

## 1. Personal information

**Name and surname:** Sorin TAȘCU

**Date and place of birth:** March 31, 1976, Comănești, Romania

**Present academic position:** Scientific Researcher, Head of RAMTECH Center, "Alexandru Ioan Cuza" University, Iași, Romania),

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## 2. Education

2000-2003 Ph.D. studies at "Claude Bernard Lyon I" University of Lyon, France

1999-2000 Master of Science in Physics, at "Claude Bernard Lyon I" University of Lyon, France

1994-1999 Faculty of Physics, "Alexandru Ioan Cuza" University Iași, Romania

(*Bachelor of Science in Engineering Physics*)

1990-1994 "Dimitrie Ghika" High School, Comănești, Romania

## 3. Selected, peer-reviewed research work

1. C. E. Ciomaga, A. M. Neagu, M. V. Pop, M. Airimioaei, **S. Tascu**, G. Schileo, C. Galassi, L. Mitoseriu, "Ferroelectric and dielectric properties of ferrite-ferroelectric ceramic composites" **Journal of Applied Physics** 113, 074103, 2013.
2. C. Michel, **S. Tascu**, V. Doya, P. Aschieri, W. Blanc, O. Legrand, F. Mortessagne "Experimental phase-space-based optical amplification of scar modes" **Phys. Rev. E**, Vol 85, Issue 4, Art. Number 047201, 2012.
3. L. P. Curecheriu, A. C. Ianculescu, N. Horchidan, S. Stoleriu, F. Tudorache, **S. Tascu**, L. Mitoseriu "Temperature dependence of tunability of Ba(Sn<sub>x</sub>Ti<sub>1-x</sub>)O<sub>3</sub> ceramics" **Journal of Applied Physics**, 108 (8), pp 084103, 2011.
4. M. A. Dolbilov, E. I. Shishkin, V. YA. Shur, **S. Tascu**, P. Baldi, M. P. De Micheli "Abnormal Domain Growth in Lithium Niobate with Surface Layer Modified by Proton Exchange" **Ferroelectrics**, Vol. 398, Issue 1, pp108-114, 2010
5. D. Castaldini, P. Bassi, P. Aschieri, **S. Tascu**, M. De Micheli, P. Baldi "High performance mode adapters based on segmented SPE:LiNbO<sub>3</sub> waveguides" **Optics Express**, Vol. 17, No. 20, pp 17868-17873, 2009
6. M.A. Dolbilov, V. Ya. Shur, E.I. Shishkin, M. F. Sarmanova, E. V. Nikolaeva, **S. Tascu**, P. Baldi, M.P. de Micheli, "Influence of surface layers modified by proton exchange on domain kinetics of lithium niobate" **Ferroelectrics**, Vol. 374, Issue 1, pp158-163, 2008
7. D. Castaldini, P. Bassi, **S. Tascu**, G. Sauder, P. Aschieri, M. de Micheli, P. Baldi, K. Thyagarajan, M. R. Shenoy, "All-in-one measurement setup for fast and accurate characterization of linear guided-wave optical devices" **Optical Engineering**, Volume 46, Issue 12, p. 124601, December 2007
8. D. Castaldini, P. Bassi, **S. Tascu**, P. Aschieri, M. De Micheli, P. Baldi "Soft Proton Exchange tapers for low insertion loss LiNbO<sub>3</sub> devices" **Journal of Lightwave Technology**, vol.25, No 6, pp 1588-1593, June 2007
9. A. Boudrioua, B. Vincent, R. Kremer, P. Moretti, **S. Tascu**, G. Aka "Linear and nonlinear optical properties of implanted Ca<sub>4</sub>GdO(BO<sub>3</sub>)<sub>3</sub> planar waveguides" *Journal of Optical Society of America B*, vol. 22 (10), pp. 2192-2199, 2005
10. **S. Tascu**, P. Moretti, S. Kostritskii, B. Jacquier, "Optical near-field measurements of guided modes in various processed LiNbO<sub>3</sub> and LiTaO<sub>3</sub> channel waveguides" **Optical Materials**, vol. 24 (1-2), pp 297-302, 2003.

## 4. Research interests

Nonlinear optical based on quasi-phase matching in guided optical wave devices for all-optical signal processing and quantum telecommunications, frequency converters based on parametric interactions, study of new materials / techniques for quasi-phase matching and optical waveguides fabrication.

**Dr. Eng. Sorin Tascu**