

VIRGIL-FLORIN DUMA List of Publications

<http://www.researcherid.com/rid/B-3031-2010>
h-index = 13 (ISI Web of Science)



Papers in Journals indexed in ISI Web of Science (**ISI Impact Factor (IF): 25.063**)¹

19. Mnerie C.*, Preitl S., and Duma V.-F.*, Galvanometer-based scanners: Mathematical model and alternative control structures for improved dynamics and immunity to disturbances, *Intl J of Structural Stability and Dynamics* **16** (2016) **ISI IF 0.764/2014** (AIS 0.241/2014) – in print;
18. Duma V.-F., Polygonal mirror laser scanning heads: Characteristic functions, *Proceedings of the Romanian Academy Series A* **18**(1), (2017); ISSN 1454-9069; **ISI IF 1.658/2015** (AIS 0.198/2014) – in print;
17. Cogliati A., Canavesi C.*, Hayes A., Tankam P., Duma V.-F., Santhanam A., Thompson K. P., and Rolland J. P., MEMS-based handheld scanning probe with pre-shaped input signals for distortion-free images in Gabor-Domain Optical Coherence Microscopy, *Optics Express* **24**(12), 13365-13374 (2016); ISSN 1094-4087; **ISI IF 3.148/2015** (AIS 1.052/2014); <http://dx.doi.org/10.1364/OE.24.013365> - also selected & published in *Virtual Journal for Biomedical Optics* **10**(6), ISSN 1931-1532 (2016); **OPEN ACCESS**
16. Craciunescu E., Sinescu C.*, Negrutiu M. L., Pop D. M., Lauer H.-C., Rominu M., Hutiu Gh., Bunoiu M., Duma V.-F.*, and Antoniac I., Shear Bond Strength Tests of Zirconia Veneering Ceramics after Chipping Repair, *J of Adhesion Science and Technology* **30**(6), 666-676 (2016); ISSN 0169-4243; **ISI IF 0.863/2015** (AIS 0.293/2014); <http://dx.doi.org/10.1080/01694243.2015.1117304>
15. Duma V.-F.*, Dobre G., Demian D., Cernat R., Sinescu C., Topala F. I., Negrutiu M. L., Hutiu Gh., Bradu A., and Podoleanu A. Gh., Handheld scanning probes for optical coherence tomography, *Romanian Reports in Physics* **67**(4), 1346-1358 (2015); ISSN 1221-1451; **ISI IF 1.367** (AIS 0.184); http://www.rpp.infim.ro/2015_67_4/A14.pdf; **OPEN ACCESS**
14. Duma V.-F.*, Tankam P., Huang J., Won J. J., and Rolland J. P., Optimization of galvanometer scanning for Optical Coherence Tomography, *Applied Optics* **54**(17), 5495-5507 (2015), ISSN 1559-128X; **ISI IF 1.598** (AIS 0.474/2014) doi: [10.1364/AO.54.005495](https://doi.org/10.1364/AO.54.005495) - also selected & published in *Virtual Journal for Biomedical Optics* **11**(7), ISSN 1931-1532 (2016); **OPEN ACCESS**
13. Canjau S., Todea C., Negrutiu M.L., Sinescu C., Topala F.I., Marcauteanu C., Manescu A., Duma V.-F., Bradu A., and Podoleanu A. Gh., Optical Coherence Tomography for Non-Invasive ex vivo Investigations in Dental Medicine - a Joint Group Experience (Review). *Sovremennye tehnologii v medicine/Modern Technologies in Medicine* **7**(1), 97–115 (2015), ISSN 2076-4243; <http://dx.doi.org/10.17691/stm2015.7.1.13>; **OPEN ACCESS**
12. Sinescu C., Negrutiu M. L., Bradu A., Duma V.-F.*, and Podoleanu A. Gh., Noninvasive quantitative evaluation of the dentin layer during dental procedures using Optical Coherence Tomography, *Computational and Mathematical Methods in Medicine*, Paper ID 709076 (2015) ISSN 1748-670X; **ISI IF 0.887** (AIS 0.338/2014); <http://dx.doi.org/10.1155/2015/709076>; **OPEN ACCESS**
11. Oancea R., Bradu A., Sinescu C.*, Negru R. M., Negrutiu M. L., Antoniac I., Duma V.-F., and Podoleanu A. Gh., Assessment of the sealant/tooth interface using optical coherence tomography, *J of Adhesion Science and Technology* **29**(1), 49-58 (2015); ISSN 0169-4243; **ISI IF 0.863** (AIS 0.293/2014) <http://dx.doi.org/10.1080/01694243.2014.974879> - all the authors had equal contributions.
10. 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 1559-128X; **ISI IF 1.784** (AIS 0.210/2014); <http://dx.doi.org/10.1364/AO.53.005912> - also selected & published in *Virtual Journal for Biomedical Optics* **9**(11), ISSN 1931-1532 (2014); **OPEN ACCESS**
9. Velea O.-A., Sinescu C.*, Zeicu C., Freiman P. C., Velea P. I., Onisei D., Duma V.-F., Evaluation of periodontal pockets using different biomaterials: a preliminary study, *Revista Chimie/Chemistry Magazine* **65**(9), 1063-1066 (2014), ISSN 0034-7752; **ISI IF 0.810** (AIS 0.062/2014) - all the authors had equal contributions. **OPEN ACCESS**

¹ The corresponding author of the papers with multiple authors is indicated by the sign *

8. 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, *Proc. of the Institution of Mechanical Engineers, Part H: Journal of Engineering in Medicine* **228**(8), 743-753 (2014); ISSN 0954-4119; **ISI IF 1.329** (AIS 0.418/2014); <http://dx.doi.org/10.1177/0954411914543963>;^{2,3}
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7. **Duma V.-F.**, Prototypes and modulation functions of classical and novel configurations of optical chopper wheels, *Latin American Journal of Solids and Structures* **10**(1), 5-18 (2013), ISSN 1679-7825; **ISI IF 1.254** (AIS 0.359/2014) <http://www.lajss.org/index.php/LAJSS/article/view/510>; **OPEN ACCESS**
6. **Duma V.-F.***, Lee K.-S., Meemon P., and Rolland J. P., Experimental investigations of the scanning functions of galvanometer-based scanners with applications in OCT⁴, *Applied Optics* **50**(29), 5735-5749 (2011), ISSN 1559-128X; <http://dx.doi.org/10.1364/AO.50.005735>, **ISI IF 1.748** (AIS 0.517/2014) - also selected & published in *Virtual Journal for Biomedical Optics* **6**(11), ISSN 1931-1532 (2011);
5. **Duma V.-F.**, Optical choppers with circular-shaped windows: Modulation functions, *Communications in Nonlinear Science and Numerical Simulation* **16**(5), 2218-2224 (2011); ISSN 1007-5704; <http://dx.doi.org/10.1016/j.cnsns.2010.04.043>; **ISI IF 2.806** (AIS 0.733/2014);
4. **Duma V.-F.**, Optimal scanning function of a galvanometer scanner for an increased duty cycle, *Optical Engineering* **49**(10), 103001 (2010); <http://dx.doi.org/10.1117/1.3497570>, ISSN 0091-3286; **ISI IF 0.822** (RIS 0.222/2010);
3. **Duma V.-F.**, Radiometric versus geometric, linear and non-linear vignetting coefficient, *Applied Optics* **48**(32), 6355-6364 (2009); ISSN 1559-128X, <http://dx.doi.org/10.1364/AO.48.006355>; **ISI IF 1.41** (AIS 0.556/2014);
2. **Duma V.-F.*** and Nicolov M., Neutral density filters with Risley prisms: analysis and design, *Applied Optics* **48**(14), 2678-2685 (2009); ISSN 1559-128X, <http://dx.doi.org/doi:10.1364/AO.48.002678>, **ISI IF 1.41** (AIS 0.556/2014);
1. **Duma V.-F.**, Theoretical approach on optical choppers for top-hat light beam distributions, *Journal of Optics A: Pure and Applied Optics*, **10**(6), 064008 (2008); <http://iopscience.iop.org/1464-4258/10/6/064008/>; ISSN 2040-8978; **ISI IF 1.742** (RIS 1.698/2014).

Theses

- T3. **Duma V.-F.**, *Optomechatronic Modulators: Choppers, Attenuators and Scanners. Analysis and Design*, **Habilitation Thesis**, defended Oct. 2013, at the *Polytechnic Univ. of Bucharest (UPB)*, Romania. Commission: President - Prof. V.I. Vlad (President of the Romanian Academy); Members - Prof. N. Puscas (UPB), Prof. J. P. Huignard (Institute Lavoisier, France), Dr. G. Perrone (Univ. Torino, Italy).
- T2. **Duma V.-F.**, *Contributions to the analysis and design of scanning systems* (in Romanian), **Ph.D. Thesis**, degree: *cum laude*, Sept. 2001. Supervisor: Prof. Dan Perju, *Polytechnic Univ. of Timisoara*, Romania;
- T1. **Duma V.-F.**, *Tri-chromatic colorimeter with mix synthesis* (in Romanian), **Diploma Thesis**, degree: *valedictorian*, July 1991. Supervisor: Prof. Ioan Mihalca, *Polytechnic Univ. of Timisoara*, Romania.

Patents – Invention Disclosure Forms

- P3. **Duma V.-F.**, Demian D., Optical modulator, has solid rotating shaft with some through slots of well-defined profiles, Romanian Patent number RO129610-A0, Derwent Primary Accession Nr: 2014-P50842 (pending);
- P2. **Duma V.-F.**, Demian D., Optical modulator with a rotational disk, Romanian Patent Request, OSIM, A01083/28.10.2011 (pending);
- P1. **Duma V.-F.**, Nicolov M. F, Mnerie C., Szantho L., Optical modulator with rotation movement, *Romanian Patent* RO 126505/2016;

² Highlighted in OCT News - Feature of the Week 10/5/14: <http://www.octnews.org/articles/5612435/feature-of-the-week-10-5-14-design-and-testing-of/>

³ From top downloaded papers of *J of Eng in Medicine* (SAGE), Oct. 2014 to Jan. 2015.

⁴ From top downloaded papers of *Applied Optics* (flagship journal of the Optical Society of America - OSA), Oct. 2011.

Books Contributions and Chapters

B15. Todea C., Podoleanu A. Gh., and **Duma V.-F.** (Eds.), *Proceedings of SPIE [ISI]*, Vol. **9670** - PROGRESS IN BIOMEDICAL OPTICS AND IMAGING 16(62), *5th Congress of the World Federation of Lasers in Dentistry-European Division (WFLD-ED) & 6th Intl Conference on Lasers in Medicine: High-end Medicine Based on Laser and Biotechnologies*, Bucharest (Romania), May 7-9, 2015 (SPIE Press, Bellingham, WA, USA, **2016**), ISSN 1605-7422, ISBN 9781628418934, 300 pages; 37 papers (ISI Accession Number: WOS); <http://spie.org/Publications/Proceedings/Volume/9670>

B14. Todea C., Podoleanu A. Gh., and **Duma V.-F.** (Eds.), *Proceedings of SPIE [ISI]*, Vol. **8925** - PROGRESS IN BIOMEDICAL OPTICS AND IMAGING 15(44), *5th Intl Conference on Lasers in Medicine: Biotechnologies Integrated in Daily Medicine*, Timisoara (Romania), Sept. 19-21, 2013 (SPIE Press, Bellingham, WA, USA, **2014**), ISSN 0277-786X, ISBN 978-0-8194-9817-5, 264 pages; 33 papers (ISI Accession Number: WOS:000333186500001); <http://spie.org/Publications/Proceedings/Volume/8925>

B13. **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, 129-134, Lovasz E.C., Corves B., Eds., ISSN 2211-0984, ISBN 978-94-007-2726-7, Springer **2011**, <http://dx.doi.org/10.1007/978-94-007-2727-4>;

B12. **Duma V.-F.***, Rolland J.P., Mechanical Constraints and Design Considerations for Polygon Scanners, in *New Trends in Mechanism Science: Analysis and Design*, Mechanisms and Machine Science, Vol. 5, Part 8, 475-483, Pisla D., Ceccarelli M., Husty M., Corves B., Eds., ISBN 978-90-481-9688-3, Springer, Berlin, Heidelberg, **2010**, http://dx.doi.org/10.1007/978-90-481-9689-0_55;

B11. **Duma V.-F.**, Teaching Mechanisms: from Classical to Hands-on-Experiments and Research-Oriented, in *New Trends in Mechanism Science: Analysis and Design*, Mechanisms and Machine Science, Vol. 5, Part 8, 493-501, Pisla D., Ceccarelli M., Husty M., Corves B., Eds., ISBN 978-90-481-9688-3, Springer, Berlin, Heidelberg, **2010**, http://dx.doi.org/10.1007/978-90-481-9689-0_57;

B10. **Duma V.-F.** (Ed.), *Proceedings of the 3rd International Symposium: Research and Education in an Innovation Era, Engineering Sciences*, ISSN 20652569, Arad, Nov. 10-12, **2010**;

B9. **Duma V.-F.** (Ed.), *Proceedings of the 2nd International Symposium: Research and Education in an Innovation Era, Engineering Sciences*, ISSN 20652569, Arad, Nov. 20-22, **2008**, 502 pages;

B8. **Duma V.-F.** (Ed.), *Tools, Devices, and Control Apparatuses. Experimental Topics* (in Romanian), Aurel Vlaicu Univ. Publishing House, ISBN 978-973-752-283-2, Arad, **2008**, 194 pages;

B7. Perju D., Ianosi E., Mateas M., **Duma V.-F.**, *Measuring Apparatuses and Systems. Experimental Works* (in Romanian), Politehnica, ISBN 973-625-194-2, Timisoara, **2005**, 267 pages.

B6. **Duma V.-F.**, *Scanning* (in Romanian), Politehnica, ISBN 973-625-191-8, Timisoara, **2004**, 190 pages.

B5. **Duma V.-F.**, *Vignetting* (in Romanian), Politehnica, ISBN 973-625-154-3, Timisoara, **2004**, 124 pages;

B4. Perju D., Davidescu A., Mateas M., **Duma V.-F.**, *Measurement and Control Apparatuses. Metrology* (in Romanian), University Horizons, ISBN 973-8109-60-4, Timisoara, **2001**, 106 pages;

B3. Nicoara I., Gruescu C., Atitoaie V., **Duma V.-F.**, *Optical Apparatuses, Vol. I* (in Romanian), University Horizons, ISBN 973-944-96-5, Timisoara, **2000**, 248 pages;

B2. Nicoara I., **Duma V.-F.** (Eds.), *Optical Apparatuses. Experimental Topics* (in Romanian), Mirton, ISBN 973-578-134-4, Timisoara, **1996**, 224 pages;

B1. Pommersheim A., Varga St., Gruescu C., Zsivanov D., **Duma V.-F.**, *Technical Optics. Laboratory Works* (in Romanian), Polytechnics Univ. Publishing House, Timisoara, **1995**, 101 pages;

Conference Proceedings Papers - indexed in ISI Web of Science

ISI.C71. Beiu R.*, Mnerie C. A., **Duma V.-F.**, Analysis of Curved Shape Micro-mirrors For On-Chip Communication, *Proc. SPIE ATOM-N*, Constanta (Romania), Aug. 25-28, **2016** - in print;

ISI.C70. Sinescu C., **Duma V.-F.***, Canjau S., Dobre G., Demian D., Cernat R., Negrutiu M. L., Todea C., Topala F. I., Hutiu Gh., Bradu A., Podoleanu A. Gh., Dentistry investigations of teeth and dental prostheses using OCT, *Proc. SPIE* 9887, 98870B, J. Popp, V. V. Tuchin, D. L. Matthews, F. S. Pavone, Eds., *SPIE Photonics Europe (Biophotonics: Photonic Solutions for Better Health Care V)*, Brussels (Belgium), Apr. 27, **2016**; <http://dx.doi.org/10.1117/12.2227443>

ISI.C69. Stan A.-T., Cojocariu A.-C., Antal A. A., Topala F., Sinescu C., Negrutiu M. L., **Duma V.-F.**, and Podoleanu A. Gh., Marginal integrity evaluation of dental composite using optical coherence tomography, *Proc.*

- SPIE*, Vol. 9670, 967012, Todea C., Podoleanu A., Duma V.-F., Eds., *5th World Federation of Lasers in Dentistry - European Division (WFLD-ED) & 6th Intl Conference Lasers in Medicine (ICLM, May 7-9, 2015)*, ISSN 1605-7422, Bucharest (Romania), **2016**; doi: [10.1117/12.2192855](https://doi.org/10.1117/12.2192855)
- ISI.C68. Zaharia C., Gabor A., Topala F. I., Negrutiu M. L., Sinescu C., **Duma V.-F.**, Podoleanu A. Gh., OCT Evaluation of Zirconia Fixed Partial Prosthesis Processed with a Conventional CAD/CAM Technology, *Proc. SPIE*, Vol. 9670, 967010, Todea C., Podoleanu A., Duma V.-F., Eds., *5th World Federation of Lasers in Dentistry - European Division (WFLD-ED) & 6th Intl Conference Lasers in Medicine (ICLM, May 7-9, 2015)*, ISSN 1605-7422, Bucharest (Romania), **2016**; doi: [10.1117/12.2192980](https://doi.org/10.1117/12.2192980)
- ISI.C67. Pribac V., Todea C., **Duma V.-F.***, Low-Level Laser Therapy (LLLT) for periodontal pockets. A preliminary study, *Proc. SPIE*, Vol. 9670, 96700K, Todea C., Podoleanu A., Duma V.-F., Eds., *5th World Federation of Lasers in Dentistry - European Division (WFLD-ED) & 6th Intl Conference Lasers in Medicine (ICLM, May 7-9, 2015)*, ISSN 1605-7422, Bucharest (Romania), **2016**; doi: [10.1117/12.2192010](https://doi.org/10.1117/12.2192010)
- ISI.C66. Marcauteanu C., Sinescu C., Negrutiu M. L., Stoica E. T., **Duma V.-F.**, Bradu A., Podoleanu A. Gh., Evaluation of Tizian overlays by means of a swept source optical coherence tomography system, *Proc. SPIE*, Vol. 9670, 96700X, Todea C., Podoleanu A., Duma V.-F., Eds., *5th World Federation of Lasers in Dentistry - European Division (WFLD-ED) & 6th Intl Conference Lasers in Medicine (ICLM, May 7-9, 2015)*, ISSN 1605-7422, Bucharest (Romania), **2016**; doi: [10.1117/12.2191905](https://doi.org/10.1117/12.2191905)
- ISI.C65. Stoica E. T., Marcauteanu C., Sinescu C., Negrutiu M. L., **Duma V.-F.**, Bradu A., Podoleanu A. Gh., All ceramic "table tops" analyzed using swept source optical coherence tomography, *Proc. SPIE*, Vol. 9670, 967011, Todea C., Podoleanu A., Duma V.-F., Eds., *5th World Federation of Lasers in Dentistry - European Division (WFLD-ED) & 6th Intl Conference Lasers in Medicine (ICLM, May 7-9, 2015)*, ISSN 1605-7422, Bucharest (Romania), **2016**; doi: [10.1117/12.2191909](https://doi.org/10.1117/12.2191909)
- ISI.C64. Dughir C., Popovschi A. M., Clonda C. S., Topala F. I., Negrutiu M. L., Sinescu C., de Sabata A., **Duma V.-F.***, Complete Denture Base Assessment using Holograms for Dimensional Alterations after Different Activation Methods, *Proc. SPIE*, Vol. 9670, 967013, Todea C., Podoleanu A., Duma V.-F., Eds., *5th World Federation of Lasers in Dentistry - European Division (WFLD-ED) & 6th Intl Conference Lasers in Medicine (ICLM, May 7-9, 2015)*, ISSN 1605-7422, Bucharest (Romania), **2016**; doi: [10.1117/12.2191886](https://doi.org/10.1117/12.2191886)
- ISI.C63. Negrutiu M. L.*, Sinescu C., Craciunescu E. L., Topala F. I., Cojocariu A. C., **Duma V.-F.**, and Podoleanu A. Gh., Assessment of Dental Plaque by Optoelectronic Methods, *Proc. SPIE*, Vol. 9670, 96700W, Todea C., Podoleanu A., Duma V.-F., Eds., *5th World Federation of Lasers in Dentistry - European Division (WFLD-ED) & 6th Intl Conference Lasers in Medicine (ICLM, May 7-9, 2015)*, ISSN 1605-7422, Bucharest (Romania), **2016**; doi: [10.1117/12.2191640](https://doi.org/10.1117/12.2191640)
- ISI.C62. **Duma V.-F.***, Demian D., Sinescu C., Negrutiu M. L., Cernat R., Topala F. I., Hutiu Gh., Bradu A., Podoleanu A. Gh., Handheld scanning probes for OCT: Developments, applications and perspectives, *Proc. SPIE*, Vol. 9670, 96700V, Todea C., Podoleanu A., Duma V.-F., Eds., *5th World Federation of Lasers in Dentistry - European Division (WFLD-ED) & 6th Intl Conference Lasers in Medicine (ICLM, May 7-9, 2015)*, ISSN 1605-7422, Bucharest (Romania), **2016** - Invited Paper; doi: [10.1117/12.2178590](https://doi.org/10.1117/12.2178590)
- ISI.C61. Gabor A.*, Jivanescu A., Zaharia C., Hategan S., Topala F. I., Negrutiu M. L., Sinescu C., **Duma V.-F.**, Podoleanu A. Gh., OCT evaluation of single ceramic crowns made with conventional and chair-side CAD/CAM technology, *Proc. SPIE*, Vol. 9670, 96700Z, Todea C., Podoleanu A., Duma V.-F., Eds., *5th World Federation of Lasers in Dentistry - European Division (WFLD-ED) & 6th Intl Conference Lasers in Medicine (ICLM, May 7-9, 2015)*, ISSN 1605-7422, Bucharest (Romania), **2016**; doi: [10.1117/12.2191907](https://doi.org/10.1117/12.2191907)
- ISI.C60. Mnerie C. A.*, Preitl S., **Duma V.-F.**, Classical PID versus predictive control solutions for a galvanometer-based scanner, *IEEE Applied Computational Intelligence and Informatics (SACI)*, 349-353, May 21-23, **2015**; doi: [10.1109/SACI.2015.7208227](https://doi.org/10.1109/SACI.2015.7208227)
- ISI.C59. **Duma V.-F.***, Demian D., Dobre G. M., Sinescu C., Cernat R. C., Negrutiu M. L., Hutiu Gh., Bradu A., Rolland J. P., Podoleanu A. Gh., Constructive solutions of handheld probes with galvanometer scanners for biomedical and industrial imaging. Applications in OCT, *Proc. SPIE*, Vol. 9633, 96330Q, Mazuray L., Wartmann R., Wood A. P., Eds., *SPIE OptiFab (Optical Design and Engineering VI)*, ISSN 0277-786X, Rochester, NY (USA), Oct. 12-15, **2015**; doi: [10.1117/12.2195839](https://doi.org/10.1117/12.2195839)
- ISI.C58. **Duma V.-F.***, Dobre G. M., Demian D., Cernat R. C., Sinescu C., Topala F. I., Negrutiu M. L., Hutiu Gh., Bradu A., Rolland J. P., and Podoleanu A. Gh., Handheld probes and galvanometer scanning for optical coherence tomography, *Proc. SPIE*, Vol. 9626, 9626-50, Mazuray L., Wartmann R., Wood A. P., Eds., *SPIE Optical Design (Optical Design and Engineering VI)*, ISSN 0277-786X, Jena (Germany), Sept. 7-10, **2015**; doi: [10.1117/12.2191130](https://doi.org/10.1117/12.2191130)

- ISI.C57. Sinescu C., Negrutiu M. L., Manole M., de Sabata A., Rusu L.-C., Stratul S., Dudea D., Borzea D., **Duma V.-F.***, Retractions of the Gingival Margins Evaluated by Holographic Methods, *Proc. SPIE*, Vol. 9508, 95080V, Hrabovský M., Sheridan J. T., Fimia A., Eds., *Holography: Advances and Modern Trends IV (Optics + Optoelectronics)*, ISSN 0277-786X, Prague (Czech Republic), Apr. 13-16, **2015** <http://dx.doi.org/10.1117/12.2179010>
- ISI.C56. Negrutiu M. L., Sinescu C., Borlea M. V., Manescu A., **Duma V.-F.***, Rominu M., and Podoleanu A. Gh., Direct composite fillings: an optical coherence tomography and microCT investigation, *Proc. SPIE*, Vol. 9412, 94123R, Hoeschen C., Kontos D., Flohr T. G., Eds., *Physics of Medical Imaging (SPIE Medical Imaging)*, ISSN 0277-786X, Orlando (USA), Febr. 21-26, **2015**; <http://dx.doi.org/10.1117/12.2081661>
- ISI.C55. Sinescu C., Negrutiu M. L., Nica L., Manescu A., **Duma V.-F.***, and Podoleanu A. Gh., MicroCT and Optical Coherence Tomography imagistic assessment of the dental roots adhesive, *Proc. SPIE*, Vol. 9417, 9417-29, Gimi B., Molthen R. C., Eds., *Biomedical Applications in Molecular, Structural, and Functional Imaging (SPIE Medical Imaging)*, ISSN 0277-786X, Orlando (USA), Febr. 21-26, **2015**; <http://dx.doi.org/10.1117/12.2082470>
- ISI.C54. **Duma V.F.***, Tankam P., Huang J., Won J. J., and Rolland J. P., Effective duty cycle of galvanometer-based scanners: Impact on OCT imaging, *Proc. SPIE*, Vol. 9315, 93150J, Raghavachari R., Liang R., Eds., *Design and Quality for Biomedical Technologies VIII (BIOS, Photonics West)*, ISSN 0277-786X, San Francisco (USA), Febr. 7-12, **2015**; <http://dx.doi.org/10.1117/12.2079776>
- ISI.C53. Ciră O. and **Duma V.-F.***, Optomechatronic choppers with rotating elements: analysis and design, *Springer Proceedings in Mathematics and Statistics*, Vol. 93 (Applied Non-Linear Dynamical Systems / DSTA 2013), 457-464, Awrejcewicz J., Ed., ISSN 2194-1009, ISBN 978-3-319-08265-3, Springer **2014**; http://dx.doi.org/10.1007/978-3-319-08266-0_34;
- ISI.C52. Canjau S.*, Todea C., Sinescu C., Negrutiu M., **Duma V.-F.**, Manescu A., Topala F., and Podoleanu A. Gh., Optical imaging of oral squamous cell carcinoma using optical coherence tomography and micro CT, *Key Engineering Materials* 587, 331-337, Trans Tech Publications (Switzerland), ISSN 1662-9795, **2014** <http://dx.doi.org/10.4028/www.scientific.net/KEM.587.331>;
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