Katharina Maniura

List of Publications by Year
in descending order

120 papers	4,923 citations	87723 38 h-index	114278 63 g-index
122 all docs	122 docs citations	122 times ranked	8901 citing authors

#	Article	IF	Citations
1	Palladiumâ€Based Metallic Glass with High Thrombogenic Resistance for Bloodâ€Contacting Medical Devices. Advanced Functional Materials, 2022, 32, 2108256.	7.8	9
2	Plasmaâ€deposited AgOxâ€doped TiOx coatings enable rapid antibacterial activity based on ROS generation. Plasma Processes and Polymers, 2022, 19, .	1.6	12
3	Multiscale 2D/3D microshaping and property tuning of polymer-derived SiCN ceramics. Journal of the European Ceramic Society, 2022, 42, 1963-1970.	2.8	8
4	A low-fouling, self-assembled, graft co-polymer and covalent surface coating for controlled immobilization of biologically active moieties. Applied Surface Science, 2022, 584, 152525.	3.1	2
5	Uncoupling bacterial attachment on and detachment from polydimethylsiloxane surfaces through empirical and simulation studies. Journal of Colloid and Interface Science, 2022, 622, 419-430.	5.0	9
6	Outside Front Cover: Plasma Process. Polym. 7/2022. Plasma Processes and Polymers, 2022, 19, .	1.6	0
7	Gallium Complex-Functionalized P4HB Fibers: A Trojan Horse to Fight Bacterial Infection. ACS Applied Bio Materials, 2021, 4, 682-691.	2.3	6
8	Controlling pH by electronic ion pumps to fight fibrosis. Applied Materials Today, 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. Bone and Joint Research, 2021, 10, 218-225.	1.3	6
10	In vitro skin culture media influence the viability and inflammatory response of primary macrophages. Scientific Reports, 2021, 11, 7070.	1.6	10
11	Bioresponsive Hybrid Nanofibers Enable Controlled Drug Delivery through Glass Transition Switching at Physiological Temperature. ACS Applied Bio Materials, 2021, 4, 4271-4279.	2.3	24
12	Nanoâ€3Dâ€Printed Photochromic Microâ€Objects. Small, 2021, 17, e2101337.	5.2	20
13	Virus pHâ€Dependent Interactions with Cationically Modified Cellulose and Their Application in Water Filtration. Small, 2021, 17, e2100307.	5.2	11
14	Photochromic 3D Microâ€Objects: Nanoâ€3Dâ€Printed Photochromic Microâ€Objects (Small 26/2021). Small, 2021, 17, 2170132.	5.2	0
15	Photo-activated titanium surface confers time dependent bactericidal activity towards Gram positive and negative bacteria. Colloids and Surfaces B: Biointerfaces, 2021, 206, 111940.	2.5	20
16	A nanolayer coating on polydimethylsiloxane surfaces enables a mechanistic study of bacterial adhesion influenced by material surface physicochemistry. Materials Horizons, 2020, 7, 93-103.	6.4	31
17	Silk based scaffolds with immunomodulatory capacity: anti-inflammatory effects of nicotinic acid. Biomaterials Science, 2020, 8, 148-162.	2.6	18
18	Development and thorough characterization of the processing steps of an ink for 3D printing for bone tissue engineering. Materials Science and Engineering C, 2020, 108, 110510.	3.8	23

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19	A microfluidic platform for in situ investigation of biofilm formation and its treatment under controlled conditions. Journal of Nanobiotechnology, 2020, 18, 166.	4.2	24
20	Nylon-6/chitosan core/shell antimicrobial nanofibers for the prevention of mesh-associated surgical site infection. Journal of Nanobiotechnology, 2020, 18, 51.	4.2	41
21	In Vitro Cytocompatibility Assessment of Ti-Modified, Silicon-oxycarbide-Based, Polymer-Derived, Ceramic-Implantable Electrodes under Pacing Conditions. ACS Applied Materials & Interfaces, 2020, 12, 17244-17253.	4.0	13
22	Antibacterial, Cytocompatible, Sustainably Sourced: Cellulose Membranes with Bifunctional Peptides for Advanced Wound Dressings. Advanced Healthcare Materials, 2020, 9, e1901850.	3.9	49
23	Water-Based Scalable Methods for Self-Cleaning Antibacterial ZnO-Nanostructured Surfaces. Industrial & Engineering Chemistry Research, 2020, 59, 14323-14333.	1.8	32
24	Colloidal Transformations in MS2 Virus Particles: Driven by pH, Influenced by Natural Organic Matter. ACS Nano, 2020, 14, 1879-1887.	7.3	27
25	Self-assembly of glycerol monooleate with the antimicrobial peptide LL-37: a molecular dynamics study. RSC Advances, 2020, 10, 8291-8302.	1.7	7
26	Silk fibroin/sericin 3D sponges: The effect of sericin on structural and biological properties of fibroin. International Journal of Biological Macromolecules, 2020, 153, 317-326.	3.6	39
27	Macromechanics and polycaprolactone fiber organization drive macrophage polarization and regulate inflammatory activation of tendon in vitro and in vivo. Biomaterials, 2020, 249, 120034.	5.7	71
28	Multifunctional Biomaterials: Combining Material Modification Strategies for Engineering of Cell-Contacting Surfaces. ACS Applied Materials & Interfaces, 2020, 12, 21342-21367.	4.0	43
29	Microencapsulation improves chondrogenesis in vitro and cartilaginous matrix stability in vivo compared to bulk encapsulation. Biomaterials Science, 2020, 8, 1711-1725.	2.6	27
30	Multifunctional Nanoâ€Biointerfaces: Cytocompatible Antimicrobial Nanocarriers from Stabilizerâ€Free Cubosomes. Advanced Functional Materials, 2019, 29, 1904007.	7.8	38
31	In Vitro Endothelialization of Surface-Integrated Nanofiber Networks for Stretchable Blood Interfaces. ACS Applied Materials & Interfaces, 2019, 11, 5740-5751.	4.0	11
32	Substrate viscosity plays an important role in bacterial adhesion under fluid flow. Journal of Colloid and Interface Science, 2019, 552, 247-257.	5.0	48
33	Encrustations on ureteral stents from patients without urinary tract infection reveal distinct urotypes and a low bacterial load. Microbiome, 2019, 7, 60.	4.9	19
34	Bacterial Adhesion on Soft Materials: Passive Physicochemical Interactions or Active Bacterial Mechanosensing?. Advanced Healthcare Materials, 2019, 8, e1801323.	3.9	45
35	Complete inclusion of bioactive molecules and particles in polydimethylsiloxane: a straightforward process under mild conditions. Scientific Reports, 2019, 9, 17575.	1.6	3
36	Cell-Membrane-Inspired Silicone Interfaces that Mitigate Proinflammatory Macrophage Activation and Bacterial Adhesion. Langmuir, 2019, 35, 1882-1894.	1.6	35

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37	From Structure to Function: pH-Switchable Antimicrobial Nano-Self-Assemblies. ACS Applied Materials & Interfaces, 2019, 11, 2821-2829.	4.0	66
38	Assessing the osteogenic potential of zirconia and titanium surfaces with an advanced in vitro model. Dental Materials, 2019, 35, 74-86.	1.6	20
39	Surface modification of ultrafineâ€grained titanium: Influence on mechanical properties, cytocompatibility, and osseointegration potential. Clinical Oral Implants Research, 2019, 30, 99-110.	1.9	21
40	Plasma polymer film designs through the eyes of ToF-SIMS. Biointerphases, 2018, 13, 03B417.	0.6	7
41	Optical glucose sensing using ethanolamineâ€“polyborate complexes. Journal of Materials Chemistry B, 2018, 6, 816-823.	2.9	8
42	Nearâ€Infrared Lightâ€Sensitive Polyvinyl Alcohol Hydrogel Photoresist for Spatiotemporal Control of Cellâ€Instructive 3D Microenvironments. Advanced Materials, 2018, 30, 1705564.	11.1	87
43	Nanostructured surface topographies have an effect on bactericidal activity. Journal of Nanobiotechnology, 2018, 16, 20.	4.2	91
44	Toward Immunocompetent 3D Skin Models. Advanced Healthcare Materials, 2018, 7, e1701405.	3.9	42
45	Catechin loaded PLGA submicron-sized fibers reduce levels of reactive oxygen species induced by MWCNT in vitro. European Journal of Pharmaceutics and Biopharmaceutics, 2018, 122, 78-86.	2.0	14
46	Absorbable mineral nanocomposite for biomedical applications: Influence of homogenous fiber dispersity on mechanical properties. Journal of Biomedical Materials Research - Part A, 2018, 106, 850-857.	2.1	1
47	In Focus: Women in biointerface science. Biointerphases, 2018, 13, 06D101.	0.6	0
48	Controlling the surface structure of electrospun fibers: Effect on endothelial cells and blood coagulation. Biointerphases, 2018, 13, 051001.	0.6	6
49	3D Printed Enzymatically Biodegradable Soft Helical Microswimmers. Advanced Functional Materials, 2018, 28, 1804107.	7.8	222
50	Enhanced Antimicrobial Activity and Structural Transitions of a Nanofibrillated Celluloseâ€“Nisin Biocomposite Suspension. ACS Applied Materials & Interfaces, 2018, 10, 20170-20181.	4.0	39
51	Extraction of Biofilms From Ureteral Stents for Quantification and Cultivation-Dependent and -Independent Analyses. Frontiers in Microbiology, 2018, 9, 1470.	1.5	14
52	Near-Surface Structure of Plasma Polymer Films Affects Surface Behavior in Water and its Interaction with Proteins. Plasma Chemistry and Plasma Processing, 2018, 38, 851-870.	1.1	6
53	Role of the Surface Nanoscale Roughness of Stainless Steel on Bacterial Adhesion and Microcolony Formation. ACS Omega, 2018, 3, 6456-6464.	1.6	83
54	Harvesting pre-polarized macrophages using thermo-responsive substrates. Scientific Reports, 2017, 7, 42495.	1.6	8

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55	The pyranine-benzalkonium ion pair: A promising fluorescent system for the ratiometric detection of wound pH. Sensors and Actuators B: Chemical, 2017, 249, 156-160.	4.0	38
56	Anti-oxidant and immune-modulatory properties of sulfated alginate derivatives on human chondrocytes and macrophages. Biomaterials Science, 2017, 5, 1756-1765.	2.6	36
57	A compliant and biomimetic three-layered vascular graft for small blood vessels. Biofabrication, 2017, 9, 025010.	3.7	46
58	Steering surface topographies of electrospun fibers: understanding the mechanisms. Scientific Reports, 2017, 7, 158.	1.6	71
59	A Proteinâ€Nanocellulose Paper for Sensing Copper Ions at the Nanoâ€•to Micromolar Level. Advanced Functional Materials, 2017, 27, 1604291.	7.8	54
60	Electrospraying of microfluidic encapsulated cells for the fabrication of cell-laden electrospun hybrid tissue constructs. Acta Biomaterialia, 2017, 64, 137-147.	4.1	33
61	Hierarchical Selfâ€Assembly of Poly(Urethane)/Poly(Vinylidene Fluorideâ€coâ€Hexafluoropropylene) Blends into Highly Hydrophobic Electrospun Fibers with Reduced Protein Adsorption Profiles. Macromolecular Materials and Engineering, 2017, 302, 1700081.	1.7	15
62	Micro-patterned plasma polymer films for bio-sensing. Materials and Design, 2017, 114, 123-128.	3.3	19
63	Simultaneous detection of pH value and glucose concentrations for wound monitoring applications. Biosensors and Bioelectronics, 2017, 87, 312-319.	5.3	75
64	Human chondroprogenitors in alginate-collagen hybrid scaffolds produce stable cartilagein vivo. Journal of Tissue Engineering and Regenerative Medicine, 2017, 11, 3014-3026.	1.3	31
65	Some changes, but still communicating exciting key insights from the biointerface. Biointerphases, 2017, 12, 050201.	0.6	0
66	Editorial: In Focus Issue on Bacterial-Surface Interactions. Biointerphases, 2017, 12, 05G201.	0.6	0
67	Rapid Assay to Assess Bacterial Adhesion on Textiles. Materials, 2016, 9, 249.	1.3	29
68	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
69	A simple and rapid method for optical visualization and quantification of bacteria on textiles. Scientific Reports, 2016, 6, 39635.	1.6	19
70	Vacuum plasma sprayed coatings using ionic silver doped hydroxyapatite powder to prevent bacterial infection of bone implants. Biointerphases, 2016, 11, 011012.	0.6	29
71	Enzymes Enhance Biofilm Removal Efficiency of Cleaners. Antimicrobial Agents and Chemotherapy, 2016, 60, 3647-3652.	1.4	60
72	Macrophage Polarization by Titanium Dioxide (TiO₂) Particles: Size Matters. ACS Biomaterials Science and Engineering, 2016, 2, 908-919.	2.6	26

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73	Antimicrobial Peptide-Driven Colloidal Transformations in Liquid-Crystalline Nanocarriers. Journal of Physical Chemistry Letters, 2016, 7, 3482-3486.	2.1	69
74	Convex and concave micro-structured silicone controls the shape, but not the polarization state of human macrophages. Biomaterials Science, 2016, 4, 1562-1573.	2.6	46
75	A Bioinspired Ultraporous Nanofiberâ€Hydrogel Mimic of the Cartilage Extracellular Matrix. Advanced Healthcare Materials, 2016, 5, 3129-3138.	3.9	54
76	Affinity-Driven Immobilization of Proteins to Hematite Nanoparticles. ACS Applied Materials & Interfaces, 2016, 8, 20432-20439.	4.0	9
77	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
78	Toward a quantified, validated, and verifiable understanding of the Biointerface. Biointerphases, 2016, 11, 040201.	0.6	3
79	In Vitro Biofilm Models for Device-Related Infections. Trends in Biotechnology, 2016, 34, 945-948.	4.9	43
80	Encapsulation of FRET-based glucose and maltose biosensors to develop functionalized silica nanoparticles. Analyst, The, 2016, 141, 3982-3984.	1.7	13
81	Antibacterial Au nanostructured surfaces. Nanoscale, 2016, 8, 2620-2625.	2.8	101
82	Morphology and surface chemistry of bicomponent scaffolds in terms of mesenchymal stromal cell viability. Journal of Bioactive and Compatible Polymers, 2016, 31, 423-436.	0.8	5
83	A FRET-based biosensor for the detection of neutrophil elastase. Analyst, The, 2016, 141, 1645-1648.	1.7	24
84	Is biofilm removal properly assessed? Comparison of different quantification methods in a 96-well plate system. Applied Microbiology and Biotechnology, 2016, 100, 4135-4145.	1.7	109
85	New developments at the biointerface. Biointerphases, 2015, 10, 040201.	0.6	0
86	Engineered Microtissues Formed by Schiff Base Crosslinking Restore the Chondrogenic Potential of Aged Mesenchymal Stem Cells. Advanced Healthcare Materials, 2015, 4, 1348-1358.	3.9	25
87	The role of nanostructures and hydrophilicity in osseointegration: Inâ€vitro proteinâ€adsorption and bloodâ€interaction studies. Journal of Biomedical Materials Research - Part A, 2015, 103, 2661-2672.	2.1	112
88	The Effect of Selected Electrospinning Parameters on Molecular Structure of Polycaprolactone Nanofibers. International Journal of Polymeric Materials and Polymeric Biomaterials, 2015, 64, 365-377.	1.8	25
89	Critical aspects of using bacterial cell viability assays with the fluorophores SYTO9 and propidium iodide. BMC Microbiology, 2015, 15, 36.	1.3	502
90	Orthogonal Morphological Feature Size and Density Gradients for Exploring Synergistic Effects in Biology. Langmuir, 2015, 31, 8446-8452.	1.6	5

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91	Tunable release of hydrophilic compounds from hydrophobic nanostructured fibers prepared by emulsion electrospinning. Polymer, 2015, 66, 268-276.	1.8	37
92	Enhanced differentiation of human osteoblasts on Ti surfaces pre-treated with human whole blood. Acta Biomaterialia, 2015, 19, 180-190.	4.1	62
93	TEMPO-Oxidized Nanofibrillated Cellulose as a High Density Carrier for Bioactive Molecules. Biomacromolecules, 2015, 16, 3640-3650.	2.6	84
94	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
95	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
96	Fabrication of biopolymer-based staple electrospun fibres for nanocomposite applications by particle-assisted low temperature ultrasonication. Materials Science and Engineering C, 2014, 45, 277-286.	3.8	6
97	Differential regulation of osteogenic differentiation of stem cells on surface roughness gradients. Biomaterials, 2014, 35, 9023-9032.	5.7	226
98	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
99	Addition of nanoscaledbioinspiredsurface features: A revolution for bone related implants and scaffolds?. Journal of Biomedical Materials Research - Part A, 2014, 102, 275-294.	2.1	48
100	Structure and morphology of electrospun polycaprolactone/gelatine nanofibres. European Polymer Journal, 2013, 49, 2052-2061.	2.6	80
101	Biodegradable Bicomponent Fibers from Renewable Sources: Meltâ€Spinning of Poly(lactic acid) and Poly[(3â€hydroxybutyrate)â€coâ€(3â€hydroxyvalerate)]. Macromolecular Materials and Engineering, 2012, 297, 75-84.	1.7	84
102	Ribosomal Protein L13a as a Reference Gene for Human Bone Marrow-Derived Mesenchymal Stromal Cells During Expansion, Adipo-, Chondro-, and Osteogenesis. Tissue Engineering - Part C: Methods, 2012, 18, 761-771.	1.1	42
103	Watching osteogenesis: Life monitoring of osteogenic differentiation using an osteocalcin reporter. Journal of Cellular Biochemistry, 2012, 113, 313-321.	1.2	23
104	Molecular and biophysical mechanisms regulating hypertrophic differentiation in chondrocytes and mesenchymal stem cells. , 2012, 24, 118-135.		171
105	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
106	Fluorescence intensity decay shape analysis microscopy (FIDSAM) for quantitative and sensitive live-cell imaging. Proceedings of SPIE, 2010, , .	0.8	0
107	Stem cell plasticity, osteogenic differentiation and the third dimension. Journal of Materials Science: Materials in Medicine, 2010, 21, 999-1004.	1.7	15
108	Correlating cell architecture with osteogenesis: first steps towards live single cell monitoring. , 2009, 18, 59-62.		29

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109	Fabrication of elastomer pillar arrays with modulated stiffness for cellular force measurements. Journal of Vacuum Science & Technology B, 2008, 26, 2549-2553.	1.3	31
110	Impaired mitochondrial Ca2+ homeostasis in respiratory chain-deficient cells but efficient compensation of energetic disadvantage by enhanced anaerobic glycolysis due to low ATP steady state levels. Experimental Cell Research, 2007, 313, 3076-3089.	1.2	54
111	Molecular dysfunction associated with the human mitochondrial 3302A>G mutation in the MTTL1 (mt-tRNALeu(UUR)) gene. Nucleic Acids Research, 2006, 34, 6404-6415.	6.5	28
112	A new mechanism for mtDNA pathogenesis: impairment of post-transcriptional maturation leads to severe depletion of mitochondrial tRNASer(UCN) caused by T7512C and G7497A point mutations. Nucleic Acids Research, 2005, 33, 5647-5658.	6.5	30
113	Transient overexpression of mitochondrial transcription factor A (TFAM) is sufficient to stimulate mitochondrial DNA transcription, but not sufficient to increase mtDNA copy number in cultured cells. Nucleic Acids Research, 2004, 32, 6015-6027.	6.5	129
114	A novel point mutation in the mitochondrial tRNATrp gene produces a neurogastrointestinal syndrome. European Journal of Human Genetics, 2004, 12, 509-512.	1.4	26
115	Cultivation in Glucose-Deprived Medium Stimulates Mitochondrial Biogenesis and Oxidative Metabolism in HepG2 Hepatoma Cells. Biological Chemistry, 2002, 383, 283-290.	1.2	42
116	Mechanism of mammalian mitochondrial DNA replication: import of mitochondrial transcription factor A into isolated mitochondria stimulates 7S DNA synthesis. Nucleic Acids Research, 2001, 29, 3657-3663.	6.5	59
117	Human mitochondria: distinct organelles or dynamic network?. Trends in Genetics, 1995, 11, 211-212.	2.9	20
118	Are duplications of mitochondrial DNA characteristic of Kearnsâ€"Sayre syndrome?. Human Molecular Genetics, 1994, 3, 947-951.	1.4	79
119	Biochemical and Molecular Studies of Mitochondrial Function in Diabetes Insipidus, Diabetes Mellitus, Optic Atrophy, and Deafness. Diabetes Care, 1994, 17, 728-733.	4.3	49
120	Bioassay development. , 0, , 67-84.		0