

Markus Rottmar

List of Publications by Year in descending order

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Version: 2024-02-01

54
papers

1,523
citations

346980

22
h-index

371746

37
g-index

56
all docs

56
docs citations

56
times ranked

3368
citing authors

#	ARTICLE	IF	CITATIONS
1	Palladium-Based Metallic Glass with High Thrombogenic Resistance for Blood-Contacting Medical Devices. <i>Advanced Functional Materials</i> , 2022, 32, 2108256.	7.8	9
2	Multiscale 2D/3D microshaping and property tuning of polymer-derived SiCN ceramics. <i>Journal of the European Ceramic Society</i> , 2022, 42, 1963-1970.	2.8	8
3	A low-fouling, self-assembled, graft co-polymer and covalent surface coating for controlled immobilization of biologically active moieties. <i>Applied Surface Science</i> , 2022, 584, 152525.	3.1	2
4	The response of soft tissue cells to Ti implants is modulated by blood-implant interactions. <i>Materials Today Bio</i> , 2022, 15, 100303.	2.6	10
5	Structure-Property Relationship Based on the Amino Acid Composition of Recombinant Spider Silk Proteins for Potential Biomedical Applications. <i>ACS Applied Materials & Interfaces</i> , 2022, 14, 31751-31766.	4.0	8
6	Gallium Complex-Functionalized P4HB Fibers: A Trojan Horse to Fight Bacterial Infection. <i>ACS Applied Bio Materials</i> , 2021, 4, 682-691.	2.3	6
7	Tissue Inhibitor of Metalloproteinase (TIMP) Peptidomimetic as an Adjunctive Therapy for Infectious Keratitis. <i>Biomacromolecules</i> , 2021, 22, 629-639.	2.6	6
8	Controlling pH by electronic ion pumps to fight fibrosis. <i>Applied Materials Today</i> , 2021, 22, 100936.	2.3	9
9	Influence of ceftriaxone on human bone cell viability and in vitro mineralization potential is concentration- and time-dependent. <i>Bone and Joint Research</i> , 2021, 10, 218-225.	1.3	6
10	In vitro skin culture media influence the viability and inflammatory response of primary macrophages. <i>Scientific Reports</i> , 2021, 11, 7070.	1.6	10
11	Rationally designed ultra-short pulsed laser patterning of zirconia-based ceramics tailored for the bone-implant interface. <i>Applied Surface Science</i> , 2021, 545, 149020.	3.1	11
12	Nano-3D-Printed Photochromic Micro-Objects. <i>Small</i> , 2021, 17, e2101337.	5.2	20
13	Photochromic 3D Micro-Objects: Nano-3D-Printed Photochromic Micro-Objects (<i>Small</i> 26/2021). <i>Small</i> , 2021, 17, 2170132.	5.2	0
14	One-Step Synthesis of Versatile Antimicrobial Nano-Architected Implant Coatings for Hard and Soft Tissue Healing. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 33300-33310.	4.0	21
15	Photo-activated titanium surface confers time dependent bactericidal activity towards Gram positive and negative bacteria. <i>Colloids and Surfaces B: Biointerfaces</i> , 2021, 206, 111940.	2.5	20
16	Lumican is upregulated in osteoarthritis and contributes to TLR4-induced pro-inflammatory activation of cartilage degradation and macrophage polarization. <i>Osteoarthritis and Cartilage</i> , 2020, 28, 92-101.	0.6	38
17	Silk based scaffolds with immunomodulatory capacity: anti-inflammatory effects of nicotinic acid. <i>Biomaterials Science</i> , 2020, 8, 148-162.	2.6	18
18	Nanofiber membranes as biomimetic and mechanically stable surface coatings. <i>Materials Science and Engineering C</i> , 2020, 108, 110417.	3.8	6

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19	Responsive Nanofibers with Embedded Hierarchical Lipid Self-Assemblies. <i>Langmuir</i> , 2020, 36, 11787-11797.	1.6	6
20	In Vitro Cytocompatibility Assessment of Ti-Modified, Silicon-oxycarbide-Based, Polymer-Derived, Ceramic-Implantable Electrodes under Pacing Conditions. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 17244-17253.	4.0	13
21	Electrospun colourimetric sensors for detecting volatile amines. <i>Sensors and Actuators B: Chemical</i> , 2020, 322, 128570.	4.0	23
22	Silk fibroin/sericin 3D sponges: The effect of sericin on structural and biological properties of fibroin. <i>International Journal of Biological Macromolecules</i> , 2020, 153, 317-326.	3.6	39
23	Multifunctional Biomaterials: Combining Material Modification Strategies for Engineering of Cell-Contacting Surfaces. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 21342-21367.	4.0	43
24	Multifunctional Nano-Biointerfaces: Cytocompatible Antimicrobial Nanocarriers from Stabilizer-Free Cubosomes. <i>Advanced Functional Materials</i> , 2019, 29, 1904007.	7.8	38
25	In Vitro Endothelialization of Surface-Integrated Nanofiber Networks for Stretchable Blood Interfaces. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 5740-5751.	4.0	11
26	Mussel-Inspired Injectable Hydrogel Adhesive Formed under Mild Conditions Features Near-Native Tissue Properties. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 47707-47719.	4.0	49
27	Cell-Membrane-Inspired Silicone Interfaces that Mitigate Proinflammatory Macrophage Activation and Bacterial Adhesion. <i>Langmuir</i> , 2019, 35, 1882-1894.	1.6	35
28	Assessing the osteogenic potential of zirconia and titanium surfaces with an advanced in vitro model. <i>Dental Materials</i> , 2019, 35, 74-86.	1.6	20
29	Surface modification of ultrafine-grained titanium: Influence on mechanical properties, cytocompatibility, and osseointegration potential. <i>Clinical Oral Implants Research</i> , 2019, 30, 99-110.	1.9	21
30	Near-Infrared Light-Sensitive Polyvinyl Alcohol Hydrogel Photoresist for Spatiotemporal Control of Cell-Instructive 3D Microenvironments. <i>Advanced Materials</i> , 2018, 30, 1705564.	11.1	87
31	Toward Immunocompetent 3D Skin Models. <i>Advanced Healthcare Materials</i> , 2018, 7, e1701405.	3.9	42
32	Design of a Versatile Sample Holder for Facile Culture of Cells on Electrospun Membranes or Thin Polymer Films Under Flow Conditions. <i>Methods in Molecular Biology</i> , 2018, 2125, 1-13.	0.4	1
33	Controlling the surface structure of electrospun fibers: Effect on endothelial cells and blood coagulation. <i>Biointerphases</i> , 2018, 13, 051001.	0.6	6
34	The pyranine-benzalkonium ion pair: A promising fluorescent system for the ratiometric detection of wound pH. <i>Sensors and Actuators B: Chemical</i> , 2017, 249, 156-160.	4.0	38
35	Anti-oxidant and immune-modulatory properties of sulfated alginate derivatives on human chondrocytes and macrophages. <i>Biomaterials Science</i> , 2017, 5, 1756-1765.	2.6	36
36	A compliant and biomimetic three-layered vascular graft for small blood vessels. <i>Biofabrication</i> , 2017, 9, 025010.	3.7	46

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37	Steering surface topographies of electrospun fibers: understanding the mechanisms. Scientific Reports, 2017, 7, 158.	1.6	71
38	Electrospraying of microfluidic encapsulated cells for the fabrication of cell-laden electrospun hybrid tissue constructs. Acta Biomaterialia, 2017, 64, 137-147.	4.1	33
39	Easy to Apply Polyoxazoline-Based Coating for Precise and Long-Term Control of Neural Patterns. Langmuir, 2017, 33, 8594-8605.	1.6	35
40	Electrospinning: A Bioinspired Ultraporous Nanofiber-Hydrogel Mimic of the Cartilage Extracellular Matrix (Adv. Healthcare Mater. 24/2016). Advanced Healthcare Materials, 2016, 5, 3216-3216.	3.9	1
41	Magnetization Transfer MR Imaging to Monitor Muscle Tissue Formation during Myogenic in Vivo Differentiation of Muscle Precursor Cells. Radiology, 2016, 281, 436-443.	3.6	5
42	A Bioinspired Ultraporous Nanofiber-Hydrogel Mimic of the Cartilage Extracellular Matrix. Advanced Healthcare Materials, 2016, 5, 3129-3138.	3.9	54
43	A micropatterning approach to study the influence of actin cytoskeletal organization on polystyrene nanoparticle uptake by BeWo cells. RSC Advances, 2016, 6, 72827-72835.	1.7	3
44	Intravoxel incoherent motion analysis of abdominal organs: computation of reference parameters in a large cohort of C57Bl/6 mice and correlation to microvessel density. Magnetic Resonance Materials in Physics, Biology, and Medicine, 2016, 29, 751-763.	1.1	7
45	Viability, Differentiation Capacity, and Detectability of Super-Paramagnetic Iron Oxide-Labeled Muscle Precursor Cells for Magnetic-Resonance Imaging. Tissue Engineering - Part C: Methods, 2015, 21, 182-191.	1.1	14
46	Enhanced differentiation of human osteoblasts on Ti surfaces pre-treated with human whole blood. Acta Biomaterialia, 2015, 19, 180-190.	4.1	62
47	Osteogenic differentiation of human mesenchymal stem cells in the absence of osteogenic supplements: A surface-roughness gradient study. Acta Biomaterialia, 2015, 28, 64-75.	4.1	124
48	In vitro investigations of a novel wound dressing concept based on biodegradable polyurethane. Science and Technology of Advanced Materials, 2015, 16, 034606.	2.8	22
49	MR Imaging Relaxometry Allows Noninvasive Characterization of in Vivo Differentiation of Muscle Precursor Cells. Radiology, 2015, 274, 800-809.	3.6	6
50	Regulation of Human Mesenchymal Stem Cell Osteogenesis by Specific Surface Density of Fibronectin: a Gradient Study. ACS Applied Materials & Interfaces, 2015, 7, 2367-2375.	4.0	37
51	Differential regulation of osteogenic differentiation of stem cells on surface roughness gradients. Biomaterials, 2014, 35, 9023-9032.	5.7	226
52	Interference with the contractile machinery of the fibroblastic chondrocyte cytoskeleton induces re-expression of the cartilage phenotype through involvement of PI3K, PKC and MAPKs. Experimental Cell Research, 2014, 320, 175-187.	1.2	39
53	A High Throughput System for Long Term Application of Intermittent Cyclic Hydrostatic Pressure on Cells in Culture. Journal of Biomechanical Engineering, 2011, 133, 024502.	0.6	5
54	Stem cell plasticity, osteogenic differentiation and the third dimension. Journal of Materials Science: Materials in Medicine, 2010, 21, 999-1004.	1.7	15