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Personal Information

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International Researcher IDs

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Education Information

Doctorate, University of Wisconsin-Madison, Cellular and Molecular Biology, United States Of America 2007 - 2013

Undergraduate, Middle East Technical University, Faculty Of Arts And Sciences, Department Of Biology, Turkey 1997 - 2012

Postgraduate, Middle East Technical University, Graduate School Of Natural And Applied Sciences, Biotechnology, Turkey 2002 - 2005

Dissertations

Doctorate, Dissecting the role of estrogen receptor palmitoylation in breast cancer cells, University of Wisconsin-Madison, 2013

Research Areas

Proteomics, Molecular Biology of Cancer, Protein Engineering

Academic Titles / Tasks

Assistant Professor, Abdullah Gul University, Yaşam Ve Doğa Bilimleri Fakültesi, Moleküler Biyoloji Ve Genetik, 2018 - Continues

Research Assistant PhD, The University of Wisconsin Madison, Cell and Regenerative Biology, 2014 - 2016

Research Assistant, The University of Wisconsin Madison, Cellular and Molecular Biology, 2007 - 2013

Courses

Special Techniques and Advances in Molecular Biology, Undergraduate, 2021 - 2022, 2020 - 2021, 2019 - 2020

Molecular Biology, Undergraduate, 2020 - 2021, 2019 - 2020, 2018 - 2019

Proteomics and Metabolomics, Postgraduate, 2020 - 2021

Health and Well Being, Undergraduate, 2021 - 2022

Cell Signaling, Undergraduate, 2020 - 2021

Published journal articles indexed by SCI, SSCI, and AHCI

- I. **An integrative-omics analysis of an industrial clavulanic acid-overproducing *Streptomyces clavuligerus***
KURT KIZILDOĞAN A., Celik G., unsaldi E., ÖZCAN S., AYAZ GÜNER Ş., ÖZCENGİZ G.
APPLIED MICROBIOLOGY AND BIOTECHNOLOGY, vol.106, no.18, pp.6139-6156, 2022 (SCI-Expanded)
- II. **Proteomic fertility markers in ram sperm**
HİTİT M., Ozbek M., AYAZ GÜNER Ş., GÜNER H., Oztug M., BODU M., Kirbas M., BÜLBÜL B., BUCAK M. N., ATAMAN M. B., et al.
ANIMAL REPRODUCTION SCIENCE, vol.235, 2021 (SCI-Expanded)
- III. **Proteomic and Biological Analysis of the Effects of Metformin Senomorphics on the Mesenchymal Stromal Cells**
Acar M. B., AYAZ GÜNER Ş., Gunaydin Z., KARAKÜKCÜ M., Peluso G., Di Bernardo G., ÖZCAN S., GALDERISI U.
FRONTIERS IN BIOENGINEERING AND BIOTECHNOLOGY, vol.9, 2021 (SCI-Expanded)
- IV. **Why Do Muse Stem Cells Present an Enduring Stress Capacity? Hints from a Comparative Proteome Analysis**
Acar M. B., Aprile D., AYAZ GÜNER Ş., GÜNER H., TEZ C., Di Bernardo G., Peluso G., ÖZCAN S., Galderisi U.
INTERNATIONAL JOURNAL OF MOLECULAR SCIENCES, vol.22, no.4, 2021 (SCI-Expanded)
- V. **Obesity induced by high-fat diet is associated with critical changes in biological and molecular functions of mesenchymal stromal cells present in visceral adipose tissue**
Acar M. B., AYAZ GÜNER Ş., Di Bernardo G., GÜNER H., Murat A., Peluso G., ÖZCAN S., Galderisi U.
AGING-US, vol.12, no.24, pp.24894-24913, 2020 (SCI-Expanded)
- VI. **A comparative study on normal and obese mice indicates that the secretome of mesenchymal stromal cells is influenced by tissue environment and physiopathological conditions**
AYAZ GÜNER Ş., Alessio N., Acar M. B., Aprile D., ÖZCAN S., Di Bernardo G., Peluso G., Galderisi U.
CELL COMMUNICATION AND SIGNALING, vol.18, no.1, 2020 (SCI-Expanded)
- VII. **A photocleavable surfactant for top-down proteomics**
Brown K. A., Chen B., Guardado-Alvarez T. M., Lin Z., Hwang L., Ayaz-Guner Ş., Jin S., Ge Y.
NATURE METHODS, vol.16, no.5, pp.417-423, 2019 (SCI-Expanded)
- VIII. **Monophosphorylation of cardiac troponin-I at Ser-23/24 is sufficient to regulate cardiac myofibrillar Ca²⁺ sensitivity and calpain-induced proteolysis**
Martin-Garrido A., Biesiadecki B. J., Salhi H. E., Shaifta Y., dos Remedios C. G., Ayaz-Guner Ş., Cai W., Ge Y., Avkiran M., Kentish J. C.
JOURNAL OF BIOLOGICAL CHEMISTRY, vol.293, no.22, pp.8588-8599, 2018 (SCI-Expanded)
- IX. **A Family of Photolabile Nitroveratryl-Based Surfactants That Self-Assemble into Photodegradable Supramolecular Structures**
Hwang L., Guardado-Alvarez T. M., Ayaz-Gunner Ş., Ge Y., Jin S.
LANGMUIR, vol.32, no.16, pp.3963-3969, 2016 (SCI-Expanded)
- X. **MASH Suite Pro: A Comprehensive Software Tool for Top-Down Proteomics**
Cai W., Guner H., Gregorich Z. R., Chen A. J., Ayaz-Guner Ş., Peng Y., Valeja S. G., Liu X., Ge Y.
MOLECULAR & CELLULAR PROTEOMICS, vol.15, pp.703-714, 2016 (SCI-Expanded)
- XI. **Comprehensive Characterization of AMP-Activated Protein Kinase Catalytic Domain by Top-Down Mass Spectrometry**
Yu D., Peng Y., Ayaz-Guner Ş., Gregorich Z. R., Ge Y.
JOURNAL OF THE AMERICAN SOCIETY FOR MASS SPECTROMETRY, vol.27, no.2, pp.220-232, 2016 (SCI-Expanded)
- XII. **Effective Top-Down LC/MS plus Method for Assessing Actin Isoforms as a Potential Cardiac Disease Marker**
Chen Y., Ayaz-Guner Ş., Peng Y., Lane N. M., Locher M. R., Kohmoto T., Larsson L., Moss R. L., Ge Y.
ANALYTICAL CHEMISTRY, vol.87, no.16, pp.8399-8406, 2015 (SCI-Expanded)
- XIII. **Specific Enrichment of Phosphoproteins Using Functionalized Multivalent Nanoparticles**
Hwang L., Ayaz-Guner Ş., Gregorich Z. R., Cai W., Valeja S. G., Jin S., Ge Y.
JOURNAL OF THE AMERICAN CHEMICAL SOCIETY, vol.137, no.7, pp.2432-2435, 2015 (SCI-Expanded)

- XIV. **Top-down mass spectrometry of cardiac myofilament proteins in health and disease**
Peng Y., Ayaz-Guner Ş., Yu D., Ge Y.
PROTEOMICS CLINICAL APPLICATIONS, vol.8, pp.554-568, 2014 (SCI-Expanded)
- XV. **Systematic Analyses of the Cytotoxic Effects of Compound 11a, a Putative Synthetic Agonist of Photoreceptor-Specific Nuclear Receptor (PNR), in Cancer Cell Lines**
Zhao Z., Wang L., Wen Z., Ayaz-guner Ş., Wang Y., Ahlquist P., Xu W.
PLOS ONE, vol.8, no.9, 2013 (SCI-Expanded)
- XVI. **The impact of antibody selection on the detection of cardiac troponin I**
Guy M. J., Chen Y., Clinton L., Zhang H., Zhang J., Dong X., Xu Q., Ayaz-Guner Ş., Ge Y.
CLINICA CHIMICA ACTA, vol.420, pp.82-88, 2013 (SCI-Expanded)
- XVII. **Phosphorylation, but Not Alternative Splicing or Proteolytic Degradation, Is Conserved in Human and Mouse Cardiac Troponin T**
Zhang J., Zhang H., Ayaz-Guner Ş., Chen Y., Dong X., Xu Q., Ge Y.
BIOCHEMISTRY, vol.50, no.27, pp.6081-6092, 2011 (SCI-Expanded)
- XVIII. **In Vivo Phosphorylation Site Mapping in Mouse Cardiac Troponin I by High Resolution Top-Down Electron Capture Dissociation Mass Spectrometry: Ser22/23 Are the Only Sites Basally Phosphorylated**
Ayaz-Guner Ş., Zhang J., Li L., Walker J. W., Ge Y.
BIOCHEMISTRY, vol.48, no.34, pp.8161-8170, 2009 (SCI-Expanded)

Refereed Congress / Symposium Publications in Proceedings

- I. **Immunoproteomic Analysis of Acinetobacter baumannii Surface and Secreted Proteins**
AYAZ GÜNER Ş., ÖZCAN S.
International Congress of the Molecular Biology Association of Turkey, İstanbul, Turkey, 27 - 29 September 2019
- II. **Monophosphorylation of cardiac troponin-I at Ser23/24 regulates cardiac myofibrillar Ca²⁺ sensitivity and modulates calpain-induced proteolysis**
Kentish J. C., Martin-Garrido A., Biesiadecki B. J., Salhi H. E., Shaifta Y., Dos Remedios C., Ayaz-Guner Ş., Cai W., Ge Y., Avkiran M.
5th Congress of the ESC-Council-on-Basic-Cardiovascular-Science on Frontiers in Cardio Vascular Biology, Vienna, Austria, 20 - 22 April 2018, vol.114
- III. **Kalp Miyofilamentlerinde Top-Down Proteomik Uygulamaları**
AYAZ GÜNER Ş.
2. Ulusal Proteomik Kongresi, İstanbul, Turkey, 24 - 25 November 2017
- IV. **Estrogen receptor (ER α) palmitoylation is essential for its membrane localization and the intact function of ER α in breast cancer cell.**
AYAZ GÜNER Ş., Elaine A., Xu W.
5th International Congress of the Molecular Biology Association of Turkey, 8 - 10 September 2017

Supported Projects

Ayaz Güner Ş., Özcan S., TUBITAK Project, Determination of the New Chimeric Antigen Receptor (CAR) Targets by Investigation of B-Cell Acute Lymphoblastic Leukemia (B-ALL) Surface Proteome, 2020 - 2022

Activities in Scientific Journals

Turkish Journal Of Biology, Assistant Editor/Section Editor, 2019 - Continues

Metrics

Publication: 22

Citation (WoS): 297

Citation (Scopus): 322

H-Index (WoS): 7

H-Index (Scopus): 9