

Prof. BURCU AKATA KURÇ

Personal Information

Email: akata@metu.edu.tr

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

International Researcher IDs

ScholarID: QsjW_EgAAAAJ

ORCID: 0000-0002-4337-5537

Publons / Web Of Science ResearcherID: ABA-1602-2020

ScopusID: 17344894400

Yoksis Researcher ID: 164851

Education Information

Doctorate, Northeastern University, Kimya Mühendisliği Bölümü, United States Of America 1998 - 2004

Undergraduate, Middle East Technical University, Faculty of Engineering, Department of Chemical Engineering, Turkey
1994 - 1998

Foreign Languages

English, C1 Advanced

Dissertations

Doctorate, Characterization of Acidity in Zeolite Beta, Northeastern University, Kimya Mühendisliği Bölümü, 2004

Research Areas

Chemical Engineering and Technology, Metallurgical and Materials Engineering

Academic and Administrative Experience

Middle East Technical University, Graduate School of Natural and Applied Sciences, Mikro Ve Nanoteknoloji (YI) (Tezli),
2016 - Continues

Middle East Technical University, Graduate School of Natural and Applied Sciences, 2012 - 2016

Advising Theses

AKATA KURÇ B., Synthesis and characterization of microporous titano/vanadosilicate zeotype films for humidity sensing applications, Doctorate, R.DAVOUDNEZHAD(Student), 2022

ÖZENBAŞ A. M., AKATA KURÇ B., Production of inorganic charge selective layers for mesoscopic perovskite solar cells, Doctorate, K.ÇAĞATAY(Student), 2018

AKATA KURÇ B., Modification of zeolites for biosensor applications, Doctorate, B.OZANSOY(Student), 2018
TOFFOLÍ H., AKATA KURÇ B., Covalent and non-covalent functionalization of graphene for application in catalysis and device technology: A first principles computational study, Doctorate, T.İRFAN(Student), 2017
ÖZENBAŞ A. M., AKATA KURÇ B., Characterization and enhancement of IR optical and tribological properties of DLC films synthesized by RF-PECVD, Postgraduate, V.EREN(Student), 2017
ÖZENBAŞ A. M., AKATA KURÇ B., Optical and electrical characterization of titanosilicate ets-10 thin films: Photochromism and ionic conductivity, Doctorate, S.GALİOĞLU(Student), 2015
AKATA KURÇ B., ÖZENBAŞ A. M., Optical and electrical characterization of titanosilicate ETS-10 thin films: photochromism and ionic conductivity, Doctorate, S.Galioğlu(Student), 2015
TURAN R., AKATA KURÇ B., Synthesis and modification of titanosilicate ETS-10: Its role as host in host-guest systems, Postgraduate, M.İŞLER(Student), 2014
KAYNAK C., AKATA KURÇ B., Effects of oxidative functionalized and aminosilanized carbon nanotubes on the behaviours of polyamide-6 nanocomposites, Postgraduate, S.ŞANKAL(Student), 2013
AKATA KURÇ B., TOFFOLÍ H., Modelling and experimental study of titanosilicate ETS-10: application for solar cells, Postgraduate, M.KOÇ(Student), 2013
TURAN R., AKATA KURÇ B., Preparation of functional surfaces using zeolite nanocrystals for biosensor and biomedical applications, Postgraduate, S.KAAN(Student), 2012
AKATA KURÇ B., ÖZEN C., Immobilization of proteins on zeolite and zeo-type materials for biosensor applications based on conductometric biosensors and ion sensitive field effect transistors, Postgraduate, E.SOY(Student), 2011
TURAN R., AKATA KURÇ B., Thickness determination of thin films by energy dispersive x-ray spectroscopy, Postgraduate, S.CANLI(Student), 2010
TURAN R., AKATA KURÇ B., Immobilization of zeolite crystals on solid substrates for biosensor applications, Postgraduate, S.ÖZTÜRK(Student), 2010
PARLAK M., AKATA KURÇ B., Synthesis and characterization of titanosilicate ETS-10 for potential photovoltaic applications, Postgraduate, S.GALİOĞLU(Student), 2010
TURAN R., AKATA KURÇ B., Thickness analysis of thin films by energy dispersive x-ray spectroscopy, Postgraduate, S.Canlı(Student), 2010
AKATA KURÇ B., Synthesis of Zeolite Beta for Composite Membranes, Postgraduate, N.GÜR(Student), 2006

Jury Memberships

Appointment to Academic Staff - Associate Professorship, Appointment to Academic Staff - Associate Professorship, Orta Doğu Teknik Üniversitesi, March, 2022

Published journal articles indexed by SCI, SSCI, and AHCI

- I. **Investigating antimicrobial behavior of thymol/Zn encapsulated hierarchically structured zeolite and thymol release kinetics**
Binay M. I., KART D., AKATA KURÇ B.
Microporous and Mesoporous Materials, vol.376, 2024 (SCI-Expanded)
- II. **Tailoring titanosilicate molecular sieves by vanadium substitution for humidity sensing applications**
Davoudnezhad R., Kuzyaka D., AKATA KURÇ B.
Sensors and Actuators B: Chemical, vol.403, 2024 (SCI-Expanded)
- III. **Solarization of the zeolite production: Calcination of kaolin as proof-of-concept**
Paşabeyoğlu P., Moumin G., De Oliveira L., Roeb M., Akata Kurç B.
Journal of Cleaner Production, vol.414, 2023 (SCI-Expanded)
- IV. **Enhanced antimicrobial activity of volatile thymol molecules encapsulated in hierarchical titanosilicates**
Binay M., KART D., AKATA KURÇ B.

JOURNAL OF POROUS MATERIALS, vol.30, no.2, pp.619-628, 2023 (SCI-Expanded)

- V. **Development of three-enzyme lactose amperometric biosensor modified by nanosized poly (meta-phenylenediamine) film**
Pyeshkova V., Dudchenko O., Soldatkin O., Alekseev S., Şeker T., Kurc B., Dzyadevych S.
Applied Nanoscience (Switzerland), vol.12, no.4, pp.1267-1274, 2022 (SCI-Expanded)
- VI. **Critical analysis of zeolite 4A synthesis through one-pot fusion hydrothermal treatment approach for class F fly ash**
Akin S. Ş., Kirdeciler S. K., KAZANÇ ÖZERİNÇ F., AKATA KURÇ B.
Microporous and Mesoporous Materials, vol.325, 2021 (SCI-Expanded)
- VII. **Microporous vanadosilicate films with tailorable V4+/V5+ ratio to achieve enhanced visible-light photocatalysis**
Kuzyaka D., Uzun C., YILDIZ İ., Kaya M., AKATA KURÇ B.
Microporous and Mesoporous Materials, vol.323, 2021 (SCI-Expanded)
- VIII. **One pot fusion route for the synthesis of zeolite 4A using kaolin**
Kirdeciler S. K., Akata B.
Advanced Powder Technology, vol.31, no.10, pp.4336-4343, 2020 (SCI-Expanded)
- IX. **Development of antibacterial powder coatings using single and binary ion-exchanged zeolite A prepared from local kaolin**
İŞLER BİNAY M., KİRDECİLER S. K., AKATA KURÇ B.
APPLIED CLAY SCIENCE, vol.182, 2019 (SCI-Expanded)
- X. **The effect of microporous vanadosilicate AM-6 thin films as photocatalysts for the degradation of methylene blue**
Kuzyaka D., Galioglu S., ALTIN İ., Sokmen M., AKATA KURÇ B.
JOURNAL OF PHOTOCHEMISTRY AND PHOTOBIOLOGY A-CHEMISTRY, vol.366, pp.127-135, 2018 (SCI-Expanded)
- XI. **New Mixed Conductivity Mechanisms in the Cold Plasma Device Based on Silver-Modified Zeolite Microporous Electronic Materials**
Koc S. O., Galioglu S., ÖZTÜRK S., AKATA KURÇ B., Koc E., SALAMOV B.
JOURNAL OF ELECTRONIC MATERIALS, vol.47, no.5, pp.2791-2799, 2018 (SCI-Expanded)
- XII. **Low level NO gas sensing properties of Cu doped ZnO thin films prepared by SILAR method**
Corlu T., Karaduman I., Galioglu S., AKATA KURÇ B., YILDIRIM M. A., ATEŞ A., ACAR S.
MATERIALS LETTERS, vol.212, pp.292-295, 2018 (SCI-Expanded)
- XIII. **Zeolite A coated Zn1-XCuXO MOS sensors for NO gas detection**
Galioglu S., Karaduman I., Corlu T., AKATA KURÇ B., YILDIRIM M. A., ATEŞ A., Acar S.
JOURNAL OF MATERIALS SCIENCE-MATERIALS IN ELECTRONICS, vol.29, no.2, pp.1356-1368, 2018 (SCI-Expanded)
- XIV. **Ionic conductivity of microporous titanosilicate ETS-10 and ion-exchanged Mn+-ETS-10 (where, Mn+ = Li+, Na+, Mg2+, Zn2+, Ca2+) thin films prepared by secondary growth method**
Galioglu S., ÇAM İ., AKATA KURÇ B.
MICROPOROUS AND MESOPOROUS MATERIALS, vol.250, pp.177-185, 2017 (SCI-Expanded)
- XV. **A Novel Amperometric Glutamate Biosensor Based on Glutamate Oxidase Adsorbed on Silicalite**
Soldatkina O. V., Soldatkin O. O., Kasap B. O., Kucherenko D. Y., Kucherenko I. S., AKATA KURÇ B., Dzyadevych S. V.
NANOSCALE RESEARCH LETTERS, vol.12, 2017 (SCI-Expanded)
- XVI. **Biosensors Based on Nano-Gold/Zeolite-Modified Ion Selective Field-Effect Transistors for Creatinine Detection**
Kasap B. O., Marchenko S. V., Soldatkin O. O., Dzyadevych S. V., AKATA KURÇ B.
NANOSCALE RESEARCH LETTERS, vol.12, 2017 (SCI-Expanded)
- XVII. **Secondary growth of microporous vanadosilicate AM-6 films**
Kuzyaka D., Galioglu S., AKATA KURÇ B.
JOURNAL OF POROUS MATERIALS, vol.23, no.5, pp.1319-1327, 2016 (SCI-Expanded)
- XVIII. **Creatinine Deiminase Adsorption onto Silicalite-Modified pH-FET for Creation of New Creatinine-Sensitive Biosensor**

- Marchenko S. V., Soldatkin O. O., Kasap B. O., AKATA KURÇ B., Soldatkin A. P., Dzyadevych S. V.
NANOSCALE RESEARCH LETTERS, vol.11, 2016 (SCI-Expanded)
- XIX. **Effects of pressure and electric field on the charge transport mechanisms in the silver-modified-zeolite porous microstructure**
Koc S. O., Koseoglu K., Galioglu S., AKATA KURÇ B., SALAMOV B.
MICROPOROUS AND MESOPOROUS MATERIALS, vol.223, pp.18-26, 2016 (SCI-Expanded)
- XX. **A Novel Conductometric Urea Biosensor with Improved Analytical Characteristic Based on Recombinant Urease Adsorbed on Nanoparticle of Silicalite**
Velychko T. P., Soldatkin O. O., Melnyk V. G., Marchenko S. V., Kirdeciler S. K., AKATA KURÇ B., Soldatkin A. P., El'skaya A. V., Dzyadevych S. V.
NANOSCALE RESEARCH LETTERS, vol.11, 2016 (SCI-Expanded)
- XXI. **Development of Silicalite/Glucose Oxidase-Based Biosensor and Its Application for Glucose Determination in Juices and Nectars**
Dudchenko O. Y., Pyeshkova V. M., Soldatkin O. O., AKATA KURÇ B., Kasap B. O., Soldatkin A. P., Dzyadevych S. V.
NANOSCALE RESEARCH LETTERS, vol.11, 2016 (SCI-Expanded)
- XXII. **Nanosized zeolites as a perspective material for conductometric biosensors creation**
Kucherenko I., Soldatkin O., Kasap B. O., Kirdeciler S. K., AKATA KURÇ B., Jaffrezic-Renault N., Soldatkin A., Lagarde F., Dzyadevych S.
NANOSCALE RESEARCH LETTERS, vol.10, 2015 (SCI-Expanded)
- XXIII. **Application of silicalite-modified electrode for the development of sucrose biosensor with improved characteristics**
Pyeshkova V. M., Dudchenko O. Y., Soldatkin O. O., Kasap B. O., Lagarde F., AKATA KURÇ B., Dzyadevych S. V.
NANOSCALE RESEARCH LETTERS, vol.10, 2015 (SCI-Expanded)
- XXIV. **Nano- and micro-sized zeolites as a perspective material for potentiometric biosensors creation**
Soldatkin O. O., Shelyakina M. K., Arkhypova V. N., Soy E., Kirdeciler S. K., Kasap B. O., Lagarde F., Jaffrezic-Renault N., AKATA KURÇ B., Soldatkin A. P., et al.
NANOSCALE RESEARCH LETTERS, vol.10, 2015 (SCI-Expanded)
- XXV. **Understanding the Effects of Ion-Exchange in Titanosilicate ETS-10: A Joint Theoretical and Experimental Study**
Koc M., Galioglu S., Toffoli D., TOFFOLI H., AKATA KURÇ B.
JOURNAL OF PHYSICAL CHEMISTRY C, vol.118, no.47, pp.27281-27291, 2014 (SCI-Expanded)
- XXVI. **Photochromic behavior of silver nanoparticle incorporated titanosilicate ETS-10 films**
Galioglu S., İŞLER BİNAY M., Demircioglu Z., Koc M., Vocanson F., Destouches N., TURAN R., AKATA KURÇ B.
MICROPOROUS AND MESOPOROUS MATERIALS, vol.196, pp.136-144, 2014 (SCI-Expanded)
- XXVII. **Application of enzyme/zeolite sensor for urea analysis in serum**
Soldatkin O. O., Kucherenko I. S., Marchenko S. V., Kasap B. O., AKATA KURÇ B., Soldatkin A. P., Dzyadevych S. V.
MATERIALS SCIENCE & ENGINEERING C-MATERIALS FOR BIOLOGICAL APPLICATIONS, vol.42, pp.155-160, 2014 (SCI-Expanded)
- XXVIII. **Urease-based ISFET biosensor for arginine determination**
Sheliakina M., Arkhypova V., Soldatkin O., Saiapina O., AKATA KURÇ B., Dzyadevych S.
TALANTA, vol.121, pp.18-23, 2014 (SCI-Expanded)
- XXIX. **Study of zeolite influence on analytical characteristics of urea biosensor based on ion-selective field-effect transistors**
Shelyakina M. K., Soldatkin O. O., Arkhypova V. M., Kasap B. O., AKATA KURÇ B., Dzyadevych S. V.
NANOSCALE RESEARCH LETTERS, vol.9, 2014 (SCI-Expanded)
- XXX. **Direct evidence of advantage of using nanosized zeolite Beta for ISFET-based biosensor construction**
Soy E., Galioglu S., Soldatkin O. O., Dzyadevych S. V., Warzywoda J., Sacco A., AKATA KURÇ B.
JOURNAL OF NANOPARTICLE RESEARCH, vol.15, no.5, 2013 (SCI-Expanded)
- XXXI. **Application of Different Zeolites for Improvement of the Characteristics of a pH-FET Biosensor Based on Immobilized Urease**

- Soldatkin O. O., Kucherenko I. S., Shelyakina M. K., Soy E., Kirdeciler K., ÖZTÜRK S., Jaffrezic-Renault N., AKATA KURÇ B., Dzyadevych S. V., Soldatkin A. P.
ELECTROANALYSIS, vol.25, no.2, pp.468-474, 2013 (SCI-Expanded)
- XXXII. **Investigation of characteristics of urea and butyrylcholine chloride biosensors based on ion-selective field-effect transistors modified by the incorporation of heat-treated zeolite Beta crystals**
Soy E., Arkhypova V., Soldatkin O., Shelyakina M., Dzyadevych S., Warzywoda J., Sacco A., AKATA KURÇ B.
MATERIALS SCIENCE & ENGINEERING C-MATERIALS FOR BIOLOGICAL APPLICATIONS, vol.32, no.7, pp.1835-1842, 2012 (SCI-Expanded)
- XXXIII. **Effect of different modifications of BEA-zeolites on operational characteristics of conductometric biosensor**
Kucherenko I. S., Soldatkin O. O., Soy E., Kirdeciler K., ÖZTÜRK S., AKATA KURÇ B., Jaffrezic-Renault N., Soldatkin A. P., Dzyadevych S. V.
MATERIALS SCIENCE & ENGINEERING C-MATERIALS FOR BIOLOGICAL APPLICATIONS, vol.32, no.6, pp.1648-1653, 2012 (SCI-Expanded)
- XXXIV. **Elaboration of Urease Adsorption on Silicalite for Biosensor Creation**
Kucherenko I. S., Soldatkin O. O., Kasap B. O., ÖZTÜRK S., AKATA KURÇ B., Soldatkin A. P., Dzyadevych S. V.
ELECTROANALYSIS, vol.24, no.6, pp.1380-1385, 2012 (SCI-Expanded)
- XXXV. **Influence of Composition of Zeolite/Enzyme Nanobiocomposites on Analytical Characteristics of Urea Biosensor Based on Ion-Selective Field-Effect Transistors**
Soldatkin O. O., Soy E., Errachid A., Jaffrezic-Renault N., AKATA KURÇ B., Soldatkin A. P., Dzyadevych S. V.
SENSOR LETTERS, vol.9, no.6, pp.2320-2326, 2011 (SCI-Expanded)
- XXXVI. **Conductometric enzyme biosensors based on natural zeolite clinoptilolite for urea determination**
Saiapina O. Y., Pyeshkova V. M., Soldatkin O. O., Melnik V. G., AKATA KURÇ B., Walcarius A., Dzyadevych S. V., Jaffrezic-Renault N.
MATERIALS SCIENCE & ENGINEERING C-MATERIALS FOR BIOLOGICAL APPLICATIONS, vol.31, no.7, pp.1490-1497, 2011 (SCI-Expanded)
- XXXVII. **A novel urea conductometric biosensor based on zeolite immobilized urease**
Kirdeciler S. K., Soy E., ÖZTÜRK S., Kucherenko I., Soldatkin O., Dzyadevych S., AKATA KURÇ B.
TALANTA, vol.85, no.3, pp.1435-1441, 2011 (SCI-Expanded)
- XXXVIII. **Preparation and microstructural characterization of oriented titanosilicate ETS-10 thin films on indium tin oxide surfaces**
Galioglu S., Ismail M. N., Warzywoda J., Sacco A., AKATA KURÇ B.
MICROPOROUS AND MESOPOROUS MATERIALS, vol.131, pp.401-406, 2010 (SCI-Expanded)
- XXXIX. **Oriented assembly and nanofabrication of zeolite A monolayers**
ÖZTÜRK S., AKATA KURÇ B.
MICROPOROUS AND MESOPOROUS MATERIALS, vol.126, no.3, pp.228-233, 2009 (SCI-Expanded)
- XL. **Preparation and Characterization of Antibacterial Zeolite-Polyurethane Composites**
Kamisoglu K., ÇATMAN AKSOY E., AKATA KURÇ B., Hasirci N., BAÇ N.
JOURNAL OF APPLIED POLYMER SCIENCE, vol.110, no.5, pp.2854-2861, 2008 (SCI-Expanded)
- XLI. **Titanosilicate ETS-10 as a Lewis acid catalyst in the Meerwein-Ponndorf-Verley (MPV) reaction**
AKATA KURÇ B., Yilmaz B., Sacco A.
JOURNAL OF POROUS MATERIALS, vol.15, no.3, pp.351-357, 2008 (SCI-Expanded)
- XLII. **Synthesis of antibacterial zeolite-polyurethane composites**
Kamisoglu K., Aksoy E. A., AKATA KURÇ B., Bac N., Hasirci N.
ABSTRACTS OF PAPERS OF THE AMERICAN CHEMICAL SOCIETY, vol.234, 2007 (SCI-Expanded)

Refereed Congress / Symposium Publications in Proceedings

- I. **Humidity Sensing Behavior of Microporous Titanosilicate and Vanadosilicate Thin Films**
Davoudnezhad R., Kuzkaya D., ÇAM İ., AKATA KURÇ B.

MRS 2019 Fall Meeting Exhibit, Boston, United States Of America, 1 - 06 December 2019

- II. **FLY ASH TO ZEOLITE: EFFECT OF FLY ASH CHARACTERISTICS ON ZEOLITE 4A SYNTHESIS**
Akn Ş., Kirdeciler K. S., KAZANÇ ÖZERİNÇ F., AKATA KURÇ B.
Clean Air 2019, 8 - 12 September 2019
- III. **Humidity Sensors Based on microporous Titanosilicate Vanadosilicate Thin Films**
Davoudnezhad R., Kuzkaya D., ÇAM İ., AKATA KURÇ B.
British Zeolit Association 42. Annual Meeting, 11 - 12 April 2019
- IV. **The Effect of Defects Created in Microporous Vanadosilicate AM-6 Thin Films in Photocatalysis**
KUZYAKA D., AKATA KURÇ B.
2018 MRS (Materials Research Society) Fall Meeting, 25 - 30 November 2018
- V. **The Effect of Defect Creation in Microporous Vanadosilicate AM-6 Thin Films on Their Photocatalytic Performances**
KUZYAKA D., GALIOĞLU S., ALTIN İ., SÖKMEN M., AKATA KURÇ B.
14th NANOSCIENCE AND NANOTECHNOLOGY CONFERENCE, 22 - 25 September 2018
- VI. **Fly Ash to Zeolite: Effect of Ash Characteristics on Zeolite Synthesis**
Kazanç Özerinç F., Akn S. Ş., Akata Kurç B., Kirdeciler S. K.
37th International Symposium on Combustion, Dublin, Ireland, 29 July - 03 August 2018, pp.1
- VII. **The Effect Of Microporous Vanadosilicate AM-6 Thin Films As Photocatalysts For The Degradation Of Methylene Blue**
KUZYAKA D., GALIOĞLU S., ALTIN İ., SÖKMEN M., AKATA KURÇ B.
34th GFZ Congress, Cabourg, France, 26 - 29 March 2018
- VIII. **Exhaled breath analysis with Sn doped ZnO sensors for the identification and characterization of asthma disease**
Karaduman I., Çorlu T., Gali S., AKATA KURÇ B., YILDIRIM M. A., ATEŞ A., Örkü H. H., ACAR S.
ANCON 2017, 5 - 07 October 2017, pp.129
- IX. **A Novel Amperometric Glutamate Biosensor Based on Glutamate Oxidase Adsorbed on Silicalite**
Ozansoy B., Dzyadevych S., AKATA KURÇ B.
Materials Research Society Meeting, 26 November - 01 December 2017
- X. **Biosensors Based on Nano-Gold/Zeolite-Modified Ion Selective Field-Effect Transistors for Creatinine Detection**
Ozansoy B., Dzyadevych S., AKATA KURÇ B.
Materials Research Society Meeting, 26 November - 01 December 2017
- XI. **Zn_{1-x}Cu_xO thin films for NO gas detection deposited by SILAR method**
Karaduman I., Çorlu T., Galiöğlü S., AKATA KURÇ B., YILDIRIM M. A., ATEŞ A., ACAR S.
NANOTR 13, 22 - 25 October 2017, pp.353
- XII. **Effect of microporous vanadosilicate AM-6 thin films as photocatalysts for the degradation of methylene blue**
KUZYAKA D., Galiöğlü S., ALTIN İ., SÖKMEN M., AKATA KURÇ B.
6th International conference on semiconductor photochemistry in Oldenburg, 12 - 15 September 2017
- XIII. **Effect of microporous AM-6 thin films as photocatalysts for the degradation of methylene blue**
KUZYAKA D., Galiöğlü S., Altın İ., SÖKMEN M., AKATA KURÇ B.
6th International Conference on Semiconductor Photochemistry, 11 - 14 September 2017
- XIV. **Biocide activity of microporous titanosilicate ETS-10 containing volatile organic compound thymol**
İşler Binay M., AKATA KURÇ B.
7th FEZA Conference, 3 - 07 July 2017
- XV. **Understanding the effects of seed layer in the secondary growth of microporous vanadosilicate AM-6 films**
KUZYAKA D., Galiöğlü S., AKATA KURÇ B.
7th FEZA Conference, 3 - 07 July 2017
- XVI. **Humidity sensors developed based on ETS-10**
Davoudnezhad R., Galiöğlü S., ÇAM İ., AKATA KURÇ B.

7th FEZA Conference, 3 - 07 July 2017

- XVII. **Investigation of photocatalytic activities of vanadium silicate AM-6 thin films**
KUZYAKA D., Galioglu S., Altın İ., SÖKMEN M., AKATA KURÇ B.
7th FEZA Conference, 3 - 07 July 2017
- XVIII. **Fabrication of Zeolite modified Cu doped ZnO films and their response towards nitrogen monoxide**
Karaduman I., Çorlu T., Galioglu S., AKATA KURÇ B., YILDIRIM M. A., ATEŞ A., ACAR S.
WASET 2017 ICCME ROME, 4 - 05 May 2017, pp.105
- XIX. **Impedance analysis and NO gas sensing performance of zeolite deposited Zn_{0.75}Cu_{0.25}O thin film**
Çorlu T., Karaduman I., Galioglu S., AKATA KURÇ B., YILDIRIM M. A., ATEŞ A., ACAR S.
ICASA 2017, 29 - 31 March 2017, pp.53
- XX. **Design of Zeolite Modified Electrodes and Their Influence on Biosensor Performance**
Ozansoy Kasap B., AKATA KURÇ B.
Materials Research Society Meeting Fall 2016, 27 November - 02 December 2016
- XXI. **New multibiosensor device for diagnosis of diabetic nephropathy**
Marchenko S., Soldatkin O., Kasap B., AKATA KURÇ B., Soldatkin A., Dzyadevych S.
41st FEBS Congress on Molecular and Systems Biology for a Better Life, Kusadasi, Turkey, 3 - 08 September 2016, vol.283, pp.349
- XXII. **Development of a New Biosensor by Adsorption of Creatinine Deiminase on Monolayers of Micro- and Nanoscale Zeolites**
Marchenko S., Piliponskiy I. I., Mamchur O. O., Soldatkin O. O., Kucherenko I. S., Kasap B. O., AKATA KURÇ B., Dzyadevych S., Soldatkin A. P.
4th International Research and Practice Conference on Nanotechnology and Nanomaterials (NANO), Lviv, Ukraine, 24 - 27 August 2016, vol.195, pp.573-584
- XXIII. **Antimicrobial Paint Coating Containing Single and Binary Ion exchanged Zeolite A**
İsler M., AKATA KURÇ B.
18th international Zeolite Conference, 19 - 24 June 2016
- XXIV. **Zeolite type Titanosilicate ETS 10 Thin Films as a Humidity Sensor**
Galioglu S., ÇAM İ., AKATA KURÇ B.
18th International Zeolite Conference, 19 - 24 June 2016
- XXV. **Resist Free Zeolite Patterning with Electron Beam Lithography Zeolite Lithography**
KİRDECİLER S. K., ÖZTÜRK S., AKATA KURÇ B.
18th International Zeolite Conference, 19 - 24 June 2016
- XXVI. **Secondary Growth of Microporous Vanadosilicate AM 6 Films**
KUZYAKA D., Galioglu S., AKATA KURÇ B.
18th International Zeolite Conference, 19 - 24 June 2016
- XXVII. **NANOSIZED ZEOLITES AS A PERSPECTIVE MATERIAL FOR DEVELOPMENT OF ELECTROCHEMICAL ENZYME BIOSENSORS**
Kucherenko I., Soldatkin O., Saiapina O., Soy E., Ozansoy B., KİRDECİLER S. K., ÖZTÜRK S., AKATA KURÇ B., Dzyadevych S.
International Porous and Powder Materials Symposium and Exhibition, 15 - 18 September 2015
- XXVIII. **SECONDARY GROWTH OF MICROPOROUS VANADOSILICATE AM 6 FILMS**
KUZYAKA D., Sezin G., AKATA KURÇ B.
International Porous and Powder Materials Symposium and Exhibition, 15 - 18 September 2015
- XXIX. **CONDUCTIVITY OF MICROPOROUS TITANOSILICATE ETS 10 THIN FILMS PREPARED THROUGH SECONDARY GROWTH METHOD**
Sezin G., Ibrahim C., AKATA KURÇ B.
International Porous and Powder Materials Symposium and Exhibition, 15 - 18 September 2015
- XXX. **Controlled assemble and microfabrication of zeolite particles on SiO₂ substrates for potential biosensor applications**
ÖZTÜRK S., Kamisoglu K., TURAN R., AKATA KURÇ B.
Symposium on Materials, Devices, and Characterization for Smart Systems held at the 2008 MRS Fall Meeting,

Massachusetts, United States Of America, 1 - 04 December 2008, vol.1129, pp.91-92

XXXI. Biocompatible polyurethane films incorporation with antibacterial silver loaded zeolites

ÇATMAN AKSOY E., Kamisoglu K., AKATA KURÇ B., BAÇ N., Hasirci N.

Annual Tissue-Engineering-and-Regenerative-Medicine-International-Society-European-Chapter Meeting, Porto, Portugal, 01 June 2008, vol.14, pp.813

Supported Projects

Baker D. K., Tari I., Okutucu Özyurt H. T., Akata Kurç B., Çulfaz Emecen P. Z., Kurt Z., Erden Topal Y., TAYLAN O., H2020 Project, SolarTwins: Solar Twinning to Create Solar Research Twins, 2020 - 2023

AKATA KURÇ B., İŞLER BİNAY M., Project Supported by Higher Education Institutions, TİMOL ORGANİK BİLEŞİĞİNİN YAPISINDA KUSUR OLUŞTURULMUŞ ETS-10 KRİSTALİ YÜZEYİNE BAĞLANMASI, 2018 - 2019

AKATA KURÇ B., DAVOUDNEZHAD R., Project Supported by Higher Education Institutions, FARKLI YÖNTEMLER İLE NANOGÖZENEKLİ TİTANYUMSİLİKAT İNCE FİMLERİNDEN NEM SENSÖRÜ YAPIMININ ARAŞTIRILMASI, 2018 - 2019

AKATA KURÇ B., AKIN S. Ş., KAZANÇ ÖZERİNÇ F., Project Supported by Higher Education Institutions, UÇUCU KÜLDEN ZEOLİT ELDE EDİLMESİ: SENTEZ VE KARAKTERİZASYONU, 2018 - 2019

TOKSOY KÖKSAL F., AKATA KURÇ B., KUTLU B. T., Project Supported by Higher Education Institutions, KAOLEN ARA KATKILI KÖMÜR YATAKLARINDAKİ GANG KAOLENİN SENTETİK ZEOLİT ÜRETİMİNDE KULLANILABİLİRLİĞİ VE EKONOMİYE KAZANDIRILMASI, 2018 - 2019

AKATA KURÇ B., ÇAM İ., BEHLÜLGİL A. K., KÖKSAL S., GÜZEL A., Project Supported by Higher Education Institutions, Merkez Laboratuvar ARGE Eğitim ve Ölçme Merkezinde Malzeme Karakterizasyonu, 2017 - 2019

AKATA KURÇ B., Project Supported by Higher Education Institutions, TİMOL ORGANİK BİLEŞİĞİNİN YAPISINDA KUSUR OLUŞTURULMUŞ ETS-10 KRİSTALİ YÜZEYİNE BAĞLANMASI, 2017 - 2017

AKATA KURÇ B., ÇAM İ., DAVOUDNEZHAD R., Project Supported by Higher Education Institutions, NANOGÖZENEKLİ TİTANYUMSİLİKAT İNCE FİMLERİNDEN NEM SENSÖRÜ YAPIMININ ARAŞTIRILMASI, 2017 - 2017

AKATA KURÇ B., Project Supported by Higher Education Institutions, İLERİDEKİ UYGULAMALARDA KULLANILMAK ÜZERE ANTİBAKTERİYEL ZEOLİT İNCE FİMLERİN ESNEK YÜZEYLER ÜZERİNDE OLUŞTURULMASI, 2017 - 2017

AKATA KURÇ B., Project Supported by Higher Education Institutions, ZEOLİT 4A, ZEOLİT 13X VE ZEOLİT Y KRİSTALLERİNİN ÜLKEMİZ DOĞAL KAYNAKLARINDA OLAN KAOLİN VE TRONA İLE ÜRETİMİNİN GELİŞTİRİLMESİ, 2017 - 2017

AKATA KURÇ B., İŞLER BİNAY M., Project Supported by Higher Education Institutions, TİMOL ORGANİK BİLEŞİĞİNİN MEZO-ZEOLİT X YÜZEYİNE BAĞLANMASI, 2016 - 2016

AKATA KURÇ B., Project Supported by Higher Education Institutions, FEN BİLİMLERİ ENSTİTÜSÜ/LİSANSÜSTÜ TEZ PROJESİ, 2014 - 2016

ÜNALAN H. E., AKATA KURÇ B., Project Supported by Higher Education Institutions, NANOTELLER ve NANOTÜPLERLE GAZ SENSÖRLERİNİN GELİŞTİRİLMESİ, 2014 - 2014

AKATA KURÇ B., Project Supported by Higher Education Institutions, Titanyumsilikat Ets-10 Nano Kristallerinin Modifiye Edilmesi Ve İnce Film Yapımının Araştırılması, 2012 - 2012

Patent

Akata Kurç B., : Process for the preparation of an intermediate product for the production of zeolites by means of concentrated solar radiation, and process for the preparation of zeolites, Patent, CHAPTER C Chemistry; Metallurgy, The Invention Recourse Number: 213715DE Rü/o , Standard Registration, 2021

Akata Kurç B., Kirdeciler S. K., DOĞAL ALUMİNASİLİKAT KAYNAKLARINA EK OLARAK KALSİT VE POTAS KULLANILARAK DİREKT ZEOLİT 3A VEZEOLİT 5A ÜRETİM YÖNTEMİ, Patent, CHAPTER C Chemistry; Metallurgy, The Invention Recourse Number: 2020/11666 , Standard Registration, 2020

Akata Kurç B., TERMAL DAYANIMI ARTTIRILMIŞ, UÇUCU YAĞ İÇEREN HİYERARŞİK YAPILI ANTİMİKROBİYAL ZEOLİTİK MALZEMELER, Patent, CHAPTER C Chemistry; Metallurgy, The Invention Recourse Number: 2019/21513 , Standard

Registration, 2019

AKATA KURÇ B., SODYUM FELDSPATTAN, ZEOLİT 4A VE 13X ÜRETİMİ VE BUNLARIN ÜRETİM YÖNTEMLERİ, Patent, CHAPTER C Chemistry; Metallurgy, Standard Registration, 2017

Scientific Refereeing

MICROPOROUS AND MESOPOROUS MATERIALS, SCI Journal, December 2021

MICROPOROUS AND MESOPOROUS MATERIALS, SCI Journal, September 2021

MICROPOROUS AND MESOPOROUS MATERIALS, SCI Journal, September 2021

MICROPOROUS AND MESOPOROUS MATERIALS, SCI Journal, November 2020

CLAY MINERALS, National Scientific Refreed Journal, September 2020

MICROPOROUS AND MESOPOROUS MATERIALS, SCI Journal, June 2020

MICROPOROUS AND MESOPOROUS MATERIALS, SCI Journal, December 2019

TURKISH JOURNAL OF CHEMISTRY, SCI Journal, July 2019

MICROPOROUS AND MESOPOROUS MATERIALS, SCI Journal, June 2019

MICROPOROUS AND MESOPOROUS MATERIALS, SCI Journal, May 2019

Metrics

Publication: 73

Citation (WoS): 474

Citation (Scopus): 656

H-Index (WoS): 13

H-Index (Scopus): 16

Congress and Symposium Activities

United Nations/Jordan Workshop: Global Partnership in Space Exploration and Innovation, Invited Speaker, Amman, Jordan, 2019

Non Academic Experience

METU

METU