

6 - Meet the Faculty and Post-Doc Candidates Poster Session (sorted by poster board number)

Sunday, November 10, 2019 1:00 PM - 3:00 PM

Regency Ballroom R/S, Hyatt Regency Orlando

BOARD NUMBER	Title	First Name	Last Name	Paper Number
Biomaterials & Biological Engineering				
1	Engineering the Future of Aging, Healthspan and Lymphoma Time	Jude M.	Phillip	6b
2	Designer Biomaterials and Integrated Biosensors Toward Precision Medicine	Jouha	Min	6d
3	Biomaterial Investigation and Development for Biomedical Advancement	Antonio C. F.	dos Santos	6e
4	Molecular Simulations of Biological Self-Assembly	Gul H.	Zerze	6f
5	Peptide- and Protein-Based Functional Biomaterials	Jugal Kishore	Sahoo	6h
6	Conversion of Waste Biomass into Bioproducts (Bioenergy, Biomaterials, Biochemicals)	Ezinne	Achinivu	6i
7	Engineering Biology Solutions for a Sustainable Future	Niju	Narayanan	6k
8	Exploring the Design Space of Living Systems: Experimental and Theoretical Tool-Kits for Multi-Functional Materials	Symone	Alexander	6n
9	Ultrasml C' Dots Activate Pro-Inflammatory Anti-Tumor Responses in the Microenvironment of PDGF-B Driven High Grade Gliomas	Steven	Zanganeh	6r
10	Metabolic Sugar Labeling for Cancer Targeting and Immunoengineering	Hua	Wang	6s
11	Multiscale Dynamics in Biological Soft Matter and Polymeric Fluids	Amir	Saadat	6u
12	Molecular Tension Sensors in Protein Hydrogels	Joshua	Baccile	6v
13	3D-Engineering of Functional Living Composite Materials	Seunghyun	Sim	6w
14	Regenerative Bandages for Enhanced Healing in Diabetic Wounds	Sahar	Rahmani	6z
15	Molecular Design Principles for Chemically Tunable Biomaterial Platform Technologies	Crystal K.	Chu	6ab
16	Shining Light on the Nervous System: From Biomaterials to Bioelectronics	Jing	Tang	6ac
17	3D Printed Bioelectronics for Tissue Engineering and Regenerative Medicine	Alexandra	Rutz	6ae
18	Lipid Nanoparticles for Highly Efficient Non-Viral Gene Editing	Jie	Li	6ag
19	Multiscale Modeling for the Design of Functional Soft Materials	Nicholas	Jackson	6jz
20	Fabrication of Highly Sensitive LSPR Biosensor for the C-Reactive Protein (CRP) Detection Based on the Immunocolloidal Gold Nanoparticles	Yun Suk	Huh	6g
21	Multiscale Biomechanics of Platelet-Driven Blood Clot Contraction and Intracellular Mechanisms of Its Termination	Oleg	Kim	6y
22	Hierarchical Self-Assembly and Biological Interactions of Functional Synthetic and Natural Supramolecular Systems	Herdeline Ann M.	Ardoña	6kk
23	Genetically Engineered Probiotics Designed at the Interconnect of Synthetic Biology and Metabolic Engineering	Amin	Zargar	6kq
24	Quantitative Single-Cell Analysis of RNA Regulation at the Single Molecule Level	Fangyuan	Ding	6kr

BOARD NUMBER	Title	First Name	Last Name	Paper Number
25	Electrochemistry Enabling New Frontiers in Biomaterials Engineering	Sina	Jamali	6p
26	Interactive Characterization of Biomaterials in Simulated Biological Environment	Sina	Jamali	6x
28	Theory and Modeling of Biopolymers and Bio-Inspired Soft Materials	Kai	Huang	6ks
29	Understanding Physically Crosslinked Polymer Networks to Rationally Design Hydrogel Biomaterials	Hector	Lopez Hernandez	6l
30	Biocompatible Zwitterionic Polymers for Medical Applications	Xiaojie	Lin	6m
31	Tailoring Polymer Chemistry for Biomass-Derived Materials: From Artificial Plant Cell Wall to Fungible Bioproducts	Qiang	Li	6t
32	All-Atom Molecular Dynamics Simulations of the 5-HT _{2B} G Protein-Coupled Receptor	Brandon	Peters	6ah
33	Engineering Microorganisms and Their Environment for Increased Performance in Biorenewable Applications	Kirsten	Davis	6aa
34	Nano-Optical and -Electronic Devices with Machine Learning for Biomarker Discovery and Diagnostics in Personalized Medicine	Lee	Korshoj	6a
35	Biosafe, Eco-Friendly Levan Polysaccharide Toward Transient Electronics	Kiyoona	Kwon	6c
36	Constitutive Modeling of Complex Biomaterials	Jeffrey S.	Horner	6j
37	Integrating Molecular Modeling with Experimental Work to Propel a Bioproducts Pipeline	Emma C.	Brace	6o
38	Advancing Technologies for Prenatal and Women's Health	Christina M.	Bailey-Hytholt	6af
39	Biofilm Prevention By UVC Side Emitting Optical Fibers	Mariana	Lanzarini-Lopes	210a
40	Force Response Defines Both Subcellular Architectures and Dynamic Protein Binding	Peter	Chung	6kt
41	Engineering Biomimetic Materials and Cells for Diagnostic and Therapeutic Applications	Zongmin	Zhao	6kw
42	Multi-Modal Biofabrication Approaches for Biomaterials Development and Tissue Engineering	Jenna M.	Shapiro	6kz
43	An Unsteady State Reactor Engineering Model for Spatially Heterogeneous Wine Fermentations	Konrad	Miller	6le
44	Optoelectronic Devices and Smart Biomaterials	Dena	Shahriari	6lg
45	Molecular Engineering Approaches Towards Platform Immuno-Biomaterials	Owen S.	Fenton	6ln
46	Defining Capture and Release Mechanisms of Biochemical Ligands in Multifunctional Biomaterials to Control Cell Function	Linqing	Li	6lo

BOARD NUMBER	Title	First Name	Last Name	Paper Number
Biomedical Engineering				
47	Living Biodevices for Precision Medicine:from Morphing Electronics to Medical Nanorobots	Jinxing	Li	6ai
48	Soft, Flexible Tissue-Integrated Chemical Sensors: From Wearable to Implantable Neural Systems	Amay J.	Bandodkar	6aj
49	Lung Surfactant Inhibitors and Their Effect on ARDS (Acute Respiratory Distress Syndrome)	Sourav	Barman	6ak
51	Developing Tools for Emerging Liquid Biopsy Applications	Jose C.	Contreras-Naranjo	6al
52	Interfacing Cell/Tissue Engineering with Gene Editing Tools and Sequencing Technologies for Regenerative Medicine	Halil	Tekin	6am
53	Engineering Microsystems for Regulating Cellular Behavior: From Implantable Drug Factories to Novel Platforms for Single-Cell Genomics	Suman	Bose	6an
54	Biologically Inspired, Electrically Active Membranes for Sustainability and Medicine	Thomas B. H.	Schroeder	6ao
55	Computational Modeling in Cancer Systems Biology: Stochasticity, Complexity, and Multiscale Dynamics in Disease Progression and Drug Response	Leonard Alfredo	Harris	6ap
56	Engineering the Tumor Microenvironment	Andreas	Kourouklis	6aq
57	Multidimensional Single Cell Analysis: Devices and Technology for Cancer Biology	Alex	Xu	6ar
58	The Role of Topographical Cues in Cancer Cell Migration and Metastasis	Colin D.	Paul	6at
59	Reverse Perfluorocarbon Emulsions for Pulmonary Drug Delivery	Diane L.	Nelson	6au
60	Engineering DNA-Polymer Assemblies	Alexander E.	Marras	6av
61	Synergizing Engineering, Chemical, and Immunological Concepts to Design the Next Generation of Therapeutics for Unmet Clinical Needs	Benjamin	Umlauf	6aw
62	Engineering Materials to Recapitulate the Stem Cell Microenvironment	Christopher M.	Madl	6ax
63	Ionic Liquids to Overcome Obstacles in Nanoparticle Drug Delivery	Eden E L	Tanner	6ay
64	Understanding Nucleation and Crystal Growth of Organic Molecular Materials with Application to Pharmaceutical Manufacturing	Gerard	Capellades	6ba
65	A Polymeric Reactor for the Synthesis of Superparamagnetic-Thermal Treatment of Breast Cancer	Roa'	Fardous	6as
66	Developing Methods to Accelerate the Design, Development, and Implementation of Therapeutics, Materials, And Equipment for Diseases with Urgent Unmet Clinical Needs	Donald	Belcher	6lj
67	High Performance Materials for Wearable Electronics and Sensors	Lauren	Taylor	6lt
68	Bionanotechnology: DNA Nanotechnology-based Molecular Devices, Bio-sensors, and Hybrid Materials forBiological and Nanophotonic Applications	Palash	Dutta	6lu

BOARD NUMBER	Title	First Name	Last Name	Paper Number
Catalysis				
69	Process Intensification for Sustainable Fuels and Energy Production	Cornelius Mduduzi	Masuku	6bc
70	Molecular Modeling and Machine Learning for Catalysis and Separations	Tyler R.	Josephson	6bd
71	Developing Active, Selective, and Energy-Efficient Heterogeneous Catalytic Processes for Enhanced Sustainability	Insoo	Ro	6be
72	Scaling up First Principle Simulation in Realistic Environment: Solvent Effects and Excited State Properties in Computational Catalysis	Fang	Liu	6bg
73	Elucidating Atomic Dances through Reaction Landscapes	Arthur J.	Shih	6bh
74	From 1- and 2-Dimensional Materials to Architectural Properties in Catalysis: Rationalizing, Predicting and Designing through First-Principles Methods	Roberto	Schimmenti	6bi
75	Dynamic Heterogeneous Catalysis to Enhance Turnover Frequency Via Surface Resonance	M. Alexander	Ardagh	6bk
76	Engineering Platform for Brain-Machine Interface	Siyuan	Rao	-
77	Sustainable Fuel and Chemical Synthesis Via Catalytic Valorization of Abundant and Renewable Resources	Nathaniel	Eagan	6bm
78	Discovery and Optimization of Processes and Catalysts for the Organic Electrosynthesis of Carbon-Neutral Fuels and Chemicals	Ezra L.	Clark	6bn
79	Enabling New Chemistries through Catalyst Design	Marcella	Lusardi	6bp
80	Precision Synthesis to Control Catalyst Surface Structures for Improved Reactivity and Performance	Madelyn R.	Ball	6bq
81	Reshaping the Carbon Cycle with Catalysis: Selective Activation of Chemical Bonds for Producing Carbon Neutral Fuel and Chemicals	Alyssa	Hensley	6bs
82	Development of Thin Film Deposition & Etching Processes for Challenging Materials	David	Barlaz	6bu
83	Unifying Principles in Thermally and Electrochemically Driven Catalytic Reactions	Joaquin	Resasco	6bv
84	Fixed Feed Temperature Program Modulation (FFTPM) - a Versatile Method for Extracting Adsorption Thermodynamics for Weakly Adsorbing Systems over a Range of Adsorbates	William T.	Gibbons	6bz
85	Mechanistic Study and Engineering of Vapor/Solid Interface <i>in-Operando</i> : Applications in Heterogeneous Catalysis for Energy Upgrading Reactions	Xueqiang	Zhang	6ca
86	Understanding and Controlling Multielectron Transfer Chemistry for Sustainable Energy Technologies	Adam	Nieler	6cf
87	Computational-Accelerated Materials Design for Negative Emission Technologies	Paul	Meza-Morales	6ch
88	Catalyst Design through Simulations and Machine Learning	Seoin	Back	6ci
89	Accelerating Net-Zero Carbon Emissions By Electrochemical Catalysis: Understanding and Controlling the Reactions at Interfaces	Lei	Wang	6cj
90	Design of Dynamic and Solvated Reaction Environments for Enhanced Conversion and Selectivity with Heterogenous Catalysts	Jennifer	Jocz	6kg
91	Sustainability towards the Future:bridging the gap between catalysis science and reaction engineering	Yang	Xiao	6kn

BOARD NUMBER	Title	First Name	Last Name	Paper Number
92	Bimetallic Catalysts for Internal Steam Reforming of Methane at Low-Temperature for High Fuel Utilization of Proton-Conducting Ceramic Fuel Cells	Kyungpyo	Hong	6bx
93	Rational Catalysts and Process Development for Light Hydrocarbons Upgrading from Natural Gas/Shale Gas	Weijian	Diao	6cd
94	Rational Design of Alloy Catalysts By Building Atomic-Scale Structure-Property-Activity Relationships	Liang	Cao	6bb
95	Combining First-Principles Modeling and Nanomaterial Synthesis to Understand and Improve Environmental Catalysis	Hanyu	Ma	6bj
96	Process-Informed Design of Electrocatalysts for Sustainable Chemical Transformations	Gastón O.	Larrazábal	6ck
97	Development of n-Doped Oxides As an Electron Rich Support: Bridging Homogeneous and Heterogeneous Catalysis	Juan	Jimenez	6cg
98	Fundamental Design of Sustainable Catalytic Reactions at the Water-Energy-Food Nexus	Lea	Winter	6bf
99	Electrosynthesis for Sustainable Chemical Production	Matthew	Jouny	6bo
100	Study of Catalytic Reactions for the Production of Fuels and Chemicals from Renewable Feedstocks	Gabriel	Seufitelli	6br
101	Direct and Non-Oxidative Conversion of Methane to Value Added Products	Vaidheeshwar	Ramasubramanian	6bt
102	One-Step Synthesis of Oxide Catalysts Using Aerosol Reactors for Environmental Applications: Theoretical and Experimental Study	Sungyoon	Jung	6bw
103	Engineering the Catalytic Environment: Synthetic, Mechanistic, and Spectroscopic Approaches for Developing Design Principles	Daniel T.	Bregante	6cb
104	First-Principles Approaches for Catalyst Design: Novel Descriptors and Strategies for Materials Discovery	Joseph	Gauthier	6cc
105	Novel Approaches to Biomass Upgrading for a More Sustainable Chemical Industry	Andrew W.	Tricker	6ku
106	Catalyst Design with Atomic Precision for Fuel Gas Processing and Pollution Purification Reactions	Ming	Yang	6lc

BOARD NUMBER	Title	First Name	Last Name	Paper Number
Computation & Modeling				
107	Molecular Simulations of Interfacial Dynamics in Biological Systems	Viviana	Monje-Galvan	6cl
108	Reproduce - Remediation and Production Using Computational and Electrochemical Approaches	Damilola A.	Daramola	6co
109	From Biosynthesis to Human Health: Harnessing Biomolecules with Multiscale Quantum Mechanics–Molecular Mechanics Simulations	Zhongyue	Yang	6cz
110	Designing the Structure and Function of Soft, Complex Materials with Computational Modeling	Michael P.	Howard	6jx
111	Computational Protein Design Using Optimization Programs and Force-Field Calculations	Ratul	Chowdhury	6ki
112	Data-Driven Modeling and Control of Batch and Batch-like Processes	Abhinav	Garg	6cp
113	Optimization and Control of Chemical Process Systems Under Uncertainty	Rohit	Kannan	6cq
114	Computational Design and Development of Advanced Catalytic Materials	Mingjie	Liu	6cr
115	Studying Soft Materials in- and out-of-Equilibrium Using Analytical and Numerical Field Theories	Douglas	Grzetic	6cs
116	QM-Based Multiscale Simulations for Applications in Electrocatalysis, Interfacial Chemistry, and Energetic Materials	Saber	Naserifar	6ct
117	Computational Heterogeneous Catalysis for Energy Storage and Conversion	Zhenghang	Zhao	6cu
118	Computational Crystallization and Assembly of Polymers and Soft Matter	Wenlin	Zhang	6cv
119	Computational Modeling of Chemical Interactions at Interfaces for Environmental Applications	Zhizhang	Shen	6cw
120	Modeling and Optimization for Process System Engineering Problems	Yachao	Dong	6cy
121	Combining Computational Chemistry and Advanced Characterization for Process Optimization and Intensification	Adam	Karcz	6da
122	Predictive Descriptors for the Targeted Synthesis of Solid-State Materials	Christopher J.	Bartel	6db
123	Understanding Multimodal Interactions through Deep Neural Networks and Statistical Mechanics	Camille	Bilodeau	6cn
Electrochemistry				
27	Chemically and Electrochemically Interactive Characterization of Biomaterials <i>in Vitro</i>	Sina	Jamali	6dm
124	Mechanistic Electrochemistry Driving Energy Science: From Catalysts to Batteries	Srini	Ramakrishnan	6dd
125	Heterogeneous Electrocatalysis: Developing Strategies to Engineer Industrially Relevant Catalysts from Fundamental Activity Trends	Michaela	Burke Stevens	6di
126	Corrosion Mitigation and Wastewater Treatment	Zineb	Belarbi	6dn
127	Nanoscale Design of Electrocatalysts for CO ₂ -to-Fuels Powered Using Renewable Electricity	Yuguang (Chris)	Li	6do
128	Reinforced Anion Exchange Membrane (AEM) Separators Based on Triblock Copolymers for Electrode-Decoupled Redox Flow Batteries (RFBs)	Shrihari	Sankarasubramanian	6dp
129	Developing Electrochemical-Based Predictive Battery Health Monitoring for Future Battery Management Systems	Saeed	Khaleghi Rahimian	6df

BOARD NUMBER	Title	First Name	Last Name	Paper Number
130	Charge Storage and Transport in Electrochemical Science: From Bulk to Interfaces	Chia-Chin	Chen	6de
131	Electrocatalysts and Gas Diffusion Electrodes for Vapor-Phase Carbon Dioxide Electrolyzers and Hydrogen Fuel Cells	Dong Un (Daniel)	Lee	6dg
132	Combining Advanced Materials and Manufacturing and Electrochemical Engineering for Building a Sustainable Future	Jeremy T.	Feaster	6dh
133	Design of Electrochemical Biosensing Strategies Toward High-Sensitivity, Non-Fouling, Multiplex Point-of-Care Systems	Yifan	Dai	6jy
Energy & Sustainability				
134	Advanced Materials for Efficient Energy Conversion Based on Spectroscopic and Mechanistic Study	Xuan	Yang	6dq
135	Fabrication of Conducting Polymers and Superconductors Using Chemical Vapor Deposition Methods for Energy and Electronic Application Devices	Meysam	Heydari Gharahcheshmeh	6dx
136	Sustainability in Process Systems Engineering	Styliani	Avraamidou	6dy
137	Nanostructured Materials for Next-Generation Lithium-Sulfur Batteries	Somayeh	Zamani	6ea
138	Kinetics and Chemistry of Fast Pyrolysis of Carbon-Based Material Using Novels Reactors Approaches	Ali	Zolghadr	6eb
139	Energy Storage and Conversion with Organic Molecules and Advanced Porous Electrodes	Michael R.	Gerhardt	6ec
140	Materials for Energy Storage Applications: Fundamental Insight for Rational Design and Development	Jeffrey	Lopez	6ed
141	Realizing CO ₂ Utilization and Carbon-Neutral Energy Conversion in Practical Scenarios --- Mining the Air, Extracting Industrial Wastes, One-Pass Conversion, and Scale-Out	Xu	Lu	6eh
142	Advancing the Development of Fuel Flexible Combustion, Compact Energy Systems, and the Sustainability Analysis Methods	Sampath	Gunukula	6ei
143	Electrochemical Engineering for Energy, Environment and Separation Applications	Tao	Gao	6en
144	Illuminating Solid-Water Interfacial Processes at Nanoscale for Sustainable Environmental Remediation and Resource Recovery	Haesung	Jung	6kj
200	Winning the Energy Dilemma: Carbon-Free Energy and Environmental Sustainability	Simona	Liguori	6dr
201	Organic Molecular Electrocatalysts for Energy-Water Nexus and Beyond	Xi	Yin	6du
202	Efficient Carbon Modification for Sustainable Food/Energy/Water Nexus	Baharak	Sajjadi	6ek
204	Energy Conversion and Storage	Yijin	Kang	6ej
205	Multiscale Approach to Future Energy Science and Engineering	Yingda	Lu	6eo
206	Biopolymer Encapsulated Lipase for Biodiesel Production	Ravindra	Pogaku	6el
207	Functionalized Materials for Sustainable Energy Applications: Structure and Reactivity	Gengnan	Li	6kp
208	Sustainable Conversion Processes and Reactor Design to Produce Fuels and Chemicals	Muhammad	Siddiquee	6dt
209	Sustainable Energy Production from Renewable and Fossil Fuels	Saikat	Das	6ee
210	A Structured Approach to the Design and Optimization of Sustainable Energy Systems	Nathanial J.	Cooper	6ef

BOARD NUMBER	Title	First Name	Last Name	Paper Number
211	The Future of Concentrated Solar Thermal - Smart Selection of Materials for Hydrogen Production and Energy Storage	Alicia	Bayon	6em
212	Moving Beyond the Limits between Science, Engineering and Information Technology for a Sustainable Society and Economy	Botond	Szilagyi	6ke
213	A Novel Route for the Flexible Preparation of Hydrocarbon Jet Fuels and Valuable Chemicals from Biomass-Based Platform Chemicals: A Case of Using 2, 3-Butanediol As a Feedstock	Yuchen	BAI	6ds
214	Engineering Multifunctional Nanomaterials for Energy and the Environment	Michael	Bozlar	6lf
215	Probing Hydrogen activation to solve current energy challenges	K.B. Sravan	Kumar	6lz
216	Utilizing bioenergy for production of energy and mitigation of climate change	Sonal	Thengane	6ma
224	Producing Cleaner Fuels using Waste and Renewable Resources	Efstratios	Svinterikos	6mb
Fluid Mechanics				
217	Active Soft Materials: Data Driven Study to Understand, Control, and Design Bio-Soft-Materials	Mehdi	Molaei	6ep
218	Dynamics, Transport, and Self-Assembly in Flowing Polymeric Liquids	Sarit	Dutta	6eq
219	Constitutive Modelling for Complex Fluids in Complex Flows	Joseph	Peterson	6et
220	Structure, Rheology and Processing of Complex Fluids Towards Scalable Manufacturing of Functional Devices	Sunilkumar	Khandavalli	6ev
221	Complex and Biological Fluids	Debasish	Das	6ew
222	Microscale Transport Phenomena: Data Analytics and Fluid Dynamics	Shiyan	Wang	6kl
223	Numerical Simulation based Design of Point of Care Diagnostic Devices	Debayan	Das	6eu
225	Dynamics of Soft Material Systems Under Electric Fields	Rajarshi	Sengupta	6es
226	Investigating Yielding Dynamics and Fracture Mechanics in Soft Materials	Alan Ranjit	Jacob	6kx
227	Understanding the hierarchy of structure, dynamics, and interactions in soft matter	Ryan	Poling-Skutvik	6ls
228	Electrokinetically enhanced particle focusing in Non-linear microfluidic flows	A.	Choudhary	6lv
229	Recycle, micromixing and particle migration in a microchannel	T.	Krishnaveni	6ly

BOARD NUMBER	Title	First Name	Last Name	Paper Number
Interfacial & Transport Phenomena				
50	Dilational Rheology of Lung Surfactant Inhibitors and Its Effects on Acute Respiratory Distress Syndrome	Sourav	Barman	6fh
231	Quantifying Interfacial Transport Phenomena for Environmental and Biochemical Systems	Henry C. W.	Chu	6ey
232	Microbial Biofilm Processes: Multiscale Modeling, Simulation, and Visualization	George E.	Kapellos	6ez
233	Design of Functional Soft Materials for a Sustainable Future	Karthik	Nayani	6fb
234	Intelligent Systems, Active Colloids, and Advanced Responsive Materials	Nicholas G.	Chisholm	6fd
235	Designer Soft Matter: From Passive to Active to Biomimetics	Hanumantha Rao	Vutukuri	6ff
236	Coupled Ion Transport and Fluid Flow in Energy and Environmental Sciences	Mohammad	Mirzadeh	6fg
237	Ionic and Electronic Transport Properties in Covalent Organic Framework and Nanomaterial	Ankit	Agrawal	6fi
238	From Understanding the Transport of Complex Fluids to Development of Liquid Lenses	Shreyash	Gulati	6fa
239	Flow of Soft Matter in Complex Geometries	Yu-Jiun	Lin	6fe
240	Role of Species Transport on the Stability of Interfaces	Vineeth	Chandran Suja	6fc
Materials				
241	Silk-Based Materials: A Sustainable Route Towards Multifunctional Material Applications	Jaewon	Choi	6fk
242	Interfacial Materials for Electrochemical and Biomedical Devices	Jie	Zhao	6fm
243	Machine Learning and Data-Enabled Design and Discovery of Soft and Nano Materials	Tarak	Patra	6fn
244	Rational Design of Smart Soft Materials	Yimin	Luo	6fq
245	Tailoring Organic Materials for Electronics and Energy: From Molecular Design to Two-Dimensional Polymerization	Yu	Zhong	6fr
246	Learning from Nature: Rational Design of Multifunctional Hybrid Materials	Hyosung	An	6fs
247	Rational Design of Advanced Materials and Membranes for Energy, Separations and Catalytic Applications	Sameh	Elsaidi	6fu
248	Computational Assembly Engineering for Bio-Inspired Nanomaterials	Trung	Nguyen	6ft
249	Hierarchically Engineered Structures Using Self- and Directed- Assembly for Unique Electronic, Optical and Mechanical Properties	Yuyin	Xi	6kd
250	3D Printing of Polylactic Acid Mixed with Wood	Samarthya	Bhagia	6fj
251	Advance Manufacturing of Materials for Flexible and Stretchable Devices	Kunal	Mondal	6fv
252	Bio-Inspired Soft Electronics	Alex	Chortos	6fw
253	Scalable Synthesis of Nano- and Micro-Scale Materials for Energy Applications	Clayton	Kacica	6fo
254	Molecular Engineering Approach for the Development of Advanced Functional Materials: Engaging Students Through Impactful Research	Anthony	Engler	6kc
255	Polymer Science in Developing Fibrous materials for Advanced Technical Applications	Behzad	Nazari	6lb

BOARD NUMBER	Title	First Name	Last Name	Paper Number
256	Chemomechanical effect affects ductile mode material removal in slicing silicon wafers for photovoltaics	Arkadeep	Kumar	6li
257	Multiscale Framework to Engineer Non-Equilibrium Responses at Complex Materials Interfaces	Alexander J.	Pak	6ll
Nanomaterials & Nanotechnology				
258	Advancing Nanomaterials for Energy and Water Applications Using Atomistic and Quantum Chemical Simulations	Ananth	Govind Rajan	6fz
259	Catalytic Porous Materials with Tailored Nanostructures for Selective and Sustainable Chemical Processes	Hong Je	Cho	6ga
260	Building Autonomous Nanomachines at the Interface of Colloids and Electronics	Volodymyr	Koman	6gb
261	Controlling Organization and Effects of Nanoparticles on Polymer-Nanoparticle Composites	Hamed	Emamy	6gd
262	Engineering Redox-Active Materials from Electrocatalysis to Pseudocapacitance	Xueli	Zheng	6ge
263	Engineering Nanomaterials for Biomedical Applications	Devleena	Samanta	6gf
264	An <i>Active</i> Approach to Colloidal Self-Assembly	Stewart	Mallory	6gi
265	Low-Cost, Scalable, and Rapid Platforms in Ultrathin Materials Synthesis for Water and Energy Technologies	David S.	Bergsman	6gj
266	Nanostructured Anodic Oxides of Metals: From Corrosion Protection to Nanotechnology and Emerging Applications	Wojciech	Stepniowski	6gn
267	Electrochemical and Optoelectronic Transformations in Dynamic Semiconductor Nanomaterials	Clayton J.	Dahlman	6go
268	Applications of Nanofillers in Advanced Composites	Aniruddh	Vashisth	6gp
269	Charge Transport in Self-Assembled Biomolecular Systems	Bo	Li	6gq
270	Chiral Nanomaterials Design for Human Health	Jihyeon	Yeom	6gu
271	Rational Synthesis and Assembly of Doped Nanomaterials for Quantum and Optoelectronic Applications	Matthew	Crane	6gy
272	Designing Nanomaterials and Electronic Devices for Multi-Level Neural Interfacing	Huiliang	Wang	6gz
273	Liquid Metal Encapsulation: Towards Next Generation Flexible Electronics	Megan A.	Creighton	6hb
274	Design of Flow Reactors and Functional Nanomaterials for Energy & Photocatalytic Applications	Ioannis	Lignos	6kb
275	Multi-Sensor System for Complex Chemical Environment Detection	Yixin	Liu	6gg
276	Nanotechnology and Neurotoxicity: Exposure to Ultrafine (nano) Particles and its Impact on the Human Brain: Case Studies for Cooking and Diesel Engine UFPs	Mehdi	Amouei Torkmahalleh	6kh
277	Evaluation of the Influence of Ce ⁴⁺ /Ce ³⁺ Redox-Couple on the Cyclyc Regeneration of NiO-Pdo/CeO ₂ Nanoparticles for Asphaltene Steam Decomposition	Oscar	Medina	6gt
278	Beyond Lithium Aqueous Electrochemical Energy Storage	Daniel S.	Charles	6gk
279	Interfacial Engineering of 2D Nanomaterials for Biomedical and Energy Application	Dorsa	Parviz	6gl
280	Understanding of Nanoparticle Self-Assembly Mechanisms and Its Applications to Energy Storage and Bio-Medical Applications	Jaewon	Lee	6ha
281	Colloidal Electronic Cells As Building-Blocks for Synthetic, Tissue-like Scaffolds	Albert Tianxiang	Liu	6gc

BOARD NUMBER	Title	First Name	Last Name	Paper Number
282	Enhancement Routes of Corrosion Resistance in Steel-Reinforced Concrete By Using Nanomaterials	Arash	Etemad	6gh
283	Eco Friendly Strategies for Nanocellulose Production Using a Non Commercial Enzymatic Cocktail	Paula	Squinca	6gr
284	Interfacial Molecular Engineering of Bio-Inorganic Systems from Aqueous Molecules to Assembled High Order Functional Materials	Tyler D.	Jorgenson	6gs
285	Meet the Faculty: Investigating the Properties of Nanoparticles Containing Fullerene-like Molecules	Kimberly	Bowal	6gv
286	Recombinant Peptide-Templated Palladium Nanoparticle Synthesis and Their Catalytic Activity in Coupling Reactions	Imann	Mosleh	6gw
287	Plant Genome Engineering with Nanotechnology for Agricultural Applications	Gozde Sultan	Demirer	174ae
288	Synthesis and Characterization of Perovskites	Atefe	Hadi	6kv
289	Next-Generation Fluorescence Bioimaging: Integrating Chemical and Optical Tools	Yang	Zhang	6ky
290	Scalable Electronic Separation of Single-Walled Carbon Nanotubes (SWCNTs) via Novel Chromatographic Methods	Payam	Rezaei	6ld
291	Deep characterization boosted next-generation high-performance energy storage systems	Chengcheng	Fang	6lp
292	Novel Nanostructured Transition Metal Oxides for Catalysis.	Yulian	He	6lr
Particle Technology				
293	Dynamics of Carbonaceous Nanoparticles: Climate Impact & Fire Detection	Georgios A.	Kelesidis	6hd
294	Particle Simulation in Rotating Reactors	Dan	Sun	6he
Pharmaceuticals				
295	Development of Strategies to Combat Genomic Instability in Cell Culture Engineering, Biopharmaceutical Production, Disease and Ageing	Philipp	Spahn	6hf
296	Engineering Lipid and Polymer-Based Nanomaterials for Drug, Protein and Gene Delivery	Yamin	Li	6hi
297	Reengineering the Tumor Microenvironment to Alleviate Hypoxia, Increase Drug Delivery and Enhance Immunotherapy	John D.	Martin	6hk
298	Priming the Innate Immunity Using Nanomedicine	Fan	Zhang	6hj
299	Zwitterionic Polymeric Platforms for Biologic Drug Delivery and Tissue Engineering	Caroline	Tsao	6hg
300	High Diffusive Peptides for Drug Carriers in Tumor Extracellular Matrix.	Rashmi	Mohanty	6lx

BOARD NUMBER	Title	First Name	Last Name	Paper Number
Polymers				
301	Mechanisms of Diffusion in Associative Polymer Networks: Evidence for Chain Hopping	Peter	Rapp	6hl
302	Programmable Deformation and Assembly of Soft Active Materials	Ji-Hwan	Kang	6hm
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