



Curriculum vitae

Personal Information

Name / Surname	DUTA Liviu-Marian
Address	Bucharest, Romania
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Nationality	Romanian
Sex	Male

Official Affiliation and Address

“Laser-surface-plasma interactions” (LSPI) laboratory, Lasers Department, National Institute for Laser, Plasma and Radiation Physics (INFLPR), 409 Atomistilor Street, Magurele, Ilfov, Romania

Website

<http://lspi.inflpr.ro/People/CV%20Liviu%20Duta.html>
<http://www.researcherid.com/rid/G-3417-2011>
<https://www.brainmap.ro/liviu-marian-duta>

Education and training

Period	2008–2013
Degree / Qualification	PhD in Exact Sciences, Physics
Thesis Title	“The synthesis by pulsed laser techniques of adherent and conductive nanostructured coating of metal oxides, bioglasses and calcium phosphates for biomedical applications”
Institution	Faculty of Physics, University of Bucharest
Period	2006–2008
Degree / Qualification	Master’s Degree in Biomaterials
Thesis Title	„Bioglass coatings obtained by pulsed laser deposition – structure and properties”
Institution	Department of Bioengineering and Biotechnology, Faculty of Applied Chemistry and Materials Science, University Politehnica of Bucharest
Period	2001–2006
Degree / Qualification	Engineer Diploma
Thesis Title	„Calibration of porosity in a layer using electrochemical impedance spectroscopy”

Institution	Faculty of Materials Science and Engineering, University Politehnica of Bucharest
Period	1997–2001
Degree / Qualification	High School Diploma
Profile	Foreign languages
Institution	Mihail Sadoveanu Theoretical High-School, Bucharest
Professional experience	
Period	01.04.2024 – present
Position	Senior Scientific Researcher, I st degree
Main activities and responsibilities	Organization of complex experiments, preparation of project proposals (national, international, bilateral), data processing and interpretation, supervision, writing and publication of scientific papers in ISI-ranked journals (Q1/Q2), mentoring of early-career researchers.
Employer	INFLPR, 409 Atomistilor Street, Magurele, Ilfov, Romania
Type of activity	Research and development
Period	01.09.2016 – 29.03.2024
Position	Senior Scientific Researcher, II nd degree
Main activities and responsibilities	Design of complex experiments, drafting of project proposals, processing and interpretation of experimental data, coordination and writing of scientific articles.
Employer	INFLPR, 409 Atomistilor Street, Magurele, Ilfov, Romania
Type of activity	Research and development
Period	03.01.2013 – 31.08.2016
Position	Scientific Researcher, III rd degree
Main activities and responsibilities	Laser processing experiments; structural, optical, and electrical analyses of the synthesized coatings.
Employer	INFLPR, 409 Atomistilor Street, Magurele, Ilfov, Romania
Type of activity	Research and development
Period	01.01.2011 – 02.01.2013
Position	Scientific Researcher
Main activities and responsibilities	Preparation of the experimental setup; synthesis of thin films using Pulsed Laser Deposition (PLD) and Matrix-Assisted Pulsed Laser Evaporation (MAPLE).
Employer	INFLPR, 409 Atomistilor Street, Magurele, Ilfov, Romania
Type of activity	Research and development
Period	01.05.2007 – 31.12.2010
Position	Research Assistant

Main activities and responsibilities	Setup preparation; participation in PLD and MAPLE experiments.
Employer	INFLPR, 409 Atomistilor Street, Magurele, Ilfov, Romania
Type of activity	Research and development

Period	01.11.2006 – 30.04.2007
Position	Intern Research Assistant
Main activities and responsibilities	Laser alignment and focusing; PLD target preparation.
Employer	INFLPR, 409 Atomistilor Street, Magurele, Ilfov, Romania
Type of activity	Research and development

Research Internships and Study Grants	• 23.06 – 11.07.2022: Faculty of Electrical Engineering and Computer Science, “Stefan cel Mare” University, Suceava, Romania. • 13.05 – 06.06.2022: Faculty of Electrical Engineering and Computer Science, “Stefan cel Mare” University, Suceava, Romania. • 07.12 – 13.12.2017: Institute of Solid State Physics, Institute of Electronics, and Institute of Electrochemistry and Energy Systems, Bulgarian Academy of Sciences, Sofia, Bulgaria. • 27.11 – 02.12.2014: Institute of Solid State Physics, Institute of Electronics, and Institute of Electrochemistry and Energy Systems, Bulgarian Academy of Sciences, Sofia, Bulgaria. • 26.11 – 02.12.2012: Program "Young Researchers Training in Nanotechnology and Processing of Functional Materials", Faculty of Technology and Metallurgy, University of Belgrade, Serbia. • 19 – 24.09.2011: Department of Bioengineering, Faculty of Engineering, Marmara University, Istanbul, Turkey. • 17 – 21.11.2010: Institute of Physics, Academy of Sciences, Prague, Czech Republic. • 01.03.2006 – 30.06.2006: Socrates/Erasmus Scholarship, National Institute of Applied Sciences (INSA), Strasbourg, France.
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Editorial and Scientific Board Memberships	• Frontiers in Ceramics (https://www.frontiersin.org/journals/ceramics/editors). • International Journal of Molecular Sciences, MDPI (https://www.mdpi.com/journal/ijms/topic_editors/material_sciences). • Coatings, MDPI (https://www.mdpi.com/journal/coatings/topic_editors).
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Member of International Conference Committees	• „International Conference on Renewable and Sustainable Energy (RenewableEng-2023)”, Xperts Meetings, Barcelona, Spain, September 25-27, 2023. • „2nd Edition of European Summit on Laser Optics & Photonics Technology (ELOPS-2024 - Hybrid Edition)”, Xperts Meetings, Paris, France, September 26-28, 2024. • „10th International Conference on Photoexcited Processes and Applications”, ICPEPA 10, (http://icpepa10.com/), Transilvania University & INFLPR, Brasov, Romania, 2016.
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Special Issue Editorships	• “Biofabrication and Groundbreaking Applications of Polymers of Natural Origin” (https://www.frontiersin.org/research-topics/67470/biofabrication-and-groundbreaking-applications-of-polymers-of-natural-origin), Frontiers in Bioengineering and Biotechnology, 2025. • “The Heat Equation: The Theoretical Basis for Materials Processing” (https://www.mdpi.com/journal/materials/special_issues/KIP5LG15V3), Materials, 2025. • “Biomimetic Coating Technologies and Biomaterials for Medical Applications” (https://www.mdpi.com/journal/biomimetics/special_issues/492RVE99IW), Biomimetics, 2024. • “Biofunctional Coatings for Medical Applications” (https://www.mdpi.com/journal/ijms/special_issues/7667CP22MI), International Journal of Molecular Sciences, 2024. • “Fabrication Strategies of Molecular Layers for Modern Medical Applications” (https://www.mdpi.com/journal/ijms/special_issues/H27409D8Y0), International Journal of Molecular Sciences, 2023. • “Organic and Inorganic Materials for the Fabrication of Molecular Layers for Medical Applications” (https://www.mdpi.com/journal/ijms/special_issues/H27409D8Y0), International Journal of Molecular Sciences, 2023. • “Advances and Challanges in Pulsed Laser Deposition for Complex Material Applications” (https://www.mdpi.com/journal/coatings/special_issues/GRKZQJ0UI1), Coatings, 2023. • “Calcium phosphates of synthetic and natural origin: current status and future challenges” (https://www.frontiersin.org/research-topics/31606/calcium-phosphates-of-natural-origin-current-status-and-future-challenges), Frontiers in Bioengineering and Biotechnology, 2022. • “Laser-Assisted Processing of Metals and Alloys” (https://www.mdpi.com/journal/metals/special_issues/Laser_Processing_Metals), Metals, MDPI, 2021. • “Synthetic and Biological-Derived Hydroxyapatite Implant Coatings” (https://www.mdpi.com/journal/coatings/special_issues/hydroxyapatite), Coatings, MDPI, 2019. • “Current Research in Pulsed Laser Deposition” (https://www.mdpi.com/journal/coatings/special_issues/pulse_laser_depos), Coatings, MDPI, 2018.
Scientific Output (see Annex I)	• 68 ISI-indexed articles • 2 National Patents • 7 proceeding papers • 1 edited eBook • 3 Book chapters • 3 Editorials • 1 Preface (International Conference)
National and International Conference Participation (available upon request)	• Invited/Keynote/Oral presentations – 39 (13 as main author) • Poster presentations – 106 (50 as main author)

Awards and Distinctions

- “*Best Poster award*”, International Conference on Materials: Advanced and Emerging Materials (sciforum-054742), pentru lucrarea “Pulsed laser deposited bi-phasic calcium phosphate implant coatings fabricated from fish bones”, Gianina Popescu-Pelin, Carmen Ristoscu, Liviu Duta, Iuliana Pasuk, George E. Stan, Miruna Silvia Stan, Marcela Popa, Mariana C. Chifiriuc, Claudiu Hapenciuc, Faik N. Oktar, Anca Nicarel, Ion N. Mihailescu, November 22-24, 2021.

- “*Best Poster presentation*”, International Conference „New Trends on Sensing-Monitoring-Telediagnosis for Life Sciences (NT SMT-LS)”, for the work titled “Matrix-assisted pulsed laser evaporation of lignin addition to simple and silver-doped hydroxyapatite thin films: structural and biological evaluation”, N. Mihailescu, C. Ristoscu, A. Janković, S. Eraković, I.N. Mihailescu, G. E. Stan, L. Duta, A. Visan, A. C. Popa, M. A. Husanu, C. Bleotu, M. C. Chifiriuc, C. R. Luculescu, V. V. Srdić, Dj. Janačković, V. Mišković-Stanković, Brasov, Romania, September 3-5, 2015;

- “*Ion Agarbiceanu (2015)*” INFLPR, for the paper „Novel doped hydroxyapatite thin films obtained by Pulsed Laser Deposition”, L. Duta *et al.*, Applied Surface Science 265 (2013) – most cited paper in 2014.

- “*Best Oral presentation*” at „5th International Student Conference on Photonics (ISCP)”, for the work „Pure and doped hydroxyapatite thin films synthesized by pulsed laser deposition for metal implant coatings”, A. Visan, S. Erakovic, A. Jankovic, C. Ristoscu, L. Duta, N. Mihailescu (Serban), G.E. Stan, M. Socol, O. Iordache, I. Dumitrescu, C.R. Luculescu, I.N. Mihailescu, Dj. Janackovic, V. Miskovic-Stankovic, Orastie, Romania, September 23-26, 2014.

- „*Best Poster (Session C)*”, at the Workshop „Transition Metal Oxide Thin Films-functional Layers in “Smart windows” and Water Splitting devices: Technology and Optoelectronic properties” (INERA), for the work “ZnO and hydrophobin thin coatings on textiles substrates for biomedical applications”, Anita Ioana Visan, A.C. Popescu, G. E. Stan, L. Duta, G. Dorcioman, O. Iordache, I. Dumitrescu, I. Pasuk, I. N. Mihailescu, Varna, Bulgaria, September 4-6, 2014.

- „*OSA Best Student Presentation*” at the International Conference „Micro- to Nano-Photonics III (ROMOPTO)”, for the work „Hydroxyapatite thin films synthesized by Pulsed Laser Deposition and radio Frequency-Magnetron Sputtering onto titanium mesh implants”, L. Duta, G.E. Stan, G. Socol, A.C. Popescu, F.M. Miroiu, I.N. Mihailescu, A. Ianculescu, A. Chiriac, I. Poata, Bucuresti, Romania, Septembrie 3-6, 2012.

- „*Best poster presentation*” at the International Conference „E-MRS Spring Meeting”, for the paper „Compositional assay of steels by laser induced breakdown spectroscopy and spark optical emission spectroscopy”, A. C. Popescu, E. Mothe, C. Popescu, L. Duta, D. Craciun, V. Craciun, I. N. Mihailescu, J. Hermann, I. Pencea, E. C. Sfat, A. Bodea, Simpozionul V, Strasbourg, Franta, May 19-23, 2012.

Member of the Scientific Committee for Doctoral Studies

- Doctoral School of Physics, Faculty of Physics, University of Bucharest.

Reviewer for International journals	• ACS Omega; Applied Physics A: Materials Science & Processing; Applied Sciences; Applied Surface Science; Bioengineering; Biomedical Materials; Biomimetics; Ceramics International; Chemical papers; Coatings; Environmental Science: Nano; Frontiers in Bioengineering and Biotechnology; Inorganic Chemistry Communications; International Journal of Biological Macromolecules; International Journal of Molecular Sciences; Journal of Crystal Growth; Journal of Functional Biomaterials; Journal of Physics D: Applied Physics; Journal of the Mechanical Behavior of Materials; Lubricants; Materials; Materials Advances; Materials Chemistry Frontiers; Metabolites; Metals; Molecules; Nanomaterials; Next Materials; Optical and Quantum Electronics; Optik - International Journal for Light and Electron Optics; Pharmaceutics; Polymers; Prosthesis; Scientific Reports; Sensors; Surface & Coatings Technology; Tissue Engineering.
Evaluator for national projects	• Executive Agency for Funding Higher Education, Research, Development and Innovation (UEFISCDI), Experimental Demonstration Project (PED2019).
Advisory Board member/Organizing Committee for International Conferences	• „2nd Edition of European Summit on Laser Optics & Photonics Technology (ELOPS-2024 - Hybrid Edition)”, Xperts Meetings, Paris, France, September 26-28, 2024. • „International Conference on Renewable and Sustainable Energy (RenewableEng-2023)”, Xperts Meetings, Barcelona, Spain, September 25-27, 2023. • „10th International Conference on Photoexcited Processes and Applications”, ICPEPA 10, (http://icpepa10.com/), Brasov, Romania, August 29 – September 2, 2016.
Member in International Research Projects	• “Ag/Si doped Carbon thin layers for medical applications (CarLa)”, Contract No. 7-083/2014. • „Reinforcing of Nanotechnology and Functional Materials Centre” FP7 - Theme Research potential (FP7 - REGPOT - 2009 - 1)”, Project Coordinator: Faculty of Technology and Metallurgy, University of Belgrade, Serbia (2009 - 2012). • „Hydroxyapatite nanocomposite ceramics – new implant material for bone substitute EUREKA (BIONANOCOMPOSIT E!3033)”, Coordinator: Riga Technical University, Latvia, Contract No. 37/2005.
Director of National Research Projects	• „<i>Marine-derived hydroxyapatite coatings as sustainable biomaterials for implantable applications (MarineHA)</i>”, Project code: PN-III-P1-1.1-TE-2019-1449 (TE 189 / 13.01.2021), https://marineha.inflpr.ro/. • „<i>In vivo testing of novel doped biological-derived hydroxyapatite thin films synthesized by pulsed laser deposition techniques for a new generation of metallic implants (VivoBHA)</i>”, Project code: PN-III-P1-1.1-PD-2016-1568 (PD 6 / 02.05.2018), http://lspi.inflpr.ro/2018/PD6/index.html. • “<i>Highly adherent biological Hydroxyapatite thin films synthesized by pulsed laser deposition techniques for medical applications (HABioMed)</i>”, Project code: PN-II-RU-TE-2014-4-1570 (TE 10801/10/2015), http://lspi.inflpr.ro/contracte%20noi/site%20TE%20108/index.html.
Membru in National Research Projects	23+ Projects

**Coordinator for
specialization and
internship programs**

- Internship program – Zancu Andrei-Silviu, Faculty of Physics, Bucharest University, August 7 – September 11, 2023.
- “Étude des céramiques: matériaux dopés ou non pour des applications biomédicales”, Quentin Bonnet, Institut Universitaire de Technologie (I.U.T.) de Marseille, April 8 – June 21, 2019.
- “Synthèse et caractérisation de couches minces par la technologie d’ablation laser pulse: application en nano-médecine”, Quentin Féraud, Institut Universitaire de Technologie (I.U.T.) de Marseille, April 9 – June 22, 2018.
- “Synthèse de couches minces d’Hydroxyapatite d’origine biologique dopée avec du Fluorure de Magnésium par la technique de Dépôt Laser Pulsée”, Gwenaél Urhahn, Institut Universitaire de Technologie (I.U.T.) de Marseille, April 10 – June 24, 2017.
- “Dépôts par ablation laser pulsé de couches minces d’hydroxyapatite biologique dopée au lithium pour des applications biomédicales”, Thibault Mazzei, Institut Universitaire de Technologie (I.U.T.) de Marseille, April 4 – June 17, 2016.
- “Synthèse des couches minces d’hydroxyapatite d’origine biologique par des techniques de dépôt laser pulsées”, Victor Delaforge, I.U.T. de Marseille, April 7 – June 20, 2014.
- “Obtention des couches biocompatibles d’hydroxyapatite par techniques de dépôt laser pulse”, Florian Babin, Polytech Lille, May – July, 2013.
- “Synthèse de couches minces d’hydroxyapatite carbonaté dopé avec différents ions pour des applications biomimétiques”, Bertrand Yvernault, I.U.T. de Marseille, April 8 – June 21, 2013.
- “Dépôt d’hydroxyapatite biologique dopé au verre bioactif par ablation laser pulsé”, Razafimandanona Dina, I.U.T St Jérôme de Marseille, April 11 – June 23, 2012.
- “Couches minces des phosphates de calcium déposés par PLD”, Nicolas Van Ghele, I.U.T. de Marseille, April – June, 2011.
- “Synthesis of calcium phosphates thin layers by PLD for orthopaedic and oral implants”, Gael Porte, I.U.T de Marseille, Department Mesures Physiques, April 5 – June 19, 2009.

**Skills and
Competencies**

Foreign languages

Listening

Spoken

Writing

European level ()*

Listening

Reading

Spoken
interaction

Oral speech

Writing

English

C1 Advanced

C1 Advanced

C1 Advanced

C1 Advanced

C1 Advanced

French

C1
Advanced

C1 Advanced

B2 Upper-
intermediate

B2 Upper-
intermediate

B1 Intermediate

()Level of the Common European Framework of Reference for Languages.*

**Social Skills and
Competences**

- High-level scientific communication skills developed through participation in project teams (national/international), internships, conferences, and workshops.
- Strong team player and also capable of working independently; sociable, open, and empathetic.
- Ability to lead research groups while fostering a collegial and productive working atmosphere.

Other abilities	• Ability to initiate research topics aligned with the thematic areas and strategic objectives of the Institute. • Preparation and coordination of research project proposals. • Capability to design, organize, and conduct complex experimental investigations. • Processing and interpretation of experimental data. • Coordination and authorship of scientific publications. • Supervision and mentorship of students, PhD candidates, and early-career researchers.
Organizational Skills and Competences	• Member of scientific boards and organizing committees of international conferences. • Editorial board member of ISI-ranked journals. • Editor of special issues in high-impact journals. • Principal investigator of national research projects (PD- and TE-type).
Technical Skills and Expertise	• Experience in the design and operation of complex laboratory setups for the fabrication of highly adherent thin films and/or nanoparticles using pulsed laser deposition techniques (PLD, MAPLE). • Expertise in surface characterization techniques, including UV-VIS spectrophotometry, Fourier Transform Infrared (FTIR) spectroscopy, optical and fluorescence microscopy, four-point probe electrical measurements, pull-out bonding strength tests, and primary biological assays.
Computer skills	• Proficient in: Windows, Microsoft Office, Adobe (Acrobat, Reader, Photoshop), Origin, ImageJ, Canvas. • Experienced in website development and maintenance.
Additional Information	• Total citations: <i>1371</i> (Web of Science Core Collection) / <i>1472</i> (Scopus) / <i>1838</i> (Google Scholar). • <i>H-Index</i>: <i>22</i> (Web of Science Core Collection) / <i>24</i> (Scopus) / <i>26</i> (Google Scholar).

68. „Development of Polylactic Acid/Hydroxyapatite Composite Filaments for 3D Printing of Bone Tissue Engineering Scaffolds”, Bilal Cinici, Sule Gozonunde, Mustafa Kurt, **Liviu Duta**, Oguzhan Gunduz. Progress in Biomaterials, <https://doi.org/10.57647/pibm.2025.17542>, Article in Press, 2025;
67. „Fine-tuning equilibrium water content and mechanical properties of acrylic-based copolymers for intraocular lens applications”, Deniz Aki, Monireh Esmaeili Rad, Esat Can Şenel, Mesut Celil Onceyiz, Melih Can Gokmenoglu, **Liviu Duta**, Oguzhan Gunduz. Biomedical Materials **20**(4), 045026, <https://doi.org/10.1088/1748-605X/ade8c7>, 2025;
66. „Bioactive Hydroxyapatite–Carboplatin–Quercetin Coatings for Enhanced Osteointegration and Antitumoral Protection in Hip Endoprostheses”, Gheorghe Iosub, Dana-Ionela Tudorache (Trifa), Ionuț Marinell Iova, **Liviu Duta**, Valentina Grumezescu, Alexandra Cătălina Bîrcă, Adelina-Gabriela Niculescu, Paul Cătălin Balaure, Ionela Cristina Voinea, Miruna S. Stan, Dragoș Mihai Rădulescu, Adrian Emilian Bădilă, Bogdan Ștefan Vasile, Alexandru Mihai Grumezescu, Adrian Radu Rădulescu. Coatings **15**(4), <https://doi.org/10.3390/coatings15040489>, 2025;
65. „Development and Characterization of Antimicrobial Chitosan/Polyethylene Oxide/Bacterial Cellulose Nanofibers”, Fatma Sude Cetin, Tubanur Avci, Emre Uygur, Elif Ilhan, Elif Kaya, Gulgun Bosgelmez Tinaz, **Liviu Duta**, Canan Dogan, Oguzhan Gunduz. Polymers **17**(5), <https://doi.org/10.3390/polym17050693>, 2025;
64. „The Key Role of Thermal Relaxation Time on the Improved Generalized Bioheat Equation: Analytical Versus Simulated Numerical Approach”, Alexandra Maria Isabel Trefilov, Mihai Oane, **Liviu Duta**. Materials **18**(15), <https://doi.org/10.3390/ma18153524>, 2025;
63. „Fabrication of Lithium-doped biological-derived hydroxyapatite and zoledronic acid bi-layered structures for implantology”, Oana Andreea Zureigat, Johnny Neamțu, Paula Florian, Madalina Icriverzi, Livia E. Sima, Andrei Biță, Maria Viorica Ciocîlteu, Gabriela Dorcioman, Valentina Grumezescu, Gianina Popescu-Pelin, **Liviu Duta**. Farmacia **73**(1), <https://doi.org/10.31925/farmacia.2025.1.20>, 2025;
62. „Enhancing orthopaedic implant efficacy: the development of cerium-doped bioactive glass and polyvinylpyrrolidone composite coatings via MAPLE technique”, Gratiela Gradisteanu-Pircalabioru, Irina Negut, Mihaela Dinu, Anca Constantina Parau, Bogdan Bită, **Liviu Duta**, Carmen Ristoscu, Bogdan Sava. Biomedical Materials **20**, 015019 <https://doi.org/10.1088/1748-605X/ad98d5>, 2025;
61. „Ultra-Short Pulses Laser Heating of Dielectrics: A Semi-Classical Analytical Model”, Liviu Badea, **Liviu Duta**, Cristian N. Mihailescu, Mihai Oane, Alexandra M. I. Trefilov, Andrei Popescu, Claudiu Hapenciuc, Muhammad Arif Mahmood, Dorina Ticos, Natalia Mihailescu, Carmen Ristoscu, Sinziana A. Anghel, Ion N. Mihailescu. Materials **17**(21), <https://doi.org/10.3390/ma17215366>, 2024;

60. „Development and characterisation of implantable sandwich structures made of lithium-doped biological-derived hydroxyapatite and ciprofloxacin”, Oana Andreea Zureigat, Johny Neamțu, **Liviu Duta**, Mădălina Icriverzi, Paula Florian, Livia-Elena Sima, Gabriela Dorcioman, Valentina Grumezescu, Roxana-Maria Bălășoiu, Sandra Alice Buteică, Renata Maria Văruț, Oana Elena Nicolaescu. *Farmacia* **72**(6), <https://doi.org/10.31925/farmacia.2024.6.21>, 2024;
59. „Development and Evaluation of Fucoïdan-Loaded Electrospun Polyvinyl Alcohol/Levan Nanofibers for Wound Dressing Applications”, Ismayilova, N.; Zia, M.K.; Akkaya, H.S.; Ulag, S.; Guldorum, Y.; Oner, E.T.; Ince, E.; **Duta, L.**; Gunduz, O. *Biomimetics* **9**(9), 508, <https://doi.org/10.3390/biomimetics9090508>, 2024;
58. „Fabrication Strategies for Bioceramic Scaffolds in Bone Tissue Engineering with Generative Design Applications”, Cinici B, Yaba S, Kurt M, Yalcin HC, **Duta L**, Gunduz O. *Biomimetics* **9**(7), 409, <https://doi.org/10.3390/biomimetics9070409>, 2024;
57. „The Effect of Doping on the Electrical and Dielectric Properties of Hydroxyapatite for Medical Applications: From Powders to Thin Films”, **Liviu Duta**, Valentina Grumezescu, *Materials* **17**(3), 640, <https://doi.org/10.3390/ma17030640>, 2024;
56. „Synthetic and Biological-Derived Hydroxyapatite Implant Coatings”, **Liviu Duta**, Faik Nüzhet Oktar, *Coatings* **14**(1), 39, <https://doi.org/10.3390/coatings14010039>, 2023;
55. „Advanced Applications of Silk-Based Hydrogels for Tissue Engineering: A Short Review”, Zekiye Akdag, Songul Ulag, Deepak M. Kalaskar, **Liviu Duta**, Oguzhan Gunduz, *Biomimetics* **8**(8), 612, <https://doi.org/10.3390/biomimetics8080612>, 2023;
54. „Bioactivity and Mechanical Properties of Hydroxyapatite on Ti6Al4V and Si(100) Surfaces by Pulsed Laser Deposition”, Salizhan Kylychbekov, Yaran Allamyradov, Zikrulloh Khuzhakulov, Inomjon Majidov, Simran Banga, Justice ben Yosef, **Liviu Duta**, Ali Oguz Er, *Coatings* **13**(10), 1681, <https://doi.org/10.3390/coatings13101681>, 2023;
53. „Multifunctional Polymeric Biodegradable and Biocompatible Coatings Based on Silver Nanoparticles: A Comparative In Vitro Study on Their Cytotoxicity towards Cancer and Normal Cell Lines of Cytostatic Drugs versus Essential-Oil-Loaded Nanoparticles and on Their Antimicrobial and Antibiofilm Activities”, Rebecca Alexandra Puiu, Alexandra Catalina Birca, Valentina Grumezescu, **Liviu Duta**, Ovidiu Cristian Oprea, Alina Maria Holban, Ariana Hudit, Bianca Galateanu, Paul Catalin Balaure, Alexandru Mihai Grumezescu, Ecaterina Andronescu, *Pharmaceutics*, **15**, 1882, <https://doi.org/10.3390/pharmaceutics15071882>, 2023;
52. „Hydroxyapatite thin films of marine origin as sustainable candidates for dental implants”, G. Dorcioman, V. Grumezescu, G.E. Stan, M.C. Chifiriuc, G. (Gradisteanu) Pircalabioru, F. Miculescu, E. Matei, G. Popescu-Pelin, Irina Zgura, V. Craciun, F.N. Oktar, **L. Duta**, *Pharmaceutics*, **15** (4), 1294, <https://doi.org/10.3390/pharmaceutics15041294>, 2023;

51. „Influence of post-deposition thermal treatments on the morpho-structural, and bonding strength characteristics of lithium-doped biological-derived hydroxyapatite coatings”, **L. Duta**, George E. Stan, Gianina Popescu-Pelin, Irina Zgura, M. Anastasescu, F.N. Oktar, *Coatings* **12** (12), 1883, <https://doi.org/10.3390/coatings12121883>, 2022;
50. „Marine-Derived Bioceramics for Orthopaedic, Reconstructive and Dental Surgery Applications”, Faik Nuzhet Oktar, Semra Unal, Oguzhan Gunduz, Besim Ben Nissan, Innocent J Macha, Sibel Akyol, **Liviu Duta**, Nazmi Ekren, Eray Altan, Mehmet Yetmez, *Journal of the Australian Ceramic Society*, <https://doi.org/10.1007/s41779-022-00813-3>, 2022;
49. „Real-Time Defects Analyses Using High-Speed Imaging during Aluminum Magnesium Alloy Laser Welding”, Sabin Mihai, Diana Chioibas, Muhammad Arif Mahmood, **Liviu Duta**, Marc Leparoux, Andrei C. Popescu, *Metals* **11** (11), 1877, <https://doi.org/10.3390/met11111877>, 2021;
48. „A Review on Biphasic Calcium Phosphate Materials Derived from Fish Discards”, **Liviu Duta**, Gabriela Dorcioman, Valentina Grumezescu, *Nanomaterials* **11** (11), 2856, 2021, <https://doi.org/10.3390/nano11112856>, 2021;
47. „In Vivo Assessment of Synthetic and Biological-Derived Calcium Phosphate-Based Coatings Fabricated by Pulsed Laser Deposition: A Review”, **Liviu Duta**, *Coatings* **11** (1), 99, <https://doi.org/10.3390/coatings11010099>, 2021;
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