

2 - Meet the Faculty and Post-Doc Candidates Poster Session

Sunday, November 13, 2022 1:00 PM - 3:00 PM

North Hall E, Phoenix Convention Center

BOARD NUMBER	Title	First Name	Last Name	Paper Number
1	Engineering Nanostructured Soft Materials for Electrochemical Processes	Zhongyang	Wang	2a
2	Model-based analysis of CO2 separation processes with various isotherm shapes	Yuya	Takakura	2b
3	Towards a New World of Plastic Processing & Recycling Via Advanced Reactor Technologies	Ali	Zolghadr	2c
4	Modeling interspecies competition and exchanges in microbial communities	Andrew	Freiburger	2d
5	Exploring Fractal Canyons in Glassy Energy Landscapes	Amruthesh	Thirumalaiswamy	2f
6	Surface Chemistry for Efficient Charge Transfer in Hybrid Energy Conversion Systems	Ke	Ma	2g
7	Designing Active Biomaterials through Multifunctionality of Stimuli-Responsive Polymers	Tayler	Hebner	2h
8	Leveraging Linked Organ-on-a-Chip Platforms to Study Gut Microbiome Effects on Human Health and Disease	Danielle	Brasino	2j
9	Leveraging Thermal and Electrocatalysis for Decarbonization of the Energy and Chemical Industries	Jason S.	Bates	2k
10	Engineering and Applications of Molecularly Assembled Architected Soft Materials	Kaiwen	Hsiao	2l
11	Bioresorbable Batteries for Self-Powered Bioelectronics and Medical Devices	Yamin	Zhang	2m
12	Bridging Length Scales for Correlative and Data Science-Augmented Characterization of Energy Materials	Saman	Moniri	2n
13	Fundamental Catalytic Reaction Design for Sustainable and Green Chemical Engineering	Qiaowan	Chang	2o
14	Connecting Computational Chemistry and Its Applications at All Scales - from <i>Ab Initio</i> Quantum Chemistry to Continuum Modeling	Rui	Xu	2p
15	Ion-Mediated Manufacturing of Dynamic Nanostructured Polymer Materials	Shuyi	Xie	2q
16	How Physicochemical Forces Shape Microbial Recombination in the Host Environment	Asher	Preska Steinberg	2s
17	Converting Low-Rank Hydrocarbon Wastes into Valuable Anisotropic Carbon Material Intermediates: Combining Experimental Investigation and Data Science	Wenjia	Wang	2u
18	Interacting Polymer Mixtures for Health and the Environment	Scott	Danielsen	2v
19	Nanoengineering of Colloidal Soft Matter Towards Optical and Biological Applications	Fan	Cui	2w
20	Transient Spectro-Kinetic Approach: A Tool for Deciphering Complex Structure-Function Relationships in Heterogeneous Catalysis	Sagar	Sourav	2x
21	Process Intensification for Electrochemical Manufacturing	Bertrand J.	Neyhouse	2y

*Posters listings updated as of 11/7/2022

BOARD NUMBER	Title	First Name	Last Name	Paper Number
22	Towards an Atomistic Understanding of Microenvironment Effects in (electro)Catalytic Reactions for Energy Conversion	Nitish	Govindarajan	2z
23	Optimization-Based Assessment Framework for Identification of the Optimal CO ₂ Utilization Strategy to Energy Products	Chanhee	You	2aa
24	Enzymatic Synthesis and Metabolism of Small Molecules	Karthik	Sankaranarayanan	2ab
25	Understanding and Improving Supported Metal Oxide Catalysts	Sol	Ahn	2ac
26	Developing a Sustainable and Scalable Platform of High-Performance Degradable Polymers	Lorenz	Manker	2ad
27	Molecular-Based Modeling of Polymer Dynamics for Material Design and Processing	Marat	Andreev	2ae
28	Leveraging Molecular Designs for Colloidal Platforms with Tunable Structures and Properties	Hojin	Kim	2af
29	Decarbonizing Chemical Manufacturing: CO ₂ Capture & Utilization from Point Sources and Electrochemical Synthesis of Chemicals Using Renewable Energy	Nishithan Balaji	Chidambara Kani	2ag
30	Battery Materials Harvesting	Lingping	Kong	2ai
31	Enabling Technologies for Point-of-Care Diagnostics and Targeted Drug Delivery	Mohammad	Mofidfar	2aj
32	Resisting Dendrites in Lithium Batteries, One Pinhole at a Time	Solomon	Oyakhire	2ak
33	Engineered Multiscale Materials from Biopolymers for Sustainable Agriculture and Manufacturing	Muchun	Liu	2al
34	Reaction Engineering of Complex Systems (RECS): Towards Circularity and Sustainability	SriBala	Gorugantu	2am
35	CO ₂ Hydrogenation Reaction over Pd-Containing MWW Zeolite Catalyst	Willie	Yang	2an
36	Nanoporous Materials for Energy, Healthcare, and Sustainability	Kaihang	Shi	2ao
37	Nucleic Acid Detection By Target-Assisted Synthesis of Enzyme Reporters in a Cell-Free Protein Synthesis System	Yu Jin	Park	2aq
38	Designing Granular Hydrogels for Bioengineering Applications	Victoria	Muir	2ar
39	Engineering Macrophages and Biomaterials to Overcome Barriers in Immunotherapies and for Novel Biomedical Applications	Lawrence J.	Dooling	2as
40	Tailored Polymeric Systems: Material Properties Informed By Molecular Design	Caitlin	Sample	2at
41	Design and Control of Biological Assemblies By Leveraging Self-Organization	Krishna	Shrinivas	2au
42	Next-Generation Materials through Sustainable Polymer Synthesis and Processing	Jeffrey	Self	2av
43	Genetically Engineered Commensal Bacteria As Theranostic Probes for the Lungs	Michael	Brasino	2aw
44	Understanding Nanomaterials for Biosensors and Catalysts	Anuja	Tripathi	2az
45	Biomolecular Interactions and Transport Laboratory (BIT Lab) to Create a Transformative Impact on Human Health.	Aditya	Raghunandan	2ba

BOARD NUMBER	Title	First Name	Last Name	Paper Number
46	Data-Driven and Physics-Based Methods for Atomistic Modeling of Electrochemical Interfaces	Siddharth	Deshpande	2bb
47	Design of Heterogeneous Catalysts for Energy Conversion Reactions	Md Delowar	Hossain	2bc
48	Developing Catalysts for Solar-Driven Chemicals, Fuel Production, and Waste Water Treatment	Aisulu	Aitbekova	2bd
49	Supporting the Circular Economy and Advanced Manufacturing through Soft-Matter Simulations and Theory	Benjamin	Dolata	2be
50	Bridging Thermal and Electrochemical Catalysis: Rational Catalyst Design at Atomic Scales through Physical and Machine Learning Based Insights	Shyam	Deo	2bf
51	Green Organic Photoredox Catalysis: Electronic Structure Guided Design and Discovery	Kareesa	Kron	2bg
52	Light-Tunable Two-Dimensional Nanopore for Energy-Efficient Separation	Shiqi	Huang	2bh
53	An Information-Driven Approach for Controlling Emergent Order in Soft Materials	Ashley	Guo	2bi
54	Machine Learning-Assisted Materials Design for Energy and Sustainability	Yasemin	Basdogan	2bj
55	Using Machine Learning to Empower Science and Strengthening Machine Learning through Physics	Matthew	Spellings	2bk
56	Guiding the Development and Deployment of Sustainable Energy Systems with Data-Informed Modeling of Energy and Chemical Technologies	Micah	Ziegler	2bl
57	Advancing Crystallization to Enable Challenging Separations	Matthew	McDonald	2bm
58	Utilizing Differences in Electronic Structure of Molecules for Improved Metals Separations	Subhajyoti	Chaudhuri	2bn
59	Post-Doc Candidate: In Vitro Platforms for Biotherapeutic Screening	Paulina	Babiak	2bo
60	The Role of Extracellular Matrix Viscoelasticity and Confinement on Cell Migration: A Multiscale Bio-Chemo-Mechanical Model	Wenya	Shu	2bq
61	Elucidate the Role of Membrane-Bound Organelle Interactome in Parkinson's Disease	Han	Zhao	2br
62	Comparative Analysis of Cell-Free Synthesis Systems Based on the Extracts Different Microorganisms.	So Jeong	Lee	2bt
63	MOFs-Derived Carbon (MDC) for Organic Chloride Removal in the Waste Plastic Pyrolysis Oil (WPPO) and Its Modeling Studies (Kinetic, equilibrium, and thermodynamic analysis)	Seong Cheon	Kim	2bu
64	Harnessing Hydrogen Transfer in Energy Science to Boost Sustainability	Gang	Wan	2bv
65	Improving the Understanding of Dynamics and Mechanical Response of Mixed Moduli Polymer Materials through Simulation	Joshua	Mysona	2bw
66	Accelerated Discovery of Polymer Materials and Chemical Reactions	Dylan	Walsh	2bx

BOARD NUMBER	Title	First Name	Last Name	Paper Number
67	Engineering Instructive Vascular Tissues As Biological Models and Next-Generation Therapies	Mai T.	Ngo	2by
68	Colloidal Soft Materials Driven By Electromagnetic Fields	Zachary	Sherman	2bz
69	Optimization of Concentric-Tube Internal Loop Airlift Photobioreactors for Commercial-Scale Microalgae Cultivation Using Multiphysics Simulations	Lifeng	Li	2ca
70	Development of an Integrated Multiscale Modeling, and Control Framework for Commercialization of Quantum Dot Manufacturing and Their Applications	Niranjan	Sitapure	2cb
71	Model-Based Process Design	Ayse	Eren	2cc
72	Single-Particle/Molecule Tracking to Probe Transport in Confined Environments	Haichao	Wu	2cd
73	Biomaterial Strategies to Modulate Immunity for Disease Amelioration	Apoorv	Shanker	2ce
74	An Epitrochoidal Rotary Reactor for Solar Hydrogen Production Via Ceria Redox Cycle	Bo	Wang	2cf
75	Self-Discharge in Electrochemical Capacitors: Beyond Conway's Diagnostics	Deeksha	N V N	2ap
76	Unraveling Self-Discharge Mechanisms in Electrical Double-Layer Capacitors (EDLCs)	Deeksha	N V N	2ch
77	Optical Recording of Bioelectrical Signals Harnessing Bio-Electrochromic Materials Interface	Yuecheng Peter	Zhou	2ci
78	Improving the Performance of Hollow Fiber Membrane for Energy-Efficient Water Purification	Shahriar	Habib	2cj
79	Dual-Modal Flexible Operation of on-Site Hydrogen Refueling Station	Minseong	Park	2ck
80	Development and Implementation of Organic Color Center Nanosensors for Biomedical Applications	Mijin	Kim	2cn
81	Ultrasonication and Microwave Assisted Extraction of Bioactive Compounds	Dipesh Shikchand	Patle	2do
82	Experimental and Theoretical Investigations on Electrochemical Removal of Reactive Black 5 Dye from Wastewater	Dipesh	Patle	2cl
82	Experimental and Theoretical Investigations on Electrochemical Removal of Reactive Black 5 Dye from Wastewater	Sushil	Kumar	2cl
83	Towards Rational Design of Structured Soft Earth Materials	Shravan	Pradeep	2co
84	Interdisciplinary Research to Advance Flow-Based Electrochemical Power Systems	Nicholas	Cross	2cp
85	Chemical Informatics-Directed Modeling and Processing of Polymeric Materials	Weizhong	Zou	2cq
86	Synergizing Molecular Simulations and Machine Learning for Understanding Molecular Interactions.	Xinqiang	Ding	2cr
87	New Catalytic Pathways Towards Waste to Chemicals Conversion and Sustainable Manufacturing	Pavel	Kots	2cs
88	Computer-Aided Molecular Design: Combining Knowledge-Based and Data-Driven Approaches	Ye Seol	Lee	2cu
89	Rational Design of Ion Exchange Membranes for Sustainable Water and Energy	Jung Min	Kim	2cv
90	Voltage As a Driving Force for Sustainably Forming Chemical Bonds	Zachary	Schiffer	2cw

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BOARD NUMBER	Title	First Name	Last Name	Paper Number
91	Advancing Next-Generation Bioelectronics through Rational Omiec Design	Joshua	Tropp	2cx
92	Computational Assessment of Catalytic Materials	Alexander	Hoffman	2cy
93	Understanding Ion Transport and Thermodynamics in Electrochemical Systems for Energy and Separations	Oscar	Nordness	2cz
94	Molecular Simulation of HIV-1 Env Conformational Dynamics and Computational Design of HIV-1 Entry Inhibitors	Mohammadjavah	Mohammadi	2da
95	Influence of pH on the Capture Efficiency and Deposition Patterns in an Evaporating Sessile Droplet with Antibody Antigen Surface Reaction	Vidisha Singh	Rathaur	2db
96	Peptide Guided Bio-Hybrid Functional Architectures and Materials	Tyler	Jorgenson	2dc
97	Synthetic, Orthogonal Metabolic Pathways for Sustainable Bioconversion and Biomanufacturing of Industrially Relevant Chemicals	Seung Hwan	Lee	2dd
98	Belowground Carbon Farming: Engineering Genetic Circuits in Plant Roots and Rhizobacteria for Soil Carbon Input	Christopher	Dundas	2de
99	Autonomous Labs to Accelerate Discovery and Understanding of Organic Mixed Conducting Materials	Martin	Seifrid	2df
100	Engineering Complex Fluid-Fluid and Fluid-Solid Interfaces for Drug Delivery	Vineeth 'Vinny'	Chandran Suja	2dg
101	Chiral Nanomaterial Based High Throughput Platforms: Leveraging Asymmetric Light-Matter Interaction for Chiral Photosynthesis and Bioanalytical Chemistry	Ji-Young	Kim	2dh
102	Post-Doctoral Candidate: Protein-Based Biomaterials for Biomedical Applications	Jessica	Torres	2di
103	Accelerated Discovery of Next-Generation Hybrid Materials Powered By Computational Material Science and Data Science	Abhishek	Sose	2dj
104	Thermal-Electro-Chemistry for a Circular Carbon Economy	Arthur J.	Shih	2dk
105	Elucidating the Mechanical and Transport Properties of Novel Composite Hydrogels Containing Fractionated, Purified Lignin	Nicholas	Gregorich	2dl
106	Developing High-Throughput Tools for Functional Macromolecular Design	Melody	Morris	2dn
107	Developing Functional Materials Using Photopolymerization	Shreyas	Pathreeker	2dp
108	A Systems Approach Towards Reconciling Single-Cell Heterogeneity and Cell Phenotype in Health and Disease	James	Park	2dq
109	A Split Enzyme-Based Self Amplification System for Ultrasensitive Detection of Proteins and Small Molecules at the Point of Care	Catherine	Majors	2dr
110	A Chemical Engineer's Path to Chemical Engineering Education: Supporting Students' Transition into the Chemical Engineering Discipline	AraOluwa	Adaramola	2ds
111	Engineering (Glyco)Immunology	Jessica C.	Stark	2du

BOARD NUMBER	Title	First Name	Last Name	Paper Number
112	Green Energy Storage and Chemical Technologies: Combining Informatic Principles with Advanced Molecular Simulations to Capture Catalyst Dynamics	Gregory	Collinge	2dv
113	Advanced Materials from Renewable and Refinable Polymers	Graham W.	Tindall	2dw
114	Surface Tension Driven Phenomena across Scales	Alireza	Hooshanginejad	2dx
115	Decision-Making and Learning Under Uncertainty for Complex Systems	Joshua	Pulsipher	2dy
116	Computational and AI-Driven Chemistry for Advanced Heterogeneous Catalyst Design	Xijun	Wang	2ea
117	Exploring Antibody Design Space with Deep Learning Models	Sai Pooja	Mahajan	2eb
118	Interfacial Engineering and Fluid Dynamics for Water and Sustainability	Samantha	McBride	2ec
119	Computational Methods to Engineer Proteins for Health and Environmental Applications	Rituparna	Samanta	2ed
120	Modeling Electrochemical Oxygen and Carbon Dioxide Reduction at Solid-Liquid Interfaces for Energy Conversion and Environment Protection	Ankita	Morankar	2ef
121	Big Data Analytics for Biopharmaceutical Production Platform Development	Saratram	Gopalakrishnan	2eg
122	Computational Design of Functional Polymer Materials	Heyi	Liang	2eh
123	Advanced Nanoparticle and Cellular Drug Delivery Strategies for Neurological Diseases	Rick	Liao	2ei
124	Understanding the Effect of Nanoconfinement on Carbon Dioxide Reaction with Water Using Reactive Molecular Dynamics Simulations	Nabankur	Dasgupta	2ej
125	Discovery and Engineering of Ribosomal Peptide Natural Products for Therapeutics	Hengqian	Ren	2ek
126	<i>Interfacial Design of Nanoparticles and Microbubbles for Treatment of Viral Infection and Brain Injury</i>	Rajarshi	Chattaraj	2el
127	Carbon Management for Fixing the Climate	Xiaoyang	Shi	2em
128	Multi-Scale Design of Hybrid Materials for Chiral Photonics	Prashant	Kumar	2en
129	Engineering and Analysis of Electromicrobial Production Systems	Jeremy	Adams	2eo
130	Multiscale Modeling and Engineering of Low-Dimensional Material Interfaces	Tian	Tian	2ep
131	Engineering Models and Experiments in Gut-Lung Axis: Immunity Against Viral Infection and Foodborne Nanotoxicity	Mohammad Aminul	Islam	2eq
132	Data-Driven Biochemical Systems Engineering	Remil	Aguda	2es
133	Driving and Suppressing Clonal Expansion in Engineered Stem Cell Environments	Aidan	Gilchrist	2et
134	Electronic Structure Methods to Discover Low-Cost Catalytic Materials for Sustainable Energy Development	Shikha	Saini	2eu
135	Transport in Complex Fluids for Applications in Sustainable Energy and Health	Madhu Venkata Rama Krishna	Majji	2ew
136	Applications of Sustainable Engineered Polymer Interfaces: From Packaging to Environmental Remediation	Paresh	Samantaray	2ex

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BOARD NUMBER	Title	First Name	Last Name	Paper Number
137	Low Temperature Selective Detection of Ammonia Gas with Cu-En Functionalized Polyaniline	Shivam	Gautam	2ey
138	Theoretical and Experimental Techniques for Gas-Phase Kinetics	Clayton	Mulvihill	2ez
139	Rheology-Guided Design and Understanding of Soft Materials	Ria	Corder	2fa
140	Harnessing Membrane Engineering for the Robust Bio-Production of Chemicals and Efficacious Therapeutics	Miguel	Santoscoy	2fb
141	Theory-Guided Modulation of Local Coordination Environment of Single-Atom Metal Site Catalysts for Enhanced Oxygen Reduction Reaction	Ara	Cho	2fc
142	Quantitative Metabolism in Microbes and Microbial Communities	Yihui	Shen	2fd
143	Engineering Peptides through Molecular Simulation, Machine Learning and Optimization Methods for Biological and Clean Energy Applications	Yiming	Wang	2fe
144	Dual Wave-Particle Nature of Light: Magnetic Effect of Light Could Lead to Solar Power without Traditional Semiconductor-Based Solar Cells.	Winston	Vo	2ev
144	Dual Wave-Particle Nature of Light: Magnetic Effect of Light Could Lead to Solar Power without Traditional Semiconductor-Based Solar Cells.	Giau	Tran	2ev
145	Chemically Informed Theoretical Models and Simulation Techniques to Characterize Interfacial Phenomenon	Sriteja	Mantha	2ff
146	Understanding Fundamental Gas Transport in Next Generation Membranes for Energy-Efficient Gas Separations: Carbon Molecular Sieve and Metal Organic Framework Membranes	Hyun Jung	Yu	2fg
147	Computationally Accelerated Discovery of Atomically and Electronically Tunable Clean Energy Materials	Andrew	Rosen	2fh
148	Biomimetic Nanopore and Material for Rapid Identification, Quantification, and Isolation	Youwen	Zhang	2fi
149	Engineering Electrocatalytic Systems for Producing Value-Added Chemicals	Minju	Chung	2fj
150	A Novel <i>in Vitro</i> Cell Transfection Method: Optimization of Corona Charge Instrumentation and Parameters	Molly	Skinner	2fk
151	Inverse Design of Functional Nanomaterials	Timothy C.	Moore	2fm
152	Synthetic Strategies Toward Tailored Structural Properties of Advanced Inorganic Materials to Enable the Sustainable Circular Economy	Juan Carlos	Vega-Vila	2fn
153	Engineering Exotic Correlated Disorder for Functional Amorphous Soft-Matter Systems	Duyu	Chen	2fo
154	Heterogeneous Catalysis and Process Development for Sustainable Growth	Jun Hee	Jang	2fp
155	Controlling Self-Assembled Block Copolymer Morphologies for Tailored Performance	Karthika	Madathil	2fs
156	Predictive Modeling of Adverse Drug Reactions	Sophia	Orbach	2ft
157	Interfacing Biology with Materials	Gang	Fan	2fu

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BOARD NUMBER	Title	First Name	Last Name	Paper Number
158	Novel Polymer and Composite Materials: From Molecular Design to Applications	Mengfan	Zhu	2fv
159	Predictive Modeling of Phase Behavior of Reservoir Fluids Under Miscible Gas Injection Using Peng-Robinson Equation of State	Ali	Alhammadi	2fw
160	Development of Genetic Tools for Engineering Novel Production Platform, Cyanobacterium <i>Synechococcus Elongatus</i> PCC 11801	Swati	Madhu	2fl
160	Development of Genetic Tools for Engineering Novel Production Platform, Cyanobacterium <i>Synechococcus Elongatus</i> PCC 11801	Aditya	Sarnaik	2fl
161	DNA Origami Assemblies for Reconfiguration, Actuation, and Education Modules	Anjelica	Kucinic	2fx
162	Ionization and Conformation Consistency in Weak Polyelectrolytes Near Interfaces	Alejandro	Gallegos	2fy
163	Development of Materials and Processes for CO ₂ Capture and Water Purification	Suyong	Han	2fz
164	Tuning of Defects and Disorder in Lanthanum-Doped Ceria Nanoparticles: The Effect on Direct Methane Conversion to C ₂ Products	Fabiane	Trindade	2ga
165	Bridging Dissimilar Materials through Dynamic Bonds	Neil	Dolinski	2gb
166	Development of Cement Kiln Dust Recovery Process for CO ₂ Utilization	Jonghun	Lim	2gc
167	Engineering Spatial Organization in Biological Systems	Carolyn E.	Mills	2gd
168	Investigation of Metal-Organic Frameworks (MOFs) As Thin Films, and Polymer-MOF Gels and Hybrids for Drug-Delivery and Carbon Capture Applications	Prince	Verma	2ge
169	Programmable Catalysts: Condensing Charges & Defect and Atom By Atom Engineering	Tzia Ming	Onn	2gf
170	Bulk and Interfacial Dynamics in Complex Fluids and Soft Materials.	Rodrigo	Reboucas	2gg
171	Se-Catalyzed Oxidative Carbonylation of C1-C4 Alcohols for Producing Dialkyl Carbonates	Hye Jin	Lee	2gh
172	Efficient Catalytic Synthesis of Adipic Acid Via Hydrogenation and Hydrogenolysis of Biomass Derived 2,5-Furandicarboxylic Acid	Anh Vy	Tran	2gi
173	Sustainable Product and Process Intensification through Molecular and Process Optimization	Jianping	Li	2gj
174	Addressing the Energy Challenges of the 21st Century through Next-Generational Battery Chemistries for Safer, More Resilient, and Higher Energy Density Batteries	H. Hohyun	Sun	2gk
175	A-Priori Theory-Informed Training of Artificial Neural Networks for Prediction of Chemical Reactivity	Jaeyoung	Cho	2gl
176	Aquatic Biodegradation of Fibers/Bio-Based Polymers	Soojin	Kwon	2gm
177	Interfacial Dynamics for Renewable Energy Conversion and Storage	Weilai	Yu	2gn

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BOARD NUMBER	Title	First Name	Last Name	Paper Number
178	Environmentally-Relevant Electrochemical Separations Beyond Drinking Water	Jonathan	Boualavong	2go
179	A Holistic Approach for Inorganic Salt Recovery from Wastes Generated from Common Salt Harvesting Activities	Parul	Sahu	2gv
180	Fluctuation Driven Dynamics: From Glassy Systems to Biopolymers	Ashesh	Ghosh	2gq
181	Application of Amorphous Solid Dispersion Technology for Improving the Solubility and Anti-Oxidant Activity of <i>Withania Somnifera</i> methanolic Root Powder Extract	Kiran	Dudhat	2gr
182	Sequence-Defined Polymers for Precise Engineering of Assemblies and Interfaces Towards Responsive Soft Materials	Beihang	Yu	2gs
183	Designing Dynamic Materials for Selective Reactions at Ultra-Low Substrate Concentrations, Enabling Direct Air Carbon Capture and Utilization	Joshua	Lansford	2gu
184	Carbon Capture and Organic Transformations Enabled By Photochemical and Electrochemical Methods for Sustainability	Hyowon	Seo	2gw
185	Co-Continuous Polymeric Nanostructures By Microphase Separation of Diverse Molecular Architectures	Jaechul	Ju	2gx
186	Skeletal Tissue Regeneration Using Physiochemical Cues	Ritopa	Das	2gy
187	Synthesis and Characterization of Functional Soft Materials	Khushboo	Suman	2gz
188	Catalytic Microwave-Assisted Pyrolysis of Waste Plastics for Fuels and Chemicals	Leilei	Dai	2ha
189	Programmable, Electrified, and Far-from-Equilibrium Thermochemical Synthesis	Qi	Dong	2hb
190	New Sulfide Based Solid State Battery from Reactive Molecular Dynamics	Tridip	Das	2he
191	Next Generation Catalysis By Microwave, Plasma, and Materials Design	Sean	Brown	2hf
192	Rhodium and Platinum Recovery from Spent Catalyst Using Deep Eutectic Solvents.	Victoria	Shields	2hg
193	Interfacing Electrogenic Bacteria and Reduced Graphene Oxide: Energetics and Electron Transport	Sheldon	Cotts	2hh
194	(Photo)Electrochemical Conversion for Sustainable Fuels, Chemicals, and Fertilizer	Elizabeth	Corson	2hi
195	Enabling Green Chemist By Atomic-Scale Catalysts Design - Fundamental Insight into Biomass Upgrading	Joakim	Halldin Stenlid	2hk
196	Antibody Production Against Camptothecin-Derived Small Molecules: A Tool Fordeveloping Pharmacokinetic Studies and Dose Management of Chemotherapy	Tahereh	Zarnoosheh farahani	2hm
197	Narrow the Gap between Simulated Adsorption Properties and Experimental Results in MOFs	Zhenzi	Yu	2hn
198	Computational Active Learning of Switchable Materials and Molecular Probes	Siva	Dasetty	2ho
199	Multi-Scale DFT/MD Computational Approaches to Condensed Phase and Electrocatalytic Reactions.	Bolton	Tran	2hp
200	Thermochemical Modulation of Acid-Containing Siliceous Zeolites for Renewable Chemicals	Raisa Carmen	Andeme Ela	2hq

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201	Machine Learning Guided Discovery of Organic and Polymeric Materials for Energy and Environmental Applications	Dylan	Anstine	2hr
202	Hierarchical Control and Characterization of Synthetic and Biopolymer Materials	Gabriel	Burks	2hs
203	Molecularly Programmed Dynamic Polymers for Responsive Materials	Christopher B.	Cooper	2ht
204	Amine-Functionalized Carbon Nanodot Electrocatalysts Converting Carbon Dioxide to Methane	Zhengyuan	Li	2hu
205	Understanding and Applying Modern Electrochemistry to Develop and Connect Research for Electronic Technologies	Theresa	Schoetz	2hv
206	Comparison of Decarbonization Effectiveness Among Steelmaking, Cement, and Aluminum Sectors	Lingyan	Deng	2hx
207	Leveraging Membrane Biophysical Features for Enhanced Functionality of Cell-Mimetic Systems	Justin	Peruzzi	2hz
208	Oxidative Coupling of Methane: Developing Structure-Property Relationships for High-Performance Metal Oxide Catalysts	Mariano D.	Susman	2ib
209	Role of New Class Functionalized Ionic Liquids for Enhancement of CO ₂ Capturing Performance of N-Methyldiethanolamine: Kinetics Study and Interaction Mechanism Analysis	Surya	Tiwari	2ic
210	Integrating across Scales in Computational Protein Engineering	Tucker	Burgin	2id
211	Interfacing Synthetic Biology with Electrochemistry and Biomolecular Condensate	Yifan	Dai	2ie
212	Enhancing the Bioconversion of Major Lignocellulosic Fractions to Medium Chain Length-Polyhydroxyalkanoates	Jorge	Arreola Vargas	2if
213	Manipulating and Chaining Polyelectrolyte Droplets with an Electric Field	Aman	Agrawal	2ig
214	Data Science Enabled Cell Analysis for Improving Pre-Clinical to Clinical Translation Pipelines	Hawley	Helmbrecht	2ih
215	Enhanced Electrochemical Struvite Precipitation from Phosphate-Rich Wastewater Using Pulsating Voltage	Ruhi	Sultana	2ij
216	Investigating Non-Equilibrium Forcing in Biological Tissues and Design of Bio-Inspired Active Adaptive Materials	Yuqing	Qiu	2ik
217	Howsmon Laboratory: Systems Biology and Biomedical Signals	Daniel P.	Howsmon	2il
218	Toward a More Sustainable World with Heterogeneous Photocatalysis: From Bench to Industry	Hossein	Robotjazi	2im
219	Theory and Design of Non-Natural Peptides That Undergo Folding-Induced Self-Assembly to Liquid-Liquid Phase Separation.	Nairiti	Sinha	2in
220	Bending the Drug Delivery Paradigm By Targeting Nanocarriers for Accumulation within the Body's Intrinsic Barriers	Nicholas	Lamson	2io
221	Computational Modeling of Advanced Materials for Sustainable Energy Conversion and Storage	Nick	Singstock	2ir

BOARD NUMBER	Title	First Name	Last Name	Paper Number
222	Engineering Single Shot Vaccine Platform Comprising Liposome Embedded Polyelectrolyte Nanofilms Assembly for Controlled Release of Inactivated Chikungunya Virus	Rashi	Porwal	2is
223	Scalable Decision-Making for Decarbonized Energy Systems	Sungho	Shin	2it
224	Advanced Membrane Designs and Fundamentals at the Water-Energy Nexus	Mahsa	Abbaszadeh	2iv
225	Intricacies of Spontaneous Emulsification	Monicka	Kullappan	2iw
226	Dual Stimuli-Responsive Polycationic Nanoparticles for miRNA Delivery in the Treatment of Glioblastoma Multiforme	Deidra	Ward	2iy
227	Interdroplet Interactions and Rheology of Nanoemulsion Templates for Synthesis of Porous Hydrogels	Zahra	Abbasian Chaleshtari	2iz
228	Molecular-Level Understanding and Design of Functional Nanomaterials for Sustainable Energy Applications	Zachariah	Berkson	2ja
229	Low-Cost and Membrane-Free Chloride Redox Flow Battery with Multiphase Flow	Singyuk	Hou	2jb
230	Accelerating the Transition Towards a Sustainable Bioeconomy through an Integrated Biorefinery Development Framework	Yoel	Cortes-Pena	2jc
231	Probing the Mechanism of Isonitrile Formation By a Non-Heme Iron(II)-Dependent Oxidase/Decarboxylase	Antonio	Del Rio Flores	2jd
232	Polymer Membrane Technology, Synthesis of Copolymer Membrane with Polystyrene and Divinylbenzene Used in Electrodialysis and It's Applications	Rajni Bala	Talwar	2je
233	Machine-Learned Committor Functions for Reactive Molecular Dynamics	Jacob	Gissinger	2jh
234	Using analytical and computational chemistry to uncover chemical mechanisms of complex systems	Heather	LeClerc	2ji
235	Platinum nanoparticles encapsulated within PLGA, treatment for TNBC, an <i>in vitro</i> and <i>in vivo</i> study.	Aida	López Ruiz	2jj
236	Engineering Cytokines for the Treatment of Metabolic Diseases	Lisa	Volpatti	2jk
237	Coarse-Grained Simulation of Self Healing Supramolecular Polymers with Highly Branched Architectures	Cody	Bezik	2jl
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239	Colloidal science and macromolecular interactions: Leveraging soft materials in medicine and sustainability	Amir	Erfani	2jn
240	Influence of Bifunctional PtZn/SiO ₂ and H-ZSM-5 on the Rates and Selectivity of Propene Aromatization	Christopher	Russell	2jo
241	Surface Redox Mediators Co-catalyze the Reduction of O ₂ to H ₂ O ₂ on Pd Nanoparticles	Jason S.	Adams	2jp
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249	Charge based high throughput fractionation and biosensing of exRNA nanocarriers (Extracellular vesicles, Lipoproteins and Ribonucleic protein)	Himani	Sharma	2jx
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251	Elucidating the role of network topology dynamics on the coil-stretch transition hysteresis in extensional flow of entangled polymer melts	Mahdi	Boudaghi	2jz
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