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## **University Education and Degrees:**

- \* 2003-2005 Ph.D. in Applied Physics at the University of Pisa, Italy
- \* 2001-2003 MSc degree in Atomic, Molecular and Astrophysics at the University of Bucharest, Romania
- \* 1997-2001 BSc degree in Physics at the University of Bucharest, Romania

## **Professional Experiences:**

- \* Since October 2007 Assistant Professor at the Faculty of Physics, University of Bucharest
- \* January 2007– September 2007 PostDoctoral Fellowship at Department of Physics “Enrico Fermi”, University of Pisa
- \* January 2006– December 2006 Researcher at the Institute for chemical and physical processes (IPCF) - CNR

## **Publications:**

***High-Field Electron Paramagnetic Resonance in polymers and glasses: criteria for the optimal choice of the spin probe,***

V.Bercu, M.Martinelli, C.A.Massa, L.A.Pardi, D.Leporini

*Journal of Optoelectronics and Advanced Materials, Vol. 9 (6), pp 1785-1788, 2007*

**Sensitivity of High-Field Electron Paramagnetic Resonance to the reorientation of molecular guests in glassy polymers,**

V.Bercu, M.Martinelli, C.A.Massa, L.A.Pardi, D.Leporini

*Philosophical Magazine, Vol. 87( 3-5), pp 795-798, 2007*

**Signatures of the fast dynamics in glassy polystyrene by multi-frequency, high-field Electron Paramagnetic Resonance of molecular guests,**

V.Bercu, M.Martinelli, C.A.Massa, L.A.Pardi, D.Leporini

*Journal of Non-Crystalline Solids, Vol. 352, pp 5029-5034, 2006*

**A spin resonance investigation of magnetism and dynamics in the charge-transfer salts beta-(BEDT-TTF)(4)[(H<sub>3</sub>O)M(C<sub>2</sub>O<sub>4</sub>)(3)]S,**

A.Narduzzo, A.Coldea, A.Ardavan, J.Singleton, L.Pardi, V.Bercu, A.Akutsu-Sato, H.Akutsu; S.Turner, P.Day

*Journal of Low Temperature Physics, Vol. 142 (3-4), pp 581-584, 2006*

**The onset of the fast dynamics in glassy polystyrene observed by the detrapping of guest molecules: A high-field Electron Paramagnetic Resonance study,**

V.Bercu, M.Martinelli, C.A.Massa, L.A.Pardi, D.Leporini

*Europhysics Letters, Vol. 72 (4), pp 590-596, 2005*

**Signatures of the fast dynamics in glassy polystyrene: First evidence by high-field Electron Paramagnetic Resonance of molecular guests,**

V.Bercu, M.Martinelli, C.A.Massa, L.A.Pardi, D.Leporini

*Journal of Chemical Physics, Vol. 123 (17), 174906, 2005*

**Delocalization of spin projection in weak exchange linear chains, evidenced by multifrequency HF-EPR spectroscopy,**

F.F.Popescu, M.Martinelli, C.A.Massa, L.A.Pardi, V.Bercu

*Magnetic Resonance in Chemistry, Vol.43, pp. S215-S220, 2005*

**Multifrequency electron paramagnetic resonance of Ce<sup>3+</sup> in the Gd(HBPz3)2 tropolonate complex: high-field effects**

F.F.Popescu, M.Martinelli, C.A.Massa, L.A.Pardi, V.Bercu

*Journal of Physics-Condensed Matter, Vol. 17 (36), pp. 5563-5575, Sept. 14, 2005*

**A study of the deep structure of the energy landscape of glassy polystyrene: the exponential distribution of the energy barriers revealed by high-field electron spin resonance spectroscopy,**

V.Bercu, M.Martinelli, C.A.Massa, L.A.Pardi, D.Leporini

*Journal of Physics-Condensed Matter, Vol. 16 (43), L479-L488, Nov. 3, 2004*

***Electron spin resonance studies of the organic superconductor -(BEDT-TTF)4[ (H<sub>3</sub>O)Fe(C<sub>2</sub>O<sub>4</sub>)<sub>36</sub>H<sub>5</sub>CN,***

A.Narduzzo, A.Ardavan, J.Singleton, L.Pardi, V.Bercu, A.Akutsu-Sato,

H.Akutsu, S.S.Turner, P.Day

*J. Phys. IV France, Vol. 114, 347, 2004*

***Relaxation processes in a multilevel spin system investigated by linewidth analysis of multifrequency high-frequency EPR spectra,***

M.Martinelli, C.A.Massa, L.A.Pardi, V.Bercu, F.F.Popescu

*Physical Review B, Vol. 67, 014425, 2003*