






PERSONAL INFORMATION

Gabriel SOCOL



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Sex MALE | Date of birth 04/10/1976 | Nationality Romanian

WORK EXPERIENCE

2021 – to date

Scientific Director, INFLPR

National Institute for Laser, Plasma and Radiation Physics (INFLPR), 409 Atomistilor, RO-77125, Magurele, Bucharest, Romania (www.inflpr.ro)

- Management of INFLPR
- Business or sector:** Research & Development

2015 - 2021

Head of Laser Department, INFLPR

National Institute for Laser, Plasma and Radiation Physics (INFLPR), 409 Atomistilor, RO-77125, Magurele, Bucharest, Romania (www.inflpr.ro)

- Management of Laser Department, INFLPR
- Business or sector:** Research & Development

2015 - to date

Leader of " Lasers in life sciences, environment and manufacturing" group, INFLPR

National Institute for Laser, Plasma and Radiation Physics (INFLPR), 409 Atomistilor, RO-77125, Magurele, Bucharest, Romania (<http://llasem.inflpr.ro/>)

- Management of research team, Laser Department, INFLPR
- Business or sector:** Research & Development

2011 - to date

Senior Research Scientist 1st degree

National Institute for Laser, Plasma and Radiation Physics (INFLPR), 409 Atomistilor, RO-77125, Magurele, Bucharest, Romania (www.inflpr.ro)

- Deposition and modification of thin films;
- Synthesis of nanomaterials;
- Biomaterials;
- Gas sensors and biosensors;
- Photovoltaics and photocatalysis;
- Research contracts;
- Member of INFLPR Scientific Council.
- Business or sector:** Research & Development

2009 - 2011

Senior Research Scientist 2nd degree

National Institute for Laser, Plasma and Radiation Physics (INFLPR), 409 Atomistilor, RO-77125, Magurele, Bucharest, Romania (www.inflpr.ro)

- Deposition and modification of thin films by laser techniques;
- Biomaterials;
- Gas sensors;
- Photovoltaic and photocatalysis;
- Research contracts;
- Member of INFLPR Scientific Council.

Business or sector: Research & Development

2006 - 2009 **Senior Research Scientist 3rd degree**

National Institute for Laser, Plasma and Radiation Physics (INFLPR), 409 Atomistilor, RO-77125, Magurele, Bucharest, Romania (www.inflpr.ro)

- Deposition and modification of thin solid structures by laser techniques;
- Biomaterials;
- Physico-chemical characterization of materials;
- Gas sensors;
- Photovoltaic;

Business or sector: Research & Development

2003 - 2006 **Senior Research Scientist**

National Institute for Laser, Plasma and Radiation Physics (INFLPR), 409 Atomistilor, RO-77125, Magurele, Bucharest, Romania (www.inflpr.ro)

- Deposition and modification of thin solid structures by laser techniques;
- Biomaterials;
- Gas sensors;
- Physico-chemical characterization of materials;

Business or sector: Research & Development

2001 - 2003 **Assistant Researcher**

National Institute for Laser, Plasma and Radiation Physics (INFLPR), 409 Atomistilor, RO-77125, Magurele, Bucharest, Romania (www.inflpr.ro)

- Deposition and modification of thin solid structures by laser techniques;
- Biomaterials;
- Physico-chemical characterization of materials;

Business or sector: Research & Development

2001 **Assistant Researcher**

Institute of Microtechnology (IMT), 126A, Erou Iancu Nicolae Street, 077190, Bucharest, ROMANIA

- Testing of electronic devices - *Reliability of electronic components*

Business or sector: Research & Development

2000 - 2001 **Junior Assistant Researcher**

Institute of Microtechnology (IMT), 126A, Erou Iancu Nicolae Street, 077190, Bucharest, ROMANIA

- Testing of electronic devices - *Reliability of electronic components*

Business or sector: Research & Development

EDUCATION AND TRAINING

2010-2012 **Post Doctoral Stage**

Institute of Biochemistry, Romania

Biomaterials, nanostructures and pharmacophores: Laser applications in nanostructures for controlled drug administration, implants and tissue reconstruction

2001-2006 **PhD in Physics**
 University of Bucharest / National Institute for Laser, Plasma and Radiation Physics, Romania
 PhD thesis: "Thin films of biomaterials obtained by PLD methods for a new generation of medical implants"

2000-2001 **Master in Physics**
 Faculty of Physics, University of Bucharest, Romania
 Master thesis: "Study of infrared sensors"

1995-2000 **Bachelor in Physics**
 Faculty of Physics, University of Bucharest, Romania
 Diploma Thesis: "Connectors for optical fibres"

PERSONAL SKILLS

Mother tongue(s) Romanian

Other language(s)	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
English	B1	B2	B1	B1	B2

Organisational / managerial skills

✓ Leadership:

- 2021 – to date: Scientific Director of INFLPR
- 2015 - 2021: Head of Laser Department (the largest department with more than 100 employees and nine research groups);
- 2015 – to date: member of the Steering Committee of INFLPR;
- 2015 – to date: Leader of "LASERS IN LIFE SCIENCES, ENVIRONMENT AND MANUFACTURING" laboratory (responsible for a team of 12 researchers); <http://lasem.inflpr.ro/>
- 2013 – to date: Member of Doctoral School Council, Faculty of Physics – University of Bucharest;
- 2010 – to date: Member of INFLPR Scientific Council;
- 2010 - 2014: Member and Secretary of INFLPR Scientific Council;

✓ Director or responsible of research contracts:

- 2010 - 2013, contract No. TE 84/2010, "Nanostructures processed by laser techniques for photovoltaic applications", UEFISCDI, 170 000 EURO.
- 2012 – 2016, contract No. PCCA 153/2012 "Fabrication of osteoinductive orthopedic implants with gradual 3D hierarchical structure", UEFISCDI, 700 000 EURO.
- 2015-2017, contract No. TE 188/2015 "Controlled external activation of drug release from smart polymeric systems", 125 000 EURO.
- 2018-2021, contract no. 63PCCDI/2018, PN-III-P1-1.2-PCCDI-2017-0728, "Integrated development project for advanced medical treatment technologies", 1 130 000 EURO.
- 2020-2022, contract no. 486PED/2020, PN-III-P2-2.1-PED-2019-3292, "Enhanced magnetic hyperthermia for malignant melanoma therapy", 125 000 EURO.
- 2022-2024, contract no. 590PED/2022, PN-III-P2-2.1-PED-2021-3165, "Flexible and nanostructured organic field effect transistor for UV-VIS detection", 125 000 EURO.
- 2024-2027, contract no. 72/2024, M-ERANET "New gas sensing materials with working temperature close to or at room temperature", 90 000 EURO
- 2025-2027, contract no. 19PCE2025, PN-IV-P1-PCE-2023-1902, "Dual sensor for H2 detection at room temperature", 240 000 EURO

2023-2026, Director of NUCLEU Program, Advanced Research and Technological Development of Lasers - Plasma - Radiation – Space, LAPLAS VII – INFLPR

2016-2021, Technical Manager, Competitiveness operational programme (POC) project „Interdisciplinary innovative center of photonics and plasma for eco-nano technologies and advanced materials”, IN2FOTOPLASMAT

2016-2017, Responsible of NUCLEU Program, No. 4N/2016_16 47 01 03, "Multi-disciplinary studies based on laser, plasma and radiation processing for public interest (HEALTH& ENVIRONMENT)"

Job-related skills

- Optics, lasers, vacuum and material physics; electrical, optical, structural and morphological investigations, designing of experimental setups.

Other skills

- Training in laboratory skills of young researchers
- Ability to work on several topics at the same time

ADDITIONAL INFORMATION

- Publications
 - Presentations
 - Projects
 - Conferences
 - Seminars
 - Honours and awards
 - Memberships
 - References
 - Citations
 - Courses
 - Certifications
- Publications and patents:
 - over 280 scientific ISI publications in international journals;
 - 4 book chapters;
 - over 4000 citations and Hirsh factor = 33 (according with Web of Knowledge);
 - 6 OSIM Romanian Patents.
 - since 2011, reviewer in the committee of 18 PhD theses, Faculty of Physics and Faculty of Biology – University of Bucharest;
 - Member in hiring and promotion committees in INFLPR, ISS, Faculty of Physics, University of Bucharest, University “Ovidius” from Constanta; “Alexandru Ioan Cuza” University of Iasi;
 - Member and the leader of the committees for the evaluation of National Institutes for Research and Development (ICSI Ramnicu Valcea, IFT Iasi, INMR Bucuresti);
 - Reviewer for project proposals and project implementation (PFE, PD, etc);
 - 2010 Certification from Ministry of Education and Research for project manager;
 - 2017 Certification from Ministry of Education and Research for manager;
 - 2019 Leadership course;
 - 2022 Manager of innovation;
 - 2020-2021 Guest Editor - Polymers Journal, Special Issue on “Polymeric Systems for Drug Delivery: From Synthesis to Applications”;
https://www.mdpi.com/journal/polymers/special_issues/Drug_Deliv
 - 2020-2021 Guest Editor - Coatings Journal, Special Issue on "Pulsed Laser Deposition in Thin Films: Recent Advances and Challenge";
https://www.mdpi.com/journal/coatings/special_issues/pulsed_laser
 - Reviewer for International Journals:
Thin Solid Films, Applied Surface Science, Surface & Coatings Technology, Journal of Nuclear Materials, Solid State Sciences, Vacuum, Materials Science & Engineering B, Materials Letters, Materials Science in Semiconductor Processing, Journal of Photochemistry and Photobiology A: Chemistry, Materials Chemistry and Physics, Optics and Lasers in Engineering, Journal of Materials Processing Technology, Materials Science and Engineering C, etc.

ANNEXES

Publication list:

- Researcher ID: <https://publons.com/researcher/A-5405-2011/>
- Scopus Author ID: <https://www.scopus.com/authid/detail.uri?authorId=8282767000&eid=2-s2.0-84876023098>
- ORCID: <https://orcid.org/0000-0002-1992-7346>
- Google Scholar: <https://scholar.google.com/citations?user=KdzI9Z0AAAAJ&hl=ro>

Data
20.05.2025

Signature

