

**Stephan Diekmann**  
**List of Publications (last 5 years)**

**2007**

Ibrahim B, Diekmann S, Schmitt E, Dittrich P  
Qualitative in silico Model of the Mitotic Spindle Assembly Checkpoint.  
submitted

Ibrahim B, Diekmann S, Schmitt E, Dittrich P  
Neither Mad2 nor p31(comet) alone are sufficient for M<sub>SAC</sub> regulation.  
submitted

Derome A, Hoischen C, Bussiek M, Grady R, Kędzierska B, Diekmann S, Barillà D, Hayes F  
Centromere anatomy in the multidrug resistant pathogen *Enterococcus faecium*.  
submitted

Ibrahim B, Schmitt E, Dittrich P, Diekmann S  
MCC assembly is not combined with full Cdc20 sequestering.  
submitted

Hemmerich P, Weidtkamp-Peters S, Hoischen C, Schmiedeberg L, Erliandri I, Diekmann S  
Live cell imaging of inner kinetochore assembly reveals details of the CENP-A loading  
mechanism and identifies CENP-I as a novel epigenetic centromere mark.  
submitted

Ibrahim B, Dittrich P, Diekmann S, Schmitt E  
Stochastic effects in a compartmental model for mitotic checkpoint regulation.  
*J of Integrated Bioinformatics*, in press

Orthaus S, Biskup C, Hoffmann B, Hoischen C, Ohndorf S, Benndorf K, Diekmann S  
Assembly of the Inner Kinetochore Proteins CENP-A and CENP-B in Living Human Cells.  
*Chem Bio Chem*, in press

Hoischen C, Bussiek M, Langowski J, Diekmann S  
E. coli low-copy-number plasmid R1 centromere parC forms a U-shaped complex with its  
binding protein ParR.  
*Nucl. Acids Res.*, in press

Bussiek M, Müller G, Waldeck W, Diekmann S, Langowski J  
Sequence-dependent nucleosomal organization of repetitive African green monkey  $\alpha$ -satellite  
DNA as analyzed by atomic force microscopy.  
*Eur Biophys J.*, Epub 2007 May 15

Gellermann GP, Ullrich K, Unger C, Fändrich M, Sauter S, Diekmann S  
Identification of molecular compounds critical to Alzheimer's-like plaque formation.  
*J Neurosci Res.* 2007 Jul;85(9):2037-2044.

**2006**

Gellermann GP, Appel TR, Davies PD, Diekmann S  
Paired helical filaments contain small amounts of cholesterol, phosphatidylcholine and  
sphingolipids.  
*Biol. Chem.* 2006, 387(9), 1267-74

Orthaus S, Ohndorf S, Diekmann S  
RNAi knockdown of human kinetochore protein CENP-H.  
*Biochem. Biophys. Res. Com.* 2006, 348, 36-46

Fändrich M, Zandomenighi G, Krebs MRH, Kittler M, Buder K, Roßner A, Heinemann SH, Dobson CM, Diekmann S  
Apomyoglobin reveals a random-nucleation mechanism in amyloid protofibril formation.  
*Acta Histochem.* 2006, 108, 215-219

Lorenz M, Diekmann S  
Distance determination in protein-DNA complexes using fluorescence resonance energy transfer.  
*Methods Mol Biol.* 2006, 335, 243-55

Lorenz, M., Diekmann, S.  
Distance determination in protein-DNA complexes using FRET; in: *Methods in Molecular Biology, Volume: Fluorescent Energy Transfer Nucleic Acids Probes*, Humana Press Inc., Totowa, NJ, USA, 2006, pp 243-256

Sachse C, Xu C, Wieligmann K, Diekmann S, Grigorieff N, Fändrich M  
Quaternary structure of a mature amyloid fibril from Alzheimer's A $\beta$ (1-40) peptide.  
*J. Mol. Biol.* 2006, 362, 347-354

Siddiqui RA, Hoischen C, Holst O, Heinze I, Schlott B, Gumpert J, Diekmann S, Grosse F, Platzer M  
The analysis of cell division and cell wall synthesis genes reveals mutationally inactivated *ftsQ* and *mraY* in a protoplast-type L-form of *Escherichia coli*.  
*FEMS Microbiol. Lett.* 2006, 258, 305-311

## 2005

von Langen J, Fritzeimer K-H, Diekmann S, Hillisch A  
Molecular Basis of the Interaction Specificity between the Human Glucocorticoid Receptor and Its Endogenous Steroid Ligand Cortisol.  
*Chem Bio Chem* 2005, 6, 1-9

Hemmerich, P., Diekmann, S. (editors)  
Visions of the Cell Nucleus, American Scientific Publishers, CA USA, 2005

## 2004

Wieland G, Orthaus S, Ohndorf S, Diekmann S, Hemmerich P  
Functional complementation of human centromere protein A (CENP-A) by Cse4p from *Saccharomyces cerevisiae*.  
*Mol. Cell. Biol.* 2004, 24, 6620-6630.

Schmiedeberg L, Weisshart K, Diekmann S, Meyer zu Hörste G, Hemmerich P  
High- and low-mobility populations of HP1 in heterochromatin of mammalian cells.  
*Mol. Biol. Cell* 2004, 15, 2819-2833.

Hoischen C, Bolshoy A, Gerdes K, Diekmann S  
Centromere *parC* of plasmid R1 is curved.  
*Nucl. Acids Res.*, 2004, 32, 5907 - 5915

Hettmann T, Siddiqui R A, Frey C, Santos-Silva T, Romao M J, Diekmann S  
Mutagenesis study on amino acids around the molybdenum centre of the periplasmic nitrate reductase from *Ralstonia eutropha*.  
*Biochem. Biophys. Res. Comm.* 2004, 320, 1211-1219

Hillisch A, Diekmann S.  
Computer Aided Design of DNA-Based Nanoinstruments

In: *The Dekker Encyclopedia of Nanoscience and Nanotechnology*, Schwarz J A, Contescu C, Putyera K (Eds.), Marcel Dekker, New York, 2004, pp833-844.

## 2003

Hettmann T, Anemüller S, Borchering H, Mathé L, Steinrücke P, Diekmann S

*Pseudomonas stutzeri* soluble nitrate reductase  $\alpha\beta$ -subunit is a soluble enzyme with a similar electronic structure at the active site as the inner membrane-bound  $\alpha\beta\gamma$  holoenzyme.

*FEBS Letters* 2003, 534, 143-150

Sauter SR, Diekmann S, Braun V

Two-step purification of the outer membrane transporter and activator protein Sh1B from *Escherichia coli* using internally His<sub>6</sub>-tagged constructs.

*Journal of Chromatography B* 2003, 786, 33-37

Diekmann S, Siegmund G, Roecker A, Klemm DO

Regioselective nitrilotriacetic acid-cellulose-nickel-complexes for immobilisation of His<sub>6</sub>-tag proteins.

*Cellulose* 2003, 10, 53-63

Fändrich M, Forge V, Buder K, Kittler M, Dobson CM, Diekmann S

Myoglobin forms amyloid fibrils by association of unfolded polypeptide segments.

*PNAS* 2003, 100, 15463-15468

Hettmann T, Siddiqui R, Langen J, Frey Ch, Romao M, Diekmann S

Mutagenesis study on the role of a lysine residue highly conserved in formate dehydrogenases and periplasmic nitrate reductases.

*Biochem. Biophys. Res. Comm.* 2003, 310, 40-47

## 2002

Lorenz M, Hillisch A, Diekmann S

FRET studies of U-shaped DNA molecules.

*Rev. Mol. Biotechnol.* 2002, 82, 197-209

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Metal mediated reactions modeled after nature.

*Rev. Mol. Biotechnol.* 2002, 90, 73-94

Gollmick FA, Lorenz M, Dornberger U, Langen J, Diekmann S, Fritzsche H

Solution structure of dAATAA and dAAUAA bulges.

*Nucl. Acids Res.* 2002, 30, 2669-2677

Anders E, Diekmann S

Chemical Biomimetics

*Rev. Mol. Biotechnol.* 2002, 90, 71

Lindhorst TK, Diekmann S

Dendrimers

*Rev. Mol. Biotechnol.* 2002, 90, 157-158

Diekmann S

Molekulare Biotechnologie

In: *Management-Handbuch Biotechnologie*,

Eds: Herstatt C, Müller C

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*Reviews in Molecular Biotechnology* 2002, 82, 197-209

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*Journ Biotechn* 2002, 90, 3-4

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Schaeffer-Poeschel Verlag Stuttgart, 2002, 431-443