

BIOGRAPHICAL SKETCH

NAME: Barbara Zambelli

POSITION TITLE: Associate Professor of General and Inorganic chemistry at the University of Bologna, Dept. of Pharmacy and Biotechnology

EDUCATION/TRAINING *(Begin with baccalaureate or other initial professional education, such as nursing, include postdoctoral training and residency training if applicable. Add/delete rows as necessary.)*

INSTITUTION AND LOCATION	DEGREE (if applicable)	Completion Date MM/YYYY	FIELD OF STUDY
University of Bologna, Italy	Graduation (MS)	10/2002	Biotechnology
University of Bologna, Italy	PHD	06/2006	Cellular and Molecular Biology
University of Bologna, Italy	Postdoctoral	11/2008	Bioinorganic chemistry
University of Ferrara, Italy	Master	10/2016	Journalism and science communication

A. Personal Statement

I am an Associate Professor at the Department of Pharmacy and Biotechnology of the University of Bologna. In my research, I use protein biochemistry and biophysics to understand the role of transition metal ions in biological systems and human health. My scientific interests focus on the mechanisms of interaction between metal ions and proteins, their structure-function relationships, and the metal-induced conformational changes responsible for specific cellular responses and protein-protein interactions. I routinely handle molecular biology and biochemical techniques aimed to obtain protein (or protein-complex) over-expression, isolation, and purification. In addition, I have experience in spectroscopic, calorimetric and crystallization techniques (e.g. CD, ITC, static and dynamic light-scattering, DSC, fluorescence spectroscopy, NMR, protein crystallization, mass spectrometry), aimed to determine the structural and molecular details of the isolated macromolecules, and to relate them to their physiological role. An important part of my research involves the study of essential nickel metabolism in bacteria such as *Sporosarcina pasteurii* and *H. pylori*. I contributed to a significant bulk of knowledge concerning the regulation of nickel ion delivery into urease, at the level of the protein-protein network formed by urease accessory proteins. I am also interested in the biophysics of protein folding, in intrinsically disordered proteins, and in the relationship between protein disorder and its physiological roles. Few years ago, my research focus moved to the study of the role of nickel as a promoter of lung cancer. One of the proteins involved in nickel-induced carcinogenesis, named NDRG1, is the object of this proposal. NDRG1 expression is induced by nickel and its over-expression is associated to a worse tumor prognosis. The final goal of this activity is to clarify the mechanism of function of NDRG1 and to identify drug candidates able to bind it and modulate its activity. This research was previously funded, as listed below:

2020 – “Nuove strategie per prevenire o curare il cancro al polmone”, Carisbo – 15000 €

2022 – “Struttura e interazioni di NDRG1: una nuova strategia contro il cancro al polmone”, Carisbo – 6000 €

2022 – “NDRG1: un nuovo target per la prevenzione e la terapia del cancro al polmone causato da nichel”, Fondazione del Monte - 23000 €

2024 – “Inibire la proteina oncogenica NDRG1 come strategia contro il cancro al polmone” Carisbo – 15000 €

B. Positions, Scientific Appointments, and Honors

2021 to now: Associate Professor in General and Inorganic Chemistry (CHIM/03) at the Department of Pharmacy and Biotechnology, University of Bologna, Bologna, Italy.

2008-2021: Assistant professor in General and Inorganic Chemistry (CHIM/03) at the Department of Pharmacy and Biotechnology, University of Bologna, Bologna, Italy

2024: National Academic Qualification (Abilitazione Scientifica Nazionale) as Full Professor for General biochemistry (05/E1, from 12/11/2024 to 12/11/2035)

2020: National Academic Qualification (Abilitazione Scientifica Nazionale) as Full Professor for Chemistry and inorganic systems (03/B1, from 08/11/2020 to 08/11/2029)

2006 – 2008: Post-doctoral position, University of Bologna

2005: EMBO fellow at the EMBL of Hamburg (EMBO Short term fellowship)

2003: Visiting scientist at Department of Biochemistry, University of Gent (Belgium), supported by a UniBO fellow

C. Contributions to Science

Bibliometric indexes

72 published articles on peer-reviewed, international journals

H-index = 32 (Google Scholar, May 2025)

Number of citations = 2935 (Google Scholar, May 2025)

Google Scholar: <https://scholar.google.it/citations?user=aqMPntgAAAAJ&hl=it>

Scopus: <https://shorturl.at/mJNU2>

List of publications

1. Rossetto D., Nader S., Kufner C., Lozano G., Cerofolini L., Fragai M., Martin-Diaconescu V., Zambelli B., Ciurli S., Guella G., Szabla R., Sassellov D., Mansy S.S. "Ultraviolet light selects for metal-binding peptide motifs" (2025) in press
2. Bellanda M., Damulewicz M., Zambelli B., Costanzi E., Gregoris F., Mammi S., Tosatto S.C.E., Costa R., Minervini G., Mazzotta G.M. "A PDZ scaffolding/CaM-mediated pathway in Cryptochrome signaling" (2024) *Protein Sci.* 33, 3; e4914. DOI: 10.1002/pro.4914
3. Pierro A., Tamburrini K. C., Leguenno H., Gerbaud G., Etienne E., Guigliarelli B., Belle V., Zambelli B.,* Mileo E.* "In cell investigation of the conformational landscape of the GTPase UreG by SDSL-EPR" (2023) *iScience*, 26;10; 107855. doi: 10.1016/j.isci.2023.107855 - *co-last authors
4. N. Carosella, K.P. Brock, B. Zambelli, F. Musiani, C. Sander and S. Ciurli "Functional contacts for activation of urease from *Helicobacter pylori*: an integrated approach using evolutionary couplings, in-cell enzymatic assays, and computational docking" (2023) *Front. Chem. Biol.* 2:1243564 DOI: 10.3389/fchbi.2023.1243564
5. Zambelli B., "Intracellular phase separation and its role in nickel sensing" (2023) *Trends Cell Biol.* S0962-8924(23)00131-9. doi: 10.1016/j.tcb.2023.06.008
6. Zambelli B., Basak P., Hu H., Piccioli M., Musiani F., Broll V., Imbert L., Boisbouvier J., Maroney M. J., Ciurli S. "The structure of the high-affinity nickel-binding site in the Ni,Zn-HypA•UreE₂ complex" (2023) *Metallomics* 6;15(3):mfad003 doi: 10.1093/mtomcs/mfad003
7. Beniamino Y., Cenni V., Piccioli M., Ciurli S., Zambelli B. "The Ni(II)-Binding Activity of the Intrinsically Disordered Region of Human NDRG1, a Protein Involved in Cancer Development" (2022) *Biomolecules* 12(9):1272. doi: 10.3390/biom12091272
8. Basak P, Zambelli B, Cabelli DE, Ciurli S, Maroney MJ. "Pro5 is not essential for the formation of 'Ni-hook' in nickel superoxide dismutase" (2022) *J. Inorg. Biochem.*, 21;234:111858 doi: 10.1016/j.jinorgbio.2022.111858
9. Mazzei L., Musiani F., Žerko S., Koźminski W., Cianci M., Beniamino Y., Ciurli S., Zambelli B., "Structure, dynamics, and function of SrnR, a transcription factor for nickel-dependent gene expression" (2021) *Metallomics*, 20;13(12):mfab069.i doi: 10.1093/mtomcs/mfab069
10. Duskey J. T., Ottonelli, I., Rinaldi A., Parmeggiani I., Zambelli B., Wang L.Z., Prud'homme R.K., Vandelli M., Tosi G., Ruozi B., "Tween® Preserves Enzyme Activity and Stability in PLGA Nanoparticles" (2021) *Nanomaterials*, 11(11):2946. doi: 10.3390/nano11112946
11. Darrouzet E, Rinaldi C, Zambelli B., Ciurli S, Cavazza C., "Revisiting the CooJ family, a potential chaperone for nickel delivery to [NiFe]-carbon monoxide dehydrogenase" (2021) *J. Inorg. Biochem.* 225:111588. doi: 10.1016/j.jinorgbio.2021.111588

12. Manoli, F., Doria, F., Colombo, G., Zambelli, B.,* Freccero, M.,* Manet, I.,* "The binding pocket at the interface of multimeric telomere G-quadruplexes: myth or reality?" (2021) *Chem-Eur. J.*, 27(45):11707-11720. doi: 10.1002/chem.202101486
13. Costanzi E.; Coletti, A.; Zambelli B.; Macchiarulo A.; Bellanda M.; Battistuta R. "Calmodulin binds to the STAS domain of SLC26A5 prestin with a calcium-dependent, one-lobe, binding mode" (2021) *J. Struct. Biol.*; 213(2):107714. doi: 10.1016/j.jsb.2021.107714
14. Duskey J.T., da Ros F., Ottonelli I., Zambelli B., Vandelli M.A., Tosi G., Ruozi B. "Enzyme Stability in Nanoparticle Preparations Part 1: Bovine Serum Albumin Improves Enzyme Function" (2020) *Molecules*, 25(20):4593. doi: 10.3390/molecules25204593
15. Pierro, A., Etienne, E., Gerbaud, G., Guigliarelli, B., Ciurli, S., Belle, V., Zambelli, B., Mileo, E.,* "Nickel and GTP Modulate *Helicobacter pylori* UreG Structural Flexibility" (2020) *Biomolecules*, 10, 1062; doi:10.3390/biom10071062
16. Zambelli, B., Mazzei, L., Ciurli, S., "Intrinsic disorder in the nickel-dependent urease network" (2020) *Prog. Mol. Biol. Transl. Sci.* 2020;174:307-330. doi: 10.1016/bs.pmbts.2020.05.004
17. Nngnameko C. R., Marchetti L., Zambelli B., Quotadamo A., Roncarati D., Bertelli D., Njaye F. N., Smith S. I., Moundipa P. F., Costi M. P., and Pellati F. "New Insights into Bioactive Compounds from the Medicinal Plant *Spathodea campanulata* P. Beauv. and Their Activity against *Helicobacter pylori*" (2020) *Antibiotics*, 9(5), 258 doi: 10.3390/antibiotics9050258.
18. Beniamino Y, Pesce G, Zannoni A, Roncarati D, Zambelli B. "SrnR from *Streptomyces griseus* is a nickel-binding transcriptional activator." (2020) *J. Biol. Inorg. Chem.* 25(2):187-198 doi: 10.1007/s00775-019-01751-5
19. Kappaun K, Martinelli AHS, Broll V, Zambelli B., Lopes FC, Ligabue-Braun R, Fruttero LL, Moyetta NR, Bonan CD, Carlini CR, Ciurli S. "Soyuretox, an Intrinsically Disordered Polypeptide Derived from Soybean (Glycine Max) Ubiquitous Urease with Potential Use as a Biopesticide" (2019) *Int. J. Mol. Sci.*, 30;20(21), doi: 10.3390/ijms20215401.
20. M. Alfano, G. Veronesi, F. Musiani, B. Zambelli, L. Signor, O. Proux, M. Rovezzi, S. Ciurli, C. Cavazza "A solvent-exposed cysteine forms a peculiar Ni(II)-binding site in the metallochaperone CooT from *Rhodospirillum rubrum*." (2019) *Chem-Eur J.*, 2;25(67):15351-15360. doi: 10.1002/chem.201903492, doi: 10.1002/chem.201903492
21. B. Zambelli "Characterization of Enzymatic Reactions Using ITC" (2019) *Methods Mol. Biol.*, 1964:251-266. doi: 10.1007/978-1-4939-9179-2_18.
22. J. Gallego-Jara, G.L. Terol, A. Écija Conesa, B. Zambelli, M. Cánovas Díaz, T. de Diego Puente "Characterization of acetyl-CoA synthetase kinetics and ATP-binding" (2019) *Biochim. Biophys. Acta Gen. Subj.* 1863(6):1040-1049. doi: 10.1016/j.bbagen.2019.03.017
23. M. Alfano, J. Pérard, P. Carpentier, C. Basset, B. Zambelli, J. Timm, S. Crouzy, S. Ciurli, C. Cavazza "The carbon monoxide dehydrogenase accessory protein CooJ is a histidine-rich multidomain dimer containing an unexpected Ni(II)-binding site" (2019) *J. Biol. Chem.* 10;294(19):7601-7614. doi: 10.1074/jbc.RA119.008011
24. C.A.E.M. Spronk, S. Žerko, M. Górka, W. Koźmiński, B. Bardiaux, B. Zambelli, F. Musiani, M. Piccioli, P. Basak, F.C. Blum, R.C. Johnson, H. Hu, D.S. Merrell, M. Maroney, S. Ciurli "Structure and dynamics of *Helicobacter pylori* nickel-chaperone HypA: an integrated approach using NMR spectroscopy, functional assays and computational tools" (2018) *J. Biol. Inorg. Chem.* 23(8):1309-1330. doi: 10.1007/s00775-018-1616-y
25. C. Tarsia, A. Danielli, F. Florini, P. Cinelli, S. Ciurli, B. Zambelli; "Targeting *Helicobacter pylori* urease activity and maturation: In-cell high-throughput approach for drug discovery" (2018) *Biochim. Biophys. Acta Gen. Subj.* 1862(10):2245-2253. doi: 10.1016/j.bbagen.2018.07.020
26. G.M.Mazzotta, M. Bellanda, G. Minervini, M. Damulewicz, P. Cusumano, S. Aufiero, M. Stefani, B. Zambelli, S. Mammi, R. Costa, S.C.E. Tosatto, "Calmodulin Enhances Cryptochrome Binding to INAD in *Drosophila* Photoreceptors" (2018) *Front. Mol. Neurosci.* 11:280. doi: 10.3389/fnmol.2018.00280
27. M. Sturlese, B. Manta, A. Bertarello, M. Bonilla, M. Lelli, B. Zambelli, K. Grunberg, S. Mammi, M. A. Comini, M. Bellanda, "The lineage-specific, intrinsically disordered N-terminal extension of monothiol glutaredoxin 1 from trypanosomes contains a regulatory region", (2018) *Sci. Rep.* 8(1):13716. doi: 10.1038/s41598-018-31817-4.
28. V. Broll, A.H.S. Martinelli, F.C. Lopes, LL Fruttero, B. Zambelli, E. Salladini, O. Dobrovolska, S. Ciurli, C.R. Carlini, "Structural analysis of the interaction between Jaburetox, an intrinsically disordered protein, and membrane models" (2017) *Colloids Surf B Biointerfaces.* 159:849-860, doi: 10.1016/j.colsurfb.2017.08.053
29. M. Palombo, A. Bonucci, E. Etienne, S. Ciurli, V. N. Uversky, B. Guigliarelli, V. Belle, E. Mileo, B. Zambelli The relationship between folding and activity in UreG, an intrinsically disordered enzyme" (2017) *Scientific Reports*, 7(1): 5977, doi: 10.1038/s41598-017-06330-9
30. J. Timm, C. Brochier-Armanet, J. Perard, B. Zambelli, S. Ollagnier-de-Choudens, S. Ciurli, C. Cavazza (2017) "The CO dehydrogenase accessory protein CooT is a novel nickel-binding protein" (2017) *Metallomics*, 24;9(5):575-583, doi: 10.1039/c7mt00063d
31. B. Zambelli, V. Uversky, S. Ciurli, "Nickel impact on human health: An intrinsic disorder perspective" (2016) *BBA Proteins and proteomics*, 1864 (12) 1714–1731

32. E. Fabini, B. Zambelli, L. Mazzei, S. Ciurli, C. Bertucci, "Surface plasmon resonance and isothermal titration calorimetry to monitor the Ni(II)-dependent binding of *Helicobacter pylori* NikR to DNA" (2016) *Anal Bioanal Chem.*, 408(28):7971-7980
33. D. Roncarati, S. Pellicciari, N. Doniselli, S. Maggi, A. Vannini, L. Valzania, L. Mazzei, B. Zambelli, C. Rivetti, A. Danielli, "Metal-responsive promoter DNA compaction by the Ferric Uptake Regulator", (2016) *Nature Commun.* 7:12593. doi: 10.1038/ncomms12593
34. L. Mazzei, S. Ciurli, B. Zambelli, "Isothermal Titration Calorimetry to Characterize Enzymatic Reactions", (2016) *Methods in Enzymology*, 567:215-36, doi: 10.1016/bs.mie.2015.07.022
35. E. Baraldi, E. Collier, L. Zoli, A. Cestaro, S. Tosatto, B. Zambelli, "Unfoldome variation upon plant-pathogen interactions: strawberry infection by *Colletotrichum acutatum*", (2015) *Plant Mol. Biol.* 89(1-2):49-65
36. L. Mazzei, O. Dobrovolska, F. Musiani, B. Zambelli, S. Ciurli, "On the interaction of *Helicobacter pylori* NikR, a Ni(II)-responsive transcription factor, with the urease operator: in solution and in silico studies", (2015) *J. Biol. Inorg. Chem.* 20(6):1021-37
37. F. Musiani¹, B. Zambelli¹, M. Bazzani, L. Mazzei, S. Ciurli; "Nickel-responsive transcriptional regulators", (2015) *Metallomics* 7(9):1305-18, ¹co-first author
38. M. Miraula, S. Ciurli, B. Zambelli; "Intrinsic disorder and metal binding in UreG proteins from Archae hyperthermophiles: GTPase enzymes involved in the activation of Ni(II) dependent urease." (2015) *J. Biol. Inorg. Chem.* 20(4):739-55
39. F. C. Lopes, O. Dobrovolska, R. Real-Guerra, V. Broll, V. N. Uversky, B. Zambelli, C. R. Carlinia, S. Ciurli; "Pliable natural biocide: Jaburetox, an intrinsically disordered insecticidal and fungicidal polypeptide derived from jack bean urease", (2015) *FEBS Lett.* 282(6):1043-64
40. A. D'Urzo, C. Santambrogio, R. Grandori, S. Ciurli, B. Zambelli; "The conformational response to Zn(II) and Ni(II) binding of *Sporosarcina pasteurii* UreG, an intrinsically disordered GTPase", (2014) *J. Biol. Inorg. Chem.*, 19(8): 1341-1354
41. H. Lebrette, C. Brochier-armanet, B. Zambelli, H. de Reuse, E. Borezée-Durant, S. Ciurli, C. Cavazza; "Promiscuous nickel import in human pathogens: structure, thermodynamics and evolution of extracytoplasmic nickel-binding proteins", (2014) *Structure*, 22(10): 1421-1432
42. A. Merloni, O. Dobrovolska, B. Zambelli, F. Agostini, M. Bazzani, F. Musiani, S. Ciurli; "Molecular landscape of the interaction between the urease accessory proteins UreE and UreG", (2014) *BBA - Proteins and Proteomics*, 1844(9):1662-74; doi: 10.1016/j.bbapap.2014.06.016
43. L. Mazzei, S. Ciurli, B. Zambelli; "Hot biological catalysis: isothermal titration calorimetry to characterize enzymatic reactions" (2014), *J. Vis. Exp.*, (86), e51487, doi:10.3791/51487
44. B. Zambelli, A. Berardi, V. Martin-Diaconescu, L. Mazzei, M. J. Maroney, S. Ciurli; "Metal binding properties of *Helicobacter pylori* UreF, an accessory protein in the nickel-based activation of urease", (2014) *J. Biol. Inorg. Chem.*, 19:319-334
45. B. Zambelli, K. Banaszak, A. Merloni, A. Kiliszek, W. Rypniewski, S. Ciurli; "Selectivity of Ni(II) and Zn(II) binding to *Sporosarcina pasteurii* UreE, a metallo-chaperone in the urease assembly: a calorimetric and crystallographic study"; (2013) *J. Biol. Inorg. Chem.*; 18:1005–1017
46. T. E. Bergdale, R. J. Pinkelman, S. R. Hughes, B. Zambelli, S. Ciurli, S. S. Bang; "Engineered biosealant producing inorganic and organic biopolymers" (2012); *J. Biotech.* 161: 181-189
47. K. Banaszak, V. Martin-Diaconescu, M. Bellucci, B. Zambelli, W. R. Rypniewski, M. J. Maroney, S. Ciurli; "Crystallography and X-ray absorption spectroscopy on *Helicobacter pylori* UreE bound to Ni²⁺ and Zn²⁺: role of the C-terminal disordered arm in metal trafficking" (2012); *Biochem. J.* 441(3): 1017-1026
48. R. Real-Guerra, F. Staniscuaski, B. Zambelli, F. Musiani, S. Ciurli, C. R. Carlini; "Biochemical and Structural Studies on Native and Recombinant Glycine max UreG: a Detailed Characterization of a Plant Urease Accessory Protein" (2012); *Plant Mol. Biol.* 78(4-5):461-75
49. B. Zambelli, N. Cremades, P. Neyroz, P. Turano, V. Uversky, S. Ciurli; "Insights in the (un)structural organization of *Bacillus pasteurii* UreG, an intrinsically disordered GTPase enzyme" (2012); *Mol. Biosyst.* 8: 220-228 (hot article)
50. I. Manet, F. Manoli, B. Zambelli, G. Andreano, A. Masi, L. Cellai, S. Ottani, G. Marconi, S. Monti; "Complexes of the antitumoral drugs Doxorubicin and Sabarubicin with telomeric G-quadruplex in basket conformation: ground and excited state properties"; *Photochem. Photobiol. Sci.* (2011), 10(8):1326-1337
51. B. Zambelli, F. Musiani, S. Benini, S. Ciurli; "Chemistry of Ni²⁺ in urease: sensing, trafficking and catalysis"; *Accounts Chem. Res.* (2011), 44(7):520-30
52. D.W. Lee, E. Y. Khoury, F. Francia, B. Zambelli, S. Ciurli, G. Venturoli, P. Hellwig, F. Daldal; "Zinc inhibition of bacterial cytochrome bc1 reveals the role of cytochrome b E295 in proton release at the Qo site"; *Biochemistry* (2011), 50(20):4263-72

53. G. Marconi, E. Mezzina, I. Manet, F. Manoli, B. Zambelli, S. Monti; "Stereoselective interaction of ketoprofen enantiomers with β -cyclodextrin: ground state binding and photochemistry."; *Photochem. Photobiol. Sci.* (2011) 10: 48 – 59
54. I. Manet, F. Manoli, B. Zambelli, G. Andreano, A. Masi, L. Cellai, S. Monti; "Affinity of the anthracycline antitumor drugs Doxorubicin and Sabarubicin for human telomeric G-quadruplex structures"; *Phys. Chem. Chem. Phys.* (2011), 13: 540 – 551
55. Musiani, B. Bertosa, A. Magistrato, B. Zambelli, P. Turano, V. Losasso, C. Micheletti, S. Ciurli, P. Carloni; "A computational study of the DNA-binding protein *Helicobacter pylori* NikR: the role of Ni²⁺."; *J. Chem. Theor. Comp.* (2010), 6: 3503 – 3515
56. S. Monti, S. Ottani, F. Manoli, I. Manet, F. Scagnolari, B. Zambelli, and G. Marconi; "Chiral recognition of 2-(3-benzoylphenyl)propionic acid (ketoprofen) by serum albumin: an investigation with microcalorimetry, circular dichroism and molecular modelling"; *Phys. Chem. Chem. Phys.* (2009), 11:9104-9113
57. M. Bellucci, B. Zambelli, F. Musiani, P. Turano, and S. Ciurli; "*Helicobacter pylori* UreE, a urease accessory protein: specific Ni²⁺ and Zn²⁺ binding properties and interaction with its cognate UreG"; *Biochem. J.* (2009), 422(1): 91-100 (Faculty of 1000)
58. P. Zubini, B. Zambelli, F. Musiani, S. Ciurli, P. Bertolini, and E. Baraldi; "The RNA hydrolysis and the cytokinin binding activities of PR-10 proteins are differently performed by two isoforms of the Pru p 1 peach major allergen and are possibly functionally related"; *Plant Physiol.* (2009), 150(3): 1235-1247
59. B. Zambelli, P. Turano, F. Musiani, P. Neyroz, and S. Ciurli; "Zn²⁺-linked dimerization of UreG from *Helicobacter pylori*, a chaperone involved in nickel trafficking and urease activation"; *Proteins: Structure, Functions and Bioinformatics* (2009), 74(1):222-239
60. B. Zambelli, A. Danielli, S. Romagnoli, P. Neyroz, S. Ciurli, and V. Scarlato; "High-affinity Ni²⁺ binding selectively promotes binding of *Helicobacter pylori* NikR to its target urease promoter"; *J. Mol. Biol.* (2008) 383(5):1129-1143
61. A. Soragni, B. Zambelli, M.D. Mukrasch, J. Biernat, S. Jeganathan, C. Griesinger, S. Ciurli, E. Mandelkow, and M. Zweckstetter; "Structural characterization of binding of Cu(II) to tau protein"; *Biochemistry* (2008), 47(41):10841-10851
62. B. Zambelli, F. Musiani, M. Savini, P. Tucker, and S. Ciurli; "Biochemical studies on *Mycobacterium tuberculosis* UreG and comparative modeling reveal structural and functional conservation among the bacterial UreG family"; *Biochemistry* (2007), 46(11):3171-3182
63. B. Zambelli, M. Bellucci, A. Danielli, V. Scarlato, and S. Ciurli; "The Ni²⁺ binding properties of *Helicobacter pylori* NikR"; *Chem. Commun.* (2007), (35):3649-3651
64. M. Salomone-Stagni, B. Zambelli, F. Musiani, and S. Ciurli; "A model-based proposal for the role of UreF as a GTPase-activating protein in the urease active site biosynthesis"; *Proteins: Structure, Functions and Bioinformatics* (2007), 68(3):749-761
65. M. Stola, F. Musiani, S. Mangani, P. Turano, N. Safarov, B. Zambelli, and S. Ciurli; "The nickel site of *Bacillus pasteurii* UreE, a urease metallo-chaperone, as revealed by metal-binding studies and X-ray absorption spectroscopy"; *Biochemistry* (2006), 45(20):6495-6509
66. P. Neyroz, B. Zambelli, and S. Ciurli; "Intrinsically disordered structure of *Bacillus pasteurii* UreG as revealed by steady-state and time-resolved fluorescence spectroscopy"; *Biochemistry* (2006), 45(29):8918-8930
67. B. Zambelli, M. Stola, F. Musiani, K. De Vriendt, B. Samyn, B. Devreese, J. Van Beeumen, P. Turano, A. Dikiy, D.A. Bryant, and S. Ciurli; "UreG, a chaperone in the urease assembly process, is an intrinsically unstructured GTPase that specifically binds Zn²⁺"; *J. Biol. Chem.* (2005), 280(6):4684-4695
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Contributions to books

1. B. Zambelli and S. Ciurli; "Nickel enzymes/models (Biological and Biomimetic)"; in "Encyclopedia of catalysis - Second Edition" (2009), John Wiley & Sons, Inc.: New York, USA - ISBN: 9780471227618, DOI: 10.1002/0471227617.eoc154.pub2.
2. B. Zambelli, F. Musiani, and S. Ciurli; "Metal Ion-Mediated DNA-Protein Interactions"; in A. Sigel, H. Sigel, and R.K.O. Sigel (Eds.) "Metal Ions in Life Sciences - Volume 10: Interplay between Metal Ions and Nucleic Acids" (2012), p. 135-170, BERLIN:Springer, ISBN: 9789400721715
3. B. Zambelli, S. Ciurli; "Nickel and human health"; in A. Sigel, H. Sigel, and R.K.O. Sigel (Eds.) "Metal Ions in Life Sciences - Volume 13: Interrelations between Essential Metal Ions and Human Diseases" (2013);13:321-57. doi: 10.1007/978-94-007-7500-8_10
4. L. Mazzei, F. Musiani, B. Zambelli, S. Benini, M. Cianci and S. Ciurli "Urease: structure, function, catalysis, and inhibition" in R. Ligabue-Braun and C.R. Carlini (Eds.) "Ureases" (2024) Springer, in press. ISBN: 9780323918008