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L I S T A

lucr rilor tiin ifice în domeniul disciplinelor din postul didactic

perioada 01.01.2005 – 01.10.2014

A. Teza de doctorat

„Cercet ri privind capacitatea productiva si consumul specific energetic la prelucr ri de tan are pe prese cu manivel ”; *Universitatea Politehnica din Timisoara (Romania)*; Conduc tor tiin ific: Prof.dr.ing.Rosinger stefan; Sus inerea: în data de 18-10-**2002**;

B. C r i si capitole în c r i

1. Duma V.-F., Schitea A., Tuef M., Cira O., Hutiu Gh., **Demian D.**, Mnerie C., Kaposta I., *Optomechatronics applications of the theory of mechanisms with active student involvement in research, in New Trends in Educational Activity in the Field of Mechanism and Machine Theory, Mechanisms and Machine Science (Book Series), vol. 19, 111-119, García-Prada J. C. and Castejon C., Eds., Springer (2014), ISSN: 2211-0984 (Print) 2211-0992 (Online); http://dx.doi.org/10.1007/978-3-319-01836-2_12;*

2. Duma V.F., Nicolov M. F., Kiss M., Ilca T., Mnerie C., **Demian D.** and Szantho L., *Choppers: Optomechatronic Devices for the Controlled Modulation of Light, in Mechanisms, Transmissions and Applications, Mechanisms and Machine Science, Vol. 3, Lovasz E.C., Corves B., Eds., Springer, 2011, ISSN 2211-0984, ISBN 978-94-007-2726-7, pp. 129-134, <http://dx.doi.org/10.1007/978-94-007-2727-4>;*

3. **D. Demian** Suport curs - Scule aschietoare Vol.1 - în format electronic pe CD; 2005

4. **D. Demian** Suport curs - Scule aschietoare Vol.2 - în format electronic pe CD; 2006

5. **D. Demian** Suport curs Tehnologia pres rii la rece Vol.1 in format electronic pe CD; 2007

6. **D. Demian** Suport curs Tehnologia pres rii la rece Vol.2 in format electronic pe CD; 2008

7. **D. Demian** Suport curs Controlul si asigurarea calitatii, in format electronic (CD); 2009

C. Lucr ri indexate ISI/BDI

- Lucr ri in reviste ISI

1. Hutiu Gh., Duma V. F.*, **Demian D.**, Bradu A., and Podoleanu A. Gh., Surface imaging of metallic material fractures using optical coherence tomography, *Applied Optics* 53(26), 5912-5916 (**2014**), ISSN 0003-6935 (print), ISSN 1539-4522 (online); **ISI IF 1.649/2013** (RIS 1.383); <http://dx.doi.org/10.1364/AO.53.005912>; OPEN ACCESS

2. **Demian D.**, Duma V. F., Sinescu C., Negrutiu M. L., Cernat R., Topala F. I., Hutiu Gh., Bradu A., and Podoleanu A. Gh., Design and testing of prototype handheld scanning probes for optical coherence tomography, *Journal of Engineering in Medicine* 228(8), 743-753 (**2014**); ISSN 0954-4119; **ISI IF 1.144/2013**; <http://dx.doi.org/10.1177/0954411914543963>; OPEN ACCESS

- Lucr ri in reviste BDI

3. Mnerie C., Kiss M., Ilca T., Szantho L., Falcan O., Nicolov M. F., **Demian D.**, Voiculescu I., Duma V.F., Study of optical modulators with rotating wheels: The experimental setup, *Sc. Bulletin of the Politehnica Univ. of Timisoara, Transactions on Mathematics-Physics* 56(70), **2011**, ISSN 1224-6069, pp. 73-80;

4. Szantho L., Mnerie C., Ilca T., Falcan O., Nicolov M. F., **Demian D.**, Duma V.F., Radiometric scanning with applications in the lighting technology, *Sc. Bulletin of the Politehnica Univ. of Timisoara, Transactions on Mathematics-Physics* **56(70)**, **2011**, ISSN 1224-6069, pp. 89-97;

- Lucruri in volume de conferin e ISI

5. Duma V.F., Schitea A., Tuef M., Cira O., Hutiu Gh., **Demian D.**, Mnerie C., Kaposta I., Optomechatronics applications of the theory of mechanisms with active student involvement in research, *New Trends in Educational Activity in the Field of Mechanism and Machine Theory (ISEMMS, Madrid 2013)*, Mechanisms and Machine Science (Book Series), vol. 19, 111-119, García-Prada J. C., Castejon C., Eds., Springer, **2014**, ISSN 2211-0984; ISBN 978-3-319-01835-5; http://dx.doi.org/10.1007/978-3-319-01836-2_12;

6. Duma V.F., **Demian D.**, and Cira O., Optical choppers with high speed rotating elements, *Proc. SPIE*, Vol. 9131, 9131OE, Wyrowski F., Sheridan J.T., Tervo J., Meuret Z., Eds., *Optical Modelling and Design III (Photonics Europe)*, Brussels, April. 14-17, **2014**; <http://dx.doi.org/10.1117/12.2051828>;

7. Duma V.F., Hutiu G., Cira O., **Demian D.**, Mnerie C., Kaposta I., Building an Optomechatronics Group in a young university in Western Romania, *Proc. SPIE*, Vol. 9289, 928913, Manuel Filipe P. C. Martins Costa, Mourad Zghal, Eds., *12th Education and Training in Optics and Photonics (ETOP July 22-26, 2013)*, Porto (Portugal), **2014**; <http://dx.doi.org/10.1117/12.2070774>;

8. Duma V.F., Negrutiu M. L., Sinescu C., Miutescu E., Burlea A., Vlascici M., Negru C., Gheorghiu N., **Demian D.**, Hutiu G., Mnerie C., Marcauteanu C., Topala F., Rolland J., Voiculescu I., and Podoleanu A. Gh., Towards a Research Pole in Photonics in Western Romania, *Proc. SPIE*, Vol. 9289, 928916, Manuel Filipe P. C. Martins Costa, Mourad Zghal, Eds., *12th Education and Training in Optics and Photonics (ETOP July 22-26, 2013)*, Porto (Portugal), **2014**; <http://dx.doi.org/10.1117/12.2070787>

9. Duma V.F., Nicolov M., Kiss M., Ilca T., **Demian D.**, Szantho L., Modeling of modulation functions of different configurations of optical chopper wheels, *Proc. SPIE*, Vol. 8083, 8083-17, Bodermann B., Bosse H., Silver R. M., Eds., *Modeling Aspects in Optical Metrology (LASER Congress)*, Munchen, May 23-26, **2011**, ISSN 0277-786X, <http://dx.doi.org/10.1117/12.889509>;

10. Duma V.F., Nicolov M., Kiss M., Ilca T., **Demian D.**, Szantho L., Modeling of modulation functions of different configurations of optical chopper wheels, *Proc. SPIE*, Vol. 8083, 8083-17, Bodermann B., Bosse H., Silver R. M., Eds., *Modeling Aspects in Optical Metrology (LASER Congress)*, Munchen, May 23-26, **2011**, ISSN 0277-786X, <http://dx.doi.org/10.1117/12.889509>;

11. Duma V.F., Schitea A., Tuef M., Cira O., Hutiu Gh., **Demian D.**, Mnerie C., Kaposta I., Optomechatronics applications of the theory of mechanisms with active student involvement in research, *New Trends in Educational Activity in the Field of Mechanism and Machine Theory (ISEMMS, Madrid 2013)*, Mechanisms and Machine Science (Book Series), vol. 19, 111-119, García-Prada J. C., Castejon C., Eds., Springer, **2014**, ISSN 2211-0984; ISBN 978-3-319-01835-5; http://dx.doi.org/10.1007/978-3-319-01836-2_12;

D. Lucruri publicate în reviste i volume de conferin e cu referen i (neindexate ISI/Web of Science)

- Lucruri in reviste

1. Considerations regarding the mechanic work at dies with punchers of different lengths, *Sc. and Tech. Bulletin of the Aurel Vlaicu Univ. Arad, Series: Mech. Eng.* **2(1)**, **2006**, ISSN 1584-918X, pp. 47-54;

2. The analysis of the factors of influence on the specific consumption of electric energy in the work on the modified PAI-16 die, *Sc. and Tech. Bulletin of the Aurel Vlaicu Univ. Arad, Series: Mech. Eng.* **2**(1), **2006**, ISSN 1584-918X, pp. 55-65;

- Lucrari in volume de conferinta

3. Ciria O., **Demian D.**, Duma V. F., Theoretical and experimental investigations of some novel solutions of optomechanical choppers, *Dynamical Systems. Nonlinear Dynamics and Control (12th DSTA)*, Awrejcewicz J., Ed., Łódź (Poland), Dec. 2-5, **2013** - submitted;

4. **Demian D.**, Hutiu Gh., Duma V.F., Development of handheld scanning probes for optical coherence tomography, Proc. 4th ISREIE, Series: Engineering, 85-90, Nov. 8-9, **2012**, ISSN 2065-2569;

5. Kiss M., Ilca T., Szantho L., Mnerie C., Falcan O., **Demian D.**, Nicolov M. F., Duma V.F., Experimental setup for the study of optical modulators with rotating wheels, *Proc. 3rd ISREIE, Series: Engineering*, Oct. 10-12, **2010**, ISSN 2065-2569, pp. 98-104;

6. **Demian D.**, Sobol D., Filaments, fibers and methods for their production from PETs; The XIV International exhibition of research, innovation and technological transfer "INVENTICA 2010" Iasi, 9-11 iunie.

7. **Demian D.**, Sobol D., Rotary valves for thermal engines, pumps and compressors; The XIV International exhibition of research, innovation and technological transfer "INVENTICA 2010" Iasi, 9-11 iunie.

E. Brevete obinute în întreaga activitate

1. **Demian D.** Dispozitiv universal cu actionare electrica pentru indoirea tevilor la rece; Certificat 1108/11-08-1986

2. **Demian D.** + 4 colaboratori; Dispozitiv de fixare teava "tipizat" pentru produsele MFTF 9 5/8"-13 3/8"; Certificat 852/01-06-1987

3. **Demian D.** si + 6 colaboratori; Sistem de deblocare cu dubla functie pentru masinile de gaurit adanc; Certificat 420/30-03-1989

4. Duma V.F., **Demian D.**, Optical modulator with a rotational disk, Romanian Patent Request, OSIM, A01083/28.10.2011 (depus/in asteptare);

5. Duma V.F., **Demian D.**, Optical modulator with shafts with holes, Romanian Patent Request, OSIM, A0097/29.11.2012 (depus/in asteptare);

F. RESEARCH GRANTS & CONTRACTS

1. **Investigator (PI), PARTNERSHIP Grant** code PN-II-PT-PCCA-2011-3.2-1682, Romanian Authority for Scientific Research, CNDI-UEFISCDI: *Optical Coherence Tomography (OCT) systems with handheld and endoscope probes for real-time investigations in material studies and for in vivo medical imaging*, with five institutions involved, **2012-2016**; <http://3om-group-optomechatronics.ro/> (950k€);

G. Premii, distincții

1. Medalie si Diploma aur la „The XIV International exhibition of research, innovation and technological transfer "INVENTICA 2010" Iasi, 9-11.06.2010

Data:
01.10.2014

Semn tura: