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Education Information

Post Doctorate, University of California, Berkeley, United States Of America 2020 - 2021
Doctorate, Istanbul Technical University, Enerji Enstitüsü, Turkey 2010 - 2017
Postgraduate, Istanbul Technical University, Enerji Enstitüsü, Turkey 2008 - 2010
Undergraduate, Cukurova University, Turkey 2004 - 2008

Dissertations

Doctorate, Porosity generation and optimization of silicon-based anodes for high energy density lithium ion batteries, Istanbul Technical University, Enerji Enstitüsü, 2017
Postgraduate, Karbon nanotüplerin çeşitli yöntemlerle saflaştırılması, Istanbul Technical University, Enerji Enstitüsü, 2010

Research Areas

Direct Energy Conversion and Energy Storage, Material science and engineering, Engineering and Technology

Academic Titles / Tasks

Associate Professor, Istanbul Technical University, Enerji Enstitüsü, Enerji Planlaması Ve Yönetimi, 2022 - Continues
Assistant Professor, Maltepe University, Faculty Of Engıneerıng And Natural Scıences, Department Of Electrıcal And Electronıcs Engıneerıng, 2018 - 2022
Research Assistant, Istanbul Technical University, Enerji Enstitüsü, Yenilenebilir Enerji , 2010 - 2016
Research Assistant, University of California, Berkeley, 2013 - 2014

Published journal articles indexed by SCI, SSCI, and AHCI

I. **Synthesis and characterization of li-rich cathode material for lithium ion batteries**
Cetin B., Camtakan Z., Yuca N.
Materials Letters, vol.273, 2020 (SCI-Expanded)
II. **Synergistic effect of carbon nanomaterials on a cost-effective coral-like Si/rGO composite for lithium ion battery application**

Benzait Z., Yuca N.
ELECTROCHIMICA ACTA, vol.339, 2020 (SCI-Expanded)

III. **Highly efficient poly(fluorene phenylene) copolymer as a new class of binder for high-capacity silicon anode in lithium-ion batteries**
YUCA N., Cetintasoglu M. E., Dogdu M. F., AKBULUT H., Tabanli S., Çolak Ü., Taskin O. S.
INTERNATIONAL JOURNAL OF ENERGY RESEARCH, vol.42, no.3, pp.1148-1157, 2018 (SCI-Expanded)

IV. **A facile and functional process to enhance electrochemical performance of silicon anode in lithium ion batteries**
YUCA N., Çolak Ü.
ELECTROCHIMICA ACTA, vol.222, pp.1538-1544, 2016 (SCI-Expanded)

V. **A Convenient and Versatile Method To Control the Electrode Microstructure toward High-Energy Lithium-Ion Batteries**
Zhao H., Yang Q., Yuca N., Ling M., Higa K., Battaglia V. S., Parkinson D. Y., Srinivasan V., Liu G.
NANO LETTERS, vol.16, no.7, pp.4686-4690, 2016 (SCI-Expanded)

VI. **Effect of hydrogen and oxygen addition as a mixture on emissions and performance characteristics of a gasoline engine**
Karagoz Y., Yuca N., Sandalci T., Dalkilic A. S.
INTERNATIONAL JOURNAL OF HYDROGEN ENERGY, vol.40, no.28, pp.8750-8760, 2015 (SCI-Expanded)

VII. **Side-Chain Conducting and Phase-Separated Polymeric Binders for High-Performance Silicon Anodes in Lithium-Ion Batteries**
Park S., Zhao H., Ai G., Wang C., Song X., Yuca N., Battaglia V. S., Yang W., Liu G.
JOURNAL OF THE AMERICAN CHEMICAL SOCIETY, vol.137, no.7, pp.2565-2571, 2015 (SCI-Expanded)

VIII. **High Capacity and High Density Functional Conductive Polymer and SiO Anode for High-Energy Lithium-Ion Batteries**
Zhao H., Yuca N., Zheng Z., Fu Y., Battaglia V. S., Abdelbast G., Zaghib K., Liu G.
ACS APPLIED MATERIALS & INTERFACES, vol.7, no.1, pp.862-866, 2015 (SCI-Expanded)

IX. **A Systematic Investigation of Polymer Binder Flexibility on the Electrode Performance of Lithium-Ion Batteries**
Yuca N., Zhao H., Song X., Dogdu M. F., Yuan W., Fu Y., Battaglia V. S., Xiao X., Liu G.
ACS APPLIED MATERIALS & INTERFACES, vol.6, no.19, pp.17111-17118, 2014 (SCI-Expanded)

X. **Synthesis of Carbon-Based Nano Materials for Hydrogen Storage**
Karatepe N., YUCA N., Şenkal B. F.
FULLERENES NANOTUBES AND CARBON NANOSTRUCTURES, vol.21, no.1, pp.31-46, 2013 (SCI-Expanded)

XI. **Hydrogen adsorption on carbon nanotubes purified by different methods**
Karatepe N., YUCA N.
INTERNATIONAL JOURNAL OF HYDROGEN ENERGY, vol.36, no.17, pp.11467-11473, 2011 (SCI-Expanded)

Articles Published in Other Journals

I. **Hydrogen storage in single-walled carbon nanotubes purified by microwave digestion method**
Yuca N., Karatepe N.
World Academy of Science, Engineering and Technology, vol.79, pp.605-610, 2011 (Scopus)

Refereed Congress / Symposium Publications in Proceedings

I. **Effect of Mn, Ni, Co transition metal ratios in lithium rich metal oxide cathodes on lithium ion battery performance**
Cetin B., Camtakan Z., Yuca N.
2019 Fall Meeting Metal Oxide- and Oxyhydride-based Nanomaterials for Energy and Environment-related

Applications, EMRS 2019, Warszawa, Poland, 16 - 19 September 2019, vol.33, pp.2490-2494

II. **The Role of H-2 Reduction in the Growth of Single-Walled Carbon Nanotubes**
Yuca N., Gumus F., Karatepe N.
Conference on Carbon Nanotubes, Graphene, and Associated Devices VI, California, United States Of America, 28 - 29 August 2013, vol.8814

III. **Different Techniques for Characterizing Single-Walled Carbon Nanotube Purity**
Yuca N., Camtakan Z., Yavuz N.
Conference on Carbon Nanotubes, Graphene, and Associated Devices VI, California, United States Of America, 28 - 29 August 2013, vol.8814

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