Abhay Pandit

List of Publications by Year in Descending Order

363 papers	13,039 citations	59 h-index	95 g-index
399 ext. papers	15,194 ext. citations	8 avg, IF	6.84 L-index

#	Paper	IF	Citations
363	Role and therapeutic implications of protein glycosylation in neuroinflammation.. *Trends in Molecular Medicine*, **2022**,	11.5	4
362	Inflammation-specific targeted carriers for local drug delivery to inflammatory bowel disease.. *Biomaterials*, **2022**, 281, 121364	15.6	2
361	Cohesion mechanisms for bioadhesives.. *Bioactive Materials*, **2022**, 13, 105-118	16.7	5
360	Intervertebral Disc Degeneration: Biomaterials and Tissue Engineering Strategies Towards Precision Medicine.. *Advanced Healthcare Materials*, **2022**, e2102530	10.1	4
359	Potential Biomarkers of Acute Ischemic Stroke Etiology Revealed by Mass Spectrometry-Based Proteomic Characterization of Formalin-Fixed Paraffin-Embedded Blood Clots.. *Frontiers in Neurology*, **2022**, 13, 854846	4.1	1
358	Protein nitration induced by Hemin/NO: A complementary mechanism through the catalytic functions of hemin and NO-scavenging.. *Nitric Oxide - Biology and Chemistry*, **2022**, 124, 49-67	5	0
357	Therapeutic potential of targeting galectins A biomaterials-focused perspective. *Biomaterials*, **2022**, 286, 121585	15.6	0
356	Per-pass analysis of acute ischemic stroke clots: impact of stroke etiology on extracted clot area and histological composition. *Journal of NeuroInterventional Surgery*, **2021**, 13, 1111-1116	7.8	16
355	Modulation of Gut Barrier Functions in Ulcerative Colitis by Hyaluronic Acid System. *Advanced Science*, **2021**, e2103189	13.6	4
354	Artificial Cornea: Past, Current, and Future Directions. *Frontiers in Medicine*, **2021**, 8, 770780	4.9	3
353	HATMSC Secreted Factors in the Hydrogel as a Potential Treatment for Chronic Wounds-In Vitro Study. *International Journal of Molecular Sciences*, **2021**, 22,	6.3	2
352	Cell Membrane-Coated Mimics: A Methodological Approach for Fabrication, Characterization for Therapeutic Applications, and Challenges for Clinical Translation. *ACS Nano*, **2021**,	16.7	10
351	A Self-Powered Piezo-Bioelectric Device Regulates Tendon Repair-Associated Signaling Pathways through Modulation of Mechanosensitive Ion Channels (Adv. Mater. 40/2021). *Advanced Materials*, **2021**, 33, 2170315	24	
350	An Injectable Hyaluronic Acid Hydrogel Promotes Intervertebral Disc Repair in a Rabbit Model. *Spine*, **2021**, 46, E810-E816	3.3	4
349	The role of altered glycosylation in human nucleus pulposus cells in inflammation and degeneration. *European Cells and Materials*, **2021**, 41, 401-420	4.3	2
348	Bioactive potential of natural biomaterials: identification, retention and assessment of biological properties. *Signal Transduction and Targeted Therapy*, **2021**, 6, 122	21	30
347	Protocol for in vitro skin fibrosis model to screen the biological effects of antifibrotic compounds. *STAR Protocols*, **2021**, 2, 100387	1.4	0

346	An engineered coccolith-based hybrid that transforms light into swarming motion. *Cell Reports Physical Science*, **2021**, 2, 100373	6.1	2
345	Preclinical models of vertebral osteomyelitis and associated infections: Current models and recommendations for study design. *JOR Spine*, **2021**, 4, e1142	3.7	3
344	Complete spatial characterisation of N-glycosylation upon striatal neuroinflammation in the rodent brain. *Journal of Neuroinflammation*, **2021**, 18, 116	10.1	7
343	The -Glycome of Human Nigrostriatal Tissue and Its Alteration in Parkinson's Disease. *Journal of Proteome Research*, **2021**, 20, 3913-3924	5.6	3
342	Plasma & Microwaves as Greener Options for Nanodiamond Purification: Insight Into Cytocompatibility. *Frontiers in Bioengineering and Biotechnology*, **2021**, 9, 637587	5.8	2
341	Correlation between acute ischaemic stroke clot length before mechanical thrombectomy and extracted clot area: Impact of thrombus size on number of passes for clot removal and final recanalization. *European Stroke Journal*, **2021**, 6, 254-261	5.6	3
340	Large Artery Atherosclerotic Clots are Larger than Clots of other Stroke Etiologies and have Poorer Recanalization rates. *Journal of Stroke and Cerebrovascular Diseases*, **2021**, 30, 105463	2.8	6
339	Biomaterial based strategies to reconstruct the nigrostriatal pathway in organotypic slice co-cultures. *Acta Biomaterialia*, **2021**, 121, 250-262	10.8	14
338	Recent Advances in the Design and Sensing Applications of Hemin/Coordination Polymer-Based Nanocomposites. *Advanced Materials*, **2021**, 33, e2003883	24	23
337	The Relationship Between Cerebral Reperfusion And Regional Expression Of Matrix Metalloproteinase-9 In Rat Brain Following Focal Cerebral Ischemia. *Neuroscience*, **2021**, 453, 256-265	3.9	1
336	A high molecular weight hyaluronic acid biphasic dispersion as potential therapeutics for interstitial cystitis. *Journal of Biomedical Materials Research - Part B Applied Biomaterials*, **2021**, 109, 864-876	3.5	3
335	Enabling MedTech Translation in Academia: Redefining Value Proposition with Updated Regulations. *Advanced Healthcare Materials*, **2021**, 10, e2001237	10.1	7
334	The administration of rtPA before mechanical thrombectomy in acute ischemic stroke patients is associated with a significant reduction of the retrieved clot area but it does not influence revascularization outcome. *Journal of Thrombosis and Thrombolysis*, **2021**, 51, 545-551	5.1	12
333	Glucose-Responsive Gene Delivery at Physiological pH through Tertiary-Amine Stabilized Boronate-PVA Particles Synthesized by One-Pot Reaction. *Pharmaceutics*, **2021**, 13,	6.4	2
332	Elastin-like recombinamers-based hydrogel modulates post-ischemic remodeling in a non-transmural myocardial infarction in sheep. *Science Translational Medicine*, **2021**, 13,	17.5	24
331	A Review on Production, Characterization and Application of Bacterial Cellulose and Its Biocomposites. *Journal of Polymers and the Environment*, **2021**, 29, 2738-2755	4.5	5
330	Elastin-like hydrogel stimulates angiogenesis in a severe model of critical limb ischemia (CLI): An insight into the glyco-host response. *Biomaterials*, **2021**, 269, 120641	15.6	2
329	Therapeutic Biomaterial Approaches to Alleviate Chronic Limb Threatening Ischemia. *Advanced Science*, **2021**, 8, 2003119	13.6	2

328	Sweet tailoring of glyco-modulatory extracellular matrix-inspired biomaterials to target neuroinflammation. *Cell Reports Physical Science*, **2021**, 2, 100321	6.1	4
327	An optimized protocol for combined fluorescent lectin/immunohistochemistry to characterize tissue-specific glycan distribution in human or rodent tissues. *STAR Protocols*, **2021**, 2, 100237	1.4	1
326	Additive-free Aqueous Dispersions of Two-Dimensional Materials with Glial Cell Compatibility and Enzymatic Degradability. *Chemistry - A European Journal*, **2021**, 27, 7434-7443	4.8	2
325	A robust platform for high-throughput screening of therapeutic strategies for acute and chronic spinal cord injury. *IScience*, **2021**, 24, 102182	6.1	1
324	Anti-inflammatory cytokine-eluting collagen hydrogel reduces the host immune response to dopaminergic cell transplants in a rat model of Parkinson's disease. *Neuronal Signaling*, **2021**, 5, NS20210028	3.7	1
323	Does prior administration of rtPA influence acute ischemic stroke clot composition? Findings from the analysis of clots retrieved with mechanical thrombectomy from the RESTORE registry. *Journal of Neurology*, **2021**, 1	5.5	7
322	A Self-Powered Piezo-Bioelectric Device Regulates Tendon Repair-Associated Signaling Pathways through Modulation of Mechanosensitive Ion Channels. *Advanced Materials*, **2021**, 33, e2008788	24	7
321	Recent advances and prospects of hyaluronan as a multifunctional therapeutic system. *Journal of Controlled Release*, **2021**, 336, 598-620	11.7	16
320	Therapies to prevent post-infarction remodelling: From repair to regeneration. *Biomaterials*, **2021**, 275, 120906	15.6	7
319	Characterization of the 'White' Appearing Clots that Cause Acute Ischemic Stroke. *Journal of Stroke and Cerebrovascular Diseases*, **2021**, 30, 106127	2.8	1
318	Localized temporal co-delivery of interleukin 10 and decorin genes using amediated by collagen-based biphasic scaffold modulates the expression of TGF-1/2 in a rabbit ear hypertrophic scarring model. *Biomaterials Science*, **2021**, 9, 3136-3149	7.4	4
317	Macromolecular modulation of a 3D hydrogel construct differentially regulates human stem cell tissue-to-tissue interface.. *Materials Science and Engineering C*, **2021**, 112611	8.3	0
316	Glycan-Functionalized Collagen Hydrogels Modulate the Glycoenvironment of a Neuronal Primary Culture. *Biomacromolecules*, **2020**, 21, 2681-2694	6.9	5
315	A Glycotherapeutic Approach to Functionalize Biomaterials-Based Systems. *Advanced Functional Materials*, **2020**, 30, 1910031	15.6	4
314	Morphological and biomechanical effects of annulus fibrosus injury and repair in an ovine cervical model. *JOR Spine*, **2020**, 3, e1074	3.7	8
313	A worm gel-based 3D model to elucidate the paracrine interaction between multiple myeloma and mesenchymal stem cells. *Materials Today Bio*, **2020**, 5, 100040	9.9	7
312	Adipose tissue depot-specific intracellular and extracellular cues contributing to insulin resistance in obese individuals. *FASEB Journal*, **2020**, 34, 7520-7539	0.9	16
311	The role of extracellular matrix in tumour angiogenesis: the throne has NOx servants. *Biochemical Society Transactions*, **2020**, 48, 2539-2555	5.1	5

310	Advanced Functional Materials and Cell-Based Therapies for the Treatment of Ischemic Stroke and Postischemic Stroke Effects. *Advanced Functional Materials*, **2020**, 30, 1906283	15.6	16
309	Biofilm formation to inhibition: Role of zinc oxide-based nanoparticles. *Materials Science and Engineering C*, **2020**, 108, 110319	8.3	56
308	Platelet-rich emboli are associated with von Willebrand factor levels and have poorer revascularization outcomes. *Journal of NeuroInterventional Surgery*, **2020**, 12, 557-562	7.8	16
307	Public & patient involvement to guide research in wound care in an Irish context. A round table report. *Journal of Tissue Viability*, **2020**, 29, 7-11	3.2	3
306	The Role of Hyaluronic Acid in Intervertebral Disc Regeneration. *Applied Sciences (Switzerland)*, **2020**, 10, 6257	2.6	5
305	Local intracerebral inhibition of IRE1 by MKC8866 sensitizes glioblastoma to irradiation/chemotherapy in vivo. *Cancer Letters*, **2020**, 494, 73-83	9.9	12
304	Characterization of biomaterials intended for use in the nucleus pulposus of degenerated intervertebral discs. *Acta Biomaterialia*, **2020**, 114, 1-15	10.8	11
303	Temporal changes guided by mesenchymal stem cells on a 3D microgel platform enhance angiogenesis in vivo at a low-cell dose. *Proceedings of the National Academy of Sciences of the United States of America*, **2020**, 117, 19033-19044	11.5	19
302	Design of tunable gelatin-dopamine based bioadhesives. *International Journal of Biological Macromolecules*, **2020**, 164, 1384-1391	7.9	20
301	Differential Role of Anterior Cingulate Cortical Glutamatergic Neurons in Pain-Related Aversion Learning and Nociceptive Behaviors in Male and Female Rats. *Frontiers in Behavioral Neuroscience*, **2020**, 14, 139	3.5	6
300	Crossing the hurdles of translation robust methodology for synthesis, characterization and GMP production of cross-linked high molecular weight hyaluronic acid particles (cHA). *Nano Select*, **2020**, 1, 353-371	3.1	1
299	Region-Specific Characterization of -Glycans in the Striatum and Substantia Nigra of an Adult Rodent Brain. *Analytical Chemistry*, **2020**, 92, 12842-12851	7.8	8
298	Effect of Glycosaminoglycan Replacement on Markers of Interstitial Cystitis. *Frontiers in Pharmacology*, **2020**, 11, 575043	5.6	2
297	Distinct glycosylation in membrane proteins within neonatal versus adult myocardial tissue. *Matrix Biology*, **2020**, 85-86, 173-188	11.4	10
296	A multidisciplinary approach to online support for device research translation: regulatory change and clinical engagement. *Health Policy and Technology*, **2020**, 10, 95-95	4.8	2
295	Recent Advances in Host Guest Self-Assembled Cyclodextrin Carriers: Implications for Responsive Drug Delivery and Biomedical Engineering. *Advanced Functional Materials*, **2020**, 30, 1909049	15.6	116
294	Storage of blood clots for histological analysis: How long is too long in saline and paraformaldehyde?. *Histology and Histopathology*, **2020**, 35, 313-320	1.4	2
293	An Orally Administrated Hyaluronan Functionalized Polymeric Hybrid Nanoparticle System for Colon-Specific Drug Delivery. *Nanomaterials*, **2019**, 9,	5.4	17

292	A window into the brain: Tools to assess pre-clinical efficacy of biomaterials-based therapies on central nervous system disorders. *Advanced Drug Delivery Reviews*, **2019**, 148, 68-145	18.5	16
291	A novel medical device coating prevents Staphylococcus aureus biofilm formation on medical device surfaces. *FEMS Microbiology Letters*, **2019**, 366,	2.9	6
290	Encapsulation of young donor age dopaminergic grafts in a GDNF-loaded collagen hydrogel further increases their survival, reinnervation, and functional efficacy after intrastriatal transplantation in hemi-Parkinsonian rats. *European Journal of Neuroscience*, **2019**, 49, 487-496	3.5	23
289	Bioresponsive drug delivery systems in intestinal inflammation: State-of-the-art and future perspectives. *Advanced Drug Delivery Reviews*, **2019**, 146, 248-266	18.5	74
288	Hyperglycemia acts in synergy with hypoxia to maintain the pro-inflammatory phenotype of macrophages. *PLoS ONE*, **2019**, 14, e0220577	3.7	23
287	Development and characterization of an immunomodulatory and injectable system composed of collagen modified with trifunctional oligourethanes and silica. *Biomaterials Science*, **2019**, 7, 4547-4557	7.4	1
286	P11.61 Development of a novel preclinical GBM model and therapeutic impact of IRE1 inhibition. *Neuro-Oncology*, **2019**, 21, iii57-iii58	1	78
285	Targeted Approaches to Inhibit Sialylation of Multiple Myeloma in the Bone Marrow Microenvironment. *Frontiers in Bioengineering and Biotechnology*, **2019**, 7, 252	5.8	6
284	Orbit image analysis machine learning software can be used for the histological quantification of acute ischemic stroke blood clots. *PLoS ONE*, **2019**, 14, e0225841	3.7	28
283	Therapeutic Applications of Phytoplankton, with an Emphasis on Diatoms and Coccolithophores. *Advanced Therapeutics*, **2019**, 2, 1800099	4.9	5
282	The Collagen Suprafamily: From Biosynthesis to Advanced Biomaterial Development. *Advanced Materials*, **2019**, 31, e1801651	24	287
281	Cross-Linked Cholecyst-Derived Extracellular Matrix for Abdominal Wall Repair. *Tissue Engineering - Part A*, **2018**, 24, 1190-1206	3.9	1
280	Responsive triggering systems for delivery in chronic wound healing. *Advanced Drug Delivery Reviews*, **2018**, 129, 169-193	18.5	31
279	Neuroregeneration: Spatial Differences in Cellular and Molecular Responses as a Function of the Material Used in Conduit-Mediated Repair and Autograft Treatment of Peripheral Nerve Injuries (Adv. Funct. Mater. 12/2018). *Advanced Functional Materials*, **2018**, 28, 1870080	15.6	
278	Implantation of hyaluronic acid hydrogel prevents the pain phenotype in a rat model of intervertebral disc injury. *Science Advances*, **2018**, 4, eaaq0597	14.3	47
277	Tissue Engineering: Toward Customized Extracellular Niche Engineering: Progress in Cell-Entrapment Technologies (Adv. Mater. 1/2018). *Advanced Materials*, **2018**, 30, 1870006	24	1
276	Low oxygen tension and macromolecular crowding accelerate extracellular matrix deposition in human corneal fibroblast culture. *Journal of Tissue Engineering and Regenerative Medicine*, **2018**, 12, 6-18	4.4	31
275	Exogenous miR-29B Delivery Through a Hyaluronan-Based Injectable System Yields Functional Maintenance of the Infarcted Myocardium. *Tissue Engineering - Part A*, **2018**, 24, 57-67	3.9	25

274	Preparation of Cytocompatible ITO Neuroelectrodes with Enhanced Electrochemical Characteristics Using a Facile Anodic Oxidation Process. *Advanced Functional Materials*, **2018**, 28, 1605035	15.6	12
273	Functionalised collagen spheres reduce HO mediated apoptosis by scavenging overexpressed ROS. *Nanomedicine: Nanotechnology, Biology, and Medicine*, **2018**, 14, 2397-2405	6	26
272	Spatial Differences in Cellular and Molecular Responses as a Function of the Material Used in Conduit-Mediated Repair and Autograft Treatment of Peripheral Nerve Injuries. *Advanced Functional Materials*, **2018**, 28, 1702170	15.6	4
271	Critical aspects and challenges for intervertebral disc repair and regeneration-Harnessing advances in tissue engineering. *JOR Spine*, **2018**, 1, e1029	3.7	42
270	Scavenging Nanoreactors that Modulate Inflammation. *Advanced Biology*, **2018**, 2, 1800086	3.5	11
269	Attenuated Glial Reactivity on Topographically Functionalized Poly(3,4-Ethylenedioxythiophene):P-Toluene Sulfonate (PEDOT:PTS) Neuroelectrodes Fabricated by Microimprint Lithography. *Small*, **2018**, 14, e1800863	11	18
268	Abstract TP54: Machine-Learned Characterization of Acute Ischemic Stroke Clots Reveals a Correlation Between Clot Composition and Density on CT. *Stroke*, **2018**, 49,	6.7	3
267	Rerouting mesenchymal stem cell trajectory towards epithelial lineage by engineering cellular niche. *Biomaterials*, **2018**, 156, 28-44	15.6	21
266	Nanocellulose reinforced gellan-gum hydrogels as potential biological substitutes for annulus fibrosus tissue regeneration. *Nanomedicine: Nanotechnology, Biology, and Medicine*, **2018**, 14, 897-908	6	40
265	Toward Customized Extracellular Niche Engineering: Progress in Cell-Entrapment Technologies. *Advanced Materials*, **2018**, 30, 1703948	24	31
264	Nerve growth factor released from collagen scaffolds protects axotomized cholinergic neurons of the basal nucleus of Meynert in organotypic brain slices. *Journal of Neuroscience Methods*, **2018**, 295, 77-86	3	21
263	Antioxidant functionalized polymer capsules to prevent oxidative stress. *Acta Biomaterialia*, **2018**, 67, 21-31	10.8	40
262	Tissue Engineering: Biomaterials for Disc Repair. *Current Molecular Biology Reports*, **2018**, 4, 161-172	2	4
261	Wound healing using plasma modified collagen. *Clinical Plasma Medicine*, **2018**, 12, 23-32	2.8	15
260	Exosomes: Cellular capsules for drug delivery in Parkinson disease **2018**, 91-151		3
259	Glycosylation and Integrin Regulation in Cancer. *Trends in Cancer*, **2018**, 4, 537-552	12.5	81
258	In Vitro Enzymatic Degradation of Tissue Grafts and Collagen Biomaterials by Matrix Metalloproteinases: Improving the Collagenase Assay. *ACS Biomaterials Science and Engineering*, **2017**, 3, 1922-1932	5.5	32
257	Biomimetic Lipid-Based Nanosystems for Enhanced Dermal Delivery of Drugs and Bioactive Agents. *ACS Biomaterials Science and Engineering*, **2017**, 3, 1262-1272	5.5	45

256	Bioengineered three-dimensional diseased intervertebral disc model revealed inflammatory crosstalk. *Biomaterials*, **2017**, 123, 127-141	15.6	18
255	A clinically relevant in vivo model for the assessment of scaffold efficacy in abdominal wall reconstruction. *Journal of Tissue Engineering*, **2017**, 8, 2041731416686532	7.5	7
254	Injectable hyaluronic acid down-regulates interferon signaling molecules, IGFBP3 and IFIT3 in the bovine intervertebral disc. *Acta Biomaterialia*, **2017**, 52, 118-129	10.8	24
253	Synthetic/ECM-inspired hybrid platform for hollow microcarriers with ROS-triggered nanoporation hallmarks. *Scientific Reports*, **2017**, 7, 13138	4.9	13
252	2.15 Collagen: Materials Analysis and Implant Uses ? **2017**, 332-350		1
251	Encapsulation of primary dopaminergic neurons in a GDNF-loaded collagen hydrogel increases their survival, re-innervation and function after intra-striatal transplantation. *Scientific Reports*, **2017**, 7, 16033	4.9	49
250	Hyaluronic Acid Microgels Modulate Inflammation and Key Matrix Molecules toward a Regenerative Signature in the Injured Annulus Fibrosus. *Advanced Biology*, **2017**, 1, e1700077	3.5	11
249	Engineered systems for therapeutic angiogenesis. *Current Opinion in Pharmacology*, **2017**, 36, 34-43	5.1	13
248	The Functional Response of Mesenchymal Stem Cells to Electron-Beam Patterned Elastomeric Surfaces Presenting Micrometer to Nanoscale Heterogeneous Rigidity. *Advanced Materials*, **2017**, 29, 1702119	24	18
247	Ageing affects chondroitin sulfates and their synthetic enzymes in the intervertebral disc. *Signal Transduction and Targeted Therapy*, **2017**, 2, 17049	21	23
246	Synthesis and characterization of hyaluronic acid coated manganese dioxide microparticles that act as ROS scavengers. *Colloids and Surfaces B: Biointerfaces*, **2017**, 159, 30-38	6	15
245	Polymer capsules as micro-/nanoreactors for therapeutic applications: Current strategies to control membrane permeability. *Progress in Materials Science*, **2017**, 90, 325-357	42.2	75
244	6.20 Skin Tissue Engineering ? **2017**, 334-382		1
243	Controlled Delivery of Tissue Inductive Factors in a Cardiovascular Hybrid Biomaterial Scaffold. *ACS Biomaterials Science and Engineering*, **2017**, 3, 1350-1358	5.5	3
242	Therapeutic Effect of Neurotrophin-3 Treatment in an Injectable Collagen Scaffold Following Rat Spinal Cord Hemisection Injury. *ACS Biomaterials Science and Engineering*, **2017**, 3, 1287-1295	5.5	15
241	Influence of Nonsulfated Polysaccharides on the Properties of Electrospun Poly(lactic--glycolic acid) Fibers. *ACS Biomaterials Science and Engineering*, **2017**, 3, 1304-1312	5.5	8
240	2.21 Xenogenic Tissues and Biomaterials for the Skeletal System **2017**, 471-504		
239	7.27 Cardiac Valves: Biologic and Synthetic ? **2017**, 525-547		

238	Preferential tendon stem cell response to growth factor supplementation. *Journal of Tissue Engineering and Regenerative Medicine*, **2016**, 10, 783-98	4.4	51
237	Polyhydroxyalkanoate/carbon nanotube nanocomposites: flexible electrically conducting elastomers for neural applications. *Nanomedicine*, **2016**, 11, 2547-63	5.6	29
236	Reactive Oxygen Species: Physical, Chemical, and Biological Structures based on ROS-Sensitive Moieties that are Able to Respond to Oxidative Microenvironments (Adv. Mater. 27/2016). *Advanced Materials*, **2016**, 28, 5334	24	12
235	Biological Activity on Piezoelectric PVDF **2016**, 167-176		1
234	Non-viral xylosyltransferase-1 siRNA delivery as an effective alternative to chondroitinase in an in vitro model of reactive astrocytes. *Neuroscience*, **2016**, 339, 267-275	3.9	6
233	Macromolecular crowding meets oxygen tension in human mesenchymal stem cell culture - A step closer to physiologically relevant in vitro organogenesis. *Scientific Reports*, **2016**, 6, 30746	4.9	47
232	Physical, Chemical, and Biological Structures based on ROS-Sensitive Moieties that are Able to Respond to Oxidative Microenvironments. *Advanced Materials*, **2016**, 28, 5553-85	24	148
231	Progress in Corneal Stromal Repair: From Tissue Grafts and Biomaterials to Modular Supramolecular Tissue-Like Assemblies. *Advanced Materials*, **2016**, 28, 5381-99	24	37
230	Recreating complex pathophysiologies in vitro with extracellular matrix surrogates for anticancer therapeutics screening. *Drug Discovery Today*, **2016**, 21, 1521-1531	8.8	20
229	Polymeric Gene Carriers Bearing Pendant Cyclodextrin: The Relevance of Glycoside Permethylation on the "In Vitro" Cell Response. *Macromolecular Rapid Communications*, **2016**, 37, 575-83	4.8	4
228	Special Collection: Closing the Gaps in Skin Wound Healing. *Tissue Engineering - Part A*, **2016**, 22, 401-2	3.9	1
227	An acetal-based polymeric crosslinker with controlled pH-sensitivity. *RSC Advances*, **2016**, 6, 9604-9611	3.7	10
226	Scaffold and scaffold-free self-assembled systems in regenerative medicine. *Biotechnology and Bioengineering*, **2016**, 113, 1155-63	4.9	29
225	Variability in Endogenous Perfusion Recovery of Immunocompromised Mouse Models of Limb Ischemia. *Tissue Engineering - Part C: Methods*, **2016**, 22, 370-81	2.9	15
224	An insight into morphometric descriptors of cell shape that pertain to regenerative medicine. *Journal of Tissue Engineering and Regenerative Medicine*, **2016**, 10, 539-53	4.4	14
223	The influence of poly(ethylene glycol) ether tetrasuccinimidyl glutarate on the structural, physical, and biological properties of collagen fibers. *Journal of Biomedical Materials Research - Part B Applied Biomaterials*, **2016**, 104, 914-22	3.5	23
222	Co-transfection of decorin and interleukin-10 modulates pro-fibrotic extracellular matrix gene expression in human tenocyte culture. *Scientific Reports*, **2016**, 6, 20922	4.9	24
221	Unique glycosignature for intervertebral disc and articular cartilage cells and tissues in immaturity and maturity. *Scientific Reports*, **2016**, 6, 23062	4.9	13

220	2D imprinted substrates and 3D electrospun scaffolds revolutionize biomedicine. *Nanomedicine*, **2016**, 11, 989-92	5.6	11
219	A sustained release formulation of novel quininib-hyaluronan microneedles inhibits angiogenesis and retinal vascular permeability in vivo. *Journal of Controlled Release*, **2016**, 233, 198-207	11.7	22
218	Twenty-five years of nano-bio-materials: have we revolutionized healthcare?. *Nanomedicine*, **2016**, 11, 985-7	5.6	14
217	Influence of porosity and pore shape on structural, mechanical and biological properties of poly ?-caprolactone electro-spun fibrous scaffolds. *Nanomedicine*, **2016**, 11, 1031-40	5.6	29
216	Low, but not too low, oxygen tension and macromolecular crowding accelerate extracellular matrix deposition in human dermal fibroblast culture. *Acta Biomaterialia*, **2016**, 44, 221-31	10.8	32
215	Materials Science in Ireland - Current Developments and Future Aspirations. *Advanced Materials*, **2016**, 28, 5346-8	24	
214	Improved gene transfection efficacy and cytocompatibility of multifunctional polyamidoamine-cross-linked hyaluronan particles. *Macromolecular Bioscience*, **2015**, 15, 682-90	5.5	17
213	Glycosaminoglycans in Tendon Physiology, Pathophysiology, and Therapy. *Bioconjugate Chemistry*, **2015**, 26, 1237-51	6.3	32
212	An injectable elastin-based gene delivery platform for dose-dependent modulation of angiogenesis and inflammation for critical limb ischemia. *Biomaterials*, **2015**, 65, 126-39	15.6	47
211	Synergistic effect of pendant hydroxypropyl and pyrrolidine moieties randomly distributed along polymethacrylamide backbones on in vitro DNA-transfection. *European Journal of Pharmaceutics and Biopharmaceutics*, **2015**, 90, 38-43	5.7	5
210	Macromolecularly crowded in vitro microenvironments accelerate the production of extracellular matrix-rich supramolecular assemblies. *Scientific Reports*, **2015**, 5, 8729	4.9	72
209	An academic, clinical and industrial update on electrospun, additive manufactured and imprinted medical devices. *Expert Review of Medical Devices*, **2015**, 12, 601-12	3.5	24
208	Hyaluronic acid decreases IL-6 and IL-8 secretion and permeability in an inflammatory model of interstitial cystitis. *Acta Biomaterialia*, **2015**, 19, 66-75	10.8	44
207	Synthesis of polymer-silica hybrid microparticles with defined geometry using surface initiated atom transfer radical polymerization. *Polymer Chemistry*, **2015**, 6, 3014-3017	4.9	4
206	Hyaluronic Acid Based Hydrogels Attenuate Inflammatory Receptors and Neurotrophins in Interleukin-1□Induced Inflammation Model of Nucleus Pulposus Cells. *Biomacromolecules*, **2015**, 16, 1714-25	6.9	56
205	Glucosamine loaded injectable silk-in-silk integrated system modulate mechanical properties in bovine ex-vivo degenerated intervertebral disc model. *Biomaterials*, **2015**, 55, 64-83	15.6	27
204	Fibrin-genipin annulus fibrosus sealant as a delivery system for anti-TNF□drug. *Spine Journal*, **2015**, 15, 2045-54	4	32
203	The influence of anisotropic nano- to micro-topography on in vitro and in vivo osteogenesis. *Nanomedicine*, **2015**, 10, 693-711	5.6	37

202	Substrate topography: A valuable in vitro tool, but a clinical red herring for in vivo tenogenesis. *Acta Biomaterialia*, **2015**, 27, 3-12	10.8	52
201	Effects of Polydopamine Functionalization on Boron Nitride Nanotube Dispersion and Cytocompatibility. *Bioconjugate Chemistry*, **2015**, 26, 2025-37	6.3	32
200	Modulation of inflammation and angiogenesis and changes in ECM GAG-activity via dual delivery of nucleic acids. *Biomaterials*, **2015**, 69, 133-47	15.6	36
199	Encapsulated cells for long-term secretion of soluble VEGF receptor 1: Material optimization and simulation of ocular drug response. *European Journal of Pharmaceutics and Biopharmaceutics*, **2015**, 95, 387-97	5.7	14
198	Biophysical and biological characterisation of collagen/resilin-like protein composite fibres. *Biomedical Materials (Bristol)*, **2015**, 10, 065005	3.5	12
197	The past, present and future in scaffold-based tendon treatments. *Advanced Drug Delivery Reviews*, **2015**, 84, 257-77	18.5	120
196	Biomimetic approaches in bone tissue engineering: Integrating biological and physicomechanical strategies. *Advanced Drug Delivery Reviews*, **2015**, 84, 1-29	18.5	286
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5	Concealed intrapulmonary shunting in liver disease. *Respiratory Medicine*, **1994**, 88, 545-7	4.6	3

4	Guidelines for management of asthma **1990**, 301, 1162-1162		
3	Configuration of a Two-Phase Jet. *Combustion Science and Technology*, **1988**, 57, 71-87	1.5	0
2	Local intracerebral Inhibition of IRE1 by MKC8866 sensitizes glioblastoma to irradiation/chemotherapy in vivo		1
1	Novel IRE1-dependent proinflammatory signaling controls tumor infiltration by myeloid cells		2