

Curriculum Vitae

Dr. Ales Omerzu

Born

07.04. 1968. Zagreb, Croatia

University Education:

B.Sc., Physics (1994), University of Zagreb, Zagreb, Croatia

PhD, Physics (1999), University of Ljubljana, Ljubljana, Slovenia

Past positions and appointments:

2004 - 2014 Research associate at J. Stefan Institute

2000 - 2004 Research assistant at J. Stefan Institute

2001 Postdoctoral fellow at Physics Department, University of California Los Angeles, USA

2000 Postdoctoral fellow at Agency for Industrial Science and Technology, Tsukuba, Japan

1994 - 2000 Research assistant at J. Stefan Institute

Research experience

Measurements of electronic, magnetic and optical properties of organic crystalline and noncrystalline materials (organic conductors, fullerenes and DNA) which include: dielectric spectroscopy, conductivity measurement, magnetic susceptometry, electronic spin resonance, optical spectroscopy (UV, visible, infrared). Currently working on electronic dynamics and interactions in DNA – metal complexes.

Bibliography

- 46 Scientific papers published in international scientific journals
- 3 Independent scientific chapters in monographs
- 20 Published scientific conference contributions
- 29 Published scientific conference contribution abstracts

Citations

Over 700 citations in international scientific journals (ISI)

Pedagogical experience

Co-supervising 8 diploma works

Academic Awards:

Jozef Stefan Golden Prize (2001)

Selected publications:

1. **A. Omerzu**, B. Anželak, I. Turel, J. Štrancar, A. Potočnik, D. Arčon, I. Arčon, D. Mihailović, H. Matsui: Strong Correlations in Highly Electron-Doped Zn(II)-DNA Complexes. *Phys. Rev. Lett.* **104**, (2010) 156804.
2. **A. Omerzu**, D. Mihailovic, B. Anzelak, I. Turel: Optical spectra of wet and dry M-DNA, *Phys. Rev. B* **75** (2007) 121103.
3. **A. Omerzu**, M. Licer, T. Mertelj, V.V. Kabanov, D. Mihailovic: Hole interactions with molecular vibrations on DNA, *Phys. Rev. Lett.* **93** (2004) 218101.
4. B. Narymbetov, **A. Omerzu A**, V. V.Kabanov, M. Tokumoto, H. Kobayashi, D. Mihailovic: Origin of ferromagnetic exchange interactions in a fullerene-organic compound, *Nature* **407** (2000) 883.
5. **A. Omerzu**, D. Mihailovic, S. Tomic, O. Milat, N. Biskup: Electrical conductivity in dynamically orientationally disordered systems: ac and dc measurements in ferromagnetic single crystals of TDAE-C-60, *Phys. Rev. Lett.* **77** (1996) 2045.