

Stephen F Badylak

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ext. papers

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ext. citations

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L-index

#	Paper	IF	Citations
402	A perivascular origin for mesenchymal stem cells in multiple human organs. <i>Cell Stem Cell</i> , 2008 , 3, 301-138	15.6	3013
401	An overview of tissue and whole organ decellularization processes. <i>Biomaterials</i> , 2011 , 32, 3233-43	15.6	2038
400	Decellularization of tissues and organs. <i>Biomaterials</i> , 2006 , 27, 3675-83	15.6	1413
399	Extracellular matrix as a biological scaffold material: Structure and function. <i>Acta Biomaterialia</i> , 2009 , 5, 1-13	10.8	1282
398	Whole-organ tissue engineering: decellularization and recellularization of three-dimensional matrix scaffolds. <i>Annual Review of Biomedical Engineering</i> , 2011 , 13, 27-53	12	755
397	The extracellular matrix as a biologic scaffold material. <i>Biomaterials</i> , 2007 , 28, 3587-93	15.6	752
396	Macrophage phenotype and remodeling outcomes in response to biologic scaffolds with and without a cellular component. <i>Biomaterials</i> , 2009 , 30, 1482-91	15.6	658
395	Immune response to biologic scaffold materials. <i>Seminars in Immunology</i> , 2008 , 20, 109-16	10.7	641
394	Macrophage polarization: an opportunity for improved outcomes in biomaterials and regenerative medicine. <i>Biomaterials</i> , 2012 , 33, 3792-802	15.6	595
393	The extracellular matrix as a scaffold for tissue reconstruction. <i>Seminars in Cell and Developmental Biology</i> , 2002 , 13, 377-83	7.5	595
392	Xenogeneic extracellular matrix as a scaffold for tissue reconstruction. <i>Transplant Immunology</i> , 2004 , 12, 367-77	1.7	574
391	Macrophage phenotype as a determinant of biologic scaffold remodeling. <i>Tissue Engineering - Part A</i> , 2008 , 14, 1835-42	3.9	560
390	Macrophage phenotype as a predictor of constructive remodeling following the implantation of biologically derived surgical mesh materials. <i>Acta Biomaterialia</i> , 2012 , 8, 978-87	10.8	505
389	Small intestinal submucosa as a large diameter vascular graft in the dog. <i>Journal of Surgical Research</i> , 1989 , 47, 74-80	2.5	494
388	Identification of extractable growth factors from small intestinal submucosa. <i>Journal of Cellular Biochemistry</i> , 1997 , 67, 478-491	4.7	484
387	Consequences of ineffective decellularization of biologic scaffolds on the host response. <i>Biomaterials</i> , 2012 , 33, 1771-81	15.6	417
386	Extracellular matrix scaffolds for cartilage and bone regeneration. <i>Trends in Biotechnology</i> , 2013 , 31, 169-76	15.1	379

385	The use of xenogeneic small intestinal submucosa as a biomaterial for Achilles tendon repair in a dog model. <i>Journal of Biomedical Materials Research Part B</i> , 1995 , 29, 977-85		371
384	Extracellular matrix hydrogels from decellularized tissues: Structure and function. <i>Acta Biomaterialia</i> , 2017 , 49, 1-15	10.8	364
383	Engineered whole organs and complex tissues. <i>Lancet, The</i> , 2012 , 379, 943-952	40	361
382	Preparation and rheological characterization of a gel form of the porcine urinary bladder matrix. <i>Biomaterials</i> , 2008 , 29, 1630-7	15.6	351
381	Quantification of DNA in biologic scaffold materials. <i>Journal of Surgical Research</i> , 2009 , 152, 135-9	2.5	341
380	Methods of tissue decellularization used for preparation of biologic scaffolds and in vivo relevance. <i>Methods</i> , 2015 , 84, 25-34	4.6	337
379	Extracellular matrix-based materials for regenerative medicine. <i>Nature Reviews Materials</i> , 2018 , 3, 159-173	3.3	335
378	The basement membrane component of biologic scaffolds derived from extracellular matrix. <i>Tissue Engineering</i> , 2006 , 12, 519-26		327
377	An acellular biologic scaffold promotes skeletal muscle formation in mice and humans with volumetric muscle loss. <i>Science Translational Medicine</i> , 2014 , 6, 234ra58	17.5	313
376	The effects of processing methods upon mechanical and biologic properties of porcine dermal extracellular matrix scaffolds. <i>Biomaterials</i> , 2010 , 31, 8626-33	15.6	310
375	Extracellular matrix bioscaffolds for orthopaedic applications. A comparative histologic study. <i>Journal of Bone and Joint Surgery - Series A</i> , 2006 , 88, 2673-86	5.6	301
374	Regenerative urinary bladder augmentation using small intestinal submucosa: urodynamic and histopathologic assessment in long-term canine bladder augmentations. <i>Journal of Urology</i> , 1996 , 155, 2098-104	2.5	299
373	Xenogeneic extracellular matrix grafts elicit a TH2-restricted immune response. <i>Transplantation</i> , 2001 , 71, 1631-40	1.8	296
372	Extracellular matrix as an inductive scaffold for functional tissue reconstruction. <i>Translational Research</i> , 2014 , 163, 268-85	11	287
371	Degradation products of extracellular matrix affect cell migration and proliferation. <i>Tissue Engineering - Part A</i> , 2009 , 15, 605-14	3.9	287
370	Experimental assessment of small intestinal submucosa as a bladder wall substitute. <i>Urology</i> , 1995 , 46, 396-400	1.6	280
369	A hydrogel derived from decellularized dermal extracellular matrix. <i>Biomaterials</i> , 2012 , 33, 7028-38	15.6	276
368	Morphologic study of small intestinal submucosa as a body wall repair device. <i>Journal of Surgical Research</i> , 2002 , 103, 190-202	2.5	272

367	Macrophage participation in the degradation and remodeling of extracellular matrix scaffolds. <i>Tissue Engineering - Part A</i> , 2009 , 15, 1687-94	3.9	263
366	Glycosaminoglycan content of small intestinal submucosa: a bioscaffold for tissue replacement. <i>Tissue Engineering</i> , 1996 , 2, 209-17		258
365	A whole-organ regenerative medicine approach for liver replacement. <i>Tissue Engineering - Part C: Methods</i> , 2011 , 17, 677-86	2.9	243
364	Resorbable bioscaffold for esophageal repair in a dog model. <i>Journal of Pediatric Surgery</i> , 2000 , 35, 1097-103	2.0	240
363	Esophageal reconstruction with ECM and muscle tissue in a dog model. <i>Journal of Surgical Research</i> , 2005 , 128, 87-97	2.5	238
362	Preparation of cardiac extracellular matrix from an intact porcine heart. <i>Tissue Engineering - Part C: Methods</i> , 2010 , 16, 525-32	2.9	232
361	Small intestinal submucosa as a vascular graft: a review. <i>Journal of Investigative Surgery</i> , 1993 , 6, 297-310	2.2	226
360	Functional skeletal muscle formation with a biologic scaffold. <i>Biomaterials</i> , 2010 , 31, 7475-84	15.6	218
359	Intestine submucosa and polypropylene mesh for abdominal wall repair in dogs. <i>Journal of Surgical Research</i> , 1996 , 60, 107-14	2.5	217
358	Strength over time of a resorbable bioscaffold for body wall repair in a dog model. <i>Journal of Surgical Research</i> , 2001 , 99, 282-7	2.5	209
357	Perfusion-decellularized pancreas as a natural 3D scaffold for pancreatic tissue and whole organ engineering. <i>Biomaterials</i> , 2013 , 34, 6760-72	15.6	207
356	Maintenance of human hepatocyte function in vitro by liver-derived extracellular matrix gels. <i>Tissue Engineering - Part A</i> , 2010 , 16, 1075-82	3.9	205
355	Hydrogels derived from central nervous system extracellular matrix. <i>Biomaterials</i> , 2013 , 34, 1033-40	15.6	201
354	Biologic scaffold composed of skeletal muscle extracellular matrix. <i>Biomaterials</i> , 2012 , 33, 2916-25	15.6	200
353	Clinical application of an acellular biologic scaffold for surgical repair of a large, traumatic quadriceps femoris muscle defect. <i>Orthopedics</i> , 2010 , 33, 511	1.5	196
352	Decellularized allogeneic and xenogeneic tissue as a bioscaffold for regenerative medicine: factors that influence the host response. <i>Annals of Biomedical Engineering</i> , 2014 , 42, 1517-27	4.7	195
351	In vivo degradation of ¹⁴ C-labeled small intestinal submucosa (SIS) when used for urinary bladder repair. <i>Biomaterials</i> , 2001 , 22, 2653-9	15.6	188
350	Antibacterial activity within degradation products of biological scaffolds composed of extracellular matrix. <i>Tissue Engineering</i> , 2006 , 12, 2949-55		186

349	Biologic scaffolds composed of central nervous system extracellular matrix. <i>Biomaterials</i> , 2012 , 33, 3539-47	15.6	183
348	Chemoattraction of progenitor cells by remodeling extracellular matrix scaffolds. <i>Tissue Engineering - Part A</i> , 2009 , 15, 1119-25	3.9	183
347	Biaxial strength of multilaminated extracellular matrix scaffolds. <i>Biomaterials</i> , 2004 , 25, 2353-61	15.6	182
346	Regeneration of skeletal muscle. <i>Cell and Tissue Research</i> , 2012 , 347, 759-74	4.2	180
345	Rabbit urethral regeneration using small intestinal submucosa onlay grafts. <i>Urology</i> , 1998 , 52, 138-42	1.6	178
344	Esophageal preservation in five male patients after endoscopic inner-layer circumferential resection in the setting of superficial cancer: a regenerative medicine approach with a biologic scaffold. <i>Tissue Engineering - Part A</i> , 2011 , 17, 1643-50	3.9	176
343	Maintenance of hepatic sinusoidal endothelial cell phenotype in vitro using organ-specific extracellular matrix scaffolds. <i>Tissue Engineering</i> , 2007 , 13, 2301-10		176
342	Small intestinal submucosa as a small-diameter arterial graft in the dog. <i>Journal of Investigative Surgery</i> , 1990 , 3, 217-27	1.2	175
341	Expanded applications, shifting paradigms and an improved understanding of host-biomaterial interactions. <i>Acta Biomaterialia</i> , 2013 , 9, 4948-55	10.8	174
340	Extracellular matrix-derived products modulate endothelial and progenitor cell migration and proliferation in vitro and stimulate regenerative healing in vivo. <i>Matrix Biology</i> , 2010 , 29, 690-700	11.4	174
339	Degradation and remodeling of small intestinal submucosa in canine Achilles tendon repair. <i>Journal of Bone and Joint Surgery - Series A</i> , 2007 , 89, 621-30	5.6	171
338	Low-molecular-weight peptides derived from extracellular matrix as chemoattractants for primary endothelial cells. <i>Endothelium: Journal of Endothelial Cell Research</i> , 2004 , 11, 199-206		171
337	Matrix-bound nanovesicles within ECM bioscaffolds. <i>Science Advances</i> , 2016 , 2, e1600502	14.3	168
336	Assessing porcine liver-derived biomatrix for hepatic tissue engineering. <i>Tissue Engineering</i> , 2004 , 10, 1046-53		168
335	Hydrogels derived from demineralized and decellularized bone extracellular matrix. <i>Acta Biomaterialia</i> , 2013 , 9, 7865-73	10.8	166
334	The promotion of a constructive macrophage phenotype by solubilized extracellular matrix. <i>Biomaterials</i> , 2014 , 35, 8605-12	15.6	162
333	Mechanical properties and in vivo behavior of a biodegradable synthetic polymer microfiber-extracellular matrix hydrogel biohybrid scaffold. <i>Biomaterials</i> , 2011 , 32, 3387-94	15.6	161
332	Small bowel tissue engineering using small intestinal submucosa as a scaffold. <i>Journal of Surgical Research</i> , 2001 , 99, 352-8	2.5	160

331	Characterization of Small Intestinal Submucosa Regenerated Canine Detrusor: Assessment of Reinnervation, in Vitro Compliance and Contractility. <i>Journal of Urology</i> , 1996 , 156, 599-607	2.5	160
330	Differential expression of muscle regulatory factor genes in normal and denervated adult rat hindlimb muscles. <i>Developmental Dynamics</i> , 1993 , 198, 214-24	2.9	157
329	Marrow-derived cells populate scaffolds composed of xenogeneic extracellular matrix. <i>Experimental Hematology</i> , 2001 , 29, 1310-8	3.1	156
328	Naturally derived and synthetic scaffolds for skeletal muscle reconstruction. <i>Advanced Drug Delivery Reviews</i> , 2015 , 84, 208-21	18.5	151
327	Xenogeneic extracellular matrix as an inductive scaffold for regeneration of a functioning musculotendinous junction. <i>Tissue Engineering - Part A</i> , 2010 , 16, 3309-17	3.9	150
326	Comparison of three methods for the derivation of a biologic scaffold composed of adipose tissue extracellular matrix. <i>Tissue Engineering - Part C: Methods</i> , 2011 , 17, 411-21	2.9	150
325	An extracellular matrix scaffold for esophageal stricture prevention after circumferential EMR. <i>Gastrointestinal Endoscopy</i> , 2009 , 69, 289-96	5.2	150
324	Macrophage polarization in response to ECM coated polypropylene mesh. <i>Biomaterials</i> , 2014 , 35, 6838-49	5.6	149
323	Extracellular matrix scaffold devices for rotator cuff repair. <i>Journal of Shoulder and Elbow Surgery</i> , 2010 , 19, 467-76	4.3	148
322	Extracellular matrix scaffolds are repopulated by bone marrow-derived cells in a mouse model of achilles tendon reconstruction. <i>Journal of Orthopaedic Research</i> , 2006 , 24, 1299-309	3.8	146
321	Recruitment of progenitor cells by an extracellular matrix cryptic peptide in a mouse model of digit amputation. <i>Tissue Engineering - Part A</i> , 2011 , 17, 2435-43	3.9	145
320	Extracellular matrix scaffold for cardiac repair. <i>Circulation</i> , 2005 , 112, 1135-43	16.7	145
319	Small intestinal submucosa: a substrate for in vitro cell growth. <i>Journal of Biomaterials Science, Polymer Edition</i> , 1998 , 9, 863-78	3.5	145
318	Biologic scaffolds for regenerative medicine: mechanisms of in vivo remodeling. <i>Annals of Biomedical Engineering</i> , 2015 , 43, 577-92	4.7	143
317	Non-invasive imaging of transplanted human neural stem cells and ECM scaffold remodeling in the stroke-damaged rat brain by (19)F- and diffusion-MRI. <i>Biomaterials</i> , 2012 , 33, 2858-71	15.6	143
316	Endothelial cell adherence to small intestinal submucosa: an acellular bioscaffold. <i>Biomaterials</i> , 1999 , 20, 2257-63	15.6	143
315	Antimicrobial activity associated with extracellular matrices. <i>Tissue Engineering</i> , 2002 , 8, 63-71		142
314	Porcine small intestinal submucosa (SIS): a bioscaffold supporting in vitro primary human epidermal cell differentiation and synthesis of basement membrane proteins. <i>Burns</i> , 2001 , 27, 254-66	2.3	142

313	Comparison of the resistance to infection of intestinal submucosa arterial autografts versus polytetrafluoroethylene arterial prostheses in a dog model. <i>Journal of Vascular Surgery</i> , 1994 , 19, 465-72 ^{3.5}	139
312	Surface characterization of extracellular matrix scaffolds. <i>Biomaterials</i> , 2010 , 31, 428-37	15.6 136
311	Collagen fiber alignment and biaxial mechanical behavior of porcine urinary bladder derived extracellular matrix. <i>Biomaterials</i> , 2008 , 29, 4775-82	15.6 136
310	Tissue-engineered myocardial patch derived from extracellular matrix provides regional mechanical function. <i>Circulation</i> , 2005 , 112, 1144-9	16.7 134
309	Naturally occurring extracellular matrix as a scaffold for musculoskeletal repair. <i>Clinical Orthopaedics and Related Research</i> , 1999 , S333-43	2.2 132
308	Epimorphic regeneration approach to tissue replacement in adult mammals. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2010 , 107, 3351-5	11.5 131
307	Characterization of Fibronectin Derived from Porcine Small Intestinal Submucosa. <i>Tissue Engineering</i> , 1998 , 4, 75-83	131
306	Small intestinal submucosa as a superior vena cava graft in the dog. <i>Journal of Surgical Research</i> , 1992 , 53, 175-81	2.5 129
305	Effect of the alphaGal epitope on the response to small intestinal submucosa extracellular matrix in a nonhuman primate model. <i>Tissue Engineering - Part A</i> , 2009 , 15, 3877-88	3.9 126
304	Galalpha(1,3)Gal epitope in porcine small intestinal submucosa. <i>Tissue Engineering</i> , 2000 , 6, 233-9	126
303	Extracellular matrix bioscaffolds in tissue remodeling and morphogenesis. <i>Developmental Dynamics</i> , 2016 , 245, 351-60	2.9 125
302	The effect of detergents on the basement membrane complex of a biologic scaffold material. <i>Acta Biomaterialia</i> , 2014 , 10, 183-93	10.8 124
301	Extracellular matrix for myocardial repair. <i>Heart Surgery Forum</i> , 2003 , 6, E20-6	0.7 121
300	Rethinking regenerative medicine: a macrophage-centered approach. <i>Frontiers in Immunology</i> , 2014 , 5, 510	8.4 120
299	The use of extracellular matrix as an inductive scaffold for the partial replacement of functional myocardium. <i>Cell Transplantation</i> , 2006 , 15 Suppl 1, S29-40	4 119
298	Healing comparison of small intestine submucosa and ePTFE grafts in the canine carotid artery. <i>Journal of Surgical Research</i> , 1995 , 58, 415-20	2.5 119
297	Solubilized extracellular matrix bioscaffolds derived from diverse source tissues differentially influence macrophage phenotype. <i>Journal of Biomedical Materials Research - Part A</i> , 2017 , 105, 138-147	5.4 115
296	A murine model of volumetric muscle loss and a regenerative medicine approach for tissue replacement. <i>Tissue Engineering - Part A</i> , 2012 , 18, 1941-8	3.9 114

295	Thrombospondin-1 mimetic peptide inhibitors of angiogenesis and tumor growth: design, synthesis, and optimization of pharmacokinetics and biological activities. <i>Journal of Medicinal Chemistry</i> , 2005 , 48, 2838-46	8.3	114
294	ECM hydrogel coating mitigates the chronic inflammatory response to polypropylene mesh. <i>Biomaterials</i> , 2014 , 35, 8585-95	15.6	113
293	Small Intestinal Submucosa. <i>Annals of Plastic Surgery</i> , 1995 , 35, 374-380	1.7	112
292	Production and characterization of ECM powder: implications for tissue engineering applications. <i>Biomaterials</i> , 2005 , 26, 1431-5	15.6	110
291	An acellular biologic scaffold treatment for volumetric muscle loss: results of a 13-patient cohort study. <i>Npj Regenerative Medicine</i> , 2016 , 1, 16008	15.8	109
290	Small Intestinal Submucosa. <i>Annals of Plastic Surgery</i> , 1995 , 35, 381-388	1.7	109
289	Hepatic differentiation of amniotic epithelial cells. <i>Hepatology</i> , 2011 , 53, 1719-29	11.2	108
288	Application and evaluation of the alamarBlue assay for cell growth and survival of fibroblasts. <i>In Vitro Cellular and Developmental Biology - Animal</i> , 1998 , 34, 239-46	2.6	108
287	The use of porcine small intestinal submucosa to enhance the healing of the medial collateral ligament--a functional tissue engineering study in rabbits. <i>Journal of Orthopaedic Research</i> , 2004 , 22, 214-20	3.8	107
286	The impact of detergents on the tissue decellularization process: A ToF-SIMS study. <i>Acta Biomaterialia</i> , 2017 , 50, 207-219	10.8	104
285	Hydrated xenogeneic decellularized tracheal matrix as a scaffold for tracheal reconstruction. <i>Biomaterials</i> , 2010 , 31, 3520-6	15.6	104
284	Chemoattractant activity of degradation products of fetal and adult skin extracellular matrix for keratinocyte progenitor cells. <i>Journal of Tissue Engineering and Regenerative Medicine</i> , 2008 , 2, 491-8	4.4	104
283	Histology after dural grafting with small intestinal submucosa. <i>World Neurosurgery</i> , 1996 , 46, 389-93; discussion 393-4		104
282	Biocompatibility of small-intestinal submucosa in urinary tract as augmentation cystoplasty graft and injectable suspension. <i>Journal of Endourology</i> , 1994 , 8, 125-30	2.7	103
281	Biomaterials for tissue engineering applications. <i>Seminars in Pediatric Surgery</i> , 2014 , 23, 112-8	2.1	102
280	Uniaxial and biaxial properties of terminally sterilized porcine urinary bladder matrix scaffolds. <i>Journal of Biomedical Materials Research - Part B Applied Biomaterials</i> , 2008 , 84, 408-14	3.5	101
279	The Th2-restricted immune response to xenogeneic small intestinal submucosa does not influence systemic protective immunity to viral and bacterial pathogens. <i>Tissue Engineering</i> , 2002 , 8, 53-62		101
278	Injectable Extracellular Matrix Hydrogels as Scaffolds for Spinal Cord Injury Repair. <i>Tissue Engineering - Part A</i> , 2016 , 22, 306-17	3.9	100

277	Regenerative medicine and developmental biology: the role of the extracellular matrix. <i>The Anatomical Record Part B: the New Anatomist</i> , 2005 , 287, 36-41		100
276	Progress in tissue engineering and regenerative medicine. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2010 , 107, 3285-6	11.5	98
275	Concentration-dependent rheological properties of ECM hydrogel for intracerebral delivery to a stroke cavity. <i>Acta Biomaterialia</i> , 2015 , 27, 116-130	10.8	95
274	A quantitative method for evaluating the degradation of biologic scaffold materials. <i>Biomaterials</i> , 2007 , 28, 147-50	15.6	95
273	Fibronectin peptides mediate HMEC adhesion to porcine-derived extracellular matrix. <i>Biomaterials</i> , 2002 , 23, 1841-8	15.6	95
272	The Use of Biologic Scaffolds in the Treatment of Chronic Nonhealing Wounds. <i>Advances in Wound Care</i> , 2015 , 4, 490-500	4.8	94
271	The effect of source animal age upon the in vivo remodeling characteristics of an extracellular matrix scaffold. <i>Biomaterials</i> , 2012 , 33, 5524-33	15.6	93
270	EXTRACELLULAR MATRIX BIOSCAFFOLDS FOR ORTHOPAEDIC APPLICATIONS. <i>Journal of Bone and Joint Surgery - Series A</i> , 2006 , 88, 2673-2686	5.6	92
269	Hybrid nanofibrous scaffolds from electrospinning of a synthetic biodegradable elastomer and urinary bladder matrix. <i>Journal of Biomaterials Science, Polymer Edition</i> , 2008 , 19, 635-52	3.5	90
268	The effect of source animal age upon extracellular matrix scaffold properties. <i>Biomaterials</i> , 2011 , 32, 128-36	15.6	89
267	Retention of endothelial cell adherence to porcine-derived extracellular matrix after disinfection and sterilization. <i>Tissue Engineering</i> , 2002 , 8, 225-34		89
266	Biologic scaffold remodeling in a dog model of complex musculoskeletal injury. <i>Journal of Surgical Research</i> , 2012 , 176, 490-502	2.5	88
265	ECM hydrogel for the treatment of stroke: Characterization of the host cell infiltrate. <i>Biomaterials</i> , 2016 , 91, 166-181	15.6	87
264	Perfusion-decellularized skeletal muscle as a three-dimensional scaffold with a vascular network template. <i>Biomaterials</i> , 2016 , 89, 114-26	15.6	86
263	Reprint of: Extracellular matrix as a biological scaffold material: Structure and function. <i>Acta Biomaterialia</i> , 2015 , 23 Suppl, S17-26	10.8	85
262	The host response to allogeneic and xenogeneic biological scaffold materials. <i>Journal of Tissue Engineering and Regenerative Medicine</i> , 2015 , 9, 504-11	4.4	84
261	Macrophage phenotype in response to ECM bioscaffolds. <i>Seminars in Immunology</i> , 2017 , 29, 2-13	10.7	84
260	Polypropylene surgical mesh coated with extracellular matrix mitigates the host foreign body response. <i>Journal of Biomedical Materials Research - Part A</i> , 2014 , 102, 234-46	5.4	84

259	Porcine small intestinal submucosa as a dural substitute. <i>World Neurosurgery</i> , 1999 , 51, 99-104		83
258	Evidence of innervation following extracellular matrix scaffold-mediated remodelling of muscular tissues. <i>Journal of Tissue Engineering and Regenerative Medicine</i> , 2009 , 3, 590-600	4.4	81
257	Bi-layered polyurethane - Extracellular matrix cardiac patch improves ischemic ventricular wall remodeling in a rat model. <i>Biomaterials</i> , 2016 , 107, 1-14	15.6	79
256	Fabrication and characterization of bioactive and antibacterial composites for dental applications. <i>Acta Biomaterialia</i> , 2014 , 10, 3723-32	10.8	79
255	Extracellular matrix degradation products and low-oxygen conditions enhance the regenerative potential of perivascular stem cells. <i>Tissue Engineering - Part A</i> , 2011 , 17, 37-44	3.9	79
254	Role of the extracellular matrix in whole organ engineering. <i>Journal of Cellular Physiology</i> , 2014 , 229, 984-9	7	78
253	Reinforcement of esophageal anastomoses with an extracellular matrix scaffold in a canine model. <i>Annals of Thoracic Surgery</i> , 2006 , 82, 2050-8	2.7	78
252	Aerobic fitness and resting energy expenditure in young adult males. <i>Metabolism: Clinical and Experimental</i> , 1989 , 38, 85-90	12.7	78
251	2036 Extracellular matrix as a novel approach to glioma therapy. <i>Journal of Clinical and Translational Science</i> , 2018 , 2, 11-12	0.4	78
250	Natural anti-galactose alpha1,3 galactose antibodies delay, but do not prevent the acceptance of extracellular matrix xenografts. <i>Transplant Immunology</i> , 2002 , 10, 15-24	1.7	77
249	Enhanced bone regeneration using porcine small intestinal submucosa. <i>Journal of Investigative Surgery</i> , 1999 , 12, 277-87	1.2	75
248	Patch esophagoplasty: esophageal reconstruction using biologic scaffolds. <i>Annals of Thoracic Surgery</i> , 2014 , 97, 283-8	2.7	74
247	Extracellular Matrix Bioscaffolds as Immunomodulatory Biomaterials. <i>Tissue Engineering - Part A</i> , 2017 , 23, 1152-1159	3.9	73
246	The surface molecular functionality of decellularized extracellular matrices. <i>Biomaterials</i> , 2011 , 32, 137-43	13.6	73
245	Decellularization and cell seeding of whole liver biologic scaffolds composed of extracellular matrix. <i>Journal of Clinical and Experimental Hepatology</i> , 2015 , 5, 69-80	4.1	72
244	Morphologic assessment of extracellular matrix scaffolds for patch tracheoplasty in a canine model. <i>Annals of Thoracic Surgery</i> , 2008 , 86, 967-74; discussion 967-74	2.7	72
243	Gene expression by fibroblasts seeded on small intestinal submucosa and subjected to cyclic stretching. <i>Tissue Engineering</i> , 2007 , 13, 1313-23		72
242	Damage associated molecular patterns within xenogeneic biologic scaffolds and their effects on host remodeling. <i>Biomaterials</i> , 2012 , 33, 91-101	15.6	71

241	Effects of biologic scaffolds on human stem cells and implications for CNS tissue engineering. <i>Tissue Engineering - Part A</i> , 2014 , 20, 313-23	3.9	71
240	Intestinal stem cell growth and differentiation on a tubular scaffold with evaluation in small and large animals. <i>Regenerative Medicine</i> , 2016 , 11, 45-61	2.5	69
239	Molecular assessment of collagen denaturation in decellularized tissues using a collagen hybridizing peptide. <i>Acta Biomaterialia</i> , 2017 , 53, 268-278	10.8	69
238	The Effect of Range of Motion on Remodeling of Small Intestinal Submucosa (SIS) When Used as an Achilles Tendon Repair Material in the Rabbit. <i>Tissue Engineering</i> , 1997 , 3, 27-37		69
237	Hydrated versus lyophilized forms of porcine extracellular matrix derived from the urinary bladder. <i>Journal of Biomedical Materials Research - Part A</i> , 2008 , 87, 862-72	5.4	69
236	Correlation of motor-evoked potential response to ischemic spinal cord damage. <i>Journal of Thoracic and Cardiovascular Surgery</i> , 1992 , 104, 262-272	1.5	68
235	FGF-2 enhances vascularization for adipose tissue engineering. <i>Plastic and Reconstructive Surgery</i> , 2008 , 121, 1153-1164	2.7	66
234	An isolated cryptic peptide influences osteogenesis and bone remodeling in an adult mammalian model of digit amputation. <i>Tissue Engineering - Part A</i> , 2011 , 17, 3033-44	3.9	64
233	Constructive remodeling of biologic scaffolds is dependent on early exposure to physiologic bladder filling in a canine partial cystectomy model. <i>Journal of Surgical Research</i> , 2010 , 161, 217-25	2.5	63
232	Extracellular matrix as a scaffold for laryngeal reconstruction. <i>Annals of Otology, Rhinology and Laryngology</i> , 2003 , 112, 428-33	2.1	63
231	Preparation and characterization of a biologic scaffold from esophageal mucosa. <i>Biomaterials</i> , 2013 , 34, 6729-37	15.6	60
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