

# Rainer Mueller

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/2222986/publications.pdf>

Version: 2024-02-01

32  
papers

1,871  
citations

279798

23  
h-index

395702

33  
g-index

33  
all docs

33  
docs citations

33  
times ranked

2993  
citing authors

#	ARTICLE	IF	CITATIONS
1	The promotion of oriented axonal regrowth in the injured spinal cord by alginate-based anisotropic capillary hydrogels. <i>Biomaterials</i> , 2006, 27, 3560-9.	11.4	285
2	Influence of different collagen species on physico-chemical properties of crosslinked collagen matrices. <i>Biomaterials</i> , 2004, 25, 2831-2841.	11.4	267
3	Surface engineering of stainless steel materials by covalent collagen immobilization to improve implant biocompatibility. <i>Biomaterials</i> , 2005, 26, 6962-6972.	11.4	123
4	Cell-seeded alginate hydrogel scaffolds promote directed linear axonal regeneration in the injured rat spinal cord. <i>Acta Biomaterialia</i> , 2015, 27, 140-150.	8.3	113
5	Influence of surface pretreatment of titanium- and cobalt-based biomaterials on covalent immobilization of fibrillar collagen. <i>Biomaterials</i> , 2006, 27, 4059-4068.	11.4	108
6	Influences of protein films on antibacterial or bacteria-repellent surface coatings in a model system using silicon wafers. <i>Biomaterials</i> , 2009, 30, 4921-4929.	11.4	98
7	Measuring and modeling aqueous electrolyte/amino-acid solutions with ePC-SAFT. <i>Journal of Chemical Thermodynamics</i> , 2014, 68, 1-12.	2.0	97
8	Regulated viral BDNF delivery in combination with Schwann cells promotes axonal regeneration through capillary alginate hydrogels after spinal cord injury. <i>Acta Biomaterialia</i> , 2017, 60, 167-180.	8.3	93
9	Proliferation of osteoblasts and fibroblasts on model surfaces of varying roughness and surface chemistry. <i>Journal of Materials Science: Materials in Medicine</i> , 2007, 18, 1895-1905.	3.6	69
10	Increasing capillary diameter and the incorporation of gelatin enhance axon outgrowth in alginate-based anisotropic hydrogels. <i>Acta Biomaterialia</i> , 2011, 7, 2826-2834.	8.3	65
11	Reinforcement of experimental composite materials based on amorphous calcium phosphate with inert fillers. <i>Dental Materials</i> , 2014, 30, 1052-1060.	3.5	45
12	The impact of dendrimer-grafted modifications to model silicon surfaces on protein adsorption and bacterial adhesion. <i>Biomaterials</i> , 2011, 32, 9168-9179.	11.4	43
13	Influence of electrolytes on liquid-liquid equilibria of water/1-butanol and on the partitioning of 5-hydroxymethylfurfural in water/1-butanol. <i>Fluid Phase Equilibria</i> , 2016, 428, 102-111.	2.5	39
14	Characterization of esterified hyaluronan-gelatin polymer composites suitable for chondrogenic differentiation of mesenchymal stem cells. <i>Journal of Biomedical Materials Research - Part A</i> , 2009, 91A, 416-427.	4.0	36
15	Intrinsic and extrinsic determinants of central nervous system axon outgrowth into alginate-based anisotropic hydrogels. <i>Acta Biomaterialia</i> , 2015, 27, 131-139.	8.3	36
16	Bonding of articular cartilage using a combination of biochemical degradation and surface cross-linking. <i>Arthritis Research and Therapy</i> , 2007, 9, R47.	3.5	35
17	Effect of silanized nanosilica addition on remineralizing and mechanical properties of experimental composite materials with amorphous calcium phosphate. <i>Clinical Oral Investigations</i> , 2014, 18, 783-792.	3.0	31
18	Fluorescence-Based Bacterial Overlay Method for Simultaneous In Situ Quantification of Surface-Attached Bacteria. <i>Applied and Environmental Microbiology</i> , 2007, 73, 2653-2660.	3.1	30

#	ARTICLE	IF	CITATIONS
19	Surface-immobilized PAMAM-dendrimers modified with cationic or anionic terminal functions: Physicochemical surface properties and conformational changes after application of liquid interface stress. <i>Journal of Colloid and Interface Science</i> , 2012, 366, 179-190.	9.4	30
20	Effects of aging on surface properties and adhesion of <i>Streptococcus mutans</i> on various fissure sealants. <i>Clinical Oral Investigations</i> , 2009, 13, 419-426.	3.0	27
21	Salivary protein adsorption and <i>Streptococcus gordonii</i> adhesion to dental material surfaces. <i>Dental Materials</i> , 2013, 29, 1080-1089.	3.5	27
22	Synthesis of functionalized, dispersible carbon-coated cobalt nanoparticles for potential biomedical applications. <i>Faraday Discussions</i> , 2014, 175, 27-40.	3.2	25
23	Chemiluminescence-based detection and comparison of protein amounts adsorbed on differently modified silica surfaces. <i>Analytical Biochemistry</i> , 2006, 359, 194-202.	2.4	24
24	Adhesion of eukaryotic cells and <i>Staphylococcus aureus</i> to silicon model surfaces. <i>Journal of Biomedical Materials Research - Part A</i> , 2008, 84A, 817-827.	4.0	23
25	Terminal chemical functions of polyamidoamine dendrimer surfaces and its impact on bone cell growth. <i>Materials Science and Engineering C</i> , 2019, 101, 190-203.	7.3	21
26	New Anisotropic Ceramic Membranes from Chemically Fixed Dissipative Structures. <i>Langmuir</i> , 2006, 22, 11353-11359.	3.5	20
27	Novel multicolor fluorescently labeled silica nanoparticles for interface fluorescence resonance energy transfer to and from labeled avidin. <i>Analytical and Bioanalytical Chemistry</i> , 2010, 398, 1615-1623.	3.7	19
28	Saliva and Serum Protein Adsorption on Chemically Modified Silica Surfaces. <i>Journal of Dental Research</i> , 2021, 100, 1047-1054.	5.2	9
29	Protecting Nanoscaled Non-oxidic Particles from Oxygen Uptake by Coating with Nitrogen-Containing Surfactants. <i>Langmuir</i> , 2004, 20, 2598-2606.	3.5	6
30	Streptococcal adhesion to various luting systems and the role of mixing errors. <i>Acta Odontologica Scandinavica</i> , 2009, 67, 139-145.	1.6	6
31	Osmotic Coefficients and Activity Coefficients in Aqueous Aminoethanoic Acid-NaCl Mixtures at 298.15 K. <i>Journal of Chemical &amp; Engineering Data</i> , 2014, 59, 2741-2749.	1.9	4
32	Comparison of Protein-Repellent Behavior of Linear versus Dendrimer-Structured Surface-Immobilized Polymers. <i>Langmuir</i> , 2020, 36, 5880-5890.	3.5	4