Asst. Prof. ÖZGÜR AYDIN

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Education Information

Post Doctorate, Kyushu University (JAPONYA), School of Engineering, HYdrogen Energy Systems, Japan 2017 - 2019
Doctorate, Kyushu University (JAPONYA), School of Engineering, Hydrogen Energy Systems, Japan 2014 - 2017
Post Graduate, Ulm University (ALMANYA), Institute of Energy Conversion and Storage, Energy Science and Technology, Germany 2011 - 2013
Under Graduate, Selçuk Üniversitesi, Faculty Of Engıneerıng And Archıtecture, Mechanical Engineering, Turkey 2005 - 2011

Foreign Languages

German, C1 Advanced
English, C2 Proficiency
Japanese, B2 Upper Intermediate

Academic Titles / Tasks

Assistant Professor, Abdullah Gul University, Mühendislik Fakültesi, Makine Mühendisliği, 2019 - Continues

Articles Published in Journals That Entered SCI, SSCI and AHCI Indexes

I. **Performance and Durability of One-Cell Module of Biogas-Utilizing SOFC Equipped with Graded Indirect Internal Reformer**
AYDIN Ö., Matsumoto G., Kubota A., Dang Long Tran D. L. T. , Sakamoto M., Shiratori Y.
JOURNAL OF THE ELECTROCHEMICAL SOCIETY, vol.167, 2020 (Journal Indexed in SCI)

II. **Mass transport limitation in inlet periphery of fuel cells: Studied on a planar Solid Oxide Fuel Cell**
Aydin O., Ochiai T., Nakajima H., Kitahara T., Ito K., Ogura Y., Shimano J.
INTERNATIONAL JOURNAL OF HYDROGEN ENERGY, vol.43, pp.17420-17430, 2018 (Journal Indexed in SCI)

III. **Designing graded catalytic domain to homogenize temperature distribution while dry reforming of CH4**
Aydin O., Kubota A., Dang Long Tran D. L. T. , Sakamoto M., Shiratori Y.
INTERNATIONAL JOURNAL OF HYDROGEN ENERGY, vol.43, pp.17431-17443, 2018 (Journal Indexed in SCI)

IV. **Concentration Gradient of Reactants Extending from Reaction Sites Inward Inlet Periphery of Fuel Cells**
Aydin O., Nakajima H.
JOURNAL OF THE ELECTROCHEMICAL SOCIETY, vol.165, 2018 (Journal Indexed in SCI)

V. **Reliability of the numerical SOFC models for estimating the spatial current and temperature variations**
Aydin O., Nakajima H., Kitahara T.

INTERNATIONAL JOURNAL OF HYDROGEN ENERGY, vol.41, pp.15311-15324, 2016 (Journal Indexed in SCI)

VI. **Processes Involving in the Temperature Variations in Solid Oxide Fuel Cells In-Situ Analyzed through Electrode-Segmentation Method**
Aydin O., Nakajima H., Kitahara T.
JOURNAL OF THE ELECTROCHEMICAL SOCIETY, vol.163, 2016 (Journal Indexed in SCI)

VII. **Current and temperature distributions in-situ acquired by electrode-segmentation along a microtubular solid oxide fuel cell operating with syngas**
Aydin O., Nakajima H., Kitahara T.
JOURNAL OF POWER SOURCES, vol.293, pp.1053-1061, 2015 (Journal Indexed in SCI)

VIII. **Challenges Associated with Measuring the Intrinsic Electrical Conductivity of Carbon Paper Diffusion Media**
Aydin O., Zedda M., Zamel N.
FUEL CELLS, vol.15, pp.537-544, 2015 (Journal Indexed in SCI)

IX. **In-situ diagnosis and assessment of longitudinal current variation by electrode-segmentation method in anode-supported microtubular solid oxide fuel cells**
Aydin O., Koshiyama T., Nakajima H., Kitahara T.
JOURNAL OF POWER SOURCES, vol.279, pp.218-223, 2015 (Journal Indexed in SCI)

Refereed Congress / Symposium Publications in Proceedings

I. **Indirect internal reforming SOFC accommodating graded-catalytic domain fabricated by paper-structured catalyst**
AYDIN Ö., Matsumoto G., Kubota A., Tran D. L. , Sakamoto M., Shiratori Y.
16th International Symposium on Solid Oxide Fuel Cells (SOFC-XVI), Kyoto, Japan, 8 - 13 September 2019, vol.91, pp.1631-1640

II. **Development of a Compact SOFC Module with Paper-structured Catalyst**
Matsumoto G., AYDIN Ö., Sakamoto M., Sasaki K., Shiratori Y.
The 27th SOFC Symposium in Japan, 13 - 14 December 2018

III. **Onset of Mass Transport Limitation in Inlet Periphery of Fuel Cells**
AYDIN Ö., Ochiai T., Nakajima H., Kitahara T., Ito K., Ogura Y., Shimano J.
HYPOTHESIS XIII (Hydrogen Power Theoretical and Engineering Solutions International Symposium), Singapore, Singapore, 24 - 27 July 2018

IV. **Functionally-Graded Catalytic Domain for Homogenizing Temperature Distribution Along a Plate-Type Dry CH4 Reformer**
AYDIN Ö., Kubota A., Tran D. L. , Sakamoto M., Shiratori Y.
HYPOTHESIS XIII (Hydrogen Power Theoretical and Engineering Solutions International Symposium), Singapore, Singapore, 24 - 27 July 2018

V. **Development of Plate-type Reformer for Downsizing and Power Enhancement of SOFC**
Kubota A., Tran D. L. , AYDIN Ö., Sakamoto M., Sasaki K., Shiratori Y.
The 85th Electrochemical Society of Japan (ECSJ) Spring Meeting, Tokyo, Japan, 9 - 11 March 2018

VI. **Concentration Gradient of Reactants in Fuel Cells Extending from Reaction Sites Inward the Inlet Periphery**
AYDIN Ö., Nakajima H., Kitahara T.
European Fuel Cells Conference Exhibition (EFC17), Naples, Italy, 12 - 15 December 2017

VII. **Reliability of Numerical SOFC Tools for Computing Spatial Current and Temperature Variations**
AYDIN Ö., Nakajima H., Kitahara T.
2nd International Hydrogen Technologies Congress, Adana, Turkey, 15 - 18 March 2017

VIII. **In Situ Measured Spatial Temperature Variations for Improving Reliability of Numerical SOFC Tools**
Aydin O., Nakajima H., Kitahara T.
15th International Symposium on Solid Oxide Fuel Cells (SOFC), Florida, United States Of America, 23 - 28 July

2017, vol.78, pp.2191-2201

IX. **Contributions to the Spatial Temperature Variations Emerging in SOFCs Elucidated via Combining Experimental and Numerical Techniques**
AYDIN Ö., Nakajima H., Kitahara T.
2016 Asian SOFC Symposium, Tokyo, Japan, 4 - 07 September 2016

X. **Accuracy of the Numerically Computed Spatial Current and Temperature Variations in SOFCs**
AYDIN Ö., Nakajima H., Kitahara T.
12th European SOFC SOE Forum 2016, Lucerne, Switzerland, 5 - 08 July 2016

XI. **Influence of convective heat transfer by air flow on local current/temperatures along microtubular solid oxide fuel cells in-situ identified by electrode-segmentation method for Co- and counter-flow configurations**
AYDIN Ö., Nakajima H., Kitahara T.
ECS Conference on Electrochemical Energy Conversion Storage with SOFC-XIV, Glasgow, England, 26 - 31 July 2015, vol.68, pp.2141-2150

XII. **Experimental Evaluation of Internal Hydrocarbon Reforming Reaction in Microtubular SOFCs by Segmentation Method**
AYDIN Ö., Koshiyama T., Nakajima H., Kitahara T.
The 55th Battery Symposium in Japan, Kyoto, Japan, 19 - 21 November 2014

XIII. **Comprehensive understanding of electrical conductivity measurements of gas diffusion media of PEM fuel cells**
AYDIN Ö., Zedda M., Zamel N., Groos U., Hebling C.
20th World Hydrogen Energy Conference, WHEC 2014, Gwangju, South Korea, 15 - 20 June 2014, vol.1, pp.474

Citations

Total Citations (WOS):59
h-index (WOS):4