# Anthony Callanan

## List of Publications by Citations



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|---|---|---|---|
| 71 papers | 1,633 citations | 22 h-index | 38 g-index |
| 72 ext. papers | 1,898 ext. citations | 4.3 avg, IF | 5.18 L-index |

| # | Paper | IF | Citations |
|---|---|---|---|
| 71 | Fibrin: a natural biodegradable scaffold in vascular tissue engineering. *Cells Tissues Organs*, **2008**, 188, 333-46 | 2.1 | 139 |
| 70 | Anisotropic fibrous scaffolds for articular cartilage regeneration. *Tissue Engineering - Part A*, **2012**, 18, 2073-83 | 3.9 | 117 |
| 69 | Comparison of methods for whole-organ decellularization in tissue engineering of bioartificial organs. *Tissue Engineering - Part B: Reviews*, **2013**, 19, 194-208 | 7.9 | 112 |
| 68 | Vessel asymmetry as an additional diagnostic tool in the assessment of abdominal aortic aneurysms. *Journal of Vascular Surgery*, **2009**, 49, 443-54 | 3.5 | 103 |
| 67 | Combinatorial scaffold morphologies for zonal articular cartilage engineering. *Acta Biomaterialia*, **2014**, 10, 2065-75 | 10.8 | 101 |
| 66 | 3-D numerical simulation of blood flow through models of the human aorta. *Journal of Biomechanical Engineering*, **2005**, 127, 767-75 | 2.1 | 89 |
| 65 | ECM-based materials in cardiovascular applications: Inherent healing potential and augmentation of native regenerative processes. *International Journal of Molecular Sciences*, **2009**, 10, 4375-417 | 6.3 | 75 |
| 64 | 3D human liver tissue from pluripotent stem cells displays stable phenotype in vitro and supports compromised liver function in vivo. *Archives of Toxicology*, **2018**, 92, 3117-3129 | 5.8 | 60 |
| 63 | Effects of fiber orientation on the frictional properties and damage of regenerative articular cartilage surfaces. *Tissue Engineering - Part A*, **2013**, 19, 2300-10 | 3.9 | 44 |
| 62 | Blended electrospinning with human liver extracellular matrix for engineering new hepatic microenvironments. *Scientific Reports*, **2019**, 9, 6293 | 4.9 | 42 |
| 61 | A Drug-Induced Hybrid Electrospun Poly-Capro-Lactone: Cell-Derived Extracellular Matrix Scaffold for Liver Tissue Engineering. *Tissue Engineering - Part A*, **2017**, 23, 650-662 | 3.9 | 40 |
| 60 | Optimization of SDS exposure on preservation of ECM characteristics in whole organ decellularization of rat kidneys. *Journal of Biomedical Materials Research - Part B Applied Biomaterials*, **2017**, 105, 1352-1360 | 3.5 | 39 |
| 59 | High-throughput production of silk fibroin-based electrospun fibers as biomaterial for skin tissue engineering applications. *Materials Science and Engineering C*, **2020**, 112, 110939 | 8.3 | 37 |
| 58 | Xenogenic extracellular matrices as potential biomaterials for interposition grafting in urological surgery. *Journal of Urology*, **2010**, 184, 2246-53 | 2.5 | 36 |
| 57 | Evaluation of viability and proliferative activity of human urothelial cells cultured onto xenogenic tissue-engineered extracellular matrices. *Urology*, **2011**, 77, 1007.e1-7 | 1.6 | 34 |
| 56 | The effect of electrospun polycaprolactone scaffold morphology on human kidney epithelial cells. *Biomedical Materials (Bristol)*, **2017**, 13, 015006 | 3.5 | 30 |
| 55 | On the optimization of low-cost FDM 3D printers for accurate replication of patient-specific abdominal aortic aneurysm geometry. *3D Printing in Medicine*, **2018**, 4, 2 | 5 | 28 |

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| 54 | Novel phase separated polycaprolactone/collagen scaffolds for cartilage tissue engineering. *Biomedical Materials (Bristol)*, **2018**, 13, 051001 | 3.5 | 28 |
| 53 | A Non-woven Path: Electrospun Poly(lactic acid) Scaffolds for Kidney Tissue Engineering. *Tissue Engineering and Regenerative Medicine*, **2018**, 15, 301-310 | 4.5 | 27 |
| 52 | Nozzle-free electrospinning of Polyvinylpyrrolidone/Poly(glycerol sebacate) fibrous scaffolds for skin tissue engineering applications. *Medical Engineering and Physics*, **2019**, 71, 56-67 | 2.4 | 25 |
| 51 | New pulsatile hydrostatic pressure bioreactor for vascular tissue-engineered constructs. *Artificial Organs*, **2010**, 34, 153-8 | 2.6 | 25 |
| 50 | Use of the photoelastic method and finite element analysis in the assessment of wall strain in abdominal aortic aneurysm models. *Journal of Biomechanics*, **2012**, 45, 1759-68 | 2.9 | 22 |
| 49 | Construction and evaluation of urinary bladder bioreactor for urologic tissue-engineering purposes. *Urology*, **2011**, 78, 954-60 | 1.6 | 22 |
| 48 | Hybrid cardiovascular sourced extracellular matrix scaffolds as possible platforms for vascular tissue engineering. *Journal of Biomedical Materials Research - Part B Applied Biomaterials*, **2020**, 108, 910-924 | 3.5 | 18 |
| 47 | A soft 3D polyacrylate hydrogel recapitulates the cartilage niche and allows growth-factor free tissue engineering of human articular cartilage. *Acta Biomaterialia*, **2019**, 90, 146-156 | 10.8 | 16 |
| 46 | From scaffold to structure: the synthetic production of cell derived extracellular matrix for liver tissue engineering. *Biomedical Physics and Engineering Express*, **2018**, 4, 065015 | 1.5 | 16 |
| 45 | Mechanical characterisation of unidirectional and cross-directional multilayered urinary bladder matrix (UBM) scaffolds. *Medical Engineering and Physics*, **2012**, 34, 1368-74 | 2.4 | 16 |
| 44 | Realistic Temporal Variations of Shear Stress Modulate MMP-2 and MCP-1 Expression in Arteriovenous Vascular Access. *Cellular and Molecular Bioengineering*, **2009**, 2, 591-605 | 3.9 | 15 |
| 43 | Arrays of 3D double-network hydrogels for the high-throughput discovery of materials with enhanced physical and biological properties. *Acta Biomaterialia*, **2016**, 34, 104-112 | 10.8 | 14 |
| 42 | A combinatorial approach: Cryo-printing and electrospinning hybrid scaffolds for cartilage tissue engineering. *Bioprinting*, **2019**, 16, e00056 | 7 | 14 |
| 41 | Porcine extracellular matrix scaffolds in reconstructive urology: An ex vivo comparative study of their biomechanical properties. *Journal of the Mechanical Behavior of Biomedical Materials*, **2011**, 4, 375-82 | 4.1 | 14 |
| 40 | Fabrication of 3D cryo-printed scaffolds using low-temperature deposition manufacturing for cartilage tissue engineering. *Bioprinting*, **2018**, 10, e00033 | 7 | 14 |
| 39 | The effects of stent interaction on porcine urinary bladder matrix employed as stent-graft materials. *Journal of Biomechanics*, **2014**, 47, 1885-93 | 2.9 | 13 |
| 38 | Development of a rotational cell-seeding system for tubularized extracellular matrix (ECM) scaffolds in vascular surgery. *Journal of Biomedical Materials Research - Part B Applied Biomaterials*, **2014**, 102, 781-8 | 3.5 | 13 |
| 37 | Extracellular matrices as advanced scaffolds for vascular tissue engineering. *Bio-Medical Materials and Engineering*, **2009**, 19, 333-48 | 1 | 13 |

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| 36 | The effect of vessel material properties and pulsatile wall motion on the fixation of a proximal stent of an endovascular graft. *Medical Engineering and Physics*, **2011**, 33, 106-11 | 2.4 | 13 |
| 35 | Acoustic radiation force impulse imaging on ex vivo abdominal aortic aneurysm model. *Ultrasound in Medicine and Biology*, **2010**, 36, 821-32 | 3.5 | 13 |
| 34 | Influence of aorta extracellular matrix in electrospun polycaprolactone scaffolds. *Journal of Applied Polymer Science*, **2019**, 136, 48181 | 2.9 | 12 |
| 33 | Responsive poly (Eglutamic acid) fibres for biomedical applications. *Journal of Materials Chemistry B*, **2013**, 1, 1397-1401 | 7.3 | 11 |
| 32 | In vivo feasibility case study for evaluating abdominal aortic aneurysm tissue properties and rupture potential using acoustic radiation force impulse imaging. *Journal of the Mechanical Behavior of Biomedical Materials*, **2011**, 4, 507-13 | 4.1 | 11 |
| 31 | Acrylate-based materials for heart valve scaffold engineering. *Biomaterials Science*, **2017**, 6, 154-167 | 7.4 | 10 |
| 30 | Augmentation cystoplasty and extracellular matrix scaffolds: an ex vivo comparative study with autogenous detubularised ileum. *PLoS ONE*, **2011**, 6, e20323 | 3.7 | 9 |
| 29 | Integrational Technologies for the Development of Three-Dimensional Scaffolds as Platforms in Cartilage Tissue Engineering. *ACS Omega*, **2020**, 5, 12623-12636 | 3.9 | 8 |
| 28 | Mechanical characterisation of directionally frozen polycaprolactone scaffolds using 1,4-dioxane and glacial acetic acid for articular cartilage tissue engineering. *Biomedical Physics and Engineering Express*, **2018**, 4, 057004 | 1.5 | 8 |
| 27 | On the potential of hydrated storage for naturally derived ECMs and associated effects on mechanical and cellular performance. *Journal of Biomedical Materials Research - Part B Applied Biomaterials*, **2014**, 102, 89-97 | 3.5 | 8 |
| 26 | Rapid fabrication and screening of tailored functional 3D biomaterials. *Materials Science and Engineering C*, **2020**, 108, 110489 | 8.3 | 8 |
| 25 | Cell-seeded extracellular matrices for bladder reconstruction: an ex vivo comparative study of their biomechanical properties. *International Journal of Artificial Organs*, **2013**, 36, 251-8 | 1.9 | 7 |
| 24 | Controlling Electrospun Polymer Morphology for Tissue Engineering Demonstrated Using hepG2 Cell Line. *Journal of Visualized Experiments*, **2020**, | 1.6 | 6 |
| 23 | Recent advancements in the bioprinting of vascular grafts. *Biofabrication*, **2021**, 13, | 10.5 | 6 |
| 22 | Architected fibrous scaffolds for engineering anisotropic tissues. *Biofabrication*, **2021**, 13, | 10.5 | 6 |
| 21 | Modulating electrospun polycaprolactone scaffold morphology and composition to alter endothelial cell proliferation and angiogenic gene response. *PLoS ONE*, **2020**, 15, e0240332 | 3.7 | 5 |
| 20 | Multiscale SAXS/WAXD characterisation of the deformation mechanisms of electrospun PCL scaffolds. *Polymer*, **2020**, 203, 122775 | 3.9 | 5 |
| 19 | Evaluation of xenogenic extracellular matrices as adjuvant scaffolds for the treatment of stress urinary incontinence. *International Urogynecology Journal*, **2013**, 24, 2105-10 | 2 | 4 |

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| 18 | Finite element and photoelastic modelling of an abdominal aortic aneurysm: a comparative study. *Computer Methods in Biomechanics and Biomedical Engineering*, **2012**, 15, 1111-9 | 2.1 | 4 |
| 17 | A modified 3D printer as a hybrid bioprinting-electrospinning system for use in vascular tissue engineering applications. *Medical Engineering and Physics*, **2021**, 94, 52-60 | 2.4 | 4 |
| 16 | From Tension to Compression: Asymmetric Mechanical Behaviour of Trabecular Bone's Organic Phase. *Annals of Biomedical Engineering*, **2018**, 46, 801-809 | 4.7 | 3 |
| 15 | Electrospinning Fabrication Methods to Incorporate Laminin in Polycaprolactone for Kidney Tissue Engineering. *Tissue Engineering and Regenerative Medicine*, **2021**, 1 | 4.5 | 3 |
| 14 | The use of antifreeze proteins to modify pore structure in directionally frozen alginate sponges for cartilage tissue engineering. *Biomedical Physics and Engineering Express*, **2020**, 6, 055016 | 1.5 | 3 |
| 13 | Response differences of HepG2 and Primary Mouse Hepatocytes to morphological changes in electrospun PCL scaffolds. *Scientific Reports*, **2021**, 11, 3059 | 4.9 | 3 |
| 12 | Development of a Bladder Bioreactor for Tissue Engineering in Urology. *Methods in Molecular Biology*, **2016**, 1502, 213-21 | 1.4 | 2 |
| 11 | Electrospun fibre diameter and its effects on vascular smooth muscle cells. *Journal of Materials Science: Materials in Medicine*, **2021**, 32, 131 | 4.5 | 2 |
| 10 | A Review of Validation Methods for the Intracranial Response of FEHM to Blunt Impacts. *Applied Sciences (Switzerland)*, **2020**, 10, 7227 | 2.6 | 2 |
| 9 | Influence of surface topography on PCL electrospun scaffolds for liver tissue engineering. *Journal of Materials Chemistry B*, **2021**, 9, 8081-8093 | 7.3 | 2 |
| 8 | Human biliary epithelial cells from discarded donor livers rescue bile duct structure and function in a mouse model of biliary disease.. *Cell Stem Cell*, **2022**, 29, 355-371.e10 | 18 | 2 |
| 7 | Secreted Endothelial Cell Factors Immobilized on Collagen Scaffolds Enhance the Recipient Endothelial Cell Environment. *BioResearch Open Access*, **2016**, 5, 61-71 | 2.4 | 1 |
| 6 | Production and Preparation of Porcine Urinary Bladder Matrix (UBM) for Urinary Bladder Tissue-Engineering Purposes. *Advances in Experimental Medicine and Biology*, **2021**, 1345, 119-128 | 3.6 | 1 |
| 5 | Modulating electrospun polycaprolactone scaffold morphology and composition to alter endothelial cell proliferation and angiogenic gene response **2020**, 15, e0240332 | | |
| 4 | Modulating electrospun polycaprolactone scaffold morphology and composition to alter endothelial cell proliferation and angiogenic gene response **2020**, 15, e0240332 | | |
| 3 | Modulating electrospun polycaprolactone scaffold morphology and composition to alter endothelial cell proliferation and angiogenic gene response **2020**, 15, e0240332 | | |
| 2 | Modulating electrospun polycaprolactone scaffold morphology and composition to alter endothelial cell proliferation and angiogenic gene response **2020**, 15, e0240332 | | |
| 1 | Modulation of Tissue Microenvironment Following Myocardial Infarction. *Advanced NanoBiomed Research*,2200005 | 0 | |