



LIST OF KEYWORDS BY ABSTRACT CATEGORY

| ABSTRACT CATEGORY / TRACK | KEYWORDS |
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| Applications of Proteomics in Biopharma and Food Industry | Antibodies, Drugs, Biotherapeutics Bioprocessing, Molecular Pharming, Biopharma Diagnostics Future Food (E.G., Cultured Food) Quality Control, Counterfeit Detection, Food Fraud |
| Artificial Intelligence in Proteomics | AI in Mass Spectrometry, Biological Insights, Classification, Data Analysis Machine Learning, Deep Learning, Supervised Learning, Unsupervised Learning, Reinforcement Learning, Artificial Intelligence |
| Cell Signaling and Proteome Dynamics | Protein Homeostasis, Stability, Turnover PTM Dynamics Signal Transduction |
| Chemoproteomics and Drug Discovery | Activity and Thermal Profiling, Energetics-Based Protein Separation Biopharma Chemoproteomics for PTM Profiling Click Chemistry, Chemo-Enzymatic Machine-Learning and Computational Modeling Small Molecule Modulators, Molecular Glue, Protein Degradors |
| Clinical Proteomics | AI And Computational Approaches in The Clinic Biomarkers, Diagnostics, Prognostics Clinical Cohorts, Clinical Trials, Population Health and Studies Precision and Personalized Medicine Targeted Therapies, Therapeutics Tissue Biopsies, Body Fluids |
| Data Integration and Innovative Computational Methods for System Biology | Functional Enrichment, Differential Abundance, New Statistical Analyses Integrative Bioinformatics Network Biology Novel Software, Computational Methodology, Databases and Repositories, Annotations Proteogenomics |
| Environmental and Human Microbiomes | Bacteria, Fungi, Parasites, Viruses, Phages, Etc. Metaproteomics, Meta-Metabolomics Microbiota Source (E.G., Marine, Soil, Gut, Skin, Saliva, Microorganisms) |
| Glycoproteomics and Post-translational Modifications | Chemical Modifications Glycobiology Glycosylation, Phosphorylation, Acetylation, Ubiquitination, Methylation, etc. N-terminomics, Degradomics |

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| Host-Pathogen, Infectious Diseases and Virology | Antimicrobial Resistance Bacteria, Fungi, Parasites, Viruses, Phages, etc. Immunobiology Pandemic Preparedness |
| Immunopeptidomics and Immunoproteomics | Antigen Presentation, Antibodies Autoimmunity HLA/MHC Class I & Class II Immunopeptides, Immunoproteins Method and Technology Development Vaccination, Immunogenicity, Immune Response |
| Innovations in Proteomics Methodology | Analytical Techniques Computational Analysis High-Throughput, Deep Proteomics Method, Technology, and Instrumentation Development Sample Preparation Workflow Automation/Integration |
| Multi-Omics and Systems Biology | Genomics, Transcriptomics, Metabolomics, Lipidomics, Integrative Omics Multi-Omics Data Integration Network Biology and Modeling |
| New Technologies for Large Scale Proteomics | |
| Non-Canonical Translation and Microproteins | Non-Canonical Open-Reading Frames and Proteins Novel and Alternative Proteins Small Open Reading Frames and Proteins |
| Novel Computational Analysis of Mass Spectrometry Data | Computational Methods for Data Acquisition Data Processing (E.G., De-Noising, Normalization) De Novo Sequencing Novel Search Engines, Strategies, Peptide and Proteins Identification, Open Modification Searches Quantification |
| One Health One World | Animal, Human, Environmental Health Plant and Agricultural Proteomics Sustainability Veterinary-Based Proteomics |
| Proteome Organization | Organelles, Membranes, Extracellular Vesicles, etc. Protein Complexes Protein-protein Interactions, Proximal Proteomics, Cross-linking Secretomics Surface Proteome |
| Proteomics in Human Diseases | Aging Cancer Cardiovascular Gastrointestinal Diseases Metabolic Diseases and Diabetes Neuroscience, Neurodegenerative Disorders, Psychiatric Disorders |
| Quantitative Proteomics | Chemical and Metabolic Labeling Data Independent Analysis and Data Dependent Analysis Label-free Quantification |

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| | Quantitative Approach |
| Single Cell Proteomics | Low Copy Number Mass Cytometry and Imaging Method And Technology Development Single Cell Multi-Omics Single Organelle, Single Cell-Type |
| Spatial and Imaging Proteomics | Imaging Processing and Analysis Mass Spectrometry Imaging Microscopy Proximity Labelling, Cross-Linking Tissue and Cell imaging |
| Structural Proteomics | Chemical Footprinting Cryo-EM HDX, Cross-linking, Limited Proteolysis Machine-learning and Computational Modeling Native Mass Spectrometry Thermal Profiling and Energetics-based Protein Separation, Protein Folding |
| Technological Advancements | |
| Top-Down Proteomics and Proteoforms | Combinatorial Modifications Middle-down Native Mass Spectrometry Protein Complexes |