2018 IEEE 12th International Conference on Nano/Molecular Medicine and Engineering (NANOMED 2018)

Waikiki Beach, Hawaii, USA
2-5 December 2018

IEEE

IEEE Catalog Number: CFP18NMM-POD
ISBN: 978-1-5386-7580-9

****** This is a print representation of what appears in the IEEE Digital Library. Some format issues inherent in the e-media version may also appear in this print version.***

IEEE Catalog Number:	CFP18NMM-POD
ISBN (Print-On-Demand):	978-1-5386-7580-9
ISBN (Online):	978-1-5386-7579-3
ISSN:	2159-6964

Additional Copies of This Publication Are Available From:

Curran Associates, Inc
57 Morehouse Lane
Red Hook, NY 12571 USA
Phone: (845) 758-0400
Fax: (845) 758-2633
E-mail: curran@proceedings.com
Web: www.proceedings.com

Table of Contents

Mo-B1: Peptides in Nanomedicine and Biomedical Applications

Design of Thermally-Responsive Proteins to Control Cellular Uptake and Signaling N/A
J. Andrew MacKay

Adapting peptide assembly to integrate proteins and carbohydrates into supramolecular biomaterials N/A
Gregory A. Hudalla

Fabrication of Self-assembling Antimicrobial Nanofibers Via Peptide Self-assembly N/A
He Dong

Multimodal Imaging Enabled Citrate Biomaterials and Their Applications N/A
Jian Yang

Electrostatically Driven Peptide Based Materials in Nanomedicine N/A
Lorraine Leon

Mo-B2: Printed Sensors and Flexible Microdevices for Biomedical Applications

Point-of-use sensors for rapid medical diagnosis and environmental health N/A
Zhugen Yang

Selection of highly specific antibodies for Zika virus detection on flexible impedance sensor N/A
Waseem Asghar

Transfer-printed biosensors for wearable biomedical applications N/A
Chi Hwan Lee

Wearable biosensors for wound diagnosis and monitoring N/A
Peter B. Lillehoj

Flow control tools for paper-based microfluidic devices N/A
Hideaki Tsutsui

Mo-B3: Advanced Materials for Translational Medicine

Photocrosslinkable Gelatin for Regenerative Medicine: Manipulating Interactions between Cells, Drugs and Scaffolds N/A
Xin Zhao

Silk-Based Biomaterials for Cardiovascular Tissue Engineering N/A
Xiaohui Zhang

Microphysiological Systems for Emulating Human Tissues and Diseases N/A
Yu Shrike Zhang

Mo-B4: When Physicians Meet Engineers

The Development of Personalized Best-fit Stimulation Screening Platform Facilitating Tenocytes Proliferation N/A
Chih-Hao Chiu

A novel implantable sensor for perioperative monitoring of rotator cuff repair surgeries N/A
Chia-Wei Lin

Biodesign in surgical field – unmet need definition and application N/A
Chien-Hung Liao

How to make Robot smarter and surgery safer? Incorporate AI to complicated surgeries in the future N/A
Kai-Jie Yu

Back to laboratory: Novel applications of biomaterials in Orthopedics N/A
Yi-Hsun Yu

Mo-Po: Poster Group I

Enhanced shear thickening effect of nanoparticle suspension using polystyrene with poly(HEMA) shell N/A
Kwan Yoon, Young Lee

Immuno-Wall Device for Highly Sensitive Detection of Disease Markers N/A
Keine Nishiyama, Toshihiro Kasama, Masatoshi Maeki, Akihiko Ishida, Hirofumi Tani, Manabu Tokeshi

Mo-C1: Best Conference Paper

Mo-C2: Nanomaterials for Stimuli-Responsive Biomedical Applications

Mo-C3: Microfluidics for Biomedical Applications

Mo-C4: Nano- and Microdevices for Bio-object Manipulation and Sensing

Mo-D1: Best Student Paper

Mo-D2: Micro Nano and Molecular System for Diagnostics and Therapeutics

Mo-D3: Micro/nanofabricated Biomedical Systems for Sensing and Biomimicry

Tu-A1: Microfluidics Enabled Single-cell Studies / Encompassing a Wide Range of Microfluidics-based Technologies for Single-cell Studies

Tu-C1: Micro/Nano Systems for Biomedical Applications

Tu-C2: Nanoparticles for Imaging and Therapy A

Tu-C3: Micro/Nanosystems Mechanobiology A

Tu-D1: Nanoscale Hybrid Composite Materials in Bio/Nano medicine: Design, Assembly and Application

Bio-Inspired Configurable Multiscale Topographical Cues for Guided Orientation of Cells and Tissue Regeneration N/A
Jangho Kim

Natural Resource-derived Biomaterials with Nanotechnology and 3D Printing Techniques N/A
Seonwoo Hoon, Ki-Taek Lim, Jangho Kim, Kyongje Jang, Jong Hoon Chung

THz Biomolecular Spectroscopy N/A
Haewook Han, Jin-Woo Kim

Multifunctional Hybrid Nanomaterials in Bio/Nano Medicine: Design and Assembly N/A
Jin-Woo Kim, Haewook Han

Tu-D2: Nanoparticles for Imaging and Therapy B

In vivo oncophotonics with endoscopic approaches for translational medicine N/A
Euiheon Chung

Biocompatible Carbon Nanoparticles for Diagnostics and Therapeutics N/A
Woosung Kwon

Human ferritin nanocage for cancer therapeutic delivery N/A
Jung Soo Suk

Self-Powered Healthcare Sensing System for Humidity, Sweat, and Gait Phase Detection N/A
Zong-Hong Lin

Tu-D3: Micro/Nanosystems Mechanobiology B

Engineering porous membranes to optimize in vitro cellular barrier models N/A
Thomas Gaborski

Mechanobiological approach into the subcellular nuclear mechanics N/A
Dong-Hwee Kim

Probing cross-family signaling N/A
Princess I. Imoukhuede

Microphysiological systems for studying lymphatic biology N/A
Esak (Isaac) Lee

Transplantable nano cellular matrices for scaled-up culture of human ES/iPS cells N/A
Ken-ichiro Kamei

We-A1: Multidimensional Responsive Tool in Nano/biotechnology

Engineering tissue interfaces by nanobiomaterials and microfluidic bioprinting N/A
Hae Lin Jang

Ultrasensitive mechanical crack-based sensor inspired by the spider sensory system N/A
Daeshik Kang

Programmable Soft Matter with Magnetic Nanoparticle Assembly for Biological Application N/A
Ji Yun Kim

Protein diffusion and aggregation kinetics in low electric-field frequency modulations N/A
Kyongok Kang

We-A2: Microfluidic Platforms for NanoMed

Vortex-integrated Bioeditor for personalized therapy N/A
Soojung Claire Hur

New Tools and New Exosome Biology for Nanomedicine N/A
Jong Wook Hong

Chip calorimeters for cellular metabolic rate measurements and cell-based assay N/A
Wonhee Lee

Investigation of Cancer Cell Metastasis in Microfluidic System N/A
Jessie S. Jeon

We-A3: Emerging Nanomaterials and Nanotechnologies for Engineering Bio-integrated Devices and Systems

We-B1: Portable or Wearable Bio-medical Sensor Systems

We-B2: Nanomedicine for Drug Delivery and Immunotherapy

We-B3: Nanobiomanufacturing

We-C2: Functional Nanomaterials for 3D Bioprinting

We-C3: Multiplexing Imaging at Nano- and Micron- scale

We-D1: Nanobiosensing

We-D2: Nanomedicine I

We-D3: Nanomedicine II