- "A Comparative Study of Equivalent Circuit Models for Electro-Chemical Impedance Spectroscopy Analysis of Proton Exchange Membrane Fuel Cells," MDPI, accessed April 18, 2025. [Online]. Available: https://www.mdpi.com/1996-1073/15/1/386
- "A New Zinc Salt Chemistry for Aqueous Zinc-Metal Batteries," Ju Li Group, accessed April 19, 2025. [Online]. Available: http://li.mit.edu/Archive/Papers/23/Du23DongAM.pdf
- "A noble electrochemical sensor based on TiO2@CuO-N-rGO and poly (L-cysteine) nanocomposite applicable for trace analysis of flunitrazepam," PubMed, Apr. 19, 2025. [Online]. Available: https://pubmed.ncbi.nlm.nih.gov/32919661/
- "A portable EIS-based biosensor for the detection of microcystin-LR residues in environmental water bodies and simulated body fluids," PubMed, Apr. 18, 2025. [Online]. Available: https://pubmed.ncbi.nlm.nih.gov/38445310/
- "A Review of Impedance Spectroscopy Technique: Applications, Modelling, and Case Study of Relative Humidity Sensors Development," MDPI, Apr. 18, 2025. [Online]. Available: https://www.mdpi.com/2076-3417/14/13/5754
- "A review on advancement of biosensors for benzodiazepines detection," ResearchGate, accessed April 19, 2025. [Online]. Available: https://www.researchgate.net/publication/374448882_A_review_on_advancement_of_biosensors_for_benzodiazepines_detection
- "A Sensitive Immunoassay for Flunitrazepam and Metabolites," Oxford Academic, accessed April 19, 2025. [Online]. Available: https://academic.oup.com/jat/article-pdf/24/4/296/2632008/24-4-296.pdf
- "Advances in Electrochemical Impedance Spectroscopy Detection of Endocrine Disruptors," PMC, Apr. 18, 2025. [Online]. Available: https://pmc.ncbi.nlm.nih.gov/articles/PMC7697587/
- "An electrochemical impedance spectroscopy study of copper in a bentonite/saline groundwater environment," accessed April 19, 2025. [Online]. Available: https://www.mkg.se/uploads/An_electrochemical_impedance_spectroscopy_study_of_copp er_in_a_bentonite_saline_groundwater_environment.pdf
- "An Electrochemical Perspective of Aqueous Zinc Metal Anode," PMC, accessed April 19, 2025. [Online]. Available: https://pmc.ncbi.nlm.nih.gov/articles/PMC10656387/
- "An Introduction to Electrochemical Impedance Spectroscopy," Jefferson Lab. [Online]. Available: https://www.jlab.org/conferences/tfsrf/Thursday/Th2_1-EIS%20intro%20Reece.pdf. [Accessed: Apr. 18, 2025].
- "An Overview Of Electrochemical Impedance Spectroscopy (EIS)," IEST. [Online]. Available: https://iestbattery.com/overview-of-electrochemical-impedance-spectroscopy/. [Accessed: Apr. 18, 2025].

"Analytical Methods," RSC Publishing, accessed April 19, 2025. [Online]. Available: https://pubs.rsc.org/en/content/articlepdf/2012/ay/c1ay05419h

"Application of Cu20@f-MWCNTs Modified Glassy Carbon Electrode for Electrochemical Detection of Rohypnol as Strong Sedatives," electrochemsci.org, Apr. 19, 2025. [Online]. Available: http://www.electrochemsci.org/papers/vol17/221032.pdf

"Application of EIS to the initial stages of atmospheric zinc corrosion," ResearchGate, accessed April 19, 2025. [Online]. Available: https://www.researchgate.net/publication/226714399_Application_of_EIS_to_the_initial_st ages_of_atmospheric_zinc_corrosion

"Basics of EIS," Gamry Instruments. [Online]. Available: https://www.gamry.com/assets/Uploads/BasicsOfEIS.pdf. [Accessed: Apr. 18, 2025].

"Basics of Electrochemical Impedance Spectroscopy," Gamry Instruments. [Online]. Available: https://www.gamry.com/application-notes/EIS/basics-of-electrochemical-impedance-spectroscopy/. [Accessed: Apr. 18, 2025].

"Basics of Electrochemical Impedance Spectroscopy," Gamry Instruments. [Online]. Available: https://www.gamry.com/assets/Application-Notes/basics-of-electrochemical-impedance-spectroscopy.pdf. [Accessed: Apr. 18, 2025].

"Capacitance and impedance of a copper electrode in Na, K, and Cs chloride melts," ResearchGate, accessed April 19, 2025. [Online]. Available: https://www.researchgate.net/publication/271906016_Capacitance_and_impedance_of_a_copper_electrode_in_Na_K_and_Cs_chloride_melts

"CHEBI:31622 - flunitrazepam," EMBL-EBI, Apr. 19, 2025. [Online]. Available: https://www.ebi.ac.uk/chebi/searchId.do?chebiId=31622

"Comparative EIS study of different Zn-based intermediate metallic layers in coil-coated steels," ResearchGate, accessed April 19, 2025. [Online]. Available: https://www.researchgate.net/publication/248208793_Comparative_EIS_study_of_differen t_Zn-based_intermediate_metallic_layers_in_coil-coated_steels

"Comparative Study by Electrochemical Impedance Spectroscopy (EIS) On The Corrosion Resistance of Industrial and Laboratory Zinc Coatings," Science Publications, accessed April 19, 2025. [Online]. Available: https://thescipub.com/pdf/ajassp.2007.430.438.pdf

"Corrosion part 4 – equivalent circuit models," Metrohm, accessed April 18, 2025. [Online]. Available: https://www.metrohm.com/en/applications/application-notes/autolab-applikationen-anautolab/an-cor-004.html

"Detection of 'Date-Rape' Drugs in Hair and Urine, Final Report," National Institute of Justice, accessed April 19, 2025. [Online]. Available:

https://nij.ojp.gov/library/publications/detection-date-rape-drugs-hair-and-urine-final-report

"Detection of 'Date-Rape' Drugs in Hair and Urine, Final Report," Office of Justice Programs, accessed April 19, 2025. [Online]. Available: https://www.ojp.gov/pdffiles1/nij/grants/201894.pdf

"Detection of Flunitrazepam and 7-Aminoflunitrazepam in Oral Fluid after Controlled Administration of Rohypnol(R)," ResearchGate, accessed April 19, 2025. [Online]. Available: https://www.researchgate.net/publication/11320138_Detection_of_Flunitrazepam_and_7-Aminoflunitrazepam_in_Oral_Fluid_after_Controlled_Administration_of_RohypnolR

"Detection of flunitrazepam and 7-aminoflunitrazepam in oral fluid after controlled administration of rohypnol," PubMed, accessed April 19, 2025. [Online]. Available: https://pubmed.ncbi.nlm.nih.gov/12054361/

"Determination of Flunitrazepam and Nitrazepam in Beverage Samples by Liquid Chromatography with Dual Electrode Detection using a Carbon Fibre Veil Electrode," ResearchGate, Apr. 19, 2025. [Online]. Available:

https://www.researchgate.net/publication/215966651_Determination_of_Flunitrazepam_a nd_Nitrazepam_in_Beverage_Samples_by_Liquid_Chromatography_with_Dual_Electrode_Det ection_using_a_Carbon_Fibre_Veil_Electrode

"Determination of flunitrazepam by differential-pulse voltammetry using a bentonite-modified carbon paste electrode," CoLab, Apr. 19, 2025. [Online]. Available: https://colab.ws/articles/10.1039%2Fan9881301719

"Development of Distillation Sensors for Spirit Beverages Production Monitoring Based on Impedance Spectroscopy Measurement and Partial Least-Squares Regression," ACS Omega, Apr. 18, 2025. [Online]. Available: https://pubs.acs.org/doi/10.1021/acsomega.3c00481

"Development of Distillation Sensors for Spirit Beverages Production Monitoring Based on Impedance Spectroscopy Measurement and Partial Least-Squares Regression," PMC, accessed April 18, 2025. [Online]. Available: https://pmc.ncbi.nlm.nih.gov/articles/PMC10157875/

"Development of label-free electrochemical impedance spectroscopy," PubMed, accessed April 19, 2025. [Online]. Available: https://pubmed.ncbi.nlm.nih.gov/36191668/

"EIS analysis of the electrochemical characteristics of the metal–water interface under the effect of temperature," RSC Publishing Home, accessed April 19, 2025. [Online]. Available: https://pubs.rsc.org/en/content/articlehtml/2022/ra/d2ra01634f

"EIS Analysis software with equivalent circuit modeling?," Reddit, accessed April 18, 2025. [Online]. Available:

https://www.reddit.com/r/electrochemistry/comments/12kro5p/eis_analysis_software_w ith_equivalent_circuit/

"EIS Investigation and Structural Characterization of Different Hot-Dipped Zinc-Based Coatings in 3.5% NaCl Solution," International Journal of Electrochemical Science, accessed April 19, 2025. [Online]. Available:

http://www.electrochemsci.org/papers/vol8/80607753.pdf

"Electroanalytical Overview: Electrochemical Sensing Platforms for Food and Drink Safety," MDPI, Apr. 18, 2025. [Online]. Available: https://www.mdpi.com/2079-6374/11/8/291

"Electroanalytical Platform for Rapid E. coli O157:H7 Detection in Water Samples," MDPI, Apr. 18, 2025. [Online]. Available: https://www.mdpi.com/2079-6374/14/6/298

"Electroanalytical Sensing of Flunitrazepam Based on Screen Printed Graphene Electrodes," MDPI, Apr. 19, 2025. [Online]. Available: https://www.mdpi.com/2227-9040/1/3/68

"Electroanalytical Sensing of Flunitrazepam Based on Screen Printed Graphene Electrodes," ResearchGate, Apr. 19, 2025. [Online]. Available:

https://www.researchgate.net/publication/273932690_Electroanalytical_Sensing_of_Flunit razepam_Based_on_Screen_Printed_Graphene_Electrodes

"Electrochemical Behavior of Copper in CuCl 2 Silica Sol and Aqueous Solutions," accessed April 19, 2025. [Online]. Available: https://sioc-journal.cn/Jwk hxxb/EN/10.6023/A1111151

"Electrochemical Behavior of Copper in Drinking Water: Evaluation of Dissolution Process at Low Anodic Overpotential," ResearchGate, accessed April 19, 2025. [Online]. Available: https://www.researchgate.net/publication/262457567_Electrochemical_Behavior_of_Copper_in_Drinking_Water_Evaluation_of_Dissolution_Process_at_Low_Anodic_Overpotential

"Electrochemical behavior of copper in drinking water: evaluation of dissolution process at low anodic overpotential," SciELO, accessed April 19, 2025. [Online]. Available: https://www.scielo.br/j/jbchs/a/jRrHCTPqwj6HZTYwBKKgpmd/?lang=en

"Electrochemical Behavior of Copper Ion Complexed with Nanoparticle Organic Hybrid," OSTI, accessed April 19, 2025. [Online]. Available: https://www.osti.gov/servlets/purl/1808444

"Electrochemical Behavior of Metals Used in Drinking Water Distribution Systems: A Rotating Cylinder Electrode's Study," ResearchGate, accessed April 19, 2025. [Online]. Available:

https://www.researchgate.net/publication/269814473_Electrochemical_Behavior_of_Metals_Used_in_Drinking_Water_Distribution_Systems_A_Rotating_Cylinder_Electrode's_Study

"Electrochemical behavior of protons and cupric ions in water in salt electrolytes with alkaline metal chloride," accessed April 19, 2025. [Online]. Available: https://par.nsf.gov/servlets/purl/10234824

"ELECTROCHEMICAL BEHAVIOR OF ZINC ANODE IN ACIDIC ZINC ELECTROLYTE - INFLUENCE OF LEAD AS AN IMPURITY IN ZINC ANODIC DISSOLUTION," ResearchGate, accessed April 19, 2025. [Online]. Available:

https://www.researchgate.net/publication/360355897_ELECTROCHEMICAL_BEHAVIOR_O F_ZINC_ANODE_IN_ACIDIC_ZINC_ELECTROLYTE_INFLUENCE_OF_LEAD_AS_AN_IMPURITY_I N_ZINC_ANODIC_DISSOLUTION

"Electrochemical behavior of zinc-rich powder coatings in artificial sea water," ResearchGate, accessed April 19, 2025. [Online]. Available: https://www.researchgate.net/publication/222138851_Electrochemical_behavior_of_zinc-rich_powder_coatings_in_artificial_sea_water

"Electrochemical Detection of Benzodiazepines, Following Liquid Chromatography, for Applications in Pharmaceutical, Biomedical and Forensic Investigations," ResearchGate, accessed April 19, 2025. [Online]. Available:

https://www.researchgate.net/publication/259849301_Electrochemical_Detection_of_Ben zodiazepines_Following_Liquid_Chromatography_for_Applications_in_Pharmaceutical_Biom edical_and_Forensic_Investigations

"Electrochemical determination of zinc(II) using N1-hydroxy-N1,N2-diphenylbenzamidine and multi-walled carbon nanotubes modified carbon paste electrode," PMC, accessed April 19, 2025. [Online]. Available: https://pmc.ncbi.nlm.nih.gov/articles/PMC10293732/

"Electrochemical Impedance Spectroscopy (EIS) Basics," Pine Research Instrumentation, Apr. 18, 2025. [Online]. Available: https://pineresearch.com/shop/kb/theory/eis-theory/eis-basics/

"Electrochemical Impedance Spectroscopy (EIS) Basics," Pine Research Instrumentation. [Online]. Available: https://pineresearch.com/support-article/eis-basics/. [Accessed: Apr. 18, 2025].

"Electrochemical Impedance Spectroscopy (EIS) Explanation of Single Crystal Cu(100)/Cu(111) in Different Corrosion Stages," MDPI, accessed April 19, 2025. [Online]. Available: https://www.mdpi.com/1996-1944/16/4/1740

"Electrochemical Impedance Spectroscopy (EIS) fitting parameters for F3," ResearchGate, accessed April 19, 2025. [Online]. Available:

https://www.researchgate.net/figure/Electrochemical-Impedance-Spectroscopy-EIS-fitting-parameters-for-F3_tbl2_333635606

"Electrochemical impedance spectroscopy (EIS) for biosensing," ResearchGate, Apr. 18, 2025. [Online]. Available:

https://www.researchgate.net/publication/352313895_Electrochemical_impedance_spectroscopy_EIS_for_biosensing

"Electrochemical Impedance Spectroscopy (EIS) Gamry Interface 1010E Potentiostat/Galvanostat/ZRA," PhysLab, accessed April 18, 2025. [Online]. Available: https://physlab.org/wp-content/uploads/2021/09/Electrochemical-Impedance-Spectroscopy.pdf

"Electrochemical Impedance Spectroscopy (EIS) in Food, Water, and Drug Analyses: Recent Advances and Applications," OUCI, Apr. 18, 2025. [Online]. Available: https://ouci.dntb.gov.ua/en/works/7WRLVaZ9/

"Electrochemical Impedance Spectroscopy (EIS) in Food, Water, and Drug Analyses: Recent Advances and Applications," ResearchGate, Apr. 18, 2025. [Online]. Available: https://www.researchgate.net/publication/341327545_Electrochemical_Impedance_Spect roscopy_EIS_in_Food_Water_and_Drug_Analyses_Recent_Advances_and_Applications

"Electrochemical impedance Spectroscopy (EIS) Part 1 – Basic Principles," Metrohm. [Online]. Available: https://www.metrohm.com/en/applications/application-notes/autolab-applikationen-anautolab/an-eis-001.html. [Accessed: Apr. 18, 2025].

"Electrochemical Impedance Spectroscopy (EIS) Part 1 – Basic Principles," nLab. [Online]. Available: https://nlab.pl/uploads/edytor/Noty%20aplikacyjne/AN-EIS-001_original.pdf. [Accessed: Apr. 18, 2025].

"Electrochemical Impedance Spectroscopy (EIS) Performance Analysis and Challenges in Fuel Cell Applications," JECST. [Online]. Available: https://www.jecst.org/upload/pdf/jecst-2021-01263.pdf. [Accessed: Apr. 18, 2025].

"Electrochemical Impedance Spectroscopy (EIS)," PalmSens. [Online]. Available: https://www.palmsens.com/knowledgebase-article/electrochemical-impedance-spectroscopy-eis/. [Accessed: Apr. 18, 2025].

"Electrochemical Impedance Spectroscopy (EIS): Principles, Construction, and Biosensing Applications," MDPI. [Online]. Available: https://www.mdpi.com/1424-8220/21/19/6578. [Accessed: Apr. 18, 2025].

"Electrochemical Impedance Spectroscopy (EIS): Principles, Construction, and Biosensing Applications," PMC. [Online]. Available: https://pmc.ncbi.nlm.nih.gov/articles/PMC8512860/. [Accessed: Apr. 19, 2025].

"Electrochemical Impedance Spectroscopy A Tutorial," ACS Measurement Science Au. [Online]. Available: https://pubs.acs.org/doi/10.1021/acsmeasuresciau.2c00070. [Accessed: Apr. 19, 2025].

"Electrochemical impedance spectroscopy characterization of," accessed April 18, 2025. [Online]. Available: https://colab.ws/articles/10.1016%2Fj.foodchem.2019.125345

"Electrochemical Impedance Spectroscopy Detection of Endocrine Disruptors," encyclopedia.pub, Apr. 18, 2025. [Online]. Available: https://encyclopedia.pub/entry/55769

"Electrochemical Impedance Spectroscopy in the Characterisation and Application of Modified Electrodes for Electrochemical Sensors and Biosensors," PMC, Apr. 18, 2025. [Online]. Available: https://pmc.ncbi.nlm.nih.gov/articles/PMC8911593/

"Electrochemical Impedance Spectroscopy Part 1: Fundamentals," J-Stage. [Online]. Available: https://www.jstage.jst.go.jp/article/electrochemistry/90/10/90_22-66071/_article/en. [Accessed: Apr. 18, 2025].

"Electrochemical Impedance Spectroscopy Part 1: Fundamentals," ResearchGate. [Online]. Available:

https://www.researchgate.net/publication/364973853_Electrochemical_Impedance_Spect roscopy_Part_1_Fundamentals. [Accessed: Apr. 18, 2025].

"Electrochemical Impedance Spectroscopy(EIS)," NEWARE. [Online]. Available: https://www.neware.net/news/electrochemical-impedance-spectroscopy/230/70.html. [Accessed: Apr. 18, 2025].

"Electrochemical Impedance Spectroscopy," Engineering LibreTexts. [Online]. Available: https://eng.libretexts.org/Bookshelves/Materials_Science/Supplemental_Materials_Science/Insulators/Electrochemical_Impedance_Spectroscopy. [Accessed: Apr. 18, 2025].

"Electrochemical Impedance Spectroscopy," Metrohm. [Online]. Available: https://www.metrohm.com/content/dam/metrohm/shared/documents/application-notes/an-e/AN-EIS-001.pdf. [Accessed: Apr. 18, 2025].

"Electrochemical Impedance Spectroscopy—A Tutorial," PMC, Apr. 19, 2025. [Online]. Available: https://pmc.ncbi.nlm.nih.gov/articles/PMC10288619/

"Electrochemical Impedance Spectrum Equivalent Circuit Parameter Identification Using a Deep Learning Technique," MDPI, accessed April 18, 2025. [Online]. Available: https://www.mdpi.com/2079-9292/12/24/5038

"Electrochemical Impedance Techniques Potentiostatic EIS," Gamry Instruments. [Online]. Available: https://www.gamry.com/application-notes/EIS/potentiostatic-eis-tutorial/. [Accessed: Apr. 18, 2025].

"ELI5: What exactly is EIS in electrochemistry and what does it aim to achieve?" Reddit, Apr. 18, 2025. [Online]. Available:

https://www.reddit.com/r/explainlikeimfive/comments/nvauzn/eli5_what_exactly_is_eis_i n_electrochemistry_and/

"Emerging Applications of Electrochemical Impedance Spectroscopy in Tear Film Analysis," PMC, Apr. 18, 2025. [Online]. Available:

https://pmc.ncbi.nlm.nih.gov/articles/PMC9599721/

"Enabling highly reversible Zn anode via an interfacial preferentially adsorbed additive containing nucleophilic groups," OAE Publishing Inc., accessed April 19, 2025. [Online]. Available: https://www.oaepublish.com/articles/microstructures.2024.114

"Equivalent Circuit Modeling in EIS," Gamry Instruments, accessed April 18, 2025. [Online]. Available: https://www.gamry.com/assets/Application-Notes/Equivalent-Circuit-Modeling-in-EIS.pdf

"Equivalent Circuit Models and Analysis of Electrochemical Impedance Spectra of Caffeine Solutions and Beverages," ResearchGate, accessed April 18, 2025. [Online]. Available: https://www.researchgate.net/publication/304558679_Equivalent_Circuit_Models_and_An alysis_of_Electrochemical_Impedance_Spectra_of_Caffeine_Solutions_and_Beverages

"Exploring The Influence of Electrode Material on Electrical Impedance Spectroscopy: A Comparative Analysis," Frontier Advances in Applied Science and Engineering - Tinta Emas Journal, accessed April 19, 2025. [Online]. Available: https://jurnal.tintaemas.id/index.php/faase/article/view/279

"Fabrication of a new electrochemical sensor based on screen-printed carbon electrode/amine-functionalized graphene oxide-Cu nanoparticles for Rohypnol direct determination in drink sample," ResearchGate, Apr. 19, 2025. [Online]. Available: https://www.researchgate.net/publication/347156357_Fabrication_of_a_new_electrochem ical_sensor_based_on_screen-printed_carbon_electrodeamine-functionalized_graphene_oxide-Cu_nanoparticles_for_Rohypnol_direct_determination_in_drink_sample

"Fast Fourier Transform-Based Distribution of Relaxation Times Analysis for Efficient and Flexible Time-Domain Electrochemical Impedance Characterization," ChemRxiv, 2024. [Online]. Available: https://chemrxiv.org/engage/api-gateway/chemrxiv/assets/orp/resource/item/67357ab1f9980725cf208e6c/original/fast-fourier-transform-based-distribution-of-relaxation-times-analysis-for-efficient-and-flexible-time-domain-electrochemical-impedance-characterization.pdf. [Accessed: Apr. 18, 2025].

"Flunitrazepam partitioning into natural membranes increases surface curvature and alters cellular morphology," PubMed, accessed April 19, 2025. [Online]. Available: https://pubmed.ncbi.nlm.nih.gov/11137065/

"Food Safety Analysis Using Electrochemical Biosensors," PMC, Apr. 18, 2025. [Online]. Available: https://pmc.ncbi.nlm.nih.gov/articles/PMC6164425/

"Forensic electrochemistry: The electroanalytical sensing of Rohypnol® (flunitrazepam) using screen-printed graphite electrodes without recourse for electrode or sample pretreatment," ResearchGate, Apr. 19, 2025. [Online]. Available:

 $https://www.researchgate.net/publication/256086327_Forensic_electrochemistry_The_electroanalytical_sensing_of_RohypnolR_flunitrazepam_using_screen-$

printed_graphite_electrodes_without_recourse_for_electrode_or_sample_pre-treatment

"Freshness Prediction of Silver Carp Using Sub-Layer Equivalent Circuit Parameters in Electrochemical Impedance Spectroscopy," Taylor & Francis Online, accessed April 18, 2025. [Online]. Available:

https://www.tandfonline.com/doi/full/10.1080/10498850.2025.2469831?src=

"Functionalized Carbon-Based Electrochemical Sensors for Food and Alcoholic Beverage Safety," MDPI, Apr. 18, 2025. [Online]. Available: https://www.mdpi.com/2076-3417/12/18/9082

"IMPEDANCE ANALYSIS FOR FOUR TYPES OF MINERAL WATER AND AQUADES USING ELECTRICAL IMPEDANCE SPECTROSCOPY (EIS) AT FREQUENCIES OF 1 Hz - 50 kHz," ResearchGate, accessed April 19, 2025. [Online]. Available:

https://www.researchgate.net/publication/376955195_IMPEDANCE_ANALYSIS_FOR_FOUR_TYPES_OF_MINERAL_WATER_AND_AQUADES_USING_ELECTRICAL_IMPEDANCE_SPECTROSCOPY_EIS_AT_FREQUENCIES_OF_1_Hz_-50_kHz

"Impedance Basics," University of Washington. [Online]. Available: https://www.cei.washington.edu/wp-content/uploads/2018/05/EIS-and-NLEIS-Wiki.pdf. [Accessed: Apr. 18, 2025].

"Impedance characteristics of deep brain stimulation electrodes in vitro and in vivo," PMC, accessed April 19, 2025. [Online]. Available:

https://pmc.ncbi.nlm.nih.gov/articles/PMC3066196/

"Impedance of copper electrode in slightly acid Cu(II)-glycine solutions," LMA leidykla, accessed April 19, 2025. [Online]. Available:

https://www.lmaleidykla.lt/ojs/index.php/chemija/article/download/4218/3187?inline= 1

"Impedance spectra of zinc anodes at OCP (a), -0.9 V (b) and -1.1 V (c)," ResearchGate, accessed April 19, 2025. [Online]. Available:

https://www.researchgate.net/figure/Impedance-spectra-of-zinc-anodes-at-OCP-a-09-V-b-and-11-V-c-and-of-air_fig3_266437456

"Impedance spectra of zinc electrode in pH 9.2 buffer solution at different temperatures," ResearchGate, accessed April 19, 2025. [Online]. Available:

https://www.researchgate.net/figure/Impedance-spectra-of-zinc-electrode-in-pH-92-buffer-solution-at-different-temperatures_fig8_322598184

"Impedance spectroscopy as a tool to monitor the adsorption and removal of nitrate ions from aqueous solution using zinc aluminum chloride anionic clay," accessed April 19, 2025. [Online]. Available: https://pmc.ncbi.nlm.nih.gov/articles/PMC5835015/

"Impedance Spectroscopy," Chemistry LibreTexts, Apr. 18, 2025. [Online]. Available: https://chem.libretexts.org/Courses/Franklin_and_Marshall_College/Introduction_o_Materi als_Characterization_CHM_412_Collaborative_Text/Electrochemistry/Impedance_Spectroscopy

"Influence of Al Alloying on the Electrochemical Behavior of Zn Electrodes for Zn–Air Batteries With Neutral Sodium Chloride Electrolyte," Frontiers, accessed April 19, 2025. [Online]. Available:

https://www.frontiersin.org/journals/chemistry/articles/10.3389/fchem.2019.00800/full

"Influence of Zn2+ ions on copper electrowinning from sulfate electrolytes," ResearchGate, accessed April 19, 2025. [Online]. Available:

https://www.researchgate.net/publication/226757733_Influence_of_Zn2_ions_on_copper_electrowinning_from_sulfate_electrolytes

"Initial Corrosion of Pure Zinc Under NaCl Electrolyte Droplet Using a Zn-Pt-Pt Three-Electrode System," accessed April 19, 2025. [Online]. Available: http://www.electrochemsci.org/papers/vol8/80506851.pdf

"Initial formation of corrosion products on pure zinc in saline solution," PMC, accessed April 19, 2025. [Online]. Available: https://pmc.ncbi.nlm.nih.gov/articles/PMC6351358/

"Interaction of Midazolam with Glassy Carbon Supported Lipid Membrane in the Presence and Absence of Marker Ions," Asian Journal of Chemistry, accessed April 19, 2025. [Online]. Available: https://asianpubs.org/index.php/ajchem/article/view/18115

"Machine Learning Benchmarks for the Classification of Equivalent Circuit Models from Electrochemical Impedance Spectra," NREL, 2023. [Online]. Available: https://www.nrel.gov/docs/fy23osti/86260.pdf. [Accessed: Apr. 18, 2025].

"Multi-residue detection of benzodiazepines by ELISA based on class selective antibodies," Taylor & Francis Online, accessed April 19, 2025. [Online]. Available: https://www.tandfonline.com/doi/full/10.1080/09540100903199475

"Multi-residue detection of benzodiazepines by ELISA based on class selective antibodies," Taylor & Francis Online, accessed April 19, 2025. [Online]. Available: https://www.tandfonline.com/doi/pdf/10.1080/09540100903199475

"Novel Electrode Reactions of Diazepam, Flunitrazepam and Lorazepam and Their Exploitation in a New Redox Mode LCDED Assay for Serum," ResearchGate, accessed April 19, 2025. [Online]. Available:

https://www.researchgate.net/publication/215966679_Novel_Electrode_Reactions_of_Diaz

epam_Flunitrazepam_and_Lorazepam_and_Their_Exploitation_in_a_New_Redox_Mode_LCD ED_Assay_for_Serum

"Novel Reductive-Reductive Mode Electrochemical Detection of Rohypnol Following Liquid Chromatography and Its Determination in Co," CORE, Apr. 19, 2025. [Online]. Available: https://core.ac.uk/download/pdf/323891330.pdf

"Novel reductive-reductive mode electrochemical detection of Rohypnol following liquid chromatography and its determination in coffee," PubMed, Apr. 19, 2025. [Online]. Available: https://pubmed.ncbi.nlm.nih.gov/25467462/

"Novel reductive–reductive mode electrochemical detection of Rohypnol following liquid chromatography and its determination in coffee," ResearchGate, accessed April 19, 2025. [Online]. Available:

https://www.researchgate.net/publication/269173060_Novel_reductive-reductive_mode_electrochemical_detection_of_Rohypnol_following_liquid_chromatography_ and_its_determination_in_coffee

"Part 1: Fundamentals of Electrochemical Impedance Spectroscopy," Documents for Paint.org. [Online]. Available: https://docs.paint.org/Ct-Analytical-Series/Gamry1_August2004-1648.pdf. [Accessed: Apr. 18, 2025].

"PEIS or GEIS or GEIS-AA? That is the question," BioLogic Learning Center, Apr. 18, 2025. [Online]. Available: https://www.biologic.net/topics/peis-or-geis-that-is-the-question/

"Rapid Drop-Volume Electrochemical Detection of the 'Date Rape' Drug Flunitrazepam in Spirits Using a Screen-Printed Sensor in a Dry-Reagent Format," MDPI, Apr. 19, 2025. [Online]. Available: https://www.mdpi.com/1424-8220/20/18/5192

"Rapid Drop-Volume Electrochemical Detection of the 'Date Rape' Drug Flunitrazepam in Spirits Using a Screen-Printed Sensor in a Dry-Reagent Format," PMC, Apr. 19, 2025. [Online]. Available: https://pmc.ncbi.nlm.nih.gov/articles/PMC7570630/

"Recent analytical strategies on 'Date-Rape' Drugs and its metabolites," accessed April 19, 2025. [Online]. Available: https://www.japsonline.com/admin/php/uploads/119_pdf.pdf

"Redox mechanisms of Rohypnol and Mogadon and their exploitation in an assay using dual electrode ECD following HPLC," accessed April 19, 2025. [Online]. Available: https://uwe-repository.worktribe.com/index.php/OutputFile/946239

"Regulating interfacial reaction through electrolyte chemistry enables gradient interphase for low-temperature zinc metal batteries," PubMed Central, accessed April 19, 2025. [Online]. Available: https://pmc.ncbi.nlm.nih.gov/articles/PMC10482877/

"RELATIONSHIP BETWEEN ZINC CORROSION PROCESS AND CORROSION PRODUCTS: AN EIS AND RAMAN SPECTROSCOPY STUDY," accessed April 19, 2025. [Online]. Available: https://www.electrochem.org/dl/ma/203/pdfs/0246.pdf

"Rescuing zinc anode–electrolyte interface: mechanisms, theoretical simulations and in situ characterizations," RSC Publishing Home, accessed April 19, 2025. [Online]. Available: https://pubs.rsc.org/en/content/articlehtml/2024/sc/d4sc00711e

"Review of Electroanalytical-Based Approaches for the Determination of Benzodiazepines," MDPI, Apr. 19, 2025. [Online]. Available: https://www.mdpi.com/2079-6374/9/4/130

"Review of Electroanalytical-Based Approaches for the Determination of Benzodiazepines," PMC, accessed April 19, 2025. [Online]. Available: https://pmc.ncbi.nlm.nih.gov/articles/PMC6955736/

"Rohypnol (Roofies) Drug Testing," Health Street, Apr. 19, 2025. [Online]. Available: https://www.health-street.net/drug-tests/substances/date-rape/rohypnol/

"Surface Structure to Tailor the Electrochemical Behavior of Mixed-Valence Copper Sulfides during Water Electrolysis," JACS Au - ACS Publications, accessed April 19, 2025. [Online]. Available: https://pubs.acs.org/doi/10.1021/jacsau.3c00703

"The Corrosion Protection Behaviour of Zinc Rich Epoxy Paint in 3% NaCl Solution," accessed April 19, 2025. [Online]. Available: https://www.scirp.org/journal/paperinformation?paperid=4609

"The Corrosion Protection Behaviour of Zinc Rich Epoxy Paint in 3% NaCl Solution," Scientific Research, accessed April 19, 2025. [Online]. Available: https://file.scirp.org/pdf/ACES20110200005_16162236.pdf

"The date rape drug-flunitrazepam-electroanalytical sensing using electrogenerated chemiluminescence," ResearchGate, Apr. 19, 2025. [Online]. Available: https://www.researchgate.net/publication/287301133_The_date_rape_drug-flunitrazepam-electroanalytical_sensing_using_electrogenerated_chemiluminescence

"The effect of interface heterogeneity on zinc metal anode cyclability," RSC Publishing, accessed April 19, 2025. [Online]. Available: https://pubs.rsc.org/en/content/articlehtml/2024/ta/d4ta03165b?page=search

"The Electroanalytical Sensing of Flunitrazepam (Rohypnol) and 7-amino Flunitrazepam in Oral Fluid, Urine and Alcoholic Beverages," Horizon Research Publishing, Apr. 19, 2025. [Online]. Available: https://www.hrpub.org/download/201310/ujc.2013.010307.pdf

"The electrochemical behavior of zinc," ScholarWorks@UTEP, accessed April 19, 2025. [Online]. Available: https://scholarworks.utep.edu/dissertations/AAI1494309/

"The study of copper corrosion mechanisms using electrochemical experimental techniques," ThinkIR, accessed April 19, 2025. [Online]. Available: https://ir.library.louisville.edu/cgi/viewcontent.cgi?article=4980&context=etd

"The World Clock — Worldwide," Time and Date, accessed April 19, 2025. [Online]. Available: https://www.timeanddate.com/worldclock/

"Theory of impedance for initial corrosion of metals under a thin electrolyte layer: a coupled charge transfer-diffusion model," accessed April 19, 2025. [Online]. Available: https://www.ias.ac.in/article/fulltext/jcsc/134/00/0032

"Voltammetric Electronic Tongue for the Simultaneous Determination of Three Benzodiazepines," MDPI, accessed April 19, 2025. [Online]. Available: https://www.mdpi.com/1424-8220/19/22/5002

"Voltammetric study and surface pressure isotherms describing Flunitrazepam incorporation into a distearoylphosphatidic acid film adsorbed at air/water and water/1,2-dichloroethane interfaces," DOI, accessed April 19, 2025. [Online]. Available: https://doi.org/10.1016/j.electacta.2011.06.005

"What is Electrochemical Impedance Spectroscopy (EIS)? Electrochemistry Basics Series," BioLogic Learning Center. [Online]. Available: https://www.biologic.net/topics/what-iseis/. [Accessed: Apr. 18, 2025].

"What is Electrochemical Impedance Spectroscopy?" News-Medical.net, Apr. 18, 2025. [Online]. Available: https://www.news-medical.net/life-sciences/What-is-Electrochemical-Impedance-Spectroscopy.aspx

"ZFit and equivalent electrical circuits (EIS Equivalent Circuit) Battery - Application Note 14," accessed April 18, 2025. [Online]. Available: https://www.biologic.net/documents/eisequivalent-circuit-electrochemistry-battery-application-note-14/

A. C. Lazanas and M. I. Prodromidis, "Electrochemical Impedance Spectroscopy—A Tutorial," ACS Measurement Science Au, vol. 3, no. 3, pp. 162-193, 2023, doi: 10.1021/acsmeasuresciau.2c00070.

A. Grela, L. Gautam, and M. D. Cole, "A multifactorial critical appraisal of substances found in drug facilitated sexual assault cases," Forensic Science International, vol. 292, pp. 50–60, Sep. 2018, doi: 10.1016/j.forsciint.2018.08.034.

D. Wulandari, A. Zarkasi, and K. Nurhanafi, "Impedance Analysis for Four Types of Mineral Water and Aquades Using Electrical Impedance Spectroscopy (EIS) at Frequencies of 1 Hz - 50 kHz," Indonesian Physical Review, vol. 7, no. 1, pp. 84-94, Jan. 2024.

F. Sun, X. Peng, X. Bai, Z. Chen, R. Xie, B. He, and P. Han, "EIS analysis of the electrochemical characteristics of the metal–water interface under the effect of temperature," RSC Advances, vol. 12, no. 27, pp. 16979–16990, Jan. 2022, doi: 10.1039/d2ra01634f.

- J. Slay et al., "Distinguishing Liquid Solutions With Alcohol Using Electrical Impedance Measurements: Preliminary Study for Food Safety Applications," IEEE Sensors Journal, vol. 23, no. 22, pp. 26997-27007, Nov. 15, 2023, doi: 10.1109/JSEN.2023.3315798.
- K. A. Bautista, E. Madsen, S. D. Riegle, and J. C. Linnes, "HELPStat: A Handheld, EIS-Enabled, Low-Cost, and Portable Potentiostat," GitHub repository, 2024. [Online]. Available: https://github.com/LinnesLab/HELPStat
- K. Chinen, S. Nakamoto, and I. Kinjo, "Alcohol solutions impedance and equivalent circuits," International Journal of Electrical and Computer Engineering Research, vol. 4, no. 2, pp. 1–7, Jun. 2024, doi: 10.53375/ijecer.2024.397.
- K. Kim, S. Stoll, R. Singh, W. H. Lee, and J.-H. Hwang, "Recent advances in illicit drug detection sensor technology in water," TrAC Trends in Analytical Chemistry, vol. 168, Nov. 2023, Art. no. 117295.
- M. E. Orazem and B. Tribollet, Electrochemical Impedance Spectroscopy. New York: Wiley-Interscience, 2008, doi: 10.1002/9780470381588.
- M. El-Azazy, "Electrochemical Impedance Spectroscopy (EIS) in Food, Water, and Drug Analyses: Recent Advances and Applications," in Electrochemical Impedance Spectroscopy, M. El-Azazy, M. Min, and P. Annus, Eds. IntechOpen, 2020, doi: 10.5772/intechopen.92333.
- M. Grossi and B. Riccò, "Electrical impedance spectroscopy (EIS) for biological analysis and food characterization: a review," Journal of Sensors and Sensor Systems, vol. 6, no. 2, pp. 303–325, Aug. 2017, doi: 10.5194/jsss-6-303-2017.
- M. Grossi, C. Parolin, B. Vitali, and B. Riccò, "Electrical Impedance Spectroscopy (EIS) characterization of saline solutions with a low-cost portable measurement system," Engineering Science and Technology, an International Journal, vol. 22, no. 1, pp. 102-108, Feb. 2019.

pubs.acs.org, Apr. 18, 2025. [Online]. Available: https://pubs.acs.org/doi/10.1021/acsmeasuresciau.2c00070#:~:text=EIS%20is%20based%20on%20the,the%20system%20toward%20the%20applied

- S. Soni, U. Jain, and N. Chauhan, "A systematic review on sensing techniques for drug-facilitated sexual assaults (DFSA) monitoring," Chinese Journal of Analytical Chemistry, vol. 49, no. 11, pp. 83-92, Nov. 2021.
- S. Wang, J. Zhang, O. Gharbi, V. Vivier, M. Gao, and M. E. Orazem, "Electrochemical impedance spectroscopy," Nature Reviews Methods Primers, vol. 1, no. 1, art. 41, Jun. 2021, doi: 10.1038/s43586-021-00039-w.
- T. R. Fiorentin and B. K. Logan, "Toxicological findings in 1000 cases of suspected drug facilitated sexual assault in the United States," Journal of Forensic and Legal Medicine, vol. 61, pp. 56-64, Feb. 2019.

U. Kumar P, Dharani S, Divya P, and Mounika T, "Advancements in rapid detection technologies for club drugs in beverages," Journal of Pharma Insights and Research, vol. 2, no. 5, pp. 046–058, Oct. 2024, doi: 10.69613/5h65gt50.

X. Ye, T. Jiang, Y. Ma, D. To, S. Wang, and J. Chen, "A portable, low-cost and high-throughput electrochemical impedance spectroscopy device for point-of-care biomarker detection," Biosensors and Bioelectronics: X, vol. 13, May 2023, Art. no. 100301.\