

PERSONAL INFORMATION



Mihai Stafe

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Date of birth 10/11/1972 | Nationality Romanian

POSITION WITHIN THE PROJECT

Researcher

WORK EXPERIENCE

from 2015
 (/ from 2006 to 2014,
 / from 2001 to 2005)

Conferentiar (/ Lecturer, / Asistent)

University „Politehnica” of Bucharest

1. Teaching duties- laboratory and seminar lessons, giving courses of general physics at undergraduate level.
2. Teaching duties- laboratory lessons, projects and giving courses of high- power lasers applications at Master level
3. Research activities in the field of high- power laser- matter interaction: laser ablation, laser induced breakdown spectroscopy, nonlinear optics- HHG

EDUCATION AND TRAINING

2010-2012 Postdoctoral fellow, POSDRU program

University "Carol Davila" and University 'Politehnica' of Bucharest (Romania). Studies on laser microstructuring of materials

2007-2008 Postdoctoral fellow, Marie Currie program

Department of Experimental Physics, University of Szeged (Hungary) . Studies on extreme non-linear optical phenomena induced with high power, ultrashort pulse lasers

2001-2006 PhD in Physics

University 'Politehnica' of Bucharest (Romania). Thesis title: 'Theoretical photo-thermal modelling and experimental opto-dynamical analysis of the pulsed laser ablation of metals'.

1996-1997 Master in Physics

University 'Alexandru Ioan Cuza' of Iasi (Romania), Faculty of Physics- Department of Solid State Physics. Dissertation on 'Electrical properties of the ferroelectric films'

1991-1996 Diploma in Physics (BS)

University 'Alexandru Ioan Cuza' of Iasi (Romania), Faculty of Physics. Diploma thesis on 'Structural properties of metals and alloys'

1987-1991 Bachelor

'L. Patrascanu' High School, Bacau (Romania)

PERSONAL SKILLS

Mother tongue Romanian

Other language(s)	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
English	C1	C1	C1	C1	C1
	Replace with name of language certificate. Enter level if known.				
French	B2	B2	B2	B2	B2
	Replace with name of language certificate. Enter level if known.				

Levels: A1/A2: Basic user - B1/B2: Independent user - C1/C2 Proficient user
[Common European Framework of Reference for Languages](#)

Communication skills good communication skills gained through my experience as teacher and lecturer, and through participation at scientific conferences

Organisational / managerial skills Team work in different working groups (Bucharest and Magurele- Romania, Szeged- Hungary, Munich- Germany)

Digital competence Numerical computation in MATLAB, COMSOL

ADDITIONAL INFORMATION

Publications

Papers

1. Marcu, A; Stafe, M; (...); Puscas, N, Photon energy transfer on titanium targets for laser thrusters, HIGH POWER LASER SCIENCE AND ENGINEERING 10, e27 (2022)
 2. M. Stafe, Three-step model for third-harmonic generation in air by nanosecond lasers, JOURNAL OF THE OPTICAL SOCIETY OF AMERICA B-OPTICAL PHYSICS 38 (7), pp.2206-2214 (2021).
 3. M. Stafe, C. Negutu, N.N. Puscas, *Third harmonic from air breakdown plasma induced by nanosecond laser pulses*, Applied Physics B **124**, 106 (2018)
 4. P. Heissler, R. Horlein, M. Stafe ... F. Krausz, L. Veisz, GD Tsakiris, *Towards single attosecond pulses using harmonic emission from solid density plasmas*, Appl. Phys. B **101**, 511-521 (2010).
 5. Stafe, M., Neguțu, C., Vasile, G.C., Pușcaș, N.N., *Analysis of optimum conditions for high order harmonic generation in gaseous media*, UPB Scientific Bulletin, Series A: Applied Mathematics and Physics **77**(1), 187-202 (2015)
 6. M. Stafe, *Theoretical photo-thermo-hydrodynamic approach to the laser ablation of metals*, Journal of Applied Physics **112**, 123112 (2012).
 7. Mihai Stafe, Constantin Negutu, *Real-Time Monitoring of the Pulsed Laser Ablation of Metals Using Ablation Plasma Spectroscopy*, Plasma Chemistry and Plasma Processing **32**, 643-653 (2012)
- Book:** Stafe Mihai, Marcu Aurelian, Puscas Niculae, "Pulsed Laser Ablation of Solids-Basics, Theory and Applications", Springer Series in Surface Sciences, Vol. 53, Springer-Verlag Berlin Heidelberg (2014)

Conferences

National and international conferences: Romania- ROMOPTO, ATOM-N, USA- ICALEO, Great Britain- MATADOR

Projects

Collaboration with research groups in Romania (UPB, INFLPR, CETAL, ELI-NP, INFIM, INOE) for more than 10 national and European projects. Worked for 1 European project proposal (INOVABIOMED at UPB) in 2017-2018. In charge for activities at UPB for 1 national project (UFOUV) coordinated by INFLPR in 2012-2016. Worked for proposal and research activities for two ELI-RO projects in 2014-2016 and 2020-2023

Memberships

SRF

Citations

H index: 13 in ISI web of Science, 14 in SCOPUS and Google Scholar

Courses

General Physics, Engineering and applications of high- power lasers