James J Yoo

List of Publications by Year
in descending order

138 papers	12,603 citations	66343 42 h-index	24982 109 g-index
141 all docs	141 docs citations	141 times ranked	12966 citing authors

#	Article	IF	Citations
1	A 3D bioprinting system to produce human-scale tissue constructs with structural integrity. Nature Biotechnology, 2016, 34, 312-319.	17.5	2,078
2	Tissue-engineered autologous bladders for patients needing cystoplasty. Lancet, The, 2006, 367, 1241-1246.	13.7	1,690
3	The influence of electrospun aligned poly(É›-caprolactone)/collagen nanofiber meshes on the formation of self-aligned skeletal muscle myotubes. Biomaterials, 2008, 29, 2899-2906.	11.4	558
4	Precisely printable and biocompatible silk fibroin bioink for digital light processing 3D printing. Nature Communications, 2018, 9, 1620.	12.8	520
5	Biofabrication strategies for 3D in vitro models and regenerative medicine. Nature Reviews Materials, 2018, 3, 21-37.	48.7	502
6	Biofabrication: A Guide to Technology and Terminology. Trends in Biotechnology, 2018, 36, 384-402.	9.3	465
7	Multi-tissue interactions in an integrated three-tissue organ-on-a-chip platform. Scientific Reports, 2017, 7, 8837.	3.3	407
8	Optimization of gelatinâ€“alginate composite bioink printability using rheological parameters: a systematic approach. Biofabrication, 2018, 10, 034106.	7.1	336
9	Decellularization methods of porcine kidneys for whole organ engineering using a high-throughput system. Biomaterials, 2012, 33, 7756-7764.	11.4	318
10	In Situ Bioprinting of Autologous Skin Cells Accelerates Wound Healing of Extensive Excisional Full-Thickness Wounds. Scientific Reports, 2019, 9, 1856.	3.3	297
11	A 3D bioprinted complex structure for engineering the muscleâ€“tendon unit. Biofabrication, 2015, 7, 035003.	7.1	293
12	Bioprinting technology and its applications. European Journal of Cardio-thoracic Surgery, 2014, 46, 342-348.	1.4	271
13	<i>In vitro</i> evaluation of electrospun nanofiber scaffolds for vascular graft application. Journal of Biomedical Materials Research - Part A, 2007, 83A, 999-1008.	4.0	239
14	3D bioprinted functional and contractile cardiac tissue constructs. Acta Biomaterialia, 2018, 70, 48-56.	8.3	227
15	Assessment methodologies for extrusion-based bioink printability. Biofabrication, 2020, 12, 022003.	7.1	214
16	In situ tissue regeneration through host stem cell recruitment. Experimental and Molecular Medicine, 2013, 45, e57-e57.	7.7	202
17	Tissue-engineered autologous vaginal organs in patients: a pilot cohort study. Lancet, The, 2014, 384, 329-336.	13.7	185
18	3D Bioprinted Human Skeletal Muscle Constructs for Muscle Function Restoration. Scientific Reports, 2018, 8, 12307.	3.3	166

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19	A Photoâ€Crosslinkable Kidney ECMâ€Derived Bioink Accelerates Renal Tissue Formation. Advanced Healthcare Materials, 2019, 8, e1800992.	7.6	162
20	A Tissue-Engineered Muscle Repair Construct for Functional Restoration of an Irrecoverable Muscle Injury in a Murine Model. Tissue Engineering - Part A, 2011, 17, 2291-2303.	3.1	151
21	Neural cell integration into 3D bioprinted skeletal muscle constructs accelerates restoration of muscle function. Nature Communications, 2020, 11, 1025.	12.8	130
22	Bioengineered transplantable porcine livers with re-endothelialized vasculature. Biomaterials, 2015, 40, 72-79.	11.4	127
23	Engineered small diameter vascular grafts by combining cell sheet engineering and electrospinning technology. Acta Biomaterialia, 2015, 16, 14-22.	8.3	121
24	Efficient myotube formation in 3D bioprinted tissue construct by biochemical and topographical cues. Biomaterials, 2020, 230, 119632.	11.4	120
25	A novel tissue-engineered trachea with a mechanical behavior similarÂto native trachea. Biomaterials, 2015, 62, 106-115.	11.4	110
26	High-Throughput Production of Single-Cell Microparticles Using an Inkjet Printing Technology. Journal of Manufacturing Science and Engineering, Transactions of the ASME, 2008, 130, .	2.2	102
27	Electrospun vascular scaffold for cellularized small diameter blood vessels: A preclinical large animal study. Acta Biomaterialia, 2017, 59, 58-67.	8.3	91
28	Understanding the Role of Growth Factors in Modulating Stem Cell Tenogenesis. PLoS ONE, 2013, 8, e83734.	2.5	90
29	Skin bioprinting: the future of burn wound reconstruction?. Burns and Trauma, 2019, 7, 4.	4.9	84
30	A photo-crosslinkable cartilage-derived extracellular matrix bioink for auricular cartilage tissue engineering. Acta Biomaterialia, 2021, 121, 193-203.	8.3	81
31	Bioprinted Skin Recapitulates Normal Collagen Remodeling in Full-Thickness Wounds. Tissue Engineering - Part A, 2020, 26, 512-526.	3.1	79
32	Combined systemic and local delivery of stem cell inducing/recruiting factors for <i>in situ</i> tissue regeneration. FASEB Journal, 2012, 26, 158-168.	0.5	72
33	Bioengineered self-seeding heart valves. Journal of Thoracic and Cardiovascular Surgery, 2012, 143, 201-208.	0.8	70
34	In situ regeneration of skeletal muscle tissue through host cell recruitment. Acta Biomaterialia, 2014, 10, 4332-4339.	8.3	68
35	Repopulation of porcine kidney scaffold using porcine primary renal cells. Acta Biomaterialia, 2016, 29, 52-61.	8.3	67
36	Solid Organ Bioprinting: Strategies to Achieve Organ Function. Chemical Reviews, 2020, 120, 11093-11127.	47.7	62

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37	3D bioprinted biomask for facial skin reconstruction. Bioprinting, 2018, 10, e00028.	5.8	56
38	A tissue-engineered uterus supports live births in rabbits. Nature Biotechnology, 2020, 38, 1280-1287.	17.5	55
39	Host Cell Mobilization for<i>In Situ</i>Tissue Regeneration. Rejuvenation Research, 2008, 11, 747-756.	1.8	53
40	Three-dimensional cell-based bioprinting for soft tissue regeneration. Tissue Engineering and Regenerative Medicine, 2016, 13, 647-662.	3.7	50
41	Kidney diseases and tissue engineering. Methods, 2016, 99, 112-119.	3.8	50
42	Combinations of photoinitiator and UV absorber for cell-based digital light processing (DLP) bioprinting. Biofabrication, 2021, 13, 034103.	7.1	50
43	The effect of BMP-mimetic peptide tethering bioinks on the differentiation of dental pulp stem cells (DPSCs) in 3D bioprinted dental constructs. Biofabrication, 2020, 12, 035029.	7.1	49
44	Comparative analysis of two porcine kidney decellularization methods for maintenance of functional vascular architectures. Acta Biomaterialia, 2018, 75, 226-234.	8.3	48
45	Effect of Hierarchical Scaffold Consisting of Aligned dECM Nanofibers and Poly(lactide-<i>co</i>-glycolide) Struts on the Orientation and Maturation of Human Muscle Progenitor Cells. ACS Applied Materials & Interfaces, 2019, 11, 39449-39458.	8.0	46
46	Engineered multilayer ovarian tissue that secretes sex steroids and peptide hormones in response to gonadotropins. Biomaterials, 2013, 34, 2412-2420.	11.4	43
47	Enhanced re-endothelialization of acellular kidney scaffolds for whole organ engineering via antibody conjugation of vasculatures. Technology, 2014, 02, 243-253.	1.4	43
48	In vitro reconstitution of human kidney structures for renal cell therapy. Nephrology Dialysis Transplantation, 2012, 27, 3082-3090.	0.7	42
49	Decellularized Skin Extracellular Matrix (dsECM) Improves the Physical and Biological Properties of Fibrinogen Hydrogel for Skin Bioprinting Applications. Nanomaterials, 2020, 10, 1484.	4.1	41
50	Endothelialization of Heart Valve Matrix Using a Computer-Assisted Pulsatile Bioreactor. Tissue Engineering - Part A, 2009, 15, 807-814.	3.1	40
51	NIR fluorescence for monitoring in vivo scaffold degradation along with stem cell tracking in bone tissue engineering. Biomaterials, 2020, 258, 120267.	11.4	40
52	3D Bioprinted Highly Elastic Hybrid Constructs for Advanced Fibrocartilaginous Tissue Regeneration. Chemistry of Materials, 2020, 32, 8733-8746.	6.7	40
53	Regenerative Medicine Strategies for Treating Neurogenic Bladder. International Neurourology Journal, 2011, 15, 109-119.	1.2	40
54	A novel decellularized skeletal muscle-derived ECM scaffolding system for in situ muscle regeneration. Methods, 2020, 171, 77-85.	3.8	39

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55	Fabrication of biomimetic vascular scaffolds for 3D tissue constructs using vascular corrosion casts. Acta Biomaterialia, 2016, 32, 190-197.	8.3	38
56	Structure establishment of three-dimensional (3D) cell culture printing model for bladder cancer. PLoS ONE, 2019, 14, e0223689.	2.5	38
57	The Role of the Microenvironment in Controlling the Fate of Bioprinted Stem Cells. Chemical Reviews, 2020, 120, 11056-11092.	47.7	37
58	The Influence of Printing Parameters and Cell Density on Bioink Printing Outcomes. Tissue Engineering - Part A, 2020, 26, 1349-1358.	3.1	36
59	In vivo transplantation of 3D encapsulated ovarian constructs in rats corrects abnormalities of ovarian failure. Nature Communications, 2017, 8, 1858.	12.8	35
60	Cell Therapy with Human Renal Cell Cultures Containing Erythropoietin-Positive Cells Improves Chronic Kidney Injury. Stem Cells Translational Medicine, 2012, 1, 373-383.	3.3	33
61	Self-aligned myofibers in 3D bioprinted extracellular matrix-based construct accelerate skeletal muscle function restoration. Applied Physics Reviews, 2021, 8, 021405.	11.3	33
62	The potential role of tissue-engineered urethral substitution: clinical and preclinical studies. Journal of Tissue Engineering and Regenerative Medicine, 2017, 11, 3-19.	2.7	32
63	Methods to generate tissue-derived constructs for regenerative medicine applications. Methods, 2020, 171, 3-10.	3.8	31
64	Bioartificial Kidneys. Current Stem Cell Reports, 2017, 3, 68-76.	1.6	29
65	Progressive Muscle Cell Delivery as a Solution for Volumetric Muscle Defect Repair. Scientific Reports, 2016, 6, 38754.	3.3	28
66	Bioengineering Strategies to Treat Female Infertility. Tissue Engineering - Part B: Reviews, 2017, 23, 294-306.	4.8	27
67	In Situ Tissue Regeneration of Renal Tissue Induced by Collagen Hydrogel Injection. Stem Cells Translational Medicine, 2018, 7, 241-250.	3.3	26
68	State-of-the-Art Strategies for the Vascularization of Three-Dimensional Engineered Organs. Vascular Specialist International, 2019, 35, 77-89.	0.6	26
69	Reno-protection of Urine-derived Stem Cells in A Chronic Kidney Disease Rat Model Induced by Renal Ischemia and Nephrotoxicity. International Journal of Biological Sciences, 2020, 16, 435-446.	6.4	26
70	Potential Use of Autologous Renal Cells from Diseased Kidneys for the Treatment of Renal Failure. PLoS ONE, 2016, 11, e0164997.	2.5	24
71	Kidney regeneration: Where we are and future perspectives. World Journal of Nephrology, 2014, 3, 24.	2.0	23
72	The Dose-Effect Safety Profile of Skeletal Muscle Precursor Cell Therapy in a Dog Model of Intrinsic Urinary Sphincter Deficiency. Stem Cells Translational Medicine, 2015, 4, 286-294.	3.3	23

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73	Encapsulation of Mesenchymal Stem Cells in 3D Ovarian Cell Constructs Promotes Stable and Long-Term Hormone Secretion with Improved Physiological Outcomes in a Syngeneic Rat Model. Annals of Biomedical Engineering, 2020, 48, 1058-1070.	2.5	22
74	Clinically Relevant Bioprinting Workflow and Imaging Process for Tissue Construct Design and Validation. 3D Printing and Additive Manufacturing, 2017, 4, 239-247.	2.9	21
75	Kidney regeneration with biomimetic vascular scaffolds based on vascular corrosion casts. Acta Biomaterialia, 2019, 95, 328-336.	8.3	21
76	Bioreactor design and validation for manufacturing strategies in tissue engineering. Bio-Design and Manufacturing, 2022, 5, 43-63.	7.7	21
77	Effects of Allogeneic Bone Marrow Derived Mesenchymal Stromal Cell Therapy on Voiding Function in a Rat Model of Parkinson Disease. Journal of Urology, 2014, 191, 850-859.	0.4	20
78	Cell-based therapy for kidney disease. Korean Journal of Urology, 2015, 56, 412.	1.2	19
79	Comparing adult renal stem cell identification, characterization and applications. Journal of Biomedical Science, 2017, 24, 32.	7.0	18
80	Bioprinting Au Natural: The Biologics of Bioinks. Biomolecules, 2021, 11, 1593.	4.0	17
81	Bioprinted Scaffolds for Cartilage Tissue Engineering. Methods in Molecular Biology, 2015, 1340, 161-169.	0.9	15
82	Combination of small RNAs for skeletal muscle regeneration. FASEB Journal, 2016, 30, 1198-1206.	0.5	14
83	Microfluidic Systems for Assisted Reproductive Technologies: Advantages and Potential Applications. Tissue Engineering and Regenerative Medicine, 2020, 17, 787-800.	3.7	14
84	Can Computed Tomography--assisted Virtual Endoscopy Be an Innovative Tool for Detecting Urethral Tissue Pathologies?. Urology, 2014, 83, 930-938.	1.0	13
85	Dynamic Changes in Erectile Function and Histological Architecture After Intracorporal Injection of Human Placental Stem Cells in a Pelvic Neurovascular Injury Rat Model. Journal of Sexual Medicine, 2020, 17, 400-411.	0.6	13
86	Characterization of CD133 Antibody-Directed Recellularized Heart Valves. Journal of Cardiovascular Translational Research, 2015, 8, 411-420.	2.4	12
87	Controlled Delivery of Stem Cell-Derived Trophic Factors Accelerates Kidney Repair After Renal Ischemia-Reperfusion Injury in Rats. Stem Cells Translational Medicine, 2019, 8, 959-970.	3.3	12
88	Effect of Human Amniotic Fluid Stem Cells on Kidney Function in a Model of Chronic Kidney Disease. Tissue Engineering - Part A, 2019, 25, 1493-1503.	3.1	12
89	Applicability and Safety of in Vitro Skin Expansion Using a Skin Bioreactor: A Clinical Trial. Archives of Plastic Surgery, 2014, 41, 661-667.	0.9	12
90	Pre-Clinical Efficacy and Safety Evaluation of Human Amniotic Fluid-Derived Stem Cell Injection in a Mouse Model of Urinary Incontinence. Yonsei Medical Journal, 2015, 56, 648.	2.2	11

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91	Three-dimensional bioprinting for tissue engineering. , 2020, , 1391-1415.		10
92	Regenerative Medicine Approaches in Bioengineering Female Reproductive Tissues. Reproductive Sciences, 2021, 28, 1573-1595.	2.5	10
93	Enhanced method to select human oogonial stem cells for fertility research. Cell and Tissue Research, 2021, 386, 145-156.	2.9	10
94	In vitro breast cancer model with patient-specific morphological features for personalized medicine. Biofabrication, 2022, 14, 034102.	7.1	10
95	Self-Assembling Peptide Solution Accelerates Hemostasis. Advances in Wound Care, 2021, 10, 191-203.	5.1	9
96	Evaluation of cell viability and apoptosis in human amniotic fluid-derived stem cells with natural cryoprotectants. Cryobiology, 2014, 68, 244-250.	0.7	8
97	Bioactive Compounds for the Treatment of Renal Disease. Yonsei Medical Journal, 2018, 59, 1015.	2.2	8
98	Pelvic floor muscle function recovery using biofabricated tissue constructs with neuromuscular junctions. Acta Biomaterialia, 2021, 121, 237-249.	8.3	8
99	Total penile corpora cavernosa replacement using tissue engineering techniques. FASEB Journal, 2006, 20, A885.	0.5	8
100	Automated Image Analysis Methodologies to Compute Bioink Printability. Advanced Engineering Materials, 2021, 23, 2000900.	3.5	7
101	Accelerating neovascularization and kidney tissue formation with a 3D vascular scaffold capturing native vascular structure. Acta Biomaterialia, 2021, 124, 233-243.	8.3	7
102	Kidney regeneration approaches for translation. World Journal of Urology, 2020, 38, 2075-2079.	2.2	6
103	Administration of secretome from human placental stem cellâ€conditioned media improves recovery of erectile function in the pelvic neurovascular injury model. Journal of Tissue Engineering and Regenerative Medicine, 2020, 14, 1394-1402.	2.7	6
104	Myogenic-induced mesenchymal stem cells are capable of modulating the immune response by regulatory T cells. Journal of Tissue Engineering, 2014, 5, 204173141452475.	5.5	5
105	In vitro skin expansion: Wound healing assessment. Wound Repair and Regeneration, 2017, 25, 398-407.	3.0	5
106	Tissue engineering of the kidney. , 2020, , 825-843.		5
107	Functional recovery of denervated muscle by neurotization using nerve guidance channels. Journal of Tissue Engineering and Regenerative Medicine, 2015, 9, 838-846.	2.7	4
108	Surgical Therapies and Tissue Engineering: At the Intersection Between Innovation and Regulation. Tissue Engineering - Part A, 2016, 22, 397-400.	3.1	4

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109	Optimized culture system to maximize ovarian cell growth and functionality in vitro. Cell and Tissue Research, 2021, 385, 161-171.	2.9	4
110	Engineering Functional Rat Ovarian Spheroids Using Granulosa and Theca Cells. Reproductive Sciences, 2021, 28, 1697-1708.	2.5	4
111	The Delivery of the Recombinant Protein Cocktail Identified by Stem Cell-Derived Secretome Analysis Accelerates Kidney Repair After Renal Ischemia-Reperfusion Injury. Frontiers in Bioengineering and Biotechnology, 2022, 10, .	4.1	4
112	Electrospinning Fabrication of Collagenâ€based Scaffolds for Vascular Tissue Engineering. FASEB Journal, 2006, 20, A1101.	0.5	3
113	Bioink materials for translational applications. MRS Bulletin, 2022, 47, 80-90.	3.5	3
114	Three-dimensional printing in tissue engineering and regenerative medicine. Tissue Engineering and Regenerative Medicine, 2016, 13, 611-611.	3.7	2
115	Decellularization and recellularization strategies for translational medicine. Methods, 2020, 171, 1-2.	3.8	2
116	Applications of Organoids for Tissue Engineering and Regenerative Medicine. Tissue Engineering and Regenerative Medicine, 2020, 17, 729-730.	3.7	2
117	Tissue Engineered Tubularized Urethra for Surgical Reconstruction: A Preâ€Clinical Study. FASEB Journal, 2008, 22, 581.6.	0.5	2
118	Synergistic effect of CNTF and GDNF on directed neurite growth in chick embryo dorsal root ganglia. PLoS ONE, 2020, 15, e0240235.	2.5	2
119	Adenosine-treated bioprinted muscle constructs prolong cell survival and improve tissue formation. Bio-Design and Manufacturing, 2021, 4, 441-451.	7.7	1
120	Total Organ Replacement Using Tissue Engineering. FASEB Journal, 2007, 21, A140.	0.5	1
121	Bioâ€printing of living organized tissues using an inkjet technology. FASEB Journal, 2007, 21, A636.	0.5	1
122	Cell-derived Secretome for the Treatment of Renal Disease. Childhood Kidney Diseases, 2019, 23, 67-76.	0.4	1
123	Use of uniformly sized muscle fiber fragments for restoration of muscle tissue function. Journal of Tissue Engineering and Regenerative Medicine, 2019, 13, 1230-1240.	2.7	0
124	Preface. Current Stem Cell Research and Therapy, 2019, 14, 2-2.	1.3	0
125	Organized kidney tissue structures for the treatment of end stage renal disease. FASEB Journal, 2006, 20, A885.	0.5	0
126	Functional enhancement of bioreactor assisted engineered skeletal muscle. FASEB Journal, 2007, 21, A135.	0.5	0

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127	Three-Dimensional Tissue Printing Technology. Manuals in Biomedical Research, 2007, , 183-191.	0.0	0
128	A Composite Scaffold for the Engineering of Hollow Organs and Tissues. FASEB Journal, 2008, 22, 581.5.	0.5	0
129	Mouse Latissimus Dorsi as a model system for evaluating tissue engineered skeletal muscle. FASEB Journal, 2009, 23, 468.4.	0.5	0
130	Oxygen Generating Biomaterials for Ischemic Tissue Salvage and Function. FASEB Journal, 2010, 24, lb673.	0.5	0
131	Structure establishment of three-dimensional (3D) cell culture printing model for bladder cancer. , 2019, 14, e0223689.		0
132	Structure establishment of three-dimensional (3D) cell culture printing model for bladder cancer. , 2019, 14, e0223689.		0
133	Structure establishment of three-dimensional (3D) cell culture printing model for bladder cancer. , 2019, 14, e0223689.		0
134	Structure establishment of three-dimensional (3D) cell culture printing model for bladder cancer. , 2019, 14, e0223689.		0
135	Synergistic effect of CNTF and GDNF on directed neurite growth in chick embryo dorsal root ganglia. , 2020, 15, e0240235.		0
136	Synergistic effect of CNTF and GDNF on directed neurite growth in chick embryo dorsal root ganglia. , 2020, 15, e0240235.		0
137	Synergistic effect of CNTF and GDNF on directed neurite growth in chick embryo dorsal root ganglia. , 2020, 15, e0240235.		0
138	Synergistic effect of CNTF and GDNF on directed neurite growth in chick embryo dorsal root ganglia. , 2020, 15, e0240235.		0