

# Curriculum Vitae: Dr. Rita De Zorzi

## Personal information

Name: Rita De Zorzi  
Address: via di Cologna, 57/1 – 34127 Trieste, Italy  
Telephone: +39-340-0738211  
E-mail: rdezorzi@units.it, ritadezorzi@gmail.com, ritadezorzi@libero.it  
Nationality: Italian  
Place of birth: Udine, Italy  
Date of birth: 1981, July 15th

## Education, Training and Professional Experiences

2019, November – present: **Associate Professor** at the **University of Trieste** (Professore Associato), Department of Chemical and Pharmaceutical Sciences, University of Trieste.

2016, November – 2019, November: **Research position** at the **University of Trieste** (Ricercatore e Tempo Determinato/B), Department of Chemical and Pharmaceutical Sciences, University of Trieste.

2015, September – 2016, November: **Research position** at the **University of Trieste** (Ricercatore e Tempo Determinato/A), Department of Chemical and Pharmaceutical Sciences, University of Trieste.

Research projects: Structural characterization and elucidation of mechanistic aspects of flippases, proteins that flip specific lipids in the lipid bilayer. Funding: SIR (Scientific Independence of young Researchers) grant from the Italian Ministry of Education, University and Research (MIUR).

2012, September – 2015, August: **Post-doctoral position at Harvard Medical School** (Boston, Massachusetts, USA), Cell Biology Department, under the supervision of Prof. Thomas Walz.

Research projects: determination of the structural features of Aquaporin-0, crystallized with phosphatidyl inositol lipids, by electron crystallography; structural determination of different conformations of the  $\alpha$ -amino-3-hydroxy-5-methyl-4-isoxazolepropionic acid (AMPA) receptor by cryo-electron microscopy on single particles.

2010, May – 2012, August: **Marie Curie Intra European Fellowship at Oxford University**, Biochemistry Department (Oxford, UK), under the supervision of Prof. Catherine Vénien-Bryan. At the end of the fellowship, post-doctoral position.

Research projects: determination of the structure of a membrane protein, a bacterial potassium channel (KirBac3.1), using X-ray diffraction techniques on 3D crystals, and electron microscopy techniques for the analysis of 2D crystals. Other experiences: supervision of the work of two

undergraduate students of Oxford University. Funding: Marie Curie Actions – Intra-European Fellowship for Career Development, FP7 (2 years).

2009, April – 2010, April: **Post-doctoral position at Centre of Excellence in Biocrystallography**, Trieste, in collaboration with the Department of Biological Sciences of the University “Federico II” of Naples (Italy).

2006, January – 2009, March 18<sup>th</sup>: **PhD degree in Molecular Sciences** at the Centre of Excellence in Biocrystallography, University of Trieste (Italy). Experimental thesis in structural chemistry: “*Structural studies on molecular recognition in protein complexes and supramolecular systems*”, supervisor Prof. Silvano Geremia.

Research projects: supramolecular studies of cavitand-porphyrin systems; structural characterization of alcohol-receptor binding affinities via X-Ray diffraction analysis of single crystals; structural determination of soluble proteins. Other experiences: co-supervision of four undergraduate students and a PhD student; teaching activities with undergraduate students on subjects of chemistry and physics.

2000, September – 2005, July 8<sup>th</sup>: **Master Degree in Chemistry** at the University of Trieste, grade obtained: 110/110 *cum laude*. Experimental thesis in structural chemistry: “*Structural studies on supramolecular systems*”, supervisor Prof. Silvano Geremia.

## **Personal skills and competences**

During my PhD, I acquired many skills in the crystallographic field, including **micro-scale crystallization techniques** (vapour-diffusion crystallization techniques, hanging drop and sitting drop) applied to both protein and supramolecular crystallization, automated crystallization using robots, **supramolecular self-assembly**, co-crystallization techniques, **data collection** using area detectors and cryogenic systems. I had the opportunity to use and gain experience with both **conventional sources and synchrotron radiation** (at the XDR1 beamline of Elettra, Trieste). In addition, during my Marie Curie fellowship I had the opportunity to learn the basics of the crystallization in **lipid cubic phase (LCP)**, a technique specifically developed for the crystallization of membrane proteins.

In Oxford, I have been involved in an electron microscopy study on 2D protein crystals, learning various **2D crystallization** techniques, both in batch (dialysis, BioBeads method) and on lipid monolayers. I acquired also skills regarding automated systems for 2D crystallization screening, through a collaboration with the University of Basel, Switzerland. Moreover, during my post-doctoral experiences, I learnt techniques of **sample preparation** for crystals, for negative stained samples and **cryosamples** (back injection and sandwich methods), and for single-particle specimen, using Vitrobot and CryoPlunge3. In Boston, I was trained in **electron microscopy imaging and diffraction data collection of 2D crystals** and **data analysis** with the main software available. In addition, in the lab of Prof. Thomas Walz, I acquired skills regarding **single-particle data collection and processing**: class

averaging, *ab initio* 3D reconstruction of the protein volume from 2D class averages, 3D classification and refinement of the 3D reconstruction.

To these main fields of expertise, my knowledge spans to other fields that I deemed essential for the experimental work. Among these, a basic knowledge of NMR techniques such as DOSY, EXAFS techniques and skills regarding the analysis of kinetic data.

Among my technical skills, it's worth mentioning hand-on skills regarding **expression of proteins** in bacterial inclusion bodies and membranes, refolding, and **purification** using various chromatographic techniques, together with some expertise in simple **molecular biology protocols** such as site mutagenesis or plasmid replication.

My computer skills include:

- A good knowledge of several crystallographic software for analysis of X-ray diffraction data (Mosflm, HKL2000 package including Denzo and Scalepack) and for resolution and refinement of the structures (CCP4 suite, Shelx, SIR, XDS).
- Use of EM image analysis software (SPARX, EMAN, RELION, FREALIGN, the MRC 2D processing suite, 2dx, IPLT).
- Good knowledge of software for model building and molecular graphics (Pymol, Coot, Chimera, Mercury).
- Use of chemical softwares: ChemSketch (to plot molecular schematic structures), Gepasi (to analyse kinetic data).
- Programming languages knowledge: Matlab, Octave, Python.
- Use of operating systems: Unix, Linux, Windows, Mac OS X.
- Use of application software (MS office and OpenOffice) and use of graphical software (JASC Paint Shop Pro, Adobe Photoshop, GIMP Image Editor).

## Schools, Congresses and Presentations

- 2016, August 29th: **Oral communication** at the 8<sup>th</sup> Conference Chemistry towards Biology in Brno (CZ): *"Structure and stereochemistry of self-assembly heterochiral tripeptides"*.
- 2016, February 17<sup>th</sup>: **Invited talk** at the Department of Chemical and Pharmaceutical Sciences, University of Trieste: *"Structure and Dynamics of Membrane Channels revealed by Electron Microscopy"*.
- 2012, December 17<sup>th</sup>– 18<sup>th</sup>: 1st Workshop CNRS-Oxford Membrane Proteins Network, Paris (France). **Oral presentation**: *"Comparison of the structure of a bacterial potassium channel in both 2D and 3D crystals"*.
- 2012, May 23<sup>rd</sup>: **Invited talk** at the Institute of Cancer Research, London (UK): *"Structural studies of a potassium channel, KirBac, showing the molecular mechanisms of gating"*.

- 2012, February 25th– 29th: 56th Biophysical Society Annual Meeting 2012, San Diego (California, USA). **Poster presentation:** “*Comparison of the structure of a bacterial potassium channel in 2D and 3D crystals*”.
- 2012, February 16th: **Invited talk** at the Pasteur Institute, Paris (France): “*Structural studies of a potassium channel, KirBac, showing the molecular mechanisms of gating*”.
- 2011, September 30th: “Ion Channels and Diseases of Electrically Excitable Cells”, 9th OXION Day, Oxford University, Oxford (UK). **Poster presentation.**
- 2011, August 22nd – 30th: XXII Congress and General Assembly, International Union of Crystallography, Madrid (Spain).
- 2011, June 26th – July 1st: Gordon Research Conference on Three Dimensional Electron Microscopy, Colby-Sawyer College, New London (NH), USA. **Poster presentation:** “*A bacterial potassium channel in 2D and 3D crystals: the influence of the lipid environment*”.
- 2010, October 1st: “Ion Channels and Diseases of Electrically Excitable Cells”, 8th OXION Day, Oxford University, Oxford (UK).
- 2010, August 1st – 7th: “Electron Crystallography Workshop”, C-CINA, Biozentrum, University Basel, Basel (Switzerland). **Poster and oral presentation:** “*Insights in the gating mechanism of KirBac3.1*”
- 2008, April 27th – May 2nd: “Summer School on Mathematical and Theoretical Crystallography”, International Union of Crystallography, Gargnano, Italy.
- 2007, September 23rd – 28th: “Meeting of the Italian and Spanish Crystallographic Associations”, Copanello di Staletti, Catanzaro (Italy). **Oral presentation:** “*Probing cavitand selectivity for alcohols via competition studies by X-ray diffraction*”.
- 2007, September 10th – 21st: “IX School on Synchrotron Radiation: Fundamentals, Methods and Applications”, Duino, Trieste (Italy).
- 2007, July 19th – 21st: “Summer School 2007: Advanced Topics in Biomedicine II”, Trieste (Italy).
- 2006, May 21st – 25th: “Eighth International School on the Crystallography of Biological Macromolecules”, Como (Italy).
- 2004, August 30th – September 3rd: Italian Crystallography Association Summer School 2004: “Diffraction methods for materials analysis at atomic level - Principles and applications”, Miramare, Trieste (Italy).
- 2003, September 8th – 11th: Biocrystallography Course: “From Gene to Drug” Trieste (Italy).

## Publications

- Fagnen C., Bannwarth L., Oubella I., Forest E., De Zorzi R., de Araujo A., Mhoumadi Y., Bendahhou S., Perahia D., and Venien-Bryan C., “*New Structural insights into Kir channel gating from molecular simulations, HDX-MS and functional studies*”, **Sci Rep.**, 2020. 10(1): p. 8392.

- Squarcina A., Santoro A., Hickey N., De Zorzi R., Carraro M., Geremia S., Bortolus M., Di Valentin M., and Bonchio M., "Neutralization of Reactive Oxygen Species at Dinuclear Cu(II)-Cores: Tuning the Antioxidant Manifold in Water by Ligand Design", **ACS Catal.**, 2020. 10(13): p. 7295–7306.
- Cringoli M. C., Romano C., Parisi E., Waddington L. J., Melchionna M., Semeraro S., De Zorzi R., Grönholm M., and Marchesan S., "Bioadhesive supramolecular hydrogel from unprotected, short d,l-peptides with Phe-Phe and Leu-Asp-Val motifs", **Chem. Commun.**, 2020. 56(20): p. 3015-3018.
- Cringoli M. C., Bellotto O., De Zorzi R., Vargiu A. V., and Marchesan, S., "Self-Assembling L-D-L - Tripeptides Dance the Twist", **Synlett**, 2020. 31(5): p. 434-438.
- Garcia A. M, Lavendomme R., Kralj S., Kurbasic M., Bellotto O., Cringoli M. C, Semeraro S., Bandiera A., De Zorzi R., and Marchesan S., "Self-Assembly of an Amino Acid Derivative into an Antimicrobial Hydrogel Biomaterial", **Chemistry**, 2020. 26(8): p. 1880-1886.
- Salpietro V., Dixon C. L., Guo H., et al., "AMPA receptor GluA2 subunit defects are a cause of neurodevelopmental disorders", **Nat Commun.**, 2019. 10(1): p. 3094.
- Redenti S., Marcovich I., De Vita T., Pérez C., De Zorzi R., Demitri N., Perez D. I., Bottegoni G., Bisignano P., Bissaro M., Moro S., Martinez A., Storici P., Spalluto G., Cavalli A., and Federico S., "A Triazolotriazine-Based Dual GSK-3 $\beta$ /CK-1 $\delta$  Ligand as a Potential Neuroprotective Agent Presenting Two Different Mechanisms of Enzymatic Inhibition", **ChemMedChem**, 2019. 14(3): p. 310-314.
- Đorđević L., Marangoni T., Liu M., De Zorzi R., Geremia S., Minoia A., Lazzaroni R., Ishida Y., and Bonifazi D., "Templating Porphyrin Anisotropy via Magnetically Aligned Carbon Nanotubes", **Chempluschem**, 2019. 84(9): p. 1270-1278.
- Asaro F., Boga C., Demitri N., De Zorzi R., Drioli S., Gigli L., Micheletti G., Nitti P., and Zangrando E., "X-Ray Crystal Structures and Organogelator Properties of (R)-9-Hydroxystearic Acid", **Molecules**, 2019. 24(15): p. 2854.
- Efthymiou S., Salpietro V., Malintan N., et al., "Biallelic mutations in neurofascin cause neurodevelopmental impairment and peripheral demyelination", **Brain**, 2019. 142(10): p. 2948-2964.
- Kurbasic M., Semeraro S., García Fernández A., Kralj S., Parisi E., Deganutti C., De Zorzi R., and Marchesan S., "Microwave-Assisted Cyclization of Unprotected Dipeptides in Water to 2,5-Piperazinediones and Self-Assembly Study of Products- and Reagents", **Synthesis**, 2019. 51(14): p. 2829-2838.
- Salpietro V., Malintan N. T., Llano-Rivas I., et al., "Mutations in the Neuronal Vesicular SNARE VAMP2 Affect Synaptic Membrane Fusion and Impair Human Neurodevelopment", **Am J Hum Genet.**, 2019. 104(4): p. 721-730.
- Garcia A. M., Iglesias Asperilla D., Parisi E., Styan K. E., Waddington L. J., Deganutti C., De Zorzi R., Grassi M., Melchionna M., Vargiu A. V., and Marchesan S., "Chirality Effects on Peptide Self-Assembly Unraveled from Molecules to Materials", **Chem**, 2018. 4(8): p. 1862-1876.
- Brancatelli G., Nicosia C., Barboza T., Guy L., Dutasta J.-P., De Zorzi R., Demitri N., Dalcanale E., Geremia S., and Pinalli R., "Enantiospecific recognition of 2-butanol by an inherently chiral cavitand in the solid state", **CrystEngComm**, 2017. 19(24): p. 3355-3361.

- Cecot G, Marmier M., Geremia S., De Zorzi R., Vologzhanina A. V., Pattison P., Solari E., Fadaei Tirani F., Scopelliti R., and Severin K., *"The Intricate Structural Chemistry of MII2nLn-Type Assemblies"*, **J Am Chem Soc.**, 2017. 139(24): p. 8371-8381.
- Tagliapietra M., Squarcina A., Hickey N., De Zorzi R., Geremia S., Sartorel A., and Bonchio M., *"Hydrogen Evolution by FeIII Molecular Electrocatalysts Interconverting between Mono and Di-Nuclear Structures in Aqueous Phase"*, **ChemSusChem**, 2017. 10(22): p.4430-4435.
- Saboe P.O., Rapisarda C., Kaptan S., Hsiao Y.S., Summers S.R., De Zorzi R., Dukovski D., Yu J., de Groot B.L., Kumar M., and Walz T., *"Role of Pore-Lining Residues in Defining the Rate of Water Conduction by Aquaporin-0."*, **Biophys J.**, 2017. 112(5): p. 953–965.
- Bellich B., Di Fonzo S., Tavagnacco L., Paolantoni M., Masciovecchio C., Bertolotti F., Giannini G., De Zorzi R., Geremia S., Maiocchi A., Uggeri F., Masciocchi N., and Cesàro A., *"Myelography Iodinated Contrast Media. 2. Conformational Versatility of Iopamidol in the Solid State."*, **Mol Pharm.**, 2017. 14(2): p. 468–477.
- Olajuyigbe F.M., Demitri N., De Zorzi R., and Geremia S., *"Developing HIV-1 Protease Inhibitors through Stereospecific Reactions in Protein Crystals."*, **Molecules**, 2016. 21: p. 1458.
- Cecot G., Alameddine B., Prior S., De Zorzi R., Geremia S., Scopelliti R., Fadaei F.T., Solaria E., and Severin K., *"Large heterometallic coordination cages with gyrobifastigium-like geometry."*, **Chem. Commun.**, 2016. 52: p. 11243-11246.
- Klara S.S., Saboe P.O., Sines I.T., Babaei M., Chiu P.L., De Zorzi R., Dayal K., Walz T., Kumar M. and Mauter M.S., *"Magnetically Directed Two-Dimensional Crystallization of OmpF Membrane Proteins in Block Copolymers."*, **J Am Chem Soc**, 2016. 138: p. 28–31.
- D'Urso A., Brancatelli G., Hickey N., Farnetti E., De Zorzi R., Bonaccorso C., Purrello R., and Geremia S., *"Interactions of a water-soluble calix[4]arene with spermine: solution and solid-state characterization"*, **Supramolecular Chemistry**, 2016. 28(5–6): p. 499–505.
- De Zorzi R., Mi W., Liao M., and Walz T., *"Single-particle electron microscopy in the study of membrane protein structure."*, **Microscopy (Oxf)**, 2016. 65(1): p. 81–96.
- De March M., Brancatelli G., Demitri N., De Zorzi R., Hickey N., and Geremia S., *"A general exit strategy of monoheme cytochromes c and c2 in electron transfer complexes?"*, **IUBMB Life**, 2015. 67(9): p.694-700.
- Shen Y.X., Si W., Erbakan M., Decker K., De Zorzi R., Saboe P.O., Kang Y.J., Majd S., Butler P.J., Walz T., Aksimentiev A., Hou J.L., and Kumar M., *"Highly permeable artificial water channels that can self-assemble into two-dimensional arrays."*, **Proc Natl Acad Sci U S A**, 2015. 112(32): p.9810-5.
- Shaheen A., Ismat F., Iqbal M., Haque A., De Zorzi R., Mirza O., Walz T. and Rahman M., *"Characterization of putative multidrug resistance transporters of the major facilitator-superfamily expressed in Salmonella Typhi."*, **J Infect Chemother.**, 2015.21(5): p.357-62.
- De Zorzi R., Brancatelli G., Melegari M., Pinalli R., Dalcanale E. and Geremia S., *"Selectivity assessment in host–guest complexes from single-crystal X-ray diffraction data: the cavitand–alcohol case."*, **CrystEngComm**, 2014. 16:p. 10987-96.

- Dürr K.L., Chen L., Stein R.A., De Zorzi R., Folea I.M., Walz T., Mchaourab H.S. and Gouaux E., "Structure and dynamics of AMPA receptor GluA2 in resting, pre-open, and desensitized states.", **Cell**, 2014. 158 (4): p. 778-92
- De March M., Demitri N., De Zorzi R., Casini A., Gabbiani C., Guerri A., Messori L. and Geremia S., "Nitrate as a probe of cytochrome c surface: crystallographic identification of crucial "hot spots" for protein-protein recognition", **J InorgBiochem.**, 2014. 135: p. 58-67.
- Zubcevic L., Bavro V.N., Muniz J.R., Schmidt M.R., Wang S., De Zorzi R., Venien-Bryan C., Sansom M.S., Nichols C.G., Tucker S.J., "Control of KirBac3.1 potassium channel gating at the interface between cytoplasmic domains", **J BiolChem**, 2014. 289 (1): p. 143-51.
- De Zorzi R., Nicholson W.V., Guigner J.M., Erne-Brand F. and Vénien-Bryan C., "Growth of large and highly ordered 2D crystals of a K<sup>+</sup> channel, structural role of lipidic environment", **Biophys J**, 2013. 105 (2): p. 398-408.
- Brancatelli G., De Zorzi R., Hickey N., Siega P., Zingone G. and Geremia S., "New Multicomponent Porous Architecture of Self-Assembled Porphyrins/Calixarenes Driven by Nickel Ions", **Crystal Growth & Design**, 2012. 12 (10): p. 5111-5117.
- Bavro V.N.\*, De Zorzi R.\*, Schmidt M.R., Muniz J.R.C., Zubcevic L., Sansom M.S.P., Vénien-Bryan C. and Tucker S.J., "Structure of a KirBac potassium channel with an open bundle crossing indicates a mechanism of channel gating", **Nat Struct Mol Biol**, 2012. 19 (2): p. 158-163.
- Maffei F., Betti P., Genovese D., Montalti M., Prodi L., De Zorzi R., Geremia S. and Dalcanale E., "Highly selective chemical vapor sensing by molecular recognition: Specific detection of C1-C4 alcohols with a fluorescent phosphonatecavitand", **AngewChem – Int Ed**, 2011. 50 (20): p. 4654-4657.
- Busi M., Cantadori B., Boccini F., De Zorzi R., Geremia S. and Dalcanale E., "Molecular recognition with ditopiccavitand Re complexes", **Eur J Org Chem**, 2011. 14: p. 2629-2642.
- Tancini F., Yebeutcho R.M., Pirondini L., De Zorzi R., Geremia S., Scherman O.A. and Dalcanale E., "Host-guest-driven copolymerization of tetraphosphonatecavitands", **ChemEur J**, 2010. 16 (48): p. 14313-14321.
- De Zorzi R., Guidolin N., Randaccio L. and Geremia S., "A bifunctionalized porous material containing discrete assemblies of copper-porphyrins and calixarenesmetallated by ion diffusion", **CrystEngComm**, 2010. 12 (12): p. 4056-4058.
- Capici C., De Zorzi R., Gargiulli C., Gattuso G., Geremia S., Notti A., Pappalardo S., Parisi M.F. and Puntoriero F., "Calix[5]crown-3-based heteroditopic receptors for n-butylammonium halides", **Tetrahedron**, 2010. 66 (27-28): p. 4987-4993.
- Zeitouny J., Aurisicchio C., Bonifazi D., De Zorzi R., Geremia S., Bonini M., Palma C.-A., Samorì P., Listorti A., Belbakra A. and Armaroli N., "Photoinduced structural modifications in multicomponent architectures containing azobenzene moieties as photoswitchable cores", **J Mater Chem**, 2009. 19: p. 4715 – 4724.
- Sooambar C., Troiani V., Bruno C., Marcaccio M., Paolucci F., Listorti A., Belbakra A., Armaroli N., Magistrato A., De Zorzi R., Geremia S. and Bonifazi D., "Synthesis, photophysical, electrochemical,

and electrochemiluminescent properties of 5,15-bis(9-anthracenyl)porphyrin derivatives”, **Org BiomolChem**, 2009. 7: p. 2402-13.

- De Zorzi R., Guidolin N., Randaccio L., Purrello R. and Geremia S., “Nanoporous Crystals of Calixarene/Porphyrin Supramolecular Complex Functionalized by Diffusion and Coordination of Metal Ions”, **J Am Chem Soc**, 2009. 131(7): p. 2487-2489.
- Sartorel A., Carraro M., Scorrano G., De Zorzi R., Geremia S., McDaniel N.D., Bernhard S. and Bonchio M., “Polyoxometalate embedding of a tetraruthenium(IV)-oxo-core by template-directed metalation of  $[\gamma\text{-SiW}_{10}\text{O}_{36}]^{8-}$ : A totally inorganic oxygen-evolving catalyst”, **J Am Chem Soc**, 2008. 130(15): p. 5006-5007.
- Campagnolo M., Campa C., De Zorzi R., Wuerges J. and Geremia S., “X-ray studies on ternary complexes of maltodextrinphosphorylase”, **Arch BiochemBiophys**, 2008. 471(1): p. 11-19.
- De Zorzi R., Dubessy B., Mulatier J.-C., Geremia S., Randaccio L. and Dutasta J.-P., “Structure of a 4:1:4 supramolecular assembly of neutral TiiiPOcavitands and tetrakis(N-methylpyridinium) porphyrin iodide”, **J OrgChem**, 2007. 72(12): p. 4528-4531.
- Pattarozzi M., Zonta C., Broxterman Q.B., Kaptein B., De Zorzi R., Randaccio L., Scrimin P. and Licini G., “Stereoselective iodocyclization of (S)-allylalanine derivatives:  $\gamma$ -lactone vs cyclic carbamate formation”, **Org Lett**, 2007. 9(12): p. 2365-2368.
- Pirondini L., Bonifazi D., Cantadori B., Braiuca P., Campagnolo M., De Zorzi R., Geremia S., Diederich F. and Dalcanale E., “Inclusion of methano[60]fullerene derivatives in cavitand-based coordination cages”, **Tetrahedron**, 2006. 62(9): p. 2008-2015.
- Gulino F.G., Lauceri R., Frish L., Evan-Salem T., Cohen Y., De Zorzi R., Geremia S., Di Costanzo L., Randaccio L., Sciotto D. and Purrello R., “Noncovalent synthesis in aqueous solution and spectroscopic characterization of multi-porphyrin complexes”, **ChemEur J**, 2006. 12(10): p. 2722-2729.
- Randaccio L., De Zorzi R., Di Costanzo L., Geremia S., Lauceri R., and Purrello R., “Design and crystallographic characterization of multi-porphyrins complexes”, **Acta Crystallographica Section A**, 2005. 61(a1): p. C283-C284.

## Languages

Italian (mother tongue), English.