Analytical chemistry

#	PI	Authors	Title	Affiliation
1	White	Lars Alexander Olivan	Electrochemical Control of the Diazonium Reduction Reaction for Precisely Tunable Thin Layers	University of Cincinnati
2	Ross	Blaise Ostertag	Synthesizing copolymer-based porous carbon microfibers for enhanced electrochemical detection	University of Cincinnati
3	Strobbia	Lutfun Naher	Developing a fiber optrode for in-situ monitoring via SERS sensing	University of Cincinnati
4	Alvarez	Chaminda Nawarathne	Covalent bond formation between Carbon nanotubes and metal surfaces	University of Cincinnati
5	White	Sanduni Abeykoon	Continuous Square Wave Voltammetry for High Information Content Interrogation of Conformation Switching Sensors	University of Cincinnati
6	Ross	Rebekah Brantley	Comparison of Graphene-Modified Carbon-Fiber Microelectrodes with Fast-Scan Cyclic Voltammetry	University of Cincinnati
7	White	Audrey Pumford	Collision dynamics of single, nucleic acid-tethered nanoparticle	University of Cincinnati
8	Strobbia	Steven Quarin	Development of a Catalytic Sensing Mechanism to Enhance the Sensitivity of Homogenous SERS Sensors for Viral Genetic Targets	University of Cincinnati

Analytical chemistry

#	PI	Authors	Title	Affiliation
9	White	Essraa Khalil	Silver Nanoneedle Ion Channel Probe to Maintain Single Channel Recordings: Probe Design and Tip Positioning Control	University of Cincinnati
10	Zhang	Juhyeon Park	Visual Hydrogen-Sensing Film for the Monitoring of Biodegradation of Magnesium Alloy Implant	University of Cincinnati
11	Alvarez	Chethani Ruhunage	Application of HNBR as a flexible polymer material for implantable sensors	University of Cincinnati
12	White	Hope Kumakli	Real-time Formation and Studies of Self-Assembled Monolayer on a Gold Electrode Surface Using Scanning Electrochemical Cell Microscopy (SECCM)	University of Cincinnati
13	Ross	Moriah Weese-Myers	Probing the mechanism of rapid guanosine release during ischemia	University of Cincinnati
14	Alvarez	Abdul Hoque	Control over the Size, Shape, and Composition of Bimetallic Aluminum-Iron Oxide Nanoparticles	University of Cincinnati
15	Ross White	Jordan Seibold	Development of Electrochemical Aptamer-Based Neuropeptide Y Sensor	University of Cincinnati
16	Ross	Perry Anntonette N	Selective Zn(II) Detection for Fast Scan Cyclic Voltammetry	University of Cincinnati
17	Alvarez	Artur Huseinov	Reagentless sample preparation method for electrochemical detection of metals	University of Cincinnati
18	Ross	Vivek Subedi	Comparative study of how alignment of graphene impacts neurochemical detection	University of Cincinnati

Analytical chemistry

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19	Zhang	Xiaoyu Cui	Sensitive DNA Detection based on catalytic nanoparticles with a Competitive Hybridization	University of Cincinnati
20	Strobbia	Der Vang	Analysis of Nanostar Reshaping Kinetics for Optimal Substrate Fabrication	University of Cincinnati
21	Ross	Alexandra Keller	Induced Acute Inflammation in the Mesenteric Lymph Nodes to Study Purinergic and Adrenergic Signaling through Fast-Scan Cyclic Voltammetry	University of Cincinnati
22	Alvarez	Gabrielle R. Dangel	Electrochemical Detection of Lead from Lead Scale in Drinking Water	University of Cincinnati
23	Ross	Delong, L.M	Oxygen Gradient Microfluidic Device for Culturing Precision Cut Intestinal Slices	University of Cincinnati
24	Strobbia	Manisha Sheokand	Rational Design of Duplex-Aptamer SERS Sensors	University of Cincinnati
25	Ross	Maria Kristindottir	Characterization of an Improved Microfluidic Chip for Localized and Sustained Ex Vivo Applications	University of Cincinnati
26	Kim	Tam Trinh	Selective monitoring and understanding of DNA-bridging by human PARP1	University of Cincinnati
27	Ross	Bindu Modi	Controlled graphene oxide microfiber fabrication on-chip for neurochemical detection	University of Cincinnati

organic and inorganic chemistry

#	PI	Authors	Title	Affiliation
28	Sun	Kaili Yan	Electrosynthesis of amino acids from biomass-derived α-hydroxyl acids	University of Cincinnati
29	Jiang	Ashwin Chaturvedi	A PEGylated Tin-Porphyrin Complex for Electrocatalytic Proton Reduction: Mechanistic Insights into Main-Group Element Catalysis	University of Cincinnati
30	Sun	Guanqun Han	Two-photon-absorbing ruthenium complexes enable near infrared light-driven photocatalysis	University of Cincinnati
31	Jiang	Nilakshi Devi	Homogeneous Electrocatalytic CO_2 Reduction Using a Porphyrin Complex with Flexible Triazole Units in the Second Coordination Sphere	University of Cincinnati
32	Liu	Wenhao Yan	Copper-Catalyzed Dilfluoromethylation Enabled by Aryl Radical Activation	University of Cincinnati
33	Baldwin	Ben Crabtree	Pyridyl containing tripodal alpha hydroxy amide ligands	University of Cincinnati
34	Liu	Chao Wang	Copper catalyzed aryl radical enabled C-C bond formation	University of Cincinnati
35	Hartley	Govinda Prasad Devkota	Long-range structural communication in ortho-phenylenes	University of Cincinnati
36	Guan	J. P. I. Dulmini Jayawardhena	Boronactivation with low-valent Co complex, HCo(PMe3)4	University of Cincinnati
37	Mack	Jaina E Helmann	Reduction of alkyl halides under mechanochemical conditions	University of Cincinnati
38	Guan	Bedraj Pandey	Cobalt-Catalyzed Reversible Hydrogenation of Carbon Dioxide to Formic Acid	University of Cincinnati
39	Miami University	Ruichao(Charles) Xie	A Dual Grafted Fluorinated Hydrocarbon Amine Weak Anion Exchange Resin Polymer for Adsorption of PFOA from Water	Miami University
40	Miami University	Roshan Lama	Progress towards orthPhenylene based Foldamer Cage.	Miami University
41	Ayres	Vindya Dikella	Porous Polyurethane with Monodisperse Porosity using High Internal Phase Emulsion	University of Cincinnati
42	Ayres	Anthony Smith	Enhancing the properties of PDMS PolyHIPEs by increasing the crosslinking density and their use as oil/water separation media	University of Cincinnati
43	Ayres	Naomi Coutinho	Porous Polymer Particles using Thiol-Ene Chemistry with Poly(dimethylsiloxane)	University of Cincinnati

Physical chemistry

#	PI	Authors	Title	Affiliation
44	Gudmundsdottir	Leanna J. Patton	Controlling photofracking behavior by strengthening lattice interactions in crystal packing	University of Cincinnati
45	Gudmundsdottir	Pitawela, Niroodha	Medicinal drug synthesis; mechanistic studies using flow vs. batch photochemistry	University of Cincinnati
46	Gudmundsdottir	Dmitrii Govorov	Characterizing aromaticity of triplet corannulene and coronene using magnetic properties	University of Cincinnati
47	Gudmundsdottir	Janaka Kavikarage	Exploring the Photodynamics of Dimethylpyrazole-Phenyl Azides (DPZA)	University of Cincinnati
48	Gudmundsdottir	Charley Hamon	Synthesis of a diazidostilbene for photochemical and photodynamic studies	University of Cincinnati
49	Gudmundsdottir	Anthony M. Mack	Secrets of Photodynamic Azide Crystals Revealed By Crystal Packing	University of Cincinnati
50	Gudmundsdottir	Brandi James	Elucidating the Mechanism for Forming Isocyanates from a Geminal Alkyl Diazide	University of Cincinnati
51	Gudmundsdottir	Brianna McVay	Photo-fracking of 1-azido-2-nitrobenzene: Crystals under external pressure	University of Cincinnati
52	Gudmundsdottir	Dinindu Mendis	Wavelength matters in photochemistry	University of Cincinnati
53	Gudmundsdottir	Uyen Dao, Gabrielle Nelson	Photosensitive α-acetephenone azides lifting weight in correlation to their intermolecular forces	University of Cincinnati
54	Gudmundsdottir	Rajkumar Merugu	N2 and CO2 Gas Induced Photo Fracking and Dynamic Behavior of Organic Azides and Peroxides	University of Cincinnati
55	Gudmundsdottir	Fiona Wasson	Photo-erupting Solid-State Vinyl Azides with Differing Dynamics due to Substituents Flexibility Upon Gas Release	Walnut Hills High School

Computational chemistry

#	PI	Authors	Title	Affiliation
56	Dima	Shehani Kahawatte	Exploring the effects of tubulin isotypes on the action of microtubule severing proteins using simulations and machine learning	University of Cincinnati
57	Stan	Tharushi Rajaguru	Allosteric communication within the HSP104 AAA+ Disagregase Nanomachine	University of Cincinnati
58	Dima	Maria Kelly	Identifying Allosteric Networks of Severing Enzymes using Markov State Models and Classification Models	University of Cincinnati
59	Stan	Hayden Dennison	Probing Allosteric Communication of Bacterial ClpP Peptidase using Dynamic Network Analysis and Machine Learning	University of Cincinnati
60	Dima	Emma M. Meilinger	The effect of tubulin code on microtubule severing enzyme dynamics	University of Cincinnati
61	Stan	Ashan Dayananda	Machine Learning Approaches for Elucidation of Allosteric Communication within the Bacterial ClpP Peptidase	University of Cincinnati