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)

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- 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

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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://llasem.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 4200 citations and Hirsh factor = 34 (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=Kdzl9Z0AAAAJ&hl=ro

Data
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Signature

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