Carsten Werner

List of Publications by Year in Descending Order

458 papers	16,976 citations	65 h-index	106 g-index
498 ext. papers	18,875 ext. citations	7.3 avg, IF	6.71 L-index

#	Paper	IF	Citations
458	Combining microscopy assays of bacteria-surface interactions to better evaluate antimicrobial polymer coatings.. *Applied and Environmental Microbiology*, **2022**, aem0224121	4.8	0
457	Skin epithelial cells change their mechanics and proliferation upon snail-mediated EMT signalling.. *Soft Matter*, **2022**, 18, 2585-2596	3.6	0
456	Quantitative insights into electrostatics and structure of polymer brushes from microslit electrokinetic experiments and advanced modelling of interfacial electrohydrodynamics. *Current Opinion in Colloid and Interface Science*, **2022**, 101590	7.6	0
455	A modular in vitro flow model to analyse blood-surface interactions under physiological conditions. *Current Directions in Biomedical Engineering*, **2021**, 7, 171-174	0.5	0
454	Mapping Tumor Spheroid Mechanics in Dependence of 3D Microenvironment Stiffness and Degradability by Brillouin Microscopy. *Cancers*, **2021**, 13,	6.6	3
453	Amphiphilic Copolymers for Versatile, Facile, and In Situ Tunable Surface Biofunctionalization (Adv. Mater. 42/2021). *Advanced Materials*, **2021**, 33, 2170332	24	
452	Zwitterionic Peptides Reduce Accumulation of Marine and Freshwater Biofilm Formers. *ACS Applied Materials & Interfaces*, **2021**, 13, 49682-49691	9.5	2
451	Injectable Glycosaminoglycan-Based Cryogels from Well-Defined Microscale Templates for Local Growth Factor Delivery. *ACS Chemical Neuroscience*, **2021**, 12, 1178-1188	5.7	5
450	Sulfonated cryogel scaffolds for focal delivery in ex-vivo brain tissue cultures. *Biomaterials*, **2021**, 271, 120712	15.6	6
449	Preclinical Testing of New Hydrogel Materials for Cartilage Repair: Overcoming Fixation Issues in a Large Animal Model. *International Journal of Biomaterials*, **2021**, 2021, 5583815	3.2	1
448	Techniques for RNA extraction from cells cultured in starPEG-heparin hydrogels. *Open Biology*, **2021**, 11, 200388	7	0
447	Tuning the network charge of biohybrid hydrogel matrices to modulate the release of SDF-1. *Biological Chemistry*, **2021**, 402, 1453-1464	4.5	1
446	Cryogel biomaterials for neuroscience applications. *Neurochemistry International*, **2021**, 147, 105012	4.4	12
445	Chemokine-Capturing Wound Contact Layer Rescues Dermal Healing. *Advanced Science*, **2021**, 8, e2100293	9.6	8
444	Conformational changes of GDNF-derived peptide induced by heparin, heparan sulfate, and sulfated hyaluronic acid - Analysis by circular dichroism spectroscopy and molecular dynamics simulation. *International Journal of Biological Macromolecules*, **2021**, 182, 2144-2150	7.9	0
443	Biomaterial based strategies to reconstruct the nigrostriatal pathway in organotypic slice co-cultures. *Acta Biomaterialia*, **2021**, 121, 250-262	10.8	14
442	Screening Arrays of Laminin Peptides on Modified Cellulose for Promotion of Adhesion of Primary Endothelial and Neural Precursor Cells. *Advanced Biology*, **2021**, 5, 1900303		1

441	The innate immune response of self-assembling silk fibroin hydrogels. *Biomaterials Science*, **2021**, 9, 7194-7204	7.4	2
440	Amphiphilic Copolymers for Versatile, Facile, and In Situ Tunable Surface Biofunctionalization. *Advanced Materials*, **2021**, 33, e2102489	24	2
439	Bioresponsive starPEG-heparin hydrogel coatings on vascular stents for enhanced hemocompatibility. *Materials Science and Engineering C*, **2021**, 128, 112268	8.3	2
438	Poly(2-alkyl-2-oxazoline)-Heparin Hydrogels-Expanding the Physicochemical Parameter Space of Biohybrid Materials. *Advanced Healthcare Materials*, **2021**, 10, e2101327	10.1	0
437	Customizing biohybrid cryogels to serve as ready-to-use delivery systems of signaling proteins. *Biomaterials*, **2021**, 278, 121170	15.6	1
436	Selective vulnerability of inhibitory networks in multiple sclerosis. *Acta Neuropathologica*, **2021**, 141, 415-429	14.3	11
435	3D Quantification of Vascular-Like Structures in z Stack Confocal Images. *STAR Protocols*, **2020**, 1, 100180	1.4	3
434	Polymer Hydrogels to Guide Organotypic and Organoid Cultures. *Advanced Functional Materials*, **2020**, 30, 2000097	15.6	28
433	Tuning the Local Availability of VEGF within Glycosaminoglycan-Based Hydrogels to Modulate Vascular Endothelial Cell Morphogenesis. *Advanced Functional Materials*, **2020**, 30, 2000068	15.6	13
432	Non-leaching, Highly Biocompatible Nanocellulose Surfaces That Efficiently Resist Fouling by Bacteria in an Artificial Dermis Model.. *ACS Applied Bio Materials*, **2020**, 3, 4095-4108	4.1	4
431	Focal drug administration via heparin-containing cryogel microcarriers reduces cancer growth and metastasis. *Carbohydrate Polymers*, **2020**, 245, 116504	10.3	9
430	Gel-in-Gel Materials: Cell-Instructive Multiphasic Gel-in-Gel Materials (Adv. Funct. Mater. 26/2020). *Advanced Functional Materials*, **2020**, 30, 2070171	15.6	
429	Sperm Micromotors for Cargo Delivery through Flowing Blood. *ACS Nano*, **2020**, 14, 2982-2993	16.7	92
428	Cell-Instructive Multiphasic Gel-in-Gel Materials. *Advanced Functional Materials*, **2020**, 30, 1908857	15.6	16
427	Static and dynamic 3D culture of neural precursor cells on macroporous cryogel microcarriers. *MethodsX*, **2020**, 7, 100805	1.9	7
426	Thermodynamic Analysis of the Interaction of Heparin with Lysozyme. *Biomacromolecules*, **2020**, 21, 4615-4625	5.9	6
425	Protein Component of Oyster Glycogen Nanoparticles: An Anchor Point for Functionalization. *ACS Applied Materials & Interfaces*, **2020**, 12, 38976-38988	9.5	4
424	Stromal fibroblasts regulate microvascular-like network architecture in a bioengineered breast tumour angiogenesis model. *Acta Biomaterialia*, **2020**, 114, 256-269	10.8	9

423	EMT-Induced Cell-Mechanical Changes Enhance Mitotic Rounding Strength. *Advanced Science*, **2020**, 7, 2001276	13.6	7
422	Discovery of hemocompatible bacterial biofilm-resistant copolymers. *Biomaterials*, **2020**, 260, 120312	15.6	1
421	Poly(ethylene glycol) based nanotubes for tuneable drug delivery to glioblastoma multiforme. *Nanoscale Advances*, **2020**, 2, 4498-4509	5.1	3
420	Heparin-based, injectable microcarriers for controlled delivery of interleukin-13 to the brain. *Biomaterials Science*, **2020**, 8, 4997-5004	7.4	10
419	Glycosaminoglycan-based hydrogels with programmable host reactions. *Biomaterials*, **2020**, 228, 119557	15.6	17
418	Macroporous heparin-based microcarriers allow long-term 3D culture and differentiation of neural precursor cells. *Biomaterials*, **2020**, 230, 119540	15.6	14
417	A Practical Guide to the Automated Analysis of Vascular Growth, Maturation and Injury in the Brain. *Frontiers in Neuroscience*, **2020**, 14, 244	5.1	9
416	Cryogel scaffolds for regionally constrained delivery of lysophosphatidylcholine to central nervous system slice cultures: A model of focal demyelination for multiple sclerosis research. *Acta Biomaterialia*, **2019**, 97, 216-229	10.8	10
415	Modulation of Human CXCL12 Binding Properties to Glycosaminoglycans To Enhance Chemotactic Gradients. *ACS Biomaterials Science and Engineering*, **2019**, 5, 5128-5138	5.5	6
414	The blood compatibility challenge. Part 3: Material associated activation of blood cascades and cells. *Acta Biomaterialia*, **2019**, 94, 25-32	10.8	33
413	High resolution bioprinting of multi-component hydrogels. *Biofabrication*, **2019**, 11, 045008	10.5	26
412	The blood compatibility challenge. Part 4: Surface modification for hemocompatible materials: Passive and active approaches to guide blood-material interactions. *Acta Biomaterialia*, **2019**, 94, 33-43	10.8	41
411	Nogo-A targeted therapy promotes vascular repair and functional recovery following stroke. *Proceedings of the National Academy of Sciences of the United States of America*, **2019**, 116, 14270-14279	11.5	47
410	Fabrication of multifunctional titanium surfaces by producing hierarchical surface patterns using laser based ablation methods. *Scientific Reports*, **2019**, 9, 6721	4.9	24
409	Highly Conductive, Stretchable, and Cell-Adhesive Hydrogel by Nanoclay Doping. *Small*, **2019**, 15, e1901406	11.6	40
408	Subwavelength Direct Laser Nanopatterning Via Microparticle Arrays for Functionalizing Metallic Surfaces. *Journal of Micro and Nano-Manufacturing*, **2019**, 7,	1.3	2
407	Session 3: Biomaterials - Natural Polymers. *Biomedizinische Technik*, **2019**, 64, 25-29	1.3	
406	Springtail-Inspired Triangular Laser-Induced Surface Textures on Metals Using MHz Ultrashort Pulses. *Journal of Micro and Nano-Manufacturing*, **2019**, 7,	1.3	5

405	GATA3 Promotes the Neural Progenitor State but Not Neurogenesis in 3D Traumatic Injury Model of Primary Human Cortical Astrocytes. *Frontiers in Cellular Neuroscience*, **2019**, 13, 23	6.1	14
404	Treatment of Focal Cartilage Defects in Minipigs with Zonal Chondrocyte/Mesenchymal Progenitor Cell Constructs. *International Journal of Molecular Sciences*, **2019**, 20,	6.3	8
403	Dehydroabietylamine-Based Cellulose Nanofibril Films: A New Class of Sustainable Biomaterials for Highly Efficient, Broad-Spectrum Antimicrobial Effects. *ACS Sustainable Chemistry and Engineering*, **2019**, 7, 5002-5009	8.3	6
402	Charge-tuning of glycosaminoglycan-based hydrogels to program cytokine sequestration. *Faraday Discussions*, **2019**, 219, 244-251	3.6	19
401	Intrafibrillar, bone-mimetic collagen mineralization regulates breast cancer cell adhesion and migration. *Biomaterials*, **2019**, 198, 95-106	15.6	36
400	3D Microenvironment Stiffness Regulates Tumor Spheroid Growth and Mechanics via p21 and ROCK. *Advanced Biology*, **2019**, 3, e1900128	3.5	38
399	Investigation of Sustained BMP Delivery in the Prevention of Medication-Related Osteonecrosis of the Jaw (MRONJ) in a Rat Model. *Macromolecular Bioscience*, **2019**, 19, e1900226	5.5	7
398	Temperature-Induced Mechanomodulation of Interpenetrating Networks of Star Poly(ethylene glycol)-Heparin and Poly(-isopropylacrylamide). *ACS Applied Materials & Interfaces*, **2019**, 11, 41862-41874	9.5	5
397	Protein adsorption dynamics to polymer surfaces revisited-A multisystems approach. *Biointerphases*, **2019**, 14, 051005	1.8	6
396	A customizable microfluidic platform for medium-throughput modeling of neuromuscular circuits. *Biomaterials*, **2019**, 225, 119537	15.6	11
395	On the analysis of ionic surface conduction to unravel charging processes at macroscopic soft and hard solid–liquid interfaces. *Current Opinion in Colloid and Interface Science*, **2019**, 44, 177-187	7.6	2
394	Altered Structure and Function of Mesenchymal Stromal Cell-Derived Extracellular Matrix in MDS Can be Restored By Luspatercept. *Blood*, **2019**, 134, 1699-1699	2.2	2
393	Multiphasic microgel-in-gel materials to recapitulate cellular mesoenvironments in vitro. *Biomaterials Science*, **2019**, 8, 101-108	7.4	12
392	New directions in surface functionalization and characterization: general discussion. *Faraday Discussions*, **2019**, 219, 252-261	3.6	
391	Polyacrylamide Bead Sensors for in vivo Quantification of Cell-Scale Stress in Zebrafish Development. *Scientific Reports*, **2019**, 9, 17031	4.9	25
390	Impact of oral astringent stimuli on surface charge and morphology of the protein-rich pellicle at the tooth-saliva interphase. *Colloids and Surfaces B: Biointerfaces*, **2019**, 174, 451-458	6	14
389	Layer-by-Layer Assembly of Heparin and Peptide-Polyethylene Glycol Conjugates to Form Hybrid Nanothin Films of Biomatrices. *ACS Applied Materials & Interfaces*, **2018**, 10, 14264-14270	9.5	6
388	Impact of Bioactive Peptide Motifs on Molecular Structure, Charging, and Nonfouling Properties of Poly(ethylene oxide) Brushes. *Langmuir*, **2018**, 34, 6010-6020	4	7

387	Soft and flexible poly(ethylene glycol) nanotubes for local drug delivery. *Nanoscale*, **2018**, 10, 8413-8421	7.7	16
386	Analyzing the antiseptic capacity of silver-functionalized poly(ethylene glycol)-heparin hydrogels after human whole blood exposure. *Biomaterials Science*, **2018**, 6, 1129-1139	7.4	6
385	Modular peptide-functionalized gold nanorods for effective glioblastoma multicellular tumor spheroid targeting. *Biomaterials Science*, **2018**, 6, 1140-1146	7.4	15
384	Evaluation of Three-Dimensional Models to Study Tumor Angiogenesis. *ACS Biomaterials Science and Engineering*, **2018**, 4, 337-346	5.5	10
383	Peptide-functionalized starPEG/heparin hydrogels direct mitogenicity, cell morphology and cartilage matrix distribution in vitro and in vivo. *Journal of Tissue Engineering and Regenerative Medicine*, **2018**, 12, 229-239	4.4	21
382	In situ-forming, cell-instructive hydrogels based on glycosaminoglycans with varied sulfation patterns. *Biomaterials*, **2018**, 181, 227-239	15.6	25
381	Impact of the springtail's cuticle nanotopography on bioadhesion and biofilm formation and in the oral cavity. *Royal Society Open Science*, **2018**, 5, 171742	3.3	10
380	Matrix-mediated modulation of neuron identity. *Nature Biomedical Engineering*, **2018**, 2, 473-474	19	
379	Coatings for biomaterials to improve hemocompatibility **2018**, 163-190		6
378	Oxygen producing microscale spheres affect cell survival in conditions of oxygen-glucose deprivation in a cell specific manner: implications for cell transplantation. *Biomaterials Science*, **2018**, 6, 2571-2577	7.4	9
377	Retargeting of UniCAR T cells with an synthesized target module directed against CD19 positive tumor cells. *Oncotarget*, **2018**, 9, 7487-7500	3.3	29
376	StarPEG/heparin-hydrogel based in vivo engineering of stable bizonal cartilage with a calcified bottom layer. *Biofabrication*, **2018**, 11, 015001	10.5	11
375	Exploring Structure?Property Relationships of GAGs to Tailor ECM-Mimicking Hydrogels. *Polymers*, **2018**, 10,	4.5	2
374	Test methods for hemocompatibility of biomaterials **2018**, 77-104		5
373	Standardized microgel beads as elastic cell mechanical probes. *Journal of Materials Chemistry B*, **2018**, 6, 6245-6261	7.3	51
372	Three-Dimensional In Vitro Hydro- and Cryogel-Based Cell-Culture Models for the Study of Breast-Cancer Metastasis to Bone. *Cancers*, **2018**, 10,	6.6	20
371	Defined Geldrop Cultures Maintain Neural Precursor Cells. *Scientific Reports*, **2018**, 8, 8433	4.9	5
370	3D Culture Method for Alzheimer's Disease Modeling Reveals Interleukin-4 Rescues A□2-Induced Loss of Human Neural Stem Cell Plasticity. *Developmental Cell*, **2018**, 46, 85-101.e8	10.2	69

369	Evidence of Ion-Pairing in Cationic Brushes from Evaluation of Brush Charging and Structure by Electrokinetic and Surface Conductivity Analysis. *Journal of Physical Chemistry C*, **2017**, 121, 2915-2922	3.8	12
368	Cryogel-supported stem cell factory for customized sustained release of bispecific antibodies for cancer immunotherapy. *Scientific Reports*, **2017**, 7, 42855	4.9	37
367	Cell-instructive starPEG-heparin-collagen composite matrices. *Acta Biomaterialia*, **2017**, 53, 70-80	10.8	12
366	In Vivo Examination of an Injectable Hydrogel System Crosslinked by Peptide Oligosaccharide Interaction in Immunocompetent Nude Mice. *Advanced Functional Materials*, **2017**, 27, 1605189	15.6	27
365	Oxygen-Producing Gellan Gum Hydrogels for Dual Delivery of Either Oxygen or Peroxide with Doxorubicin. *ACS Biomaterials Science and Engineering*, **2017**, 3, 787-792	5.5	30
364	Macromolecular crowding for tailoring tissue-derived fibrillated matrices. *Acta Biomaterialia*, **2017**, 55, 109-119	10.8	31
363	Glycosaminoglycan-based hydrogels capture inflammatory chemokines and rescue defective wound healing in mice. *Science Translational Medicine*, **2017**, 9,	17.5	159
362	Adaptive release of heparin from anticoagulant hydrogels triggered by different blood coagulation factors. *Biomaterials*, **2017**, 135, 53-61	15.6	26
361	Heparin-based hydrogels induce human renal tubulogenesis in vitro. *Acta Biomaterialia*, **2017**, 57, 59-69	10.8	25
360	Enhanced targeting of invasive glioblastoma cells by peptide-functionalized gold nanorods in hydrogel-based 3D cultures. *Acta Biomaterialia*, **2017**, 58, 12-25	10.8	30
359	Combined influence of biophysical and biochemical cues on maintenance and proliferation of hematopoietic stem cells. *Biomaterials*, **2017**, 138, 108-117	15.6	34
358	Trastuzumab and survival of patients with metastatic breast cancer. *Archives of Gynecology and Obstetrics*, **2017**, 296, 303-312	2.5	16
357	A three-dimensional tri-culture model mimics cell-cell interactions between acute myeloid leukemia and the vascular niche. *Haematologica*, **2017**, 102, 1215-1226	6.6	35
356	Biofabricated soft network composites for cartilage tissue engineering. *Biofabrication*, **2017**, 9, 025014	10.5	100
355	Solvent-Assisted Micromolding of Biohybrid Hydrogels to Maintain Human Hematopoietic Stem and Progenitor Cells Ex Vivo. *Advanced Materials*, **2017**, 29, 1703489	24	14
354	Polyacrylamide gels with selective recognition of the tetrameric molecular form of human growth hormone. *EXPRESS Polymer Letters*, **2017**, 11, 645-651	3.4	2
353	Matrix Growth Factor and Surface Ligand Presentation **2017**, 215-231		2
352	Neutrophil extracellular trap formation upon exposure of hydrophobic materials to human whole blood causes thrombogenic reactions. *Biomaterials Science*, **2017**, 5, 1998-2008	7.4	16

351	Bone marrow niche-mimetics modulate HSPC function via integrin signaling. *Scientific Reports*, **2017**, 7, 2549	4.9	19
350	Biocompatibility assessment of silk nanoparticles: hemocompatibility and internalization by human blood cells. *Nanomedicine: Nanotechnology, Biology, and Medicine*, **2017**, 13, 2633-2642	6	44
349	Limbal stromal cells derived from porcine tissue demonstrate mesenchymal characteristics in vitro. *Scientific Reports*, **2017**, 7, 6377	4.9	8
348	A Positively Charged Surface Triggers Coagulation Activation Through Factor VII Activating Protease (FSAP). *ACS Applied Materials & Interfaces*, **2017**, 9, 40107-40116	9.5	29
347	Forbidden Chemistry: Two-Photon Pathway in [2+2] Cycloaddition of Maleimides. *Journal of the American Chemical Society*, **2017**, 139, 10184-10187	16.4	10
346	Periosteum tissue engineering in an orthotopic in‐vivo platform. *Biomaterials*, **2017**, 121, 193-204	15.6	62
345	Bottom-Up Structuring and Site-Selective Modification of Hydrogels Using a Two-Photon [2+2] Cycloaddition of Maleimide. *Advanced Materials*, **2017**, 29, 1603327	24	12
344	Modular GAG-matrices to promote mammary epithelial morphogenesis in‐vitro. *Biomaterials*, **2017**, 112, 20-30	15.6	27
343	4.25 Drug Delivery via Heparin Conjugates ? **2017**, 464-471		
342	Hydrogel-Based In Vitro Models of Tumor Angiogenesis. *Methods in Molecular Biology*, **2017**, 1612, 39-63	1.4	3
341	The springtail cuticle as a blueprint for omniphobic surfaces. *Chemical Society Reviews*, **2016**, 45, 323-41	58.5	143
340	Biomaterials trigger endothelial cell activation when co-incubated with human whole blood. *Biomaterials*, **2016**, 104, 258-68	15.6	7
339	Oxidation and structural changes in NMMO-regenerated cellulose films. *Cellulose*, **2016**, 23, 3535-3541	5.5	11
338	StarPEG-Heparin Hydrogels to Protect and Sustainably Deliver IL-4. *Advanced Healthcare Materials*, **2016**, 5, 3157-3164	10.1	34
337	Distinguishing autocrine and paracrine signals in hematopoietic stem cell culture using a biofunctional microcavity platform. *Scientific Reports*, **2016**, 6, 31951	4.9	24
336	Hybrid Hairy Janus Particles as Building Blocks for Antibiofouling Surfaces. *ACS Applied Materials & Interfaces*, **2016**, 8, 32591-32603	9.5	24
335	Hydrogels: Glycosaminoglycan-Based Biohybrid Hydrogels: A Sweet and Smart Choice for Multifunctional Biomaterials (Adv. Mater. 40/2016). *Advanced Materials*, **2016**, 28, 9013-9013	24	3
334	Heparin-Modified Polyethylene Glycol Microparticle Aggregates for Focal Cancer Chemotherapy. *ACS Biomaterials Science and Engineering*, **2016**, 2, 2287-2293	5.5	20

333	Tumour stage distribution and survival of malignant melanoma in Germany 2002-2011. *BMC Cancer*, **2016**, 16, 936	4.8	19
332	The impact of structure dimensions on initial bacterial adhesion. *Biomaterials Science*, **2016**, 4, 1074-8	7.4	54
331	Electrokinetics of soft polymeric interphases with layered distribution of anionic and cationic charges. *Current Opinion in Colloid and Interface Science*, **2016**, 24, 1-12	7.6	27
330	Synthesis of ROS scavenging microspheres from a dopamine containing poly(□amino ester) for applications for neurodegenerative disorders. *Biomaterials Science*, **2016**, 4, 400-4	7.4	23
329	Tailored and biodegradable poly(2-oxazoline) microbeads as 3D matrices for stem cell culture in regenerative therapies. *Biomaterials*, **2016**, 79, 1-14	15.6	21
328	Direct laser interference patterning for decreased bacterial attachment **2016**,		7
327	Short-range cytokine gradients to mimic paracrine cell interactions in vitro. *Journal of Controlled Release*, **2016**, 224, 59-68	11.7	12
326	Providing the right cues in nerve guidance conduits: Biofunctionalization versus fiber profile to facilitate oriented neuronal outgrowth. *Materials Science and Engineering C*, **2016**, 61, 466-72	8.3	9
325	3D extracellular matrix interactions modulate tumour cell growth, invasion and angiogenesis in engineered tumour microenvironments. *Acta Biomaterialia*, **2016**, 36, 73-85	10.8	94
324	A hyperbranched dopamine-containing PEG-based polymer for the inhibition of □synuclein fibrillation. *Biochemical and Biophysical Research Communications*, **2016**, 469, 830-5	3.4	19
323	Monoclonal Antibodies 13A4 and AC133 Do Not Recognize the Canine Ortholog of Mouse and Human Stem Cell Antigen Prominin-1 (CD133). *PLoS ONE*, **2016**, 11, e0164079	3.7	10
322	Functional Interference in the Bone Marrow Microenvironment by Disseminated Breast Cancer Cells. *Stem Cells*, **2016**, 34, 2224-35	5.8	13
321	Aligned Fibrillar Collagen Matrices **2016**, 340-354		
320	Breast cancer cells compete with hematopoietic stem and progenitor cells for intercellular adhesion molecule 1-mediated binding to the bone marrow microenvironment. *Carcinogenesis*, **2016**, 37, 759-767	4.6	18
319	Structural Aspects of Thermally Cleavable Adducts Derived from the Reaction of Imidazolines with Isocyanates. *Synthesis*, **2016**, 48, 4431-4442	2.9	2
318	Biodegradable fiducial markers for X-ray imaging - soft tissue integration and biocompatibility. *Journal of Materials Chemistry B*, **2016**, 4, 5700-5712	7.3	12
317	Macroporous biohybrid cryogels for co-housing pancreatic islets with mesenchymal stromal cells. *Acta Biomaterialia*, **2016**, 44, 178-87	10.8	33
316	Glycosaminoglycan-Based Biohybrid Hydrogels: A Sweet and Smart Choice for Multifunctional Biomaterials. *Advanced Materials*, **2016**, 28, 8861-8891	24	125

315	Preparation, loading, and cytotoxicity analysis of polymer nanotubes from an ethylene glycol dimethacrylate homopolymer in comparison to multi-walled carbon nanotubes. *Journal of Interdisciplinary Nanomedicine*, **2016**, 1, 9-18	4	8
314	Self-assembling hydrogels crosslinked solely by receptor-ligand interactions: tunability, rationalization of physical properties, and 3D cell culture. *Chemistry - A European Journal*, **2015**, 21, 3178-82	5.8	20
313	Noncovalent hydrogel beads as microcarriers for cell culture. *Angewandte Chemie - International Edition*, **2015**, 54, 3962-6	16.4	37
312	Neurotropic growth factors and glycosaminoglycan based matrices to induce dopaminergic tissue formation. *Biomaterials*, **2015**, 67, 205-13	15.6	11
311	Availability of extracellular matrix biopolymers and differentiation state of human mesenchymal stem cells determine tissue-like growth in vitro. *Biomaterials*, **2015**, 60, 121-9	15.6	11
310	Multilayer hydrogel coatings to combine hemocompatibility and antimicrobial activity. *Biomaterials*, **2015**, 56, 198-205	15.6	75
309	Space constraints govern fate of hematopoietic stem and progenitor cells in vitro. *Biomaterials*, **2015**, 53, 709-15	15.6	20
308	Multi-parametric hydrogels support 3D in vitro bioengineered microenvironment models of tumour angiogenesis. *Biomaterials*, **2015**, 53, 609-20	15.6	145
307	Thermo-responsive cell culture carriers based on poly(vinyl methyl ether)-the effect of biomolecular ligands to balance cell adhesion and stimulated detachment. *Science and Technology of Advanced Materials*, **2015**, 16, 045003	7.1	12
306	Extracellular matrix deposition of bone marrow stroma enhanced by macromolecular crowding. *Biomaterials*, **2015**, 73, 60-9	15.6	53
305	Heparin desulfation modulates VEGF release and angiogenesis in diabetic wounds. *Journal of Controlled Release*, **2015**, 220, 79-88	11.7	80
304	Is primary surgery of breast cancer patients consistent with German guidelines? Twelve-year trend of population-based clinical cancer registry data. *European Journal of Cancer Care*, **2015**, 24, 242-52	2.4	4
303	Comprehensive characterization of well-defined silk fibroin surfaces: Toward multitechnique studies of surface modification effects. *Biointerphases*, **2015**, 10, 029509	1.8	
302	TGF functionalized starPEG-heparin hydrogels modulate human dermal fibroblast growth and differentiation. *Acta Biomaterialia*, **2015**, 25, 65-75	10.8	45
301	Photopatterning of multifunctional hydrogels to direct adult neural precursor cells. *Advanced Healthcare Materials*, **2015**, 4, 516-21	10.1	21
300	Dewaxed ECM: A simple method for analyzing cell behaviour on decellularized extracellular matrices. *Journal of Tissue Engineering and Regenerative Medicine*, **2015**, 9, 1046-55	4.4	9
299	Phenotypic, Morphological and Adhesive Differences of Human Hematopoietic Progenitor Cells Cultured on Murine versus Human Mesenchymal Stromal Cells. *Scientific Reports*, **2015**, 5, 15680	4.9	10
298	Magnetically Controllable Polymer Nanotubes from a Cyclized Crosslinker for Site-Specific Delivery of Doxorubicin. *Scientific Reports*, **2015**, 5, 17478	4.9	14

297	Tackling Cell Transplantation Anoikis: An Injectable, Shape Memory Cryogel Microcarrier Platform Material for Stem Cell and Neuronal Cell Growth. *Small*, **2015**, 11, 5047-53	11	49
296	Noncovalent Hydrogel Beads as Microcarriers for Cell Culture. *Angewandte Chemie*, **2015**, 127, 4034-4038	3.6	6
295	EphrinB2/EphA4-mediated activation of endothelial cells increases monocyte adhesion. *Molecular Immunology*, **2015**, 68, 648-56	4.3	19
294	Bio-orthogonal Immobilization of Fibroblast Growth Factor 2 for Spatial Controlled Cell Proliferation. *ACS Biomaterials Science and Engineering*, **2015**, 1, 740-746	5.5	28
293	Prospects for polymer therapeutics in Parkinson's disease and other neurodegenerative disorders. *Progress in Polymer Science*, **2015**, 44, 79-112	29.6	21
292	Sutureless fixation of amniotic membrane for therapy of ocular surface disorders. *PLoS ONE*, **2015**, 10, e0125035	3.7	17
291	Recent Progress and Perspectives in the Electrokinetic Characterization of Polyelectrolyte Films. *Polymers*, **2015**, 8,	4.5	10
290	Glycosaminoglycan-based hydrogels to modulate heterocellular communication in in vitro angiogenesis models. *Scientific Reports*, **2014**, 4, 4414	4.9	150
289	Multifunctional silk-heparin biomaterials for vascular tissue engineering applications. *Biomaterials*, **2014**, 35, 83-91	15.6	79
288	Experimental study on the behavior of primary human osteoblasts on laser-cused pure titanium surfaces. *Journal of Biomedical Materials Research - Part A*, **2014**, 102, 1422-30	5.4	9
287	Tissue-engineered 3D tumor angiogenesis models: potential technologies for anti-cancer drug discovery. *Advanced Drug Delivery Reviews*, **2014**, 79-80, 30-9	18.5	65
286	TNF-□mediated adhesion of monocytes to endothelial cells-The role of ephrinA1. *Journal of Molecular and Cellular Cardiology*, **2014**, 77, 125-35	5.8	22
285	Electrokinetics as an alternative to neutron reflectivity for evaluation of segment density distribution in PEO brushes. *Soft Matter*, **2014**, 10, 7804-9	3.6	19
284	Chemoselective peptide functionalization of starPEG-GAG hydrogels. *Bioconjugate Chemistry*, **2014**, 25, 1942-50	6.3	10
283	Biohybrid networks of selectively desulfated glycosaminoglycans for tunable growth factor delivery. *Biomacromolecules*, **2014**, 15, 4439-46	6.9	37
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3	Standardized microgel beads as elastic cell mechanical probes		2
2	3D microenvironment stiffness regulates tumor spheroid growth and mechanics via p21 and ROCK		2
1	EMT-induced cell mechanical changes enhance mitotic rounding strength		2