

Curriculum Vitae

Prof. Dr. Kristina Djinović-Carugo

Head of the Department of Structural and Computational Biology,
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Personal data

Born 1963 in Ljubljana, Slovenia - one child (born 1994)

Higher education

1992 PhD in Chemistry, at the University of Ljubljana (Slovenia). Supervisors: Prof. M. Bolognesi (Uni. Pavia, Italy) and Prof. L. Golic

1986-1989 Master in Chemistry, at the University of Ljubljana (Slovenia); majors: small-molecule crystallography, solid state physics, biophysics, statistical thermodynamics (Master diploma grade with distinction; 10/10)

1981-1986 Diploma in Chemistry at the University of Ljubljana (Slovenia)

Appointments

Since 2004 Full Professor of Structural Biology, Department of Structural and Computational Biology, Max F. Perutz Laboratories, University of Vienna, Austria

Since 2009 Head of Department of Structural and Computational Biology, Max F. Perutz Laboratories, University of Vienna, Austria

2016 - Head (together with Prof. R. Konrat) of CD-Laboratory for High-Content Structural Biology and Biotechnology

2010-2016 Director of Laura Bassi Center for Optimized Structural Studies

1999-2004 Head of Structural Biology and Crystallography Unit, Sincrotrone Trieste, Italy

1997-1999 Staff Scientist, Structural Biology Programme, EMBL-Heidelberg, Germany

1995-1997 EMBO Post-Doctoral Fellow, Structural Biology Programme, EMBL-Heidelberg

1992-1995 Post-Doctoral Fellow, Dept. Microbiol. and Genetics, University of Pavia, Italy

Fellowships and Awards

1995 EMBO long-term postdoctoral fellowship

1995 Alexander von Humboldt postdoctoral fellowship (declined)

2016 Elected EMBO member

Supervision of Graduate Students and Postdoctoral Fellows

2004 – 2018 17 Postdocs / 23 PhD / 16 Master Students
Department of Structural and Computational Biology, MFPL, Univ. of Vienna, Austria

1992 – 2004 4 Postdocs / 2 PhD / 2 Master Students
Structural Biology and Crystallography Unit, Sincrotrone Trieste, Italy

Teaching activities

University of Vienna, Austria

Teaching Macromolecular crystallography, Advanced macromolecular crystallography and Structural Biology I, Biophysical Methods for Biological Macromolecules for students of Molecular Biology and Chemistry (since study year 2004/2005 onwards).

Coordinator of Seminar series Modern concepts in structural biology for students of Molecular Biology and Chemistry (since study year 2004/2005 onwards).

Vice-Speaker of Doctoral College "Integrative Structural Biology" (since 2016 onwards).

Participation in Seminar Series Dynamic Biochemistry for students of Molecular Biology at (since study year 2008/2009 onwards).

University of Ljubljana, Slovenia

Research topics

- Structural biology of actin based cytoskeleton with focus on muscle Z-disk
- Structure-function analysis metallo-enzymes involved in protection from chemical and oxidative damage
- X-ray induced radiation damage

Research achievements in numbers

- 125 papers in peer-reviewed journals (5361 citations, H-index 38), 5 book chapters
- Two publications in Cell, two in Nature Molecular Structural Biology, three in PNAS, two Trends in Biochemical Sciences
- >70 invited talks at national and international conferences or institutions
- 36 research grants as PI (total budget > 6.0 million €).

Teaching Methods for Determining 3D Macromolecular Structure for students of Biochemistry (since study year 1998/99).
Teaching Modern and Complementary Approaches in Structural Biology for students of Biochemistry (since study year 2013/2014)
Mentoring numerous diploma, master and doctoral students in Vienna and Ljubljana.

Institutional Responsibilities

2018 Member of appointment committees for tenure track positions, and RNA biology professorship, Univ. of Vienna, Austria
2015 Member of appointment committee for Scientific Director of MFPL, Univ. of Vienna, Austria
Since 2011 Member of User Committee of the "Protein Technology Facilities" at the Vienna Biocenter Campus Facility (VBCF)
Since 2009 Head of Department for Structural and Computational Biology, Univ. of Vienna, Austria
Since 2004 Member of habilitation committees (3x head of committee) Univ. of Vienna, Austria
Since 2004 Member of appointment committees (2x head of committee) or reviewer for selection of new professors at the Univ. of Vienna and Univ. of Graz, Austria

Fund Raising

Since 1999 I have raised a total of 6.6 million Euros as PI with grants from funding agencies in Austria, Germany, Slovenia, United Kingdom and Europe (5th, 6th, 7th EU Framework Programmes) Coordinator of EU-FP5 RTD project "EXMAD" (2000-2004); Coordinator of EU-FP7 ITN "MUZIC"; Coordinator of Laura Bassi "Center for Optimised Structural Studies" (2010-2016); member of Wellcome Trust Collaborative Award (since 2016); joint director of Christian Doppler Laboratory for High-Content Structural Biology and Biotechnology (since 2017), and Vienna Science and Technology Fund (2018).

Most important funded research projects

- Coordinator of EU-FP7 ITN project: **Muscle Z-disk Protein Complexes: from atomic structure to physiological function (MUZIC)** (Period: 1.11.2009 – 31.8.2014); 459,369.85 €, total volume 2,672,772.26 €
- Vice-Coordinator of DFG/FWF Forschergruppe **Structure, Function and Regulation of the Myofibrillar Z-disc Interactome** (Period:01.02.2011–31.12.2014); 306,558 €
- Director/coordinator of FFG funded **Laura Bassi Center for Optimised Structural Studies (COSS)** (Period 1.1.2010 – 31.12.2016); 766,000 €, total volume 2,249,000 €
- Partner of DFG/FWF Forschergruppe **Structure, Function and Regulation of the Myofibrillar Z-disc Interactome** (Period 01.05.2014 – 30.04.2017); 240,061.50 €
- Partner in Wellcome Trust Collaborative Award, **An integrated approach to the muscle Z-disk: from atomic structure to human disease** (Period 1.10. 2016 – 30.9.2020); 362,528 GBP, total grant volume 1,164,059 GBP
- Co-director (with R. Konrat) of **Christian Doppler Laboratory for High-Content Structural Biology and Biotechnology** (Period 1.3. 2017 – 31/01/2024); 749,241 €, total grant volume 3,309,117 €
- Member of WWTF LS17-008 Chemical Biology Project **Structure Zoom** (Period: 01/03/2018 – 31/08/2021); 79,050 €, total grant volume 672,000 €

5 Selected Commissions of Trust and Expert Activities

2011-2014 Elected member of Board of Austrian Science Fund (FWF)
Since 2012 Member of Project Evaluation Panel of EMBL Hamburg
Since 2013 Member of Scientific Advisory Board of Max IV Swedish Synchrotron Facility
Since 2016 Vice-coordinator of PhD Programme Integrative Structural Biology
Since 2018 Elected Member of the Board of European Muscle Society

Membership in Editorial Boards of International Journals

Since 2018 Member of the Editorial Board of Scientific Reports
Since 2015 Member of the Editorial Board of Journal Muscle Research and Cell Motility
Since 2014 Associated Editor of Science Frontiers Molecular Biosciences

Reviewing activities

For scientific journals:

J. Mol. Biol., Structure, Acta Cryst., J. Biol. Chem., FEBS Letters, BBA Proteins and Proteomics, Mol. Biol. Evol., Proteins, Protein Science, PLoS Biology, J. Muscle Res. Cell Motil.

For foreign funding organizations:

DFG (Germany), ANR (France), EC-FP7, EC-FP6 (European Community), ARRS (Slovenia), NOW (The Netherlands), CIVR (Italy), AIRC (Italy), BBSRC (UK), MRC (UK), Portuguese Foundation for Science and Technology (PT), European Community, ERC Advanced Grant LS1

For PhD theses from foreign universities:

Sweden, Italy, Germany, Slovenia, Norway, EMBL, Finland

5 Selected Organizations of International Scientific Meetings

2003, 2006, 2009, 2012 Scientific co-organizer of *Winter School on Soft X-rays in Macromolecular Crystallography*, in Bressanone, Italy, Seefeld, Austria, Berlin, Germany and Grenoble, France (50 participants)

2013 Scientific organizer (with M. Gautel, D. Fuerst, M. Wilmanns) of *Conference Z-disk structure and dynamics*, Hamburg, Germany (70 participants)

2014 Scientific organizer (with S. Galler) of *European Muscle Conference*, Salzburg, Austria (350 participants)

2016 Scientific organizer (with S.Kojic and M. Gautel) of *Conference Structure and Dynamics of the Sarcomere*, Belgrade, Serbia (70 participants)

2019 Organizer (with K. Hradil and R. Miletich) of 32nd *European Crystallographic Meeting*, Vienna, Austria (expected >1000 participants)

5 Most important invitations to present at academic conferences (> 70 invited oral presentations)

Invited talk European Muscle Conference, 1 – 5 September, 2012, Rhodes, Greece

Plenary lecture Chemistry towards Biology, 10 – 13 September 2013, Trieste, Italy

Keynote Lecture CRYSTAL30, Society of Crystallographers of Australia and New Zealand, 29 March – 1 April, 2016, Hobart, Australia

Invited talk Conference of Structure and Dynamics of the Sarcomere, 4 – 6 May 2016, Belgrade, Serbia

Plenary Lecture XVII International Small Angles Scattering Conference, 7 – 12 October, 2018, Traverse City, USA

Most relevant external collaborations

- Mathias Gautel (King's College London, UK), regulation of muscle α -actinin-2
 - Dieter Fuerst (Univ. Bonn, Germany), function and dynamics of sarcomeric Z-disk proteins
 - Edward Egelman (Univ. Virginia, US), electron-microscopy analysis of decorated F-actin
 - Perry Elliott (University College London, UK), molecular basis of selected Z-disk causing inherited cardiovascular diseases
 - Hugh Watkins, Katja Gehmlich (University of Oxford, UK), molecular basis of selected Z-disk causing inherited cardiovascular disease
 - Bettina Warscheid (Univ. Freiburg, Germany), crosslinking-coupled mass spectrometry
 - Dmitri Svergun (EMBL-Hamburg, Germany), small angle X-ray scattering analysis
 - Christian Obinger (Univ. Natural Resources and Life Sciences, Vienna, Austria), structural and functional studies of heme-dependent peroxidases, dismutases and oxygenases
 - Michael Wagner and Holger Daims (Univ. Vienna, Austria), structural and biochemical studies of Comammox enzymes
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Publication summary

125 papers in peer-reviewed journals, **5 book chapters**

Total number of citations: **5361** (Google Scholar), **4143** (Scopus), **4130** (ISI)

H-index: **38** (Google Scholar), **37** (Scopus), **35** (ISI)

Google Scholar <https://scholar.google.com/citations?user=4psspWIAAAAJ&hl=en>

ORCID <http://orcid.org/0000-0003-0252-2972>

10 most important publications:

- Grison, M., Merkel, U., Kostan, J., **Djinović-Carugo, K.**, and Rief, M. (2017) alpha-Actinin/titin interaction: A dynamic and mechanically stable cluster of bonds in the muscle Z-disk. *Proc Natl Acad Sci U S A* 114, 1015-1020
- Song, J. G., Kostan, J., Drepper, F., Knapp, B., de Almeida Ribeiro, E., Jr., Konarev, P. V., Grishkovskaya, I., Wiche, G., Gregor, M., Svergun, D. I., Warscheid, B., and **Djinović-Carugo, K.** (2015) Structural Insights into Ca-Calmodulin Regulation of Plectin 1a-Integrin beta4 Interaction in Hemidesmosomes. *Structure* 23, 1-13
- Ribeiro, E. D., Jr., Pinotsis, N., Ghisleni, A., Salmazo, A., Konarev, P. V., Kostan, J., Sjoblom, B., Schreiner, C., Polyansky, A. A., Gkougkouli, E. A., Holt, M. R., Aachmann, F. L., Zagrovic, B., Bordignon, E., Pirker, K. F., Svergun, D. I., Gautel, M., and **Djinović-Carugo, K.** (2014) The Structure and Regulation of Human Muscle alpha-Actinin. *Cell* 6, 1447-1460
- Kostan, J., Salzer, U., Orlova, A., Toro, I., Hodnik, V., Senju, Y., Zou, J., Schreiner, C., Steiner, J., Merilainen, J., Nikki, M., Virtanen, I., Carugo, O., Rappsilber, J., Lappalainen, P., Lehto, V. P., Anderluh, G., Egelman, E. H., and **Djinović-Carugo, K.** (2014) Direct interaction of actin filaments with F-BAR protein pacsin2. *EMBO Rep* 15, 1154-1162
- Galkin, V. E., Orlova, A., Salmazo, A., **Djinović-Carugo, K.**, and Egelman, E. H. (2010) Opening of tandem calponin homology domains regulates their affinity for F-actin. *Nat Struct Mol Biol* 17, 614-616
- Sjoblom, B., Polentarutti, M., and **Djinović-Carugo, K.** (2009) Structural study of X-ray induced activation of carbonic anhydrase. *Proc Natl Acad Sci U S A* 106, 10609-10613
- Sjekloca, L., Pudas, R., Sjoblom, B., Konarev, P., Carugo, O., Rybin, V., Kiema, T. R., Svergun, D., Ylanne, J., and **Djinović-Carugo, K.** (2007) Crystal structure of human filamin C domain 23 and small angle scattering model for filamin C 23-24 dimer. *J Mol Biol* 368, 1011-1023
- Franzot, G., Sjoblom, B., Gautel, M., and **Djinović-Carugo, K.** (2005) The crystal structure of the actin binding domain from alpha-actinin in its closed conformation: structural insight into phospholipid regulation of alpha-actinin. *J Mol Biol* 348, 151-165
- Wuerges, J., Lee, J. W., Yim, Y. I., Yim, H. S., Kang, S. O., and **Djinović-Carugo, K.** (2004) Crystal structure of nickel-containing superoxide dismutase reveals another type of active site. *Proc Natl Acad Sci U S A* 101, 8569-8574
- **Djinović-Carugo, K.**, Young, P., Gautel, M., and Saraste, M. (1999) Structure of the alpha-actinin rod: molecular basis for cross-linking of actin filaments. *Cell* 98, 537-546
- **Djinović-Carugo, K.**, Banuelos, S., and Saraste, M. (1997) Crystal structure of a calponin homology domain. *Nat Struct Biol* 4, 175-179

Publications of the last 5 years: (Style: APA 6th_all_authors; changed output order)

1. Pfanzagl, V., Nys, K., Bellei, M., Michlits, H., Mlynek, G., Battistuzzi, G., **Djinović-Carugo, K.**, Van Doorslaer, S., Furtmuller, P. G., Hofbauer, S., & Obinger, C. (2018). Roles of distal aspartate and arginine of B-class dye-decolorizing peroxidase in heterolytic hydrogen peroxide cleavage. *J Biol Chem*, *293*(38), 14823-14838. doi:10.1074/jbc.RA118.004773
2. Nicolussi, A., Dunn, J. D., Mlynek, G., Bellei, M., Zamocky, M., Battistuzzi, G., **Djinović-Carugo, K.**, Furtmuller, P. G., Soldati, T., & Obinger, C. (2018). Secreted heme peroxidase from *Dictyostelium discoideum*: Insights into catalysis, structure, and biological role. *J Biol Chem*, *293*(4), 1330-1345. doi:10.1074/jbc.RA117.000463, PMC5787809
3. Schaffner, I., Mlynek, G., Flego, N., Puhlinger, D., Libiseller-Egger, J., Coates, L., Hofbauer, S., Bellei, M., Furtmuller, P. G., Battistuzzi, G., Smulevich, G., **Djinović-Carugo, K.**, & Obinger, C. (2017). Molecular Mechanism of Enzymatic Chlorite Detoxification: Insights from Structural and Kinetic Studies. *ACS Catalysis*, *7*(11), 7962-7976. doi:10.1021/acscatal.7b01749, PMC5678291
4. Salzer, U., Kostan, J., & **Djinović-Carugo, K.** (2017). Deciphering the BAR code of membrane modulators. *Cell Mol Life Sci*, *74*(13), 2413-2438. doi:10.1007/s00018-017-2478-0, PMC5487894
5. Rieder, F. J., Kastner, M. T., Hartl, M., Puchinger, M. G., Schneider, M., Majdic, O., Britt, W. J., **Djinović-Carugo, K.**, & Steininger, C. (2017). Human cytomegalovirus phosphoproteins are hypophosphorylated and intrinsically disordered. *J Gen Virol*, *98*(3), 471-485. doi:10.1099/jgv.0.000675, PMC5705059
6. Puz, V., Pavsic, M., Lenarcic, B., & **Djinović-Carugo, K.** (2017). Conformational plasticity and evolutionary analysis of the myotilin tandem Ig domains. *Sci Rep*, *7*(1), 3993. doi:10.1038/s41598-017-03323-6, PMC5479843
7. Lobner, E., Humm, A. S., Mlynek, G., Kubinger, K., Kitzmuller, M., Traxlmayr, M. W., **Djinović-Carugo, K.**, & Obinger, C. (2017). Two-faced Fcab prevents polymerization with VEGF and reveals thermodynamics and the 2.15 Å crystal structure of the complex. *Mabs*, *9*(7), 1088-1104. doi:10.1080/19420862.2017.1364825, PMC5627596
8. Lobner, E., Humm, A. S., Goritzer, K., Mlynek, G., Puchinger, M. G., Hasenhindl, C., Ruker, F., Traxlmayr, M. W., **Djinović-Carugo, K.**, & Obinger, C. (2017). Fcab-HER2 Interaction: a Menage a Trois. Lessons from X-Ray and Solution Studies. *Structure*, *25*(6), 878-889 e875. doi:10.1016/j.str.2017.04.014,
9. Kaufmann, T., Grishkovskaya, I., Polyansky, A. A., Kostrhon, S., Kukulj, E., Olek, K. M., Herbert, S., Beltzung, E., Mechtler, K., Peterbauer, T., Gotzmann, J., Zhang, L., Hartl, M., Zagrovic, B., Elsayad, K., **Djinović-Carugo, K.**, & Slade, D. (2017). A novel non-canonical PIP-box mediates PARG interaction with PCNA. *Nucleic Acids Res*, *45*(16), 9741-9759. doi:10.1093/nar/gkx604, PMC5766153
10. Grison, M., Merkel, U., Kostan, J., **Djinović-Carugo, K.**, & Rief, M. (2017). alpha-Actinin/titin interaction: A dynamic and mechanically stable cluster of bonds in the muscle Z-disk. *Proc Natl Acad Sci U S A*, *114*(5), 1015-1020. doi:10.1073/pnas.1612681114, PMC5293040
11. Grishkovskaya, I., Paumann-Page, M., Tscheliessnig, R., Stampler, J., Hofbauer, S., Soudi, M., Sevcnikar, B., Oostenbrink, C., Furtmuller, P. G., **Djinović-Carugo, K.**, Nauseef, W. M., & Obinger, C. (2017). Structure of human promyeloperoxidase (proMPO) and the role of the propeptide in processing and maturation. *J Biol Chem*, *292*(20), 8244-8261. doi:10.1074/jbc.M117.775031, PMC5437232
12. Bezerra, G. A., Ohara-Nemoto, Y., Cornaciu, I., Fedosyuk, S., Hoffmann, G., Round, A., Marquez, J. A., Nemoto, T. K., & **Djinović-Carugo, K.** (2017). Bacterial protease uses distinct thermodynamic signatures for substrate recognition. *Sci Rep*, *7*(1), 2848. doi:10.1038/s41598-017-03220-y, PMC5460201
13. Sousa, B. L., Silva-Filho, J. C., Kumar, P., Graewert, M. A., Pereira, R. I., Cunha, R. M. S., Nascimento, K. S., Bezerra, G. A., Delatorre, P., **Djinović-Carugo, K.**, Nagano, C. S., Gruber, K., & Cavada, B. S. (2016). Structural characterization of a *Vatairea macrocarpa* lectin in complex with a tumor-associated antigen: A new tool for cancer research. *Int J Biochem Cell Biol*, *72*, 27-39. doi:10.1016/j.biocel.2015.12.016,
14. Murphy, A. C., Lindsay, A. J., McCaffrey, M. W., **Djinović-Carugo, K.**, & Young, P. W. (2016). Congenital macrothrombocytopenia-linked mutations in the actin-binding domain of alpha-actinin-1 enhance F-actin association. *FEBS Lett*, *590*(6), 685-695. doi:10.1002/1873-3468.12101,
15. Hofbauer, S., Mlynek, G., Milazzo, L., Puhlinger, D., Maresch, D., Schaffner, I., Furtmuller, P. G., Smulevich, G., **Djinović-Carugo, K.**, & Obinger, C. (2016). Hydrogen peroxide-mediated conversion of coproheme to heme b by HemQ-lessons from the first crystal structure and kinetic studies. *FEBS J*, *283*(23), 4386-4401. doi:10.1111/febs.13930, PMC5157759

16. Hofbauer, S., Howes, B. D., Flego, N., Pirker, K. F., Schaffner, I., Mlynek, G., **Djinović-Carugo, K.**, Furtmuller, P. G., Smulevich, G., & Obinger, C. (2016). From chlorite dismutase towards HemQ - the role of the proximal H-bonding network in haeme binding. *Biosci Rep*, 36(2). doi:10.1042/BSR20150330, PMC4793301
17. Hofbauer, S., Dalla Sega, M., Scheiblbrandner, S., Jandova, Z., Schaffner, I., Mlynek, G., **Djinović-Carugo, K.**, Battistuzzi, G., Furtmuller, P. G., Oostenbrink, C., & Obinger, C. (2016). Chemistry and Molecular Dynamics Simulations of Heme b-HemQ and Coproheme-HemQ. *Biochemistry*, 55(38), 5398-5412. doi:10.1021/acs.biochem.6b00701, PMC5041162
18. Gautel, M., & **Djinović-Carugo, K.** (2016). The sarcomeric cytoskeleton: from molecules to motion. *J Exp Biol*, 219(Pt 2), 135-145. doi:10.1242/jeb.124941,
19. Fedosyuk, S., Bezerra, G. A., Radakovics, K., Smith, T. K., Sammito, M., Bobik, N., Round, A., Ten Eyck, L. F., **Djinović-Carugo, K.**, Uson, I., & Skern, T. (2016). Vaccinia Virus Immunomodulator A46: A Lipid and Protein-Binding Scaffold for Sequestering Host TIR-Domain Proteins. *PLoS Pathog*, 12(12), e1006079. doi:10.1371/journal.ppat.1006079, PMC5156371
20. Drmota Prebil, S., Slapsak, U., Pavsic, M., Ilc, G., Puz, V., de Almeida Ribeiro, E., Anrather, D., Hartl, M., Backman, L., Plavec, J., Lenarcic, B., & **Djinović-Carugo, K.** (2016). Structure and calcium-binding studies of calmodulin-like domain of human non-muscle alpha-actinin-1. *Sci Rep*, 6, 27383. doi:10.1038/srep27383, PMC4895382
21. Carugo, O., & **Djinović-Carugo, K.** (2016). Criteria to Extract High-Quality Protein Data Bank Subsets for Structure Users. *Methods Mol Biol*, 1415, 139-152. doi:10.1007/978-1-4939-3572-7_7,
22. Song, J. G., Kostan, J., Drepper, F., Knapp, B., de Almeida Ribeiro, E., Jr., Konarev, P. V., Grishkovskaya, I., Wiche, G., Gregor, M., Svergun, D. I., Warscheid, B., & **Djinović-Carugo, K.** (2015). Structural insights into Ca²⁺-calmodulin regulation of Plectin 1a-integrin beta4 interaction in hemidesmosomes. *Structure*, 23(3), 558-570. doi:10.1016/j.str.2015.01.011, PMC4353693
23. Martens, B., Bezerra, G. A., Kreuter, M. J., Grishkovskaya, I., Manica, A., Arkhipova, V., **Djinović-Carugo, K.**, & Blasi, U. (2015). The Heptameric SmAP1 and SmAP2 Proteins of the Crenarchaeon *Sulfolobus Solfataricus* Bind to Common and Distinct RNA Targets. *Life (Basel)*, 5(2), 1264-1281. doi:10.3390/life5021264, PMC4500138
24. Hofbauer, S., Hagmuller, A., Schaffner, I., Mlynek, G., Krutzler, M., Stadlmayr, G., Pirker, K. F., Obinger, C., Daims, H., **Djinović-Carugo, K.**, & Furtmuller, P. G. (2015). Structure and heme-binding properties of HemQ (chlorite dismutase-like protein) from *Listeria monocytogenes*. *Arch Biochem Biophys*, 574, 36-48. doi:10.1016/j.abb.2015.01.010, PMC4420033
25. **Djinović-Carugo, K.**, & Carugo, O. (2015a). Missing strings of residues in protein crystal structures. *Intrinsically Disord Proteins*, 3(1), e1095697. doi:10.1080/21690707.2015.1095697, PMC5314880
26. **Djinović-Carugo, K.**, & Carugo, O. (2015b). Structural biology of the lanthanides-mining rare earths in the Protein Data Bank. *J Inorg Biochem*, 143, 69-76. doi:10.1016/j.jinorgbio.2014.12.005,
27. Byrgazov, K., Grishkovskaya, I., Arenz, S., Coudeville, N., Temmel, H., Wilson, D. N., **Djinović-Carugo, K.**, & Moll, I. (2015). Structural basis for the interaction of protein S1 with the *Escherichia coli* ribosome. *Nucleic Acids Res*, 43(1), 661-673. doi:10.1093/nar/gku1314, PMC4288201
28. Ribeiro Ede, A., Jr., Pinotsis, N., Ghisleni, A., Salmazo, A., Konarev, P. V., Kostan, J., Sjoblom, B., Schreiner, C., Polyansky, A. A., Gkougkoulia, E. A., Holt, M. R., Aachmann, F. L., Zagrovic, B., Bordignon, E., Pirker, K. F., Svergun, D. I., Gautel, M., & **Djinović-Carugo, K.** (2014). The structure and regulation of human muscle alpha-actinin. *Cell*, 159(6), 1447-1460. doi:10.1016/j.cell.2014.10.056, PMC4259493
29. Pavsic, M., Guncar, G., **Djinović-Carugo, K.**, & Lenarcic, B. (2014). Crystal structure and its bearing towards an understanding of key biological functions of EpCAM. *Nat Commun*, 5, 4764. doi:10.1038/ncomms5764,
30. Mlynek, G., Lehner, A., Neuhold, J., Leeb, S., Kostan, J., Charnagalov, A., Stolt-Bergner, P., **Djinović-Carugo, K.**, & Pinotsis, N. (2014). The Center for Optimized Structural Studies (COSS) platform for automation in cloning, expression, and purification of single proteins and protein-protein complexes. *Amino Acids*, 46(6), 1565-1582. doi:10.1007/s00726-014-1699-x,
31. Kostan, J., Salzer, U., Orlova, A., Toro, I., Hodnik, V., Senju, Y., Zou, J., Schreiner, C., Steiner, J., Merilainen, J., Nikki, M., Virtanen, I., Carugo, O., Rappsilber, J., Lappalainen, P., Lehto, V. P., Anderluh, G., Egelman, E. H., & **Djinović-Carugo, K.** (2014). Direct interaction of actin filaments with F-BAR protein pacsin2. *EMBO Rep*, 15(11), 1154-1162. doi:10.15252/embr.201439267, PMC4253489
32. Hofbauer, S., Gysel, K., Bellei, M., Hagmuller, A., Schaffner, I., Mlynek, G., Kostan, J., Pirker, K. F., Daims, H., Furtmuller, P. G., Battistuzzi, G., **Djinović-Carugo, K.**, & Obinger, C. (2014). Manipulating conserved heme cavity residues of

- chlorite dismutase: effect on structure, redox chemistry, and reactivity. *Biochemistry*, 53(1), 77-89. doi:10.1021/bi401042z, PMC3893830
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