



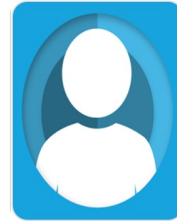
دانشگاه صنعتی امیرکبیر
(پلی تکنیک تهران)

پست الکترونیک:

b.khorsandi@aut.ac.ir

شماره تماس:

6454-3088 (21 98+)



بابک خورسندی

استادیار

دانشکده مهندسی عمران و محیط زیست
گروه آموزشی مهندسی آب و محیط زیست

:(Scopus) h-index

3

:ارجاعات (Scopus)

73

سوابق تحصیلی

#	مقطع/رشته تحصیلی	دانشگاه محل تحصیل	شهر محل تحصیل	کشور محل تحصیل	تاریخ فارغ‌التحصیلی
1	BSc	Sharif University of Technology	Tehran	Iran	2004
2	MSc (Distinction)	(University College London (UCL	London	The United Kingdom	2005
3	PhD	McGill University	Montreal	Canada	2011

پایان‌نامه‌های کارشناسی ارشد

#	عنوان پایان‌نامه	توسط	تاریخ دفاع
1	بررسی اثر محدودیت های ناشی از همه گیری کووید19 بر روی کیفیت هوای شهر تهران و تخمین اثرات این تغییر کیفیت بر روی سلامتی	سیدامیرحسین نجیب و بابک خورسندی	مهر 1400
2	بررسی آشفته‌گی بیوژنیک تولید شده توسط گونه های مختلف از ماهیان	ثنا آهنی و بابک خورسندی	مرداد 1400
3	برآورد اثرات بهداشتی بلندمدت آلاینده‌های ذرات معلق کوچکتر از 2.5 میکرون، ازن و کربن سیاه در شهر تهران و مقایسه نتایج نرم‌افزارهای AIRQ+ و BenMAP-CE	اسما میرزایی عباس آبادی و بابک خورسندی	تیر 1400
4	تاثیر جریان هم راستا بر روی دو جت دایره ای موازی	ندا بیرامی و بابک خورسندی	تیر 1400
5	بررسی اثر آشفته‌گی ایجاد شده ناشی از شبکه نوسانی بر پخش نفت در عمق	محمد قیاسوند و بابک خورسندی	شهریور 1399

6	اثر شرایط اولیه بر روی دینامیک و اختلاط جت آشفته	پوریا نجاتی پور و بابک خورسندی	شهریور 1399
7	تأثیر جریان هم راستا بر دینامیک و اختلاط جت دیواره	محمد کاظمی بلگه شیری و بابک خورسندی	اسفند 1398
8	بررسی اثرات زیست محیطی و شبیه سازی تخلیه شورابه از آب شیرین کن ها در خلیج فارس	وحید بابایی نژاد و بابک خورسندی	اسفند 1398
9	تحلیل آماری و برآورد اثرات بهداشتی ناشی از مواجهه با آلاینده های کربن سیاه و ازون در سالهای اخیر	کیارش فرزد و بابک خورسندی	بهمن 1398
10	حذف آلاینده منتخب از جریان هوا با استفاده از فرآیند ترکیبی پلاسمای سرد و جاذب	حمیدرضا صفری واریانی و بابک خورسندی	خرداد 1398
11	تحلیل آماری تأثیر آلودگی هوا بر تصادفات رانندگی	مریم احمدی و بابک خورسندی	اسفند 1397
12	تأثیر آشفته جریانی الحاقی بر دینامیک و اختلاط جت متقارن محوری آشفته	مسعود معینی و بابک خورسندی	بهمن 1397
13	مدل سازی سناریوهای کاهش انتشار آلودگی هوای ناشی از صنایع بزرگ با رویکرد تحقق اهداف توسعه ی پایدار (SDGs) و تعهدات ملی در COP21 (مطالعه ی موردی: محدوده ی تهران)	امیرحسین عبدالرضایی و بابک خورسندی	بهمن 1396

مقالات ژورنال

داده های ثبت شده در پورتال

- 1 Pourya Nejati Pour, Babak Khorsandi, "Effect of nozzle geometry on the dynamics and mixing of self-similar turbulent jets", *WATER SCIENCE AND TECHNOLOGY*, Vol. 84, Num. 12, Page 3907-3915, November 2021,
- 2 Vahid Babaeinezhad, Babak Khorsandi, "Influence of ambient flow on the behavior of dense effluent discharged into the water environment", *Amirkabir Journal of Civil Engineering*, Vol. 53, Num. 9, Page 1-25, November 2021,
- 3 Vahid Babaeinezhad, Babak Khorsandi, "Studying the Best Method for Saline Wastewater Discharge: A Case Study of One of Assaluyeh Desalination Plants", *Journal of Hydraulics*, Vol. 16, Num. 3, Page 1-15, October 2021,
- 4 Vahid Babaeinezhad, Babak Khorsandi, "Validation of CORMIX and CorJet models in dense effluents released with a 60-degree angle from multi-port dischargers", *Journal of Hydraulics*, Vol. 16, Num. 2, Page 1-13, August 2021,
- 5 Vahid Babaeinezhad, Babak Khorsandi, "Factors Influencing the Merging Point of Effluents Discharged from Multi-Port Dischargers", , Vol. 7, Num. 2, Page 318-327, August 2021,
- 6 Babak Khorsandi, Kiarash Farzad, Hannaneh Tahriri Vasighi, Reza Maknoon, "Association between short-term exposure to air pollution and COVID-19 hospital admission/mortality during warm seasons", *ENVIRONMENTAL MONITORING AND ASSESSMENT*, Vol. 193, Num. 426, Page 1-6, June 2021,
- 7 Farzin Homayounfar, Babak Khorsandi, "Application of Post-Processing Methods on the Velocity Statistics Measured at Different Sampling Frequencies Using Acoustic Doppler Velocimeter", *Journal of Hydraulics*, Vol. 16, Num. 1, Page 37-51, June 2021,
- 8 Asma Mirzaei Abass Abadi, Hannaneh Tahriri Vasighi, Babak Khorsandi, "Comparison between AirQ+ and BenMAP-CE in estimating the health benefits of PM2.5 reduction", *Air Quality Atmosphere and Health*, Vol. 0, Num. 0, Page 1-9, March 2021,
- 9 Kiarash Farzad, Babak Khorsandi, Maziar Khorsandi, Omar Bouamra, Reza Maknoon, "Estimating short-term mortality benefits associated with a reduction in tropospheric ozone", *ATMOSPHERIC ENVIRONMENT*, Vol. 252, Num. 118342, Page 1-8, March 2021,

- 10 Mohammad Kazemi Balgehshiri, Babak Khorsandi, Laurent Mydlarski, "Effect of acoustic Doppler velocimeter sampling volume size on measurements of turbulence", *JOURNAL OF ATMOSPHERIC AND OCEANIC TECHNOLOGY*, Vol. 1, Num. 1, Page 1-13, December 2020,
- 11 Maryam Ahmadi, Babak Khorsandi, Mahmoud Mesbah Namini, "The effect of air pollution on drivers' safety performance", *ENVIRONMENTAL SCIENCE AND POLLUTION RESEARCH*, Vol. 1, Num. 1, Page 1-14, November 2020,
- 12 Masoud Moeini, Babak Khorsandi, Laurent Mydlarski, "Effect of Coflow Turbulence on the Dynamics and Mixing of a Nonbuoyant Turbulent Jet", *JOURNAL OF HYDRAULIC ENGINEERING-ASCE*, Vol. 147, Num. 1, Page 1-13, October 2020,
- 13 Kiarash Farzad, Babak Khorsandi, Maziar Khorsandi, Omar Bouamra, Reza Maknoon, "A study of cardiorespiratory related mortality as a result of exposure to black carbon", *SCIENCE OF THE TOTAL ENVIRONMENT*, Vol. 725, Num. 138422, Page 1-10, April 2020,
- 14 Masoud Moeini, Babak Khorsandi, Laurent Mydlarski, "Effect of Acoustic Doppler Velocimetry Sampling Frequency on Statistical Measurements of Turbulent Axisymmetric Jets", *JOURNAL OF HYDRAULIC ENGINEERING-ASCE*, Vol. 146, Num. 7, Page 1-17, April 2020,

سایر داده ها







- 1 Khorsandi, B., Gaskin, S.J., Mydlarski, L., "Effect of background turbulence on the dynamics and mixing of an axisymmetric turbulent jet", *Journal of Fluid Mechanics*, Vol. 736, Num. , Page 250-286, 2013,
- 2 Khorsandi, B., Mydlarski, L., Gaskin, S.J., "Noise in turbulence measurements using acoustic Doppler velocimetry", *Journal of Hydraulic Engineering-ASCE*, Vol. 138, Num. 10, Page 29-838, 2012,

مقالات کنفرانس

داده های ثبت شده در پورتال

- 1 Ali Tannazi, Farzin Homayounfar, Babak Khorsandi, "Numerical Modeling of the Dynamics of Axisymmetric Turbulent Jets ", 20th Iranian Hydraulic Conference, October 2021
- 2 Seyed Amirhosein Najib, Babak Khorsandi, Taghi Ebadi, "Studying the effect of the COVID-19 pandemic restrictions on air quality in Tehran ", 12th International Congress on Civil Engineering, July 2021
- 3 Farzin Homayounfar, Atefeh Soltaniye, Babak Khorsandi, "Experimental investigation of the dynamics of two parallel axisymmetric turbulent jets ", The 19th Iranian Hydraulic Conference, February 2021
- 4 Atefeh Soltaniye, Neda Beyrami, Farzin Homayounfar, Babak Khorsandi, "The effect of velocity range of acoustic Doppler velocimeter on the accuracy of measurements ", The 19th Iranian Hydraulic Conference, February 2021
- 5 Sana Ahani, Babak Khorsandi, "Laboratory study of biogenic turbulence generated by Koi fish at various abundances ", The 19th Iranian Hydraulic Conference, February 2021
- 6 Neda Beyrami, Pourya Nejati Pour, Mohammad Kazemi Balgehshiri, Babak Khorsandi, "An experimental study of the dynamics of a turbulent circular wall jet ", 12th National Congress of Civil Engineering, May 2020
- 7 Seyed Amirhosein Najib, Babak Khorsandi, Taghi Ebadi, "Study of pyrolysis of widely used plastic wastes with a focus on liquid product production ", 12th National Congress on Civil Engineering, May 2020
- 8 Pourya Nejati Pour, Babak Khorsandi, "The effect of initial conditions on the dynamics of two circular and square turbulent jets issued into a quiescent background ", 12th National Congress of Civil Engineering, May 2020
- 9 Vahid Babaeinezhad, Babak Khorsandi, "Influence of ambient flow on dilution rate of negatively buoyant jets ", The 18th Iranian National Hydraulic Conference, February 2020
- 10 Vahid Babaeinezhad, Babak Khorsandi, Reza Khodadadi, "Effect of the discharge angle and height on the dilution rate of dense jets in a quiescent environment ", The 18th Iranian National Hydraulic Conference, February 2020
- 11 Mohammad Kazemi Balgehshiri, Pourya Nejati Pour, Babak Khorsandi, "Effect of sampling volume size of acoustic Doppler velocimeters (ADVs) on measurements ", The 18th Iranian National Hydraulic Conference, February 2020

- 12 Mohammadmahdi Miraj, Ahmad Taheri, Babak Khorsandi, "THE CORRELATION BETWEEN BLACK CARBON AEROSOL AND CO, AND TROPOSPHERIC OZONE IN TEHRAN ", The 1st International Conference on Application of Air Quality in Science and Engineering Purposes, February 2020
- 13 Negah Soleimani, Ahmad Taheri, Babak Khorsandi, "PREDICTING BENZENE CONCENTRATION LEVELS FROM STATISTICAL DATA OF OTHER AIR POLLUTANTS BY MULTIPLE REGRESSION ANALYSIS ", The 1st International Conference on Application of Air Quality in Science and Engineering Purposes, February 2020
- 14 Pedram Akbari Ghuchani, Ahmad Taheri, Babak Khorsandi, "EVALUATION OF THE COLD START PHENOMENA AND ITS EFFECT ON AIR QUALITY BASED ON MONITORED DATA IN TEHRAN ", The 1st International Conference on Application of Air Quality in Science and Engineering Purposes, February 2020
- 15 Amir Mohammad Eslami, Ahmad Taheri, Babak Khorsandi, "ESTIMATION OF SECONDARY AEROSOLS FORMATION THROUGH PHOTOCHEMICAL REACTIONS, CASE STUDY: TEHRAN ", The 1st International Conference on Application of Air Quality in Science and Engineering Purposes, February 2020
- 16 Asma Mirzaei Abass Abadi, Babak Khorsandi, "Comparison of health impact estimates of PM2.5 using AirQ+ and BenMap software in Tehran during 2016-2018 ", The 8th National Conference on Air and Noise Pollution Management, February 2020
- 17 Aminreza Omranian Khorasani, Shahab Dabirinejad, Zahra Kian, Babak Khorsandi, Meeghat Habibian, "Contribution of Pollutant Sources to CO2 Emission in Karaj ", The 8th National Conference on Air and Noise Pollution Management, February 2020
- 18 Mohammad Hossein Yazdani Kachouei, Babak Khorsandi, "Effects of ozone on respiratory mortalities in Tehran ", The 8th National Conference on Air and Noise Pollution Management, February 2020
- 19 Shahab Dabirinejad, Amin Moeinadini, Meeghat Habibian, Babak Khorsandi, "Evaluation of Iran Railway Electrification Impacts on Air Pollution; Case study: Tehran-Tabriz Railway ", The 8th National Conference on Air and Noise Pollution Management, February 2020
- 20 Babak Khorsandi, Mahdiyeh Kalhori, Mohammad Ghiasvand, "Analyzing Irans water label and comparing it with leading countries standards ", The 2nd national conference on water consumption management loss reduction and reuse, December 2019
- 21 Masoud Moeini, Mohammad Kazemi Balgehshiri, Babak Khorsandi, Laurent Mydlarski, "A LABORATORY STUDY OF THE EFFECT OF ACOUSTIC DOPPLER VELOCIMETER SAMPLING FREQUENCY AND SAMPLING VOLUME ON MEASUREMENTS ", The 24th Hydrotechnical Conference, CSCE (Canadian Society for Civil Engineering), 2019, June 2019
- 22 Mohammad Kazemi Balgehshiri, Masoud Moeini, Babak Khorsandi, "The accuracy of acoustic Doppler velocimeter measurements in a turbulent jet and the application of spike and noise removal post-processing methods ", 11th National Congress on Civil Engineering, May 2019
- 23 Kiarash Farzad, Ahmad Taheri, Babak Khorsandi, "Health Impact Assessment Associated with Exposure to Black Carbon Using BenMAP in Tehran during the Second Half of 1396 and the First Half of 1397 ", The 7th National Conference on Air and Noise Pollution, January 2019
- 24 Maryam Ahmadi, Babak Khorsandi, Mahmoud Mesbah Namini, "A comprehensive review on the effects of air pollution on human performance ", International conference on society and environment, September 2018
- 25 Amirhosein Abdorrezayi, Babak Khorsandi, Reza Maknoon, "Modeling Scenarios to Reduce Air Pollution Emission Caused by Power Plants in Tehran region ", 11th International Congress on Civil Engineering, May 2018
- 26 Masoud Moeini, Babak Khorsandi, "Effect of External Forcing on the Self-Similarity of Turbulent Jets ", The 16th Iranian Hydraulic Conference, September 2017
- 27 Amirhosein Abdorrezayi, Reza Maknoon, Babak Khorsandi, "Air Pollution Dispersion Models: History, Mathematical Foundations, Software, and How to Choose an Appropriate Model ", The 10th National Congress on Civil Engineering, April 2017
- 28 Babak Khorsandi, "Accuracy of Acoustic Doppler Velocimetry in Turbulence Measurements ", The 15th Hydraulic Conference, December 2016

#	عنوان درس	توصیف درس	سرفصل ها	دوره درسی
1	Fluid Mechanics	This course aims to provide an introduction to the fundamentals of fluid mechanics, beginning with the fluid statics followed by the dynamics of fluid flow including internal and external flows. The course applies the theories taught to practical pro		Spring 2022
2	Principles of Air Pollution Engineering	In this course principles of air pollution, its sources and effects, control mechanisms and technologies, and pollution dispersion modeling will be presented.		Fall 2021
3	Fluid Mechanics	This course aims to provide an introduction to the fundamentals of fluid mechanics, beginning with the fluid statics followed by the dynamics of fluid flow including internal and external flows. The course applies the theories taught to practical pro		Fall 2021
4	Fluid Mechanics	This course aims to provide an introduction to the fundamentals of fluid mechanics, beginning with the fluid statics followed by the dynamics of fluid flow including internal and external flows. The course applies the theories taught to practical pro		Spring 2021
5	Fluid Mechanics	This course aims to provide an introduction to the fundamentals of fluid mechanics, beginning with the fluid statics followed by the dynamics of fluid flow including internal and external flows. The course applies the theories taught to practical pro		Fall 2020
6	Principles of Air Pollution Engineering	In this course principles of air pollution, its sources and effects, control mechanisms and technologies, and pollution dispersion modeling will be presented.		Fall 2020