

## Assoc. Prof. Serdar Doğruel

### Personal Information

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### Education Information

Doctorate, İstanbul Teknik Üniversitesi, Fen Bilimleri Enstitüsü, Çevre Bilimleri Ve Mühendisliği (Dr), Turkey 2000 - 2006

Post Graduate, İstanbul Teknik Üniversitesi, Fen Bilimleri Enstitüsü, Çevre Bilimleri Ve Mühendisliği (Dr), Turkey 1998 - 2000

### Foreign Languages

English

German

### Dissertations

Doctorate, Biyolojik arıtılabilirlik bazlı atık su karakterizasyonu ve atık aktif çamur üzerinde ozonlamanın etkisi, İstanbul Teknik Üniversitesi, Fen Bilimleri Enstitüsü, Çevre Bilimleri Ve Mühendisliği (Dr), 2006

Post Graduate, Bir pamuklu son işlemleri endüstrisinde ozonlamanın KOİ bileşenleri üzerine etkisi, İstanbul Teknik Üniversitesi, Fen Bilimleri Enstitüsü, Çevre Bilimleri Ve Mühendisliği (Dr), 2000

### Research Areas

Technical Sciences, Environmental Engineering, Environmental Sciences, Environmental Chemistry

### Academic Titles / Tasks

Associate Professor, İstanbul Teknik Üniversitesi, İnşaat Fakültesi, Çevre Mühendisliği Bölümü, 2014 - Continues

Assistant Professor, İstanbul Teknik Üniversitesi, İnşaat Fakültesi, Çevre Mühendisliği Bölümü, 2009 - 2014

Research Assistant, İstanbul Teknik Üniversitesi, İnşaat Fakültesi, Çevre Mühendisliği Bölümü, 1999 - 2008

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

- I. **Performance of ozone and peroxone on the removal of endocrine disrupting chemicals (EDCs) coupled with cost analysis**

Ölmez Hancı T., Doğruel S., Emek A. D. A. , Yilmazer C. E. , Cinar S., Kiraz O., Cıtlı E., Orhon A. K. , Siltu E., Gucver S. M. , et al.

WATER SCIENCE AND TECHNOLOGY, vol.82, pp.640-650, 2020 (Journal Indexed in SCI)

- II. **Ozonation in advanced treatment of secondary municipal wastewater effluents for the removal of micropollutants**

Doğruel S., Atesci Z. C. , Aydın E., Pehlivanoglu Mantaş E.

ENVIRONMENTAL SCIENCE AND POLLUTION RESEARCH, 2020 (Journal Indexed in SCI)

- III. **Effect of ultrasonic and microwave disintegration on physico-chemical and biodegradation characteristics of waste-activated sludge**  
Doğruel S., Ozgen A. S.  
ENVIRONMENTAL TECHNOLOGY, vol.38, no.7, pp.844-859, 2017 (Journal Indexed in SCI)
- IV. **Kinetic characterization of acetate utilization and response of microbial population in super fast membrane bioreactor**  
Basaran S. T., AYSEL M., Kurt H., ERGAL I., AKARSUBASI A., Yağcı N., Doğruel S., Çokgör E., Keskinler B., Sözen S., et al.  
JOURNAL OF MEMBRANE SCIENCE, vol.455, pp.392-404, 2014 (Journal Indexed in SCI)
- V. **Effect of ferric chloride coagulation, lime precipitation, electrocoagulation and the Fenton's reagent on the particle size distribution of olive mill wastewater**  
Gursoy-Haksevenler B. H., DOGRUEL S., ARSLAN-ALATON I.  
INTERNATIONAL JOURNAL OF GLOBAL WARMING, vol.6, pp.194-211, 2014 (Journal Indexed in SCI)
- VI. **Biodegradation characteristics and size fractionation of landfill leachate for integrated membrane treatment**  
Insel G., DAGDAR M., DOGRUEL S., Dizge N., Cokgor E., Keskinler B.  
JOURNAL OF HAZARDOUS MATERIALS, vol.260, pp.825-832, 2013 (Journal Indexed in SCI)
- VII. **Potential of ultrafiltration for organic matter removal in the polymer industry effluent based on particle size distribution analysis**  
Doğruel S., Cokgor E. U., İnce O., Sözen S., Orhon D.  
ENVIRONMENTAL SCIENCE AND POLLUTION RESEARCH, vol.20, no.1, pp.340-350, 2013 (Journal Indexed in SCI)
- VIII. **Biodegradation characteristics of high strength municipal wastewater supported by particle size distribution**  
Dogruel S.  
DESALINATION AND WATER TREATMENT, vol.45, pp.11-20, 2012 (Journal Indexed in SCI)
- IX. **Particle size distribution based evaluation of biodegradation and treatability for leachate from organic waste**  
Doğruel S., KOKTUNA M., Cokgor E. U., SOZENA S., Orhon D.  
JOURNAL OF CHEMICAL TECHNOLOGY AND BIOTECHNOLOGY, vol.86, no.11, pp.1364-1373, 2011 (Journal Indexed in SCI)
- X. **Effect of Fenton's oxidation on the particle size distribution of organic carbon in olive mill wastewater**  
Doğruel S., OLMEZ-HANCI T., KARTAL Z., ARSLAN-ALATON I., ORHON D.  
WATER RESEARCH, vol.43, no.16, pp.3974-3983, 2009 (Journal Indexed in SCI)
- XI. **COD fractionation of tannery wastewaters - Particle size distribution, biodegradability and modeling**  
Karahan Ö., Doğruel S., Dulekgurgen E., Orhon D.  
WATER RESEARCH, vol.42, pp.1083-1092, 2008 (Journal Indexed in SCI)
- XII. **Effect of chemical and biological treatment on COD fingerprints of textile wastewaters**  
Dulekgurgen E., Dogruel S., ORHON D.  
WATER SCIENCE AND TECHNOLOGY, vol.55, no.10, pp.277-287, 2007 (Journal Indexed in SCI)
- XIII. **Effect of ozonation on biodegradability characteristics of surplus activated sludge**  
Dogruel S., SIEVERS M., Germirli-Babuna F. F.  
OZONE-SCIENCE & ENGINEERING, vol.29, no.3, pp.191-199, 2007 (Journal Indexed in SCI)
- XIV. **An investigation on the optimal location of ozonation within biological treatment for a tannery wastewater**  
Dogruel S., Genceli E. A., Babuna F. F., ORHON D.  
JOURNAL OF CHEMICAL TECHNOLOGY AND BIOTECHNOLOGY, vol.81, no.12, pp.1877-1885, 2006 (Journal Indexed in SCI)
- XV. **Evaluation of coagulation-flocculation on a COD-based molecular size distribution for a textile finishing mill effluent**

- UNER H., Dogruel S., Arslan-Alaton I., Babuna F. F. , ORHON D.  
JOURNAL OF ENVIRONMENTAL SCIENCE AND HEALTH PART A-TOXIC/HAZARDOUS SUBSTANCES &  
ENVIRONMENTAL ENGINEERING, vol.41, no.9, pp.1899-1908, 2006 (Journal Indexed in SCI)
- XVI. **Coagulation-flocculation of wastewaters from a water-based paint and allied products industry and its effect on inert COD**  
Eremektar G., GOKSEN S., Babuna F. F. , Dogruel S.  
JOURNAL OF ENVIRONMENTAL SCIENCE AND HEALTH PART A-TOXIC/HAZARDOUS SUBSTANCES &  
ENVIRONMENTAL ENGINEERING, vol.41, no.9, pp.1843-1852, 2006 (Journal Indexed in SCI)
- XVII. **Effect of ozonation on chemical oxygen demand fractionation and color profile of textile wastewaters**  
Dogruel S., Dulekgurgen E., Orhon D.  
JOURNAL OF CHEMICAL TECHNOLOGY AND BIOTECHNOLOGY, vol.81, pp.426-432, 2006 (Journal Indexed in SCI)
- XVIII. **Size distribution of wastewater COD fractions as an index for biodegradability**  
Dulekgurgen E., Dogruel S., KARAHAN Ö., ORHON D.  
WATER RESEARCH, vol.40, no.2, pp.273-282, 2006 (Journal Indexed in SCI)
- XIX. **Biological treatability of raw and ozonated penicillin formulation effluent**  
Cokgor E., ALATON I., KARAHAN Ö., DOGRUEL S., ORHON D.  
JOURNAL OF HAZARDOUS MATERIALS, vol.116, pp.159-166, 2004 (Journal Indexed in SCI)
- XX. **Combined chemical and biological oxidation of penicillin formulation effluent**  
Alaton I., Dogruel S., BAYKAL E., GERONE G.  
JOURNAL OF ENVIRONMENTAL MANAGEMENT, vol.73, no.2, pp.155-163, 2004 (Journal Indexed in SCI)
- XXI. **Pre-treatment of penicillin formulation effluent by advanced oxidation processes**  
Arslan-Alaton I., DOGRUEL S.  
JOURNAL OF HAZARDOUS MATERIALS, vol.112, pp.105-113, 2004 (Journal Indexed in SCI)
- XXII. **Feasibility analysis of in-plant control for water minimization and wastewater reuse in a wool finishing textile mill**  
ERDOGAN A., ORHON H., DULKADIROGLU H., Dogruel S., Eremektar G., Babuna F. F. , ORHON D.  
JOURNAL OF ENVIRONMENTAL SCIENCE AND HEALTH PART A-TOXIC/HAZARDOUS SUBSTANCES &  
ENVIRONMENTAL ENGINEERING, vol.39, no.7, pp.1819-1832, 2004 (Journal Indexed in SCI)
- XXIII. **Evaluation of control alternatives for domestic and industrial wastewater sources in Umur Creek Catchment Area**  
ONGAN-TORUNOGLU P., DOGRUEL S., ORHON D., Musaoglu N.  
FRESENIUS ENVIRONMENTAL BULLETIN, vol.13, no.9, pp.831-838, 2004 (Journal Indexed in SCI)
- XXIV. **Ozonation of nonbiodegradable organics in tannery wastewater**  
Dogruel S., Genceli E., Babuna F. F. , ORHON D.  
JOURNAL OF ENVIRONMENTAL SCIENCE AND HEALTH PART A-TOXIC/HAZARDOUS SUBSTANCES &  
ENVIRONMENTAL ENGINEERING, vol.39, no.7, pp.1705-1715, 2004 (Journal Indexed in SCI)
- XXV. **Biodegradability improvement of penicillin formulation effluent by ozonation**  
Cokgor E., Arslan-Alaton I., KARAHAN Ö., DOGRUEL S., ORHON D.  
FRESENIUS ENVIRONMENTAL BULLETIN, vol.13, no.10, pp.1053-1056, 2004 (Journal Indexed in SCI)
- XXVI. **Advanced oxidative treatment of dyehouse effluents using Fenton's reagent, O-3 and O3H2O2 processes**  
UNER H., Dogruel S., Alaton I., Babuna F. F.  
FRESENIUS ENVIRONMENTAL BULLETIN, vol.13, no.10, pp.959-964, 2004 (Journal Indexed in SCI)
- XXVII. **Wastewater reuse for the minimization of fresh water demand in coastal areas - Selected cases from the textile finishing industry**  
ORHON D., Kabdasli I., Babuna F. F. , Sozen S., DULKADIROGLU H., Dogruel S., Gul Ö., Insel G.  
JOURNAL OF ENVIRONMENTAL SCIENCE AND HEALTH PART A-TOXIC/HAZARDOUS SUBSTANCES &  
ENVIRONMENTAL ENGINEERING, vol.38, no.8, pp.1641-1657, 2003 (Journal Indexed in SCI)
- XXVIII. **Effect of stream segregation on ozonation for the removal of significant COD fractions from textile wastewater**

- Dogruel S., Germirli-Babuna F. F. , Kabdasli I, Insel G., ORHON D.  
JOURNAL OF CHEMICAL TECHNOLOGY AND BIOTECHNOLOGY, vol.78, no.1, pp.6-14, 2003 (Journal Indexed in SCI)
- XXIX. **Assessment of source based nitrogen removal alternatives in leather tanning industry wastewater**  
ZENGİN BALCI G. E. , ÖLMEZ HANCI T., DOĞRUEL S., KABDAŞLI N. I. , Tünay O.  
WATER SCIENCE AND TECHNOLOGY, vol.45, no.12, pp.205-215, 2002 (Journal Indexed in SCI Expanded)
- XXX. **In-plant control applications and their effect on treatability of a textile mill wastewater**  
DULKADIROGLU H., Eremektar G., Dogruel S., UNER H., Germirli-Babuna F. F. , ORHON D.  
WATER SCIENCE AND TECHNOLOGY, vol.45, no.12, pp.287-295, 2002 (Journal Indexed in SCI)
- XXXI. **Assessment of Sourced based Nitrogen Removal Alternative in Leather Tanning Industry**  
ZENGİN BALCI G. E. , ÖLMEZ HANCI T., DOĞRUEL S., Kabdaşlı N. I. , TÜNAY O.  
WATER SCIENCE AND TECHNOLOGY, vol.45, no.12, pp.205-215, 2002 (Journal Indexed in SSCI)
- XXXII. **Ozonation application in activated sludge systems for a textile mill effluent**  
ORHON D., DULKADIROGLU H., Dogruel S., Kabdasli I, Sozen S., Babuna F. F.  
WATER SCIENCE AND TECHNOLOGY, vol.45, no.12, pp.305-313, 2002 (Journal Indexed in SCI)
- XXXIII. **A scientific approach to wastewater recovery and reuse in the textile industry**  
ORHON D., Babuna F. F. , Kabdasli I, Insel F., Karahan Ö., DULKADIROGLU H., Dogruel S., SEVİMLİ F., YEDİLER A.  
WATER SCIENCE AND TECHNOLOGY, vol.43, no.11, pp.223-231, 2001 (Journal Indexed in SCI)

## Articles Published in Other Journals

- I. **Kimyasal arıtma proseslerinin karasuyun boyutsal dağılımı üzerindeki etkilerinin incelenmesi**  
GÜRSOY HAKSEVENLER B. H. , DOĞRUEL S., ARSLAN ALATON İ.  
Uludağ Üniversitesi Mühendislik Fakültesi Dergisi, vol.24, no.3, pp.469-482, 2019 (Refereed Journals of Other Institutions)
- II. **İleri biyolojik atıksu arıtma tesislerinde model bazlı proses optimizasyonu**  
Sözen S., ORHON D., COKGOR E. U. , INSEL G., KARAHAN O., Yağcı N., DOGRUEL S., EMEL ZENGİN BALCI G., Ölmez Hancı T., Okutman Taş D., et al.  
itüdergisi/e, vol.19, pp.101-110, 2009 (National Refreed University Journal)

## Supported Projects

- Doğruel S., Project Supported by Higher Education Institutions, Atık Çamurun Ozon Oksidasyonu ve Fenton Prosesi İle Dezentegrasyonu, 2013 - 2018
- Doğruel S., Project Supported by Higher Education Institutions, Dezenentegrasyonun Atık Aktif Çamurun Fizikokimyasal Özellikleri ve Biyolojik Ayrışabilirliği Üzerindeki Etkisinin İncelenmesi, 2014 - 2017

## Citations

Total Citations (WOS):786  
h-index (WOS):14