

## Prof. AHMET SARI

### Personal Information

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### International Researcher IDs

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ScopusID: 7006342950

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### Education Information

Doctorate, Karadeniz Technical University, -, Kimya, Turkey 1996 - 2000

Postgraduate, Karadeniz Technical University, -, Kimya, Turkey 1994 - 1996

Undergraduate, Karadeniz Technical University, Fen Edebiyat Fakültesi, Kimya, Turkey 1989 - 1993

### Foreign Languages

English, B2 Upper Intermediate

### Dissertations

Doctorate, Bazı Yağ Asitleri ve Ötektik Karışımlarının Enerji Depolayıcı Madde Olarak Kullanılabilirliğinin İncelenmesi, Gaziosman Paşa Üniversitesi, Fen Bilimleri Enstitüsü, Kimya, 2000

Postgraduate, Enerji Depolama Sisteminin Performansının Hesaplanması İçin Enerji ve Ekserji Analizi, Karadeniz Technical University, Fen Bilimleri Enstitüsü, Kimya/Fizikokimya, 1996

### Research Areas

Chemistry, Physical Chemistry, Functional Polymers, Chemical Kinetics, Composites, nanocomposites, Polymeric Materials, Thermodynamics, Natural Sciences

### Academic Titles / Tasks

Professor, Karadeniz Technical University, Mühendislik Fakültesi, Metalurji ve Malzeme Mühendisliği, 2015 - Continues

Professor, Gaziosman Paşa Üniversitesi, Fen Edebiyat, Kimya, 2010 - 2015

Associate Professor, Gaziosman Paşa Üniversitesi, Fen Edebiyat, Kimya, 2004 - 2010

Assistant Professor, Gaziosman Paşa Üniversitesi, Fen Edebiyat, Kimya, 2000 - 2004

### Academic and Administrative Experience

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

- I. **Nano-enhanced phase change materials: Fundamentals and applications**  
Said Z., Pandey A., Tiwari A. K., Kalidasan B., Jamil F., Thakur A. K., Tyagi V., SARI A., Ali H. M.  
Progress in Energy and Combustion Science, vol.104, 2024 (SCI-Expanded)
- II. **Evaluation of carbonized cotton stalk for development of novel form stable composite phase change materials for solar thermal energy storage**  
Gowthami D., Sharma R., Ansu A., SARI A., Tyagi V., Rathore P.  
Process Safety and Environmental Protection, vol.188, pp.1037-1048, 2024 (SCI-Expanded)
- III. **Production and assessment of UV-cured resin coated stearyl alcohol/expanded graphite as novel shape-stable composite phase change material for thermal energy storage**  
GÜLER O., Er Y., HEKİMOĞLU G., Ustaoglu A., SARI A., Subaşı S., Maraşlı M., Gencil O.  
Applied Thermal Engineering, vol.247, 2024 (SCI-Expanded)
- IV. **Physico-mechanical properties and thermal monitoring performance of thermal enhanced cement slurry-coated LWAs containing microencapsulated phase change material**  
Emiroğlu M., ÖZGÜLER A. T., NAS M., Subasi S., SARI A., HEKİMOĞLU G., Ustaoglu A., Gencil O.  
Materials Today Sustainability, vol.26, 2024 (SCI-Expanded)
- V. **A novel cement mortar comprising natural zeolite/dodecyl alcohol shape stable composite phase change material for energy effective buildings**  
SARI A., NAS M., YEŞİLATA B., Ustaoglu A., Erdoğmuş E., Torlaklı H., HEKİMOĞLU G., Gencil O.  
Journal of Energy Storage, vol.87, 2024 (SCI-Expanded)
- VI. **Innovative cementitious mortar incorporated with sepiolite based shape-stable phase change material for thermal controlling of buildings**  
TOPÇU İ. B., Bayram M., Ustaoglu A., HEKİMOĞLU G., Erdoğmuş E., SARI A., Gencil O., Ozbakkaloglu T.  
Construction and Building Materials, vol.426, 2024 (SCI-Expanded)
- VII. **Magnetic nanoparticles loaded hydrochar for effective Cr(VI) removal from water: Batch and column studies**  
Rind I. K., Memon N., SARI A., Khuhawar M. Y., Tuzen M., Naveed ul Hasan S., Memon A. A., Soomro W. A., Zaman Brohi R. O., Saleh T. A.  
Materials Chemistry and Physics, vol.318, 2024 (SCI-Expanded)
- VIII. **Microencapsulated phase change material/wood fiber-starch composite as novel bio-based energy storage material for buildings**  
Öztürk G., TEMİZ A., HEKİMOĞLU G., ASLAN M., KÖSE DEMİREL G., ERDEYER Ö. N., SARI A., Gencil O., Subaşı S.  
Journal of Energy Storage, vol.84, 2024 (SCI-Expanded)
- IX. **Enhancing sustainability with waste hemp-shive and phase change material: Novel gypsum-based composites with advanced thermal energy storage properties**  
Gencil O., GÜLER O., Ustaoglu A., Erdoğmuş E., SARI A., HEKİMOĞLU G., BOZTOPRAK Y., Subaşı S.  
Journal of Cleaner Production, vol.451, 2024 (SCI-Expanded)
- X. **Development of a novel form-stable phase change material based on alkali activated date seed biochar to harvest solar thermal energy**  
Gowthami D., Sharma R., Tyagi V., Rathore P. K. S., SARI A.  
Journal of Energy Storage, vol.83, 2024 (SCI-Expanded)
- XI. **Novel integration of recycled-hemihydrate phosphogypsum and ethyl palmitate in composite phase change material for building thermal regulation**  
Kocyiğit Ş., GÜLER O., HEKİMOĞLU G., Ustaoglu A., Erdoğmuş E., SARI A., Gencil O., Ozbakkaloglu T.  
Journal of Cleaner Production, vol.445, 2024 (SCI-Expanded)
- XII. **A Novel Layered Double Hydroxide and Dodecyl Alcohol Assisted PCM Composite with High Latent**

### **Heat Storage Capacity and Thermal Conductivity**

Al-Ahmed A., SARI A., Khan F., Al-Rasheidi M., HEKİMOĞLU G., Afzaal M., Alsulami A. A., Dafalla H., Salhi B., Alsulaiman A. F.

JOURNAL OF THERMAL SCIENCE, vol.33, no.2, pp.537-547, 2024 (SCI-Expanded)

- XIII. **Influential adsorption of Congo red using vermiculite/graphene/polyacrylamide composite**  
Rind I. K., SARI A., Tuzen M., Saleh T. A.  
Materials Chemistry and Physics, vol.314, 2024 (SCI-Expanded)
- XIV. **Characterisation and energy storage performance of 3D printed-photocurable resin/microencapsulated phase change material composite**  
Er Y., GÜLER O., Ustaoglu A., HEKİMOĞLU G., SARI A., Subası S., Gencil O., Marası M.  
Thermal Science and Engineering Progress, vol.48, 2024 (SCI-Expanded)
- XV. **Effects of graphene doping on shape stabilization, thermal energy storage and thermal conductivity properties of PolyHIPE/PEG composites**  
Kahraman Döğüşcü D., SARI A., HEKİMOĞLU G.  
Journal of Energy Storage, vol.76, 2024 (SCI-Expanded)
- XVI. **Simultaneous removal of polyaromatic hydrocarbons from water using polymer modified carbon**  
Saleh T. A., SARI A., Tuzen M.  
Biomass Conversion and Biorefinery, vol.14, no.1, pp.567-576, 2024 (SCI-Expanded)
- XVII. **Activated carbon/expanded graphite hybrid structure for development of nonadecane based composite PCM with excellent shape stability, enhanced thermal conductivity and heat charging-discharging performance**  
HEKİMOĞLU G., SARI A., Gencil O., Tyagi V., Sharma R.  
THERMAL SCIENCE AND ENGINEERING PROGRESS, vol.44, 2023 (SCI-Expanded)
- XVIII. **Influential antimony removal from Aquatic Solution using Graphene Nanoplatelet/ *Staphylococcus aureus* as Novel Composite Adsorbent**  
Rind I. K., SARI A., Tuzen M., Lanjwani M. F., Karaman I., Saleh T. A.  
SURFACES AND INTERFACES, vol.38, 2023 (SCI-Expanded)
- XIX. **The effect of limestone and bottom ash sand with recycled fine aggregate in foam concrete**  
Gencil O., Balci B., Bayraktar O. Y., Nodehi M., SARI A., KAPLAN G., Hekimog G., Gholampour A., Benli A., Ozbakkaloglu T.  
JOURNAL OF BUILDING ENGINEERING, vol.54, 2022 (SCI-Expanded)
- XX. **Comparative exergoeconomic analysis of single, two and three stage spray drying systems**  
Singh G., Tyagi V., Pandey A., Goel V., SARI A.  
Journal of Thermal Analysis and Calorimetry, vol.147, no.16, pp.8947-8968, 2022 (SCI-Expanded)
- XXI. **Glass fiber reinforced gypsum composites with microencapsulated PCM as novel building thermal energy storage material**  
Gencil O., HEKİMOĞLU G., SARI A., Ustaoglu A., Subasi S., Marasli M., Erdogmus E., Memon S. A.  
CONSTRUCTION AND BUILDING MATERIALS, vol.340, 2022 (SCI-Expanded)
- XXII. **Factorial design, physical studies and rapid arsenic adsorption using newly prepared polymer modified perlite adsorbent**  
Saleh T. A., Tuzen M., SARI A., ALTUNAY N.  
Chemical Engineering Research and Design, vol.183, pp.181-191, 2022 (SCI-Expanded)
- XXIII. **Activated carbon nanotube/polyacrylic acid/stearyl alcohol nanocomposites as thermal energy storage effective shape-stabilized phase change materials**  
Goksu H., Aydinli E., HEKİMOĞLU G., SARI A., Gencil O., Subasi S., Tozluoglu A.  
SURFACES AND INTERFACES, vol.31, 2022 (SCI-Expanded)
- XXIV. **A critical overview of upstream cultivation and downstream processing of algae-based biofuels: Opportunity, technological barriers and future perspective**  
Ahmad S., Iqbal K., Kothari R., Singh H. M., SARI A., Tyagi V.  
Journal of Biotechnology, vol.351, pp.74-98, 2022 (SCI-Expanded)
- XXV. **Investigation of physico-mechanical, thermal properties and solar thermoregulation performance of**

**shape-stable attapulgite based composite phase change material in foam concrete**

Gencil O., Ustaoglu A., Benli A., HEKİMOĞLU G., SARI A., Erdogmus E., Sutcu M., KAPLAN G., Bayraktar O. Y.  
SOLAR ENERGY, vol.236, pp.51-62, 2022 (SCI-Expanded)

- XXVI. **Effect of simultaneous & consecutive melting/solidification of phase change material on domestic solar water heating system**  
Chopra K., Tyagi V., Pandey A., Popli S., Singh G., Sharma R., SARI A.  
Renewable Energy, vol.188, pp.329-348, 2022 (SCI-Expanded)
- XXVII. **Utilization of waste apricot kernel shell derived-activated carbon as carrier framework for effective shape-stabilization and thermal conductivity enhancement of organic phase change materials used for thermal energy storage**  
HEKİMOĞLU G., SARI A., ÖNAL Y., Gencil O., Tyagi V., Aslan E.  
POWDER TECHNOLOGY, vol.401, 2022 (SCI-Expanded)
- XXVIII. **Utilization of Chlorella pyrenoidosa for Remediation of Common Effluent Treatment Plant Wastewater in Coupling with Co-relational Study: An Experimental Approach**  
Kothari R., Pandey A., Ahmad S., Singh H. M., Pathak V. V., Tyagi V. V., Kumar K., SARI A.  
BULLETIN OF ENVIRONMENTAL CONTAMINATION AND TOXICOLOGY, vol.108, no.3, pp.507-517, 2022 (SCI-Expanded)
- XXIX. **Metal Oxide Nanoparticle Dispersed-Polyethylene Glycol: Thermal Conductivity and Thermal Energy Storage Properties**  
Ouikhalfan M., HEKİMOĞLU G., SARI A., Gencil O., Tyagi V. V.  
ENERGY & FUELS, vol.36, no.5, pp.2821-2832, 2022 (SCI-Expanded)
- XXX. **Thermal conductivity enhancement of silica fume based composite thermal energy storage material using different carbon nanomaterials**  
HEKİMOĞLU G., SARI A., Gencil O., Tyagi V. V.  
Energy and Buildings, vol.257, 2022 (SCI-Expanded)
- XXXI. **Synthesis of carbon modified with polymer of diethylenetriamine and trimesoyl chloride for the dual removal of Hg (II) and methyl mercury ([CH<sub>3</sub>Hg]<sup>+</sup>) from wastewater: Theoretical and experimental analyses**  
Tuzen M., SARI A., Afshar Mogaddam M. R., KAYA S., Katin K., ALTUNAY N.  
Materials Chemistry and Physics, vol.277, 2022 (SCI-Expanded)
- XXXII. **Production and characterization of natural clay-free green building brick materials using water treatment sludge and oak wood ash**  
Harja M., Gencil O., SARI A., Sutcu M., Erdogmus E., HEKİMOĞLU G.  
ARCHIVES OF CIVIL AND MECHANICAL ENGINEERING, vol.22, no.2, 2022 (SCI-Expanded)
- XXXIII. **Cultivation of two Chlorella species in Open sewage contaminated channel wastewater for biomass and biochemical profiles: Comparative lab-scale approach**  
Azam R., Kothari R., Singh H. M., Ahmad S., SARI A., Tyagi V.  
Journal of Biotechnology, vol.344, pp.24-31, 2022 (SCI-Expanded)
- XXXIV. **A comprehensive review on phase change materials for heat storage applications: Development, characterization, thermal and chemical stability**  
Tyagi V., Chopra K., Sharma R., Pandey A., Tyagi S., Ahmad M. S., SARI A., Kothari R.  
Solar Energy Materials and Solar Cells, vol.234, 2022 (SCI-Expanded)
- XXXV. **A review on phase change materials (PCMs) for thermal energy storage implementations**  
HEKİMOĞLU G., SARI A.  
MATERIALS TODAY : PROCEEDINGS, vol.58, pp.8, 2022 (SCI-Expanded)
- XXXVI. **Shape stabilized attapulgite/myristic-palmitic acid composite PCM for thermal energy storage implementations in buildings**  
HEKİMOĞLU G., SARI A.  
Materials Today: Proceedings, vol.58, pp.1350-1353, 2022 (SCI-Expanded)
- XXXVII. **Novel approach for harvesting of microalgal biomass using electric geyser waste material deposit as flocculant in coupling with poultry excreta leachate**

- Singh H. M., Tyagi V. V., Kothari R., Azam R., Khare P., SARI A.  
 BIORESOURCE TECHNOLOGY, vol.341, 2021 (SCI-Expanded)
- XXXVIII. **Evaluation of poly(ethylene diamine-trimesoyl chloride)-modified diatomite as efficient adsorbent for removal of rhodamine B from wastewater samples**  
 Saleh T. A., Tuzen M., SARI A.  
 ENVIRONMENTAL SCIENCE AND POLLUTION RESEARCH, vol.28, no.39, pp.55655-55666, 2021 (SCI-Expanded)
- XXXIX. **Phase change material based advance solar thermal energy storage systems for building heating and cooling applications: A prospective research approach**  
 Tyagi V. V., Chopra K., Kalidasan B., Chauhan A., Strith U., Anand S., Pandey A. K., SARI A., Kothari R.  
 SUSTAINABLE ENERGY TECHNOLOGIES AND ASSESSMENTS, vol.47, 2021 (SCI-Expanded)
- XL. **Carbonized waste hazelnut wood-based shape-stable composite phase change materials for thermal management implementations**  
 HEKİMOĞLU G., SARI A., Kar T., KELEŞ S., KAYGUSUZ K., YILDIRIM N., Tyagi V. V., Sharma R. K., Saleh T. A.  
 INTERNATIONAL JOURNAL OF ENERGY RESEARCH, vol.45, no.7, pp.10271-10284, 2021 (SCI-Expanded)
- XLI. **Experimental investigation of microalgal harvesting with low cost bottom ash: Influence of temperature and pH with zeta potential and thermodynamic function**  
 Ahmad S., Kothari R., Singh H. M., Tyagi V. V., Singh B., SARI A.  
 ENVIRONMENTAL TECHNOLOGY & INNOVATION, vol.22, 2021 (SCI-Expanded)
- XLII. **A comprehensive review on development of eutectic organic phase change materials and their composites for low and medium range thermal energy storage applications**  
 Singh P., Sharma R. K., Ansu A. K., Goyal R., SARI A., Tyagi V. V.  
 SOLAR ENERGY MATERIALS AND SOLAR CELLS, vol.223, 2021 (SCI-Expanded)
- XLIII. **Thermal management performance and mechanical properties of a novel cementitious composite containing fly ash/lauric acid-myristic acid as form-stable phase change material**  
 HEKİMOĞLU G., NAS M., Ouikhalfan M., SARI A., KURBETCİ Ş., Tyagi V. V., Sharma R. K., Saleh T. A.  
 CONSTRUCTION AND BUILDING MATERIALS, vol.274, 2021 (SCI-Expanded)
- XLIV. **Walnut shell derived bio-carbon/methyl palmitate as novel composite phase change material with enhanced thermal energy storage properties**  
 HEKİMOĞLU G., SARI A., Kar T., KELEŞ S., KAYGUSUZ K., Tyagi V., Sharma R., Al-Ahmed A., Al-Sulaiman F. A., Saleh T. A.  
 JOURNAL OF ENERGY STORAGE, vol.35, 2021 (SCI-Expanded)
- XLV. **Silica fume/capric acid-stearic acid PCM included-cementitious composite for thermal controlling of buildings: Thermal energy storage and mechanical properties**  
 HEKİMOĞLU G., NAS M., Ouikhalfan M., SARI A., Tyagi V., Sharma R., KURBETCİ Ş., Saleh T. A.  
 ENERGY, vol.219, 2021 (SCI-Expanded)
- XLVI. **Effects of carbon-based fillers on thermal properties of fatty acids and their eutectics as phase change materials used for thermal energy storage: A Review**  
 Al-Ahmed A., Mazumder M. A. J., Salhi B., Sari A., Afzaal M., Al-Sulaiman F. A.  
 JOURNAL OF ENERGY STORAGE, vol.35, 2021 (SCI-Expanded)
- XLVII. **Facile synthesis of zinc oxide nanoparticles loaded activated carbon as an eco-friendly adsorbent for ultra-removal of malachite green from water**  
 Altintig E., Yenigun M., SARI A., Altundag H., Tuzen M., Saleh T. A.  
 ENVIRONMENTAL TECHNOLOGY & INNOVATION, vol.21, 2021 (SCI-Expanded)
- XLVIII. **Phase change material impregnated wood for passive thermal management of timber buildings**  
 TEMİZ A., HEKİMOĞLU G., KÖSE DEMİREL G., SARI A., Mohamad Amini M. H.  
 INTERNATIONAL JOURNAL OF ENERGY RESEARCH, vol.44, no.13, pp.10495-10505, 2020 (SCI-Expanded)
- XLIX. **Evaluation of pumice for development of low-cost and energy-efficient composite phase change materials and lab-scale thermoregulation performances of its cementitious plasters**  
 SARI A., HEKİMOĞLU G., Tyagi V., Sharma R.  
 ENERGY, vol.207, 2020 (SCI-Expanded)
- L. **Form-Stabilized Polyethylene Glycol/Palygorskite Composite Phase Change Material: Thermal Energy**

### **Storage Properties, Cycling Stability, and Thermal Durability**

SARI A., Ouikhalfan M., Chehouani H., HEKİMOĞLU G., BİÇER A., Al-Ahmed A., Al-Sulaiman F. A., Tyagi V. V.  
POLYMER ENGINEERING AND SCIENCE, vol.60, no.5, pp.909-916, 2020 (SCI-Expanded)

- LI. **A cycling study for reliability, chemical stability and thermal durability of polyethylene glycols of molecular weight 2000 and 10000 as organic latent heat thermal energy storage materials**  
Ansu A. K., Sharma R. K., Tyagi V. V., SARI A., Ganesan P., Tripathi D.  
INTERNATIONAL JOURNAL OF ENERGY RESEARCH, vol.44, no.3, pp.2183-2195, 2020 (SCI-Expanded)
- LII. **Low cost and eco-friendly wood fiber-based composite phase change material: Development, characterization and lab-scale thermoregulation performance for thermal energy storage**  
SARI A., HEKİMOĞLU G., Tyagi V. V.  
ENERGY, vol.195, 2020 (SCI-Expanded)
- LIII. **Carbon nanotubes grafted with poly(trimesoyl, m-phenylenediamine) for enhanced removal of phenol**  
Saleh T. A., SARI A., TÜZEN M.  
JOURNAL OF ENVIRONMENTAL MANAGEMENT, vol.252, 2019 (SCI-Expanded)
- LIV. **Magnetic vermiculite-modified by poly(trimesoyl chloride-melamine) as a sorbent for enhanced removal of bisphenol A**  
Saleh T. A., TÜZEN M., SARI A.  
JOURNAL OF ENVIRONMENTAL CHEMICAL ENGINEERING, vol.7, no.6, 2019 (SCI-Expanded)
- LV. **Preparation and characterization of nano-enhanced myristic acid using metal oxide nanoparticles for thermal energy storage**  
Ouikhalfan M., SARI A., Chehouani H., Benhamou B., Bicer A.  
INTERNATIONAL JOURNAL OF ENERGY RESEARCH, vol.43, no.14, pp.8592-8607, 2019 (SCI-Expanded)
- LVI. **Experimental performance evaluation of a novel designed phase change material integrated manifold heat pipe evacuated tube solar collector system**  
Chopra K., Tyagi V. V., Pathak A. K., Pandey A. K., SARI A.  
ENERGY CONVERSION AND MANAGEMENT, vol.198, 2019 (SCI-Expanded)
- LVII. **Investigation of thermal properties and enhanced energy storage/release performance of silica fume/myristic acid composite doped with carbon nanotubes**  
SARI A., Al-Ahmed A., BİÇER A., Al-Sulaiman F. A., HEKİMOĞLU G.  
RENEWABLE ENERGY, vol.140, pp.779-788, 2019 (SCI-Expanded)
- LVIII. **Effects of carbon nanotubes additive on thermal conductivity and thermal energy storage properties of a novel composite phase change material**  
SARI A., BİÇER A., HEKİMOĞLU G.  
JOURNAL OF COMPOSITE MATERIALS, vol.53, no.21, pp.2967-2980, 2019 (SCI-Expanded)
- LIX. **Efficacy of chemical shift MRI for differentiating diffuse red bone marrow reconversion and hematological malignancies**  
Akman B., Ata Korkmaz H. A., SARI A.  
TURKISH JOURNAL OF MEDICAL SCIENCES, vol.49, no.2, pp.644-652, 2019 (SCI-Expanded)
- LX. **Thermal energy storage characteristics of myristic acid-palmitic eutectic mixtures encapsulated in PMMA shell**  
SARI A., BİÇER A., ALKAN C., Ozcan A. N.  
SOLAR ENERGY MATERIALS AND SOLAR CELLS, vol.193, pp.1-6, 2019 (SCI-Expanded)
- LXI. **Preparation, characterization, thermal energy storage properties and temperature control performance of form-stabilized sepiolite based composite phase change materials**  
SARI A., Sharma R. K., HEKİMOĞLU G., Tyagi V. V.  
ENERGY AND BUILDINGS, vol.188, pp.111-119, 2019 (SCI-Expanded)
- LXII. **Poly(styrene-co-maleic anhydride)-graft-fatty acids as novel solid-solid PCMs for thermal energy storage**  
SARI A., BİÇER A., ALKAN C.  
POLYMER ENGINEERING AND SCIENCE, vol.59, 2019 (SCI-Expanded)

- LXIII. **Preparation, characterization and evaluation of bio-based magnetic activated carbon for effective adsorption of malachite green from aqueous solution**  
ALTINTIĞ E., Onaran M., SARI A., ALTUNDAĞ H., TÜZEN M.  
MATERIALS CHEMISTRY AND PHYSICS, vol.220, pp.313-321, 2018 (SCI-Expanded)
- LXIV. **Global advancement on experimental and thermal analysis of evacuated tube collector with and without heat pipe systems and possible applications**  
Chopra K., Tyagi V. V., Pandey A. K., SARI A.  
APPLIED ENERGY, vol.228, pp.351-389, 2018 (SCI-Expanded)
- LXV. **Effects of carbon nanotubes additive on thermal conductivity and thermal energy storage properties of a novel composite phase change material**  
SARI A., BİÇER A., HEKİMOĞLU G.  
JOURNAL OF COMPOSITE MATERIALS, vol.0, pp.1-14, 2018 (SCI-Expanded)
- LXVI. **Effective uranium biosorption by macrofungus (*Russula sanguinea*) from aqueous solution: equilibrium, thermodynamic and kinetic studies**  
BAĞDA E., SARI A., TÜZEN M.  
JOURNAL OF RADIOANALYTICAL AND NUCLEAR CHEMISTRY, vol.317, no.3, pp.1387-1397, 2018 (SCI-Expanded)
- LXVII. **Thermodynamics and Kinetics of Biosorption of Vanadium with Macrofungus (*Hypholoma fasciculare*) and Determination by GFAAS**  
BAĞDA E., TÜZEN M., SARI A., Shemsi A. M., Bukhari A. A.  
ATOMIC SPECTROSCOPY, vol.39, no.4, pp.170-177, 2018 (SCI-Expanded)
- LXVIII. **Silica fume/capric acid-palmitic acid composite phase change material doped with CNTs for thermal energy storage**  
SARI A., BİÇER A., Al-Ahmed A., Al-Sulaiman F. A., Zahir M. H., Mohamed S. A.  
SOLAR ENERGY MATERIALS AND SOLAR CELLS, vol.179, pp.353-361, 2018 (SCI-Expanded)
- LXIX. **Polyamide magnetic palygorskite for the simultaneous removal of Hg(II) and methyl mercury; with factorial design analysis**  
Saleh T. A., TÜZEN M., SARI A.  
JOURNAL OF ENVIRONMENTAL MANAGEMENT, vol.211, pp.323-333, 2018 (SCI-Expanded)
- LXX. **Diatomite/CNTs/PEG composite PCMs with shape-stabilized and improved thermal conductivity: Preparation and thermal energy storage properties**  
SARI A., BİÇER A., Al-Sulaiman F. A., KARAIPEKLİ A., Tyagi V. V.  
ENERGY AND BUILDINGS, vol.164, pp.166-175, 2018 (SCI-Expanded)
- LXXI. **Novel approaches and recent developments on potential applications of phase change materials in solar energy**  
Pandey A. K., Hossain M. S., Tyagi V. V., Abd Rahim N., Selvaraj J. A. L., SARI A.  
RENEWABLE & SUSTAINABLE ENERGY REVIEWS, vol.82, pp.281-323, 2018 (SCI-Expanded)
- LXXII. **Microencapsulated n-alkane eutectics in polystyrene for solar thermal applications**  
DÖĞÜŞCÜ D. K., Kizil C., BİÇER A., SARI A., ALKAN C.  
SOLAR ENERGY, vol.160, pp.32-42, 2018 (SCI-Expanded)
- LXXIII. **Response surface optimization, kinetic and thermodynamic studies for effective removal of rhodamine B by magnetic AC/CeO<sub>2</sub> nanocomposite**  
TÜZEN M., SARI A., Saleh T. A.  
JOURNAL OF ENVIRONMENTAL MANAGEMENT, vol.206, pp.170-177, 2018 (SCI-Expanded)
- LXXIV. **Preparation, Characterization and Thermal Energy Storage Properties of Micro/Nano Encapsulated Phase Change Material with Acrylic-Based Polymer**  
SARI A., ALKAN C., Bilgin C., BİÇER A.  
POLYMER SCIENCE SERIES B, vol.60, no.1, pp.58-68, 2018 (SCI-Expanded)
- LXXV. **Preparation, characterization and thermal regulation performance of cement based-composite phase change material**  
SARI A., BİÇER A., KARAIPEKLİ A., Al-Sulaiman F. A.  
SOLAR ENERGY MATERIALS AND SOLAR CELLS, vol.174, pp.523-529, 2018 (SCI-Expanded)

- LXXVI. **Application of chitosan-modified pumice for antimony adsorption from aqueous solution**  
SARI A., TÜZEN M., Kocal I.  
ENVIRONMENTAL PROGRESS & SUSTAINABLE ENERGY, vol.36, no.6, pp.1587-1596, 2017 (SCI-Expanded)
- LXXVII. **Polystyrene microcapsules with palmitic-capric acid eutectic mixture as building thermal energy storage materials**  
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- LXXVIII. **Biosorption of Aluminum From Aqueous Solutions by Using Macrofungus (*Cortinarius armillatus*): Equilibrium, Kinetic, and Thermodynamic Studies and Determination by GFAAS**  
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- LXXXIV. **Thermal characteristics of expanded perlite/paraffin composite phase change material with enhanced thermal conductivity using carbon nanotubes**  
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- I. **Intracystic papillary carcinoma of the breast in females: two case reports**  
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### Refereed Congress / Symposium Publications in Proceedings

- I. **Termal Enerji Depolamada Faz Değiştiren Maddelerin Odun Kompozitlerinde Kullanılabilirliği**  
Öztürk G., TEMİZ A., HEKİMOĞLU G., KÖSE DEMİREL G., ASLAN M., SARI A.  
IV. Ulusal Karadeniz Ormanlık Kongresi, 06 December 2021
- II. **Eutectic Paraffin Mixture/Polymer Composite PCM for Thermal Energy Storage: Synthesis and Characterization**

SARI A.

3rd International Conference on Advanced Engineering Technologies, Bayburt, Turkey, 19 - 21 September 2019, pp.130-136

- III. **Fly Ash Based-Composite Phase Change Material for Thermal Energy Storage in Buildings**  
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- IV. **Clay/Polymer Composite Phase Change Material for Thermoregulation of Buildings**  
SARI A., Biçer A., HEKİMOĞLU G., Ouikhaalfan M.  
3rd International Conference on Advanced Engineering Technologies, Bayburt, Turkey, 19 - 21 September 2019, pp.136-139
- V. **Thermal properties of ZnO enhanced polyethylene glycol (PEG) as a phase change material**  
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- VI. **ATTAPULGITE/FATTY ACID EUTECTIC MIXTURE AS FORMSTABLE BUILDING COMPOSITE FOR THERMAL ENERGY STORAGE**  
Sarı A., Biçer A., Hekimoğlu G., Ouikhaalfan M.  
IV. International Ege Composite Materials Symposium (KOMPEGE2018), İzmir, Turkey, 6 - 08 September 2018, pp.210-219
- VII. **Thermal energy storage characteristics of myristic acid-palmitic eutectic mixtures encapsulated in PMMA shell**  
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- VIII. **Form-Stable Attapulgit/PCM Composite For Thermal Energy Storage in Building Envelopes**  
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- X. **Preparation, morphology and thermal energy storage characteristic of polystyrene/(capric-stearic acid) micro/nano capsules**  
SARI A., BİÇER A., ALKAN C., Altıntaş A.  
International Conference on Advances and Innovations in Engineering (ICAIE), 10 - 12 May 2017
- XI. **Removal of Methylene Blue from Aqueous Solution with Acorn Based Magnetic Activated Carbon**  
ALTINTIĞ E., Sentürk Ö., ALTUNDAĞ H., TÜZEN M., SARI A.  
International Conference 10th Aegean Analytical Chemistry Days, 29 September - 02 October 2016
- XII. **Thermal energy storage properties of micro nanoencapsulated polystyrene n octadecane**  
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Fourth International Symposium Frontiers in Polymer Science In association with the journal polymer, Trento, Italy, 20 - 22 May 2015

## Supported Projects

SARI A., TUBITAK Project, Isıl Enerji Depolama İçin Kullanılabilecek Faz Değişim Maddelerinin Ve Ötektik Karışımlarının Vinil Polimerler İçerisinde Mikro/Nano Boyutlarda Kapsüllenmesi, 2013 - 2015

## Metrics

Publication: 156

Citation (WoS): 6595

Citation (Scopus): 7174

H-Index (WoS): 42

H-Index (Scopus): 42

## **Congress and Symposium Activities**

Synthesis and characterization of thermal energy storage properties of polystyrene/(nonadecane-octacosane) micro-nano capsules. 1stInternational Turkic World Conference on Chemical Sciences and Technologies, Attendee, Sarajevo, Bosnia And Herzegovina, 2015

Thermal energy storage properties of poly(methyl methacrylate)/stearic acid micro/nano capsules. 1stInternational Turkic World Conference on Chemical Sciences and Technologies, Sarajevo, Bosnia and Herzegovina, Attendee, Sarajevo, Bosnia And Herzegovina, 2015

Latent heat storage characteristics of micro/nano encapsulated eutectic mixture using polystyrene shell. Fourth International Symposium Frontiers in Polymer Science In association with the journal polymer, Attendee, Trento, Italy, 2015

Thermal energy storage properties of micro-nanoencapsulated polystyrene/n-octadecane. Fourth International Symposium Frontiers in Polymer Science In association with the journal polymer, Attendee, Trento, Italy, 2015

Micro/nano encapsulated capric-myristic acid eutectic mixture in PMMA shell. Fourth International Symposium Frontiers in Polymer Science In association with the journal polymer, Attendee, Trento, Italy, 2015

## **Awards**

SARI A., TEMEL BİLİMLER ALANINDA BİLİM TEŞVİK ÖDÜLÜ, TÜBİTAK, July 2011

## **Non Academic Experience**

Gaziosmanpaşa Üniversitesi