

PUBLICATIONS

REFEREED PAPERS IN PROFESSIONAL JOURNALS

1. Microarray-based Screening of Heat Shock Protein Inhibitors, Emilia Schax, Johanna-Gabriela Walter, Helene Märzhäuser, Frank Stahl, Thomas Scheper, David A. Agard, Simone Eichner, Andreas Kirschning, Carsten Zeilinger, *Journal of Biotechnology*, accepted
2. Biofunctional Quantum dots as Fluorescence Probe for Cell Specific Targeting, Didem Ag, Leyla Eral Dogan, Rebecca Bongartz, Muharrem Selec, Johanna-Gabriela Walter, Dilek Odaci Demirkol, Frank Stahl, Serdar Ozcelik, Suna Timur, Thomas Scheper, 2014, *Colloids and Surfaces B: Biointerfaces*, 114, 96-103
3. Aptamers: Versatile Probes for Flow Cytometry, Michael Meyer, Thomas Scheper, Johanna-Gabriela Walter, *Applied Microbiology and Biotechnology*, Volume 97, Issue 16 (2013), Page 7097-7109
4. Analysis of oxygen-dependent cytokine expression in human mesenchymal stem cells derived from umbilical cord, Maren Lönne, Antonina Lavrentieva, Johanna-Gabriela Walter, Cornelia Kasper, *Cell Tissue Res*, 2013, Vol 353, 117-122
5. Folic acid-modified clay: targeted surface design for cell culture applications, Rebecca Bongartz, Didem Ag, Muharrem Selec, Johanna-G. Walter, Esra E. Yalcinkaya, Dilek Odaci Demirkol, Frank Stahl, Suna Timur, Thomas Scheper, *Journal of Materials Chemistry*, 2013, Vol. 1, 522-528
6. Transcriptome analysis using next generation sequencing, Kai Mutz, Alexandra Heilkenbrinker, Maren Lönne, Johanna-Gabriela Walter, Frank Stahl, *Current Opinion in Biotechnology*, 2013, Volume 24: 22-30
7. Aptasensors for Small Molecule Detection, Johanna-Gabriela Walter, Alexandra Heilkenbrinker, Jonas Austerjost, Suna Timur, Frank Stahl, Thomas Scheper, *Zeitschrift für Naturforschung B*, 2012, Volume 67b, 976-986
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9. Aptamers as affinity ligands for downstream processing, Johanna-Gabriela Walter, Frank Stahl, Thomas Scheper, *Engineering in Life Sciences*, 2012, Volume 12, No. 5, 1-11
10. Macroporous methacrylate-based monoliths as platforms for DNA microarrays; Ekaterina S. Sinitsyna, Johanna G. Walter, Evgenia G. Vlach, Frank Stahl, Cornelia Kasper, Tatiana B. Tennikova; *Talanta*, 2012, Volume 93, 139-146
11. Aptamers as detection molecules on reverse phase protein microarrays for the analysis of cell lysates; Miriam Lübbecke, Johanna-Gabriela Walter, Frank Stahl, Thomas Scheper; *Engineering in Life Sciences*, 2012, Volume 12, Issue 2, 2012, 144-151
12. Characterization of optimal aptamer microarray binding chemistry and spacer design; Guohong Zhu, Miriam Lübbecke, Johanna-Gabriela Walter, Frank Stahl, Thomas Scheper; *Chemical Engineering & Technology*, 2011, Volume 34, Issue 12, pages 2022–2028
13. Aptamer-Based Downstream Processing of His-Tagged Proteins Utilizing Magnetic Beads; Öznur Kökpınar, Johanna-Gabriela Walter, Yuval Shoham, Frank Stahl, Thomas Scheper; *Biotechnology and Bioengineering* 2011, Vol. 108, No. 10, 2371-2379
14. Laser ablation-based one-step generation and bio-functionalization of gold nanoparticles conjugated with aptamers; Johanna-Gabriela Walter, Svea Petersen, Frank Stahl, Thomas Scheper, Stephan Barcikowski; *Journal of Nanobiotechnology* 2010, 8:21
15. Protein Microarrays: Reduced Autofluorescence and Improved Limit of Detection; Johanna-Gabriela Walter, Frank Stahl, Michael Reck, Inka Praulich, Yakir Nataf, Markus Hollas, Karl Pflanz, Dieter Melzner, Yuval Shoham, Thomas Scheper; *Engineering in Life Sciences* 2010, 10, No. 2, 103–108

16. Characterization and improvement of cell line performance via flow cytometry and cell sorting; Pierre Moretti, Larissa Behr, Johanna-G. Walter, Cornelia Kasper, Frank Stahl, Thomas Scheper; *Engineering in Life Sciences* 2010, 10, No. 2, 130–138
17. New 3-D microarray platform based on macroporous polymer monoliths; Rober M; Walter J; Vlach E; Stahl F; Kasper C; Tennikova T; *Analytica chimica acta* 2009;644(1-2):95-103.
18. Systematic Investigation of Optimal Aptamer Immobilization for Protein-Microarray Applications; Johanna-Gabriela Walter, Öznur Kökpınar, Frank Stahl, Thomas Scheper; *Analytical Chemistry*, 80; 19 (2008) 7372-7378
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21. Fast Screening for the Purification of Proteins Using Membrane Adsorber Technology; Daniela Harkensee, Öznur Kökpınar, Johanna-Gabriela Walter, Cornelia Kasper, Sascha Beutel, Oscar-Werner Reif, Thomas Scheper, Roland Ulber; *Engineering in Life Science* (2007) 388-394
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BOOK CHAPTERS

1. Aptamer-modified Nanoparticles as Biosensors, Maren Lönne, Guohong Zhu, Frank Stahl, Johanna-Gabriela Walter, *Advances in biochemical engineering/biotechnology*, 2013, DOI: 10.1007/10_2013_231
2. Transcriptome Analysis; Frank Stahl, Bernd Hitzmann, Kai Mutz, Daniel Landgrebe, Miriam Lübbecke, Cornelia Kasper, Johanna-Gabriela Walter, Thomas Scheper, *Adv. Biochem. Engin/Biotechnol.*, 2012, 127: 1-25