

1. C.Lee, S.Zdravković, and R.G.Parr, *Additivity of the one-third power of the electron density in the hydrogen molecule-ion and hydrogen molecule*, J.Chem.Phys. **92** (1990) 2114.
2. M.Satarić, S.Zdravković, J.A.Tuszyński, *DNA dynamics and endogeneous fields*, BioSystems **49** (1999) 117-125.
3. Miljko V. Satarić, Slobodan Zdravković, *Nonlinear dynamics of a DNA chain affected by endogeneous AC fields*, Bioelectrochemistry and Bioenergetics **48** (1999) 325-328 (Ново име час.: Bioelectrochemistry)
4. S. Zdravković, M. V. Satarić, *The Impact of Viscosity on the DNA Dynamics*, Physica Scripta **64** (2001) 612-619.
5. S.Zdravković and M.V.Satarić, *DNA Dynamics and Big Viscosity*, Int. J. Mod. Phys. B **17** (2003) 5911-5923.
6. S.Zdravković, M.V.Satarić and J.A.Tuszyński, *Biophysical Implications of the Peyrard-Bishop-Dauxois Model of DNA Dynamics*, J. Comput. Theor. Nanosci. **1** (2004) 171-181.
7. S.Zdravković and M.V.Satarić, *Optical and Acoustical Frequencies in a Nonlinear Helicoidal Model of DNA Molecules*, Chin. Phys. Lett. **22** (2005) 850-852.
8. S. Zdravković, *Heisenberg uncertainty principle and DNA dynamics*, Physics Essays **18** (2005) 168.
9. S.Zdravković, J.A.Tuszyński and M.V.Satarić, *Peyrard-Bishop-Dauxois Model of DNA Dynamics and Impact of Viscosity*, J. Comput. Theor. Nanosci. **2** (2005) 263-271.
10. S.Zdravković and M.V.Satarić, *Influence of Morse Potential on DNA Dynamics*, Chin. Phys. Lett. **23** (2006) 65-68.
11. Slobodan Zdravković and Miljko V. Satarić, *Single Molecule Unzipping Experiments on DNA and Peyrard-Bishop-Dauxois Model*, Phys. Rev. E **73** (2006) 021905 (11pages).

- 12.** S. Zdravković, M. V. Satarić and D. Vuković, *Modulation and Demodulation in DNA Molecule*, Mod. Phys. Lett. B, Vol. **20** (2006) 607-615.
- 13.** S. Zdravković and M. V. Satarić, *High amplitude mode and DNA opening*, Europhys. Lett. **78** (2007) 38004 (6 pages).
- 14.** S Zdravković and M V Satarić, *Impact of viscosity on DNA dynamics*, Chin. Phys. Lett. **24** (2007) 1210-1213.
- 15.** S. Zdravković and M. V. Satarić, *Resonance mode in DNA dynamics*, Europhys. Lett. **80** (2007) 38003 (6 pages).
- 16.** S.Zdravković, *Local Opening of DNA Chain as a Resonance Mode*, Nonlinear Phenom. Complex Syst. **10** (2007) 228-237.
- 17.** Slobodan Zdravković and Miljko V. Satarić, *Solitonic speed in DNA*, Phys. Rev. E **77** (2008) 031906 (7 pages).
- 18.** Slobodan Zdravković and Miljko V. Satarić, *Nonlinear Schrödinger equation and DNA dynamics*, Phys. Lett. A **373** (2008) 126-132.
- 19.** S. Zdravković and M. V. Satarić, *Parameter selection in a Peyrard-Bishop-Dauxois model for DNA dynamics*, Phys. Lett. A **373** (2009) 2739–2745.
- 20.** S. Zdravković and M. V. Satarić, *DNA dynamics - Experiment proposals*, Phys. Lett. A **373** (2009) 4453–4459.
- 21.** S. Zdravković and Conrad Bertrand Tabi, *Two Possible Approaches in Peyrard-Bishop-Dauxois Model of DNA Dynamics*, J. Comput. Theor. Nanosci. **7** (2010) 1418-1424.
- 22.** S. Zdravković and M. V. Satarić, *Stacking interaction in DNA molecule*, J. Comput. Theor. Nanosci. **7** (2010) 2031-2035.
- 23.** Slobodan Zdravković, Miljko V. Satarić, and Ljupčo Hadžievski, *DNA-RNA transcription as an impact of viscosity*, Chaos **20** (2010) 043141 (5 pages)

- 24.** Slobodan Zdravković and Miljko V. Satarić, *Transverse interaction in DNA molecule*, BioSystems **105** (2011) 10–13.
- 25.** Slobodan Zdravković, *Helicoidal Peyrard-Bishop model of DNA dynamics*, J. Nonlin Math. Phys., **18**, Suppl. 2 (2011) 463–484.
- 26.** Miljko V. Satarić, Slobodan Zdravković and Jack A. Tuszyński, *Modeling of Relay Helix Functional Dynamics and Feasibility of Experimental Verification by Neutron Scattering*, Chaos **21** (2011) 043135.
- 27.** Slobodan Zdravković and Miljko V. Satarić, *Morse potential in DNA molecule - An experiment proposal*, J. Biosci. **37** (4) (2012) 613–616.
- 28.** Slobodan Zdravković, Louis Kavitha, Miljko V. Satarić, Slobodan Zeković, Jovana Petrović, *Modified extended tanh-function method and nonlinear dynamics of microtubules*, Chaos, Solitons and Fractals **45** (2012) 1378-1386.
- 29.** H.P. Ekobena Fouda, C.B. Tabi, S. Zdravkovic, and T.C. Kofane, *Helicity and Wave Switching in a Nonlinear Model of DNA Dynamics*, J. Phys. Chem. Biophys. **S:4** (2012) 001.
- 30.** L. Kavitha, A. Muniyappan, A. Prabhu, S. Zdravković, S. Jayanthi, D. Gopi, *Nano breathers and molecular dynamics simulations in hydrogen-bonded chains*, J. Biol. Phys. **39** (2013) 15-35.
- 31.** S. Zdravković, M. V. Satarić and Slobodan Zeković, *Nonlinear dynamics of microtubules – A longitudinal model*. Will be published in Europhys. Lett.

## Chapter in a book

S. Zdravković, Nonlinear Dynamics of DNA Chain – Peyard-Bishop-Dauxois Model. In Spasic, A.M. and Hsu, J.P. (Eds.) *Finely Dispersed Particles: Micro-, Nano-, and Atto-Engineering*, 130 Surfactant Science Series, (Dekker/CRC Press/Taylor & Francis Group, Boca Raton, Florida, **2006**), pp. 779-811.

## **Ph.D. Thesis**

Slobodan Zdravković, *Elements of nonlinear dynamics of DNA molecule*, Novi Sad, 2004 (in Serbian).