

ELKIN 2026 – List of posters

1	Fatemeh Hashemifar - In-Situ Bubble Analysis in Alkaline Electrolysis
2	Sungyeol Kwak - Ionic-Conductance-Enhanced Nanofluidic Memristor Enabling Low-Voltage Neuromorphic Computing
3	Johannes Schenk - Ammonium Removal by Membrane Capacitive Deionization: Effects of Voltage, Current, and Flow on Removal Efficiency, Water Recovery, and Energy Demand
4	Sinwook Park - Printed-Circuit-Board-Integrated Iontronic Circuits for Ionic Logic Gate Computation and Memory-Based Signal Processing
5	Samira Aliasghari - Electrosorption of Short-Chain PFAS using innovative colloidal activated carbon/graphene composite electrodes
6	Boaz Kuizenga - Enhancing Selectivity in Electrochemical Alcohol Oxidation Through Reference Electrode Integration in a Microflow Reactor
7	Tina Đukić - Improved Durability of Pt-nanoalloy-based Oxygen Reduction Reaction Electrocatalysts for Low-temperature Fuel Cells: Tuning the Intrinsic Properties
8	Albert Liu - Modular Electrochemical Sensing via In Situ Reduced Carbon Quantum Dot–Nanotube Molecular Hybrids
9	Cloë Berkien - Separator development for alkaline water electrolysis
10	Paul Takhistov - Coupled Electrokinetic and Electrodifffusion Transport near Dissolving Anodes: Protein-Induced Heterogeneous Crystallization of Metal Nanoparticles
11	Wenge Huang - Stability Analysis of Oscillating Hydrogen Bubbles on Microelectrodes
12	Jihee Park - In-Operando Analysis of Nanoelectrokinetic Phenomena Governing Dendrite Growth at Metal Anode Interfaces
13	Tibor Pálszegi - Electrokinetically Steered Pattern-Forming Textiles (ES-PFTs)
14	Manish Chauhan - Unveiling the Role of Platinum and Graphite Counter Electrodes in Water Splitting with CVD-Grown Iron and Nickel Oxide Anchored Carbon Nanofibers
15	Yanbo Xie - Negative Differential Flow Resistance in Reverse Osmosis
16	Duc N. Dinh - Standardized, Scale-Invariant Performance Benchmarking of Membrane Capacitive Deionization Toward Industrial-Scale System Design
17	Senne Fransen - Simulating dipolophoresis with automatic differentiation
18	Renske Groen - Modelling the removal of ionic species from multicomponent feedwater in an electrodialysis system.
19	Mohammed Qasim - Mechanistic Modeling of Coupled Bio-Electrochemical Processes in Biophotovoltaic Systems
20	Richard Dunkel - Enhancing Overlimiting Current Densities in Electrodialysis via Flow Manipulation by Spacers
21	Bryan Enrique Acosta Angulo - Exploring Self-discharge Kinetics on Alkaline Stacks Using Microkinetic Modelling

22	Soumyadeep Paul - A stirred-tank flow-electrode reactor for lithium extraction from brines
23	Mangut Sunday Jikmyan - Influence of polycation overcompensation on single-salt transport in polyelectrolyte multilayer nanofiltration membranes
24	Valeria M. Günther - Treatment of PFAS Contaminated Landfill Leachate Using Flow-electrode Capacitive Deionization
25	Guillermo - Selective metal recovery by an electroleaching process in the FIREFLY project
26	Peter Burger - Electrochemical recovery of Li-ions from industrial process water
27	Yassine Seffar - Selective lithium extraction from aqueous solution by capacitive deionization
28	Hanieh Geranikolahlooei - Selective ion removal through process parameters tuning
29	Sara Vallejo - Efficiency and energy consumption analysis of bipolar membrane electrodialysis for electrochemical CO2 capture
30	Abhirup Chaudhuri - Surface Charge Heterogeneity Driven Electrokinetics with Ion-Specific Slip Effects in Graphene Nanochannels
31	Alessandro Gavazzi - Predicting the effect of operational conditions on local hydrogen concentration and pH within 3D porous cathodes
32	Subradip Debnath - Electrokinetic control of interfacial thermal transport in nanoconfined electrolytes
33	José Agustín Epstein - Permeability modulation via poroelastic–osmotic coupling in a charged hydrogel layer
34	Maarten Biesheuvel - The second law of Friedrich Kohlrausch (1885)