

Assoc. Prof. KAAN KEÇECİ

Personal Information

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Education Information

Post Doctorate, City University of New York Queens College, Fen, Kimya, United States Of America 2010 - 2012

Doctorate, University of Florida, Fen, Kimya, United States Of America 2004 - 2010

Postgraduate, Hacettepe University, Fen Fakültesi, Kimya, Turkey 2002 - 2004

Undergraduate, Hacettepe University, Fen Fakültesi, Kimya, Turkey 1998 - 2002

Foreign Languages

English, C1 Advanced

Dissertations

Doctorate, Preparation and characterization of solid state nanopores for DNA sensing applications, University Of Florida, Kimya, Analitik, 2010

Research Areas

Chemistry, Analytical Chemistry, Micro and Semimicro Methods, Natural Sciences

Academic Titles / Tasks

Associate Professor, Istanbul Medeniyet University, Faculty Of Engineering And Natural Sciences , Chemistry , 2018 - 2018

Assistant Professor, Istanbul Medeniyet University, Faculty Of Engineering And Natural Sciences , Chemistry , 2012 - 2018

Lecturer PhD, City University of New York, Fen Fakültesi, Kimya, 2010 - 2012

Research Assistant, University of Florida, Fen Fakültesi, Kimya, 2004 - 2010

Research Assistant, Hacettepe University, Fen Fakültesi, Kimya, 2002 - 2004

Academic and Administrative Experience

Döner Sermaye Yönetim Kurulu Üyeliği, Istanbul Medeniyet University, 2019 - Continues

İstanbul Medeniyet Üniversitesi, Faculty of Engineering and Natural Sciences , Aircraft Engineering , 2017 - Continues

İstanbul Medeniyet Üniversitesi, 2017 - Continues

İstanbul Medeniyet Üniversitesi, Faculty of Engineering and Natural Sciences , 2016 - Continues

İstanbul Medeniyet Üniversitesi, Faculty of Engineering and Natural Sciences , 2015 - Continues

İstanbul Medeniyet Üniversitesi, Faculty of Science, 2015 - 2016

İstanbul Medeniyet Üniversitesi, Kimya Bölümü, 2013 - 2016

İstanbul Medeniyet Üniversitesi, Faculty of Aeronautics and Astronautics, 2012 - 2016

İstanbul Medeniyet Üniversitesi, Havacılık Ve Uzay Bilimleri Fakültesi-Meteoroloji Mühendisliği Bölümü, 2012 - 2016

İstanbul Medeniyet Üniversitesi, Graduate School of Natural and Applied Sciences, 2012 - 2015

İstanbul Medeniyet Üniversitesi, Yabancı Diller, 2012 - 2015

Courses

Nano-biosensörler, Postgraduate, 2015 - 2016

Genel Kimya, Undergraduate, 2016 - 2017

General Chemistry, Undergraduate, 2016 - 2017

General Chemistry Lab I, Undergraduate, 2015 - 2016

General Chemistry II, Undergraduate, 2012 - 2013, 2015 - 2016

Basic Chemistry, Undergraduate, 2013 - 2014

General Chemistry I, Undergraduate, 2013 - 2014

General Chemistry II, Undergraduate, 2013 - 2014

Introduction to Organic Chemistry and Macromolecules, Undergraduate, 2013 - 2014

Introduction to Organic Chemistry and Macromolecules, Undergraduate, 2012 - 2013

General Chemistry I, Undergraduate, 2012 - 2013

Jury Memberships

Post Graduate, Yüksek Lisans Tez Savunması, Yeditepe Üniversitesi, August, 2013

Post Graduate, Yüksek Lisans Jürisi, Yeditepe Üniversitesi, June, 2013

Post Graduate, Tez Savunma Jürisi, Yeditepe Üniversitesi, May, 2013

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

- I. **Review-Nanopipette Applications as Sensors, Electrodes, and Probes: A Study on Recent Developments**
KEÇECİ K., DİNLER A., KAYA D.
JOURNAL OF THE ELECTROCHEMICAL SOCIETY, vol.169, no.2, 2022 (Journal Indexed in SCI)
- II. **Resistive-pulse Sensing of DNA with a Polymeric Nanopore Sensor and Characterization of DNA Translocation**
KEÇECİ K., KAYA D., Martin C. R.
CHEMNANOMAT, 2021 (Journal Indexed in SCI)
- III. **Role of Nanopore Geometry in Particle Resolution by Resistive-Pulse Sensing**
Yılmaz D., KAYA D., KEÇECİ K., DİNLER A.
CHEMISTRYSELECT, vol.6, no.1, pp.59-67, 2021 (Journal Indexed in SCI)
- IV. **Investigating the Effect of Charged Components on Translocation of DNA Molecules in Track-Etched Nanopores**
DİNLER A., KEÇECİ K., KAYA D., Yılmaz D.
IEEE SENSORS JOURNAL, vol.20, no.8, pp.4041-4046, 2020 (Journal Indexed in SCI)
- V. **Review-Track-Etched Nanoporous Polymer Membranes as Sensors: A Review**
KAYA D., KEÇECİ K.
JOURNAL OF THE ELECTROCHEMICAL SOCIETY, vol.167, no.3, 2020 (Journal Indexed in SCI)

- VI. **Preparation of nanopores and their application for the detection of metals**
KAYA D., KEÇECİ K.
BULGARIAN CHEMICAL COMMUNICATIONS, vol.49, pp.37-42, 2017 (Journal Indexed in SCI)
- VII. **Effect of Pore Geometry on Resistive-Pulse Sensing of DNA Using Track-Etched PET Nanopore Membrane**
Kaya D., DİNLER A., SAN N., KEÇECİ K.
ELECTROCHIMICA ACTA, vol.202, pp.157-165, 2016 (Journal Indexed in SCI)
- VIII. **Nanopore detection of double stranded DNA using a track-etched polycarbonate membrane**
KEÇECİ K., SAN N., Kaya D.
TALANTA, vol.144, pp.268-274, 2015 (Journal Indexed in SCI)
- IX. **Label-free detection of proteins in ternary mixtures using surface-enhanced Raman scattering and protein melting profiles**
Keskin S., Efeoglu E., Kececi K., Culha M.
JOURNAL OF BIOMEDICAL OPTICS, vol.18, no.3, 2013 (Journal Indexed in SCI)
- X. **Resistive-pulse measurements with nanopipettes: detection of Au nanoparticles and nanoparticle-bound anti-peanut IgY**
Wang Y., Kececi K., Mirkin M. V. , Mani V., Sardesai N., Rusling J. F.
CHEMICAL SCIENCE, vol.4, no.2, pp.655-663, 2013 (Journal Indexed in SCI)
- XI. **Laser Desorption Ionization Mass Spectrometry on Silicon Nanowell Arrays**
Gülbakan B., Park D., Kang M., Kececi K., Martin C., Powell D., Tan W.
ANALYTICAL CHEMISTRY, vol.82, no.18, pp.7566-7575, 2010 (Journal Indexed in SCI)
- XII. **Resistive pulse detection of short ds DNA using a chemically functionalized conical nanopore sensor**
KEÇECİ K., Sexton L., Buyukserin F., Martin C.
NANOMEDICINE, vol.3, no.6, pp.787-796, 2008 (Journal Indexed in SCI)
- XIII. **Antibody-functionalized nano test tubes target breast cancer cells**
Buyukserin F., Medley C., Mota M., KEÇECİ K., Rogers R., Tan W., Martin C.
NANOMEDICINE, vol.3, no.3, pp.283-292, 2008 (Journal Indexed in SCI)
- XIV. **Preparation and characterization of ciprofloxacin-loaded alginate/chitosan sponge as a wound dressing material**
KEÇECİ K.
JOURNAL OF APPLIED POLYMER SCIENCE, vol.101, no.3, pp.1602-1609, 2006 (Journal Indexed in SCI)
- XV. **Chitosan-coated alginate membranes for cultivation of limbal epithelial cells to use in the restoration of damaged corneal surfaces**
Öztürk E., Ergün M. A. , KEÇECİ K., Öztürk Z., Nurözler A., Özdemir N., Denkbaşı E. B.
INTERNATIONAL JOURNAL OF ARTIFICIAL ORGANS, vol.29, no.2, pp.228-238, 2006 (Journal Indexed in SCI)
- XVI. **Norfloxacin-loaded chitosan sponges as wound dressing material**
Denkbaşı E. B. , Öztürk E., Özdemir N., KEÇECİ K., Agalar C.
JOURNAL OF BIOMATERIALS APPLICATIONS, vol.18, no.4, pp.291-303, 2004 (Journal Indexed in SCI)
- XVII. **EGF loaded chitosan sponges as wound dressing material**
Denkbaşı E. B. , Öztürk E., KEÇECİ K., Özdemir N., Ergün M. A.
JOURNAL OF BIOACTIVE AND COMPATIBLE POLYMERS, vol.18, no.3, pp.177-190, 2003 (Journal Indexed in SCI)

Articles Published in Other Journals

- I. **Effect of Surface Functionalization on the Transport Characteristics of Methyl Orange Through Track-Etched Membranes**
KAYA D., KEÇECİ K.
Hacettepe Journal of Biology and Chemistry, vol.47, no.1, pp.67-76, 2019 (National Refreed University Journal)
- II. **Transport Characteristics of Selected Dyes Through Track-Etched Multiporous PET Membranes**
KAYA D., KEÇECİ K.

- Hacettepe Journal of Biology and Chemistry, vol.46, no.1, pp.1-11, 2018 (National Refreed University Journal)
- III. **Isoelectric Point Determination of Proteins Using Track-Etched Single-Nanopore Membrane**
KEÇECİ K.
Hacettepe Journal of Biology and Chemistry, vol.44, no.4, 2016 (National Refreed University Journal)
- IV. **Hayati zorlaştıran bir sağlık sorunu: Ağız kokuları**
KEÇECİ K., Denkbaş E. B.
Popüler Bilim, vol.1, pp.1-10, 2004 (National Non-Refereed Journal)
- V. **Doğal zenginliklerimizden, Kitin ve Kitosan**
KEÇECİ K., Denkbaş E. B.
Standard, vol.1, pp.1-10, 2002 (National Non-Refereed Journal)

Refereed Congress / Symposium Publications in Proceedings

- I. **FABRICATION AND APPLICATIONS OF NANOPOROUS MATERIALS**
KAYA D., KEÇECİ K.
25th Congress of the Society of Chemists and Technologists of Macedonia, Ohrid, Macedonia, 19 September 2018, pp.160
- II. **Fabrication and Transport Properties of Nanoporous Polymer Membranes**
KAYA D., KEÇECİ K.
International Eurasian Conference on Biological and Chemical Sciences, Ankara, Turkey, 26 April 2018, pp.120
- III. **PREPARATION AND APPLICATION OF TRACK-ETCHED NANOPORE MEMBRANES AND THEIR SENSOR APPLICATIONS**
KAYA D., KEÇECİ K.
3rd International Conference on New Trends in Chemistry, Helsinki, Finland, 28 April 2017, pp.82-83
- IV. **Laser Desorption/Ionization Mass Spectrometry on Porous Gold Nanostructured Layers For the Detection of Acrivastine**
DEMİR A., KEÇECİ K., Gülbakan B., Çelikbıçak Ö.
12th International Nanoscience and Nanotechnology Conference, Kocaeli, Turkey, 03 June 2016, pp.265
- V. **Effect of Pore Geometry on Resistive-Pulse Sensing**
Saygı S., KAYA D., KEÇECİ K.
12th Nanoscience and Nanotechnology Conference (NanoTR12), İstanbul, Turkey, 03 June 2016
- VI. **Fabrication of Track-etched Nanopore(s) and Effect of Its Geometry on Sensing Molecules (Özet Kitabı)**
KAYA D., DİNLER A., KEÇECİ K.
International Porous and Powder Materials Symposium and Exhibition, İzmir, Turkey, 15 September 2015, pp.137
- VII. **Fabrication of Track-Etched Nanopore(s) and Effect of its Geometry on Sensing Molecules**
KAYA D., DİNLER A., KEÇECİ K.
International Porous and Powder Materials, İzmir, Turkey, 15 September 2015
- VIII. **Preparation and Applications of Resistive-Pulse Sensors to Detect Biomolecules**
KEÇECİ K., KAYA D.
10th Nanoscience and Nanotechnology Conference (NanoTR10), İstanbul, Turkey, 17 June 2014
- IX. **Fabrication and Characterization of Single Nanopore Membranes for Molecular Sensing**
KAYA D., KEÇECİ K.
10th Nanoscience and Nanotechnology Conference (NanoTR10), İstanbul, Turkey, 17 June 2014
- X. **Detection of Antibodies and Nanoparticles by Resistive-Pulse Measurements with Nanopipettes**
KEÇECİ K., Wang Y., Mirkin M., Mani V., Rusling J.
221st ECS Meeting, United States Of America, 01 May 2012, pp.200-202
- XI. **Resistive-pulse sensing of short DNAs using solid state nanopore**
KEÇECİ K., Mukaibo H., Sexton L., Baker L., Martin C.
239th ACS National Meeting & Exposition, United States Of America, 01 March 2010

XII. Detecting and discriminating "short" DNAs with conically shaped single nanopore membranes

KECECİ K., Ghoi Y., Baker L., Martin C.

Pittcon, United States Of America, 01 March 2008

Supported Projects

KECECİ K., TUBITAK Project, Hızlı DNA Analizi İçin İz-aşındırma Yöntemi Kullanılarak Nanopor Sensor Hazırlanması ve Karakterizasyonu, 2013 - Continues

KAYA D., KECECİ K., Project Supported by Higher Education Institutions, İz Aşındırılmış Nanogözenekli Membranlardan Yüklü Analitlerin Taşımının Geliştirilmesi, 2019 - 2020

KAYA D., KECECİ K., Project Supported by Higher Education Institutions, Nanogözenekli Malzemelerin Hazırlanması ve Uygulamaları, 2018 - 2019

KECECİ K., KURT H., Project Supported by Higher Education Institutions, Sensör Amaçlı İletken Yüzey Kaplı Mikropipet Üretimi ve Karakterizasyonu, 2016 - 2019

CAN E., KABAOĞLU N., COŞKUN F. M. , KOYTAK Z. N. , KECECİ K., SAĞIR F., HAZAR M. A. , ALTINEL D., GEREN M., KISAAYAK ÇOLLAK F., et al., Project Supported by Higher Education Institutions, Mühendislik ve Doğa Bilimleri Fakültesi Lisans Programları Eğitim Laboratuvarlarının Kurulması, 2017 - 2018

CAN E., KABAOĞLU N., KECECİ K., Project Supported by Higher Education Institutions, Mühendislik ve Doğa Bilimleri Fakültesi Elektrik-Elektronik Bölümü Lisans Laboratuvarlarının İhtiyaçlarının Temini, 2017 - 2018

CAN E., AVCI S., KECECİ K., Project Supported by Higher Education Institutions, Mühendislik ve Doğa Bilimleri Fakültesi Fizik Mühendisliği Bölümü Lisans Laboratuvarlarının İhtiyaçlarının Temini, 2017 - 2018

CAN E., KECECİ K., KAZANCI M., Project Supported by Higher Education Institutions, Mühendislik ve Doğa Bilimleri Fakültesi Biomedikal Mühendisliği Bölümü Eğitim Altyapısının Oluşturulması için İhtiyaçların Temini, 2017 - 2018

KECECİ K., Project Supported by Higher Education Institutions, Divalent Metal İyonlarının Tayininde Kullanılmak İçin Gözenekli Membran Hazırlanması ve Karakterizasyonu, 2015 - 2017

KECECİ K., Project Supported by Higher Education Institutions, İz-aşındırma yöntemi ile nanogözenek üretimi ve geometrisinin molekül tayinine etkisi, 2015 - 2016

KECECİ K., Project Supported by Higher Education Institutions, Elektrokimya Araştırmaları Sonucunda Geliştirilen Nanoelektrodların Üretim Sürecinin Uluslararası Patent İncelemesi Ve Başvurusunun Yapılması, 2015 - 2016

TÜRÜT A., AKDENİZ DURAN E., ÖZKAN M. A. , SÖĞÜT S., OKTAY A. B. , ARAS F., GENÇ İ., AKTAŞ Ö., GEREN I. N. , KURT H., et al., Project Supported by Higher Education Institutions, Fen Bilimleri Enstitüsü Disiplinler Arası Lisansüstü Araştırma Laboratuvarlarının Kurulması, 2013 - 2016

TÜRÜT A., BAŞARAN E., TÜRKAN M., KAVAS H., KURT H., DEMİR A., ŞENGEZ B., SAĞIR F., KOYTAK Z. N. , KECECİ K., et al., Project Supported by Higher Education Institutions, Uluslararası Yarıiletken Bilimi ve Teknoloji Konferansı (International Semiconductor Science and Technology Conference), 2013 - 2014

KECECİ K., GÖRÜR M., TÜRÜT A., Project Supported by Higher Education Institutions, Nano gözenekli sensör hazırlanması, cam kaplı elektrot üretimi ve iletken polimer sentezi, 2013 - 2014

Memberships / Tasks in Scientific Organizations

Electrochemical Society, Member, 2010 - Continues

American Chemical Society, Member, 2008 - Continues

Controlled Release Society, Member, 2003 - Continues

Scientific Refereeing

TUBITAK Project, March 2014

TUBITAK Project, February 2014

Journal of Nanotechnology, Other Indexed Journal, February 2012

Edit Congress and Symposium Activities

International Porous and Powder Materials Symposium and Exhibition, Attendee, Turkey, 2015

10th Nanoscience and Nanotechnology Conference (NanoTR 10), Attendee, İstanbul, Turkey, 2014

Citations

Total Citations (WOS):268

h-index (WOS):9

Scholarships

Doktora Bursu, University, 2005 - Continues