

Prof. AHMET SARI

Personal Information

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Education Information

Doctorate, Karadeniz Technical University, Fen Bilimleri Enstitüsü, Kimya, Turkey 1996 - 2000

Post Graduate, Karadeniz Technical University, Fen Bilimleri Enstitüsü, Kimya, Turkey 1994 - 1996

Under Graduate, 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

Post Graduate, 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

Professional Experience

Head of Department, Gaziosman Paşa Üniversitesi, 2012 - 2015

Assistant Director of the Institute, Gaziosman Paşa Üniversitesi, Fen Bilimleri Enstitüsü, 2005 - 2010

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

- I. **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 (Journal Indexed in SCI)
- II. **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 (Journal Indexed in SCI)
- III. **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 (Journal Indexed in SCI)
- IV. **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 (Journal Indexed in SCI)
- V. **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 (Journal Indexed in SCI)
- VI. **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 (Journal Indexed in SCI)
- VII. **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 (Journal Indexed in SCI)
- VIII. **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 (Journal Indexed in SCI)
- IX. **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 (Journal Indexed in SCI)
- X. **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 (Journal Indexed in SCI)
- XI. **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 (Journal Indexed in SCI)
- XII. **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 (Journal Indexed in SCI)
- XIII. **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 (Journal Indexed in SCI)

- XIV. **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 (Journal Indexed in SCI)
- XV. **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 (Journal Indexed in SCI)
- XVI. **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 (Journal Indexed in SCI)
- XVII. **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 (Journal Indexed in SCI)
- XVIII. **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 (Journal Indexed in SCI)
- XIX. **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 (Journal Indexed in SCI)
- XX. **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 (Journal Indexed in SCI)
- XXI. **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 (Journal Indexed in SCI)
- XXII. **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 (Journal Indexed in SCI)
- XXIII. **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 (Journal Indexed in SCI)
- XXIV. **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 (Journal Indexed in SCI)
- XXV. **Response surface optimization, kinetic and thermodynamic studies for effective removal of rhodamine B by magnetic AC/CeO₂ nanocomposite**
TÜZEN M., SARI A., Saleh T. A.
JOURNAL OF ENVIRONMENTAL MANAGEMENT, vol.206, pp.170-177, 2018 (Journal Indexed in SCI)
- XXVI. **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 (Journal Indexed in SCI)
- XXVII. **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 (Journal Indexed in SCI)
- XXVIII. **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 (Journal Indexed in SCI)
- XXIX. **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 (Journal Indexed in SCI)
- XXX. **Equilibrium, thermodynamic and kinetic investigations for biosorption of uranium with green algae (*Cladophora hutchinsiae*)**
BAĞDA E., TÜZEN M., SARI A.
JOURNAL OF ENVIRONMENTAL RADIOACTIVITY, vol.175, pp.7-14, 2017 (Journal Indexed in SCI)
- XXXI. **Biosorption of Aluminum From Aqueous Solutions by Using Macrofungus (*Cortinarius armillatus*): Equilibrium, Kinetic, and Thermodynamic Studies and Determination by GFAAS**
Naeemullah N., TÜZEN M., SARI A., MENDİL D.
ATOMIC SPECTROSCOPY, vol.38, no.5, pp.149-157, 2017 (Journal Indexed in SCI)
- XXXII. **Polystyrene microcapsules with palmitic-capric acid eutectic mixture as building thermal energy storage materials**
DÖĞÜŞCÜ D. K. , Altıntaş A., SARI A., ALKAN C.
ENERGY AND BUILDINGS, vol.150, pp.376-382, 2017 (Journal Indexed in SCI)
- XXXIII. **Thermal Energy Storage Properties and Laboratory-Scale Thermoregulation Performance of Bentonite/Paraffin Composite Phase Change Material for Energy-Efficient Buildings**
SARI A.
JOURNAL OF MATERIALS IN CIVIL ENGINEERING, vol.29, no.6, 2017 (Journal Indexed in SCI)
- XXXIV. **Magnetic activated carbon loaded with tungsten oxide nanoparticles for aluminum removal from waters**
Saleh T. A. , TÜZEN M., SARI A.
JOURNAL OF ENVIRONMENTAL CHEMICAL ENGINEERING, vol.5, no.3, pp.2853-2860, 2017 (Journal Indexed in SCI)
- XXXV. **Effective removal of methylene blue from aqueous solutions using magnetic loaded activated carbon as novel adsorbent**
ALTINTIĞ E., ALTUNDAĞ H., TÜZEN M., SARI A.
CHEMICAL ENGINEERING RESEARCH & DESIGN, vol.122, pp.151-163, 2017 (Journal Indexed in SCI)
- XXXVI. **Thermal energy storage characteristics of poly(styrene-co-maleic anhydride)-graft-PEG as polymeric solid-solid phase change materials**
SARI A., BİÇER A., ALKAN C.
SOLAR ENERGY MATERIALS AND SOLAR CELLS, vol.161, pp.219-225, 2017 (Journal Indexed in SCI)
- XXXVII. **Thermal characteristics of expanded perlite/paraffin composite phase change material with enhanced thermal conductivity using carbon nanotubes**
KARAIPEKLİ A., BİÇER A., SARI A., Tyagi V. V.
ENERGY CONVERSION AND MANAGEMENT, vol.134, pp.373-381, 2017 (Journal Indexed in SCI)
- XXXVIII. **Optimization of parameters with experimental design for the adsorption of mercury using polyethylenimine modified-activated carbon**
Saleh T. A. , SARI A., TÜZEN M.
JOURNAL OF ENVIRONMENTAL CHEMICAL ENGINEERING, vol.5, no.1, pp.1079-1088, 2017 (Journal Indexed in SCI)
- XXXIX. **Polyethylenimine modified activated carbon as novel magnetic adsorbent for the removal of**

uranium from aqueous solution

Saleh T. A. , Naeemullah N., TÜZEN M., SARI A.

CHEMICAL ENGINEERING RESEARCH & DESIGN, vol.117, pp.218-227, 2017 (Journal Indexed in SCI)

- XL. **Effective adsorption of antimony(III) from aqueous solutions by polyamide-graphene composite as a novel adsorbent**
Saleh T. A. , SARI A., TÜZEN M.
CHEMICAL ENGINEERING JOURNAL, vol.307, pp.230-238, 2017 (Journal Indexed in SCI)
- XLII. **Thermal regulating performance of gypsum/(C18-C24) composite phase change material (CPCM) for building energy storage applications**
KARAIPEKLI A., SARI A., BIÇER A.
APPLIED THERMAL ENGINEERING, vol.107, pp.55-62, 2016 (Journal Indexed in SCI)
- XLIII. **Chitosan-modified vermiculite for As(III) adsorption from aqueous solution: Equilibrium, thermodynamic and kinetic studies**
Saleh T. A. , SARI A., TÜZEN M.
JOURNAL OF MOLECULAR LIQUIDS, vol.219, pp.937-945, 2016 (Journal Indexed in SCI)
- XLIV. **Development and thermal performance of pumice/organic PCM/gypsum composite plasters for thermal energy storage in buildings**
KARAIPEKLI A., SARI A.
SOLAR ENERGY MATERIALS AND SOLAR CELLS, vol.149, pp.19-28, 2016 (Journal Indexed in SCI)
- XLV. **Thermal energy storage characteristics of micro-nanoencapsulated heneicosane and octacosane with poly(methylmethacrylate) shell**
SARI A., ALKAN C., BIÇER A.
JOURNAL OF MICROENCAPSULATION, vol.33, no.3, pp.221-228, 2016 (Journal Indexed in SCI)
- XLVI. **Adsorption Characteristics of Mercury(II) Ions from Aqueous Solution onto Chitosan-Coated Diatomite**
Caner N., Sari A., Tuzen M.
INDUSTRIAL & ENGINEERING CHEMISTRY RESEARCH, vol.54, no.30, pp.7524-7533, 2015 (Journal Indexed in SCI)
- XLVII. **Fabrication and thermal characterization of kaolin-based composite phase change materials for latent heat storage in buildings**
Sari A.
ENERGY AND BUILDINGS, vol.96, pp.193-200, 2015 (Journal Indexed in SCI)
- XLVIII. **Micro/nano encapsulated n-tetracosane and n-octadecane eutectic mixture with polystyrene shell for low-temperature latent heat thermal energy storage applications**
Sari A., Alkan C., Doguscu D. K. , Kizil C.
SOLAR ENERGY, vol.115, pp.195-203, 2015 (Journal Indexed in SCI)
- XLIX. **Capric acid and stearic acid mixture impregnated with gypsum wallboard for low-temperature latent heat thermal energy storage**
Sari A., Karaipekli A., KAYGUSUZ K.
INTERNATIONAL JOURNAL OF ENERGY RESEARCH, vol.32, no.2, pp.154-160, 2008 (Journal Indexed in SCI)
- L. **Thermal conductivity improvement of stearic acid using expanded graphite and carbon fiber for energy storage applications**
KARAIPEKLI A., Sari A., Kaygusuz K.
RENEWABLE ENERGY, vol.32, no.13, pp.2201-2210, 2007 (Journal Indexed in SCI)
- L. **The benefits of renewables in Turkey**
Kaygusuz K., Sari A.
ENERGY SOURCES PART B-ECONOMICS PLANNING AND POLICY, vol.1, no.1, pp.23-35, 2006 (Journal Indexed in SCI)

Articles Published in Other Journals

- I. **Intracystic papillary carcinoma of the breast in females: two case reports**
CANYILMAZ E., USLU G. H. , AYDIN S., SERDAR L., BAHAT Z., ÖZDEMİR F., SARI A.
Contemporary Oncology / Współczesna Onkologia, pp.1-5, 2014 (Refereed Journals of Other Institutions)

Refereed Congress / Symposium Publications in Proceedings

- I. **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
- II. **Fly Ash Based-Composite Phase Change Material for Thermal Energy Storage in Buildings**
SARI A., HEKİMOĞLU G.
3rd International Conference on Advanced Engineering Technologies, Bayburt, Turkey, 19 - 21 September 2019, pp.140-143
- III. **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
- IV. **ATTAPULGITE/FATTY ACID EUTECTIC MIXTURE AS FORMSTABLEBUILDING 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
- V. **Thermal energy storage characteristics of myristic acid-palmitic eutectic mixtures encapsulated in PMMA shell**
SARI A., Biçer A., Alkan C., Özcan A. N.
14th International Conference on Energy Storage, Adana, Turkey, 25 - 28 April 2018, pp.648-662
- VI. **Form-Stable Attapulgit/PCM Composite For Thermal Energy Storage in Building Envelopes**
SARI A., HEKİMOĞLU G., Biçer A.
1st International Symposium on Light Alloys and Composite Materials (ISLAC'18), Karabük, Turkey, 22 - 24 March 2018, pp.186-189
- VII. **Segmentation of carotid arteries in CTA using region based active contours and classification**
BOZKURT F., KÖSE C., SARI A.
International Artificial Intelligence and Data Processing Symposium'xx17, 28 - 30 September 2017

Supported Projects

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

Edit 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, Attensee, 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, Attensee, 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, Attensee, Trento, Italy, 2015

Citations

Total Citations (WOS):2410

h-index (WOS):25

Awards

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