

## **Asst. Prof. ABDULAZIZ ATABANI**

### **Personal Information**

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### **International Researcher IDs**

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Publons / Web Of Science ResearcherID: L-5926-2019

ScopusID: 36987884200

Yoksis Researcher ID: 230202

### **Education Information**

Doctorate, University Of Malaya, Faculty Of Engineering, Mechanical Engineering, Malaysia 2011 - 2014

Postgraduate, University Of Malaya, Faculty Of Engineering, Mechanical Engineering, Malaysia 2008 - 2010

Undergraduate, University Of Khartoum, Faculty Of Engineering, Mechanical Engineering, Sudan 2000 - 2005

### **Foreign Languages**

English, C2 Mastery

Arabic, C2 Mastery

Turkish, A1 Beginner

Indonesian, A1 Beginner

### **Dissertations**

Doctorate, A comprehensive Analysis of Edible and Non-edible Biodiesel Feedstocks, University Of Malaya, Faculty Of Engineering, Mechanical Engineering, 2010

Postgraduate, Energy Economical and Environmental Analysis of Industrial boilers, University Of Malaya, Faculty Of Engineering, Mechanical Engineering, 2008

### **Research Areas**

Technical Sciences, Mechanical Engineering, Energy, Renewable Energy Systems, Alternative Energy Resources

### **Academic Titles / Tasks**

Assistant Professor, Erciyes University, Mühendislik Fakültesi, Makina Mühendisliği, 2018 - Continues

Assistant Professor, Erciyes University, Mühendislik Fakültesi, Makina Mühendisliği, 2015 - 2018

Lecturer PhD, Erciyes University, Mühendislik Fakültesi, Makina Mühendisliği, 2014 - 2015

## Supervised Theses

- MOHAMED ATABANI A. I., To be announced, Doctorate, M.Ahmed(Student), Continues
- Mohamed Atabani A., Valorization of spent coffee grounds into biodiesel: blending with alcohols, engine performance and FT-IR, TGA, DSC and NMR characterizations, Postgraduate, O.Khalid(Student), 2020
- Mohamed Atabani A., A study on the application of biodiesel–diesel higher alcohol blends with pentanol and octanol in CI (diesel engine), Postgraduate, S.Al(Student), 2019
- Mohamed Atabani A. I., FT-IR, UV-Vis, TGA, DSC characteristics, engine and emissions performance of complementary butanol-diesel blends with hemp (*Cannabis sativa* L.) methyl ester, Postgraduate, M.Noaman(Student), 2018
- Mohamed Atabani A., Alternatif Yakıt Olarak Farklı Atıklardan Biyogaz Üretimi ve Veriminin Artırılmasının İncelenmesi, Doctorate, M.RAŞİT(Student), 2018
- MOHAMED ATABANI A. I., Perspective of safflower (*Carthamus tinctorius*) as a potential biodiesel feedstock in Turkey: characterization, engine performance and emissions analyses of butanol-biodiesel-diesel blends, Postgraduate, R.Rafel(Student), 2017
- Mohamed Atabani A. I., Evaluation, characterization and engine performance of complementary fuel blends of butanol-biodiesel-diesel blends from *Aleurites moluccanus* as potential alternative fuels for CI engines, Postgraduate, M.Mekaoussi(Student), 2017

## Jury Memberships

- Post Graduate, Post Graduate, Atatürk Üniversitesi, June, 2022
- Doctoral Examination, Doctoral Examination, Aydın Adnan Menderes Üniversitesi, February, 2021

## Published journal articles indexed by SCI, SSCI, and AHCI

- I. **Investigation of a novel Defatted Spent Coffee Ground (DSCG)-supported Ni catalyst for fuel cell and supercapacitor applications**  
Hansu T. A., Al-Samarrae R., Atelge M., Kaya M., Kivrak H. D., Bogrekcı I., YILDIZ Y. Ş., AKANSU S. O., ÜNALAN S., ATABANI A.  
PROCESS SAFETY AND ENVIRONMENTAL PROTECTION, vol.191, pp.760-768, 2024 (SCI-Expanded)
- II. **Tea byproducts biorefinery for bioenergy recovery and value-added products development: A step towards environmental sustainability**  
Kumar V., Bhat S. A., Kumar S., Verma P., Badruddin I. A., Américo-Pinheiro J. H. P., Sathyamurthy R., ATABANI A.  
Fuel, vol.350, 2023 (SCI-Expanded)
- III. **Prediction and performance optimisation of a DI CI engine fuelled diesel–Bael biodiesel blends with DMC additive using RSM and ANN: Energy and exergy analysis**  
Pitthaiah S., Juchelková D., Sathyamurthy R., ATABANI A.  
Energy Conversion and Management, vol.292, 2023 (SCI-Expanded)
- IV. **Investigating the influence of plastic waste oils and acetone blends on diesel engine combustion, pollutants, morphological and size particles: Dehalogenation and catalytic pyrolysis of plastic waste**  
Yusuf A. A., Ampah J. D., Veza I., ATABANI A., Hoang A. T., Nippae A., Powoe M. T., Afrane S., Yusuf D. A., Yahuza I.  
Energy Conversion and Management, vol.291, 2023 (SCI-Expanded)
- V. **Nanomaterials for biofuels production towards a sustainable environment**  
Vasseghian Y., Almomani F., ATABANI A.  
Fuel, vol.346, 2023 (SCI-Expanded)
- VI. **Emerging potential of spent coffee ground valorization for fuel pellet production in a biorefinery**  
ATABANI A., Mahmoud E., Aslam M., Naqvi S. R., Juchelkova D., Bhatia S. K., Badruddin I. A., Khan T. M. Y., Hoang A. T., Palacky P.  
ENVIRONMENT DEVELOPMENT AND SUSTAINABILITY, vol.25, no.8, pp.7585-7623, 2023 (SCI-Expanded)
- VII. **Editorial Preface of the Special Issue on “The 5th International Conference on Alternative Fuels, Energy & Environment: Futures and Challenges (ICAFEE 2021)”**

ATABANI A., Pugazhendhi A., Almomani F., Rajendran K.

Fuel, vol.343, 2023 (SCI-Expanded)

- VIII. **Supercapacitors production from waste: A new window for sustainable energy and waste management**  
Bhat S. A., Kumar V., Kumar S., ATABANI A., Anjum Badruddin I., Chae K.  
Fuel, vol.337, 2023 (SCI-Expanded)
- IX. **Anaerobic digestion of dry palms from five cultivars of Algerian date palm (Phoenix dactylifera L.) namely H'mira, Teggaza, Tinacer, Aghamou and Takarbouchet: A new comparative study**  
Atabani A., Djaafri M.  
ENERGY, vol.269, pp.1-10, 2023 (SCI-Expanded)
- X. **Recycling of waste tires to crude pyrolytic oil: Engine performance, combustion characteristics and emissions analysis of diesel-butanol-crude pyrolytic oil blends in CI diesel engines**  
ÖNER İ. V., ATABANI A., Durnagöl T.  
Sustainable Energy Technologies and Assessments, vol.56, 2023 (SCI-Expanded)
- XI. **Defatted spent coffee grounds-supported cobalt catalyst as a promising supercapacitor electrode for hydrogen production and energy storage**  
KARAKAŞ D. E., Akdemir M., Atelge M. R., KAYA M., MOHAMED ATABANI A.  
CLEAN TECHNOLOGIES AND ENVIRONMENTAL POLICY, vol.25, no.2, pp.483-493, 2023 (SCI-Expanded)
- XII. **Editorial preface of the special issue on “the 5th international conference on alternative fuels, energy & environment: Futures & challenges (ICAFEE 2021)” (virtual) 15th – 18th, October 2021, Erciyes University (ERÜ), Türkiye**  
ATABANI A., Chae K.  
International Journal of Hydrogen Energy, vol.48, no.18, pp.6703-6704, 2023 (SCI-Expanded)
- XIII. **Environmental and economic issues for renewable production of bio-jet fuel: A global prospective**  
Tiwari R., Mishra R., Choubey A., Kumar S., ATABANI A., Badruddin I. A., Khan T. Y.  
Fuel, vol.332, 2023 (SCI-Expanded)
- XIV. **Recent advances in the thermochemical transformation of biomass to bio-oil, biochar and syngas and its upgrading methods**  
ATABANI A., Pugazhendhi A., Almomani F., Rene E. R., Naqvi S. R.  
Process Safety and Environmental Protection, vol.168, pp.624-625, 2022 (SCI-Expanded)
- XV. **Valorization of spent coffee grounds for biogas production: A circular bioeconomy approach for a biorefinery**  
Mahmoud E., ATABANI A., Badruddin I. A.  
Fuel, vol.328, 2022 (SCI-Expanded)
- XVI. **Principles and potential of thermal hydrolysis of sewage sludge to enhance anaerobic digestion**  
Gahlot P., Balasundaram G., Tyagi V. K., ATABANI A., Suthar S., Kazmi A., Štěpanec L., Juchelková D., Kumar A.  
Environmental Research, vol.214, 2022 (SCI-Expanded)
- XVII. **Scale-up of the bioelectrochemical system: Strategic perspectives and normalization of performance indices**  
Jadhav D. A., Chendake A. D., Vinayak V., ATABANI A., Abdelkareem M. A., Chae K.  
BIORESOURCE TECHNOLOGY, vol.363, 2022 (SCI-Expanded)
- XVIII. **Effect of stirring speeds on biodiesel yield using an innovative oscillatory reactor and conventional STR (A comparative study)**  
Khelafi M., Djaafri M., Kalloum S., Atelge M. R., Abut S., Dahbi A., BEKİROĞULLARI M., ATABANI A.  
FUEL, vol.325, 2022 (SCI-Expanded)
- XIX. **A critical review of the hydrogen production from biomass-based feedstocks: Challenge, solution, and future prospect**  
Taipabu M. I., Viswanathan K., Wu W., Hattu N., ATABANI A.  
Process Safety and Environmental Protection, vol.164, pp.384-407, 2022 (SCI-Expanded)
- XX. **Optimizing operation parameters of a spark-ignition engine fueled with biogas-hydrogen blend integrated into biomass-solar hybrid renewable energy system**

- Bui V. G., Bui T. M. T., Ong H. C., Nizetic S., Bui V. H., Nguyen T. T. X., ATABANI A., Stepanec L., Pham L. H. P., Hoang A. T.  
ENERGY, vol.252, 2022 (SCI-Expanded)
- XXI. **Measurement of organic and elemental carbon in the char deposits from the combustion of permitted and undesirable fuels in domestic boilers**  
Kucbel M., Švédová B., Raclavská H., Růžičková J., Raclavský K., Šafář M., Juchelková D., Kantor P., ATABANI A.  
Fuel, vol.319, 2022 (SCI-Expanded)
- XXII. **Impacts of the harvesting process on microalgae fatty acid profiles and lipid yields: Implications for biodiesel production**  
Shokravi Z., Shokravi H., Atabani A., Lau W. J., Chyuan O. H., Ismail A. F.  
Renewable & Sustainable Energy Reviews, vol.161, pp.1-15, 2022 (SCI-Expanded)
- XXIII. **Comparative investigation of multi-walled carbon nanotube modified diesel fuel and biogas in dual fuel mode on combustion, performance, and emission characteristics**  
Atelge M., ARSLAN E., Krisa D., Al-Samarrae R., Abut S., ÜNALAN S., MOHAMED ATABANI A., KAHRAMAN N., AKANSU S. O., Kaya M., et al.  
Fuel, vol.313, 2022 (SCI-Expanded)
- XXIV. **Valorization of spent coffee grounds for biodiesel production: blending with higher alcohols, FT-IR, TGA, DSC, and NMR characterizations**  
MOHAMED ATABANI A., Al-Rubaye O. K.  
BIOMASS CONVERSION AND BIOREFINERY, vol.12, no.3, pp.577-596, 2022 (SCI-Expanded)
- XXV. **Integrated biorefineries, circular bio-economy, and valorization of organic waste streams with respect to bio-products**  
MOHAMED ATABANI A., Tyagi V. K., Fongaro G., Treichel H., Pugazhendhi A., Hoang A. T.  
BIOMASS CONVERSION AND BIOREFINERY, vol.12, no.3, pp.565, 2022 (SCI-Expanded)
- XXVI. **Valorization of Wet Oily Petrochemical Sludge via Slow Pyrolysis: Thermo-Kinetics Assessment and Artificial Neural Network Modeling**  
Naqvi S. R., Ammar Taqvi S. A., Khoja A. H., Ali I., Mehran M. T., Farooq W., Tippayawong N., Juchelkova D., ATABANI A.  
FRONTIERS IN ENERGY RESEARCH, vol.9, 2022 (SCI-Expanded)
- XXVII. **A state-of-the-art review on spent coffee ground (SCG) pyrolysis for future biorefinery**  
MOHAMED ATABANI A., Ali I., Naqvi S. R., Badruddin I. A., Aslam M., Mahmoud E., Almomani F., Juchelkova D., Atelge M. R., Khan T. M. Y.  
CHEMOSPHERE, vol.286, 2022 (SCI-Expanded)
- XXVIII. **A performance evaluation study of nano-biochar as a potential slow-release nano-fertilizer from wheat straw residue for sustainable agriculture**  
Khan H. A., Naqvi S. R., Mehran M. T., Khoja A. H., Niazi M. B. K., Juchelkova D., MOHAMED ATABANI A.  
CHEMOSPHERE, vol.285, 2021 (SCI-Expanded)
- XXIX. **Co-digestion of vegetable peel with cow dung without external inoculum for biogas production: Experimental and a new modelling test in a batch mode**  
Lahbab A., Djaafri M., Kalloum S., Benatallah A., Atelge M. R., MOHAMED ATABANI A.  
FUEL, vol.306, 2021 (SCI-Expanded)
- XXX. **A dual functional material: Spirulina Platensis waste-supported Pd-Co catalyst as a novel promising supercapacitor electrode**  
KARAKAŞ D. E., Akdemir M., MOHAMED ATABANI A., KAYA M.  
FUEL, vol.304, 2021 (SCI-Expanded)
- XXXI. **Editorial Preface of the Special Issue on The 4th International Conference on Alternative Fuels, Energy & Environment: Futures and Challenges (ICAFEE 2019) 18th–21st, October 2019, Feng Chia University (FCU), Taichung, Taiwan**  
MOHAMED ATABANI A., Kumar G., Kim S., Pugazhendhi A.  
Fuel, vol.301, 2021 (SCI-Expanded)
- XXXII. **A Critical Overview of the State-of-the-Art Methods for Biogas Purification and Utilization Processes**

- Atelge M. R., ŞENOL H., Djaafri M., Hansu T. A., Krisa D., MOHAMED ATABANI A., Eskicioglu C., Muratcobanoglu H., ÜNALAN S., Kalloum S., et al.  
SUSTAINABILITY, vol.13, no.20, 2021 (SCI-Expanded)
- XXXIII. **Acid-based lignocellulosic biomass biorefinery for bioenergy production: Advantages, application constraints, and perspectives**  
Anh Tuan Hoang A. T. H., Nizetic S., Ong H. C., Chong C. T., MOHAMED ATABANI A., Van Viet Pham V. V. P.  
JOURNAL OF ENVIRONMENTAL MANAGEMENT, vol.296, 2021 (SCI-Expanded)
- XXXIV. **Investigation of slow pyrolysis mechanism and kinetic modeling of Scenedesmus quadricauda biomass**  
Khan S. A., Ali I., Naqvi S. R., Li K., Mehran M. T., Khoja A. H., Alarabi A. A., MOHAMED ATABANI A.  
JOURNAL OF ANALYTICAL AND APPLIED PYROLYSIS, vol.158, 2021 (SCI-Expanded)
- XXXV. **Enhanced Methane Production from Anaerobic Co-Digestion of Wheat Straw Rice Straw and Sugarcane Bagasse: A Kinetic Analysis**  
Meraj S., Liaquat R., Naqvi S. R., Sheikh Z., Zainab A., Khoja A. H., Juchelkova D., MOHAMED ATABANI A.  
APPLIED SCIENCES-BASEL, vol.11, no.13, 2021 (SCI-Expanded)
- XXXVI. **Synthesis of biodiesel via pre-blending of feedstocks: an optimization by the polynomial curve fitting method**  
Panhwar T., Mahesar S. A., Kandhro A. A., Laghari A., Sherazi S. T. H., Atabani A.  
BIOFUELS-UK, vol.12, no.6, pp.679-688, 2021 (SCI-Expanded)
- XXXVII. **Impact of HHO gas enrichment and high purity biodiesel on the performance of a 315 cc diesel engine**  
Khan M. B., Kazim A. H., Farooq M., Javed K., Shabbir A., Zahid R., Fatima S., Danish M. R., Ali Q., Chaudhry I. A., et al.  
INTERNATIONAL JOURNAL OF HYDROGEN ENERGY, vol.46, no.37, pp.19633-19644, 2021 (SCI-Expanded)
- XXXVIII. **Editorial preface of the special issue on “progress in alternative fuels and energies”**  
MOHAMED ATABANI A.  
International Journal of Energy Research, vol.45, no.6, pp.8123-8124, 2021 (SCI-Expanded)
- XXXIX. **Renewable biohydrogen production from lignocellulosic biomass using fermentation and integration of systems with other energy generation technologies**  
Bhatia S. K., Jagtap S. S., Bedekar A. A., Bhatia R. K., Rajendran K., Pugazhendhi A., Rao C., MOHAMED ATABANI A., Kumar G., Yang Y.  
SCIENCE OF THE TOTAL ENVIRONMENT, vol.765, 2021 (SCI-Expanded)
- XL. **Editorial preface of the special issue on “The 4th International Conference on Alternative Fuels, Energy & Environment: Futures & challenges (ICAFEE 2019)” 18th - 21st, October 2019, Feng Chia University (FCU), Taiwan**  
MOHAMED ATABANI A., Chae K.  
International Journal of Hydrogen Energy, vol.46, no.20, pp.11199-11200, 2021 (SCI-Expanded)
- XLI. **Current challenges and innovative developments in pretreatment of lignocellulosic residues for biofuel production: A review**  
Beig B., Riaz M., Naqvi S. R., Hassan M., Zheng Z., Karimi K., Pugazhendhi A., MOHAMED ATABANI A., Chi N. T. L.  
FUEL, vol.287, 2021 (SCI-Expanded)
- XLII. **Gasification of municipal solid waste blends with biomass for energy production and resources recovery: Current status, hybrid technologies and innovative prospects**  
Hameed Z., Aslam M., Khan Z., Maqsood K., MOHAMED ATABANI A., Ghauri M., Khurram M. S., Rehan M., Nizami A.  
Renewable and Sustainable Energy Reviews, vol.136, 2021 (SCI-Expanded)
- XLIII. **Recent developments and strategies in genome engineering and integrated fermentation approaches for biobutanol production from microalgae**  
Shanmugam S., Hari A., Kumar D., Rajendran K., Mathimani T., MOHAMED ATABANI A., Brindhadevi K., Pugazhendhi A.  
Fuel, vol.285, 2021 (SCI-Expanded)
- XLIV. **Techno-enviro assessment and ranking of Turkey for use of home-scale solar water heaters**  
Siampour L., Vahdatpour S., Jahangiri M., Mostafaeipour A., Goli A., Shamsabadi A. A., MOHAMED ATABANI A.

SUSTAINABLE ENERGY TECHNOLOGIES AND ASSESSMENTS, vol.43, 2021 (SCI-Expanded)

- XLV. **Anaerobic co-digestion of oil-extracted spent coffee grounds with various wastes: Experimental and kinetic modeling studies**  
Atelge M. R., Mohamed Atabani A., Abut S., Kaya M., Eskicioglu C., Semaan G., Lee C., Yildiz Y. Ş., Ünalın S., Mohanasundaram R., et al.  
BIORESOURCİ TECHNOLOGY, vol.322, 2021 (SCI-Expanded)
- XLVI. **Effect of reaction conditions on the lifetime of SAPO-34 catalysts in methanol to olefins process - A review**  
Ahmad M. S., Cheng C. K., Bhuyar P., MOHAMED ATABANI A., Pugazhendhi A., Nguyen Thuy Lan Chi N. T. L. C., Witoon T., Lim J. W., Juan J. C.  
FUEL, vol.283, 2021 (SCI-Expanded)
- XLVII. **Wastewater based microalgal biorefinery for bioenergy production: Progress and challenges**  
Bhatia S. K., Mehariya S., Bhatia R. K., Kumar M., Pugazhendhi A., Awasthi M. K., Atabani A., Kumar G., Kim W., Seo S., et al.  
SCIENCE OF THE TOTAL ENVIRONMENT, vol.751, 2021 (SCI-Expanded)
- XLVIII. **Spectral, thermoanalytical characterizations, properties, engine and emission performance of complementary biodiesel-diesel-pentanol/octanol blends**  
Atabani A., Al Kulthoom S.  
Fuel, vol.282, 2020 (SCI-Expanded)
- XLIX. **Comparative study of nanoparticles and alcoholic fuel additives-biodiesel-diesel blend for performance and emission improvements**  
Mujtaba M. A., Kalam M. A., Masjuki H. H., Gul M., Soudagar M. E. M., Ong H. C., Ahmed W., MOHAMED ATABANI A., Razzaq L., Yusoff M.  
FUEL, vol.279, 2020 (SCI-Expanded)
- L. **Spectral, In Vitro Biological, Engine and Emission Performances of Biodiesel Production from Chlorella protothecoides: A Sustainable Renewable Energy Source**  
Arvindnarayan S., Shobana S., Dharmaraja J., Nguyen D. D., Chang S. W., Atabani A., Kumar G., Prabhu K. K. S.  
Waste and Biomass Valorization, vol.11, pp.5809-5819, 2020 (SCI-Expanded)
- LI. **Carbon molecular sieve production from defatted spent coffee ground using ZnCl<sub>2</sub> and benzene for gas purification**  
Kaya M., Atelge M. R., Bekirogullari M., Eskicioglu C., Atabani A., Kumar G., Yildiz Y. Ş., Ünalın S.  
FUEL, vol.277, 2020 (SCI-Expanded)
- LII. **Editorial Preface for the Special Issue "The 3rd International Conference on Alternative Fuels, Energy & Environment: Futures and Challenges (ICAFEE 2018)" 28th-31st October 2018 Southeast University (SEU), Nanjing, People's Republic of China**  
Atabani A. E., Kumar G., Kim S.  
FUEL, vol.277, 2020 (SCI-Expanded)
- LIII. **Experimental insight into co-combustion characteristics of oxygenated biofuels in modified DICI engine**  
Alagumalai A., Mathimani T., Pugazhendhi A., MOHAMED ATABANI A., Brindhadevi K., Canh N. D.  
FUEL, vol.278, 2020 (SCI-Expanded)
- LIV. **A review on valorization of spent coffee grounds (SCG) towards biopolymers and biocatalysts production**  
Saratale G. D., Bhosale R., Shobana S., Banu J. R., Pugazhendhi A., Mahmoud E., Sirohi R., Bhatia S. K., MOHAMED ATABANI A., Mulone V., et al.  
BIORESOURCİ TECHNOLOGY, vol.314, 2020 (SCI-Expanded)
- LV. **Assessment of agro-industrial residues for bioenergy potential by investigating thermo-kinetic behavior in a slow pyrolysis process**  
Naqvi S. R., Ali I., Nasir S., Taqvi S. A. A., MOHAMED ATABANI A., Chen W.  
FUEL, vol.278, 2020 (SCI-Expanded)
- LVI. **Biodiesel from Scenedesmus species: Engine performance, emission characteristics, corrosion**

## **inhibition and bioanalysis**

Pugazhendhi A., Arvindnarayan S., Shobana S., Dharmaraja J., Vadivel M., Atabani A. E., Chang S. W., Dinh Duc Nguyen D. D. N., Kumar G.

FUEL, vol.276, 2020 (SCI-Expanded)

- LVII. **Effect of hydrogen and multiwall carbon nanotubes blends on combustion performance and emission of diesel engine using Taguchi approach**  
Manigandan S., Atabani A. E., Ponnusamy V. K., Pugazhendhi A., Gunasekar P., Prakash S.  
FUEL, vol.276, 2020 (SCI-Expanded)
- LVIII. **Impact of additives in Jet-A fuel blends on combustion, emission and exergetic analysis using a micro-gas turbine engine**  
Manigandan S., Atabani A. E., Ponnusamy V. K., Gunasekar P.  
FUEL, vol.276, 2020 (SCI-Expanded)
- LIX. **Optimization, kinetic and thermodynamic studies on sustainable biodiesel production from waste cooking oil: An Indian perspective**  
Pugazhendhi A., Alagumalai A., Mathimani T., Atabani A.  
Fuel, vol.273, 2020 (SCI-Expanded)
- LX. **Evaluation, characterization, and engine performance of complementary fuel blends of butanol-biodiesel-diesel from Aleurites moluccanus as potential alternative fuels for CI engines**  
MOHAMED ATABANI A., Mekaoussi M., Uguz G., Arpa O., Ayanoglu A., Shobana S.  
Energy and Environment, vol.31, no.5, pp.755-784, 2020 (SSCI)
- LXI. **A critical review of pretreatment technologies to enhance anaerobic digestion and energy recovery**  
Atelge M., Atabani A., Banu J. R., Krisa D., Kaya M., Eskicioglu C., Kumar G., Lee C., Yildiz Y. Ş., Unalan S., et al.  
FUEL, vol.270, 2020 (SCI-Expanded)
- LXII. **Modeling Viscosity and Density of Ethanol-Diesel-Biodiesel Ternary Blends for Sustainable Environment**  
Razzaq L., Farooq M., Mujtaba M. A., Sher F., Farhan M., Hassan M. T., Soudagar M. E. M., MOHAMED ATABANI A., Kalam M. A., Imran M.  
SUSTAINABILITY, vol.12, no.12, 2020 (SCI-Expanded)
- LXIII. **Biorefinery of spent coffee grounds waste: Viable pathway towards circular bioeconomy**  
Rajesh Banu J., Kavitha S., Yukesh Kannah R., Dinesh Kumar M., Preethi P., Atabani A., Kumar G.  
Bioresource Technology, vol.302, 2020 (SCI-Expanded)
- LXIV. **A novel Microcystis aeruginosa supported manganese catalyst for hydrogen generation through methanolysis of sodium borohydride**  
DUMAN F., Atelge M., Kaya M., Atabani A., Kumar G., ŞAHİN U., ÜNALAN S.  
INTERNATIONAL JOURNAL OF HYDROGEN ENERGY, vol.45, no.23, pp.12755-12765, 2020 (SCI-Expanded)
- LXV. **Editorial Preface to the Special Issue on “The 2nd International Conference on Alternative Fuels and Energy: Futures and Challenges (ICAFE 2017)” 23rd–25th October 2017, Daegu, Republic of Korea**  
Atabani A., Pugazhendhi A., Al-Muhtaseb A. H., Kobayashi T., Lee C.  
Waste and Biomass Valorization, vol.11, no.3, pp.1017, 2020 (SCI-Expanded)
- LXVI. **Biogas Production from Organic Waste: Recent Progress and Perspectives**  
Atelge M., Krisa D., Kumar G., Eskicioglu C., Nguyen D. D., Chang S. W., Atabani A., Al-Muhtaseb A. H., Ünalán S.  
Waste and Biomass Valorization, vol.11, pp.1019-1040, 2020 (SCI-Expanded)
- LXVII. **Characterization of Hemp (Cannabis sativa L.) Biodiesel Blends with Euro Diesel, Butanol and Diethyl Ether Using FT-IR, UV-Vis, TGA and DSC Techniques**  
Mohammed M., Atabani A., Uguz G., Lay C., Kumar G., Al-Samaraae R.  
Waste and Biomass Valorization, vol.11, pp.1097-1113, 2020 (SCI-Expanded)
- LXVIII. **Editorial preface to the special issue on “The 3rd International Conference on Alternative Fuels, Energy and Environment: Futures and challenges (ICAFEE 2018)” 28th–31st October 2018, Nanjing, People's Republic of China**  
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## Supported Projects

ATABANI A., ATELGE M. R., YILDIZ Y. Ş., AKANSU S. O., ÜNALAN S., DEMİR KIVRAK H., AVCI HANSU T., KAYA M., ABDULWAHHAB AL-SAMARAAE R. R., BOGREKCI I., et al., Project Supported by Higher Education Institutions, Development of a small-scale SCG-based biorefinery to produce biofuels and value-added products: pathways towards green environment and circular bioeconomy, 2022 - 2024

Avcı Hansu T., Atelge M. R., Atabani A., Demir Kıvrak H., Kaya M., Project Supported by Higher Education Institutions, Synthesis and characterization of new generation activated carbon-based heterogeneous biodiesel catalysts and biodiesel production applications from waste oils , 2021 - 2023

Atelge M. R., Mohamed Atabani A., Avcı Hansu T., Demir Kıvrak H., Abut S., Kaya M., Project Supported by Higher Education Institutions, Investigation of the production potential of biogas as a renewable biofuel from animal manure and coffee grounds , 2021 - 2023

Öner İ. V., Mohamed Atabani A., Project Supported by Higher Education Institutions, Kullanılmış Lastik Atıklarından Alternatif Yakıt Üretimi Ve Karakterizasyonu İle İçten Yanmalı Motorlardaki Uygulamalarının Araştırılması, 2020 - 2021  
ATABANI A., ÜNALAN S., YILDIZ Y. Ş., DUMAN F., ESKICIOĞLU C., KUMAR G., KAYA M., ATELGE M. R., LEE C., RANGANATHAN D. M., Project Supported by Higher Education Institutions, Valorization of recycling waste into biofuels experimental and modeling aspects, 2018 - 2020

ÜNALAN S., MOHAMED A., SARIKOÇ S., ABDELRAHEEM ELHAJ H. F., EFE Ş., CHAN S., RASHİD U., TABATABAEİ M., ÖRS İ., Project Supported by Higher Education Institutions, Biyodizel yakıtlı CI motorun yanma ve emisyonlarının karakteristiği motor performansı katkı maddelerinin fiziksel ve kimyasal özellikleri üzerine etkileri, 2015 - 2017

ATABANI A., ABDELRAHEEM ELHAJ H. F., SARIKOÇ S., ÜNALAN S., TRIWAHYONO S., EFE Ş., ÖRS İ., Project Supported by Higher Education Institutions, Implementation of a small scale biodiesel production project from waste for the state of Kayseri Kayseri bölgesi atıklarından küçük ölçekli biyodizel üretim uygulama projesi, 2015 - 2017

## Activities in Scientific Journals

Fuel, Special Issue Editor, 2018 - Continues

Biofuels, Committee Member, 2018 - Continues

International Journal of Hydrogen Energy, Special Issue Editor, 2017 - Continues

Energy and Environment, Special Issue Editor, 2017 - Continues

Waste and Biomass Valorization, Special Issue Editor, 2017 - Continues

Malaysian Journal of Catalysis, Assistant Editor/Section Editor, 2017 - Continues

International Journal of Energy Applications and Technologies, Publication Committee Member, 2017 - Continues

International Journal of Hydrogen Energy, Special Issue Editor, 2017 - 2017

Biofuel Research Journal, Editor, 2014 - 2017

## Peer Reviews in Scientific Publications

ENERGY, SCI Journal, May 2019

ENVIRONMENTAL SCIENCE AND POLLUTION RESEARCH, SCI Journal, May 2019

Biomass and Bioenergy, SCI Journal, February 2019

International Journal of Hydrogen Energy, SCI Journal, December 2018

International Journal of Hydrogen Energy, SCI Journal, December 2018

Bioresource Technology, SCI Journal, December 2018

Waste and Biomass Valorization, SCI Journal, December 2018

International Journal of Hydrogen Energy , SCI Journal, November 2018

International Journal of Hydrogen Energy, SCI Journal, November 2018

Fuel, SCI Journal, October 2018

Fuel, SCI Journal, October 2018

International Journal of Hydrogen Energy, SCI Journal, September 2018  
Fuel, SCI Journal, August 2018  
Biofuels, Bioproducts & Biorefining, SCI Journal, July 2018  
Renewable Energy , SCI Journal, April 2018  
Fuel, SCI Journal, April 2018  
Waste and Biomass Valorization , SCI Journal, April 2018  
Data in Brief, Journal Indexed in SSCI, March 2018  
Fuel, SCI Journal, March 2018  
Renewable Energy, SCI Journal, March 2018  
Renewable Energy, SCI Journal, March 2018  
Fuel, SCI Journal, February 2018  
Waste and Biomass Valorization, SCI Journal, February 2018  
Data in Brief, Journal Indexed in SSCI, February 2018  
Iranian Journal of Chemistry and Chemical Engineering (IJCCE), SCI Journal, February 2018  
Engineering Science and Technology, an International Journal, SCI Journal, February 2018  
Industrial Crops and Products, SCI Journal, February 2018  
Renewable Energy, SCI Journal, February 2018  
Environmental Science and Pollution Research, SCI Journal, January 2018  
Fuel, SCI Journal, January 2018  
Engineering Science and Technology, Journal Indexed in SSCI, January 2018  
Renewable Energy, SCI Journal, January 2018  
Bioresource Technology, SCI Journal, January 2018  
International Journal of Industrial Chemistry (IJIC), SCI Journal, December 2017  
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Renewable Energy, SCI Journal, November 2017  
Green Processing and Synthesis, SCI Journal, November 2017  
Energy Technology, SCI Journal, November 2017  
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Environmental Science and Pollution Research, SCI Journal, September 2017  
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International Journal of Green Energy, SCI Journal, September 2017  
South African Journal of Chemical Engineering, SCI Journal, September 2017  
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International Journal of Green Energy, SCI Journal, September 2017  
Renewable Energy, SCI Journal, September 2017  
Environmental Science and Pollution Research , SCI Journal, August 2017  
Renewable Energy, SCI Journal, August 2017  
Fuel, SCI Journal, July 2017  
Environmental Science and Pollution Research, SCI Journal, July 2017  
Atmospheric Pollution Research, SCI Journal, July 2017  
Fuel, SCI Journal, July 2017  
Renewable Energy, SCI Journal, July 2017

Energy & Fuels , SCI Journal, July 2017  
Fuel, SCI Journal, June 2017  
South African Journal of Chemical Engineering, SCI Journal, June 2017  
Energy, SCI Journal, June 2017  
Renewable Energy, SCI Journal, June 2017  
International Journal of Industrial Chemistry, SCI Journal, June 2017  
Renewable Energy, SCI Journal, June 2017  
Renewable Energy, SCI Journal, May 2017  
Preparative Biochemistry and Biotechnology, SCI Journal, May 2017  
Energy Conversion and Management, SCI Journal, May 2017  
Environmental Science and Pollution Research, SCI Journal, May 2017  
Energy & Fuels, SCI Journal, May 2017  
Transportation Research Part D: Transport and Environment, SCI Journal, March 2017  
Industrial Crops and Products, SCI Journal, February 2017  
Fuel, SCI Journal, February 2017  
Journal of Cleaner Production, SCI Journal, February 2017  
Renewable Energy, SCI Journal, December 2016  
Fuel, SCI Journal, September 2016  
Case Studies in Thermal Engineering, SCI Journal, September 2016  
Fuel, SCI Journal, September 2016  
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Energy Conversion and Management, SCI Journal, June 2016  
Energy & Fuels, SCI Journal, June 2016  
Fuel Processing Technology, SCI Journal, June 2016  
Renewable Energy, SCI Journal, June 2016  
Industrial Crops and Products, SCI Journal, June 2016  
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Energy Technology, SCI Journal, May 2016  
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Renewable Energy , SCI Journal, May 2015  
TRANSPORT POLICY, SCI Journal, May 2015  
Energy Conversion and Management, SCI Journal, April 2015  
Journal of Cleaner Production, SCI Journal, February 2015  
Journal of Cleaner Production, SCI Journal, January 2015  
Renewable and Sustainable Energy Reviews, SCI Journal, January 2015  
Industrial Crops and Products, SCI Journal, January 2015  
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Energy, SCI Journal, January 2014  
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Industrial Crops and Products, SCI Journal, December 2013  
Energy Conversion and Management, SCI Journal, November 2013  
Energy Conversion and Management, SCI Journal, August 2013  
Industrial Crops and Products, SCI Journal, August 2012

## **Metrics**

Publication: 142  
Citation (WoS): 7473  
Citation (Scopus): 9566  
H-Index (WoS): 41  
H-Index (Scopus): 47

## **Congress and Symposium Activities**

The 3rd International Conference on Alternative Fuels, Energy and Environment: Future and Challenges (ICAFEE2018),

Attendee, Nanjing, China, 2018

The 2nd International Conference on Alternative Fuels and Energy: Future and Challenges (ICAFE2017), Attendee, Daegu, South Korea, 2017

The 1st International Conference on Alternative Fuels: Future and Challenges (ICAF2016), Attendee, Kayseri, Turkey, 2016

4th "International Conference on Renewable Energy: Generation and Applications" ICREGA'16, Session Moderator, Belfort, France, 2016

## **Scholarships**

Bright Spark (BS), PhD, University, 2011 - Continues

## **Awards**

MOHAMED ATABANI A. I., Recognized reviewer, ACS Publications, September 2017

MOHAMED ATABANI A. I., Recognized reviewer, Elsevier, February 2017

MOHAMED ATABANI A. I., Outstanding Reviewer, Elsevier, October 2016

MOHAMED ATABANI A. I., Recognized reviewer, Elsevier, June 2016

MOHAMED ATABANI A. I., Recognized reviewer, Elsevier, September 2015

MOHAMED ATABANI A. I., Young Conference Scholarship (presentation), German Jordanian University (GJU), Jordan, May 2015