Year	Author	Title
2025	Hikage, Fumihito; Suzuki, Megumi; Sato, Tatsuya; Umetsu, Araya; Ogawa, Toshifumi; Nishikiori, Nami; Furuhashi, Masato; Ohguro, Hiroshi; Watanabe, Megumi	Effects of linsitinib on M22 and IGF:1-treated 3D spheroids of human orbital fibroblasts
2025	Xu, Rui; Fu, Xihong; Lun, Lerong; Jiang, Wenjing; Situ, Xuemei; Huang, Xiaobao; Xiong, Ying; Liu, Chun; Wang, Fang	Engineering a halloysite nanotube-enhanced hydrogel 3D skin model for modulated inflammation and accelerated wound healing
2025	Bider, Faina; Gunnella, Chiara; Reh, Jana T; Clejanu, Corina-Elena; Kuth, Sonja; Beltrán, Ana M; Boccaccini, Aldo R	Enhancing alginate dialdehyde-gelatin (ADA-GEL) based hydrogels for biofabrication by addition of phytotherapeutics and mesoporous bioactive glass nanoparticles (MBGNs)
2025	Touani, Francesco K.; Hamouda, Inès; Noiseux, Nicolas; Hoesli, Corinne; Sarkissian, Shant Der; Lerouge, Sophie	Injectable, cryopreservable mesenchymal stromal cell-loaded microbeads for pro-angiogenic therapy: in vitro proof-of-concept
2025	Serack, Fiona E.; Fennell, Kaylee A.; Iliopoulos, Christina; Walker, John T.; Ronald, John A.; Amsden, Brian G.; Hess, David A.; Flynn, Lauren E.	Probing the effects of polysaccharide hydrogel composition on the viability and pro-angiogenic function of human adipose-derived stromal cells
2025	Kopinski-Grünwald, Oliver; Schandl, Stephan; Gusev, Jegor; Chamalaki, Ourania Evangelia; Ovsianikov, Aleksandr	Surface Functionalization of Microscaffolds Produced by High-Resolution 3D Printing: A new Layer of Freedom
2024	Umetsu, Araya; Watanabe, Megumi; Sato, Tatsuya; Higashide, Megumi; Nishikiori, Nami; Furuhashi, Masato; Ohguro, Hiroshi	TGF-B effects on adipogenesis of 3T3 - L1 cells differ in 2D and 3D cell culture conditions
2024	Bider, Faina; Miola, Marta; Clejanu, Corina-Elena; Götzelmann, Johanna; Kuth, Sonja; Vernè, Enrica; Basu, Bikramjit; Boccaccini, Aldo R.	3D bioprinting of multifunctional alginate dialdehyde (ADA)–gelatin (GEL) (ADA-GEL) hydrogels incorporating ferulic acid
2024	Brill-Karniely, Yifat; Tischenko, Katerina; Benny, Ofra	Analyzing force measurements of multi-cellular clusters comprising indeterminate geometries
2024	Ohguro, Hiroshi; Watanabe, Megumi; Sato, Tatsuya; Nishikiori, Nami; Umetsu, Araya; Higashide, Megumi; Yano, Toshiyuki; Suzuki, Hiromu; Miyazaki, Akihiro; Takada, Kohichi; Uhara, Hisashi; Furuhashi, Masato; Hikage, Fumihito	Application of Single Cell Type-Derived Spheroids Generated by Using a Hanging Drop Culture Technique in Various In Vitro Disease Models: A Narrow Review
2024	Batasheva, Svetlana; Kotova, Svetlana; Frolova, Anastasia; Fakhrullin, Rawil	Atomic force microscopy for characterization of decellularized extracellular matrix (dECM) based materials
2024	Wu, Qinghua; Xue, Ruikang; Zhao, Yimu; Ramsay, Kaitlyn; Wang, Erika Yan; Savoji, Houman; Veres, Teodor; Cartmell, Sarah H.; Radisic, Milica	Automated fabrication of a scalable heart-on-a-chip device by 3D printing of thermoplastic elastomer nanocomposite and hot embossing

2024	Racca, Nicole M.; Dontu, Alexander; Riley, Kayle; Yolcu, Esma S.; Shirwan, Haval; Coronel, María M.	Bending the Rules: Amplifying PD-L1 Immunoregulatory Function Through Flexible Polyethylene Glycol Synthetic Linkers
2024	Casella, Alena; Lowen, Jeremy; Griffin, Katherine H.; Shimamoto, Nathan; Ramos-Rodriguez, David H.; Panitch, Alyssa; Leach, J. Kent	Conductive Microgel Annealed Scaffolds Enhance Myogenic Potential of Myoblastic Cells
2024	Hong, Xiaoqian; Tian, Geer; Dai, Binyao; Zhou, Xuhao; Gao, Ying; Zhu, Lianlian; Liu, Haoran; Zhu, Qinchao; Zhang, Liwen; Zhu, Yang; Ren, Daxi; Guo, Chengchen; Nan, Jinliang; Liu, Xianbao; Wang, Jian'an; Ren, Tanchen	Copper-loaded Milk-Protein Derived Microgel Preserves Cardiac Metabolic Homeostasis After Myocardial Infarction
2024	Chen, Si; Li, Meng; Michálek, Martin; Kaňková, Hana; Zhao, Liang; Boccaccini, Aldo R.; Galusek, Dušan; Zheng, Kai	Cross-linking of mesoporous bioactive glass nanoparticle incorporated gelatin hydrogels by tannic acid with enhanced mechanical performance and stability
2024	Ramos-Rodriguez, David H.; Fok, Shierly W.; Dorais, Connor J.; Filler, Andrea C.; Caserta, Mason; Leach, J. Kent	Decellularized Extracellular Matrix Improves Mesenchymal Stromal Cell Spheroid Response to Chondrogenic Stimuli
2024	Ko, Yeounju; Oh, Yoonjin; Park, Chan Ho; Kim, Shin-Hyun	Designing Tough Hydrogel Shells for Glucose Sensing
2024	Karyagina, Anna S.; Grishin, Alexander V.; Kudinova, Alina G.; Bulygina, Inna N.; Koudan, Elizaveta V.; Orlova, Polina A.; Datsenko, Vera P.; Zhulina, Anna V.; Grunina, Tatyana M.; Poponova, Maria S.; Krivozubov, Mikhail S.; Gromova, Maria S.; Strukova, Natalia V.; Generalova, Maria S.; Nikitin, Kirill E.; Shchetinin, Igor V.; Luchnikov, Lev O.;	Dual-Functional Implant Based on Gellan-Xanthan Hydrogel with Diopside, BMP-2 and Lysostaphin for Bone Defect Repair and Control of Staphylococcal Infection
2024	Karakaya, Emine; Gleichauf, Luisa; Schöbel, Lisa; Hassan, Ahmed; Soufivand, Anahita Ahmadi; Tessmar, Joerg; Budday, Silvia; Boccaccini, Aldo R.; Detsch, Rainer	Engineering peptide-modified alginate-based bioinks with cell-adhesive properties for biofabrication
2024	Kuth, Sonja; Boccaccini, Aldo R.	Enzymatic Insitu Crosslinking Can Improve Hydrogel Stability While Maintaining Matrix Stiffness
2024	Hassani, Iman; Anbiah, Benjamin; Moore, Andrew L.; Abraham, Peter T.; Odeniyi, Ifeoluwa A.; Habbit, Nicole L.; Greene, Michael W.; Lipke, Elizabeth A.	Establishment of a tissue-engineered colon cancer model for comparative analysis of cancer cell lines
2024	Sagheb, Isabel S.; Coonan, Thomas P.; Randall, R. Lor; Griffin, Katherine H.; Leach, J. Kent	Extracellular matrix production and oxygen diffusion regulate chemotherapeutic response in osteosarcoma spheroids
2024	Bider, Faina; Klotschan, Artem; Kuth, Sonja; Weisbach, Volker; Boccaccini, Aldo R.	Ferulic acid and human platelet lysate incorporated alginate dialdehyde-gelatin 3D (bio)printable hydrogels with biological activity
2024	Sumida, Takuya; Ogawa, Shou; Higo, Shuichiro; Kuramoto, Yuki; Eto, Ryo; Ikeda, Yoshihiko; Sun, Congcong; Li, Junjun; Liu, Li; Tabata, Tomoka; Asano, Yoshihiro; Shiba, Mikio; Akazawa, Yasuhiro; Nakamura, Daisuke; Oka, Takafumi; Ohtani, Tomohito; Sakata, Yasushi	Four cardiomyopathy patients with a heterozygous DSG2 p.Arg119Ter variant

2024	Lowen, Jeremy M.; Wheeler, Erika E.; Shimamoto, Nathan K.; Ramos-Rodriguez, David H.; Griffin, Katherine H.; Bond, Gabriella C.; Leach, J. Kent	Functionalized Annealed Microgels for Spatial Control of Osteogenic and Chondrogenic Differentiation
2024	Akhtar, Memoona; Peng, Peixi; Bernhardt, Anne; Gelinsky, Michael; Ur Rehman, Muhammad Atiq; Boccaccini, Aldo R.; Basu, Bikramjit	Gelatin Methacryloyl (GelMA) - 45S5 Bioactive Glass (BG) Composites for Bone Tissue Engineering: 3D Extrusion Printability and Cytocompatibility Assessment Using Human Osteoblasts
2024	Smits, Josephina J. H. M.; Van Der Pol, Atze; Goumans, Marie José; Bouten, Carlijn V. C.; Jorba, Ignasi	GelMA hydrogel dual photo-crosslinking to dynamically modulate ECM stiffness
2024	Bannerman, Dawn; Pascual-Gil, Simon; Wu, Qinghua; Fernandes, Ian; Zhao, Yimu; Wagner, Karl T.; Okhovatian, Sargol; Landau, Shira; Rafatian, Naimeh; Bodenstein, David F.; Wang, Ying; Nash, Trevor R.; Vunjak-Novakovic, Gordana; Keller, Gordon; Epelman, Slava; Radisic, Milica	Heart-on-a-Chip Model of Epicardial–Myocardial Interaction in Ischemia Reperfusion Injury
2024	Tang, Min; Qu, Yunjia; He, Peixiang; Yao, Emmie; Guo, Tianze; Yu, Di; Zhang, Nancy; Kiratitanaporn, Wisarut; Sun, Yazhi; Liu, Longwei; Wang, Yingxiao; Chen, Shaochen	Heat-inducible CAR-T overcomes adverse mechanical tumor microenvironment in a 3D bioprinted glioblastoma model
2024	Kong, Jeong Sik; Kim, Joeng Ju; Riva, Leonardo; Ginestra, Paola Serena; Cho, Dong-Woo	In vitro three-dimensional volumetric printing of vitreous body models using decellularized extracellular matrix bioink
2024	Watanabe, Megumi; Tsugeno, Yuri; Sato, Tatsuya; Higashide, Megumi; Umetsu, Araya; Furuhashi, Masato; Ohguro, Hiroshi	Inhibition of mTOR differently modulates planar and subepithelial fibrogenesis in human conjunctival fibroblasts
2024	Watanabe, Megumi; Tsugeno, Yuri; Sato, Tatsuya; Higashide, Megumi; Nishikiori, Nami; Umetsu, Araya; Ogawa, Toshifumi; Furuhashi, Masato; Ohguro, Hiroshi	Lysophosphatidic Acid Modulates TGF-β2-Induced Biological Phenotype in Human Conjunctival Fibroblasts
2024	Cai, Grace; Li, Xinzhi; Lin, Shan-Shan; Chen, Samuel J.; Rodgers, Nicole C.; Koning, Katherine M.; Bi, Dapeng; Liu, Allen P.	Matrix confinement modulates 3D spheroid sorting and burst-like collective migration
2024	Davidson, Christopher D.; Midekssa, Firaol S.; DePalma, Samuel J.; Kamen, Jordan L.; Wang, William Y.; Jayco, Danica Kristen P.; Wieger, Megan E.; Baker, Brendon M.	Mechanical Intercellular Communication via Matrix-Borne Cell Force Transmission During Vascular Network Formation
2024	Fouladgar, Farzaneh; Zadeh Moslabeh, Forough Ghasem; Kasani, Yashesh Varun; Rogozinski, Nick; Torres, Marc; Ecker, Melanie; Yang, Huaxiao; Yang, Yong; Habibi, Neda	Mesenchymal stem cells aligned and stretched in self-assembling peptide hydrogels
2024	Hamonangan, Wahyu Martumpal; Lee, Sangmin; Choi, Ye Hun; Li, Wanzhao; Tai, Meiling; Kim, Shin-Hyun	Microballoons: Osmotically-inflated elastomer shells for ultrafast release of encapsulants and mechanical energy
2024	Watanabe, Megumi; Sato, Tatsuya; Yano, Toshiyuki; Higashide, Megumi; Ogawa, Toshifumi; Nishikiori, Nami; Furuhashi, Masato; Ohguro, Hiroshi	mTOR Inhibitors Modulate the Biological Nature of TGF-β2-Treated or -Untreated Human Trabecular Meshwork Cells in Different Manners

2024	Mao, Zhengyi; Yao, Yao; Shen, Junda; Liu, Jiahua; Chen, Yuhan; Zhou, Binbin; Chen, Yingxian; Wang, Qiliang; Lu, Jian	Passive interfacial cooling-induced sustainable electricity–water cogeneration
2024	Hu, Qichan; Torres, Marc A.; Pan, Hongjun; Williams, Steven L.; Ecker, Melanie	Precision Engineering of Chondrocyte Microenvironments: Investigating the Optimal Reaction Conditions for Type B Gelatin Methacrylate Hydrogel Matrix for TC28a2 Cells
2024	Umetsu, Araya; Ida, Yosuke; Sato, Tatsuya; Higashide, Megumi; Nishikiori, Nami; Furuhashi, Masato; Ohguro, Hiroshi; Watanabe, Megumi	RHO-Associated Coiled-Coil-Containing Protein Kinase Inhibitors Significantly Modulate the Epithelial–Mesenchymal Transition Induced by TGF-β2 in the 2-D and 3-D Cultures of Human Corneal Stroma Fibroblasts
2024	Kopinski-Grünwald, Oliver; Guillaume, Olivier; Ferner, Tamara; Schädl, Barbara; Ovsianikov, Aleksandr	Scaffolded spheroids as building blocks for bottom-up cartilage tissue engineering show enhanced bioassembly dynamics
2024	Hu, Qichan; Williams, Steven L.; Palladino, Alessandra; Ecker, Melanie	Screening of MMP-13 Inhibitors Using a GelMA-Alginate Interpenetrating Network Hydrogel-Based Model Mimicking Cytokine-Induced Key Features of Osteoarthritis In Vitro
2024	Mazari-Arrighi, Elsa; Lépine, Matthieu; Ayollo, Dmitry; Faivre, Lionel; Larghero, Jérôme; Chatelain, François; Fuchs, Alexandra	Self-Organization of Long-Lasting Human Endothelial Capillary-Like Networks Guided by DLP Bioprinting
2024	Nishikiori, Nami; Watanabe, Megumi; Sato, Tatsuya; Furuhashi, Masato; Okura, Masae; Hida, Tokimasa; Uhara, Hisashi; Ohguro, Hiroshi	Significant and Various Effects of ML329-Induced MITF Suppression in the Melanoma Cell Line
2024	Jalali, Sara; Kruppke, Iris; Enghardt, Stefan; Wiesmann, Hans-Peter; Kruppke, Benjamin	Silica Nanofibers with Enhanced Wettability and Mechanical Strength for Bone Tissue Engineering: Electrospinning without Polymer Carrier and Subsequent Heat Treatment
2024	Bell, Joseph A.; Davies, Elizabeth R.; Brereton, Christopher J.; Vukmirovic, Milica; Roberts, James J.W.; Lunn, Kerry; Wickens, Leanne; Conforti, Franco; Ridley, Robert A.; Ceccato, Jessica; Sayer, Lucy N.; Johnston, David A.; Vallejo, Andres F.; Alzetani, Aiman; Jogai, Sanjay; Marshall, Ben G.; Fabre, Aurelie; Richeldi, Luca; Monk, Phillip D.; Skipp	Spatial transcriptomic validation of a biomimetic model of fibrosis enables re-evaluation of a therapeutic antibody targeting LOXL2
2024	Nishikiori, Nami; Sato, Tatsuya; Ogawa, Toshifumi; Higashide, Megumi; Umetsu, Araya; Suzuki, Soma; Furuhashi, Masato; Ohguro, Hiroshi; Watanabe, Megumi	TGF-β Isoforms and Local Environments Greatly Modulate Biological Nature of Human Retinal Pigment Epithelium Cells
2024	Gorla, Shilpa; Choh, Vivian	The effect of zinc on the stiffness of chicken lenses
2024	Han, Hohyeon; Kim, Minji; Yong, Uijung; Jo, Yeonggwon; Choi, Yoo-mi; Kim, Hye Jin; Hwang, Dong Gyu; Kang, Dayoon; Jang, Jinah	Tissue-specific gelatin bioink as a rheology modifier for high printability and adjustable tissue properties
2024	Pragnere, Sarah; Courtial, Edwin-Joffrey; Dubreuil, Frédéric; Errazuriz-Cerda, Elisabeth; Marquette, Christophe; Petiot, Emma; Pailler-Mattei, Cyril	Tuning viscoelasticity and stiffness in bioprinted hydrogels for enhanced 3D cell culture: A multi-scale mechanical analysis

2024	Higashide, Megumi; Watanabe, Megumi; Sato, Tatsuya; Ogawa, Toshifumi; Umetsu, Araya; Suzuki, Soma; Furuhashi, Masato; Ohguro, Hiroshi; Nishikiori, Nami	Unexpected and Synergistical Effects of All-Trans Retinoic Acid and TGF-β2 on Biological Aspects of 2D and 3D Cultured ARPE19 Cells
2024	Dong, Da-Long; Jin, Guang-Zhen	YAP and ECM Stiffness: Key Drivers of Adipocyte Differentiation and Lipid Accumulation
2023	Xiang, Yi; Zhong, Zheng; Yao, Emmie J.; Kiratitanaporn, Wisarut; Suy, Malleeka T.; Chen, Shaochen	3D bioprinting of gene delivery scaffolds with controlled release
2023	Brill-Karniely, Yifat; Tischenko, Katerina; Benny, Ofra	Analyzing force measurements of multi-cellular clusters comprising indeterminate geometries
2023	Falcone, Giovanni; Kuth, Sonja; Boccaccini, Aldo R.; Aquino, Rita P.; Esposito, Tiziana; Russo, Paola	Application of Calcium Alginate Hydrogels in Semisolid Extrusion 3D Printed for the Production of Easy-to-Swallow Tablets
2023	Turhan, Emine Ayşe; Akbaba, Sema; Tezcaner, Ayşen; Evis, Zafer	Boron nitride nanofiber/Zn-doped hydroxyapatite/polycaprolactone scaffolds for bone tissue engineering applications
2023	Bikmulina, Polina; Kosheleva, Nastasia; Efremov, Yuri; Bakulina, Alesia; Kuryanova, Anastasia; Aksenova, Nadezhda; Shavkuta, Boris; Kotova, Svetlana; Shpichka, Anastasia; Timashev, Peter	Building a tissue: gingiva- and adipose-derived mesenchymal cell spheroids' survivability and functionality after 3D extrusion bioprinting
2023	Kosheleva, Nastasia V.; Efremov, Yuri M.; Koteneva, Polina I.; Ilina, Inna V.; Zurina, Irina M.; Bikmulina, Polina Y.; Shpichka, Anastasia I.; Timashev, Peter S.	Building a tissue: Mesenchymal and epithelial cell spheroids mechanical properties at micro- and nanoscale
2023	Kilian, David; Poddar, Aayush; Desrochers, Vanessa; Heinemann, Christiane; Halfter, Norbert; Liu, Suihong; Rother, Sandra; Gelinsky, Michael; Hintze, Vera; Lode, Anja	Cellular adhesion and chondrogenic differentiation inside an alginate-based bioink in response to tailorable artificial matrices and tannic acid treatment
2023	Lagneau, Nathan; Tournier, Pierre; Halgand, Boris; Loll, François; Maugars, Yves; Guicheux, Jérôme; Le Visage, Catherine; Delplace, Vianney	Click and bioorthogonal hyaluronic acid hydrogels as an ultra-tunable platform for the investigation of cell-material interactions
2023	Tournier, Pierre; Saint-Pé, Garance; Lagneau, Nathan; Loll, François; Halgand, Boris; Tessier, Arnaud; Guicheux, Jérôme; Visage, Catherine Le; Delplace, Vianney	Clickable Dynamic Bioinks Enable Post-Printing Modifications of Construct Composition and Mechanical Properties Controlled over Time and Space
2023	Kim, Jong Hyun; Hamonangan, Wahyu Martumpal; Kim, Shin-Hyun	Color-Tunable Elastic Photonic Shells With High Color Saturation and Deformability
2023	Schulik, Jana; Salehi, Sahar; Boccaccini, Aldo R.; Schrüfer, Stefan; Schubert, Dirk W.; Arkudas, Andreas; Kengelbach-Weigand, Annika; Horch, Raymund E.; Schmid, Rafael	Comparison of the Behavior of 3D-Printed Endothelial Cells in Different Bioinks

2023	Affonso de Oliveira, Jessica Fernanda; Zhao, Zhongchao; Xiang, Yi; Shin, Matthew D.; Villaseñor, Kathleen Elizabeth; Deng, Xinyi; Shukla, Sourabh; Chen, Shaochen; Steinmetz, Nicole F.	COVID-19 vaccines based on viral nanoparticles displaying a conserved B-cell epitope show potent immunogenicity and a long-lasting antibody response
2023	Yen, Feng-Chun; Glusac, Jovana; Levi, Shira; Zernov, Anton; Baruch, Limor; Davidovich-Pinhas, Maya; Fishman, Ayelet; Machluf, Marcelle	Cultured meat platform developed through the structuring of edible microcarrier-derived microtissues with oleogel-based fat substitute
2023	Sevastianov, Victor I.; Basok, Yulia B.; Grigoriev, Alexey M.; Nemets, Evgeny A.; Kirillova, Alexandra D.; Kirsanova, Liudmila A.; Lazhko, Aleksey E.; Subbot, Anastasia; Kravchik, Marina V.; Khesuani, Yusef D.; Koudan, Elizaveta V.; Gautier, Sergey V.	Decellularization of cartilage microparticles: Effects of temperature, supercritical carbon dioxide and ultrasound on biochemical, mechanical, and biological properties
2023	Chung, Andrew; Tavsanli, Burak; Gillies, Elizabeth R.	Degradation of oligo[poly(ethylene glycol) fumarate] hydrogels through stimulus-mediated pendent group cyclization
2023	Terek, Julia C.; Hebb, Matthew O.; Flynn, Lauren E.	Development of Brain-Derived Bioscaffolds for Neural Progenitor Cell Culture
2023	Rezabeigi, Ehsan; Griffanti, Gabriele; Nazhat, Showan N.	Effect of Fibrillization pH on Gelation Viscoelasticity and Properties of Biofabricated Dense Collagen Matrices via Gel Aspiration-Ejection
2023	Heinemann, Christiane; Buchner, Frauke; Lee, Poh Soo; Bernhardt, Anne; Kruppke, Benjamin; Wiesmann, Hans-Peter; Hintze, Vera	Effects of Gamma Irradiation and Supercritical Carbon Dioxide Sterilization on Methacrylated Gelatin/Hyaluronan Hydrogels
2023	Landry, Corey R.; Yip, Mighten C.; Zhou, Ying; Niu, Weibo; Wang, Yunmiao; Yang, Bo; Wen, Zhexing; Forest, Craig R.	Electrophysiological and morphological characterization of single neurons in intact human brain organoids
2023	Wang, Bryan Z.; Nash, Trevor R.; Zhang, Xiaokan; Rao, Jenny; Abriola, Laura; Kim, Youngbin; Zakharov, Sergey; Kim, Michael; Luo, Lori J.; Morsink, Margaretha; Liu, Bohao; Lock, Roberta I.; Fleischer, Sharon; Tamargo, Manuel A.; Bohnen, Michael; Welch, Carrie L.; Chung, Wendy K.; Marx, Steven O.; Surovtseva, Yulia V.; Vunjak-	Engineered cardiac tissue model of restrictive cardiomyopathy for drug discovery
2023	Rickabaugh, Emilee; Weatherston, Dillon; Harris, Thomas I.; Jones, Justin A.; Vargis, Elizabeth	Engineering a Biomimetic In Vitro Model of Bruch's Membrane Using Hagfish Slime Intermediate Filament Proteins
2023	Brown, Dillon M.; Yu, Jianshi; Kumar, Praveen; Paulus, Quinn M.; Kowalski, Michael A.; Patel, Jay M.; Kane, Maureen A.; Ethier, C. Ross; Pardue, Machelle T.	Exogenous All-Trans Retinoic Acid Induces Myopia and Alters Scleral Biomechanics in Mice
2023	Raha, Arjun; Wu, Yuning; Zhong, Lily; Raveenthiran, Jatheeshan; Hong, Minji; Taiyab, Aftab; Wang, Li; Wang, Bill; Geng, Fei	Exploring Piezo1, Piezo2, and TMEM150C in human brain tissues and their correlation with brain biomechanical characteristics
2023	Liu, Xinyue; Rao, Siyuan; Chen, Weixuan; Felix, Kayla; Ni, Jiahua; Sahasrabudhe, Atharva; Lin, Shaoting; Wang, Qianbin; Liu, Yuanyuan; He, Zhigang; Xu, Jingyi; Huang, Sizhe; Hong, Eunji; Yau, Todd; Anikeeva, Polina; Zhao, Xuanhe	Fatigue-resistant hydrogel optical fibers enable peripheral nerve optogenetics during locomotion

2023	Wu, Qinghua; Zhang, Peikai; O'Leary, Gerard; Zhao, Yimu; Xu, Yinghao; Rafatian, Naimeh; Okhovatian, Sargol; Landau, Shira; Valiante, Taufik A.; Travas-Sejdic, Jadranka; Radisic, Milica	Flexible 3D printed microwires and 3D microelectrodes for heart-on-a-chip engineering
2023	Paul, Sattwikesh; Schrobback, Karsten; Tran, Phong Anh; Meinert, Christoph; Davern, Jordan William; Weekes, Angus; Nedunchezhiyan, Udhaya; Klein, Travis Jacob	GelMA-glycol chitosan hydrogels for cartilage regeneration: The role of uniaxial mechanical stimulation in enhancing mechanical, adhesive, and biochemical properties
2023	Ichioka, Hanae; Hirohashi, Yoshihiko; Sato, Tatsuya; Furuhashi, Masato; Watanabe, Megumi; Ida, Yosuke; Hikage, Fumihito; Torigoe, Toshihiko; Ohguro, Hiroshi	G-Protein-Coupled Receptors Mediate Modulations of Cell Viability and Drug Sensitivity by Aberrantly Expressed Recoverin 3 within A549 Cells
2023	You, Shangting; Xiang, Yi; Hwang, Henry H.; Berry, David B.; Kiratitanaporn, Wisarut; Guan, Jiaao; Yao, Emmie; Tang, Min; Zhong, Zheng; Ma, Xinyue; Wangpraseurt, Daniel; Sun, Yazhi; Lu, Ting-yu; Chen, Shaochen	High cell density and high-resolution 3D bioprinting for fabricating vascularized tissues
2023	Jiang, Wensen; Glaeser, Juliane D.; Kaneda, Giselle; Sheyn, Julia; Wechsler, Jacob T.; Stephan, Stephen; Salehi, Khosrowdad; Chan, Julie L.; Tawackoli, Wafa; Avalos, Pablo; Johnson, Christopher; Castaneda, Chloe; Kanim, Linda E.A.; Tanasansomboon, Teerachat; Burda, Joshua E.; Shelest, Oksana; Yameen, Haneen; Perry, Tiffany G.;	Intervertebral disc human nucleus pulposus cells associated with back pain trigger neurite outgrowth in vitro and pain behaviors in rats
2023	Halfter, Norbert; Espinosa-Cano, Eva; Pontes-Quero, Gloria María; Ramírez-Jiménez, Rosa Ana; Heinemann, Christiane; Möller, Stephanie; Schnabelrauch, Matthias; Wiesmann, Hans-Peter; Hintze, Vera; Aguilar, Maria Rosa	Ketoprofen-Based Polymer-Drug Nanoparticles Provide Anti-Inflammatory Properties to HA/Collagen Hydrogels
2023	Shin, Dongjin S.; Touani, Francesco K.; Aboud, Damon G. K.; Kietzig, Anne-Marie; Lerouge, Sophie; Hoesli, Corinne A.	Mammalian cell encapsulation in monodisperse chitosan beads using microchannel emulsification
2023	Cai, Grace; Li, Xinzhi; Lin, Shan-Shan; Chen, Samuel; Koning, Katherine; Bi, Dapeng; Liu, Allen P.	Matrix stiffness modulates 3D spheroid sorting and burst-like collective migration
2023	Mostert, Dylan; Jorba, Ignasi; Groenen, Bart G. W.; Passier, Robert; Goumans, Marie-José T. H.; van Boxtel, Huibert A.; Kurniawan, Nicholas A.; Bouten, Carlijn V. C.; Klouda, Leda	Methacrylated human recombinant collagen peptide as a hydrogel for manipulating and monitoring stiffness-related cardiac cell behavior
2023	Nativel, Fabien; Smith, Audrey; Boulestreau, Jeremy; Lépine, Charles; Baron, Julie; Marquis, Melanie; Vignes, Caroline; Le Guennec, Yoan; Veziers, Joelle; Lesoeur, Julie; Loll, François; Halgand, Boris; Renard, Denis; Abadie, Jerome; Legoff, Benoit; Blanchard, Frederic; Gauthier, Olivier; Vinatier, Claire; Rieux, Anne des; Guicheux,	Micromolding-based encapsulation of mesenchymal stromal cells in alginate for intraarticular injection in osteoarthritis
2023	Jin, Zeqing; Hu, Grace; Zhang, Zhizhou; Yu, Shao-Yi; Gu, Grace X.	Modeling and analysis of post-processing conditions on 4D-bioprinting of deformable hydrogel-based biomaterial inks
2023	Kameda, Satoshi; Higo, Shuichiro; Shiba, Mikio; Kondo, Takumi; Li, Junjun; Liu, Li; Tabata, Tomoka; Inoue, Hiroyuki; Okuno, Shota; Ogawa, Shou; Kuramoto, Yuki; Yasutake, Hideki; Lee, Jong-Kook; Takashima, Seiji; Ikeda, Yoshihiko; Hikoso, Shungo; Miyagawa, Shigeru; Sakata, Yasushi	Modeling Reduced Contractility and Stiffness Using iPSC-Derived Cardiomyocytes Generated From Female Becker Muscular Dystrophy Carrier
2023	Lowen, Jeremy M.; Bond, Gabriella C.; Griffin, Katherine H.; Shimamoto, Nathan K.; Thai, Victoria L.; Leach, J. Kent	Multisized Photoannealable Microgels Regulate Cell Spreading, Aggregation, and Macrophage Phenotype through Microporous Void Space

2023	Kleuskens, Meike W. A.; Crispim, João F.; van Doeselaar, Marina; van Donkelaar, Corrinus C.; Janssen, Rob P. A.; Ito, Keita	Neo-cartilage formation using human nondegenerate versus osteoarthritic chondrocyte-derived cartilage organoids in a viscoelastic hydrogel
2023	Chepelova, Natalia; Antoshin, Artem; Voloshin, Sergei; Usanova, Anna; Efremov, Yuri; Makeeva, Maria; Evlashin, Stanislav; Stepanov, Mikhail; Turkina, Anna; Timashev, Peter	Oral Galvanism Side Effects: Comparing Alloy Ions and Galvanic Current Effects on the Mucosa-like Model
2023	Paul, Sattwikesh; Schrobback, Karsten; Tran, Phong Anh; Meinert, Christoph; Davern, Jordan William; Weekes, Angus; Klein, Travis Jacob	Photo-Cross-Linkable, Injectable, and Highly Adhesive GelMA-Glycol Chitosan Hydrogels for Cartilage Repair
2023	Nishikiori, Nami; Takada, Kohichi; Sato, Tatsuya; Miyamoto, Sho; Watanabe, Megumi; Hirakawa, Yui; Sekiguchi, Shohei; Furuhashi, Masato; Yorozu, Akira; Takano, Kenichi; Miyazaki, Akihiro; Suzuki, Hiromu; Ohguro, Hiroshi	Physical Properties and Cellular Metabolic Characteristics of 3D Spheroids Are Possible Definitive Indices for the Biological Nature of Cancer-Associated Fibroblasts
2023	Hazur, Jonas; Röder, Jonas; Czwalinna, Jonas; Schubert, Dirk W.; Boccaccini, Aldo R.	Pre-Crosslinking with Hydrogel Microparticles Enhances the Printability of Alginate-Based Inks
2023	Kornmuller, Anna; Cooper, Tyler T.; Jani, Ammi; Lajoie, Gilles A.; Flynn, Lauren E.	Probing the effects of matrix-derived microcarrier composition on human adipose-derived stromal cells cultured dynamically within spinner flask bioreactors
2023	Tsugeno, Yuri; Sato, Tatsuya; Watanabe, Megumi; Furuhashi, Masato; Ohguro, Hiroshi	Prostanoid FP and EP2 Receptor Agonists Induce Epithelial and Subepithelial Fibrogenetic Changes in Human Conjunctival Fibroblasts in Different Manners
2023	Cao, Chunyan; Huang, Tao; Li, Yunming	Resilient and Tough Conductive Polymer Hydrogel for a Low-Hysteresis Strain Sensor
2023	Jalali, Sara; Kruppke, Iris; Enghardt, Stefan; Wiesmann, Hans-Peter; Kruppke, Benjamin	Silica Nanofibers with Enhanced Wettability and Mechanical Strength for Bone Tissue Engineering: Electrospinning without Polymer Carrier and Subsequent Heat Treatment
2023	Hikage, Fumihito; Watanabe, Megumi; Sato, Tatsuya; Umetsu, Araya; Tsugeno, Yuri; Furuhashi, Masato; Ohguro, Hiroshi	Simultaneous Effects of a Selective EP2 Agonist, Omidenepag, and a Rho-Associated Coiled-Coil Containing Protein Kinase Inhibitor, Ripasudil, on Human Orbital Fibroblasts
2023	Tischenko, Katerina; Brill-Karniely, Yifat; Steinberg, Eliana; Segev-Yekutiel, Hadas; Benny, Ofra	Surface physical cues mediate the uptake of foreign particles by cancer cells
2023	Watanabe, Megumi; Tsugeno, Yuri; Sato, Tatsuya; Umetsu, Araya; Nishikiori, Nami; Furuhashi, Masato; Ohguro, Hiroshi	TGF-β Isoforms Affect the Planar and Subepithelial Fibrogenesis of Human Conjunctival Fibroblasts in Different Manners
2023	Umetsu, Araya; Ida, Yosuke; Sato, Tatsuya; Furuhashi, Masato; Ohguro, Hiroshi; Watanabe, Megumi	TGF-β2 Induces Epithelial–Mesenchymal Transitions in 2D Planer and 3D Spheroids of the Human Corneal Stroma Fibroblasts in Different Manners

2023	Mattiassi, Sabrina; Conner, Abigail A.; Feng, Fan; Goh, Eyleen L. K.; Yim, Evelyn K. F.	The Combined Effects of Topography and Stiffness on Neuronal Differentiation and Maturation Using a Hydrogel Platform
2023	Gorla, Shilpa; Choh, Vivian	The effect of zinc on the biomechanics of chicken lenses
2023	Shahriar, Md; Uddin, Md Mezbah; Mora, Eduardo Peña; Xu, Heqi; Zhang, Zhengyi; Xu, Changxue	Tuning physio-mechanical properties of graded micropillar polydimethylsiloxane substrates for cellular attachment and guided migration
2022	DeBrunner, M., Elliott, S., Evans, J., Bury, E., Avera, A. D., Kim, Y., & Koh, A. S.	Annealing for controlled galinstan oxide thin-film morphological and electromechanical properties.
2022	Li, M., Aveyard, J., Doherty, K. G., Deller, R. C., Williams, R. L., Kolegraff, K. N., ... & D'Sa, R. A.	Antimicrobial Nitric Oxide-Releasing Electrospun Dressings for Wound Healing Applications.
2022	Umetsu, A., Ida, Y., Sato, T., Watanabe, M., Tsugeno, Y., Furuhashi, M., ... & Ohguro, H.	Brimonidine Modulates the ROCK1 Signaling Effects on Adipogenic Differentiation in 2D and 3D 3T3-L1 Cells.
2022	Sun, L., Chen, Z., Xu, D., & Zhao, Y.	Electroconductive and Anisotropic Structural Color Hydrogels for Visual Heart-on-a-Chip Construction.
2022	Watanabe, M., Sato, T., Tsugeno, Y., Umetsu, A., Suzuki, S., Furuhashi, M., ... & Ohguro, H.	Human trabecular meshwork (HTM) cells treated with TGF-β2 or dexamethasone respond to compression stress in different manners.
2022	Rivera-Tarazona, L. K., Shukla, T., Singh, K. A., Gaharwar, A. K., Campbell, Z. T., & Ware, T. H.	4D printing of engineered living materials.
2022	Monavari, M., Medhekar, R., Nawaz, Q., Monavari, M., Fuentes-Chandía, M., Homaeigohar, S., & Boccaccini, A. R.	A 3D Printed Bone Tissue Engineering Scaffold Composed of Alginate Dialdehyde-Gelatine Reinforced by Lysozyme Loaded Cerium Doped Mesoporous Silica-Calcia Nanoparticles.
2022	Ida, Y., Sato, T., Umetsu, A., Watanabe, M., Furuhashi, M., Hikage, F., & Ohguro, H.	Addition of ROCK Inhibitors Alleviates Prostaglandin-Induced Inhibition of Adipogenesis in 3T3L-1 Spheroids.
2022	Nebel, S., Lux, M., Kuth, S., Bider, F., Dietrich, W., Egger, D., ... & Kasper, C.	Alginate Core–Shell Capsules for 3D Cultivation of Adipose-Derived Mesenchymal Stem Cells.
2022	Tsugeno, Y., Sato, T., Watanabe, M., Higashide, M., Furuhashi, M., Umetsu, A., ... & Ohguro, H.	All Trans-Retinoic Acids Facilitate the Remodeling of 2D and 3D Cultured Human Conjunctival Fibroblasts.

2022	Watanabe, M., Sato, T., Tsugeno, Y., Higashide, M., Furuhashi, M., Umetsu, A., ... & Ohguro, H.	All-trans Retinoic Acids Synergistically and Beneficially Affect In Vitro Glaucomatous Trabecular Meshwork (TM) Models Using 2D and 3D Cell Cultures of Human TM Cells.
2022	Brown, D. M., Kowalski, M. A., Paulus, Q. M., Yu, J., Kumar, P., Kane, M. A., ... & Pardue, M. T.	Altered Structure and Function of Murine Sclera in Form-Deprivation Myopia.
2022	Tsugeno, Y., Sato, T., Watanabe, M., Furuhashi, M., Umetsu, A., Ida, Y., ... & Ohguro, H.	Benzalkonium Chloride, Even at Low Concentrations, Deteriorates Intracellular Metabolic Capacity in Human Conjunctival Fibroblasts.
2022	Wangpraseurt, D., Sun, Y., You, S., Chua, S. T., Noel, S. K., Willard, H. F., ... & Chen, S.	Bioprinted Living Coral Microenvironments Mimicking Coral-Algal Symbiosis.
2022	Heid, S., Becker, K., Byun, J., Biermann, I., Neščáková, Z., Zhu, H., ... & Boccaccini, A. R.	Bioprinting with bioactive alginate dialdehyde-gelatin (ADA-GEL) composite bioinks: Time-dependent in-situ crosslinking via addition of calcium-silicate particles tunes in vitro stability of 3D bioprinted constructs.
2022	Kosheleva, N. V., Efremov, Y. M., Koteneva, P. I., Ilina, I. V., Zurina, I. M., Bikmulina, P. Y., ... & Timashev, P. S.	Building a tissue: Mesenchymal and epithelial cell spheroids mechanical properties at micro-and nanoscale.
2022	Shook, D. R., Wen, J. W., Rolo, A., O'Hanlon, M., Francica, B., Dobbins, D., ... & Keller, R. E.	Characterization of convergent thickening, a major convergence force producing morphogenic movement in amphibians.
2022	Zernov, A., Baruch, L., & Machluf, M	Chitosan-collagen hydrogel microparticles as edible cell microcarriers for cultured meat.
2022	Shajib, M. S., Futrega, K., Jacob Klein, T., Crawford, R. W., & Doran, M. R.	Collagenase treatment appears to improve cartilage tissue integration but damage to collagen networks is likely permanent.
2022	Suzuki, S., Furuhashi, M., Tsugeno, Y., Umetsu, A., Ida, Y., Hikage, F., ... & Watanabe, M.	Comparison of the Drug-Induced Efficacies between Omidenepag Isopropyl, an EP2 Agonist and PGF2α toward TGF-β2-Modulated Human Trabecular Meshwork (HTM) Cells.
2022	Koudan, E. V., Zorina, A. I., Levin, A. A., Pereira, F. D., Petrov, S. V., Karshieva, S. S., ... & Zorin, V. L.	Correlation of the regenerative potential of dermal fibroblasts in 2D culture with the biological properties of fibroblast-derived tissue spheroids.
2022	Sevastianov, V. I., Basok, Y. B., Grigoriev, A. M., Nemets, E. A., Kirillova, A. D., Kirsanova, L. A., ... & Gautier, S. V.	Decellularization of cartilage microparticles: Effects of temperature, supercritical carbon dioxide and ultrasound on biochemical, mechanical, and biological properties.
2022	Tavakoli, J., Shrestha, J., Bazaz, S. R., Rad, M. A., Warkiani, M. E., Raston, C. L., ... & Tang, Y.	Developing Novel Fabrication and Optimisation Strategies on Aggregation-Induced Emission Nanoprobe/Polyvinyl Alcohol Hydrogels for Bio-Applications.

2022	Kornmuller, A., & Flynn, L. E.	Development and characterization of matrix-derived microcarriers from decellularized tissues using electrospraying techniques.
2022	Long, L. Y., Liu, W., Li, L., Hu, C., He, S., Lu, L., ... & Wang, Y. B.	Dissolving microneedle-encapsulated drug-loaded nanoparticles and recombinant humanized collagen type III for the treatment of chronic wound via anti-inflammation and enhanced cell proliferation and angiogenesis.
2022	Seeto, W. J., Tian, Y., Pradhan, S., Minond, D., & Lipke, E. A.	Droplet Microfluidics-Based Fabrication of Monodisperse Poly (Ethylene Glycol)-Fibrinogen Breast Cancer Microspheres for Automated Drug Screening Applications.
2022	Iyer, K. S., Maruri, D. P., Peak, K. E., Schmidtke, D. W., Petroll, W. M., & Varner, V. D.	ECM stiffness modulates the proliferation but not the motility of primary corneal keratocytes in response to PDGF-BB.
2022	Gonzalez-Fernandez, T., Tenorio, A. J., Saiz Jr, A. M., & Leach, J. K.	Engineered Cell-Secreted Extracellular Matrix Modulates Cell Spheroid Mechanosensing and Amplifies Their Response to Inductive Cues for the Formation of Mineralized Tissues.
2022	Hassani, I., Anbiah, B., Kuhlers, P., Habbit, N. L., Ahmed, B., Heslin, M. J., ... & Lipke, E. A.	Engineered colorectal cancer tissue recapitulates key attributes of a patient-derived xenograft tumor line.
2022	Ramesh, P., Moskwa, N., Hanchon, Z., Koplas, A., Nelson, D. A., Mills, K. L., ... & Xie, Y.	Engineering cryoelectrospun elastin-alginate scaffolds to serve as stromal extracellular matrices.
2022	Fang, Y., Liang, S., Gao, J., Wang, Z., Li, C., Wang, R., & Yu, W.	Extracellular matrix stiffness mediates radiosensitivity in a 3D nasopharyngeal carcinoma model.
2022	Tsugeno, Y., Furuhashi, M., Sato, T., Watanabe, M., Umetsu, A., Suzuki, S., ... & Ohguro, H.	FGF-2 enhances fibrogenetic changes in TGF-β2 treated human conjunctival fibroblasts.
2022	Mueller, E., Xu, F., & Hoare, T.	FRESH Bioprinting of Dynamic Hydrazone-Cross-Linked Synthetic Hydrogels.
2022	Liu, C., Campbell, S. B., Li, J., Bannerman, D., Pascual-Gil, S., Kieda, J., ... & Radisic, M.	High Throughput Omnidirectional Printing of Tubular Microstructures from Elastomeric Polymers.
2022	Suzuki, S., Sato, T., Watanabe, M., Higashide, M., Tsugeno, Y., Umetsu, A., ... & Ohguro, H.	Hypoxia Differently Affects TGF-β2-Induced Epithelial Mesenchymal Transitions in the 2D and 3D Culture of the Human Retinal Pigment Epithelium Cells.
2022	Karshieva, Saida; Koudan, Elizaveta; Levin, Aleksandr; Petrov, Stanislav; Koshuba, Olesya; Kopylov, Alexey; Safonov, Andrey; Glinskaya, Elizaveta; Kasyanov, Vladimir; Osidak, Egor; Kovalev, Alexey; Mironov, Vladimir	In vivo preclinical evaluation of bioprinted human cartilage construct

2022	Shin, D. S., Touani, F. K., Aboud, D. G., Kietzig, A., Lerouge, S., & Hoesli, C. A.	Mesenchymal stromal cell encapsulation in uniform chitosan beads using microchannel emulsification.
2022	Long, L. Y., Hu, C., Liu, W., Wu, C., Lu, L., Yang, L., & Wang, Y. B.	Microfibrillated cellulose-enhanced carboxymethyl chitosan/oxidized starch sponge for chronic diabetic wound repair.
2022	Bekele, S., Singh, K., Helton, E., Farajollahi, S., Naik, R. R., Dennis, P., ... & Berry, R.	Molecular Dynamics Investigation into pH Dependent Metal Binding of the Intrinsically Disordered Worm Jaw Protein, Nvjp-1.
2022	Assen, F. P., Abe, J., Hons, M., Hauschild, R., Shamipour, S., Kaufmann, W. A., ... & Sixt, M.	Multitier mechanics control stromal adaptations in the swelling lymph node.
2022	Baltazar, T., Kajave, N. S., Rodriguez, M., Chakraborty, S., Jiang, B., Skardal, A., ... & Albanna, M. Z.	Native human collagen type I provides a viable physiologically relevant alternative to xenogeneic sources for tissue engineering applications: A comparative in vitro and in vivo study.
2022	Sousa, T., Kajave, N., Dong, P., Gu, L., Florczyk, S., & Kishore, V.	Optimization of Freeze-FRESH Methodology for 3D Printing of Microporous Collagen Constructs.
2022	Hamonangan, W. M., Lee, S., Choi, Y. H., Li, W., Tai, M., & Kim, S. H.	Osmosis-Mediated Microfluidic Production of Submillimeter-Sized Capsules with an Ultrathin Shell for Cosmetic Applications.
2022	Kim, J. H., Kim, J. B., Choi, Y. H., Park, S., & Kim, S. H.	Photonic Microbeads Templated by Oil-in-Oil Emulsion Droplets for High Saturation of Structural Colors.
2022	Zhong, Z., Wang, J., Tian, J., Deng, X., Balayan, A., Sun, Y., ... & Chen, S.	Rapid 3D bioprinting of a multicellular model recapitulating pterygium microenvironment.
2022	Chignola, R., Mainente, F., & Zoccatelli, G.	Rheology of individual chitosan and polyphenol/chitosan microparticles for food engineering.
2022	Ida, Y., Umetsu, A., Furuhashi, M., Watanabe, M., Tsugeno, Y., Suzuki, S., ... & Ohguro, H.	ROCK 1 and 2 affect the spatial architecture of 3D spheroids derived from human corneal stromal fibroblasts in different manners.
2022	Zhang, Y., Yin, P., Huang, J., Yang, L., Liu, Z., Fu, D., ... & Miao, Y.	Scalable and high-throughput production of an injectable platelet-rich plasma (PRP)/cell-laden microcarrier/hydrogel composite system for hair follicle tissue engineering.
2022	Lee, S., Hamonangan, W. M., Kim, J. H., & Kim, S. H.	Soft and Tough Microcapsules with Double-Network Hydrogel Shells.

2022	Wasim, M., Shi, F., Liu, J., Zhang, H., Zhu, K., & Tian, Z.	Synthesis and characterization of curcumin/MMT-clay-treated bacterial cellulose as an antistatic and ultraviolet-resistive bioscaffold.
2022	Günal, G., Zihna, G., Akel, H., Okan, M., Karaaslan, C., & Aydin, H. M.	Synthesis of hybrid myocardium constructs and in vitro characterization under mechanical stimulation.
2022	Ida, Y., Sato, T., Watanabe, M., Umetsu, A., Tsugeno, Y., Furuhashi, M., ... & Ohguro, H.	The Selective α1 Antagonist Tamsulosin Alters ECM Distributions and Cellular Metabolic Functions of ARPE 19 Cells in a Concentration-Dependent Manner.
2022	Patil, L. S., & Varner, V. D.	Toward Measuring the Mechanical Stresses Exerted by Branching Embryonic Airway Epithelial Explants in 3D Matrices of Matrigel.
2022	Habbit, N. L., Anbiah, B., Anderson, L., Suresh, J., Hassani, I., Eggert, M., ... & Lipke, E. A.	Tunable three-dimensional engineered prostate cancer tissues for in vitro recapitulation of heterogeneous in vivo prostate tumor stiffness.
2022	Isik, M., Okesola, B. O., Eylem, C. C., Kocak, E., Nemutlu, E., Emregul, E., ... & Derkus, B.	Tuning the Cell-Adhesive Properties of Two-Component Hybrid Hydrogels to Modulate Cancer Cell Behavior, Metastasis, and Death Pathways.
2022	Divya, G., Madhura, R., Khetan, V., Rishi, P., & Narayanan, J.	Understanding the mechano and chemo response of retinoblastoma tumor cells.
2021	Dillon M. Brown, Machelle T. Pardue and C. Ross Ethier	A biphasic approach for characterizing tensile, compressive and hydraulic properties of the sclera.
2021	Yosuke Ida, Megumi Watanabe, Araya Umetsu, Hiroshi Ohguro, Fumihito Hikage,	Addition of EP2 agonists to an FP agonist additively and synergistically modulates adipogenesis and the physical properties of 3D 3T3-L1 sphenoids.
2021	Fumihito Hikage, Hanae Ichioka, Megumi Watanabe, Araya Umetsu, Hiroshi Ohguro & Yosuke Ida	Addition of ROCK inhibitors to prostaglandin derivative (PG) synergistically affects adipogenesis of the 3D spheroids of human orbital fibroblasts (HOFs).
2021	Babak N. Safa, Thomas Read, Ross Ethier	Assessment of the Viscoelastic Mechanical Properties of the Porcine Optic Nerve Head using Micromechanical Testing and Finite Element Modeling.
2021	Watanabe, M.; Furuhashi, M.; Tsugeno, Y.; Ida, Y.; Hikage, F.; Ohguro, H.	Autotaxin May Have Lysophosphatidic Acid-Unrelated Effects on Three-Dimension (3D) Cultured Human Trabecular Meshwork (HTM) Cells.
2021	Zheng Zhong, Alis Balayan, Jing Tian, Yi Xiang, Henry H Hwang, Xiaokang Wu, Xiaoqian Deng, Jacob Schimelman, Yazhi Sun, Chao Ma, Aurelie Dos Santos, Shangting You, Min Tang, Emmie Yao, Xiaoao Shi, Nicole F Steinmetz, Sophie X Deng and Shaochen Chen	Bioprinting of dual ECM scaffolds encapsulating limbal stem/progenitor cells in active and quiescent statuses.

2021	Sophia Hauck, Paula Zager, Norbert Halfter, Elke Wandel, Marta Torregrossa, Ainur Kakpenova, Sandra Rother, Michelle Ordieres, Susann Räthel, Albrecht Berg, Stephanie Möller, Matthias Schnabelrauch, Jan C. Simon, Vera Hintze, Sandra Franz,	Collagen/hyaluronan based hydrogels releasing sulfated hyaluronan improve dermal wound healing in diabetic mice via reducing inflammatory macrophage activity.
2021	Michael Dattilo, Dillon Brown, C Ross Ethier	Comparison of Optic Nerve Sheath Material Properties in male and female rhesus macaque.
2021	Sarah Al-Maawi, Sandra Rother, Norbert Halfter, Karen M. Fiebig, Juliane Moritz, Stephanie Moeller, Matthias Schnabelrauch, Charles James Kirkpatrick, Robert Sader, Hans-Peter Wiesmann, Dieter Scharnweber, Vera Hintze, Shahram Ghanaati,	Covalent linkage of sulfated hyaluronan to the collagen scaffold Mucograft® enhances scaffold stability and reduces proinflammatory macrophage activation in vivo.
2021	Andrea Acunaa, Julian M.Jimeneza, Naomi Denekeb, Sean M.Rothenbergera Sarah Libringa, Luis Solorioac, Vitaliy L.Rayza, Chelsea S.Davisb, Sarah Calve	Design and validation of a modular micro-robotic system for the mechanical characterization of soft tissues.
2021	Anna Kornmuller, Lauren E. Flynn	Development and characterization of matrix-derived microcarriers from decellularized tissues using electrospraying techniques.
2021	Bin Zhang, Alexander K. Nguyen, Roger J. Narayan, Jie Huang	Direct ink writing of vancomycin-loaded polycaprolactone/ polyethylene oxide/ hydroxyapatite 3D scaffolds.
2021	Megumi Watanabe, Yosuke Ida, Hiroshi Ohguro, Chiaki Ota & Fumihito Hikage	Diverse effects of pan-ROCK and ROCK2 inhibitors on 2 D and 3D cultured human trabecular meshwork (HTM) cells treated with TGFβ2.
2021	Ferdous B. Finklea, Yuan Tian, Petra Kerscher, Wen J. Seeto, Morgan E. Ellis, Elizabeth A. Lipke,	Engineered cardiac tissue microsphere production through direct differentiation of hydrogel-encapsulated human pluripotent stem cells.
2021	T. Gonzalez-Fernandez, A. J. Tenorio, A. M. Saiz Jr, J. K. Leach	Engineered Cell-Secreted Extracellular Matrix Modulates Cell Spheroid Mechanosensing and Amplifies their Response to Inductive Cues for the Formation of Mineralized Tissues.
2021	Fazil E. Uslu, Christopher D. Davidson, Erik Mailand, Nikolaos Bouklas, Brendon M. Baker, Mahmut Selman Sakar	Engineered Extracellular Matrices with Integrated Wireless Microactuators to Study Mechanobiology.
2021	Watanabe, M., Ida, Y., Ohguro, H. et al.	Establishment of appropriate glaucoma models using dexamethasone or TGFβ2 treated three-dimension (3D) cultured human trabecular meshwork (HTM) cells.
2021	Shigeru Miyagawa, Takuji Kawamura, Emiko Ito, Maki Takeda, Hiroko Iseoka, Junya Yokoyama, Akima Harada, Noriko Mochizuki-Oda, Yukiko Imanishi-Ochi, Junjun Li, Masao Sasai, Fumiyo Kitaoka, Masaki Nomura, Naoki Amano, Tomoko Takahashi, Hiromi Dobi, Eiichi Morii, Yoshiki Sawa	Evaluation of the Efficacy and Safety of a Clinical Grade Human Induced Pluripotent Stem Cell-Derived Cardiomyocyte Patch: A Pre-Clinical Study.
2021	Mohammadi, M.R., Rodriguez, S.M., Luong, J.C. et al.	Exosome loaded immunomodulatory biomaterials alleviate local immune response in immunocompetent diabetic mice post islet xenotransplantation.

2021	Chun Liu, Miao Li, Zhao-Xia Dong, Dong Jiang, Xiaojing Li, Shuibin Lin, Demeng Chen, Xuenong Zou, Xing-Ding Zhang, Gary D. Luker,	Heterogeneous microenvironmental stiffness regulates pro-metastatic functions of breast cancer cells.
2021	Ying Lei, Luciano Bortolin, Frank Benesch-Lee, Teniola Oguntolu, Zhijie Dong, Narda Bondah, Kristen Billiar,	Hyaluronic acid regulates heart valve interstitial cell contraction in fibrin-based scaffolds.
2021	Elizaveta V. Koudan, Mikhail N. Zharkov, Mikhail V. Gerasimov, Saida Sh. Karshieva, Aleksandra D. Shirshova, Vladimir V. Chrishtop, Vladimir A. Kasyanov, Aleksandr A. Levin, Vladislav A. Parfenov, Pavel A. Karalkin, Frederico D. A. S. Pereira, Stanislav V. Petrov, Nikolay A. Pyataev, Yusef D. Khesuani, Vladimir A. Mironov, and Gleb B.	Magnetic Patterning of Tissue Spheroids Using Polymer Microcapsules Containing Iron Oxide Nanoparticles.
2021	Christopher D. Davidson, Samuel J. DePalma, William Y. Wang, Jordan L. Kamen, Danica Kristen P. Jayco, Brendon M. Baker	Mechanical intercellular communication via matrix-borne cell force transmission during vascular network formation.
2021	Manuel Alejandro Tamargo, Trevor Ray Nash, Sharon Fleischer, Youngbin Kim, Olaia Fernandez Vila, Keith Yeager, Max Summers, Yimu Zhao, Roberta Lock, Miguel Chavez, Troy Costa, and Gordana Vunjak-Novakovic	milliPillar: A Platform for the Generation and Real-Time Assessment of Human Engineered Cardiac Tissues.
2021	Pascal Morissette Martin, John T. Walker, Kellie J. Kim, Courtney R. Brooks, Fiona E. Serack, Anna Kornmuller, Laura Juignet, Amanda M. Hamilton, P. Joy Dunmore-Buyze, Maria Drangova, John A. Ronald, Lauren E. Flynn,	Modular cell-assembled adipose matrix-derived bead foams as a mesenchymal stromal cell delivery platform for soft tissue regeneration.
2021	Kevin J. De France, Fei Xu, Samaneh Toufanian, Katelyn J.W. Chan, Somiraa Said, Taylor C. Stimpson, Eduardo González-Martínez, Jose M. Moran-Mirabal, Emily D. Cranston, Todd Hoare	Multi-scale structuring of cell-instructive cellulose nanocrystal composite hydrogel sheets via sequential electrospinning and thermal wrinkling.
2021	Frank P. Assen, Miroslav Hons, Robert Hauschild, Shayan Shamipour, Jun Abe, Walter A. Kaufmann, Tommaso Costanzo, Gabriel Krens, Markus Brown, Burkhard Ludewig, Simon Hippenmeyer, Jens V. Stein, Carl-Philipp Heisenberg, Edouard Hannezo, Sanjiv A. Luther, Michael Sixt	Multi-tier mechanics control stromal adaptations in swelling lymph nodes.
2021	Anna Gryadunova, Jesil Kasamkattil, Max Hans Peter Gay, Boris Dasen, Karoliina Pelttari, Vladimir Mironov, Ivan Martin, Stefan Schären, Andrea Barbero, Olga Krupkova, Arne Mehrkens	Nose to Spine: spheroids generated by human nasal chondrocytes for scaffold-free nucleus pulposus augmentation.
2021	Yanbarisov R., Efremo Y., Kosheleva N., Timashev P., Vassilevski Y.	Numerical Modelling of Multicellular Spheroid Compression: Viscoelastic Fluid vs. Viscoelastic Solid
2021	Watanabe M., Ida Y., Furuhashi M., Tsugeno Y., Hikage F., Ohguro, H.	Pan-ROCK and ROCK2 Inhibitors Affect Dexamethasone-Treated 2D- and 3D-Cultured Human Trabecular Meshwork (HTM) Cells in Opposite Manners.
2021	Mikio Shiba, Shuichiro Higo, Takumi Kondo, Junjun Li, Li Liu, Yoshihiko Ikeda, Yasuaki Kohama, Satoshi Kameda, Tomoka Tabata, Hiroyuki Inoue, Satoki Nakamura, Maki Takeda, Emiko Ito, Seiji Takashima, Shigeru Miyagawa, Yoshiki Sawa, Shungo Hikoso, Yasushi Sakata	Phenotypic recapitulation and correction of desmoglein-2-deficient cardiomyopathy using human-induced pluripotent stem cell-derived cardiomyocytes .
2021	Jong Hyun Kim, Jong Bin Kim, Ye Hun Choi, Sanghyuk Park, Shin-Hyun Kim	Photonic Microbeads Templated by Oil-in-Oil Emulsion Droplets for High Saturation of Structural Colors.

2021	Ida Y., Furuhashi M., Watanabe, M., Umetsu A., Hikage F., Ohguro H.	Prostaglandin F2 and EP2 Agonists Exert Different Effects on 3D 3T3-L1 Spheroids during Their Culture Phase.
2021	Kaku Itoh, Yosuke Ida, Hiroshi Ohguro & Fumihito Hikage	Prostaglandin F2α agonists induced enhancement in collagen1 expression is involved in the pathogenesis of the deepening of upper eyelid sulcus.
2021	Hanae Ichioka, Yosuke Ida, Megumi Watanabe, Hiroshi Ohguro, Fumihito Hikage,	Prostaglandin F2α and EP2 agonists, and a ROCK inhibitor modulate the formation of 3D organoids of Grave's orbitopathy related human orbital fibroblasts.
2021	Min Tang, Shashi Kant Tiwari, Kriti Agrawal, Matthew Tan, Jason Dang, Trevor Tam, Jing Tian, Xueyi Wan, Jacob Schimelman, Shangting You, Qinghui Xia, Tariq M. Rana, Shaochen Chen	Rapid 3D Bioprinting of Glioblastoma Model Mimicking Native Biophysical Heterogeneity.
2021	Ida Y., Ichioka H., Furuhashi M., Hikage F., Watanabe M., Umetsu A., Ohguro H.	Reactivities of a Prostanoid EP2 Agonist, Omidenepag, Are Useful for Distinguishing between 3D Spheroids of Human Orbital Fibroblasts without or with Graves' Orbitopathy.
2021	Ida Y., Hikage F. & Ohguro, H.	ROCK inhibitors enhance the production of large lipid-enriched 3D organoids of 3T3-L1 cells.
2021	Fumihito Hikage, Hanae Ichioka, Megumi Watanabe, Araya Umetsu, Hiroshi Ohguro, Yosuke Ida	ROCK inhibitors modulate the physical properties and adipogenesis of 3D spheroids of human orbital fibroblasts in different manners.
2021	Oouchi Y., Watanabe M., Ida Y., Ohguro H., Hikage F.	Rosiglitasone and ROCK Inhibitors Modulate Fibrogenetic Changes in TGF-β2 Treated Human Conjunctival Fibroblasts (HconF) in Different Manners.
2021	Watanabe M, Ida Y, Furuhashi M, Tsugeno Y, Ohguro H, Hikage F.	Screening of the Drug-Induced Effects of Prostaglandin EP2 and FP Agonists on 3D Cultures of Dexamethasone-Treated Human Trabecular Meshwork Cells.
2021	Ida Y., Watanabe M., Ohguro H., Hikage F.	Simultaneous Use of ROCK Inhibitors and EP2 Agonists Induces Unexpected Effects on Adipogenesis and the Physical Properties of 3T3-L1 Preadipocytes.
2021	So Hyun Ahn, Medha Rath, Chen-Yu Tsao, William E. Bentley, and Srinivasa R. Raghavan	Single-Step Synthesis of Alginate Microgels Enveloped with a Covalent Polymeric Shell: A Simple Way to Protect Encapsulated Cells.
2021	Yosuke Ida, Araya Umetsu, Masato Furuhashi, Megumi Watanabe, Fumihito Hikage, Hiroshi Ohguro	The EP2 agonist, omidenepag, alters the physical stiffness of 3D spheroids prepared from human corneal stroma fibroblasts differently depending on the osmotic pressure.
2021	Gabriela S. Kronemberger, Anderson Beatrici, Gisele M. L. Dalmônico, André L. Rossi, Guilherme A. S. C. Miranda, Leonardo C. Boldrini, José Mauro Granjeiro, Leandra Santos Baptista	The hypertrophic cartilage induction influences the building-block capacity of human adipose stem/stromal cell spheroids for biofabrication.

2020	Afshar, M.E., Abraha, H.Y., Bakooshli, M.A., Davoudi, S., Thavandiran, N., Tung, K., Ahn, H., Ginsberg, H.J., Zandstra, P.W. and Gilbert, P.M.	A 96-well culture platform enables longitudinal analyses of engineered human skeletal muscle microtissue strength.
2020	Brown, D.M., Pardue, M.T. and Ethier, C.R.	A Biphasic Approach for Characterizing Tensile, Compressive, and Hydraulic Properties of the Sclera.
2020	Park, H., Collignon, A.M., Lepry, W.C., Ramirez-GarciaLuna, J.L., Rosenzweig, D.H., Chaussain, C. and Nazhat, S.N.	Acellular dense collagen-S53P4 bioactive glass hybrid gel scaffolds form more bone than stem cell delivered constructs.
2020	Wang, S., Maruri, D.P., Boothby, J.M., Lu, X., Rivera-Tarazona, L.K., Varner, V.D. and Ware, T.H.	Anisotropic, porous hydrogels templated by lyotropic chromonic liquid crystals.
2020	D. Wangpraseurt, S. You, F. Azam, G. Jacucci, O. Gaidarenko, M. Hildebrand, M. Kuhl, A. Smith, M. Davey, A. Smith, D. Deheyn, S. Chen, S. Vignolini	Bionic 3D Printed Corals.
2020	Tang, C., Brodie, P., Brunsting, M. and Tam, K.C.	Carboxylated Cellulose Cryogel Beads via a One-step Ester Crosslinking of Maleic Anhydride for Copper Ions Removal.
2020	Kosheleva, N.V., Efremov, Y.M., Shavkuta, B.S., Zurina, I.M., Zhang, D., Zhang, Y., Minaev, N.V., Gorkun, A.A., Wei, S., Shpichka, A.A. and Saburina, I.N.	Cell spheroid fusion: beyond liquid drops model.
2020	Li, J., Zhang, L., Yu, L., Minami, I., Miyagawa, S., Hörning, M., Dong, J., Qiao, J., Qu, X., Hua, Y. and Fujimoto, N.	Circulating re-entrant waves promote maturation of hiPSC-derived cardiomyocytes in self-organized tissue ring.
2020	Gryadunova, A.A., Koudan, E.V., Rodionov, S.A., Pereira, F.D.A.S., Meteleva, N.Y., Kasyanov, V.A., Parfenov, V.A., Kovalev, A.V., Khesuani, Y.D., Mironov, V.A. and Bulanova, E.A.	Cytoskeleton systems contribute differently to the functional intrinsic properties of chondrospheres.
2020	Rihani, R.T., Stiller, A.M., Usoro, J.O., Lawson, J., Kim, H., Black, B.J., Danda, V.R., Maeng, J., Varner, V.D., Ware, T.H. and Pancrazio, J.J.	Deployable, liquid crystal elastomer-based intracortical probes.
2020	M. Ruoß, S. Rebholz, M. Weimer, C. Grom-Baumgarten, K. Anthanasopulu, R. Kemkemer, H. Käß, S. Ehnert, A. Nussler	Development of Scaffolds with Adjusted Stiffness for Mimicking Disease-Related Alterations of Liver Rigidity.
2020	Liu, J., Miller, K., Ma, X., Dewan, S., Lawrence, N., Whang, G., Chung, P., McCulloch, A.D. and Chen, S.	Direct 3D bioprinting of cardiac micro-tissues mimicking native myocardium.
2020	Itoh, K., Ida, Y., Ohguro, H. and Hikage, F.	Enhancement of collagen 1 expression by prostaglandin F2α agonists is pivotally involved in the pathogenesis of deepening of the upper eyelid sulcus.

2020	Dattilo, Michael, Dillon Brown, and C. Ross Ethier.	Experimental measurement of optic nerve sheath material properties.
2020	Davidson, C.D., Jayco, D.K.P., Wang, W.Y., Shikanov, A. and Baker, B.M.	Fiber Crimp Confers Matrix Mechanical Nonlinearity, Regulates Endothelial Cell Mechanosensing, and Promotes Microvascular Network Formation.
2020	Kulwatno, J., Gearhart, J., Gong, X., Herzog, N., Getzin, M., Skobe, M. and Mills, K.L.	Growth of tumor emboli within a vessel model reveals dependence on the magnitude of mechanical constraint.
2020	H. Hwang, S. You, X. Ma, L. Kwe, G. Victorine, N. Lawrence, X. Wan, H. Shen, W. Zhu, S. Chen	High throughput direct 3D bioprinting in multiwell plates.
2020	Schmitt, T., Kajave, N., Cai, H.H., Gu, L., Albanna, M. and Kishore, V.	In vitro characterization of xeno-free clinically relevant human collagen and its applicability in cell-laden 3D bioprinting.
2020	Parfenov, V.A., Khesuani, Y.D., Petrov, S.V., Karalkin, P.A., Koudan, E.V., Nezhurina, E.K., Pereira, F.D., Krokhmal, A.A., Gryadunova, A.A., Bulanova, E.A. and Vakhrushev, I.V.	Magnetic levitational bioassembly of 3D tissue construct in space.
2020	DePalma, S.J., Davidson, C.D., Stis, A.E., Helms, A.S. and Baker, B.	Microenvironmental determinants of organized iPSC-cardiomyocyte tissues on synthetic fibrous matrices.
2020	E. Koudan, A. Gryadunova, P. Karalkin, J. Korneva, N. Meteleva, I. Babichenko, A. Volkov, S. Rodionov, V. Parfenov, F. Pereira, Y. Khesuani, V. Mironov, E. Bulanova	Multiparametric Analysis of Tissue Spheroids Fabricated from Different Types of Cells.
2020	C. Davidson, D. Jayco, D. Matera, S. DePalma, H. Hiraki, W. Wang, B. Baker	Myofibroblast activation in synthetic fibrous matrices composed of dextran vinyl sulfone.
2020	F. Xu, I. Gough, J. Dorogin, H. Sheardown, T. Hoare	Nanostructured Degradable Macroporous Hydrogel Scaffolds with Controllable Internal Morphologies via Reactive Electrospinning.
2020	Pang, Q., Zhao, J., Zhang, S. and Zhang, X.	Near-infrared triggered on-demand local anesthesia using a jammed microgels system.
2020	Ida, Y., Hikage, F., Umetsu, A., Ida, H. and Ohguro, H	Omidenepag, a non-prostanoid EP2 receptor agonist, induces enlargement of the 3D organoid of 3T3-L1 cells.
2020	Ahn, J., Ahn, J.H., Yoon, S., Son, M.Y., Cho, S. and Oh, J.H.	Quantification of non-alcoholic fatty liver disease progression in 3D liver microtissues using impedance spectroscopy.

2020	Zhong, Z., Deng, X., Wang, P., Yu, C., Kiratitanaporn, W., Wu, X., Schimelman, J., Tang, M., Balayan, A., Yao, E. and Tian, J.	Rapid bioprinting of conjunctival stem cell micro-constructs for subconjunctival ocular injection.
2020	Gong, X., Kulwatno, J. and Mills, K.L.	Rapid fabrication of collagen bundles mimicking tumor-associated collagen architectures.
2020	Ota, C., Ida, Y., Ohguro, H. and Hikage, F.	ROCK inhibitors beneficially alter the spatial configuration of TGFβ2-treated 3D organoids from a human trabecular meshwork (HTM).
2020	Kronemberger, G.S., Dalmônico, G.M., Rossi, A.L., Leite, P.E.C., Saraiva, A.M., Beatrici, A., Silva, K.R., Granjeiro, J.M. and Baptista, L.S.	Scaffold-and serum-free hypertrophic cartilage tissue engineering as an alternative approach for bone repair.
2020	C. Tang, P. Brodie, Y. Li, N. Grishkewich, M. Brunsting, K. Tam	Shape recoverable and mechanically robust cellulose aerogel beads for efficient removal of copper ions.
2020	Rivera-Tarazona, L.K., Bhat, V.D., Kim, H., Campbell, Z.T. and Ware, T.H.	Shape-morphing living composites.
2020	Tang, M., Xie, Q., Gimple, R.C., Zhong, Z., Tam, T., Tian, J., Kidwell, R.L., Wu, Q., Prager, B.C., Qiu, Z. and Yu, A.	Three-dimensional bioprinted glioblastoma microenvironments model cellular dependencies and immune interactions.
2019	Farajollahi, S., Dennis, P.B., Crosby, M.G., Slocik, J.M., Pelton, A.T., Hampton, C.M., Drummy, L.F., Yang, S.J., Silberstein, M.N., Gupta, M.K. and Naik, R.R.	Disulfide crosslinked hydrogels made from the Hydra stinging cell protein, Minicollagen-1.
2019	X. Ma, S. Dewan, J. Liu, M. Tang, K. Miller, C. Yu, N. Lawrence, A. McCulloch, S. Chen	3D printed micro-scale force gauge arrays to improve human cardiac tissue maturation and enable high throughput drug testing.
2019	M. E. Afshar, H. Y. Abraha, M. A. Bakooshli, S. Davoudi, N. Thavandiran, K. Tung, H. Ahn, H. Ginsberg, P. W. Zandstra, P. M. Gilbert	A 96-Well Culture Platform Enables Longitudinal Analyses Of Engineered Human Skeletal Muscle Microtissue Strength.
2019	Lee, B.E., Shahin-Shamsabadi, A., Wong, M.K., Raha, S., Selvaganapathy, P.R. and Grandfield, K.	A Bioprinted In Vitro Model for Osteoblast to Osteocyte Transformation by Changing Mechanical Properties of the ECM.
2019	Y. Zhao, E. Y. Wang, L. H. Davenport, Y. Liao, K. Yeager, G. Vunjak-Novakovic, M. Radisic, B. Zhang	A Multimaterial Microphysiological Platform Enabled By Rapid Casting Of Elastic Microwires.
2019	Y. Zhao, N. Rafatian, N. T. Feric, B. J. Cox, R. Aschar-Sobbi, E. Y. Wang, P. Aggarwal, B. Zhang, G. Conant, K. Ronaldson-Bouchard, A. Pahnke, S. Protze, J. H. Lee, L. D. Huyer, D. Jekic, A. Wickeler, H. E. Naguib, G. M. Keller, G. Vunjak-Novakovic, U. Broeckel, P. H. Backx, M. Radisic	A Platform For Generation Of Chamber-Specific Cardiac Tissues And Disease Modeling.

2019	Shahin-Shamsabadi, A. and Selvaganapathy, P.R.	A rapid biofabrication technique for self-assembled collagen-based multicellular and heterogeneous 3D tissue constructs.
2019	I. Cortes, R. A. M. Matsui, M. S. Azevedo, A. Beatrici, K. L. A. Souza, G. Launay, F. Delolme, J. M. Granjeiro, C. Moali, L. S. Baptista	A Scaffold- And Serum-Free Method To Mimic Human Stable Cartilage Validated By Secretome.
2019	W. Y. Wang, C. D. Davidson, D. Lin, B. M. Baker	Actomyosin Contractility-dependent Matrix Stretch and Recoil Induces Rapid Cell Migration.
2019	Dumont, C.M., Carlson, M.A., Munsell, M.K., Ciciriello, A.J., Strnadova, K., Park, J., Cummings, B.J., Anderson, A.J. and Shea, L.D.	Aligned hydrogel tubes guide regeneration following spinal cord injury.
2019	C. Ethier, D. Brown, E. Landis, M. Pardue	Biomechanical Characterization of Mouse Sclera in Myopia.
2019	J. N. Webb, E. Langille, F. Hafezi, J. B. Randleman, G. Scarcelli	Biomechanical Impact of Localized Corneal Cross-linking Beyond the Irradiated Treatment Area.
2019	E. Wang, N. Rafatian, Y. Zhao, A. Lee, B. Lai, R. Lu, D. Jekic, L. Huyer, E. Knee-Walden, S. Bhattacharya, P. Backx, M. Radisic	Biowire Model of Interstitial and Focal Cardiac Fibrosis.
2019	C. D. Davidson, W. Y. Wang, I. Zaimi, D. K. P. Jayco, B. M. Baker	Cell Force-Mediated Matrix Reorganization Underlies Multicellular Network Assembly.
2019	Y. Alinejad, C. Bitar, K. Villegas, S. Perignon, C. Hoesli, S. Lerouge	Chitosan Microbeads Produced by One-Step Scalable Stirred Emulsification: A Promising Process for Cell Therapy Applications.
2019	E. Boazak, J. d'Humieres, A. Read, C. Ethier	Compressive mechanical properties of rat and pig optic nerve head.
2019	Conrad, C., Gray, K.M., Stroka, K.M., Rizvi, I. and Scarcelli, G.	Mechanical Characterization of 3D Ovarian Cancer Nodules Using Brillouin Confocal Microscopy.
2019	A. Stiller, M. Gonzalez-Gonzalez, J. Boothby, S. Sherman, J. Benavides, M. Romero-Ortega, J. Pancrazio, B. Black	Mechanical considerations for design and implementation of peripheral intraneural devices.
2019	A. Smith, J. Boulestreau, M. Marquis, D. Renard, B. Legoff, F. Blanchard, C. Vinatier, J. Guicheux, A. des Rieux, C. Le Visage	Mesenchymal stem cell encapsulation in alginate micro-particles for intra-articular injection in osteoarthritis.

2019	J. M. Boothby, J. Samuel, T. H. Ware	Molecularly-ordered Hydrogels with Controllable, Anisotropic Stimulus Response.
2019	J. Liu, J. He, J. Liu, X. Ma, Q. Chen, N. Lawrence, W. Zhu, Y. Xu, S. Chen	Rapid 3d Bioprinting Of In-Vitro Cardiac Tissue Models Using Human Embryonic Stem Cell-Derived Cardiomyocytes.
2019	X. Gong, J. Kulwatno, K. Mills	Rapid fabrication of collagen bundles mimicking tumor-associated collagen signatures.
2019	J. Li, L. Zhang, L. Yu, I. Minami, M. Horning, J. Dong, J. Qiao, N. Fujimoto, Y. Shiba, Y. Zhao, F. Tang, S. Miyagawa, Y. Chen, Y. Sawa, C. Tang, L. Liu	Rapid pacing by circulating traveling waves improves maturation of hiPSC-derived cardiomyocytes in self-organized tissue ring.
2019	W. Seeto, Y. Tian S. Pradhan, P. Kerscher, E. Lipke	Rapid Production of Cell-Laden Microspheres Using a Flexible Microfluidic Encapsulation Platform.
2019	C. Yu, X. Ma, W. Zhu, P. Wang, Kathleen L. Miller, J. Stupin, A. Koroleva-Maharajh, A. Hairabedian, S. Chen	Scanningless And Continuous 3d Bioprinting Of Human Tissues With Decellularized Extracellular Matrix.
2019	M. Seong, J. Lee, I. Hwang, H. E. Jeong	Significant Adhesion Enhancement Of Bioinspired Dry Adhesives By Simple Thermal Treatment
2019	V. Huynh, A. D'Angelo, R. Wylie	Tunable Degradation of Low-Fouling Carboxybetaine-Hyaluronic Acid Hydrogels for Applications in Cell Encapsulation.
2018	Spackman, C.C., Nowak, J.F., Mills, K.L. and Samuel, J.	A Cohesive Zone Model for the Stamping Process Encountered During Three-Dimensional Printing of Fiber-Reinforced Soft Composites.
2018	P. Wang, X. Li, W. Zhu, Z. Zhong, A. Moran, W. Wang, K. Zhang, S. Chen	3d Bioprinting Of Hydrogels For Retina Cell Culturing.
2018	J. Krieger, B-W. Park, C.R. Lambert, C. Malcuit	3d Skeletal Muscle Fascicle Engineering Is Improved With Tgf-B1 Treatment Of Myogenic Cells And Their Co-Culture With Myofibroblasts.
2018	S. Pradhan, A.M. Smith, C.J. Garson, I. Hassani, W.J. Seeto, K. Pant, R.D. Arnold, B. Prabhakarpandian, E.A. Lipke	A Microvascularized Tumor-Mimetic Platform For Assessing Anti-Cancer Drug Efficacy.
2018	R. Santoro, S. Venkateswaran, F. Amandeo, R. Zhang, M. Brioschi, A. Callanan, M. Agrifoglio, C. Banfi, M. Bradley, M. Pesce	Acrylate-Based Materials For Heart Valve Scaffold Engineering.

2018	B. Sung, J. Krieger, B. Yu, M-H. Kim	Colloidal Gelatin Microgels With Tunable Elasticity Support The Viability And Differentiation Of Mesenchymal Stem Cells Under Pro-Inflammatory Conditions.
2018	K. Wang, D.T. Venetsanos, J. Wang, B.K. Pierscionek	Combined Use Of Parallel-Plate Compression And Finite Element Modeling To Analyze The Mechanical Properties Of Intact Porcine Lens.
2018	N.P. Omelyanenko, P.A. Karalkin, E.A. Bulanova	Extracellular Matrix Determines Biomechanical Properties Of Chondrospheres During Their Maturation In Vitro.
2018	M.K. Wong, S.A. Shawky, A. Aryasomayajula, M.A. Green, T. Ewart, P.R. Selvanganapathy, S. Raha	Extracellular Matrix Surface Regulates Self-Assembly Of Three-Dimensional Placental Trophoblast Spheroids.
2018	C. Liu, D.L. Mejia, B. Chiang, K.E. Luker, G.D. Luker	Hybrid Collagen Alginate Hydrogel As A Platform For 3d Tumor Spheroid Invasion.
2018	V. Huynh, A. H. Jesmer, M. M. Shoaib, R. G. Wylie	Influence Of Hydrophobic Cross-Linkers On Carboxybetaine Copolymer Stimuli Response And Hydrogel Biological Properties.
2018	C. Liu, B. Chiang, D.L. Mejia, K.E. Luker, G.D. Luker, A. Lee	Mammary Fibroblasts Remodel Fibrillar Collagen Microstructure In A Biomimetic Nanocomposite Hydrogel.
2018	P.M. Martin, A. Grant, D.W. Hamilton, L.E. Flynn	Matrix Composition In 3-D Collagenous Bioscaffolds Modulates The Survival And Angiogenic Phenotype Of Human Chronic Wound Dermal Fibroblasts.
2018	E. Lipke, W. Seeto, Y. Tian	Microfluidics Device for Fabrication of Large, Uniform, Injectable Hydrogel Microparticles for Cell Encapsulation.
2018	M.G. Jones, O.G. Andriotis, J.J.W. Roberts, K. Lunn, V.J. Tear, L.Cao, K. Ask, D.E. Smart, A. Bonfanti, P.Johnson, A. Alzetani, D.E. Davies	Nanoscale Dysregulation Of Collagen Structure-Function Disrupts Mechano-Homeostasis And Mediates Pulmonary Fibrosis.
2018	X. Ma, C. Yu, P. Wang, W. Xu, X. Wan, C.S.E. Lai, J. Liu, A. K-Maharajh, S. Chen	Rapid 3d Bioprinting Of Decellularized Extracellular Matrix With Regionally Varied Mechanical Properties And Biomimetic Microarchitecture.
2018	V. A. Parfenov, E.V. Koudan, E.A. Bulanova, A.D. Knyazeva, A.A. Gryadunova, O.F. Petrov, V.A. Mironov	Scaffold-Free, Label-Free And Nozzle-Free Biofabrication Technology Using Magnetic Levitational Assembly.
2018	Xu, F., Dodd, M., Sheardown, H. and Hoare, T.	Single-Step Reactive Electrospinning of Cell-Loaded Nanofibrous Scaffolds as Ready-to-Use Tissue Patches.

2018	A. Williams, J.F. Nowak, R. Dass, J. Samuel, K.L. Mills	Toward Morphologically Relevant Extracellular Matrix In Vitro Models: 3d Fiber Reinforced Hydrogels.
2018	Y.E. Arslan, Y.F. Galata, T.S. Arslan, B. Derkus	Trans-Differentiation Of Human Adipose-Derived Mesenchymal Stem Cells Into Cardiomyocyte-Like Cells On Decellularized Bovine Myocardial Extracellular Matrix-Based Films.
2018	H. Zhang, W. Han, J. Tavakoli, Y. Zhang, X. Lin, X. Lu, Y. Ma, Y. Tang	Understanding Interfacial Interactions Of Polydopamine And Glass Fiber And Their Enhancement Mechanisms In Epoxy-Based Laminates.
2017	S.Pradhan, J. M. Clary, D. Seliktar, E. A. Lipke	A Three-Dimensional Spheroidal Cancer Model Based On Peg-Fibrinogen Hydrogel Microspheres
2017	C. Yu, A. Kornmuller, C. Brown, T. Hoare, L.E. Flynn	Decellularized Adipose Tissue Microcarriers As A Dynamic Culture Platform For Human Adipose-Derived Stem/Stromal Cell Expansion
2017	Kerscher, P., Kaczmarek, J.A., Head, S.E., Ellis, M.E., Seeto, W.J., Kim, J., Bhattacharya, S., Suppiramaniam, V. and Lipke, E.A	Direct production of human cardiac tissues by pluripotent stem cell encapsulation in gelatin methacryloyl.
2017	W.J. Seeto, Y. Tian, R.L. Winter, F.J. Caldwell, A.A. Wooldridge, E.A. Lipke	Encapsulation Of Equine Endothelial Colony Forming Cells In Highly Uniform, Injectable Hydrogel Microspheres For Local Cell Delivery
2017	Lai, B.F.L., Huyer, L.D., Lu, R.X.Z., Drecun, S., Radisic, M. and Zhang, B.	InVADE: integrated vasculature for assessing dynamic events.
2017	D. Sivakumaran, E. Mueller, T. Hoare	Microfluidic Production Of Degradable Thermoresponsive Poly(N-Isopropylacrylamide)-Based Microgels
2017	F. Hached, C. Vinatier, P-G. Pinta, P. Hulin, C. Le Visage, P. Weiss, J. Guicheux, A. Billon-Chabaud, G. Grimandi	Polysaccharide Hydrogels Support The Long-Term Viability Of Encapsulated Human Mesenchymal Stem Cells And Their Ability To Secrete Immunomodulatory Factors
2017	N. Henry, J. Clouet, A. Fragale, L.Griveau, C. Chedevile, J. Veziers, P. Weiss, J. Le Bideau, J. Guicheaux, C. Le Visage	Pullulan Microbeads/Si-Hpmc Hydrogel Injectable System For The Sustained Delivery Of Gdf-5 And Tgf-B1: New Insight Into Intervertebral Disc Regenerative Medicine
2017	D. Gillies, W. Gamal, A. Downes, Y. Reinwald, Y. Yang, A.J. El Haj, P.O. Bagnaninchi	Real-Time And Non-Invasive Measurements Of Cell Mechanical Behaviour With Optical Coherence Phase Microscopy
2017	Stuart, M.P., Matsui, R.A., Santos, M.F., Côrtes, I., Azevedo, M.S., Silva, K.R., Beatrici, A., Leite, P.E.C., Falagan-Lotsch, P., Granjeiro, J.M. and Mironov, V.	Successful low-cost scaffold-free cartilage tissue engineering using human cartilage progenitor cell spheroids formed by micromolded nonadhesive hydrogel.

2017	H. Morita, S. Grigolon, M. Bock, S.F.G. Krens, G. Salbreux, C-P. Heisenberg	The Physical Basis Of Coordinated Tissue Spreading In Zebrafish Gastrulation
2017	F.E. Griffin, J. Schiavi, T.C. McDevitt, J.P. McGarry, L.M. McNamara	The Role Of Adhesion Junctions In The Biomechanical Behaviour And Osteogenic Differentiation Of 3d Mesenchymal Stem Cell Spheroids
2016	Hached, F., Vinatier, C., Pinta, P.G., Weiss, P., Le Visage, C., Hulin, P., Billon-Chabaud, A., Guicheux, J. and Grimandi, G.	Adipose derived stromal cells encapsulation in hydrogel particles: potential application to osteoarthritis.
2016	J. Zhang, B. Muirhead, M. Dodd, L. Liu, N. Mangiacotte, T. Hoare, S. Sheardown	An Injectable Hydrogel Prepared Using A Peg/Vitamin E Copolymer Facilitating Aqueous-Driven Gelation
2016	Vegas, A.J., Veiseh, O., Doloff, J.C., Ma, M., Tam, H.H., Bratlie, K., Li, J., Bader, A.R., Langan, E., Olejnik, K. and Fenton, P.	Combinatorial hydrogel library enables identification of materials that mitigate the foreign body response in primates.
2016	K.R. Silva, R.A. Rezende, F.D.A.S. Pereira, P. Gruber, M.P. Stuart, A. Ovsianikov, K. Brakke, V. Kasyanov, J.V.L. da Silva, J.M. Granjeiro, L.S. Baptista, V. Mironov	Delivery Of Human Adipose Stem Cells Spheroids Into Lockyballs
2016	Lian, W.S., Ko, J.Y. and Wang, F.S.	Differential characteristics between cartilage and bone marrow mesenchymal stem cells in osteoarthritic human knees.
2016	P. Kerscher, J.A. Kaczmarek, S.E. Head, M. Brazel, W. Seeto, S. Bhattacharya, J. Kim, V. Suppiramaniam, E.A. Lipke	Direct Production Of Human Cardiac Tissues By Pluripotent Stem Cell Encapsulation In Gelatin Methacryloyl
2016	Y. Wang, X. Yu, C. Baker, W.L. Murphy, T.C. McDevitt	Mineral Particles Modulate Osteo-Chondrogenic Differentiation Of Embryonic Stem Cell Aggregates
2016	S. Pradhan, I. Hassani, W.J. Seeto, E. A. Lipke	Peg-Fibrinogen Hydrogels For Three-Dimensional Breast Cancer Cell Culture
2016	F. Xu, H. Sheardown, T. Hoare	Reactive Eletrospinning Of Degradable Poly(Oligoethylene Glycol Methacrylate)-Based Nanofibrous Hydrogel Networks
2015	Quarta, M., Brett, J.O., DiMarco, R., De Morree, A., Boutet, S.C., Chacon, R., Gibbons, M.C., Garcia, V.A., Su, J., Shrager, J.B. and Heilshorn, S.	An artificial niche preserves the quiescence of muscle stem cells and enhances their therapeutic efficacy.
2015	P. Danilevicius, R.A. Rezende, F.D.A.S. Pereira, A. Selimis, V. Kasyanov, P.Y. Noritomi, J.V.L. da Silva, M.Chatzinikolaidou, M. Farsari, V. Mironov	Burr-Like, Laser-Made 3d Microscaffolds For Tissue Spheroid Encagement

2014	Wilson, J.L., Ali Naijia, M., Saeed, R., McDevitt, T.C.	Alginate Encapsulation Parameters Influence The Differentiation Of Microencapsulated Embryonic Stem Cell Aggregates
2014	M.A. Kinney, R.Saeed, T.C. McDevitt	Mesenchymal Morphogenesis Of Embryonic Stem Cells Dynamically Modulates The Biophysical Microtissue Niche
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