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Kişisel Bilgiler

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Eğitim Bilgileri

Doktora, İstanbul Teknik Üniversitesi, Kimya-Metalurji Fakültesi, Kimya Mühendisliği Bölümü, Türkiye 1996 - 2000

Yüksek Lisans, İstanbul Teknik Üniversitesi, Kimya-Metalurji Fakültesi, Türkiye 1994 - 1996

Lisans, İstanbul Teknik Üniversitesi, Kimya-Metalurji Fakültesi, Türkiye 1990 - 1994

Yabancı Diller

İngilizce

Yaptığı Tezler

Doktora, Adsorption heat pumps utilizing zeolite coatings grown on metal surfaces, İstanbul Teknik Üniversitesi, Kimya-Metalurji Fakültesi, Kimya Mühendisliği Bölümü, 2000

Yüksek Lisans, Zeolit-su ikilisini kullanan adsorpsiyon ısı pompalarında ısıve kütle iletimini geliştirmek için yeni bir yaklaşım, İstanbul Teknik Üniversitesi, Kimya-Metalurji Fakültesi, 1996

Araştırma Alanları

Teknik Bilimler, Kimya Mühendisliği ve Teknolojisi , Proses ve Reaktör Tasarımı

Akademik Unvanlar / Görevler

Prof.Dr., İstanbul Teknik Üniversitesi, Kimya-Metalurji, Kimya Mühendisliği, 2009 - Devam Ediyor

Doç.Dr., İstanbul Teknik Üniversitesi, Kimya-Metalurji, Kimya Mühendisliği, 2006 - 2009

Yrd.Doç.Dr., İstanbul Teknik Üniversitesi, Kimya-Metalurji, Kimya Mühendisliği, 2002 - 2006

Araştırma Görevlisi, İstanbul Teknik Üniversitesi, Kimya-Metalurji, Kimya Mühendisliği, 1998 - 2001

Akademik İdari Deneyim

İstanbul Teknik Üniversitesi, Kimya-Metalurji Fakültesi, Kimya Mühendisliği Bölümü, 2006 - 2009

SCI, SSCI ve AHCI İndekslerine Giren Dergilerde Yayınlanan Makaleler

- I. **Theoretical investigation of performances of zeolite Y and SAPO-34 coatings for adsorption heat pump applications**
Tatlier M.
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- II. **Preparation of zeolite coatings by induction heating of the substrate**
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- III. **Effects of structural properties of fillers on performances of Matrimid (R) 5218 mixed matrix membranes**
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SEPARATION AND PURIFICATION TECHNOLOGY, cilt.236, 2020 (SCI-Expanded)
- IV. **Characterization of mixed matrix membranes by adsorption and fractal analysis**
Atalay-Oral Ç., Tatlier M.
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- V. **Estimation of interphase properties of various mixed matrix membranes**
Tatlier M., Oral Ç.
Composite Interfaces, cilt.26, sa.9, ss.825-837, 2019 (SCI-Expanded)
- VI. **Tailoring the reaction mixture composition for preparing zeolite coatings on aluminum supports in alkaline environments**
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CHEMICAL ENGINEERING COMMUNICATIONS, cilt.206, sa.7, ss.953-966, 2019 (SCI-Expanded)
- VII. **Ion exchange of zeolite coatings for adsorption heat pump applications**
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- VIII. **Low-methoxyl pectin-zeolite hydrogels controlling drug release promote in vitro wound healing**
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- IX. **Relation of water adsorption capacities of zeolites with their structural properties**
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- X. **Performances of MOF vs. zeolite coatings in adsorption cooling applications**
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- XI. **PREPARATION OF ZEOLITE X COATINGS ON SODA-LIME TYPE GLASS PLATES**
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BRAZILIAN JOURNAL OF CHEMICAL ENGINEERING, cilt.34, sa.1, ss.203-210, 2017 (SCI-Expanded)
- XII. **Crystallization of zeolite a coatings from natural zeolite**
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Materials Research, cilt.19, sa.6, ss.1469-1477, 2016 (SCI-Expanded)
- XIII. **Crystallization of zeolite X coatings on stainless steel by microwave heating**
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JOURNAL OF POROUS MATERIALS, cilt.22, sa.2, ss.347-352, 2015 (SCI-Expanded)
- XIV. **Effects of Using Different Polymers in Post-Synthesis Treatments of Zeolite a Coatings**
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CHEMICAL ENGINEERING COMMUNICATIONS, cilt.202, sa.3, ss.375-383, 2015 (SCI-Expanded)
- XV. **Ternary phase diagrams of CdSO₄-NiSO₄-H₂O at 40 degrees C and 80 degrees C**
Ozdugan E., ANDAK B., BULUTCU N., TURDU S., Tatlier M.
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- XVI. **Effect of zeolite A coating thickness on adsorption kinetics for heat pump applications**
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- XVII. **Adsorption kinetics and isotherms of zeolite coatings directly crystallized on fibrous plates for heat pump applications**
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- XVIII. **Post-synthesis treatment for improving zeolite coating stability**
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- XIX. **Artificial neural network predictions of up flow anaerobic sludge blanket UASB reactor performance in the treatment of citrus juice wastewater**
ELNEKAVE M., ÇELİK S., Tatlier M., TÜFEKÇİ N.
POLISH JOURNAL OF ENVIRONMENTAL STUDIES, cilt.21, sa.1, ss.49-56, 2012 (SCI-Expanded)
- XX. **Artificial Neural Network Methods for the Prediction of Framework Crystal Structures of Zeolites from XRD Data**
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- XXI. **Adsorption kinetics of zeolite coatings directly crystallized on metal supports for heat pump applications (adsorption kinetics of zeolite coatings)**
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- XXII. **Preparation of Zeolite A Coatings on Copper Plates by Using the Substrate Heating Method**
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- XXIV. **Coatings of Na-aluminosilicate zeolites prepared using predictions from an artificial neural network method**
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- XXV. **How fractal is dancing?**
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- XXVI. **How Fractal is Dancing**
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- XXVII. **Electrochemical Properties of Gel Type Zeolite Synthesis Mixtures**
ELNEKAVE M., Tatlier M.
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- XXVIII. **Microwave vs conventional synthesis of analcime from clear solutions**
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- XXIX. **Substrate heating method for coating metal surfaces with high silica zeolites ZSM 5 coatings on stainless steel plates**
TATLIER M., Demir M., Tokay B., Erdem A., KiwiMinsker L.
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- XXX. **In vitro Evaluation of the Use of Zeolites as Biomaterials Effects on Simulated Body Fluid and Two Types of Cells**
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- XXXI. **Effects of Ultrasound on the Preparation of Zeolite A Coatings**

- Andaç Ö., Telli Ş. M., TATLIER M., Erdem A.
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- XXXII. **Effects of ultrasound on zeolite A synthesis**
Andac O., Tatlier M., Sirkecioglu A., Ece I., ERDEM-SENATALAR A.
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- XXXIII. **Artificial Neural Network Methods for the Estimation of Zeolite Molar Compositions that Form from Different Reaction Mixtures**
TATLIER M., Çığızoğlu H. K., Erdem A.
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- XXXIV. **Artificial neural network methods guiding the search of new clear solution compositions for preparing zeolite coatings**
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- XXXV. **Effects of Ultrasound on Zeolite A Synthesis**
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- XXXVI. **Catalytic Activity of FeZSM 5 Zeolites in Benzene Hydroxylation by N₂O The Role of Geometry Characterized by Fractal Dimensions**
Tatlier M., KIWI MINSKER L.
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- XXXVII. **Electrochemical Monitoring of Zeolite Synthesis**
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- XXXVIII. **Wet ball milling of zeolite HY**
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- XXXIX. **Polymeric Heat Exchangers to Increase the COP Values of Adsorption Heat Pumps Utilizing Zeolite Coatings**
TATLIER M., Erdem A.
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- XL. **Searching for Clear Solution Compositions by Using the Substrate Heating Method**
Erdem A., Öner K., TATLIER M.
Studies in Surface Science and Catalysis, cilt.154, ss.667-670, 2004 (SCI-Expanded)
- XLI. **Estimation of the Effective Diffusion Coefficients in Open Zeolite Coatings**
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CHEMICAL ENGINEERING JOURNAL, cilt.102, sa.3, ss.209-216, 2004 (SCI-Expanded)
- XLII. **Simulation of the Formation of Thin Zeolite Coatings by Direct Synthesis from Clear Solutions**
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- XLIII. **Questioning the validity of present models for estimating the performances of zeolite-polymer mixed matrix membranes**
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- XLIV. **Fractal Growth of Zeolite Coatings Prepared by the Substrate Heating Method**
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- XLV. **Effects of low-temperature gel aging on the synthesis of zeolite Y at different alkalinities**
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Journal of Crystal Growth, cilt.241, sa.4, ss.481-488, 2002 (SCI-Expanded)
- XLVI. **Effects of Low Temperature Gel Aging on the Synthesis of Zeolite Y at Different Alkalinities**

Köroğlu H., Sarioğlu A., TATLIER M., Erdem A., Savaşçı Ö.

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- XLVII. **When Do Thin Zeolite Layers and a Large Void Volume in the Adsorber Limit the Performance of Adsorption Heat Pumps**

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- XLVIII. **Inorganic Adsorbates Classified by Fractal Analysis**

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- XLIX. **Lower temperatures for the preparation of thinner zeolite A coatings**

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- L. **n-Pentane/i-pentane separation by using zeolite-PDMS mixed matrix membranes**

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- LI. **Power-law scaling behavior of membranes**

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- LII. **Fractal Dimension of Zeolite Surfaces by Calculation**

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- LIIL. **Estimation of the temperature effect on the adsorption capacities of zeolites**

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- LIV. **Effect of zeolite particle size on the performance of polymer-zeolite mixed matrix membranes**

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JOURNAL OF MEMBRANE SCIENCE, cilt.175, sa.2, ss.285-288, 2000 (SCI-Expanded)

- LV. **The Performance Analysis of a Solar Adsorption Heat Pump Utilizing Zeolite Coatings on Metal Supports**

TATLIER M., Erdem A.

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- LVI. **Optimization of the Cycle Durations of Adsorption Heat Pumps Employing Zeolite Coatings Synthesized on Metal Supports**

TATLIER M., Erdem A.

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- LVII. **Effects of Metal Mass on the Performance of Adsorption Heat Pumps Utilizing Zeolite 4A Coatings Synthesized on Heat Exchanger Tubes**

TATLIER M., Erdem A.

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- LVIII. **Effects of Fractality on the Accessible Surface Area Values of Zeolite Adsorbents**

Erdem A., TATLIER M.

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- LIX. **Preparation of zeolite coatings by direct heating of the substrates**

Erdem-Senatalar A., TATLIER M., Urgen M. K.

MICROPOROUS AND MESOPOROUS MATERIALS, cilt.32, sa.3, ss.331-343, 1999 (SCI-Expanded)

- LX. **The Effects of Thermal Gradients in a Solar Adsorption Heat Pump Utilizing the Zeolite Water Pair**

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- LXI. **Effects of Thermal and Mass Diffusivities on the Performance of Adsorption Heat Pumps Employing Zeolite Synthesized on Metal Supports**

- TATLIER M., Erdem A.
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- LXII. **The stability of zeolite coatings grown on metal supports for heat pump applications**
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- LXIII. **A novel approach to enhance heat and mass transfer in adsorption heat pumps using the zeolite-water pair**
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- LXIV. **Method to Evaluate the Fractal Dimensions of Solid Adsorbents**
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- LXV. **Fractal Dimension as a Tool To Guide Zeolite Synthesis**
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Desteklenen Projeler

Oral Ç., Tatlier M., Yükseköğretim Kurumları Destekli Proje, Adsorpsiyon Isı Pompalarında Kullanılabilecek Zeolit NaX Kaplamalarının Farklı İyon Formlarına Dönüştürülerek Geliştirilmesi ve AdsorpsiyonDesorpsiyon Performanslarının Belirlenmesi, 2017 - 2019

Tatlier M., Yükseköğretim Kurumları Destekli Proje, Metal organik kafes yapıları ve zeolit kaplamalarının adsorpsiyonlu soğutma uygulamalarındaki performanslarının karşılaştırılması, 2016 - 2018

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Metrikler

Yayın: 116
Atıf (WoS): 750
Atıf (Scopus): 846
H-İndeks (WoS): 14
H-İndeks (Scopus): 14