PERSONAL INFORMATION

CRISTINA STAN

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WORK EXPERIENCE

Mar. 2015 – present — Professor
Faculty of Applied Sciences, UNSTPB, 313 Spl. Independenţei, Bucharest
Teaching activity and research

Oct. 2004 – Feb. 2015 — Associate Professor
Faculty of Applied Sciences, UPB, 313 Spl. Independenţei, Bucharest
Teaching activity and research

Oct. 2000 – Sept 2004 — Lecturer
Faculty of Applied Sciences, UPB, 313 Spl. Independenţei, Bucharest
Teaching activity and research

Feb. 1999 –Sept. 2000 — Lecturer
Alexandru Ioan Cuza University of Iassy, 1Blv Carol, Iasi, Romania
Teaching activity and research

Sept. 1990– Jan. 1999 — Assistant
Alexandru Ioan Cuza University of Iassy, 1 Blv Carol, Iasi, Romania
Teaching activity and research

EDUCATION AND TRAINING

2016 — Thesis of Habilitation in Physics: "Nonlinear Dynamics, Noise and Chaos Control: experiment and modeling in low temperature discharge plasmas and other nonlinear systems." (OM No. 3968/ 07.06.2016)

2000 — PhD in Physics -
Alexandru Ioan Cuza University of Iasi, 1 Blv Carol, Iasi, Romania (nr.53/21.07.2000)
PhD Title "Self-organized space charged structures in plasma diode type devices"

1985 -1989 — Graduate diploma
Faculty of Physics, Alexandru Ioan Cuza University of Iasi, 1 Blv Carol, Iasi, Romania

Mother tongue(s) Romanian

Other language(s)

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
English	C1	C1	C1	B2	C1
French	A2	A2	A1	A2	A1
German	A2	A2	A2	A2	A1

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 in teaching activity, supervising of diploma, master and PhD thesis, scientific communications at national and international meeting and conferences

ADDITIONAL INFORMATION

Publications Author/co-author of 15 books and over 100 scientific papers in the field of nonlinear and chaotic phenomena in plasmas, semiconductor quantum structures and other systems and time-series analysis in complex systems,

Citations Scopus Author ID: 7004427420, Researcher ID: B-5722-2012, Web of Science ResearcherIDB-5722-2012

- Referee at: Physica A: Statistical Mechanics and its Applications; Physics Lett. A, Acta Chimica, Journal of

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Other

Zhejiang University SCIENCE A. Springer, International Journal of Bifurcation and Chaos, Journal of Plasma Physics, Current Bioinformatics, Expert Systems and Applications, Applied Surface Science, Thin Solid Films, Cognitive System Research, Journal of Molecular Graph and Modelling, International Journal of Mass Spectrometry, Journal of Optoelectronics and Advanced Materials, Solid State Physics, Philosophical Magazine, Physica E, Nanomaterials, Chaos Solitons and Fractals, Materials Today Communications

- Awarded with "Constantin Miculescu" Prize of Romanian Academy – Physics Section, 2019
- 2017-2020 Member of Ethics committee UNSTPB
- 2018-2020 Member of CNATDCU – Physics Section
- 2020-2024 Director of Doctoral School of Applied Sciences, UNSTPB

ANNEXES- SELECTED PAPERS

1. Bejan D., Stan C
   Nonlinear optical rectification, second and third harmonic generation in quantum dot-double quantum rings: electric field and geometry effects
   (2025) *Optical and Quantum Electronics 57 (8), 1-18*
2. A Radu, C Stan, D Bejan
   Finite element 3D model of a double quantum ring: effects of electric and laser fields on the interband transition
   (2023) New Journal of Physics 25 (11), 113025
3. Bejan D., Stan C.
   Impurity and geometry effects on the optical rectification spectra of quasi-elliptical double quantum rings
   (2023) Physica E: Low-dimensional Systems and Nanostructures 147, 115598.
4. Cirtoaje C, Petrescu E, Stan C, Rogachev A.
   Electric Freedericksz transition in nematic liquid crystals with graphene quantum dot mixture.
   (2019) Applied Surface Science. 2019 Sep 1; 487:1301-6.
5. Bejan, D. and Stan, C.
   Aharonov-Bohm effect in pseudo-elliptic quantum rings: influence of geometry, eccentricity and electric field.
   (2019) *The European Physical Journal Plus*, 134(3), p.127.
6. Bejan, D., Stan, C.
   Oscillatory behaviour in the energy and nonlinear optical rectification spectra of elliptic quantum rings under electric field: influence of impurity and eccentricity
   (2018) *Philosophical Magazine,* 1-21
7. Bejan, D., Stan, C, Niculescu, EC
   Optical properties of an elliptic quantum ring: Eccentricity and electric field effects
   (2018) *Optical Materials 78, 207-219*
8. Niculescu, E.C., Stan, C., Bejan, D., Cartoaje, C.
   Impurity and eccentricity effects on the nonlinear optical rectification in a quantum ring under lateral electric fields
   (2017) *Journal of Applied Physics* 122 (14), 144301
9. Cirtoaje, C., Petrescu, E., Stan, C.,
   Dynamic behavior of a nematic liquid crystal mixed with $CoFe_2O_4$ ferromagnetic nanoparticles in a magnetic field
   (2017) *Beilstein journal of nanotechnology. 2017 Nov 22;8(1):2467-73*
10. Stan, C., Cristescu, C.M., Alexandroaei, D., Cristescu, C.P.
    The effect of Gaussian white noise on the fractality of fluctuations in the plasma of a symmetrical discharge
    (2014) *Chaos, Solitons and Fractals*, 61, pp. 46-55.
11. Stan, C., Cristescu, C.P., Dimitriu, D.G.
    Analysis of the intermittent behavior in a low-temperature discharge plasma by recurrence plot quantification
    (2010) *Physics of Plasmas*, 7(4), art. no.042115
12. Stan, C., Cristescu, C.P., Alexandroaei, D., Agop, M.
    Stochastic resonance and vibrational resonance in an excitable system: The golden mean barrier
    (2009) *Chaos, Solitons and Fractals*, 41 (2), pp.727-734.
13. Cristescu, C.P., Stan, C., Alexandroaei, D.
    Dynamic control by sinusoidal perturbation and by Gaussian noise of a system of two nonlinear oscillators: Computation and experimental results
    (2004) *Physical Review E - Statistical, Nonlinear, and Soft Matter Physics*,70(1 2), art. no.016613

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