


PERSONAL INFORMATION

Alexandru Anghel National Institute for Laser, Plasma and Radiation Physics (+40)746100149 Alexandru.anghel@inflpr.ro

Sex Male | Date of birth 08/08/1978 | Nationality Romanian

WORK
EXPERIENCE

01/07/2014 - present **Research scientist III**
National Institute for Laser, Plasma and Radiation Physics, Magurele, Romania
(www.inflpr.ro)
Specialized, scientific and technical activities
Business or sector R&D

01/07/2007 – 01/07/2014 **Research scientist**
National Institute for Laser, Plasma and Radiation Physics, Magurele, Romania
(www.inflpr.ro)
▪ Specialized, scientific and technical activities
Business or sector R&D

01/07/2005 – 30/06/2007 **Asistent research scientist**
National Institute for Laser, Plasma and Radiation Physics, Magurele, Romania
(www.inflpr.ro)
▪ Specialized, scientific and technical activities
Business or sector R&D

EDUCATION
AND TRAINING

01/10/2007 – 04/06/2011 **Ph.D in Physics**
Doctoral School of the Faculty of Physics, „Al.I. Cuza”University , Iasi, Romania
▪ Physics

01/10/2005 – 30/02/2007 **Master`s Degree**
Faculty of Physics, University of Bucharest, Magurele, Romania
▪ Polymer physics. Materials science and technology

01/10/1998 – 30/06/2004 **Bachelor Degree**
 Faculty of Physics, University of Bucharest, Magurele, Romania
 ▪ Physics engineering

PERSONAL SKILLS

Mother tongue(s) Romanian

Other language(s)	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
English	C2	C2	C2	C2	C2
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

Organisational / managerial skills ▪ Good skills in planning, organizing and conducting complex experiments

Job-related skills ▪ Good knowledge of devices and working methods and their use in the conduct of complex experiments

Digital competence	SELF-ASSESSMENT				
	Information processing	Communication	Content creation	Safety	Problem solving
	Proficient user	Proficient user	Independent user	Independent user	Proficient user

Levels: Basic user - Independent user - Proficient user
[Digital competences - Self-assessment grid](#)

Driving licence B

ADDITIONAL INFORMATION

- Publications**
- Aurelia Elena Tudose, Ioana Demetrescu, Florentina Golgovici and Manuela Fulger - Oxidation Behavior of an Austenitic Steel (Fe, Cr and Ni), the 310 H, in a Deaerated Supercritical Water Static System, *Metals* 2021, 11(4), 571; <https://doi.org/10.3390/met11040571>
 - Diana Diniasi, Florentina Golgovici, Alexandru Horia Marin, Aurelian Denis Negrea, Manuela Fulger and Ioana Demetrescu - Long-Term Corrosion Testing of Zy-4 in a LiOH Solution under High Pressure and Temperature Conditions, *Materials* 2021, 14(16), 4586; <https://doi.org/10.3390/ma14164586>
 - Diana Diniasi, Florentina Golgovici, Alexandru Anghel, Manuela Fulger, Carmen Cristina Surdu-Bob and Ioana Demetrescu - Corrosion Behavior of Chromium Coated Zy-4 Cladding under CANDU Primary Circuit Conditions, *Coatings* 2021, 11(11), 1417; <https://doi.org/10.3390/coatings11111417>
 - Aurelia Elena Tudose, Florentina Golgovici, Alexandru Anghel, Manuela Fulger, Ioana

- Demetrescu - Corrosion Testing of CrNx coated 310 H Stainless Steel under Simulated Supercritical Water Conditions, Materials, (Manuscript ID: materials-1832581)
5. Anca Mazare , Alexandru Anghel , Cristina Surdu-Bob , Georgeta Totea , Ioana Demetrescu , Daniela Ionita, *Silver doped diamond-like carbon antibacterial and corrosion resistance coatings on titanium*, Thin Solid Films 657, 16-23, 2018
 6. Raluca-Ioana Stefan-van Staden, Ionela Raluca Comnea-Stancu, Hülya Yanık, Meltem Göksel, Anghel Alexandru, Mahmut Durmuş, *Phthalocyanine-BODIPY dye: synthesis, characterization and utilization for pattern recognition of CYFRA 21-1 in whole blood samples*, Anal Bioanal Chem, 2017
 7. B. Calenic et all, *Oral keratinocyte stem cells behavior on diamond like carbon films*, Romanian biotechnological letters, 2016
 8. M. Badulescu, A. Anghel, et all, *Preliminary results on the electromagnetic shielding effectiveness of organic fibers silver coated by high voltage anodic plasma*, JOAM-RC, 2015
 9. I. Hinkov, S. Farhat, C. P. Lungu, A. Gicquel, F. Silva, A. Mesbahi, O. Brinza, C. Porosnicu, A. Anghel, *Microwave Plasma Enhanced Chemical Vapor Deposition of Carbon Nanotubes*, Journal of Surface Engineered Materials and Advanced Technology, 4, 196-209, 2014
 10. Burducea, I.; Straticiu, M.; Racolta, P.M.; Surdu-Bob, C.C.; Badulescu, M.; Anghel, A.; Jipa, Al.; Luculescu, C.; *Hydrogen depth profiling in DLC films using RNRA*, OPTOELECTRONICS AND ADVANCED MATERIALS – RAPID COMMUNICATIONS 6 (9-10) 832-835, 2012
 11. A. Anghel, C. Porosnicu, C.P. Lungu, K. Sugiyama, K. Krieger, J. Roth, *Influence of thermal treatment on beryllium/carbon formation and fuel retention*, Journal of Nuclear Materials, 416, 9-12, 2011
 12. K. Sugiyama, J. Roth, A. Anghel, C. Porosnicu, M. Baldwin, R. Doerner, K. Krieger, C.P. Lungu, *Consequences of deuterium retention and release from Be-containing mixed materials for ITER Tritium Inventory Control*, Journal of Nuclear Materials 415, S731-S734, 2011
 13. C. Porosnicu, A. Anghel, K. Sugiyama, K. Krieger, J. Roth, C.P. Lungu, *Influence of beryllium carbide formation on deuterium retention and release*, Journal of Nuclear Materials 415, S713-S716, 2011
 14. A. Anghel, C. Porosnicu, M. Badulescu, I. Mustata, C.P. Lungu, K. Sugiyama, S. Lindig, K. Krieger, J. Roth, A. Nastuta, G. Rusu, G. Popa, *Surface morphology influence on deuterium retention in beryllium films prepared by thermionic vacuum arc method*, Nuclear Instruments & Methods in Physics Research Section B – Beam Interactions with Materials and Atoms, 267, 426-429, 2009
 15. A. Anghel, I. Mustata, C. Porosnicu, C.P. Lungu, *Influence of the bias voltage on the formation of beryllium films by a thermionic vacuum arc method*, Journal of Nuclear Materials, 385, 242-245, 2009
 16. I. Mustata, A. Anghel, C.P. Lungu, O. Pompilian, V. Kuncser, G. Schinteie, *Tunneling magneto-resistance granular thin films deposited by thermo-ionic vacuum arc technique*, Journal of Physics Conference Series, 100, 2008
 17. V. Kuncser, M. Valeanu, G. Schinteie, G. Filoti, I. Mustata, C.P. Lungu, A. Anghel, H. Chiriac, R. Vladoiu, J. Bartolome, *Exchange bias and spin valve systems with Fe-Mn antiferromagnetic pinning layers, obtained by the thermo-ionic vacuum arc method*, Journal of Magnetism and Magnetic Materials, 320, E226-E230, 2008
 18. Lungu, C.P.; Mustata, I.; Zaroschi, V.; Lungu, AM; Anghel, A.; Chiru, P; Rubel, M; Coad, P; Matthews, GF; JET-EFDA contributors, *Beryllium coatings on metals for marker tiles at JET: development of process and characterization of layers*, Physica Scripta, T128, 157-161, 2007
 19. CP; Mustata, I ; Zaroschi, V; Lungu, AM; Chiru, P; Anghel, A.; Burcea, G; Baelescu, V; Dinuta, G ; Din, F ; *Spectroscopic study of beryllium plasma produced by thermionic vacuum arc*, Journal of Optoelectronics and Advanced Materials, 9, 884-886, 2007
 20. A. Anghel, C.P. Lungu, I. Mustata, V. Zaroschi, I. Barbu, M. Badulescu, O. Pompilian, G. Schinteie, D. Predoi, V. Kuncser, G. Filoti, N. Apetroaei, *Giant magnetoresistive coatings using thermionic vacuum arc technology*, Czechoslovak Journal of Physics, 56, B16-B23, 2006
 21. M. Popescu, F. Sava, A. Lorinczi, A. Anghel, *Nanostructural configurations in As₂S₃ glass*, Physics and Chemistry of Glasses – European Journal of Glass Science and Technology Part B, 47, 154-157, 2006
 22. F. Sava, A. Anghel, I. Kaban, W. Hoyer, M. Popescu, *Atomic scale structure of Ge₃₀As₄S₆₆*, Journal of Optoelectronics and Advanced Materials, 7, 1971-1975, 2005
 23. M. Popescu, F. Sava, A. Anghel, A. Lorinczi, I. Kaban, W. Hoyer, Journal of Optoelectronics and Advanced Materials, 7 (2005), 1743-1748
 24. A. Lorinczi, M. Popescu, F. Sava, A. Anghel, *Modelling of the complex carbon structure: Fullerene-nanotubule*, Journal of Optoelectronics and Advanced Materials, 6, 349-352, 2004