

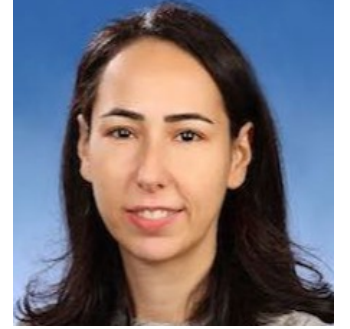
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Education Information

Post Doctorate, Duke University, School of Engineering, Environmental Engineering, United States Of America 2010 - 2011

Doctorate, İstanbul Teknik Üniversitesi, İnşaat Fakültesi, Çevre Mühendisliği Bölümü, Turkey 2003 - 2010

Postgraduate, İstanbul Teknik Üniversitesi, İnşaat Fakültesi, Çevre Mühendisliği Bölümü, Turkey 2000 - 2003

Undergraduate, İstanbul Teknik Üniversitesi, İnşaat Fakültesi, Çevre Mühendisliği Bölümü, Turkey 1995 - 2000

Biography

Esra Erken is an Assistant Professor in Environmental Engineering Department at Marmara University. Her research focuses on environmental applications of nanotechnology and hydraulics of porous media. She is particularly interested in synthesizing and using nanoparticles for resource recovery, water/wastewater treatment as well as sludge management strategies, bionanotechnology and agricultural nanotechnology applications.

Foreign Languages

English, C2 Mastery

Dissertations

Doctorate, Küresel olmayan malzemelerin sabit yatak hidroliği, İstanbul Teknik Üniversitesi, İnşaat Fakültesi, Çevre Mühendisliği Bölümü, 2010

Postgraduate, İleri biyolojik atıksu arıtma tesisi çamurlarının kompostlaştırılmasında farklı katkı maddelerinin etkilerinin

incelenmesi, İstanbul Teknik Üniversitesi, İnşaat Fakültesi, Çevre Mühendisliği Bölümü, 2003

Research Areas

Environmental Engineering, Environmental Sciences, Environmental Chemistry, Environmental Technology, Waste Water Collection and Treatment, Industrial and Hazardous Waste Management, Contaminated Sites and Remediation

Academic Titles / Tasks

Assistant Professor, Marmara University, Faculty of Engineering, Environmental Engineering, 2012 - Continues
Research Assistant, İstanbul Teknik Üniversitesi, İnşaat Fakültesi, Çevre Mühendisliği Bölümü, 2002 - 2012

Advising Theses

ERDİM E., Demir nanoparçacıkları ile sulu çözeltilerden renk giderimi, Postgraduate, E.TEKEV(Student), 2016

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

- I. **Overcoming challenges in mainstream Anammox applications: Utilization of nanoscale zero valent iron (nZVI)**
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- III. **Rapid decolorization of textile wastewater by green synthesized iron nanoparticles**
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- IV. **A revisit of pressure drop-flow rate correlations for packed beds of spheres**
Erdim E., Akgiray Ö., Demir İ.
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- V. **Characterizing reactive oxygen generation and bacterial inactivation by a zerovalent iron-fullerene nano-composite device at neutral pH under UV-A illumination**
Erdim E., Badireddy A. R. , Wiesner M. R.
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- VI. **Occurrence of THM and NDMA precursors in a watershed: Effect of seasons and anthropogenic pollution**
Aydin E., Yaman F. B. , Genceli E. A. , Topuz E., Erdim E., Gürel M., Ipek M., Pehlivanoglu-Mantas E.
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- VII. **Hybrid photocatalysis/submerged microfiltration membrane system for drinking water treatment**
Erdim E., Soyer E., Tasiyici S., Koyuncu İ.
DESALINATION AND WATER TREATMENT, vol.9, pp.165-174, 2009 (Journal Indexed in SCI)
- VIII. **Natural and modified zeolite utilization in submerged membrane reactor for potable water treatment**
Soyer E., Erdim E., Tasiyici S., Koyuncu İ.
DESALINATION AND WATER TREATMENT, vol.9, pp.201-210, 2009 (Journal Indexed in SCI)
- IX. **Advanced oxidation treatment of physico-chemically pre-treated olive mill industry effluent**

Gomec C. Y. , Erdim E., Turan I., Aydin A. E. , Ozturk I.

JOURNAL OF ENVIRONMENTAL SCIENCE AND HEALTH PART B-PESTICIDES FOOD CONTAMINANTS AND AGRICULTURAL WASTES, vol.42, no.6, pp.741-747, 2007 (Journal Indexed in SCI)

X. **Evaluation of sludge management alternatives in Istanbul metropolitan area**

Cakmakci M., Erdim E., Kinaci C., Akca L.

WATER SCIENCE AND TECHNOLOGY, vol.51, no.11, pp.121-129, 2005 (Journal Indexed in SCI)

Articles Published in Other Journals

I. **Farklı filtre malzemeleri için temiz yatak yük kayıplarının belirlenmesi**

Erdim E., Demir İ., Akgiray Ö.

itüdergisi/e Su Kirlenmesi Kontrolü, vol.20, no.1, pp.111-119, 2010 (National Refreed University Journal)

Books & Book Chapters

I. **Life Cycle Assessment: Quantitative Approaches for Decisions that Matter**

ORAK N. H. , ERDİM E., ORAK M. S. , ÜLGÜDÜR N., SEVİM P., GÜNGÖR Z. E.

Akademisyen Yayınevi, Ankara, 2019

II. **Bitkisel Sistemlerde Nanoteknolojik Uygulamalar**

Erdim E.

in: Bitki Biyoteknolojisinde Güncel Yaklaşımlar, Prof.Dr. Yelda Özden Çiftçi, Prof. Dr. Ahu Altınkut Uncuoğlu, Editor, Palme Yayın Dağıtım, İstanbul, pp.327-350, 2019

III. **Su Arıtma Tesisleri İşletimi**

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IV. **Su Arıtma Tesisleri İşletimi El Kitabı**

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Refereed Congress / Symposium Publications in Proceedings

I. **Can We Benefit From Hydroxylamine and Hydrazine Generating In Anammox Reactors? : The Possible Use In Nanobiotechnology Applications**

ERDİM E., KOCAMEMİ B.

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II. **Engineered Iron Nanoparticles via Green Routes and Their Applications for Textile Wastewater Treatment**

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III. **Reuse potential of Cataphoresis wastewaters in automotive industry**

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International Conference Protection and Restoration of the Environment XIV, Selanik, Greece, 3 - 06 July 2018, pp.1184-1192

IV. **Removal of Nonylphenol and Octylphenol from Aqueous Solutions by a Novel Nano-Composite(ZVI/Fullerene)**

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- V. **Recovery and valorisation of phenolic compounds from Table Olive Processing Wastewater (TOPW) through adsorption**
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10th Eastern European IWA YWP Conference, 7 - 12 May 2018
- VI. **Rapid Decolorization of Textile Wastewater by Green Synthesized Iron Nanoparticles.**
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- VII. **Removal of Industrial Xenoestrogens by Using Zero Valent Iron Nanoparticles, Nevşehir, TURKIYE**
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- X. **The effects of Nano Zero Valent Iron (ZVI) Particles on Anaerobic Ammonium Oxidation (Anammox) Process**
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ICOCEE, 24 April 2018 - 27 April 2017
- XI. **Enhancement of Anaerobic Ammonium Oxidation (Anammox) Process: The use of one-pot synthesized nanoscale zero-valent iron (nZVI).**
ERDİM E., YÜCESOY ÖZKAN Z., Kurt H., Dilsizoğlu N., Çetin S., Şanlı F., KOCAMEMİ B.
WEFTEC 2017, Chicago, United States Of America, 30 September - 04 November 2017
- XII. **Decomposition of NOM by Ultrasonic Irradiation in a Submerged Membrane System**
SOYER E., ERDİM E., TAŞIYICI S., KOYUNCU İ.
5th IWA Specialized Membrane Technology Conference for Water and Wastewater Treatment, Beijing, P.R. China, Beijing, China, 1 - 03 September 2009
- XIII. **Pre adsorption of NOM in a Submerged Membrane Adsorption Hybrid System for Potable Water Treatment**
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5th IWA Specialized Membrane Technology Conference for Water and Wastewater Treatment, Beijing, P.R. China, Beijing, China, 1 - 03 September 2009
- XIV. **New Methods to Decrease Fouling on Ultrafiltration Submerged Membrane System**
KOYUNCU İ., ERDİM E., SOYER E., TAŞIYICI S.
IWA Nanoparticle and Particle Separation Conference, Durham, NC, Durham, Canada, 3 - 05 June 2009
- XV. **Kirlenmiş Havzalardan Beslenen İçme Suyu Arıtma Tesisleri için İyileştirme Teknikleri**
SOYER E., ERDİM E., AKGİRAY Ö., SAATÇI A. M.
Kent Yönetimi İnsan ve Çevre Sorunları Sempozyumu, İstanbul, İstanbul, Turkey, 3 - 06 November 2008
- XVI. **Utilization of Modified Natural Zeolite in Submerged Membrane Reactors for Potable Water Treatment**
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Conference on Membranes in Drinking Water Production and Waste Water Treatment, Toulouse, France, Toulouse, France, 20 - 24 October 2008
- XVII. **Assessment of Continuous and Intermittent Application of UV TiO₂ in Hybrid Photocatalysis Submerged Membrane System**
ERDİM E., SOYER E., TAŞIYICI S., KOYUNCU İ.

Conference on Membranes in Drinking Water Production and Waste Water Treatment, Toulouse, France,
Toulouse, France, 20 - 24 October 2008

XVIII. Reuse of Segregated Textile Effluents by Membrane Technologies

KOYUNCU İ., DEMİRAL N., ERDİM E., SOYER E., ARSLAN A.

Proceedings of IWA Regional Conference on Membrane Technologies in Water and Waste Water Treatment,
Moscow, Russia, Moscow, Russia, 2 - 04 June 2008

Supported Projects

Kocamemi B., Erdim E., TUBITAK Project, Nitrogen removal via ANAMMOX process in Moving Bed Biofilm Reactor (MBBR) systems, 2018 - 2021

Erdim E., Pehlivanoğlu Mantaş E., Doğruel S., TUBITAK Project, Evsel Atıksu Arıtma Tesislerinde Mikrokirleticilerin Ve Ara Ürünlerinin Lc Ms Ms İle Ölçümü Ve Atıksuyun Geri Kazanımına Yönelik Arıtma Teknolojilerinin Belirlenmesi, 2015 - 2017

Erdim E., Tekev E., Project Supported by Higher Education Institutions, Sıfır değerlikli demir nanoparçacık ile sulu çözeltilerden nonilfenol giderimi, 2015 - 2016

Can Z. S. , Erdim E., Yücesoy Özkan Z., Pehlivanoğlu Mantaş E., Soyer E., Genç S., TUBITAK Project, Sıfır Değerlikli Demir Nanoparçacık (nZVI) ve nZVI/Fullerene Nanokompoziti ile Nonilfenolve Oktilfenol Gideriminin Araştırılması, 2014 - 2016

Erdim E., Tayanç M., Project Supported by Higher Education Institutions, Su ve Atıksu Arıtımında Nanoteknoloji Uygulamaları, 2014 - 2016

Erdim E., Soyer E., Project Supported by Higher Education Institutions, Tekstil Atıksularından nano-ZVI Teknolojisi ile Renk Giderimi, 2014 - 2016

Erdim E., Soyer E., Tuğtaş Karnabat A. E. , Çallı B., TUBITAK Project, Su ve Atıksu Arıtımında Kullanılmak Üzere Nano-Kompozit Membran Üretimi Ve Nanoparçacık Geri Salımının Araştırılması , 2012 - 2014

Citations

Total Citations (WOS):167

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