



# Curriculum Vitae

## HRZZ Form

### PERSONAL INFORMATION

Name and surname **Danijel Grgičin**  
 Academic title Dr. sc.  
 Year and institution of PhD obtained 2015; University of Zagreb,  
 Faculty of Science  
 Address Zagrebačka 76, 10291 Prigorje Brdovečko  
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 Personal web page  
 Citizenship Croatian  
 Date and place of birth 08.04.1985. Zagreb



### WORK EXPERIENCE<sup>1</sup> (CHRONOLOGICALLY\*)

Date (from – until) February 2010.-now  
 Institution Institute of physics  
 Position Research assistant  
 Work field *Biophysics*

### EDUCATION<sup>2</sup> (CHRONOLOGICALLY)

Date 2010.-2015.  
 Place Zagreb  
 Institution University of Zagreb, Faculty of science, Physics department  
 Title of qualification Dr. sc. in biophysics  
 Date 2003.-2009.  
 Place Zagreb  
 Institution University of Zagreb, Faculty of science, Physics department  
 Title of qualification Master degree in physics

### LANGUAGES

**MOTHER TONGUE** Croatian  
**ENGLISH LANGUAGE**  
 Speaking **Fluent**  
 Writing **Fluent**  
 Reading **Fluent**

<sup>1,2,3</sup> Please add rows to enter all required information

\* all information in the document should be entered chronologically – from the most recent to the oldest

**RESEARCH AND OTHER PROJECTS**

(CHRONOLOGICALLY; LEADER AND ASSOCIATES; FUNDING SOURCE)

1.02.2010. – 31.10.2014. Participation in project: Strongly correlated inorganic, organic and biomaterials (Project Leadres: Silvia Tomić); Funding Source MZOS RH 035-0000000-2836

**TEACHING**

(CHRONOLOGICALLY; UNDERGRADUATE, GRADUATE , POSTGRADUATE STUDY PROGRAMMES)

2012./2013.

Assistant in Advanced Physics lab 1 course,  
for Master students of Physics Department, Faculty of Science, University of Zagreb

2011./2012

Assistant in Advanced Physics lab 1 course,  
for Master students of Physics Department, Faculty of Science, University of Zagreb

2010./2011.

Assistant in Advanced Physics lab 2 course,  
for Master students of Physics Department, Faculty of Science, University of Zagreb

2009./2010.

Assistant in Advanced Physics lab 2 course,  
for Master students of Physics Department, Faculty of Science, University of Zagreb

**ORGANIZATIONAL SKILLS AND COMPETENCES**

(CHRONOLOGICALLY; ORGANIZATION OF HOME AND INTERNATIONAL SCIENCE EVENTS )

Participation in organisation of 6<sup>th</sup> Christmas Biophysics Workshop, Varaždin (December 12.-13., 2011.)

Participation in technical organisation of Physics of Cells: From the Edge to the Heart, Primošten (September 6.-13., 2009.)

**MEMBERSHIP IN SCIENCE ORGANIZATIONS AND BODIES**

(CHRONOLOGICALLY; HOME AND INTERNATIONAL ORGANIZATIONS AND BODIES)

Croatian physical society

Croatian biophysical society

**2015.**

I. Delač Marion, **D. Grgičin**, K. Salomon, S. Bernstorff, T. Vuletić, Polyelectrolyte Composite: Hyaluronic Acid Mixture with DNA, *Macromolecules* 48 (8), 2686–2696, (2015) IF: 5.93, [dx.doi.org/10.1021/ma502090x](https://doi.org/10.1021/ma502090x)

10<sup>th</sup> EBSA European Biophysics Congress, Dresden, Germany (18-22 July, 2015) with poster **D. Grgičin**, D. Vurnek, T. Vuletić: Experimental study of polyion potencial in polyelectrolyte in *Eur. Biophys. J* **44** (Suppl 1) (2015).

10<sup>th</sup> EBSA European Biophysics Congress, Dresden, Germany (18-22 July, 2015) with poster I. Delač Marion, **D. Grgičin**, K. Salomon, S. Bernstorff, T. Vuletić: Polyelectrolyte Composite: Hyaluronic Acid Mixture with DNA in *Eur. Biophys. J* **44** (Suppl 1) (2015).

10<sup>th</sup> Xmas biophysics Workshop, San Daniele del Friuli, Italy (14-15 December, 2015) with talk **D. Grgičin**, T. Vuletić: Dynamics and structure of DNA: influence of counterion valency

**2014.**

From Solid State To BioPhysics VII, Dubrovnik, (07-14. June 2014.) with lecture **D. Grgičin**, S. Dolanski Babić, R. Podgornik, S. Tomić: Dynamics and structure of deoxyribonucleic acid salt solutions: influence of counterion valency

12<sup>th</sup> Greta Pifat Mrzljak International School of Biophysics, Primošten, (27. Semptember-. 6 October 2014) with lecture **D. Grgičin**, S. Dolanski Babić, S. Tomić: A novel approach to study deoxyribonucleic (DNA) acid denaturation

12<sup>th</sup> Greta Pifat Mrzljak International School of Biophysics, Primošten, (27. Semptember-. 6 October 2014) with lecture I. Delač Marion, **D. Grgičin**, K. Salomon, S. Bernstorff, T. Vuletić: Polyelectrolyte composite: Hyaluronic acid mixture with DNA

9<sup>th</sup> Christmas Biophysics workshop, Buzet, (15.-16. December 2014) with lecture **D. Grgičin**, D. Vurnek, T. Vuletić: A dynamics study of a structural problem: DNA melting studied by electrical transport

9<sup>th</sup> Christmas Biophysics workshop, Buzet, (15.-16. December 2014) with lecture I. Delač Marion, **D. Grgičin**, K. Salomon, S. Bernstorff, T. Vuletić: Polyelectrolyte composite: Hyaluronic acid mixture with DNA

**2013.**

**D. Grgičin**, S. Dolanski Babić, T. Ivek, S. Tomić and R. Podgornik, *Effect of magnesium ions on dielectric relaxation in semidilute DNA aqueous solutions*, *Phys. Rev. E* **88**, 052703 (2013) IF:2.33, [dx.doi.org/10.1103/PhysRevE.88.052703](https://doi.org/10.1103/PhysRevE.88.052703)

S.Tomić, D.Grgičin, T.Vuletić, S.Dolanski Babić, T.Ivek, R.Podgornik, *DNA in Aqueous Solutions with Repulsive Interactions: Structure Determined on the Basis of Dielectric Spectroscopy Measurements*, Bioinformatics and biological physics: proceedings of the scientific meeting// editor Vladimir Paar. Zagreb : Hrvatska akademija znanosti i umjetnosti, Odbor za bioinformatiku i biološku fiziku, Razred za matematičke, fizičke i kemijske znanosti, 2013. Str. 159-177.

8<sup>th</sup> Annual meeting of the Croatian physical society, Primošten, (6.-8. October 2013.) with lecture **D. Grgičin**, S. Dolanski Babić, T. Ivek, S. Tomić, The power of magnesium counterion screening: the DNA preserve double stranded konformation even in low salt limit

8<sup>th</sup> Christmas Biophysics Workshop as coautor of lecture I. Delač Marion, K. Salomon, D. Grgičin, S. Bernstroff i T. Vuletić, *SAXS study of a binary mixuters of DNA and hyaluronic acid*

## 2012.

S.Tomić, **D. Grgičin**, T. Ivek, T.Vuletić, S. Dolanski Babić, i R. Podgornik, *Dynamics and Structure of Biopolyelectrolytes in Repulsion Regime characterized by Dielectric Spectroscopy*, [Physica B 407, 1958-1963 \(2012.\)](#) **IF:1.28**, dx.doi.org/10.1016/j.physb.2012.01.074

“11<sup>th</sup> Greta Pifat-Mrzljak International School of Biophysics”, Primošten (30.sempember -9. october 2012.) with poster **D. Grgičin**, S. Dolanski Babić, T. Vuletić, S. Tomić, *Comparative study of native and denatured Mg-DNA pure water solutions.*

„7th Christmas Biophysics Workshop“, Riegersburg (17. – 18. December 2012.) with lecture D. Grgičin, S. Dolanski Babić, T.Ivek, T. Vuletić, S. Tomić, Conformation of DNA in low added salt solutions. 2011.

T. Vuletić, S. Dolanski Babić, D. Grgičin, D. Aumiler, J. Raedler, F. Livolant i S. Tomić, Manning free counterion fraction for a rodlike polyion: Aqueous solutions of short DNA fragments in presence of very low added salt, [Phys. Rev. E 83, 041803 \(2011\) IP 2.3](#), dx.doi.org/10.1103/PhysRevE.83.041803

S. Tomić, D. Grgičin, T. Ivek, S. Dolanski Babić, T. Vuletić, G. Pabst i R. Podgornik, Dynamics and Structure of Biopolyelectrolytes Characterized by Dielectric Spectroscopy, [Macromol. Symp., 305, 43–54 \(2011\)](#), dx.doi.org/10.1002/masy.201000121

6th Christmas Biophysics Workshop, Varaždin, (12.-13. December 2011.) with lecture D. Grgičin, S. Dolanski Babić, T. Vuletić, I. Ladan, S. Tomić, Dynamics and structure of Mg-DNA aqueous solutions

7th Annual meeting of the Croatian physical society, Primošten, (13.-16. October 2011.) with poster D. Grgičin, S. Dolanski Babić, T. Vuletić, I. Ladan, S. Tomić, Dynamics and structure of DNA aqueous solutions with monovalent and divalent counterions

## 2010.

T. Vuletić, S. Dolanski Babić, T. Ivek, D. Grgičin, S. Tomić i R. Podgornik, Structure and dynamics of hyaluronate acid semidilute solution: a dielectric spectroscopy study, [Phys. Rev. E 82 011922 \(2010\); IP 2.3](#), dx.doi.org/10.1103/PhysRevE.82.011922

5th Christmas Biophysics Workshop, Ptuj, Slovenia (10.-11. December 2010.) with lecture : D. Grgičin, S. Dolanski Babić, T. Vuletić, S. Tomić, UV Spectroscopy and Conductometry of Mg-DNA Aqueous Solutions

## 2009.

4th Xmas Biophysics Workshop: Soft Matter meets Biological Physics, Leibnitz, Austria (14.-15. December 2009.) with lecture: D. Grgičin, T. Vuletić, S. Dolanski Babić, S. Tomić, Electrical transport properties of the sodium hyaluronate semidilute solutions