I. ORIGINAL WORK

# corresponding author, * equal contributions

2025

Meier, N., Berten-Schunk, L., Roger, Y., Hänsch, R., **Hoffmann, A.**, Bunjes, H., Dempwolf, W., Menzel, H. **(2025)**:
Characterization of Thin Polymer Layers Prepared from Liposomes and Polyelectrolytes for TGF-β3 Release in Tissue Engineering
Macromolecular Bioscience:e2400447

Pitts, J., Hänsch, R., Roger, Y., **Hoffmann, A.**, Menzel, H. **(2025)**:
3D Porous Polycaprolactone with Chitosan-graft-PCL Modified Surface for In Situ Tissue Engineering
Polymers (Basel);17(3):383

2024

Emonts, C., Bauer, B., Pitts, J., Roger, Y., **Hoffmann, A.,** Menzel, H., Gries, T. **(2024)**:
Mechanical, Biological and In Vitro Degradation Investigation of Braided Scaffolds for Tendon and Ligament Tissue Engineering Based on Different Polycaprolactone Materials with Chitosan-Graft-PCL Surface Modification
Polymers (Basel);16(16):2349.

Bondanza, A., Koehl, U., **Hoffmann, A.,** Toubert, A. **(2024)**:
Biological Properties of Cells Other Than HSCs.
In: Sureda A, Corbacioglu S, Greco R, Kröger N, Carreras E, editors. The EBMT Handbook: Hematopoietic Cell Transplantation and Cellular Therapies [Internet]. 8th edition. Cham (CH): Springer; 2024. Chapter 8 (Buchartikel)

2023

Berten-Schunk, L., Roger, Y., Bunjes, H.*, **Hoffmann, A.*** **(2023)**:
Release of TGF-β3 from Surface-Modified PCL Fiber Mats Triggers a Dose-Dependent Chondrogenic Differentiation of Human Mesenchymal Stromal Cells.
Pharmaceutics; 15(4):1303

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Polenkowski, M., Allister, A.B., Burbano de Lara, S., Pierce, A., Geary, B., El Bounkari, O., Wiehlmann, L., **Hoffmann, A.**, Whetton, A.D., Tamura, T., Tran, D.D.H. **(2022)**:
THOC5 complexes with DDX5, DDX17 and CDK12 to regulate R loop structures and transcription elongation rate.
iScience;26(1):105784

Kempfert, M., Willbold, E., Loewner, S., Blume, C., Pitts, J., Menzel, H., Roger, Y., **Hoffmann, A.**, Angrisani, N., Reifenrath, J. **(2022)**:

Polycaprolactone-Based 3D-Printed Scaffolds as Potential Implant Materials for Tendon-Defect Repair.
J Funct Biomater.;13(4):160

Sundermann, J., Sydow, S., Burmeister, L., **Hoffmann, A.**, Menzel, H., Bunjes, H. **(2022)**:
Spatially and Temporally Controllable BMP-2 and TGF-β_3 Double Release From Polycaprolactone Fiber Scaffolds via Chitosan-Based Polyelectrolyte Coatings.
ACS Biomater Sci Eng.;10(1):89-98

2021

Sundermann, J., Sydow, S., Burmeister, L., **Hoffmann, A.**, Menzel, H., Bunjes, H. **(2021)**:
ELISA- and Activity Assay-Based Quantification of BMP-2 Released In Vitro Can Be Biased by Solubility in Physiological Buffers and an Interfering Effect of Chitosan.
Pharmaceutics. 13(4):582

Oelze, B., Elger, K., Schadzek, P., Burmeister, L., Hamm, A., Laggies, S., Seiffart, V., Gross, G., **Hoffmann, A.**[#] **(2021)**:
The inflammatory signalling mediator TAK1 mediates lymphocyte recruitment to lipopolysaccharide-activated murine mesenchymal stem cells through interleukin-6.
Mol Cell Biochem. 476(10):3655-3670

Segovia-Trinidad, C.L., Quaas, B., Li, Z., Lavrentieva, A., Roger, Y., Scheper, T., **Hoffmann, A.**, Rinas, U. **(2021)**:
Refolding, purification, and characterization of constitutive-active human-Smad8 produced as inclusion bodies in ClearColi® BL21 (DE3).
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Varying the sustained release of BMP-2 from chitosan nanogel-functionalized polycaprolactone fiber mats by different polycaprolactone surface modifications.
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Roger, Y., Sydow, S., Burmeister, L., Menzel, H., **Hoffmann, A.**[#] **(2020)**:
Sustained release of TGF-β_3 from polysaccharide nanoparticles induces chondrogenic differentiation of human mesenchymal stromal cells.
Colloids Surf B Biointerfaces;189:110843

Roger, Y., Burmeister, L., Hamm, A., Elger, K., Dittrich-Breiholz, O., Flörkemeier, T.*, **Hoffmann, A.*** [#] **(2020)**:
Heparin Anticoagulant for Human Bone Marrow Does Not Influence In Vitro Performance of Human Mesenchymal Stromal Cells.
Cells;9(7):E1580.

Winkel, A., Jaimes, Y., Melzer, C., Dillschneider, P., Hartwig, H., Stiesch, M., von der Ohe, J., Strauss, S., Vogt, P.M., Hamm, A., Burmeister, L., Roger, Y., Elger, K., Flörkemeier, T., Weissinger, E.M., Pogozhykh, O., Müller, T., Selich, A., Rothe, M., Petri, S., Köhl, U., Hass, R., **Hoffmann, A.[#] (2020)**:
Cell culture media notably influence properties of human mesenchymal stroma/stem-like cells from different tissues.
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Vascularization and biocompatibility of poly(ε-caprolactone) fiber mats for rotator cuff tear repair.
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Schwieger, J., Hamm, A., Gepp, M.M., Schulz, A., **Hoffmann, A.**, Lenarz, T., Scheper, V. **(2020)**:
Alginate-encapsulated Brain Derived Neurotrophic Factor-overexpressing mesenchymal stem cells are a promising drug delivery system for protection of auditory neurons.
J Tissue Eng.;11:1-15

De Cassan, D., Becker, A., Glasmacher, B., Roger, Y., **Hoffmann, A.**, Gengenbach, T.R., Easton, C. D., Hänsch, R., Menzel, H. **(2020)**:
Blending chitosan-g-poly(caprolactone) with poly(caprolactone) by electrospinning to produce functional fiber mats for tissue engineering applications.
J Appl Polym Sci; DOI: 10.1002/APP.48650

Dilger, N., Neehus, A.-L., Grieger, K., **Hoffmann, A.**, Menssen, M., Ngezahayo, A. **(2020)**:
Gap junction dependent cell communication is modulated during transdifferentiation of mesenchymal stem/stromal cells towards neuron-like cells.
Front Cell Dev Biol;8:869

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Quaas, B, Burmeister, L., Li, Z., Satalov, A., Behrens, P., **Hoffmann**, A., Rinas, U. **(2019)**:
Stability and biological activity o E. coli derived soluble and precipitated bone morphogenetic protein-2.
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Jungwirth, N., Salinas Tejedor, L., Jin, W., Gudi, V., Skripuletz, T., Stein, V.M., Tipold, A., **Hoffmann, A.**, Stangel, M., Baumgärtner, W., Hansmann, F. **(2018)**:
Mesenchymal Stem Cells Form 3D Clusters Following Intraventricular Transplantation.
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Differential expression of cholinergic system components in human induced pluripotent stem cells, bone marrow-derived multipotent stromal cells, and induced pluripotent stem cell-derived multipotent stromal cells.
Stem Cells Dev;27;166-183

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Schulze, J., Kaiser, O., Paasche, G., Lamm, H., Pich, A., **Hoffmann, A.**, Lenarz, T., Warnecke, A. **(2017)**:

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PLoS One;12:e0178182

Rahim, M. I., Weizbauer, A., Evertz, F., **Hoffmann, A.**, Rohde, M., Glasmacher, B., Windhagen, H., Gross, G., Seitz, J.-M., Müller, P. P. **(2017)**:
Differential magnesium implant corrosion coat formation and contribution to bone bonding.
Journal of Biomedical Materials Research Part A;105:697-709

2016

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Induction of neuronal-like phenotype in human mesenchymal stem cells by overexpression of Neurogenin1 and treatment with neurotrophins.
Tissue Cell;48:524-532

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Grid-like surface structures in thermoplastic polyurethane induce anti-inflammatory and anti-fibrotic processes in bone marrow-derived mesenchymal stem cells.
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Saran, S., Tran, D.D.H., Ewald, F., Koch, A., **Hoffmann, A.**, Koch, M., Nashan, B., Tamura, T. **(2015)**:
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Brain Behaviour and Immunity;50:155-165

Pogozhykh, O., Pogozhykh, D., Neehus, A.-L., **Hoffmann, A.**, Blasczyk, R., Müller, T. **(2015)**:
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PLoS One;8:e65943

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II. Review Articles

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