

Prof. İNCİ EROĞLU

Personal Information

Email: ieroglu@metu.edu.tr

Web: <https://avesis.metu.edu.tr/ieroglu>

Published journal articles indexed by SCI, SSCI, and AHCI

- I. Transcriptome analysis of *Rhodobacter capsulatus* grown on different nitrogen sources
Erkal N. A., Eser M. G., Ozgur E., GÜNDÜZ U., EROĞLU İ., Yucel M.
ARCHIVES OF MICROBIOLOGY, vol.201, no.5, pp.661-671, 2019 (SCI-Expanded)
- II. Improved PEM fuel cell performance with hydrophobic catalyst layers
Avcioglu G. S., FIÇİCİLAR B., Eroglu I.
INTERNATIONAL JOURNAL OF HYDROGEN ENERGY, vol.43, no.40, pp.18632-18641, 2018 (SCI-Expanded)
- III. Three-dimensional non-isothermal model development of high temperature PEM Fuel Cells
Caglayan D. G., Sezgin B., DEVRİM Y., Eroglu I.
INTERNATIONAL JOURNAL OF HYDROGEN ENERGY, vol.43, no.23, pp.10834-10841, 2018 (SCI-Expanded)
- IV. Effective factors improving catalyst layers of PEM fuel cell
Avcioglu G. S., FIÇİCİLAR B., Eroglu I.
INTERNATIONAL JOURNAL OF HYDROGEN ENERGY, vol.43, no.23, pp.10779-10797, 2018 (SCI-Expanded)
- V. Single-stage photofermentative biohydrogen production from sugar beet molasses by different purple non-sulfur bacteria
Sagir E., Ozgur E., GÜNDÜZ U., Eroglu I., YÜCEL A. M.
BIOPROCESS AND BIOSYSTEMS ENGINEERING, vol.40, no.11, pp.1589-1601, 2017 (SCI-Expanded)
- VI. Dark fermentative hydrogen production from sucrose and molasses
TUNÇAY E. G., ERGUDER T. H., EROĞLU İ., GÜNDÜZ U.
INTERNATIONAL JOURNAL OF ENERGY RESEARCH, vol.41, no.13, pp.1891-1902, 2017 (SCI-Expanded)
- VII. Scale-up studies for stable, long-term indoor and outdoor production of hydrogen by immobilized *Rhodobacter capsulatus*
Sagir E., ALIPOUR S., ELKAHLOUT K., KOKU H., GÜNDÜZ U., Eroglu I., YUCEL M.
INTERNATIONAL JOURNAL OF HYDROGEN ENERGY, vol.42, no.36, pp.22743-22755, 2017 (SCI-Expanded)
- VIII. Facilitation of water management in low Pt loaded PEM fuel cell by creating hydrophobic microporous layer with PTFE, FEP and PDMS polymers: Effect of polymer and carbon amounts
ÖZTÜRK A., FIÇİCİLAR B., Eroglu I., BAYRAKÇEKEN YURTCAN A.
INTERNATIONAL JOURNAL OF HYDROGEN ENERGY, vol.42, no.33, pp.21226-21249, 2017 (SCI-Expanded)
- IX. Dynamic modeling of temperature change in outdoor operated tubular photobioreactors
ANDROGA D. D., Uyar B., KOKU H., Eroglu I.
BIOPROCESS AND BIOSYSTEMS ENGINEERING, vol.40, no.7, pp.1017-1031, 2017 (SCI-Expanded)
- X. Long-term biological hydrogen production by agar immobilized *Rhodobacter capsulatus* in a sequential batch photobioreactor
Elkahlout K., Alipour S., Eroglu I., GÜNDÜZ U., YÜCEL A. M.
BIOPROCESS AND BIOSYSTEMS ENGINEERING, vol.40, no.4, pp.589-599, 2017 (SCI-Expanded)
- XI. A compact tubular photobioreactor for outdoor hydrogen production from molasses
KAYAHAN E., Eroglu I., KOKU H.
INTERNATIONAL JOURNAL OF HYDROGEN ENERGY, vol.42, no.4, pp.2575-2582, 2017 (SCI-Expanded)
- XII. Influence of FEP nanoparticles in catalyst layer on water management and performance of PEM fuel

- cell with high Pt loading**
Avcioğlu G. S., FIÇİCİLAR B., Eroğlu I.
INTERNATIONAL JOURNAL OF HYDROGEN ENERGY, vol.42, no.1, pp.496-506, 2017 (SCI-Expanded)
- XIII. Implementation and analysis of temperature control strategies for outdoor photobiological hydrogen production**
ANDROGA D. D., UYAR B., KOKU H., EROĞLU İ.
BIOPROCESS AND BIOSYSTEMS ENGINEERING, vol.39, no.12, pp.1913-1921, 2016 (SCI-Expanded)
- XIV. Design of an outdoor stacked - tubular reactor for biological hydrogen production**
KAYAHAN E., Eroğlu I., KOKU H.
INTERNATIONAL JOURNAL OF HYDROGEN ENERGY, vol.41, no.42, pp.19357-19366, 2016 (SCI-Expanded)
- XV. Preface to the special issue on "1st International Symposium on Materials for Energy Storage and Conversion ((ESC)-E-m-IS 2015)"**
ÖZTÜRK T., Eroğlu I., AYDINOL M. K.
INTERNATIONAL JOURNAL OF HYDROGEN ENERGY, vol.41, no.23, pp.9719-9722, 2016 (SCI-Expanded)
- XVI. Modeling and sensitivity analysis of high temperature PEM fuel cells by using Comsol Multiphysics**
Sezgin B., Caglayan D. G., DEVRİM Y., Steenberg T., Eroğlu I.
INTERNATIONAL JOURNAL OF HYDROGEN ENERGY, vol.41, no.23, pp.10001-10009, 2016 (SCI-Expanded)
- XVII. Effect of PTFE nanoparticles in catalyst layer with high Pt loading on PEM fuel cell performance**
Avcioğlu G. S., FIÇİCİLAR B., Eroğlu I.
INTERNATIONAL JOURNAL OF HYDROGEN ENERGY, vol.41, no.23, pp.10010-10020, 2016 (SCI-Expanded)
- XVIII. Three-dimensional modeling of a high temperature polymer electrolyte membrane fuel cell at different operation temperatures**
Caglayan D. G., Sezgin B., DEVRİM Y., Eroğlu I.
INTERNATIONAL JOURNAL OF HYDROGEN ENERGY, vol.41, no.23, pp.10060-10070, 2016 (SCI-Expanded)
- XIX. Polybenzimidazole/SiO₂ hybrid membranes for high temperature proton exchange membrane fuel cells**
DEVRİM Y., Devrim H., Eroğlu I.
INTERNATIONAL JOURNAL OF HYDROGEN ENERGY, vol.41, no.23, pp.10044-10052, 2016 (SCI-Expanded)
- XX. Hydrogen production by hup(-) mutant and wild-type strains of Rhodobacter capsulatus from dark fermentation effluent of sugar beet thick juice in batch and continuous photobioreactors**
Uyar B., Gurgan M., Ozgur E., GÜNDÜZ U., YÜCEL A. M., Eroğlu I.
BIOPROCESS AND BIOSYSTEMS ENGINEERING, vol.38, no.10, pp.1935-1942, 2015 (SCI-Expanded)
- XXI. Development of 500 W PEM fuel cell stack for portable power generators**
DEVRİM Y., Devrim H., Eroğlu I.
INTERNATIONAL JOURNAL OF HYDROGEN ENERGY, vol.40, no.24, pp.7707-7719, 2015 (SCI-Expanded)
- XXII. High performance PEM fuel cell catalyst layers with hydrophobic channels**
Avcioğlu G. S., FIÇİCİLAR B., BAYRAKÇEKEN YURTCAN A., Eroğlu I.
INTERNATIONAL JOURNAL OF HYDROGEN ENERGY, vol.40, no.24, pp.7720-7731, 2015 (SCI-Expanded)
- XXIII. Development and modeling for process control purposes in PEMs**
Saygili Y., Kinçal S., Eroğlu I.
INTERNATIONAL JOURNAL OF HYDROGEN ENERGY, vol.40, no.24, pp.7886-7894, 2015 (SCI-Expanded)
- XXIV. Flame retardancy and mechanical properties of pet-based composites containing phosphorus and boron-based additives**
Kilinc M., ÇAKAL G. Ö., BAYRAM G., Eroğlu I., ÖZKAR S.
JOURNAL OF APPLIED POLYMER SCIENCE, vol.132, no.22, 2015 (SCI-Expanded)
- XXV. Transcriptional Profiling of Hydrogen Production Metabolism of Rhodobacter capsulatus under Temperature Stress by Microarray Analysis**
Gurgan M., Erkal N. A., Ozgur E., GÜNDÜZ U., Eroğlu I., YÜCEL A. M.
INTERNATIONAL JOURNAL OF MOLECULAR SCIENCES, vol.16, no.6, pp.13781-13797, 2015 (SCI-Expanded)
- XXVI. Investigation of the effects of initial substrate and biomass concentrations and light intensity on photofermentative hydrogen gas production by Response Surface Methodology**

- Akman M. C., ERGUDER T. H., GÜNDÜZ U., EROĞLU İ.
INTERNATIONAL JOURNAL OF HYDROGEN ENERGY, vol.40, no.15, pp.5042-5049, 2015 (SCI-Expanded)
- XXVII. **Model based temperature controller development for water cooled PEM fuel cell systems**
Saygili Y., Eroglu I., Kincal S.
INTERNATIONAL JOURNAL OF HYDROGEN ENERGY, vol.40, no.1, pp.615-622, 2015 (SCI-Expanded)
- XXVIII. **Optimization of temperature and light intensity for improved photofermentative hydrogen production using Rhodobacter capsulatus DSM 1710**
ANDROGA D. D., SEVİNÇ P., KOKU H., Yucel M., GÜNDÜZ U., Eroglu I.
INTERNATIONAL JOURNAL OF HYDROGEN ENERGY, vol.39, no.6, pp.2472-2480, 2014 (SCI-Expanded)
- XXIX. **Surfactant modified zinc borate synthesis and its effect on the properties of PET**
Baltaci B., ÇAKAL G. Ö., BAYRAM G., Eroglu I., ÖZKAR S.
POWDER TECHNOLOGY, vol.244, pp.38-44, 2013 (SCI-Expanded)
- XXX. **Nafion/titanium silicon oxide nanocomposite membranes for PEM fuel cells**
DEVRİM Y., Erkan S., BAÇ N., Eroglu I.
INTERNATIONAL JOURNAL OF ENERGY RESEARCH, vol.37, no.5, pp.435-442, 2013 (SCI-Expanded)
- XXXI. **Kinetics of hydrogen generation from hydrolysis of sodium borohydride on Pt/C catalyst in a flow reactor**
Boran A., Erkan S., ÖZKAR S., Eroglu I.
INTERNATIONAL JOURNAL OF ENERGY RESEARCH, vol.37, no.5, pp.443-448, 2013 (SCI-Expanded)
- XXXII. **Kinetic analysis of photosynthetic growth, hydrogen production and dual substrate utilization by Rhodobacter capsulatus**
Sevinc P., GÜNDÜZ U., EROĞLU İ., Yucel M.
INTERNATIONAL JOURNAL OF HYDROGEN ENERGY, vol.37, no.21, pp.16430-16436, 2012 (SCI-Expanded)
- XXXIII. **Amelioration of photofermentative hydrogen production from molasses dark fermenter effluent by zeolite-based removal of ammonium ion**
Androga D. D., Ozgur E., EROĞLU İ., GÜNDÜZ U., Yucel M.
INTERNATIONAL JOURNAL OF HYDROGEN ENERGY, vol.37, no.21, pp.16421-16429, 2012 (SCI-Expanded)
- XXXIV. **Biohydrogen production by Rhodobacter capsulatus Hup(-) mutant in pilot solar tubular photobioreactor**
Boran E., Ozgur E., Yucel M., GÜNDÜZ U., EROĞLU İ.
INTERNATIONAL JOURNAL OF HYDROGEN ENERGY, vol.37, no.21, pp.16437-16445, 2012 (SCI-Expanded)
- XXXV. **Durability of PEM fuel cell electrocatalysts prepared by microwave irradiation technique**
Sayin E. S., BAYRAKÇEKEN YURTCAN A., EROĞLU İ.
INTERNATIONAL JOURNAL OF HYDROGEN ENERGY, vol.37, no.21, pp.16663-16672, 2012 (SCI-Expanded)
- XXXVI. **Improvement of PEMFC performance with Nafion/inorganic nanocomposite membrane electrode assembly prepared by ultrasonic coating technique**
Devrim Y., Erkan S., BAÇ N., EROĞLU İ.
INTERNATIONAL JOURNAL OF HYDROGEN ENERGY, vol.37, no.21, pp.16748-16758, 2012 (SCI-Expanded)
- XXXVII. **Photobiological hydrogen production from sugar beet molasses**
Sagir E., Ozgur E., GÜNDÜZ U., Eroglu I., Yucel M.
NEW BIOTECHNOLOGY, vol.29, 2012 (SCI-Expanded)
- XXXVIII. **Biohydrogen production by Rhodobacter capsulatus in solar tubular photobioreactor on thick juice dark fermenter effluent**
Boran E., Ozgur E., Yucel M., GÜNDÜZ U., Eroglu I.
JOURNAL OF CLEANER PRODUCTION, vol.31, pp.150-157, 2012 (SCI-Expanded)
- XXXIX. **Hydrogen production properties of Rhodobacter capsulatus with genetically modified redox balancing pathways**
Ozturk Y., Gokce A., Peksel B., Gurgan M., Ozgur E., GÜNDÜZ U., Eroglu I., Yucel M.
INTERNATIONAL JOURNAL OF HYDROGEN ENERGY, vol.37, no.2, pp.2014-2020, 2012 (SCI-Expanded)
- XL. **Photofermentative hydrogen production using dark fermentation effluent of sugar beet thick juice in outdoor conditions**

- Ozkan E., Uyar B., Ozgur E., Yucel M., Eroglu I., GÜNDÜZ U.
 INTERNATIONAL JOURNAL OF HYDROGEN ENERGY, vol.37, no.2, pp.2044-2049, 2012 (SCI-Expanded)
- XLI. Hollow core mesoporous shell carbon supported Pt electrocatalysts with high Pt loading for PEMFCs
 Guvenatam B., Ficicular B., BAYRAKÇEKEN YURTCAN A., Eroglu I.
 INTERNATIONAL JOURNAL OF HYDROGEN ENERGY, vol.37, no.2, pp.1865-1874, 2012 (SCI-Expanded)
- XLII. Significance of carbon to nitrogen ratio on the long-term stability of continuous photofermentative hydrogen production
 Androga D. D., Ozgur E., Eroglu I., GÜNDÜZ U., Yucel M.
 INTERNATIONAL JOURNAL OF HYDROGEN ENERGY, vol.36, no.24, pp.15583-15594, 2011 (SCI-Expanded)
- XLIII. Effect of inactivation of genes involved in ammonium regulation on the biohydrogen production of *Rhodobacter capsulatus*
 Pekgoz G., GÜNDÜZ U., Eroglu I., Yucel M., Kovacs K., Rakhely G.
 INTERNATIONAL JOURNAL OF HYDROGEN ENERGY, vol.36, no.21, pp.13536-13546, 2011 (SCI-Expanded)
- XLIV. Biohydrogen production in an outdoor panel photobioreactor on dark fermentation effluent of molasses
 Avcioglu S. G., Ozgur E., Eroglu I., Yucel M., GÜNDÜZ U.
 INTERNATIONAL JOURNAL OF HYDROGEN ENERGY, vol.36, no.17, pp.11360-11368, 2011 (SCI-Expanded)
- XLV. Factors affecting the longterm stability of biomass and hydrogen productivity in outdoor photofermentation
 Androga D. D., Ozgur E., Guncluz U., Yucel M., Eroglu I.
 INTERNATIONAL JOURNAL OF HYDROGEN ENERGY, vol.36, no.17, pp.11369-11378, 2011 (SCI-Expanded)
- XLVI. Effect of iron and molybdenum addition on photofermentative hydrogen production from olive mill wastewater
 Eroglu E., GÜNDÜZ U., Yucel M., Eroglu I.
 INTERNATIONAL JOURNAL OF HYDROGEN ENERGY, vol.36, no.10, pp.5895-5903, 2011 (SCI-Expanded)
- XLVII. Hydrogen productivity of photosynthetic bacteria on dark fermenter effluent of potato steam peels hydrolysate
 Afsar N., Ozgur E., Gurgan M., Akkose S., Yucel M., GÜNDÜZ U., Eroglu I.
 INTERNATIONAL JOURNAL OF HYDROGEN ENERGY, vol.36, no.1, pp.432-438, 2011 (SCI-Expanded)
- XLVIII. Scale-up synthesis of zinc borate from the reaction of zinc oxide and boric acid in aqueous medium
 Kilinc M., Cakal G. O., Yesil S., BAYRAM G., EROĞLU İ., ÖZKAR S.
 JOURNAL OF CRYSTAL GROWTH, vol.312, no.22, pp.3361-3366, 2010 (SCI-Expanded)
- XLIX. Pt incorporated hollow core mesoporous shell carbon nanocomposite catalyst for proton exchange membrane fuel cells
 Ficicular B., BAYRAKÇEKEN YURTCAN A., EROĞLU İ.
 INTERNATIONAL JOURNAL OF HYDROGEN ENERGY, vol.35, no.18, pp.9924-9933, 2010 (SCI-Expanded)
- L. Photosynthetic bacterial growth and productivity under continuous illumination or diurnal cycles with olive mill wastewater as feedstock
 Eroglu E., GÜNDÜZ U., Yucel M., Eroglu I.
 INTERNATIONAL JOURNAL OF HYDROGEN ENERGY, vol.35, no.11, pp.5293-5300, 2010 (SCI-Expanded)
- LI. Biohydrogen production by *Rhodobacter capsulatus* on acetate at fluctuating temperatures
 Ozgur E., Uyar B., Ozturk Y., Yucel M., GÜNDÜZ U., Eroglu I.
 RESOURCES CONSERVATION AND RECYCLING, vol.54, no.5, pp.310-314, 2010 (SCI-Expanded)
- LII. Potential use of thermophilic dark fermentation effluents in photofermentative hydrogen production by *Rhodobacter capsulatus*
 Ozgur E., Afsar N., de Vrije T., Yucel M., GÜNDÜZ U., Claassen P. A. M., Eroglu I.
 JOURNAL OF CLEANER PRODUCTION, vol.18, 2010 (SCI-Expanded)
- LIII. Biohydrogen production from beet molasses by sequential dark and photofermentation
 Ozgur E., Mars A. E., Peksel B., Louwense A., Yucel M., GÜNDÜZ U., Claassen P. A. M., Eroglu I.
 INTERNATIONAL JOURNAL OF HYDROGEN ENERGY, vol.35, no.2, pp.511-517, 2010 (SCI-Expanded)
- LIV. Non-thermal production of pure hydrogen from biomass: HYVOLUTION

- Claassen P. A. M., de Vrije T., Koukios E., van Niel E., Eroglu I., Modigell M., Friedl A., Wukovits W., Ahrer W.
JOURNAL OF CLEANER PRODUCTION, vol.18, 2010 (SCI-Expanded)
- LV. **Biological hydrogen production by Rhodobacter capsulatus in solar tubular photo bioreactor**
Boran E., Ozgur E., van der Burg J., Yucel M., GÜNDÜZ U., Eroglu I.
JOURNAL OF CLEANER PRODUCTION, vol.18, 2010 (SCI-Expanded)
- LVI. **Effects of ammonium ion, acetate and aerobic conditions on hydrogen production and expression levels of nitrogenase genes in Rhodobacter sphaeroides OU001**
Akkose S., GÜNDÜZ U., Yucel M., Eroglu I.
INTERNATIONAL JOURNAL OF HYDROGEN ENERGY, vol.34, no.21, pp.8818-8827, 2009 (SCI-Expanded)
- LVII. **Effect of Pd loading in Pd-Pt bimetallic catalysts doped into hollow core mesoporous shell carbon on performance of proton exchange membrane fuel cells**
Ficicular B., BAYRAKÇEKEN YURTCAN A., Eroglu I.
JOURNAL OF POWER SOURCES, vol.193, no.1, pp.17-23, 2009 (SCI-Expanded)
- LVIII. **Preparation and characterization of sulfonated polysulfone/titanium dioxide composite membranes for proton exchange membrane fuel cells**
Devrim Y., Erkan S., BAÇ N., Eroglu I.
INTERNATIONAL JOURNAL OF HYDROGEN ENERGY, vol.34, no.8, pp.3467-3475, 2009 (SCI-Expanded)
- LIX. **Photofermentative hydrogen production from volatile fatty acids present in dark fermentation effluents**
Uyar B., Eroglu I., Yucel M., GÜNDÜZ U.
INTERNATIONAL JOURNAL OF HYDROGEN ENERGY, vol.34, no.10, pp.4517-4523, 2009 (SCI-Expanded)
- LX. **Effects of sulfonated polyether-etherketone (SPEEK) and composite membranes on the proton exchange membrane fuel cell (PEMFC) performance**
Sengul E., Erdener H., Akay R. G., YÜCEL H., BAÇ N., Eroglu I.
INTERNATIONAL JOURNAL OF HYDROGEN ENERGY, vol.34, no.10, pp.4645-4652, 2009 (SCI-Expanded)
- LXI. **Comparison of physicochemical characteristics and photofermentative hydrogen production potential of wastewaters produced from different olive oil mills in Western-Anatolia, Turkey**
Eroglu E., Eroglu I., GÜNDÜZ U., Yuecel M.
BIOMASS & BIOENERGY, vol.33, no.4, pp.706-711, 2009 (SCI-Expanded)
- LXII. **Evaluation of hydrogen production by Rhodobacter sphaeroides OU001 and its hupSL deficient mutant using acetate and malate as carbon sources**
KARS G., GÜNDÜZ U., Yucel M., Rakheley G., Kovacs K. L., Eroglu I.
INTERNATIONAL JOURNAL OF HYDROGEN ENERGY, vol.34, no.5, pp.2184-2190, 2009 (SCI-Expanded)
- LXIII. **Improved synthesis of fine zinc borate particles using seed crystals**
Guerhan D., Cakal G. O., Eroglu I., ÖZKAR S.
JOURNAL OF CRYSTAL GROWTH, vol.311, no.6, pp.1545-1552, 2009 (SCI-Expanded)
- LXIV. **Effect of Gas Diffusion Layer Characteristics and Addition of Pore-Forming Agents on the Performance of Polymer Electrolyte Membrane Fuel Cells**
Senguel E., Erkan S., Eroglu I., BAÇ N.
CHEMICAL ENGINEERING COMMUNICATIONS, vol.196, pp.161-170, 2009 (SCI-Expanded)
- LXV. **Vulcan-Supported Pt Electrocatalysts for PEMFCs Prepared using Supercritical Carbon Dioxide Deposition**
Bayrakceken A., Smirnova A., Kitkamthorn U., Aindow M., Tuerker L., Eroglu I., ERKEY C.
CHEMICAL ENGINEERING COMMUNICATIONS, vol.196, pp.194-203, 2009 (SCI-Expanded)
- LXVI. **Effect of clay pretreatment on photofermentative hydrogen production from olive mill wastewater**
Eroglu E., Eroglu I., GÜNDÜZ U., Yuecel M.
BIORESOURCE TECHNOLOGY, vol.99, no.15, pp.6799-6808, 2008 (SCI-Expanded)
- LXVII. **Improved hydrogen production by uptake hydrogenase deficient mutant strain of Rhodobacter sphaeroides OU001**
Kars G., GÜNDÜZ U., Rakheley G., Yuecel M., Eroglu I., Kovacs K. L.
INTERNATIONAL JOURNAL OF HYDROGEN ENERGY, vol.33, no.12, pp.3056-3060, 2008 (SCI-Expanded)

- LXVIII. **Pt-based electrocatalysts for polymer electrolyte membrane fuel cells prepared by supercritical deposition technique**
Bayrakceken A., Smirnova A., Kitkamthorn U., Aindow M., Turker L., Eroglu I., Erkey C.
JOURNAL OF POWER SOURCES, vol.179, no.2, pp.532-540, 2008 (SCI-Expanded)
- LXIX. **Hydrogen production by Rhodobacter sphaeroides OU001 in a flat plate solar bioreactor**
Eroglu I., Tabanoglu A., GÜNDÜZ U., Eroglu E., Yucel M.
INTERNATIONAL JOURNAL OF HYDROGEN ENERGY, vol.33, no.2, pp.531-541, 2008 (SCI-Expanded)
- LXX. **Effects of membrane electrode assembly components on proton exchange membrane fuel cell performance**
Bayrakceken A., Erkan S., Turker L., Eroglu I.
INTERNATIONAL JOURNAL OF HYDROGEN ENERGY, vol.33, no.1, pp.165-170, 2008 (SCI-Expanded)
- LXXI. **Effect of light intensity, wavelength and illumination protocol on hydrogen production in photobioreactors**
Uyar B., EROĞLU İ., Yucel M., GÜNDÜZ U., Turker L.
INTERNATIONAL JOURNAL OF HYDROGEN ENERGY, vol.32, no.18, pp.4670-4677, 2007 (SCI-Expanded)
- LXXII. **Simulation of continuous boric acid slurry reactors in series by microfluid and macrofluid models**
Cakal G. O., Eroglu I., Oezkar S.
JOURNAL OF CRYSTAL GROWTH, vol.306, no.1, pp.240-247, 2007 (SCI-Expanded)
- LXXIII. **Poly-beta-hydroxybutyrate accumulation and releasing by hydrogen producing bacteria, Rhodobacter sphaeroides OU001. A transmission electron microscopic study**
Cetin D., Guenduez U., Eroglu i., Yuecel M., Tuerker L.
AFRICAN JOURNAL OF BIOTECHNOLOGY, vol.5, no.22, pp.2069-2072, 2006 (SCI-Expanded)
- LXXIV. **Hydrogen gas production by combined systems of Rhodobacter sphaeroides OU001 and Halobacterium salinarum in a photobioreactor**
Zabut B., El-Kahlout K., Yucel M., Gunduz U., Turker L., Eroglu I.
INTERNATIONAL JOURNAL OF HYDROGEN ENERGY, vol.31, no.11, pp.1553-1562, 2006 (SCI-Expanded)
- LXXV. **Hydrogen production and transcriptional analysis of nifD, nifK and hupS genes in Rhodobacter sphaeroides OU001 grown in media with different concentrations of molybdenum and iron**
Kars G., Gunduz U., Yucel M., Turker L., Eroglu I.
INTERNATIONAL JOURNAL OF HYDROGEN ENERGY, vol.31, no.11, pp.1536-1544, 2006 (SCI-Expanded)
- LXXVI. **Hydrogen production by using Rhodobacter capsulatus mutants with genetically modified electron transfer chains**
Ozturk Y., Yucel M., Daldal F., Mandaci S., Gunduz U., Turker L., Eroglu I.
INTERNATIONAL JOURNAL OF HYDROGEN ENERGY, vol.31, no.11, pp.1545-1552, 2006 (SCI-Expanded)
- LXXVII. **Biological hydrogen production from olive mill wastewater with two-stage processes**
Eroglu E., Eroglu I., Gunduz U., Turker L., Yucel M.
INTERNATIONAL JOURNAL OF HYDROGEN ENERGY, vol.31, no.11, pp.1527-1535, 2006 (SCI-Expanded)
- LXXVIII. **Gypsum crystal size distribution in four continuous flow stirred slurry boric acid reactors in series compared with the batch**
Cakal G., Eroglu I., Ozkar S.
JOURNAL OF CRYSTAL GROWTH, vol.290, no.1, pp.197-202, 2006 (SCI-Expanded)
- LXXIX. **Hydrogen storage capability of carbon nanotube Be@C-120**
Turker L., Eroglu I., Yucel M., Gunduz U.
INTERNATIONAL JOURNAL OF HYDROGEN ENERGY, vol.29, no.15, pp.1643-1647, 2004 (SCI-Expanded)
- LXXX. **PM3 (UHF) type quantum chemical treatment of the models for Ni-C state of [NiFe] hydrogenase from Desulfovibrio vulgaris**
Turker L., Eroglu I., Yucel M., Gunduz U.
JOURNAL OF MOLECULAR STRUCTURE-THEOCHEM, vol.672, pp.169-174, 2004 (SCI-Expanded)
- LXXXI. **Photobiological hydrogen production by using olive mill wastewater as a sole substrate source**
Eroglu E., Gunduz U., Yucel M., Turker L., Eroglu I.
INTERNATIONAL JOURNAL OF HYDROGEN ENERGY, vol.29, no.2, pp.163-171, 2004 (SCI-Expanded)

- LXXXII. **Scanning electron microscopic studies of porous carbon electrodes used in alkaline fuel cells**
Yazaydin A., Eroglu I., Han E., Turker L.
CHEMICAL ENGINEERING COMMUNICATIONS, vol.190, pp.976-985, 2003 (SCI-Expanded)
- LXXXIII. **Kinetics of biological hydrogen production by the photosynthetic bacterium Rhodobacter sphaeroides O.U. 001**
KOKU H., Eroglu I., GÜNDÜZ U., Yücel M., Türker L.
International Journal of Hydrogen Energy, vol.28, no.4, pp.381-388, 2003 (SCI-Expanded)
- LXXXIV. **Gelatin microspheres and sponges for delivery of macromolecules**
Ulubayram K., Eroglu I., Hasirci N.
JOURNAL OF BIOMATERIALS APPLICATIONS, vol.16, no.3, pp.227-241, 2002 (SCI-Expanded)
- LXXXV. **Kinetics of gypsum formation and growth during the dissolution of colemanite in sulfuric acid**
Cetin E., Eroglu I., Ozkar S.
JOURNAL OF CRYSTAL GROWTH, vol.231, no.4, pp.559-567, 2001 (SCI-Expanded)
- LXXXVI. **Photogalvanic effect in aqueous Methylene blue nickel mesh systems: Conversion of light into electricity**
Bayer I., Eroglu I., Turker L.
INTERNATIONAL JOURNAL OF ENERGY RESEARCH, vol.25, no.3, pp.207-222, 2001 (SCI-Expanded)
- LXXXVII. **The effect of adsorption on mass transfer in fluidized bed catalytic reactors**
Aksahin I., Eroglu I., Yucel H.
CANADIAN JOURNAL OF CHEMICAL ENGINEERING, vol.79, no.1, pp.42-53, 2001 (SCI-Expanded)
- LXXXVIII. **Photoproduction of hydrogen from sugar refinery wastewater by Rhodobacter sphaeroides OU 001**
Yetis M., Gunduz U., Eroglu I., Yucel M., Turker L.
INTERNATIONAL JOURNAL OF HYDROGEN ENERGY, vol.25, no.11, pp.1035-1041, 2000 (SCI-Expanded)
- LXXXIX. **Experimental insight into the performance characteristics of Ni-mesh semiconductor photo-electrochemical cells**
Bayer I., Eroglu I., Turker L.
SOLAR ENERGY MATERIALS AND SOLAR CELLS, vol.62, pp.43-49, 2000 (SCI-Expanded)
- XC. **Performance of an alkaline fuel cell with single or double layer electrodes**
Han E., Eroglu I., Turker L.
INTERNATIONAL JOURNAL OF HYDROGEN ENERGY, vol.25, no.2, pp.157-165, 2000 (SCI-Expanded)
- XCI. **Crystallization kinetics of ammonium perchlorate in MSMPR crystallizer**
Tanrikulu S., Eroglu I., Bulutcu A., Ozkar S.
JOURNAL OF CRYSTAL GROWTH, vol.208, pp.533-540, 2000 (SCI-Expanded)
- XCII. **The biocatalytic effect of Halobacterium halobium on photoelectrochemical hydrogen production**
Sediroglu V., Eroglu I., Yucel M., Turker L., Gunduz U.
JOURNAL OF BIOTECHNOLOGY, vol.70, pp.115-124, 1999 (SCI-Expanded)
- XCIII. **Substrate consumption rates for hydrogen production by Rhodobacter sphaeroides in a column photobioreactor**
Eroglu I., Aslan K., Gunduz U., Yucel M., Turker L.
JOURNAL OF BIOTECHNOLOGY, vol.70, pp.103-113, 1999 (SCI-Expanded)
- XCIV. **Identification of by-products in hydrogen producing bacteria; Rhodobacter sphaeroides OU 001 grown in the waste water of a sugar refinery**
Yigit D., Gunduz U., Turker L., Yucel M., Eroglu I.
JOURNAL OF BIOTECHNOLOGY, vol.70, pp.125-131, 1999 (SCI-Expanded)
- XCV. **An investigation on the performance optimization of an alkaline fuel cell**
Ergul M., Turker L., Eroglu I.
INTERNATIONAL JOURNAL OF HYDROGEN ENERGY, vol.22, pp.1039-1045, 1997 (SCI-Expanded)
- XCVI. **Modelling of long-term photoresponse of bacteriorhodopsin immobilized on cellulose acetate membranes**
Sediroglu V., Aydemir A., Gunduz U., Yucel M., Turker L., Eroglu I.
JOURNAL OF MEMBRANE SCIENCE, vol.113, no.1, pp.65-71, 1996 (SCI-Expanded)

- XCVII. **PHOTORESPONSE OF BACTERIORHODOPSIN IMMOBILIZED IN POLYACRYLAMIDE-GEL MEMBRANES**
 EROGLU I., AYDEMIR A., TURKER L., YUCEL A.
 JOURNAL OF MEMBRANE SCIENCE, vol.86, pp.171-179, 1994 (SCI-Expanded)
- XCVIII. **EXTRACTION OF STRONTIUM IONS WITH EMULSION LIQUID MEMBRANE TECHNIQUE**
 EROGLU I., KALPAKCI R., GUNDUZ G.
 JOURNAL OF MEMBRANE SCIENCE, vol.80, pp.319-325, 1993 (SCI-Expanded)
- XCIX. **MODELING AND KINETICS OF LIGHT-INDUCED PROTON PUMPING OF BACTERIORHODOPSIN RECONSTITUTED LIPOSOMES**
 EROGLU I., ZUBAT B., YUCEL A.
 JOURNAL OF MEMBRANE SCIENCE, vol.61, pp.325-336, 1991 (SCI-Expanded)
- C. **FACTORS AFFECTING THE KINETICS OF THE HETEROGENEOUS OXIDATION OF AMMONIUM SULFITE**
 AHMAD N., EROGLU I., GURKAN T.
 CANADIAN JOURNAL OF CHEMICAL ENGINEERING, vol.65, no.1, pp.50-55, 1987 (SCI-Expanded)

Refereed Congress / Symposium Publications in Proceedings

- I. **Photofermentation as a third-stage of a dark fermentation-methanogenesis system to improve energy recovery**
 ERGUDER T. H., TUNÇAY E. G., KOÇ E., AKMAN M. C., EROĞLU İ., GÜNDÜZ U.
 20th International Conference on Energy Management and Environmental Policy (ICEMEP 2018), İstanbul, Turkey, 19 - 20 November 2018
- II. **Investigation of optimum hydraulic retention time (HRT) of semi-batch photofermentation process in a three-stage system**
 AKMAN M. C., ERGUDER T. H., GÜNDÜZ U., EROĞLU İ.
 3rd International Conference on Power and Renewable Energy (ICPRE 2018), Berlin, Germany, 21 - 24 September 2018
- III. **Microarray analysis of high light intensity stress on hydrogen production metabolism of Rhodobacter capsulatus**
 GÜRGAN ESER M., KOKU H., EROĞLU İ., YÜCEL A. M.
 7th Global Conference on Global Warming, İzmir, Turkey, 24 June - 28 July 2018
- IV. **Hydrogen production by agar-immobilized R. capsulatus in panel photobioreactor**
 ELKAHLOUT K., SAĞIR E., ALIPOUR S., KOKU H., GÜNDÜZ U., EROĞLU İ., Yücel A. M.
 3rd International Hydrogen Technologies Congress (IHTEC-2018), Antalya, Turkey, 15 - 18 March 2018, pp.29
- V. **Hidrolik ve katı bekletme süresinin asetiklastik metanojenlere ve metan verimine etkisi**
 KOÇ E., ERGUDER T. H., DURAN M., EROĞLU İ., GÜNDÜZ U.
 12. Ulusal Çevre Mühendisliği Kongresi, Ankara, Turkey, 5 - 07 October 2017, pp.45-47
- VI. **Use of a three stage system comprised of dark fermentation methanogenesis and photofermentation to improve energy production**
 ERGUDER T. H., AKMAN M. C., TUNÇAY G., KOÇ E., GÜNDÜZ U., EROĞLU İ.
 3rd International Congress on Water, Waste and Energy Management (EWWM), ROMA, Italy, 18 - 20 July 2016, pp.158-159
- VII. **Utilization of Molasses in a Pilot Scale Photobioreactor in Outdoor Conditions**
 KAYAHAN E., EROĞLU İ., KOKU H.
 21st World Hydrogen Energy Conference, 13 - 16 June 2016
- VIII. **Biyolojik Hidrojen Üretimi için Borusal Fotobiyoreaktör Tasarımı ve Analizi**
 KAYAHAN E., EROĞLU İ., KOKU H.
 UHTEK2015 - Ulusal Hidrojen Teknolojileri Kongresi, İstanbul, Turkey, 20 - 23 December 2015
- IX. **The effects of HRT pH and SRT on dark fermentative hydrogen production in an SBR using sucrose**
 TUNÇAY G., ERGUDER T. H., EROĞLU İ., GÜNDÜZ U.
 AD14 World Congress on Anaerobic Digestion, Vina-Del-Mar, Chile, 15 - 18 November 2015

- X. **Integrated biohydrogen and methane production from sucrose in a three stage configuration**
KOÇ E., MELİH CAN A., GÜNEŞ EKİN T., ERGUDER T. H., EROĞLU İ., GÜNDÜZ U.
AD14 World Congress on Anaerobic Digestion, Vina-Del-Mar, Chile, 15 - 18 November 2015
- XI. **Effects of hydraulic and solid retention times on lab scale anaerobic sequencing batch reactor performance and methanogenic diversity**
KOÇ E., ERGUDER T. H., METİN D., GÜNDÜZ U., EROĞLU İ.
3rd International Congress on Energy Efficiency and Energy Related Materials (ENEFM2015), Muğla, Turkey, 19 - 23 October 2015
- XII. **A Five Layer One-Dimensional PEMFC Model with Detailed Electrode Kinetics**
Ficicular B., Eroglu I., Nguyen T. V.
10th Polymer Electrolyte Fuel Cells Symposium (PEFC) Conducted Under the Auspices of the 218th Meeting of the Electrochemical-Society (ECS), Nevada, United States Of America, 01 October 2010, vol.33, pp.1515-1516
- XIII. **Hydrogen Production By R. Capsulatus On Dark Fermenter Effluent Of Potato Steam Peel Hydrolysate**
Afsar N., Ozgur E., Gurgan M., de Vrije T., YÜCEL M., GÜNDÜZ U., Eroglu I.
12th Conference on Process Integration, Modelling and Optimisation for Energy Saving and Pollution Reduction, Rome, Italy, 10 February - 13 May 2009, vol.18, pp.385-386
- XIV. **Investigation Of Influencing Factors For Biological Hydrogen Production By R. Capsulatus In Tubular Photo-Bioreactors**
Boran E., Ozgur E., Gebicki J., van der Burg J., YÜCEL M., GÜNDÜZ U., Modigel M., Eroglu I.
12th Conference on Process Integration, Modelling and Optimisation for Energy Saving and Pollution Reduction, Rome, Italy, 10 February - 13 May 2009, vol.18, pp.357-358
- XV. **Long term performance of an alkaline fuel cell with double layer electrodes**
Eroglu I., Han E., Turker L.
13th World Hydrogen Energy Conference, Beijing, China, 11 - 15 June 2000, pp.738-743
- XVI. **Photoelectrochemical H-2 production by using bacteriorhodopsin immobilized in PAG**
Yucel M., El-Bashiti T., Eroglu I., Sediroglu V., Turker L., Gunduz U.
13th World Hydrogen Energy Conference, Beijing, China, 11 - 15 June 2000, pp.396-401
- XVII. **The effect of Halobacterium halobium on photoelectrochemical hydrogen production**
Sediroglu V., Yucel M., Gunduz U., Turker L., Eroglu I.
International Conference on Biological Hydrogen Production, Hawaii, United States Of America, 23 - 26 June 1997, pp.295-304
- XVIII. **Continuous hydrogen production by Rhodobacter sphaeroides O.U.001**
Eroglu I., Aslan K., Gunduz M., Yucel M., Turker L.
International Conference on Biological Hydrogen Production, Hawaii, United States Of America, 23 - 26 June 1997, pp.143-149
- XIX. **Photobiological hydrogen production by Rhodobacter sphaeroides O.U.001 by utilization of waste water from milk industry**
Turkarslan S., Yigit D., Aslan K., Eroglu I., Gunduz U.
International Conference on Biological Hydrogen Production, Hawaii, United States Of America, 23 - 26 June 1997, pp.151-156
- XX. **Photoproduction of hydrogen by Rhodobacter sphaeroides OU001**
Arik T., Gunduz U., Yucel M., Turker L., Sediroglu V., Eroglu I.
11th World Hydrogen Energy Conference (11 WHEC), Stuttgart, Germany, 23 - 28 June 1996, pp.2417-2426
- XXI. **Hydrogen gas production using coupled enzyme systems from E-coli and Halobacterium halobium**
Kaya B., Gunduz U., Eroglu I., Turker L., Yucel M.
11th World Hydrogen Energy Conference (11 WHEC), Stuttgart, Germany, 23 - 28 June 1996, pp.2595-2600
- XXII. **Photoelectrochemical hydrogen production by Halobacterium halobium**
Sediroglu V., Yucel M., Gunduz L., Turker L., Aydemir A., Eroglu I.
11th World Hydrogen Energy Conference (11 WHEC), Stuttgart, Germany, 23 - 28 June 1996, pp.2589-2594
- XXIII. **Electricity generation by an alkaline fuel cell**

Ergul M., Turker L., Eroglu I.

11th World Hydrogen Energy Conference (11 WHEC), Stuttgart, Germany, 23 - 28 June 1996, pp.1939-1944

XXIV. Semiconductor-hydrogen technology

Bayer I., Eroglu I., Turker L.

11th World Hydrogen Energy Conference (11 WHEC), Stuttgart, Germany, 23 - 28 June 1996, pp.919-924

Supported Projects

EROĞLU İ., Project Supported by Higher Education Institutions, FEN BİLİMLERİ ENSTİTÜSÜ/LİSANSÜSTÜ TEZ PROJESİ, 2014 - 2015

EROĞLU İ., Avcioğlu S. G., Project Supported by Higher Education Institutions, Polimer Değişim Zarlı Yakıt Pili Performansının Katot Katalizör Tabakasına Hidrofobik Malzeme Eklenmesi ile Geliştirilmesi, 2013 - 2014

EROĞLU İ., KAYAHAN E., Project Supported by Higher Education Institutions, BARYUM METABORAT SENTEZİ VE KARAKTERİZASYONU, 2013 - 2013

EROĞLU İ., Androga D. D., GÜNDÜZ U., Project Supported by Higher Education Institutions, Modeling And Simulation Of Photobioreactors For Biological Hydrogen Production, 2012 - 2013

EROĞLU İ., Project Supported by Higher Education Institutions, Pem Yakıt Pili Yiğimi Testi Ve Doğrulanması, 2011 - 2011

EROĞLU İ., Project Supported by Higher Education Institutions, Pem Yakıt Pili Elektrokatalistleri İçin Farklı Karbon Destekleri Geliştirilmesi, 2009 - 2010

EROĞLU İ., Project Supported by Higher Education Institutions, Yüksek Sıcaklıkta Çalışabilen Proton Değişim Zarlı Yakıt Hücreleri, 2008 - 2008

Metrics

Publication: 124

Citation (WoS): 4542

Citation (Scopus): 3742

H-Index (WoS): 41

H-Index (Scopus): 36