

Medical device (13)			
order	Paper #	Title	First Author
1	16-00972	Fabrication of PCL/PLA composite tube for stent manufacturing	Antonio J Guerra
2	16-01151	Suitability evaluation of various manufacturing technologies for the development of surgical snake-like manipulators from metals based on flexure hinges	Suat Coemert
3	17-00146	A review on surgical instruments of knee arthroscopic debridement and total hip arthroplasty	Zhihua Chen
4	17-00161	A comparison review on orthopaedics surgery using piezosurgery and conventional tools	Yue Zhang
5	Invited	Activity-based synthetic biomarkers that predict the onset of organ transplant rejection	Gabe A Kwong
6	17-00164	Image Processing for Autonomous Positioning of Eye Surgery Robot in Micro-Cannulation	Takashi Tayama
7	17-00165	Toward autonomous collision avoidance for robotic neurosurgery in deep and narrow spaces in the brain	Hiroaki Ueda
8	17-00172	Integrating cell sheets for organ-on-a-chip applications	William Loewenhardt
9	17-00175	Manufacturing Choices for Ankle-Foot Orthoses: A Multi-objective Optimization	Deema Totah
10	Invited	Vibration-assisted slicing of soft tissue for biopsy procedures	Marco Giovannini
11	16-01182	Workcell for Hybrid Medical Device Fabrication	Nicholas Ho
12	17-00181	Electromagnetic suspension system for control of limb volume in prosthetics	Jarrod Ng
13	17-00156	Automated tissue dissociation for rapid extraction of viable cells	Christine McBeth

Biomechanics (8)			
order	Paper #	Title	First Author
1	16-01383	Study on mechanical response model of soft tissue in the clamping process	Pengpeng WEI
2	17-00154	Force measurement of blood vessel gripping by hydraulic-driven forceps	Tohru Sasaki
3	17-00158	Controlled three-dimensional rotation of single cells using acoustic waves	Nino Fabian Läubli
4	17-00167	Optimizing the architecture of a dynamic spinal implant for customized mechanical behavior	Yann LEDOUX
5	17-00178	Process parameter optimization for hot embossing uniformly textured UHMWPE surfaces for orthopedic bearings	Christina Ippolito
6	17-00195	Topology Optimization to reduce the stress shielding effect for orthopedic applications	Abdulsalam Altamimi
7	17-00204	A review of engineered zirconia surfaces in biomedical applications	Ling Yin
8	17-00187	Bio-inspired design methodology of sensor-actuator-structure integrated system for artificial muscle using SMA	Cheng Peng

Additive manufacturing (13)			
order	Paper #	Title	First Author
1	16-01263	Corrosion resistance and mechanical characterization of ankle prostheses fabricated via SLM	Erica Liverani
2	16-01315	Modeling and additive manufacturing of biomimetic heterogeneous structures	Navid Khani
3	16-01334	The human cornea as a model tissue for additive biomanufacturing: a review	Rory Gibney
4	16-01458	Systematic Biomimetic Part Design for Additive Manufacturing	Tobias Kamps
5	17-00173	Fabrication speed optimization for high-resolution 3D-printing of bioresorbable vascular stents	Henry Oliver T. Ware
6	Invited	Bioprinting: Implementation, Process Dynamics, and Process-Induced Cell Injury	Yong Huang
7	Invited	3D Printing Functional Materials & Devices	Michael McAlpine
8	17-00174	Methodology for Image-driven High-resolution Additive Manufacturing Using Discretized Data Set	Henry Oliver T. Ware
9	17-00176	Process chain for the fabrication of a custom 3D barrier for guided bone regeneration	Erick Ramirez-Cedillo
10	17-00177	The development of an all-polymer based piezoelectric photocurable resin for additive manufacturing	Xiangfan Chen
11	17-00191	Biaxial Testing of Silicone Fabric Made Through Additive Manufacturing	Ketut Putra
12	17-00192	Silicone Foam Additive Manufacturing by Liquid Rope Coiling	Xiaoqing Tian
13	16-01314	Biomanufacturing of heterogeneous hydrogel structures with patterned electrically conductive regions	Ali Nadernezhad

Scaffold / substrate (13)			
order	Paper #	Title	First Author
1	Invited	Biopolymer Microfabrication for Tissue Engineering & Regenerative Medicine	Leo Han
2	16-01250	Multi-layered scaffolds production via Fused Deposition Modeling (FDM) using an open source 3D printer: process parameters optimization for dimensional accuracy and design reproducibility	Elisabetta Ceretti
3	16-01254	Micro-structuring of titanium collectors by laser ablation technique: a novel approach to produce micro-patterned scaffold for tissue engineering applications	Paola Serena Ginestra
4	16-01313	3D bioprinting of solvent dissolved biopolymer/glass composite and stem cell-laden Hydrogel for tissue engineering	Krishna Kolan
5	16-01397	A study on degradation behavior of 3D printed gellan gum scaffolds	Ilhan Yu
6	17-00097	Electrospinning parameters selection to manufacture polycaprolactone scaffolds for three-dimensional breast cancer cell culture and enrichment	Marc Rabionet
7	17-00171	Trabecular scaffolds' mechanical properties of bone reconstruction using biomimetic implants	Carlos Gabriel Helguero Alcivar
8	17-00168	Fabrication of Micro-wavy Patterned Surfaces for Enhanced Cell Culturing	Yancheng Wang
9	17-00169	Human Mesenchymal Stem Cells Expansion on Three-Dimensional (3D) Printed Poly-Styrene Scaffolds in a Perfusion Bioreactor	Arun Kumar
10	17-00189	Polycaprolactone/Pluronic F127 tissue engineering scaffolds via electrohydrodynamic jetting for gastro intestinal repair	Bin Wu
11	17-00200	Design, fabrication and initial evaluation of a novel hybrid system for tissue engineering applications	Fengyuan Liu
12	17-00213	Production of micro-patterned substrates to direct iPSCs-derived neural stem cells orientation and interaction	Rosalba Monica Ferraro
13	17-00205	High-resolution 3D bioprinting system for fabricating cell-laden hydrogel scaffolds with high cellular activities	Bin Zhang

Process (12)			
order	Paper #	Title	First Author
1	Invited	Nontraditional Machining for Medical Device Manufacturing	Kamlakar Rajurkar
2	16-01181	The effect of cooling strategies and machining feed rate on the corrosion behavior and wettability of AZ31 alloy for biomedical applications	Rachele Bertolini
3	16-01309	Dimensional metrology of cell-matrix interactions in 3D microscale fibrous substrates	Filippos Tourlomos
4	16-01311	Parallelization in automated stem cell culture	Michael Kulik
5	17-00180	Optical Measurement of Tissue Deformation in Needle Insertion	DIAN-RU LI
6	16-01393	Impact of hard machining on surface and subsurface properties of zirconia based ceramics for dental applications	Sarah Busemann
7	16-01394	Material Removal Mechanisms in Grinding of Mixed Oxide Ceramics	Berend Denkena
8	17-00179	Image-guided Quality Control of Biomanufacturing Process	CHEN KAN
9	Invited	Skin friction drag reduction over a micro-patterned superhydrophobic surface in turbulent boundary flow	Bingfu Zhang
10	Invited	Nanoscale Metrology in Molecular Manufacturing: Approaches to Overcome Current Challenges	Mostafa Bedewy
11	17-00197	Electrospinning Complexly-shaped, Resorbable, Bifurcated Vascular Grafts	Raquel Tejada-Alejandre
12	16-01398	A feasibility study of laser-assisted titanium implant drilling for periprosthetic fracture repair	Carleton T Vangsness