

## 韩杰主页 COVID-19

### 基本信息



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### 站点计数器



### 我的新闻

课题组招收博士后 (含环境、生物、高分子、化学方向), 入选者聘为助理教授 2019-12-27  
课题组长期招收具有环境、生物、高分子、化学专业背景的硕士生、博士生 2019-11-05

### 研究领域

#### 环境与公众健康 (Environmental and Public Health)

##### 1. 新型冠状病毒的溯源、传播与预防 (COVID-19)

- 环境与早期感染溯源
- 传播途径、传播介质与预防
- 人群行为变化及导致的环境效应与公众健康风险
- 决策与公共健康政策制定
- 更有效的治疗、监测与预防策略

(请访问COVID-19页面, 获取更多信息 <http://gr.xjtu.edu.cn/web/jiehan/covid-19>)

##### 2. 环境新兴污染物 (Emerging chemical contaminants)

- 分析污染物特征
- 揭示人体暴露途径
- 评估暴露水平与健康风险

##### 3. 化合物在聚合物材料中的积聚与溶出 (Uptake/release of chemicals in/from polymers)

- 发现现象
- 探究机理
- 建立精准应用
- 揭示环境意义及公众健康风险

### 教育背景

博士, 化学与材料工程, 奥克兰大学  
硕士, 环境工程, 西安交通大学  
学士, 化学工程, 西安交通大学

### 工作经历

曾在新西兰奥克兰大学化学与材料工程系、新加坡国立大学水研究中心 (NUS Centre for Water Research)、美国伊利诺伊大学香槟分校 (UIUC) 土木与环境工程系 WaterCAMPWS 研究中心、美国麻省大学阿默斯特分校 Paige Laboratory 从事博士后与访问研究工作。

2018年入职西安交通大学，任能源与动力工程学院环境科学与工程系教授、博士生导师。

## 研究成果

### 代表性著作

- 现象与机理
  - **Han, J\***; Qiu, W; Tiwari, S; Bhargava, R; Gao, W; Xing, BS\*, Consumer-Grade Polyurethane Foam Functions as a Large and Selective Absorption sink for Bisphenol A in Aqueous Media. *Journal of Material Chemistry A* 3, 8870–8881, 2015.
  - **Han, J\***; Cao, Z; Gao, W, Remarkable Sorption Properties of Polyamide 12 Microspheres for a Broad-Spectrum Antibacterial (Triclosan) in Water. *Journal of Material Chemistry A* 1, 4941–4944, 2013.
- 环境应用
  - **Han, J\***; Qiu, W; Cao, Z; Hu, JY; Gao, W\*, Adsorption of Ethinylestradiol (EE2) on Polyamide 612: Molecular Modeling and Effects of Water Chemistry. *Water Research* 47, 2273–2284, 2013.
  - **Han, J\***; Meng, S; Dong, Y; Hu, JY; Gao, W\*, Capturing Hormones and Bisphenol A from Water via Sustained Hydrogen Bond Driven Sorption in Polyamide Microfiltration Membranes. *Water Research* 47, 197–208, 2013.
  - **Han, J\***; Qiu, W; Meng, S; Gao, W\*, Removal of Ethinylestradiol (EE2) from Water via Adsorption on Aliphatic Polyamides. *Water Research* 46, 5715–5741, 2012.
  - **Han, J**; Qiu, W; Hu, JY; Gao, W\*, Chemisorption of estrone in nylon microfiltration membranes: Adsorption mechanism and potential use for estrone removal from water. *Water Research* 46, 873–881, 2012.
- 公众健康
  - **Han, J\***; Qiu, W; Campbell, EC; White, JC; Xing, BS\*, Nylon Bristles and Elastomers Retain Centigram Levels of Triclosan and Other Chemicals from Toothpastes: Accumulation and Uncontrolled Release. *Environmental Science & Technology* 51, 12264–12273, 2017.
  - **Han J\***; He, S, Need for assessing the inhalation of micro(nano)plastic debris shed from masks, respirators, and home-made face coverings during the COVID-19 pandemic. *Environmental Pollution*. In press.
  - **Han, J\***; He, S, Urban flooding events could pose risks of virus spread and community outbreaks during the coronavirus (COVID-19) pandemic. *Science of the Total Environment*. <https://doi.org/10.1016/j.scitotenv.2020.142491>
  - **Han, J\***; Zhang, Y, Microfiber pillow as a potential harbor and environmental medium transmitting respiratory pathogens during the COVID-19 pandemic. *Ecotoxicology and Environmental Safety*. <https://doi.org/10.1016/j.ecoenv.2020.111177>
  - Wang, X; **Han, J\***; Lichtfouse, E, Breastfeeding in public amenities during the COVID-19 pandemic: Mothers and unprotected infants. *Environmental Chemistry Letters*. <https://doi.org/10.1007/s10311-020-01054-1>

