



Gianina Florentina Popescu-Pelin

Work permit: Romanian | **Date of birth:** 29 Oct 1986 | **Place of birth:** Magurele, Romania |

Nationality: Romanian | **Phone number:** (+40) 214574491 (Mobile) | **Email address:**

gianina.popescu@inflpr.ro | **Address:** 409 Atomistilor Street, 077125, Magurele, Romania (Work)

WORK EXPERIENCE

NATIONAL INSTITUTE FOR LASER, PLASMA AND RADIATION PHYSICS – MAGURELE, ILFOV, ROMANIA

Business or Sector Professional, scientific and technical activities | **Department** Lasers Department | **Website** www.inflpr.ro

SCIENTIFIC RESEARCHER II DEGREE – APR 2023 – CURRENT

- Coordination of experiments/research in fields such as flexible electronics and biomedicine;
- Analysis and interpretation of R&D results and drawing up research reports;
- Advanced characterisations using X-ray Diffraction (XRD), Fourier-Transform Infrared Spectroscopy (FTIR), and Scanning Electron Microscopy (SEM);
- Dissemination of results through scientific papers and participation in national and international scientific events;
- Drafting of project proposals for European Community international programs and those organised within the National Research-Development plan.

NATIONAL INSTITUTE FOR LASER, PLASMA AND RADIATION PHYSICS – MAGURELE, ILFOV, ROMANIA

Business or Sector Professional, scientific and technical activities | **Department** Lasers Department | **Website** www.inflpr.ro

SCIENTIFIC RESEARCHER III DEGREE – JUL 2018 – MAR 2023

- Specific protocols/procedures elaboration for measuring and analysing data in the field of excimer lasers;
- Experimental design and thin film synthesis by laser techniques;
- Characterisation of the obtained structures by UV - VIS spectrophotometry, nanoweighing, biodegradation;
- Samples preparation and advanced characterisation by X-Ray Diffraction (XRD), Fourier Transform Infrared Spectroscopy (FTIR) and Scanning Electron Microscopy (SEM);
- Correlation of physico-chemical and biological results;
- Dissemination of results through scientific papers;
- Participation in National and International scientific events;
- Project proposals for International Programs of the European Community and for those organised within the National R&D Plan.

NATIONAL INSTITUTE FOR LASER, PLASMA AND RADIATION PHYSICS – MAGURELE, ILFOV, ROMANIA

Business or Sector Professional, scientific and technical activities | **Department** Lasers Department | **Website** www.inflpr.ro

SCIENTIFIC RESEARCHER – JUN 2013 – JUL 2018

- Preparation (laser alignment) and achievement of laser deposition experiments by pulsed laser deposition (PLD), combinatorial PLD (C-PLD), matrix-assisted pulsed laser evaporation (MAPLE) and combinatorial MAPLE (C-MAPLE) techniques;
- Deposition (by other techniques) of thin films and nanoparticles from simple or doped compounds;
- Laser irradiation in solutions;
- Spectrophotometric measurements (UV-VIS and FTIR) on thin films, solutions and powders;
- Electrical characterisation on thin films;
- Thermal and plasma treatments;
- SEM measurements;
- Dissemination of results through scientific papers;

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Business or Sector Professional, scientific and technical activities | **Department** Lasers Department | **Website** www.inflpr.ro

SCIENTIFIC RESEARCH ASSISTANT – OCT 2010 – JUN 2013

- Thin films deposition by pulsed laser techniques;
- Laser irradiations;

- Preparation of targets for PLD and MAPLE experiments;

FUNDENI CLINICAL INSTITUTE – BUCHAREST, ROMANIA

Business or Sector Human health and social work activities | **Department** Nuclear Medicine Department |

Website <https://icfundeni.ro/department/laborator-medicina-nucleara/>

MEDICAL PHYSICIST – MAR 2009 – OCT 2010

- scintigraphic evaluations: bone, myocardial, renal, cerebral, pulmonary and thyroid scintigraphy;

EDUCATION AND TRAINING

OCT 2010 – OCT 2016 Magurele, Ilfov, Romania

PHD IN PHYSICS University of Bucharest, Faculty of Physics

Website <https://www.fizica.unibuc.ro/Fizica/> | **Field of study** Condensed matter physics | **Final grade** Summa cum laude

OCT 2008 – JUN 2010 Magurele, Ilfov, Romania

MSC IN MEDICAL PHYSICS University of Bucharest, Faculty of Physics

Website <https://www.fizica.unibuc.ro/Fizica/> | **Field of study** Biophysics, biochemistry

OCT 2005 – JUN 2008 Magurele, Ilfov, Romania

BSC IN PHYSICS University of Bucharest, Faculty of Physics

Website <https://www.fizica.unibuc.ro/Fizica/> | **Field of study** General knowledge in physics

LANGUAGE SKILLS

Mother tongue(s): **ROMANIAN**

Other language(s):

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken production	Spoken interaction	
ENGLISH	B2	C1	B2	B2	C1
FRENCH	B1	B1	A2	A2	A2

Levels: A1 and A2: Basic user; B1 and B2: Independent user; C1 and C2: Proficient user

SKILLS

Digital Skills

DRIVING LICENCE

Driving Licence: B

IDS

<https://orcid.org/0000-0003-0941-080X>

Scopus Author ID: 55102715400

Loop profile: 1760014

SciProfiles: 712450

H INDEX

18 according to Web of Science; 22 according to Google Scholar; 19 according to Scopus

- **MEMBER OF THE LOCAL ORGANIZING COMMITTEE**

10th International Conference on Photoexcited Processes and Applications (ICPEPA-10) - 29 august – 2 septembrie 2016 <http://icpepa10.com/committees/>

- **LASER, PLASMA, RADIATION-SCIENCE AND TECHNOLOGY (LPR-ST) ASSOCIATION**

Member

- **HONOURS AND AWARDS**

Awarded scholarship: POSDRU/107/1.5/S/82514 project

OCT 2025

Gold Medal

Gold Medal at the XXII edition of the International Salon of Scientific Research Innovation and Inventions for „ DC Scanning Thermal Microscopy for Thermal Conductivity Measurement of Nanomaterials with Submicronic Spatial Resolution”, authors: C. Hapenciuc, A. Visan, G. Popescu-Pelin, M. Oane and I. N. Mihailescu, 15-17 October 2025, HUB UTCN, Cluj-Napoca.

30 OCT 2019

L'Oréal – UNESCO National Fellowship For Women in Science – Physical Sciences Section

Winner of a L'Oréal–UNESCO For Women in Science National Fellowship, 10th edition

MAR 2019

Diploma of Excellence and Gold Medal – International Exhibition of Research, Innovation and Inventions (PRO-INVENT)

Obtained for the paper "Hybrid installation of recovery and/or creation of components by laser cladding allied with nanoparticles" (E. Popovici, I. N. Mihailescu, C. N. Mihailescu, G. Popescu-Pelin, M. Badiceanu, A. Ionita, T. Necsoiu, I. R. Popovici, M. Iliescu, L. Vladareanu, E. M. Stanciu) presented at PRO-INVENT, 17th edition, Cluj-Napoca, March 20–22, 2019.

NOV 2019

Silver Medal – The 16th edition of the International Specialized Exhibition (ISE), INFOINVENT

Obtained for the paper "HYBRID INSTALLATION FOR RECOVERY AND/OR CREATION WITH LASER CLADDING OF COMPONENTS ALLOYED WITH NANOPARTICLES" (Ernest Popovici, N. Ion Mihailescu, Carmen-Georgeta Ristoscu, Cristian Mihailescu, Gianina Florentina Popescu-Pelin, Maria Badiceanu, Maria Badiceanu, Anton Ionita, Carmen-Lavinia Gavrilă Florescu, Teodor Necsoiu, Ioan Razvan Popovici, Diana Chioibas, Andrei Popescu) presented at INFOINVENT, Chişinău, Republic of Moldova, November 20–23, 2019.

NOV 2019

Gold Medal – The 16th edition of the International Specialized Exhibition (ISE), INFOINVENT

Obtained for the paper "CONTINUOUS COAXIAL DEPOSITION HEAD WITH IN-SITU NP SYNTHESIS" (Ernest Popovici, N. Ion Mihailescu, Carmen-Georgeta Ristoscu, Cristian Mihailescu, Gianina Florentina Popescu-Pelin, Maria Badiceanu, Anton Ionita, Carmen-Lavinia Gavrilă Florescu, Teodor Necsoiu, Ioan Razvan Popovici, Diana Chioibas, Andrei Popescu) presented at INFOINVENT, Chişinău, Republic of Moldova, November 20–23, 2019.

NOV 2019

Gold Medal – The 16th edition of the International Specialized Exhibition (ISE), INFOINVENT

Obtained for the paper "MULTIVALENT INSTALLATION FOR LASER DEPOSITION OF FUNCTIONAL LAYERS ON BRAKE DISCS" (Ernest Popovici, N. Ion Mihailescu, Carmen-Georgeta Ristoscu, Cristian Mihailescu, Gianina Florentina Popescu-Pelin, Maria Badiceanu, Anton Ionita, Carmen-Lavinia Gavrilă Florescu, Teodor Necsoiu, Ioan Razvan Popovici, Diana Chioibas, Andrei Popescu) presented at INFOINVENT, Chişinău, Republic of Moldova, November 20–23, 2019.

MAY 2019

Silver Medal - 11th edition of EUROINVENT, European Exhibition of Creativity and Innovation

Obtained for the paper "A multivalent installation for cladding with laser of functional layers on disc breaks" (Ernest Popovici, N. Ion Mihailescu, Cristian Mihailescu, Gianina Florentina Popescu-Pelin, Maria Badiceanu, Anton Ionita,

Carmen-Lavinia Gavrilă Florescu, Teodor Necsoiu, Ioan Razvan Popovici, Diana Chioibas, Andrei Popescu) presented at EUROINVENT, Iași, Romania, May 16–18, 2019.

MAY 2019

Silver Medal - 11th edition of EUROINVENT, European Exhibition of Creativity and Innovation

Obtained for the paper "Intellectual property and database in the project: New advanced surface coating technologies using high power laser beam increase reliability and performance of materials - PRELAM - Competitiveness Operational Program" (Ernest Popovici, N. Ion Mihailescu, Cristian Mihailescu, Gianina Florentina Popescu-Pelin, Maria Badiceanu, Anton Ionita, Besenyei Niculina Mirela, Hapenciuc Claudiu, Negut Irina, Opran Marius, Ristoscu Carmen) presented at EUROINVENT, Iași, Romania, May 16–18, 2019.

MAY 2019

Silver Medal - 11th edition of EUROINVENT, European Exhibition of Creativity and Innovation

Obtained for the paper "Hybrid method of recovery and/or creation of components by laser cladding allied with nanoparticles" (Ernest Popovici, N. Ion Mihailescu, Cristian Mihailescu, Gianina Florentina Popescu-Pelin, Maria Badiceanu, Anton Ionita, Necsoiu Teodor, Popovici Ioan Razvan, Iliescu Mihaiela, Vladareanu Luige, Stanciu Elena Manuela) presented at EUROINVENT, Iași, Romania, May 16–18, 2019.

● **COURSES**

9 JAN 2023 – 11 JAN 2023

Development of innovation capacity of the RDI eco-system; Steps in technological transfer

SC IPA SA CIFATT, Craiova, Romania.

28 NOV 2022 – 30 NOV 2022

Elements and models of contracts for technology transfer

SC IPA SA CIFATT, Craiova, Romania.

14 NOV 2022 – 16 NOV 2022

Technological audit – the evaluation of how to capitalize on R&D results; Analysis of the economic operators' capability in the RDI field

SC IPA SA CIFATT, Craiova, Romania.

11 APR 2022 – 6 MAY 2022

"Successful Presentation" Course

• **Supported by the University of Colorado Boulder**

• **COURSERA platform**

Link: <https://coursera.org/share/98ea4c132e81db0a59c1b193d2e8ca11>

20 NOV 2019 – 26 NOV 2019

Specialization Course in X-ray Diffraction (XRD)

XRD independent user

13 SEP 2019 – 14 SEP 2019

"Successful Presentation" Training

Graduate of "Writing Masterclass - Learn how to communicate fluently and correctly, in writing"

11 JUL 2016 – 15 JUL 2016

Specialization Course in Scanning Electron Microscopy (SEM)

SEM independent user

● **INTERSHIPS AND WORKING STAGES**

ICTP Winter College, Trieste, Italy

Chuiko Institute of Surface Chemistry, National Academy of Science of Ukraine, Kiev, Ucraina

UMONS – University of Mons, Belgium

Institute of Electrochemistry and Energy Systems and Institute of Solid State Physics, Sofia, Bulgaria

Institute of Materials Science of Mulhouse, Mulhouse, France

Israel Institute of Technology, Haifa, Israel; Tel Aviv University, Tel Aviv, Israel

Institute of Physics of the Czech Academy of Sciences, Prague, Czech Republic

● PROJECTS

2026 – 2028

"Bioactive surfaces for enhanced osseointegration of metallic implants" - PN-IV-P2-2.1-TE-2023-2031

Key expert

2025 – 2027

"Dual sensor for H₂ detection at room temperature" - PN-IV-P1-PCE-2023-1902

Key expert

2024 – 2027

"New gas sensing materials with working temperature close to or at room temperature" - ERANET-M-3-GasSensingMat-RT-1

Key expert

2022 – 2024

"Flexible and nanostructured Organic Field Effect Transistor for UV-VIS detection" - PN-III-P2-2.1-PED-2021-3165

Key expert

2021 – 2024

"Thermochromic VO₂ for Energy-Efficient Smart Windows" - RO-NO-2019-0498

Key expert

2021 – 2023

"Implant coatings based on low-cost sustainable natural resources for infection prevention" - PN-III-P4-ID-PCE-2020-2273

Key expert

2021 – 2023

"Waterproof deformable hybrid solar cells" - PN-III-P4-ID-PCE-2020-1691

Key expert

2021 – 2022

"The case of semi-Dirac-point in multilayer TiO₂/VO₂ heterostructures" - PN-III-P1-1.1-TE-2019-1831

Key expert

2020 – 2022

"Enhanced magnetic hyperthermia for malignant melanoma therapy" - PN-III-P2-2.1-PED-2019-3292

Key expert

2020 – 2022

"Composite coatings for bone tissue treatment" - PN-III-P1-1.1-PD-2019-0409

Project coordinator

2018 – 2021

"Integrated development project for advanced medical treatment technologies" - PN-III-P1-1.2-PCCDI-2017-0728

Key expert

2018 – 2021

"Fabrication, calibration, and testing of advanced integrated sensor systems aiming at applications in societal security" - PN-III-P1-1.2-PCCDI-2017-0172

Key expert

2017 – 2019

"Energy - efficient decontamination by UV & cold plasma using metamaterials" - 43 Nato

Key expert

2017 – 2018

"Smart surface functionalization of titanium and stainless steel implants" - PN-III-P2-2.1-PED-2016-0621

Key expert

2015 – 2017

"Highly adherent biological Hydroxyapatite thin films synthesized by pulsed laser deposition techniques for medical applications" - PN-II-RU-TE-2014-4-1570

Key expert

2015 – 2017

"Controlled external activation of drug release from smart polymeric systems" - PN-II-RU-TE-2014-4-1590

Key expert

2015 – 2017

"Senzori cu unde acustice de suprafata pentru detectia H2S bazati pe filme sensibile cu porozitate graduala" - PN-II-RU-TE-2014-4-0342

Key expert

2015 – 2017

"Laser assembling of miniaturized lab-on-a-chip devices for single cell guiding, trapping and analysis" - PN-II-RU-TE-2014-4-1273

Key expert

2014 – 2017

"Research of the bone substitution with biocomposite materials processed by powder metallurgy specific techniques" - PN-II-PT-PCCA-2013-4-2094

Key expert

2012 – 2016

"Fabrication of osteoinductive orthopedic implants with gradual 3D hierarchical structure" - PN-II-PT-PCCA-2011-3.2-0898

Key expert

2013 – 2016

"All-amorphous-oxide transparent and mechanically flexible thin film transistor grown by pulsed laser deposition" - PN-II-ID-PCE-2012-4-0467

Key expert

2012 – 2016

"Investigations of ZrC thin films properties for TRISO nuclear fuel applications" - PN-II-ID-PCE-2011-3-0407

Key expert

2012 – 2014

"Pulsed laser nanostructuring, assembling and immobilization of biomaterials" - PN-II-RU-TE-2011-3-0083

Key expert

2010 – 2013

"Nanostructures processed by laser techniques for photovoltaic applications" - PN-II-RU-TE-2010-0098

Key expert

2016

"Biosensors functionalized by irradiation and transfer with laser pulses" - PN-III-P3-3.1-PM-RO-BE-2016-0003

Key expert

2014

"Biomimetic nanocomposites obtained by advanced laser biotechnologies for rapid healing and bonny tissues regeneration" - PN-II-CT-RO-FR-2014-2-0029

Key expert

● PUBLICATIONS

2025

[Combinatorial screening of structural properties and oxide growth on a co-evaporated AluminiumYtterbium Thin-Film library](#)

Authors: Hofinger M, Mardare AI, Duchoslav J, Popescu-Pelin G, Socol G, Hassel AW | **Journal Name:** Electrochimica Acta | **Volume, Issue and Pages:** Volume 540, 147018 | **Publisher:** Elsevier

2025

[Design and Processing of Metamaterials](#)

Authors: Matei AT, Visan AI and Popescu-Pelin GF | **Journal Name:** Crystals | **Volume, Issue and Pages:** 15(4): 374 | **Publisher:** MDPI

2025

[Composite Films Based on Poly\(3-hexylthiophene\):Perylene Diimide Derivative:Copper Sulfide Nanoparticles Deposited by Matrix Assisted Pulsed Laser Evaporation on Flexible Substrates for Photovoltaic Applications](#)

Authors: Socol M, Preda N, Costas, A, Petre G, Stochioiu A, Popescu-Pelin G, Iftimie S, Catargiu AM, Socol G, Stanculescu A | **Journal Name:** Journal of Composites Science | **Volume, Issue and Pages:** 9(4): 172 | **Publisher:** MDPI

2025

[Insights into the Corrosion Behavior of Pure Magnesium and Magnesium-Calcium Alloy \(Mg-1.8 at.% Ca\) in Thin-Film and Bulk Forms](#)

Authors: Zengin H, Mardare AI, Greul A, Hofinger M, Popescu-Pelin G, Socol G, Hassel AW | **Volume, Issue and Pages:** 18(7), 1416 | **Publisher:** MDPI

2025

[Development of new scaffolds for bone substitution by electrospinning and laser ablation](#)

Authors: Oprica IMA, Beregoi M, Popescu-Pelin GF, Constantinoiu I, Bacalum M, Draghici CI, Jinga SI, Busuioc C | **Journal Name:** Journal of Materials Research and Technology | **Volume, Issue and Pages:** 35: 6087-6101 | **Publisher:** Elsevier

2025

[Influence of flexible substrate nature covered with ITO on the characteristics of organic heterostructures fabricated by laser deposition techniques](#)

Authors: Socol M, Preda, N, Costas, A, Petre G, Stanculescu, A Stavarache I, Popescu-Pelin G, Iftimie S, Stochioiu A, Catargiu AM, Socol G | **Journal Name:** Applied Physics A: Materials Science & Processing | **Volume, Issue and Pages:** 131: 17 | **Publisher:** Springer

2025

[Fabrication of lithium-doped biological-derived hydroxyapatite and zoledronic acid bi-layered structures for implantology](#)

Authors: : Zureigat OA, Neamtu J, Florian A, Icriverzi M, Sima LE, Bita A, Ciocîlteu AV, Dorcioman G, Grumezescu V, Popescu-Pelin G, Duta L | **Journal Name:** FARMACIA | **Volume, Issue and Pages:** 73(1)

2025

[Reduced graphene oxide- based multilayer transparent conductive electrodes](#)

Authors: Socol M, Preda N, Costas A, Stanculescu A, Rasoga O, Stavarache I, Petre G, Popescu-Pelin G, Toderascu I, Breazu C, Socol G | **Journal Name:** Vacuum | **Volume, Issue and Pages:** 233: 113943 | **Publisher:** Elsevier

2024

[MAPLE-Deposited Perylene Diimide Derivative Based Layers for Optoelectronic Applications](#)

Authors: Breazu C, Girtan M, Stanculescu A, Preda N, Rasoga O, Costas A, Catargiu AM, Socol G, Stochioiu A, Popescu-Pelin G, Iftimie S, Petre G, Socol M | **Journal Name:** Nanomaterials | **Volume, Issue and Pages:** 14(21): 1733 | **Publisher:** MDPI

2024

[Advanced Laser Techniques for the Development of Nature-Inspired Biomimetic Surfaces Applied in the Medical Field](#)

Authors: Visan AI and Popescu-Pelin GF | **Journal Name:** Coatings | **Volume, Issue and Pages:** 14(10): 1290 | **Publisher:** MDPI

2024

[Combinatorial Analysis of Silver-Palladium Alloy Thin Film Libraries](#)

Authors: Konrad M, Popescu-Pelin G, Socol G, Mardare AI, Hassel AW | **Journal Name:** Physica status solidi (A) – Applications and materials science | **Volume, Issue and Pages:** 221(19) | **Publisher:** Wiley

2024

[Effect of varied beam diameter of picosecond laser on Foturan glass volume microprocessing](#)

Authors: Ionel L, Jipa F, Bran A, Axente E, Popescu-Pelin G, Sima F, Sugioka K | **Journal Name:** Optics Express | **Volume, Issue and Pages:** 32(11): 20109-20118 | **Publisher:** Optica

2024

[Combinatorial Property Mapping of Titanium-Zirconium Thin Film Libraries as Screening for Medical Material Candidates](#)

Authors: Greul A, Knapic D, Popescu-Pelin G, Urzica I, Socol G, Mardare AI, Hassel AW | **Journal Name:** Physica status solidi (A) – Applications and materials science | **Volume, Issue and Pages:** 221(19) | **Publisher:** Wiley

2024

[Magnesium-calcium thin films at low calcium concentrations for anode materials in biodegradable implantable primary batteries](#)

Authors: Zengin H, Mardare AI, Popescu-Pelin G, Socol G, Hassel AW | **Journal Name:** Materials Letters | **Volume, Issue and Pages:** 362: 136246 | **Publisher:** Elsevier

2023

[Titanium Surface Nanostructuring by Picosecond Laser Irradiation for Surface Improvement of Dental Abutments](#)

Authors: Jipa F, Florian P, Icriverzi M, Popescu-Pelin G, Budei, D, Axente E, Sugioka K, Sima F | **Journal Name:** Journal of Laser Micro/Nanoengineering | **Volume, Issue and Pages:** 18(3): 127-132

2023

[Hydroxyapatite Thin Films of Marine Origin as Sustainable Candidates for Dental Implants](#)

Authors: Dorcioman G, Grumezescu V, Stan GE, Chifiriuc MC, Gradisteanu GP, Miculescu F, Matei E, Popescu-Pelin G, Zgura I, Craciun V, Oktar FN, Duta L | **Journal Name:** Pharmaceuticals | **Volume, Issue and Pages:** 15(4): 1294 | **Publisher:** MDPI

2023

[Macrocyclic Compounds: Metal Oxide Particles Nanocomposite Thin Films Deposited by MAPLE](#)

Authors: Socol M, Preda N, Breazu C, Costas A, Rasoga O, Petre G, Popescu-Pelin G, Iftimie S, Stochioiu, A, Socol G, Stanculescu A | **Journal Name:** Materials | **Volume, Issue and Pages:** 16(6): 2480 | **Publisher:** MDPI

2023

[Synthesis and Anti-Melanoma Activity of L-Cysteine-Coated Iron Oxide Nanoparticles Loaded with Doxorubicin](#)

Authors: Toderascu LI, Sima LE, Orobeti S, Florian PE, Icriverzi M, Maraloiu VA, Comanescu C, Iacob N, Kuncser V, Antohe I, Popescu-Pelin G, Stanciu G, Ionita P, Mihailescu CN, Socol G | **Journal Name:** Nanomaterials | **Volume, Issue and Pages:** 13(4): 621 | **Publisher:** MDPI

2023

[Effects of Solvent Additive and Micro-Patterned Substrate on the Properties of Thin Films Based on P3HT:PC70BM Blends Deposited by MAPLE](#)

Authors: Socol M, Preda N, Breazu C, Petre G, Stanculescu A, Stavarache I, Popescu-Pelin G, Stochioiu, A, Socol G, Iftimie S, Thanner C, Rasoga O | **Journal Name:** Materials | **Volume, Issue and Pages:** 16(1): 144 | **Publisher:** MDPI

2022

[2. Influence of Post-Deposition Thermal Treatments on the Morpho-Structural, and Bonding Strength Characteristics of Lithium-Doped Biological-Derived Hydroxyapatite Coatings](#)

Authors: Duta L, Stan G E, Popescu-Pelin G, Zgura I, Anastasescu M, Oktar F | **Journal Name:** Coatings | **Volume, Issue and Pages:** 12(12): 1883 | **Publisher:** MDPI

2022

[Identification of Active Sites and the Mechanism of Reaction for Malic Acid Conversion over Iron-Doped Co₃O₄ Catalysts](#)

Authors: Mitran G, Jinga LI, Popescu-Pelin GF, Pavel OD | **Journal Name:** Industrial & Engineering Chemistry Research | **Volume, Issue and Pages:** 61(49): 17810–17820 | **Publisher:** ACS Publications

2022

[Sr and Mg Doped Bi-Phasic Calcium Phosphate Macroporous Bone Graft Substitutes Fabricated by Robocasting: A Structural and Cytocompatibility Assessment](#)

Authors: Besleaga C, Nan B, Popa A-C, Balescu LM, Nedelcu L, Neto AS, Pasuk I, Leonat L, Popescu-Pelin G, Ferreira JMF, Stan GE | **Journal Name:** Journal of Functional Biomaterials | **Volume, Issue and Pages:** 13(3): 123 | **Publisher:** MDPI

2022

[Thin Film Fabrication by Pulsed Laser Deposition from TiO₂ Targets in O₂, N₂, He, or Ar for Dye-Sensitized Solar Cells](#)

Authors: Albu DF, Lungu J, Popescu-Pelin G, Mihailescu CN, Socol G, Georgescu A, Socol M, Banica A, Ciupina V, Mihailescu IN | **Journal Name:** Coatings | **Volume, Issue and Pages:** 12(3): 293 | **Publisher:** MDPI

2022

[Advances in Laser Additive Manufacturing of Cobalt-Chromium Alloy Multi-Layer Mesoscopic Analytical Modelling with Experimental Correlations: From Micro-Dendrite Grains to Bulk Objects](#)

Authors: Mahmood MA, Rehman AU, Ristoscu C, Demir M, Popescu-Pelin G, Pitir F, Salamci MU, Mihailescu IN | **Journal Name:** Nanomaterials | **Volume, Issue and Pages:** 12(5) 802 | **Publisher:** MDPI

2021

[Composite Drug Delivery System Based on Amorphous Calcium Phosphate-Chitosan: An Efficient Antimicrobial Platform for Extended Release of Tetracycline](#)

Authors: Visan AI, Ristoscu C, Popescu-Pelin G, Sopronyi M, Matei CE Socol G, Chifiriuc MC, Bleotu C, Grossin D, Brouillet F, Le Grill S, Bertrand G, Zgura I, Cristescu R, Mihailescu IN | **Journal Name:** Pharmaceutics | **Volume, Issue and Pages:** 13(10): 1659 | **Publisher:** MDPI

2021

[Chemical Degradation of Methylene Blue Dye Using TiO₂/Au Nanoparticles](#)

Authors: Jinga LI, Popescu-Pelin G, Socol G, Mocanu S, Tudose M, Culita DC, Kuncser A, Ionita P | **Journal Name:** Nanomaterials | **Volume, Issue and Pages:** 11(6): 1605 | **Publisher:** MDPI

2021

[Bioactive Ibuprofen-Loaded PLGA Coatings for Multifunctional Surface Modification of Medical Devices](#)

Authors: Gherasim O, Popescu-Pelin G, Florian P, Icriverzi M, Roseanu A, Mitran V, Cimpean A, Socol G | **Journal Name:** Polymers | **Volume, Issue and Pages:** 13(9): 1413 | **Publisher:** MDPI

2021

[Degradation Behavior of Polymers Used as Coating Materials for Drug Delivery-A Basic Review](#)

Authors: Visan AI, Popescu-Pelin G, Socol G | **Journal Name:** Polymers | **Volume, Issue and Pages:** 13(8): 1272 | **Publisher:** MDPI

2021

[Phosphate bioglass thin-films: Cross-area uniformity, structure and biological performance tailored by the simple modification of magnetron sputtering gas pressure](#)

Authors: Tite T, Popa AC, Chirica IM, Stuart BW, Galca AC, Balescu LM, Popescu-Pelin G, Grant DM, Ferreira JMF, Stan GE | **Journal Name:** Applied Surface Science | **Volume, Issue and Pages:** 541: 148640 | **Publisher:** Elsevier

2021

[A comparative morphological study of titanium dioxide surface layer dental implants](#)

Authors: Budei DV, Vaireanu DI, Prepelita P, Popescu-Pelin G, Mincu M, Ciobotaru IA | **Journal Name:** Open Chemistry | **Volume, Issue and Pages:** 19(1): 189-198

2021

[Grain refinement and mechanical properties for AISI304 stainless steel single-tracks by laser melting deposition: Mathematical modelling versus experimental results](#)

Authors: Mahmood MA, Popescu A.C, Oane M, Chioibas D, Popescu-Pelin G, Ristoscu C, Mihailescu IN | **Journal Name:** Results in Physics | **Volume, Issue and Pages:** 22: 103880 | **Publisher:** Elsevier

2020

[Fish Bone Derived Bi-Phasic Calcium Phosphate Coatings Fabricated by Pulsed Laser Deposition for Biomedical Applications](#)

Authors: Popescu-Pelin G, Ristoscu C, Duta L, Pasuk I, Stan GE, Stan MS, Popa M, Chifiriuc MC, Hapenciu C, Oktar FN, Nicarel A, Mihailescu IN | **Journal Name:** Marine Drugs | **Volume, Issue and Pages:** 18(12): 623 | **Publisher:** MDPI

2020

[Organic Thin Films Based on DPP-DTT:C60 Blends Deposited by MAPLE](#)

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● **PROCEEDINGS**

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● **CONFERENCES AND SEMINARS**

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