Influence of the Contact Pressure on the Rolling Resistance Moments in Dry Ball-Race Contacts*, **APPLIED MECHANICS AND MATERIALS**, Vol. 658 (2014) pp. 305-310;
9. M. Rusu, I. Daniela, M. Benchea, V. Carlescu, **D. Olaru**, *Friction of the Polymers - Experimental Results and Analytical Model*, **Applied Mechanics and Materials**, Vol. 823, pp. 473-478, 2015.
10. V. Cârlescu, F. Breabăn, **D. Olaru**, Gh. Prisăcaru, *A Technique for Dynamic Characterization of Dielectric Elastomers*, **Proc. of 2nd International Conference on Innovations, Recent Trends and Challenges in Mechatronics, Mechanical Engineering and New High-Tech Products Development MECAHITECH'10**, Bucharest, 23-24 September 2010, 508-511, http://www.incdmtm.ro/mecahitech2010/materiale_new/65_pag.508-511.
11. Mihaela Rodica BĂLAN, **Dumitru OLARU**, *Rolling friction torque in lubricated contacts from micro to macro scale*, **Mechanical Testing and Diagnosis**, ISSN 2247 – 9635, 2012 (II), Volume 2, 44-53,
12. Emanuel Miron, João P. M. A. Silva, José Machado, Dumitru Olaru and Gheorghe Prisacaru: *Using ICT techniques for improving mechatronic systems' dependability*, **AIP Conf. Proc.** 1558, 1033 (2013);
13. E. Miron, J. P. Mendonca, J. Machado, **D. Olaru** and G. Prisacaru , *CAD Information Handling for Obtaining Dependable Manufacturing Systems*, **ASME 2015 International Mechanical Engineering Congress and Exposition**, Volume 2B: Advanced Manufacturing, Houston, Texas, USA, November 13–19, 2015.
14. Bujoreanu, C., **Olaru, D.N.**, Cretu, Sp., Nélias, D., Popinceanu, N.G., *Étude de la limite de grippage dans les roulements à billes*, Roulements et Tribologie, (2001), p. 195-210.
15. Gh. Prisacaru, **D. Olaru**, C. Bujoreanu, *The tribological study on linear guidance systems*, Analele Universitatii "Dunarea de Jos" Galați, fasc.VIII, Tribology, (2003), p.112-117 ;
16. C. G. Bujoreanu, **D.N. Olaru**, Sp. Cretu, D. Nélias, N.G. Popinceanu, *Scuffing Approach for an Angular Contact Ball Bearing*, Proceedings of 12th International Colloquium on Tribology 2000- Plus, Technische Akademie Esslingen, January 11-13, (2000), p.1245-1261;
17. George V. Puiu, **Dumitru N. Olaru**, Vasile Puiu - *Friction Torque and Efficiency in Ball – Screw Systems*, **ACTA TRIBOLOGICA**, Volume 17, (2009), 25-29;
18. Vlad Cârlescu, **Dumitru Olaru**, Gheorghe Prisăcaru, Stelian Vlad, *Determining the stress-strain curve of PDMS-SiO₂-TiO₂ electroactive polymers*, Mechanical Testing and Diagnosis, 2012 (II), Volume 2, 54-61, ISSN 2247 – 9635.
19. F Breaban, V Carlescu, **D Olaru**, Gh Prisacaru, J Coutte, **LASER SCANNING VIBROMETRY APPLIED TO NONDESTRUCTIVE TESTING OF ELECTRO-ACTIVE POLYMERS**, University " Politehnica" of Bucharest Scientific Bulletin, Series D: Mechanical Engineering, 2011, vol.73, No.2, pp. 171-180;
20. **Olaru D., Stamate C.**, Dumitrașcu Alina, Ianuș G. - *Friction in the microtribosystems. influence of the condensed water*, **The Annals of University „Dunărea de Jos” of Galați**, Fascicle VIII (XIII), October 2009, pp. 46-50, ISSN 1221-4590.



21. **Olaru D., Stamate C.,** Dumitrașcu Alina, Prisăcaru Gh. - *Experimental investigations of rolling friction in mechatronics Microsystems*, 2 ADEMS'09, Cluj-Napoca, 4-25 September 2009, ACTA TECHNICA NAPOCENSIS - Series: APPLIED MATHEMATICS AND MECHANICS, Vol. III, No. 52, pp. 329-332.
22. Vlad Cârlescu, **Dumitru Olaru,** Gheorghe Prisăcaru, *Tribological aspects of electrode-elastomer contact*, THE ANNALS OF UNIVERSITY "DUNĂREA DE JOS" OF GALAȚI FASCICLE VIII TRIBOLOGY, 2010 (XVI), Issue 2,
23. Liviu BALAN, Marcelin BENCHEA, Ana TUFESCU, **Dumitru OLARU;** *Experimental determination of the friction coefficient in a simulated gear transmission*, THE ANNALS OF UNIVERSITY "DUNĂREA DE JOS" OF GALAȚI FASCICLE VIII TRIBOLOGY, 2012 (XVII);
24. IULIANA ROTARU and **DUMITRU OLARU,** *Lubrication regimes in total disc prostheses on lumbar spine*, **Bul. Inst. Polit. Iasi**, t. LVIII (LXII), f. 2, 2012, pp. 137-146;
25. **Olaru D.,** C. Stamate - *Rolling friction in the mechatronic microsystems*, **Proc. of VAREHD Conference Vol.14, 2008,122-126;**
26. Stamate C., **D. Olaru,** Gh. Prisăcaru, Gelu Ianus - *Rolling Friction in the Mechatronic Microsystems, International Conference „6th Workshop on European Scientific and Industrial Collaboration on Promoting Advanced Technologies in Manufacturing” – WESIC'08, 25-26 September 2008, Bucharest, Romania*, pp.295-302, ISSN: 1584-5982;.
27. **D Olaru,** M R Balan and A Tufescu, *INFLUENCE OF THE CAGE ON FRICTION TORQUE IN LOW LOADED THRUST BALL BEARING OPERATING IN DRY CONDITIONS*, **7th International Conference on Advanced Concepts in Mechanical Engineering IOP Publishing, IOP Conf. Series: Materials Science and Engineering 147 (2016) 012027** doi:10.1088/1757-899X/147/1/012027, <http://iopscience.iop.org/article/10.1088/1757-899X/147/1/012027/pdf>;
28. A Popescu and **D Olaru,** *KINEMATICS AND TRIBOLOGICAL PROBLEMS OF LINEAR GUIDANCESYSTEMS IN FOUR CONTACT POINTS*, **7th International Conference on Advanced Concepts in Mechanical Engineering IOP Publishing, IOP Conf. Series: Materials Science and Engineering 147 (2016) 012029** doi:10.1088/1757-899X/147/1/012029, <http://iopscience.iop.org/article/10.1088/1757-899X/147/1/012029/pdf>;
29. G Ianuș , A C Dumitrașcu, V Cârlescu and **D N Olaru,** *Friction torque in thrust ball bearings grease lubricated*, **7th International Conference on Advanced Concepts in Mechanical Engineering, IOP Conf. Series: Materials Science and Engineering 147 (2016) 012026** doi:10.1088/1757-899X/147/1/012026,
30. C Opreșan, V Cârlescu, A Barnea, Gh Prisăcaru, **D N Olaru** and Gh Plesu, **EXPERIMENTAL DETERMINATION OF THE YOUNG'S MODULUS FOR THE FINGERS WITH APPLICATION IN PREHENSION SYSTEMS FOR SMALL CYLINDRICAL OBJECTS**, **7th International Conference on Advanced Concepts in Mechanical Engineering IOP Publishing IOP Conf. Series: Materials Science and Engineering 147 (2016) 012058** doi:10.1088/1757-899X/147/1/012058, <http://iopscience.iop.org/article/10.1088/1757-899X/147/1/012058/pdf>;
31. V Cârlescu, G Prisăcaru and **D Olaru,** **ELECTROMECHANICAL RESPONSE OF SILICONE DIELECTRIC ELASTOMERS**, **7th International Conference on Advanced Concepts in Mechanical Engineering IOP Publishing IOP Conf. Series: Materials Science and Engineering 147 (2016) 012057** doi:10.1088/1757-899X/147/1/012057, <http://iopscience.iop.org/article/10.1088/1757-899X/147/1/012057/pdf>;
32. R Pacheco, L Gonzalez, M Intriago ,J Machado, G Prisăcaru and **D Olaru,** **ISSUES TO BE CONSIDERED ON OBTAINING PLANT MODELS FOR FORMAL VERIFICATION PURPOSES**, **7th International Conference on Advanced Concepts in Mechanical Engineering IOP Publishing IOP Conf. Series: Materials Science and Engineering 147 (2016) 012050** doi:10.1088/1757-899X/147/1/012050, <http://iopscience.iop.org/article/10.1088/1757-899X/147/1/012050/pdf>;
33. M I Nazare, V Paleu, S Bhaumik, G Ianuș and **D N Olaru,** **PERFORMANCES OF AUTOMOTIVE LUBRICANTS – TESTS ON FOUR BALL MACHINE**, 2018 *IOP Conf. Ser.: Mater. Sci. Eng.* 444 022013 <https://doi.org/10.1088/1757-899X/444/2/022013>
34. Andrei Zamă, Viorel Paleu, Leandru Gh. Bujoreanu, **Dumitru Olaru,** **ADVANCES IN ANGULAR CONTACT BALL BEARINGS TESTING MACHINE DESIGN**, International Journal of Modern Manufacturing Technologies ISSN 2067–3604, Special Issue, Vol. XI, No. 3 / 2019 (SCOPUS). <https://www.ijmmt.ro/international-journal-ijmmt.php?volume=vol11no32019#gsc.tab=0>
35. A Popescu and **D N Olaru** **INFLUENCE OF LUBRICANT ON THE FRICTION IN AN ANGULAR CONTACT BALL BEARING UNDER LOW LOAD CONDITION**, IOP Conference Series: Materials Science and Engineering, Volume 724, International Conference on Tribology (ROTRIB'19) 19–21 September 2019, Cluj-Napoca, Romania, <https://iopscience.iop.org/article/10.1088/1757-899X/724/1/012040/meta>
36. G Ianuș, D Cojocaru, M C Opreșan, V Paleu and **D N Olaru,** **POWER LOSS IN GREASE LUBRICATED BALL BEARINGS**, **IOP CONFERENCE SERIES: MATERIALS SCIENCE AND ENGINEERING**, Volume 724, International Conference on Tribology (ROTRIB'19) 19–21 September 2019, Cluj-Napoca, Romania; <https://iopscience.iop.org/article/10.1088/1757-899X/724/1/012009/meta>
37. Ianuș, G., Cojocaru, D., Opreșan, M.C., Carlescu, V., **Olaru, D.N.** **Friction models for grease lubricated ball-race contacts**, IOP Conference Series: Materials Science and Engineering, 2020, 997(1), 012012
38. Opreșan, C.M., Chiriac, B., Carlescu, V., **Olaru, D.N.**, **Influence of the stiffness and the speed on the stick-slip process**, IOP Conference Series: Materials Science and Engineering, 2020, 997(1), 012016



39. Zamă, A., **Olaru, D.**, Paleu, V., *New concepts in friction reduction in preloaded assemblies of angular-contact ball bearings*, IOP Conference Series: Materials Science and Engineering, 2020, 997(1), 012020.
40. Ianuș, G., Cojocaru, D., Oprisaș, M.C., Paleu, V., **Olaru, D.N.**, *Power loss in grease lubricated ball bearings*, IOP Conference Series: Materials Science and Engineering, 2020, 724(1), 012009
41. Popescu, A., **Olaru, D.N.**, *Influence of lubricant on the friction in an angular contact ball bearing under low load conditions*, IOP Conference Series: Materials Science and Engineering, 2020, 724(1), 012040

B2. Lista principalelor lucrări publicate în volume indexate BDI (ISI +SCOPUS) cu tematică în domeniul biotribologiei

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Data:
30.08. 2022

Semnatura,

