

## CURRICULUM VITAE

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Date of birth: 7. November 1967  
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### Education and Professional Career

since 2008: **Professor for Colloids, Surfaces and Interfaces** (W2), Friedrich Schiller University Jena  
04/2008: **Habilitation**, University of Erlangen-Nuremberg, Germany  
2002-2008: **Head of Group “Biomaterials”**, Department of Materials Science, University of Erlangen-Nuremberg, Germany  
05/2002: **PhD in Materials Science**  
1997-2001: **Research Associate**, Department of Materials Science (Prof. Dr. Peter Greil), University of Erlangen-Nuremberg, Germany  
1990-1996: **Study of Materials Science**, University of Erlangen-Nuremberg, Germany and CSIC-ICV, Madrid, Spain

In 2008 Frank Müller received an appointment for a professorship for ‘Colloids, Surfaces and Interfaces’ (CSI) at the Otto Schott Institute of Materials Research (OSIM) of the Friedrich Schiller University of Jena (FSUJ). He currently runs a research group of two postdocs, seven PhD students and two technicians. The research in his group is mainly focused on ‘Laser Materials Processing’ including the synthesis of nanoparticles, surface modification, coatings, and additive manufacturing, and ‘Bio-inspired Materials’ including biomimetic surfaces, biomineralization, and hybride structures for applications in the fields of biomaterials, energy and environmental technology. Within the last eight years the CSI group attracted €4M of research funding from governmental and industrial sources.

Frank Müller’s work led to 131 peer-reviewed publications, 135 conference contributions, five patents, and four book chapters. The quality and recognition of his scientific work is proven by a Hirsch-index of 34, an accumulated impact factor of 527 and more than 4200 citations in total. Eleven of his papers have had more than 100 citations.

## 10 most important publications:

1. A Tesch, C Wenisch, KH Herrmann, JR Reichenbach, P Warncke, D Fischer, FA Müller: *Luminomagnetic Eu<sup>3+</sup>- and Dy<sup>3+</sup>-doped hydroxyapatite for multimodal imaging*. **Mater.Sci. Eng. C** 81 (2017) 422-431.
2. FA Müller, C Kunz, S Gräf: *Bio-inspired functional surfaces based on laser-induced periodic surface structures*. **Materials** 9 (2016) 476.
3. JF Bartolome, A Smirnov, HD Kurland, J Grabow, FA Müller: *New ZrO<sub>2</sub>-Al<sub>2</sub>O<sub>3</sub> nanocomposite fabricated from hybrid nanoparticles prepared by CO<sub>2</sub> laser co-vaporization*. **Sci. Rep.** 6 (2016) 20589.
4. J Kiefer, J Grabow HD Kurland, FA Müller: *Characterization of nanoparticles by Solvent Infrared Spectroscopy (SIRS)*. **Anal. Chem.** 87 (2015) 12313-12317.
5. S Flauder, R Sajzew, FA Müller: *Mechanical properties of porous  $\beta$ -tricalcium phosphate composites prepared by ice-templating and poly( $\epsilon$ -caprolactone) impregnation*. **ACS Appl. Mater. Inter.** 7 (2015) 845-851.
6. A Dey, PHH Bomans, FA Müller, J Will, PM Frederik, G de With, NAJM Sommerdijk: *The role of prenucleation clusters in surface induced calcium phosphate crystallization*. **Nature Mater.** 9 (2010) 1010-1014.
7. P Heintl, L Müller, C Körner, RF Singer, FA Müller: *Cellular Ti-6Al-4V structures with interconnected macro porosity for bone implants fabricated by selective electron beam melting*. **Acta Biomater.** 4 (2008) 1536-1544.
8. U Gbureck, T Hölzel, C Doillon, FA Müller, JE Barralet: *Direct printing of bioceramic implants with spatially localized angiogenic factors*. **Adv. Mater.** 19 (2007) 795-800.
9. FA Müller, L Müller, I Hofmann, P Greil, MM Wenzel, R Staudenmaier: *Cellulose-based scaffold materials for cartilage tissue engineering*. **Biomaterials** 27 (2006) 3955-3963.
10. L Müller, FA Müller: *Preparation of SBF with different HCO<sub>3</sub><sup>-</sup> content and its influence on the composition of biomimetic apatites*. **Acta Biomater.** 2 (2006) 181-189.