Berit Zeller-Plumhoff

List of Publications by Year
in descending order

34	462	687363 13	794594 19
papers	citations	h-index	g-index

37	37	37	504
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Imaging Invasion: Micro-CT imaging of adamantinomatous craniopharyngioma highlights cell type specific spatial relationships of tissue invasion. Acta Neuropathologica Communications, 2016, 4, 57.	5.2	36
2	Reptile-like physiology in Early Jurassic stem-mammals. Nature Communications, 2020, 11, 5121.	12.8	30
3	Analysis of the bone ultrastructure around biodegradable Mgâ€“xGd implants using small angle X-ray scattering and X-ray diffraction. Acta Biomaterialia, 2020, 101, 637-645.	8.3	29
4	Microengineered Hollow Graphene Tube Systems Generate Conductive Hydrogels with Extremely Low Filler Concentration. Nano Letters, 2021, 21, 3690-3697.	9.1	29
5	Quantitative characterization of degradation processes in situ by means of a bioreactor coupled flow chamber under physiological conditions using timeâ€lapse SRÂµCT. Materials and Corrosion - Werkstoffe Und Korrosion, 2018, 69, 298-306.	1.5	28
6	Combining peridynamic and finite element simulations to capture the corrosion of degradable bone implants and to predict their residual strength. International Journal of Mechanical Sciences, 2022, 220, 107143.	6.7	28
7	Exploring key ionic interactions for magnesium degradation in simulated body fluid â€“ A data-driven approach. Corrosion Science, 2021, 182, 109272.	6.6	22
8	Early osteoimmunomodulatory effects of magnesiumâ€“calciumâ€“zinc alloys. Journal of Tissue Engineering, 2021, 12, 204173142110471.	5.5	21
9	Assessing the microstructure and in vitro degradation behavior of Mg-xGd screw implants using ÂµCT. Journal of Magnesium and Alloys, 2021, 9, 2207-2222.	11.9	20
10	Utilizing Synchrotron Radiation for the Characterization of Biodegradable Magnesium Alloysâ€”From Alloy Development to the Application as Implant Material. Advanced Engineering Materials, 2021, 23, 2100197.	3.5	19
11	High-resolution ex vivo analysis of the degradation and osseointegration of Mg-xGd implant screws in 3D. Bioactive Materials, 2022, 13, 37-52.	15.6	18
12	Phase contrast synchrotron radiation computed tomography of muscle spindles in the mouse soleus muscle. Journal of Anatomy, 2017, 230, 859-865.	1.5	17
13	Implant degradation of low-alloyed Mgâ€“Znâ€“Ca in osteoporotic, old and juvenile rats. Acta Biomaterialia, 2022, 147, 427-438.	8.3	16
14	Image-based modelling of skeletal muscle oxygenation. Journal of the Royal Society Interface, 2017, 14, 20160992.	3.4	13
15	Pore characterization of PM Mgâ€“0.6Ca alloy and its degradation behavior under physiological conditions. Journal of Magnesium and Alloys, 2021, 9, 686-703.	11.9	12
16	Magnesium ions regulate mesenchymal stem cells population and osteogenic differentiation: A fuzzy agent-based modeling approach. Computational and Structural Biotechnology Journal, 2021, 19, 4110-4122.	4.1	12
17	Using high resolution X-ray computed tomography to create an image based model of a lymph node. Journal of Theoretical Biology, 2018, 449, 73-82.	1.7	11
18	Evaluating the morphology of the degradation layer of pure magnesium via 3D imaging at resolutions below 40Ânm. Bioactive Materials, 2021, 6, 4368-4376.	15.6	11

#	Article	IF	Citations
19	Investigation of microvascular morphological measures for skeletal muscle tissue oxygenation by image-based modelling in three dimensions. Journal of the Royal Society Interface, 2017, 14, 20170635.	3.4	10
20	Soft tissue 3D imaging in the lab through optimised propagation-based phase contrast computed tomography. Optics Express, 2017, 25, 33451.	3.4	10
21	Degradation Analysis of Thin Mg-xAg Wires Using X-ray Near-Field Holotomography. Metals, 2021, 11, 1422.	2.3	10
22	Scaling the U-net: segmentation of biodegradable bone implants in high-resolution synchrotron radiation microtomograms. Scientific Reports, 2021, 11, 24237.	3.3	9
23	Comparing image quality in phase contrast sub<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline" id="d1e2113" altimg="si51.svg"><mml:mi>Î¼</mml:mi></mml:math> X-ray tomographyâ€"A round-robin study. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2020, 951, 162992.	1.6	8
24	Electrochemical Surface Structuring for Strong SMA Wireâ€"Polymer Interface Adhesion. ACS Applied Materials & Interfaces, 2021, 13, 21924-21935.	8.0	8
25	A load frame for in situ tomography at PETRA III. , 2019, , .		6
26	Computational modelling of magnesium degradation in simulated body fluid under physiological conditions. Journal of Magnesium and Alloys, 2022, 10, 965-978.	11.9	6
27	Visualization of Implant Failure by Synchrotron Tomography. Minerals, Metals and Materials Series, 2018, , 275-284.	0.4	5
28	Nanotomographic evaluation of precipitate structure evolution in a Mgâ€"Znâ€"Zr alloy during plastic deformation. Scientific Reports, 2020, 10, 16101.	3.3	4
29	The Influence of In Situ Anatase Particle Addition on the Formation and Properties of Multifunctional Plasma Electrolytic Oxidation Coatings on AA2024 Aluminum Alloy. Advanced Engineering Materials, 2021, 23, 2001527.	3.5	4
30	Biodegradable magnesium-based implants in bone studied by synchrotron radiation microtomography. , 2017, , .		3
31	<scp>CppyABM</scp>: An openâ€source agentâ€based modeling library to integrate C++ and Python. Software - Practice and Experience, 2022, 52, 1337-1351.	3.6	3
32	Evaporation kinetics in highly porous tetrapodal zinc oxide networks studied using in situ SRÂµCT. Scientific Reports, 2021, 11, 20272.	3.3	2
33	X-ray diffraction tomography as a tool to study the influence of biodegradable metal implant on the bone in 3D. , 2021, , .		1
34	Mechanical Interactions in Interpenetrating Composites. IFMBE Proceedings, 2022, , 579-586.	0.3	0