



PERSONAL INFORMATION

**CRISTINA STAN**

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WORK EXPERIENCE

- Mar. 2015 – present** **Professor**  
 Faculty of Applied Sciences, UPB, 313 Spl. Independenței, Bucharest  
 Teaching activity and research
- Oct. 2004 – Feb. 2015** **Associate Professor**  
 Faculty of Applied Sciences, UPB, 313 Spl. Independenței, Bucharest  
 Teaching activity and research
- Oct. 2000 – Sept 2004** **Lecturer**  
 Faculty of Applied Sciences, UPB, 313 Spl. Independenței, Bucharest  
 Teaching activity and research
- Feb. 1999 –Sept. 2000** **Lecturer**  
 Alexandru Ioan Cuza University of Iasi, 1 Blv Carol, Iasi, Romania  
 Teaching activity and research
- Sept. 1990– Jan. 1999** **Assistant**  
 Alexandru Ioan Cuza University of Iasi, 1 Blv Carol, Iasi, Romania  
 Teaching activity and research
- Sept. 1989– Sept. 1990** **Highschool teacher**  
 Highschool no 2, Bacau, Romania  
 Teaching activity

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 - Plasma Physics**  
 Alexandru Ioan Cuza University of Iasi, 1 Blv Carol, Iasi, Romania  
 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](https://www.cedefop.europa.eu/en/common-european-framework-reference-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, quantum structures and time-series analysis for different complex systems,
- Citations** [Scopus Author ID: 7004427420](#), [Researcher ID: B-5722-2012](#)
- Other**
- Referee at: Physica A: Statistical Mechanics and its Applications; Acta Chimica, Journal of 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
  - Member of the Scientific Board of UPB Scientific Bulletin and Scientific Bulletin of Technical University "Gheorghe Asachi", Iași.

## ANNEXES- SELECTED PAPERS

1. Bejan D., Stan C.  
**Electron spin and donor impurity effects on the absorption spectra of pseudo-elliptic quantum rings under magnetic field**  
(2021) Philosophical Magazine, 101 (16), 1871 – 1893.
2. Stan, C, Marmureanu, L., Marin, C, Cristescu, C. P.  
**Investigation of multifractal cross-correlation surfaces of Hurst exponents for some atmospheric pollutants**  
(2020) Physica A: Statistical Mechanics and Its Applications, 5451, 123799
3. Cirtoaje C, Petrescu E, Stan C, Rogachev A.  
**Electric Fredericksz transition in nematic liquid crystals with graphene quantum dot mixture.**  
(2019) Applied Surface Science. 2019 Sep 1;487:1301-6.
4. Bejan, D. and Stan, C, Toma, O.  
**Magnetic field controlled induced transparency by Autler–Townes splitting in pseudo-elliptic quantum ring**  
(2019) The European Physical Journal B 92 (7), p. 153.
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. Sergeenkov, S.; Stan, C.; Cristescu, C. P.; Balasoiu M., NS Perov, C Furtado  
**Evidence for field induced proximity type behavior in CoFe<sub>2</sub>O<sub>4</sub> based ferromagnetic nanofluid**  
(2017) *Philosophical Magazine Letters* 97 (7), 287-293.
9. 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
10. Cirtoaje, C., Petrescu, E., Stan, C.,  
**Dynamic behavior of a nematic liquid crystal mixed with CoFe<sub>2</sub>O<sub>4</sub> ferromagnetic nanoparticles in a magnetic field**  
(2017) *Beilstein journal of nanotechnology*. 2017 Nov 22;8(1):2467-73
11. Niculescu EC, Stan C, Cristea M, Truscă C.  
**Magnetic-field dependence of the impurity states in a dome-shaped quantum dot.**  
(2017) *Chemical Physics*, 493, pp. 32-41.
12. 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.
13. 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
14. 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.
15. 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

20.06.2022