

Year	Author	Title
2014	T.G. Seiler, I. Fischinger, T. Senfft, G. Schmidinger, T. Seiler	Intrastromal Application Of Riboflavin For Corneal Crosslinking
2015	S.A. Hurd, N.M. Bhatti, A.M. Walker, B.M. Kasukonis, J.C. Wolchok	Development Of A Biological Scaffold Engineered Using The Extracellular Matrix Secreted By Skeletal Muscle Cells
2016	B. M. Kasukonis, J.T. Kim, T.A. Washington, J.C. Wolchok	Development Of An Infusion Bioreactor For The Accelerated Preparation Of Decellularized Skeletal Muscle Scaffolds
2016	N. Bekesi, C. Dorronsoro, A. de la Hoz, S. Marcos	Material Properties From Air Puff Corneal Deformation By Numerical Simulations On Model Corneas
2016	X. Liu, J. Cleary, G.K. German	The Global Mechanical Properties And Multi-Scale Failure Mechanics Of Heterogeneous Human Stratum Corneum
2017	A. Kumar, H. Saghlatoon, T-G. La, M. M. Honari, H. Charaya, H.A. Damis, R. Mirzavand, P. Mousavi, H-J. Chung	A Highly Deformable Conducting Traces For Printed Antennas And Interconnects: Silver/Fluoropolymer Composite Amalgamated By Triethanolamine
2017	Fischinger, I., Seiler, T.G., Frueh, B.E. and Miller, M.	Biomechanical properties after corneal crosslinking using riboflavin in dextran solution or in hydroxy propyl methyl cellulose.
2017	Lee, P.S., Eckert, H., Hess, R., Gelinsky, M., Rancourt, D., Krawetz, R., Cuniberti, G. and Scharnweber, D.	Developing a customized perfusion bioreactor prototype with controlled positional variability in oxygen partial pressure for bone and cartilage tissue engineering.
2017	X. Li, M.M. Honari, Y. Fu, A. Kumar, H. Saghlatoon	Self-Reinforcing Graphene Coatings On 3d Printed Elastomers For Flexible Radio Frequency Antennas And Strain Sensors
2018	T.D. Usal, D. Yucel, V. Hasirci	A Novel Gelma-Phema Hydrogel Nerve Guide For The Treatment Of Peripheral Nerve Damages
2018	Nemavhola, F., Dhlamini, S., Sigwadi, R. and Mokrani, T.	Effect of relative humidity on mechanical strength of zirconia/Nafion® Nano-composite membrane.
2018	S. Tukkan, D. Atila, A. Akdaq, A. Tezcaner	Fabrication Of Functionalized Citrus Pectin/Silk Fibroin Scaffolds For Skin Tissue Engineering.
2018	G. Griffanti, M. James-Bhasin, I. Donelli, G. Freddi, S.N. Nazhat	Functionalization Of Silk Fibroin Through Anionic Fibroin Derived Polypeptides
2018	N. Alejandro-Alba, R. Cutierrez-Contreras, Carlos Dorronsoro, S. Marcos	Intraocular Photobonding To Enable Accommodating Intraocular Lens Function
2018	R. Sigwadi, F. Nemavhola, M. Dhlamini, T. Mokrani	Mechanical Strength Of Nafion®/ZrO2 Nano-Composite Membrane
2018	X. Wang, J.A. Muniz-Lerma, O. Sanchez-Mata, M.A. Shandiz, M. Brochu	Microstructure And Mechanical Properties Of Stainless Steel 316L Vertical Struts Manufactured By Laser Powder Bed Fusion Process
2018	K. Jahan, M. Mekhail, M. Tabrizian	One-Step Fabrication Of Apatite-Chitosan Scaffold As A Potential Injectable Construct For Bone Tissue Engineering
2018	Jahan, K., Mekhail, M. and Tabrizian, M.	One-step fabrication of apatite-chitosan scaffold as a potential injectable construct for bone tissue engineering.
2018	Schimelman, M. Whitney, J. Steinauer, W. Xu, T.L. Yaksh, Q.T. Nguyen, S.Chen	Rapid Continuous 3d Printing Of Customizable Peripheral Nerve Guidance Conduits
2018	B. Patel, Z. Xu, C. Pinnock, L. S. Kabbani, M. T. Lam	Self-Assembled Collagen-Fibrin Hydrogel Reinforces Tissue Engineered Adventitia Vessels Seeded With Human Fibroblasts
2018	C.P. Kenaley, A. Sanin, J. Ackerman, J. Yoo, A. Alberts	Skin Stiffness In Ray-Finned Fishes: Contrasting Material Properties Between Species And Body Regions

2018	Tavakoli, J., Amin, D.B., Freeman, B.J. and Costi, J.J.	The biomechanics of the inter-lamellar matrix and the lamellae during progression to lumbar disc herniation: which is the weakest structure?
2018	Sigwadi, R., Dhlamini, M.S., Mokrani, T., Nonjola, P. and Nemavhola, F.	The impact of zirconia nano-rods on the methanol permeability and conductivity of Nafion®-ZrO2 nano-composite membrane.
2018	W. Zhu, S-H. Pyo, S. You, C. Yu, J. Alido, J. Liu, Y. Leong, S. Chen	Three-Dimensional Printing Of Bisphenol A-Free Polycarbonates
2019	G. Bahcecioglu, N. Hasirci, B. Bilgen, V. Hasirci	A 3d Printed Pcl/Hydrogel Construct With Zone-Specific Biochemical Composition Mimicking That Of The Meniscus
2019	S. Freeman, R. Ramos, P. Chando, L. Zhou, K. Reeser, S. Jin, P. Soman, K. Ye	A Bioink Blend for Rotary 3D Bioprinting Tissue Engineered Small-Diameter Vascular Constructs
2019	H. A. Alam, A. D. Dalgic, A. Tezcaner, C. Ozen, D. Keskin	A Comparative Study Of Monoaxial And Coaxial Pcl/Gelatin/Poloxamer 188 Scaffolds For Bone Tissue Engineering
2019	Usal, T.D., Yucel, D. and Hasirci, V.	A novel GelMA-pHEMA hydrogel nerve guide for the treatment of peripheral nerve damages.
2019	H. Derakhshandeh	A Smart Bandage Equipped with Miniaturized Needle Arrays and Wirelessly-Controlled Drug Delivery System for the Treatment of Chronic Wounds
2019	P. Comeau, T. Willett	An Alternative Approach to the Surface Methacrylation of Non-stoichiometric Hydroxyapatite Nanoparticles for Use in Bone-Inspired Composites
2019	G. Bahcecioglu, N. Hasirci, B. Bilgen, V. Hasirci	Anatomical Meniscus Construct with Zone Specific Biochemical Composition and Structural Organization
2019	S. Lin, X. Liu, J. Liu, H. Yuk, H. C. Loh, G. A. Parada, C. Settens, J. Song, A. Masic, G. H. McKinley, X. Zhao	Anti-Fatigue-Fracture Hydrogels
2019	X. Wang, J.A. Muniz-Lerma, O. Sanchez-Mata, M.A. Shandiz, N. Brodusch, R. Gauvin, M. Brochu	Characterization Of Single Crystalline Austenitic Stainless Steel Thin Struts Processed By Laser Powder Bed Fusion
2019	D. Wirth, J. Pokorski	Design and fabrication of a low-cost pilot-scale melt-processing system
2019	N. Sharma	Design of cell-instructiv Design of cell-instructive biomaterial scaffolds for inter e biomaterial scaffolds for intervertebral disc regeneration
2019	R. M. Rad, D. Atila, Z. Evis, D. Keskin, A. Tezcaner	Development of a Novel Functionally Graded Membrane Containing Boron Modified Bioactive Glass Nanoparticles for Guided Bone Regeneration
2019	A. Prince	Development of in-situ Forming Hydrogels for Intra-articular Drug Delivery
2019	D. A. Prince, I. J. Villamagna, C. C. Hopkins, J. R. de Bruyn, E. R. Gillies	Effect Of Drug Loading On The Properties Of Temperature-Responsive Polyester-Poly(Ethylene Glycol)-Polyester Hydrogels
2019	R. Sigwadi, F. Nemavhola, M. Dhlamini, T. Mokrani	Enhancing the Mechanical Properties of Zirconia/Nafion® Nanocomposite Membrane through Carbon Nanotubes for Fuel Cell Application
2019	R. M. Rad, D. Atila, E. E. Akgun, Z. Evis, D. Keskin, A. Tezcaner	Evaluation Of Human Dental Pulp Stem Cells Behavior On A Novel Nanobiocomposite Scaffold Prepared For Regenerative Endodontics
2019	A. Cullen, A. Price	Fabrication of 3D Conjugated Polymer Structures via Vat Polymerization Additive Manufacturing
2019	Li, Y., Guo, F., Hao, Y., Gupta, S.K., Hu, J., Wang, Y., Wang, N., Zhao, Y. and Guo, M.	Helical nanofiber yarn enabling highly stretchable engineered microtissue.
2019	M. Uyaniklar, G. Günal, A. Tevlek, P. Hosseinian, H. Aydin	Hybrid Cornea: Cell Laden Hydrogel Incorporated Decellularized Matrix

2019	J. Ortiz Ortiz, G. Carbajal de la Torre, M. Villagomez Galindo, M. Antonio Espinosa Medina, H. Aguilar Rodriguez	Hyperelastic characterization of synthetic mesh for abdominal wall hernia repair
2019	Liu, X., Steiger, C., Lin, S., Parada, G.A., Liu, J., Chan, H.F., Yuk, H., Phan, N.V., Collins, J., Tamang, S. and Traverso, G.	Ingestible hydrogel device.
2019	Shridhar, A., Amsden, B.G., Gillies, E.R. and Flynn, L.E.	Investigating the effects of tissue-specific extracellular matrix on the adipogenic and osteogenic differentiation of human adipose-derived stromal cells within composite hydrogel scaffolds.
2019	S. Qiu	Materials and Processing for Wearable Healthcare Electronics Systems: Flexible Circuit Boards and Stretchable e-Textile Patches for Surface Electromyography
2019	S. Lin, J. Liu, X. Liu, X. Zhao	Muscle-like Fatigue-Resistant Hydrogels by Mechanical Training
2019	N. Marins, B. Lee, R. Silva, A. Raghavan, N. Carreno, K. Grandfield	Niobium Pentoxide and Hydroxyapatite Particle Loaded Electrospun Polycaprolactone/Gelatin Membranes for Bone Tissue Engineering
2019	I. J. Villamagna, T. N. Gordon, M. B. Hurtig, F. Beier, E. R. Gillies	Poly(Ester Amide) Particles For Controlled Delivery Of Celecoxib
2019	S. Miar, C. Perez, J. Ong, T. Guda	Polyvinyl Alcohol-Poly Acrylic Acid Bilayer Oral Drug Delivery Systems: A Comparison Between Thin Films and Inverse Double Network Bilayers
2019	F. Nemavhola, R. Sigwadi	Prediction of Hyperelastic Material Properties of Nafion117 and Nafion/ZrO2 Nano-Composite Membrane
2019	E. Malikhhammadov, T. E. Tanir, A. Kiziltay, N. Hasirci	Preparation And Characterization Of Poly (E-Caprolactone) Scaffolds Modified With Cell-Loaded Fibrin Gel
2019	P. Comeau, T. Willett	Printability of Methacrylated Gelatin upon Inclusion of a Chloride Salt and Hydroxyapatite Nano-Particles
2019	B. Lu, H. Yuk, S. Lin, N. Jian, K. Qu, J. Xu, X. Zhao	Pure PEDOT: PSS Hydrogels
2019	A. Walker, J. Kim, J. Wyatt, A. Terlouw, K. Balachandran, J. Wolchok	Repeated In Vitro Impact Conditioning Of Astrocytes Decreases The Expression And Accumulation Of Extracellular Matrix
2019	K. Guzman-Diaz, A. Alvarado-Gonzalez, D. Herrera, A. Hernandez-Reynoso, S. Rodriguez-Reynoso, A. Garcia-Gonzalez	Surface Representation of the Urinary Bladder and Bio-mechanical Analysis by Linear Dynamic Model
2019	Y. Liang	Synthesis of Crosslinkable Poly(ester amide)s for Cell Encapsulation and Delivery
2019	M. Harvey-Burgess, D. Gregory	The Effect of Axial Torsion on the Mechanical Properties of the Annulus Fibrosus
2019	Y. Luo, D. Mills	The Effect of Halloysite Addition on the Material Properties of Chitosan-Halloysite Hydrogel Composites
2019	R. Sigwadi, M. Dhlamini, T. Mokrani, F. Nemovhola, P. Nonjola, P. Msomi	The proton conductivity and mechanical properties of Nafion®/ ZrP nanocomposite membrane
2019	Charaya, H., La, T.G., Rieger, J. and Chung, H.J.	Thermochromic and Piezocapacitive Flexible Sensor Array by Combining Composite Elastomer Dielectrics and Transparent Ionic Hydrogel Electrodes.
2019	S. Lin	Tissue-like Hydrogels by Design
2019	Z. Lipsky, G. German	Ultraviolet Light Degrades the Mechanical and Structural Properties of Human Stratum Corneum
2020	Comeau, P. and Willett, T.	A Carbodiimide Coupling Approach for PEGylating GelMA and Further Tuning GelMA Composite Properties.

2020	Snider, E.J., Cornell, L.E., Acevedo, J.M., Gross, B., Edsall, P.R., Lund, B.J. and Zamora, D.O.	Development and characterization of a Benchtop corneal puncture injury Model.
2020	Jiang, X., Wu, S., Kuss, M., Kong, Y., Shi, W., Streubel, P.N., Li, T. and Duan, B.	3D printing of multilayered scaffolds for rotator cuff tendon regeneration.
2020	Hua, M., Wu, D., Wu, S., Ma, Y., Alsaïd, Y. and He, X.	4D Printable Tough and Thermoresponsive Hydrogels.
2020	Currie, H.A., Martin, N.F., Garcia, G.E., Davis, F.M. and Kemp, P.S.	A mechanical approach to understanding the impact of the nematode <i>Anguillicoloides crassus</i> on the European eel swimbladder.
2020	H. Derakhshandeh, D. Aghabaglou, A. McCarthy, A. Mostafavi, C. Wiseman, Z. Bonick, I. Ghanavati, S. Harris, C. Kreikemeier-Bower, S. Basri, J. Rosenbohm, R. Yang, P. Mostafalu, D. Orgill, A. Tamayol	A Wirelessly Controlled Smart Bandage with 3D-Printed Miniaturized Needle Arrays
2020	Mondal, D., Srinivasan, A., Comeau, P., Toh, Y.C. and Willett, T.L.	Acrylated epoxidized soybean oil/hydroxyapatite-based nanocomposite scaffolds prepared by additive manufacturing for bone tissue engineering.
2020	Wu, S., Kumar, V., Xiao, P., Kuss, M., Lim, J.Y., Guda, C., Butcher, J. and Duan, B.	Age related extracellular matrix and interstitial cell phenotype in pulmonary valves.
2020	Parfenov, V.A., Koudan, E.V., Krokhmal, A.A., Annenkova, E.A., Petrov, S.V., Pereira, F.D., Karalkin, P.A., Nezhurina, E.K., Gryadunova, A.A., Bulanova, E.A. and Sapozhnikov, O.A.	Biofabrication of a Functional Tubular Construct from Tissue Spheroids Using Magnetoacoustic Levitational Directed Assembly.
2020	Ma, Y., Hua, M., Wu, S., Du, Y., Pei, X., Zhu, X., Zhou, F. and He, X.	Bioinspired high-power-density strong contractile hydrogel by programmable elastic recoil.
2020	Bektas, C.K. and Hasirci, V.	Cell loaded 3D bioprinted GelMA hydrogels for corneal stroma engineering.
2020	Rad, R.M., Alshemary, A.Z., Evis, Z., Keskin, D. and Tezcaner, A.	Cellulose acetate-gelatin coated boron-bioactive glass biocomposite scaffolds for bone tissue engineering.
2020	Palomino-Durand, C., Lopez, M., Marchandise, P., Martel, B., Blanchemain, N. and Chai, F.	Chitosan/Polycyclodextrin (CHT/PCD)-Based Sponges Delivering VEGF to Enhance Angiogenesis for Bone Regeneration.
2020	Patel, B., Saliganan, D., Rteil, A., Kabbani, L. and Lam, M.	Decellularized Dermis Extracellular Matrix Alloderm as a Scaffold for Biological Engineered Blood Vessels.
2020	Amiel, A.G., Palomino-Durand, C., Maton, M., Lopez, M., Cazaux, F., Chai, F., Neut, C., Fognié, B., Martel, B. and Blanchemain, N.	Designed sponges based on chitosan and cyclodextrin polymer for a local release of ciprofloxacin in diabetic foot infections.
2020	E. Snider, L. Cornell, J. Acevedo, B. Gross, P. Edsall, B. Lund, D. Zamora	Development and Characterization of a Benchtop Corneal Puncture Injury Model
2020	Acosta, F.M., Jia, U.T.A., Stojkova, K., Howland, K.K., Guda, T., Pacelli, S., Brey, E.M. and Rathbone, C.R.	Diabetic Conditions Confer Metabolic and Structural Modifications to Tissue-Engineered Skeletal Muscle.
2020	Fathi-Achachelouei, M., Keskin, D., Bat, E., Vrana, N.E. and Tezcaner, A.	Dual growth factor delivery using PLGA nanoparticles in silk fibroin/PEGDMA hydrogels for articular cartilage tissue engineering.
2020	Guner, M.B., Dalgic, A.D., Tezcaner, A., Yilanci, S. and Keskin, D.	Dual phase scaffold produced by rotary jet spinning and electrospinning for tendon tissue engineering. Biomedical Materials.
2020	Brown, M.S., Mendoza, M., Chavoshnejad, P., Razavi, M.J., Mahler, G.J. and Koh, A.	Electronic-ECM: A Permeable Microporous Elastomer for an Advanced Bio-Integrated Continuous Sensing Platform.
2020	Jan, L., Maria, L., Niklas, P., Isaak, F., Christina, H. and Gerald, S.	Endothelial Safety and Efficacy of ex-vivo Collagen Cross Linking (CXL) of Human Corneal Transplants.
2020	L. Jan, L. Maria, P. Niklas, F. Isaak, H. Christina, S. Gerald	Endothelial Safety and Efficacy of ex-vivo Collagen Cross Linking (CXL) of Human Corneal Transplants

2020	Lee, C.H., Liu, Y., Moore, M., Ge, X. and Siddique, Z	Enhancement of Stay-at-Home Learning for the Biomechanics Laboratory Course During COVID-19 Pandemic.
2020	Zhang, J., Wu, C., Xu, Y., Chen, J., Ning, N., Yang, Z., Guo, Y., Hu, X. and Wang, Y.	Highly Stretchable and Conductive Self-Healing Hydrogels for Temperature and Strain Sensing and Chronic Wound Treatment.
2020	van Haften, E.E., Wissing, T.B., Kurniawan, N.A., Smits, A.I. and Bouten, C.V.	Human In Vitro Model Mimicking Material-Driven Vascular Regeneration Reveals How Cyclic Stretch and Shear Stress Differentially Modulate Inflammation and Matrix Deposition.
2020	He, Q., Laurence, D.W., Lee, C.H. and Chen, J.S.	Manifold learning based data-driven modeling for soft biological tissues.
2020	Dhandapani, N., Samuelsson, K., Sköld, M., Zohrevand, K. and German, G.K	Mechanical, compositional, and microstructural changes caused by human skin maceration.
2020	G. Isik, N. Hasirci, A. Tezcaner, A. Kiziltay	Multifunctional periodontal membrane for treatment and regeneration purposes
2020	Curatolo, A., Birkenfeld, J.S., Martinez-Enriquez, E., Germann, J.A., Muralidharan, G., Palací, J., Pascual, D., Eliasy, A., Abass, A., Solariski, J. and Karnowski, K.	Multi-meridian corneal imaging of air-puff induced deformation for improved detection of biomechanical abnormalities.
2020	Liang, N., Flynn, L.E. and Gillies, E.R.	Neutral, water-soluble poly (ester amide) hydrogels for cell encapsulation.
2020	McCormick, R., Pearce, I., Kaye, S. and Haneef, A.	Optimisation of a Novel Bio-Substrate as a Treatment for Atrophic Age-Related Macular Degeneration.
2020	Modulevsky, D.J., Cuerrier, C.M., Leblanc-Latour, M., Hickey, R.J., Obhi, R.J.K., Shore, I., Galuta, A., Walker, K.L., Tsai, E.C. and Pelling, A.E.	Plant Scaffolds Support Motor Recovery and Regeneration in Rat Spinal Cord Injury.
2020	O'Connor, N.A., Syed, A., Wong, M., Hicks, J., Nunez, G., Jitianu, A., Siler, Z. and Peterson, M.	Polydopamine Antioxidant Hydrogels for Wound Healing Applications.
2020	Gopi, S., Ramsay, B.A., Ramsay, J.A. and Kontopoulou, M.	Preparation, Characterization and Processing of PCL/PHO Blends by 3D Bioplotting.
2020	Gerdes, S., Mostafavi, A., Ramesh, S., Memic, A., Rivero, I.V., Rao, P. and Tamayol, A.	Process–Structure–Quality Relationships of Three-Dimensional Printed Poly (Caprolactone)-Hydroxyapatite Scaffolds.
2020	Aldosary, G., Tse, T., Arnaout, A., Caudrelier, J.M., Czynnyj, C., Romain, R., McLean, L., Footitt, C., Belec, J. and Vandervoort, E.	Radiological, dosimetric and mechanical properties of a deformable breast phantom for radiation therapy and surgical applications.
2020	Griffanti, G., Rezabeigi, E., Li, J., Murshed, M. and Nazhat, S.N.	Rapid biofabrication of printable dense collagen bioinks of tunable properties.
2020	Ghelani, R.N., Zwambag, D.P. and Gregory, D.E.	Rapid increase in intradiscal pressure in porcine cervical spine units negatively impacts annulus fibrosus strength.
2020	Gholizadeh, S., Allahyari, Z., Carter, R., Delgadillo, L., Blaquiére, M., Nougulier-Morin, F., Marchi, N. and Gaboriski, T.R.	Robust and Gradient Thickness Porous Membranes for In Vitro Modeling of Physiological Barriers.
2020	Lopez, L.I.V., Bronte, D., Germann, J. and Marcos, S.,	Scleral cross-linking using Rose Bengal-Green Light.
2020	Wang, X., Muñiz-Lerma, J.A., Sanchez-Mata, O., Atabay, S.E., Shandiz, M.A. and Brochu, M.	Single-crystalline-like stainless steel 316L with different geometries fabricated by laser powder bed fusion.
2020	Ho, Q.B. and Kontopoulou, M.	Stabilization of the cellular structure of polypropylene foams and secondary nucleation mechanism in the presence of graphene nanoplatelets.
2020	Inoue, A., Yuk, H., Lu, B. and Zhao, X.	Strong adhesion of wet conducting polymers on diverse substrates.
2020	Luo, Y., Humayun, A. and Mills, D.K	Surface Modification of 3D Printed PLA/Halloysite Composite Scaffolds with Antibacterial and Osteogenic Capabilities.
2020	Ramesh, S., Kovelakuntla, V., Meyer, A.S. and Rivero, I.V.	Three-dimensional printing of stimuli-responsive hydrogel with antibacterial activity.
2020	Duijvelshoff, R., Cabrera, M.S., Sanders, B., Dekker, S., Smits, A.I., Baaijens, F.P. and Bouten, C.V.	Transcatheter-Delivered Expandable Bioresorbable Polymeric Graft With Stenting Capacity Induces Vascular Regeneration.

2020	Smith, K.J., Mathur, M., Meador, W.D., Phillips-Garcia, B., Sugerman, G.P., Menta, A.K., Jazwiec, T., Malinowski, M., Timek, T.A. and Rausch, M.K.	Tricuspid Chordae Tendineae Mechanics: Insertion Site, Leaflet, and Size-Specific Analysis and Constitutive Modelling.
2020	Comeau, P.A. and Willett, T.L.	Triethyleneglycol dimethacrylate addition improves the 3D-printability and construct properties of a GelMA-nHA composite system towards tissue engineering applications.
2020	Luo, Y., Humayun, A. and Mills, D.	Zinc Doped Halloysite Cooperating with Polylactic Acid for Bone Regeneration.
2020	Portillo-Esquivel, L.E., Nanduri, V., Zhang, F., Liang, W. and Zhang, B.	z-Wire: A Microscaffold That Supports Guided Tissue Assembly and Intramyocardium Delivery for Cardiac Repair.