

## Veröffentlichungen, Patente und Konferenzbeiträge

### 2019

D. Seiler, M. de Wild, *3D printing in medicine with focus on titanium and nitinol alloys*, 3D & 4D printing in the Upper Rhine Valley, IS2M annual meeting, 06./07.06.2019, Université de Haute-Alsace, Mulhouse (France).

M. de Wild, F. Schuler, *SPIRITS*, Upper Rhine Health Tech Innovation Forum, 2<sup>nd</sup> Trinational Workshop, 16.05.2019, Strasburg (France).

M. de Wild, *Titanium alloys for biomedical purposes*, Selected Research Topics in Biomedical Engineering: Developments in Dental Research, Universitäres Zentrum für Zahnmedizin Basel (UZB), 09.05.2019, Basel (Switzerland).

M. de Wild, P. Renaud, *SPIRITS*, Video für regionsuisse – Netzwerkstelle Regionalentwicklung, 5.4.2019, Muttenz (Switzerland).

A. Testino, M. de Wild, E. Müller, A. Carino, F. Dalcanale, P. Gruner, W. Moser, *Biomimetic growth of calcium phosphate ceramics on Ti implants*, Annual Report 2018, Supplement, Swiss NanoScience Institute, University of Basel, Nano Argovia Project A13.09 NanoCoat, 90-91 (2018).

J.P. Kirchhofer, F. Schuler, L. Rubbert, P. Renaud, M. de Wild, *Performance of metallic auxetic needle drives*, European Cells and Materials, Collection; SSB+RM Conference Abstracts accepted (2019).

M. Meier, F. Schuler, M. de Wild, *In-situ fracture analysis of 3D-printed structures*, European Cells and Materials, Collection; SSB+RM Conference Abstracts accepted (2019).

A. Carino, A. Testino, E. Mueller, M. de Wild, F. Dalcanale, P. Gruner, W. Moser, B. Hoechst, *Novel biomimetic approach for titanium surface treatment by calcium phosphate: Towards the production of implants with improved bioactivity*, European Cells and Materials, Collection; SSB+RM Conference Abstracts accepted (2019).

M. de Wild, *Interreg konkret: Angewandte trinationale Forschung und Entwicklung in den Life Sciences*, Nordwestschweizer Regierungskonferenz NWRK, 25.02.2019, Campus Muttenz (Switzerland).

M. de Wild, *Smart Implants*, Invited presentation Wissenschaftliches Seminar Werkstofftechnik, Technische Universität Berlin, Fachgebiet Werkstofftechnik, 06.02.2019, Berlin (Germany).

A. Carino, A. Testino, E. Mueller, M. de Wild, F. Dalcanale, P. Gruner, W. Moser, B. Hoechst, *Implant surface modification by a controlled biomimetic approach*, European Cells and Materials, Online Periodical, Collection 1; Meet the Expert Conference Abstracts, p2, (2019).

A. Pfeil, F. Schuler, L. Barbé, F. Geiskopf, M. de Wild, P. Renaud, *evaluation of gamma irradiation impact on 3D-printed multimaterial polymer*, European Cells and Materials, Online Periodical, Collection 1, Meet the Expert Conference Abstracts, p8 (2019).

M. de Wild, R. Krähenbühl, D. Kallweit, R. Marek, M. Estermann, M. Schnieper, *Holographic identification of titanium implants*, European Cells and Materials, Online Periodical, Collection 1; Meet the Expert Conference Abstracts, p10 (2019).

M. de Wild, *Holographic identification of titanium implants*, oral presentation, Meet the Expert Conference, 19.3.2019 Olten (Switzerland).

M. de Wild, C. Ghayor, S. Zimmermann, J. Rüegg, F. Nicholls, F. Schuler, T.-H. Chen, F.E. Weber, *Osteoconductive Lattice Microarchitecture for Optimized Bone Regeneration*, 3D Printing and Additive Manufacturing, doi.org/10.1089/3dp.2017.0129 6(1):40-49 (2019).

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A. Testino, A. Carino, E. Müller, M. de Wild, F. Dalcanale, W. Moser, B. Höchst, Ph. Gruner, *NanoCoat Project: Biomimetic growth of calcium phosphates ceramics on Ti implants*, poster at Nano-Tech Apéro, DSM, Kaiseraugst (Switzerland).

M. de Wild, *Research @ IM<sup>2</sup>*, University of Chemistry and Technology, Prague, Department of Glass and Ceramics, Department of Metals and Corrosion Engineering, 6.11.2018, Prague (Czech Republic).

M. Estermann, J. Waser, Ch. Schneider, A. Luu-Dinh, M. Schnieper, D. Kallweit, R. Krähenbühl, M. de Wild, R. Marek, *Medical prostheses, medical osteosynthetic devices or hearing aids with security and/or identification elements*, patent application, EP18164627.4 and EP18164630.8, 28.03.2018.

M. de Wild, *3D printing of titanium alloys for biomedical and robotic applications*, Technical Day 2018, 3D Printing, Robotics and Medicine, 16.10.2018, INSA Strasbourg (France).

M. de Wild, *Grenzüberschreitende Zusammenarbeit konkret: Interreg-V-Projekt «Spirits»*, Regiokommission des Grossen Rats BS und der Finanzkommission des Landrats BL, 10.09.2018, FCB-Lounge St. Jakob Park Basel (Switzerland).

F. Schuler, *A new approach to 3D-print of fine and complex structures*, 3D PRECISION SA, 30.08.2018, 3D Printing in Practice – visit at 3D Precision SA, Delémont (Switzerland).

T.H. Chen, C. Ghayor, B. Siegenthaler, F. Schuler, J. Rüegg, M. de Wild, F.E. Weber, *Lattice microarchitecture for bone tissue engineering from calcium-phosphate compared to titanium*, Tissue Engineering Part A, 14 (19-20):1554-1561. doi: 10.1089/ten.TEA.2018.0014, (2018).

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M. de Wild, *Additive manufacturing for medical implants*, seminar series on Additive manufacturing for medical implants, Department of Biomedical Engineering, 4.5.2018 Allschwil (Switzerland).

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F. Dalcanale, S. Zimmermann, O. Bill, R. Schumacher, M. de Wild, *Reduction of particles on SLM surfaces*, European Cells and Materials, Collection 1; Meet the Expert Conference Abstracts (page 9) (2018).

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M. de Wild, *Antibakterielle Implantatoberflächen*, Innovative Surfaces @ Swiss MedTech Expo, 19.09.2017, Luzern (Switzerland).

M. de Wild, *Antibacterial Implant Surfaces*, HLS Research Day, 08.09.2017, MuttENZ (Switzerland).

F: Schuler, *SPIRITS - Smart Printed Interactive Robots for Interventional Therapy and Surgery*, HLS Research Day, 08.09.2017, MuttENZ (Switzerland).

M. de Wild, *Customizing the microstructure in three-dimensional Mg structures*, oral presentation, 10<sup>th</sup> BioMetals, 29.08.2017, Bertinoro (Italy).

M. de Wild, *Das Rennen*, az Aargauer Zeitung, Basellandschaftliche Zeitung, Solothurner Zeitung, (Auflage 106'000), 31.5.2017.

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M. de Wild, *Resorbierbare metallische Implantate aus dem 3D-Drucker: Stand der Forschung und Anwendungen*, oral presentation, Symposium zementfreie Endoprothetik, 27.-28.8. 2016 Dresden (Germany).

M. de Wild, *Antibakterielle Implantatoberflächen für Gelenkimplantate: Stand des Wissens, alternative Konzepte, Osseointegration*, oral presentation, Symposium zementfreie Endoprothetik, 27.-28.8. 2016 Dresden (Germany).

M. de Wild, *Solution Provider FHNW: Research and degree programme Medical Technology*, oral presentation, Medtech Innovation Event, 5.9. 2016, Innocampus, Biel (Switzerland).

M. de Wild, *Towards Smart implants: SINAPIS – Slurry injection of nano-scale particles into implant surfaces*, oral presentation, SNI annual meeting 2016, 15./16.9.2016 Lenzerheide (Switzerland).

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*surfaces*, p. 23 in proceedings of SNI annual meeting 2016, 15./16.9.2016 Lenzerheide (Switzerland).

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M. de Wild, *3D printed resorbable metallic implants*, oral presentation, AMX meeting, 20. April 2016, Basel (Switzerland).

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M. de Wild, *Magnesium im 3D Druck - Geschichte über Schöpfung und Zerfall*, HLS-Forschungstag, 4. Sept. 2015 Muttenz (Switzerland).

M. de Wild, *Additive Manufacturing of Mg*, presentation, 2. Sept. 2015, Institut Straumann AG, Basel (Switzerland).

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M. de Wild, C. Jung, *NANTI: Development of a Nanoporous Antibacterial Surface for Titanium Implants by Electrochemical Copper deposition*, poster, CTI Mikro Nano Event & Swiss Nano Convention 2015, 28.5.2015, Neuchâtel (Switzerland).

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