Curriculum Vitae of JIN Ling Nathanael

Assistant Professor

Department of Civil and Environmental Engineering
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Education

PhD, Environmental Toxicology, The University of Queensland, 2015
MPhil, Environmental Sciences, City University of Hong Kong, 2009
BSc (1st Hon), Environmental Science & Management, City University of Hong Kong, 2007
BSc, Environmental Science and Engineering, Fudan University (transferred to CityU after two years of study 2003-2005)

Professional Experience

2021.09 – present	Assistant Professor	Department of Civil and Environmental Engineering and Department of Health Technology and Informatics (Joint appointment), The Hong Kong Polytechnic University
2015.04 – 2021.08	Research Associate/Postdoctoral Fellow/Research Fellow/Research Assistant Professor	The Hong Kong Polytechnic University
2009.09 – 2011.01	Research Assistant	City University of Hong Kong
2008.02 – 2008.05	Visiting Student	National Institute of Advanced Industrial Science and Technology, Japan
2007.06 – 2007.08	Research Intern	University of California, Davis
2006.05 – 2006.07	Conservation Volunteer	Conservation Volunteers Australia

Community/University Service

2025 – present	Co-Chair	International Medical Geology Association Working Group on One Health
2025 – present	Member	University Research Facility in Big Data Analytics User Group and Management Committee
2025 – present	Member	Departmental Management Committee
2023 – present	Deputy Programme Leader	BEng (Hons) in Environmental Engineering and Sustainable Development
2022 – present	Member	Departmental Research Committee
2023 – present	Member	Departmental Partnership Committee
2023 – present	Member	Departmental Teaching & Learning Committee
2023 – present	Summer Placement Officer	BEng (Hons) in Environmental Engineering and Sustainable Development

Statement of expertise

Nathanael is actively engaged in interdisciplinary research at the intersection of environmental chemistry, toxicology, microbiology, and data science, addressing critical challenges in planetary health. His research focuses on human health impacts of air pollution, wildlife health impacts of marine pollution, and ecohealth impacts of solid waste.

Nathanael's recent work on air pollution toxicity received recognition from *Nature*, where he contributed to an invited joint commentary on global disparities in the health impacts of air pollution. His study on the airborne transmission of antibiotic resistance genes was recognized as one of the best papers in *Environmental Science & Technology Letters* in 2018. He also led a pioneering study on the ecology and risks of the global plastisphere, which earned his team the Most Popular Paper Award (2020–2024) and the Best Paper Award (2024-2025) from *The Innovation*. This research further attracted attention from *Nature*, resulting in an invitation for Nathanael and his team to write a commentary on the microbial risks associated with global plastic pollution.

Nathanael has previously served as an Editorial Board Member for *Environmental Toxicology and Chemistry* and as a Guest Editor for *Environmental Science & Technology*, where he co-organized a Special Issue on Urban Air Pollution and Human Health. Currently, he serves as an Editorial Board Member of *Environmental Science and Technology* and *ACS Environmental Au*, and as Youth Editor for *The Innovation*, and Guest Editor for *Environment International*, where he is co-organizing a Special Issue on Advanced Data-driven Approaches to Assessing Complex Health Risks of Environmental Pollutants under Climate Change. In 2024, he received the Outstanding Reviewer Award from *National Science Review*.

In recognition of his contributions, Nathanael was named to the American Academy of Environmental Engineers and Scientists' 2025 "40 Under 40," received the 2025 Asian Young Aerosol Scientist Award from the Asian Aerosol Research Assembly, and was honored with the 2026 James J. Morgan Early Career Award for the Asia–Pacific region by *Environmental Science & Technology*, *Environmental Science & Technology Letters*, and the American Chemical Society Division of Environmental Chemistry.

Honours & Awards

- James J. Morgan Early Career Award, *Environmental Science and Technology*/*Environmental Science and Technology Letters*/American Chemical Society Division of Environmental Chemistry, 2026
- Asian Young Aerosol Scientist Award, Asian Aerosol Research Assembly, 2025
- *The Innovation* Best Paper Award (2024-2025), 2025
- 40 Under 40, American Academy of Environmental Engineers and Scientists, 2025
- *National Science Review* Outstanding Reviewer Award, 2024
- *The Innovation* Most Popular Paper Award (2020-2024), 2024
- *iMeta* Best Paper Award, 2023
- Faculty of Construction and Environment Dean's Award for Outstanding Research Funding, 2023
- Presidential Young Scholar, PolyU, 2022
- *Environmental Science and Technology Letters* Best Paper Award, 2018
- Society of Environmental Toxicology and Chemistry/Procter & Gamble Fellowship, 2014
- SETAC Australasia Student Travel Award, 2013
- Prime Minister's Australia Asia Endeavour Award, Australian Government, 2011-2014
- Dean's List, City University of Hong Kong, 2007
- Fang Brothers Whole Person Development Scholarship, City University of Hong Kong, 2007

Editorial Board Membership

Editorial Board Member of *Environmental Science and Technology*, 2025 – now
Guest Editor of *Environment International*, 2024 – 2025
Editorial Board Member of *ACS Environmental Au*, 2021 – now
Editorial Board Member of *The Innovation*, 2021 - now
Guest Editor of *Environmental Science and Technology*, 2021 – 2022
Editorial Board Member of *Environmental Toxicology and Chemistry*, 2018 – 2020

Research Funding

As (Co-)Principal Investigator (PI/Co-PI)

1. Deciphering the fungal nexus: Airborne β-lactam resistance in landfills and its implications for human health (*HK$ 1,462,251, 2026-2028, Funded by Research Grants Council of Hong Kong General Research Fund, PI)*
2. Assessing plastic pollution-associated antimicrobial resistance risk (*HK$ 850,200, 2025-2027, Funded by Research Grants Council of Hong Kong Junior Research Fellow Scheme, PI)*
3. AI-driven innovations in chemical safety: Protecting human health through safer consumer products (*HK$ 500,000, 2025-2029, Donated by HuaJun Metal Products (Hong Kong) Co., Limited, PI*)
4. How urbanization alters airborne fungal communities and antifungal resistance as part of what humans breathe *(HK$ 1,005,833, 2025-2027, Funded by Research Grants Council of Hong Kong General Research Fund, PI)*

5. Dynamics of biological components and their impacts on aerosol composition and toxicity *(HK$ 250,080, 2025-2026, Funded by The Hong Kong Polytechnic University Joint PhD Supervision Scheme with Leading Universities, PI)*
6. Postdoc Matching Fund Scheme - Shihao GONG *(HK$ 364,665.65, 2024-2025, Funded by The Hong Kong Polytechnic University Postdoc Matching Scheme, PI)*
7. Postdoc Matching Fund Scheme - Chunlan FAN *(HK$ 361,887.10, 2024-2025, Funded by The Hong Kong Polytechnic University Postdoc Matching Scheme, PI)*
8. Guangdong-Hong Kong-Macao Joint Laboratory for Environmental Pollution and Control with Chinese Academy of Sciences (CAS-GIG) *(HK$ 1,875,000, 2024-2028, Funded by RGC Co-funding Mechanism on Joint Laboratories with the Chinese Academy of Sciences (CAS), Co-PI)*
9. The effects of stable radicals in aromatic secondary organic aerosols on atmospheric oxidizing capacity and aerosol toxicity *(RMB 550,000, 2023-2026, Funded by National Natural Science Foundation of China General Program, PI)*
10. Climate- and environment-conscious urban growth in the Guangdong-Hong Kong- Macau Greater Bay Area (GBA): solutions and co-benefits *(HKD 3,548,582, 2023-2026, Funded by Research Grants Council of Hong Kong Collaborative Research Fund, Co-PI)*
11. Unravelling the black box between air pollution and public health for transformative air quality management *(HK$ 44.5 million, 2023-2027, Funded by Research Grants Council of Hong Kong Theme-based Research Scheme, Co-PI)*
12. Transmission of antimicrobial resistance from hotspot sources to occupational populations and urban communities *(HK$ 8,709,120, 2023-2026, Funded by Research Grants Council of Hong Kong Collaborative Research Fund, Co-PI)*
13. Effects of urban airborne particulate matter and associated toxic components on pathogen receptor expression in human airway epithelial cells *(HK$ 802,220, 2023-2026, Funded by Research Grants Council of Hong Kong General Research Fund, PI)*
14. Ecological threats of plastisphere in the Anthropocene (*HK$ 1,288,513, 2023-2026, Funded by The Hong Kong Polytechnic University Distinguished Postdoctoral Fellowship Scheme, PI)*
15. Air pollution-induced immune impair and respiratory pathogen colonization (*HK$ 1,200,000, 2023-2025, Funded by The Hong Kong Polytechnic University Research Institute of Sustainable Urban Development Joint Research Fund, PI*)
16. Establishing species-specific neuronal cell lines for bioanalytical assessment of contaminant cocktails in Chinese white dolphins and finless porpoises *(HK$ 300,000, 2022-2023, State Key Laboratory of Marine Pollution Seed Collaborative Fund, PI)*
17. Understanding and managing the threats of toxic algae to the Chinese White Dolphin and Finless Porpoise in Hong Kong's southern and western waters *(HKD 1,120,500.00, 2021-2024, Hong Kong LNG Terminal Limited Marine Conservation Enhancement Fund, PI)*
18. Contribution of selected toxic components and associated sources to differential mixture effects of city-specific $PM_{2.5}$ on human lung cells: How much of the iceberg have we seen? (*HK$ 579,972, 2021-2023, Funded by Research Grants Council of Hong Kong, PI*)
19. *In vitro* toxic potencies of city-specific fine particulate matter: Contribution of targeted toxic components and their emission sources (*RMB 240,000, 2021-2023 Funded by National Natural Science Foundation of China Youth Fund, PI*)
20. Dissecting the toxicity drivers of pollutant mixture effects in marine mammals of the south China coast using species-specific cell lines (*HK$ 600,000, 2021-2022, Funded by Hong Kong Branch of Southern Ocean Science and Engineering Guangdong Laboratory (Guangzhou), PI*)

21. Novel tools to assess combined effect of bioaccumulative chemicals in marine wildlife (*USD 15,000, 2014-2015, Funded by Society of Environmental Toxicology and Chemistry / Procter & Gamble, USA, Student PI*)
22. Development of novel screening tools to assess chemical-induced immunotoxicity in sea turtles (*AUD 40,000, 2013-2015, Funded by Sea World Research and Rescue Foundation, Inc., Australia, Student PI*)

As Co-Investigator (Co-I)

1. Balancing urban growth and air quality: Impacts of urban renewal and new metropolis construction on urban air pollution and public health (*HK$ 1,500,000, 2025-2028, Funded by The Hong Kong Polytechnic University Research Institute of Sustainable Urban Development Interdisciplinary Research Scheme, Co-I*)
2. Managing High-salinity Reverse Osmosis Concentrate to Enable Sustainable Water Reuse (*HK$ 500,000, 2025-2027, Funded by The Hong Kong Polytechnic University FCE Young Researcher Collaborative Research Fund, Co-I*)
3. Research Centre for Nature-based Urban Infrastructure Solutions (*HK$ 7,500,000, 2024-2027, Funded by The Hong Kong Polytechnic University Financial Support for Non-PAIR Research Centres, Co-I*)
4. Risk assessment and surveillance of the transmission of foodborne antimicrobial resistance in Hong Kong *(HK$ 1,499,500, 2024-2027, Funded by Health and Medical Research Fund, Co-I)*
5. Air pollutant as a risk factor for memory impairment in humans: a pre-clinical study to unmask underlying mechanisms and preventative treatments *(HK$ 500,000, 2024-2027, Funded by The Hong Kong Polytechnic University RISA Seed Funding, Co-I)*
6. Development of CO_2-integrated 3D concrete printing artificial reef (*HK$ 1,200,000, 2023-2025, Funded by The Hong Kong Polytechnic University Research Institute of Sustainable Urban Development Joint Research Fund, Co-I*)
7. Multi-scale investigation of bioclogging in porous media: from 3D printing aided microscale experiments to large scale numerical modelling *(HK$2,000,000, Funded by The Hong Kong Polytechnic University Collaborative Research with World-leading Research Groups, Co-I)*
8. Multipurpose Microfluidics and Imaging System *(HK$2,730,000.00, Funded by The Hong Kong Polytechnic University Large Equipment Fund, Co-I)*
9. Regional dissemination of antibiotic resistance genes: Processes and mechanisms *(RMB 2.9 million, 2022-2026, National Natural Science Foundation Major Program, Co-I)*
10. Provision of Services for Routine Surveillance of Antimicrobial Resistant Microorganisms in Food in Hong Kong *(HKD 4.5 million, 2022-2023, Food and Environmental Hygiene Department Contract Research, Co-I)*
11. A novel assessment platform to delineate transmission of antimicrobial resistance from seafood-related marine ecosystems to coastal population (*HKD 1,100,000, 2020-2022, Funded by Hong Kong Branch of Guangdong Southern Marine Science and Engineering Laboratory, The Hong Kong University of Science and Technology, Co-I*)
12. Zoonotic transmission of antimicrobial resistance from seafood-related marine ecosystems to the coastal population in the Greater Bay Area (*HKD 2,100,000, 2020-2023, Funded by State Key Laboratory of Marine Pollution, City University of Hong Kong, Co-I*)

13. Guangdong-Hong Kong-Macau Joint Laboratory of Environmental Pollution Processes and Control (*RMB 3,000,000, 2020-2022, Funded by Department of Science and Technology of Guangdong Province, China, Co-PI*)
14. Key technologies and applications for safe use of heavy metal-contaminated farmland *(RMB 600,000, 2020-2022, Funded by Department of Science and Technology of Guangdong Province, China, Co-I)*
15. Identifying the mixture effects and major toxicity drivers of ambient fine particulate matter: A comparative study of the Yangtze River Delta and Pearl River Delta regions (*RMB 3,468,000, 2016-2019, Funded by National Natural Science Foundation of China, Co-I*)

*Publications (*corresponding author; #co-first author; Students and Staff underlined)*

ORCID: 0000-0003-1267-7396; Web of Science: Citation = 4,562, H-index = 37; Google Scholar: Citation = 5,803, H-index of 37; FWCI = 2.77

Peer-reviewed journal articles

1. Zhu Y[#], Wang S[#], Han Y, Lu Y, Xiong A, Qiu S*, **Jin LN***, Zhang W*. A transformer-based deep learning approach for predicting air organic pollutant−human protein interactions. ***Environ. Sci. Technol.*** 2025, DOI: 10.1021/acs.est.5c12915
2. Fan C[#], Chen T[#], Chow FWN, Fisher MC, Rillig MC, Wu D, Luo Y, **Jin LN***. Public health implications of airborne Candida: Viability, drug resistance, and genetic links to clinical strains. ***Environ. Sci. Technol. Lett.*** 2025, 12, 1320–1326. **(Featured by the American Chemical Society embargoed press release)**
3. Yu J[#], Chen T[#], Han Y, Liu X, Su J, Leung PHM, Kelly F, Ho KF, Qu G, **Jin LN*.** Disproportionately higher contribution of endotoxin to $PM_{2.5}$ bioactivity than Its mass share highlights the need to identify low-concentration, high-potency components. ***Environ. Sci. Technol.*** 2025, 59, 20229–20238. **(Featured by *Nature Research Highlights*)**
4. Li C*, **Jin LN***, Bank MS, Fan C, Gillings MR, Zhao T, Han Y, Chen T, Gao M, Zhu D, Chen Q, Zhu G, Wang J, Wang L, Liu J, Yuan X, Huang Q, Wang X, Jahnke A, Brahney J, Allen S, Arp HPH, Oberbeckmann S, Bergmann M, Pointing SB, Zhang D, Rillig MC*. Potential planetary health impacts of the airborne plastisphere. ***One Earth*** 2025, 8, 101446.
5. Han Y[#], Yu J[#], Liu X, Zhang F, Huang X, Lu Y, Zhang W, Zimmermann R, Rudich Y, Li Q, Chen J, Chen Y*, **Jin LN***. Generation of more potent components at higher temperatures offsets toxicity reduction despite reduced mass emissions during biomass burning. ***Environ. Sci. Technol.*** 2025, 59, 19244–19256.
6. Liu X, Liang B, Yao S, Xiong A, Zhang X, Sun Y, Zhang L, Li C, Ruan Y, Yan M, Ho YW, Fang JKH, Wang B, Leusch F, Schlenk D, Liu W*, Leung KMY*, **Jin LN***. Dissecting the role of natural toxins and anthropogenic contaminants in mixture effects of seawater chemical cocktails on cetacean skin fibroblasts. ***Environ. Sci. Technol.*** 2025, 59, 14203–14213. **(Supplementary cover)**
7. Han Y, Cai J, Chen Y*, Zhang Y, **Jin LN***, Chen T, Li J, Zhang G, Chen J. Concurrent formation of low-maturity EC and BrC in biomass and coal burning: O-PAH as a precursor. ***Environ. Sci. Technol.*** 2025, 59, 12083–12095. **(Supplementary cover)**

8. Zhang L[#], Xiong A[#], Li C, Liu X, Zhang X, Gong S, Yan M, Qin X, Liu Y, Hu Z, Fang J, Duan H, Liu H, Chan LL, **Jin LN***. Ecological pattern of microalgal communities and associated risks in coastal ecosystems. ***ISME Commun.*** 2025, 5, ycaf109.
9. Hou Y, Xie J, **Jin LN**, You R, Li X. Identifying airborne release sources of antibiotic resistance genes in wastewater treatment plants using CFD simulation. ***ACS ES&T Air*** 2025, 2, 2692–2703.
10. Zheng H[#], Wu D[#], Wang S*, Li X, **Jin LN**, Zhao B, Li S, Sun Y, Dong Z, Wu Q, Chen X, Liu Y, Chen J, Tian H, Liu Q, Jiang J, Kan H, He K, He H, Chen C, Zhao J, Weichenthal S, Ji JS, Cohen A, Hao J, Li Q. Control of toxicity of fine particulate matter emissions in China. ***Nature*** 2025, 643, 404–411.
11. Jia Y, Chen L, **Jin LN**, Zhang P, Chen L, Fan C, Liu H, Ji Y, Li D*, Chen J. Environmentally relevant levels of ozone enhance *Klebsiella pneumoniae* pulmonary colonization and cross-organ translocation. ***Environ. Sci. Technol.*** 2025, 59, 18424–18439.
12. Yang S, Zhang X, **Jin LN**, Fang M, Gu AZ, Li D*, Chen J. Unveiling Phase-Dependent Genotoxicity of Organic Pollutants in Gaseous and Aqueous Forms. ***Environ. Sci. Technol.*** 2025, 59, 12048–12059.
13. Zhang X, Lu B, **Jin LN**, Yang S, Wang C, Tai J, Li D*, Chen J. Emission Dynamics and Public Health Implications of Airborne Pathogens and Antimicrobial Resistance from Urban Waste Collection Facilities. ***Environ. Sci. Technol.*** 2025, 59, 8060–8072
14. Cao X, Su J, Pan X, Zhang X, **Jin L**, Zhu Y. Metabolic Effects of Chronic Exposure to Environmentally Relevant Concentrations of *N*-(1,3-Dimethylbutyl)-*N*'-phenyl-*p*-phenylenediamine (6PPD) in Mice During Diet-Induced obesity progression ***Food Chem. Toxicol.*** 2025, 204, 115625.
15. Wang Y*, Li H, Tan F, **Jin LN**, Su J, Luo C. Root and foliar uptake, bidirectional translocation, subcellular distribution, and metabolism of tire wear particle-derived p-phenylenediamines and their quinones in Chinese cabbage and bok choy. ***Environ. Pollut.*** 2025, 382, 126737.
16. Chen L, Shao H, Gong S, Li C, **Jin L**, Huang Z, Wang P, Meng X, Ren L. Enhanced mitigation of antibiotic resistance genes in anaerobic digestion of food waste using biochar-supported nanoscale zero-valent iron. ***Environ. Pollut.*** 2025, 386, 127191.
17. Liao H, Wen C, Huang D, Liu C, Gao T, Du Q, Yang Q, **Jin L**, Ju F, Yuan MM, Tang X, Yu P*, Zhou S*, Alvarez PJ, Friman VP. Harnessing phage consortia to mitigate the soil antibiotic resistome by targeting keystone taxa *Streptomyces*. ***Microbiome*** 2025, 13, 1-20.
18. Li Q, Liu H, Liu L, **Jin LN**, Zheng Z, Liu Z, Ma T, Xin J, Zhou H, Huang D, Zhai Y, Liu M. Identifying key factors influencing cook's thermal comfort in Chinese-style residential kitchen based on typical cooking methods. ***J. Build. Eng.*** 2025, 108, 112944
19. Yu X, Yao R, Yao R, Jin X, Huang J, Liang Q, **Jin LN**, Sun J*. Mechanistic understanding of the toxic effects of tri-n-butyl phosphate (TnBP) and tricresyl phosphate (TCP) to Escherichia coli: Evidence from alterations in biomarker. ***Comp. Biochem. Physiol. C Toxicol. Pharmacol.*** 2025, 295, 110211.
20. Song X, Wu D, **Jin LN**, Xu Y, Chen X, Li Q*. Aerosol Toxicokinetics: A framework for unraveling toxicological dynamics from air to the body. ***Environ. Sci. Technol.*** 59, 6379–6386.
21. Liu M, Wang S, Zhou H, Liu H*, Huang D, Liu L, Li Q, Chen H, Lei Y, **Jin LN**, Zhang W. Thermal environment driving specific microbial species to form the visible biofilms on the UNESCO World Heritage Dazu Rock Carvings. ***Environ. Res.*** 2025, 276, 121510.

22. Yang S, Shao Z, **Jin LN**, Chen L, Zhang X, Fang M, Li D*, Chen J. Distinct baseline toxicity of volatile organic compounds (VOCs) in gaseous and liquid phases: Mixture effects and potential molecular mechanisms. ***J. Hazard. Mater.*** 485, 136890.
23. Li Q, Liu H*, Liu L, **Jin L**, Wang S, Ma T, Zhai Y, Xin J, Miao X, Fan Q, Feng C, Liu M. Source-pathway-sink framework to guide surface bacterial risk assessment and control in residential bathroom. ***Build. Environ.*** 2025, 270, 112541.
24. Ai T, Yu M, Dai Y, Yao R, **Jin LN**, Yu Y, Qiu X, Huang P, Zhu X, Sun J*. Translocation, Transformation, and Phytotoxicity of Sulfadiazine and N 4-Acetylsulfadiazine in Rice Plants. ***J. Agric. Food Chem.*** 2025, 73, 5067–5078.
25. Bai D, Chen T*, Xun J, Ma C, Luo H, Yang H, Cao C, Cao X, Cui J, Deng YP, Deng Z, Dong W, Dong W, Du J, Fang Q, Fang W, Fang Y, Fu F, Fu M, Fu YT, Gao H, Ge J, Gong Q, Gu L, Peng G, Guo Y, Hai T, Liu H, He J, He ZY, Hou H, Huang C, Ji S, Jiang C, Jiang GL, Jiang L, **Jin LN**, Kan Y, Kang D, Kou J, Lam KL, Li C, Li C, Li F, Li L, Li M, Li X, Li Ye, Li ZT, Liang J, Lin Y, Liu C, Liu D, Liu F, Liu J, Liu T, Liu T, Liu X, Liu Y, Liu B, Liu M, Lou W, Luan Y, Luo Y, Lv H, Ma T, Mai Z, Mo J, Niu D, Pan Z, Qi H, Shi Z, Song C, Sun F, Sun Y, Tian S, Wan X, Wang G, Wang H, Wang H, Wang H, Wang J, Wang J, Wang K, Wang L, Wang SK, Wang X, Wang Y, Xiao Z, Xing H, Xu Y, Yan S, Yang L, Yang S, Yang Y, Yao X, Yousuf S, Yu H, Lei Y, Yuan Z, Zeng M, Zhang C, Zhang C, Zhang H, Zhang J, Zhang N, Zhang T, Zhang YB, Zhang Y, Zhang Z, Zhou M, Zhou Y, Zhu C, Zhu L, Zhu Y, Zhu Z, Zou H, Zuo A, Dong W, Wen T*, Chen S*, Li G*, Gao Y*, Liu YX*. EasyMetagenome: A user-friendly and flexible pipeline for shotgun metagenomic analysis in microbiome research. ***iMeta*** 2025, 4, e70001.
26. Wu H, Yu M, Huang J, Zhang Q, Yao R, Liu H, Yu X, **Jin L**, Sun J*. Pollution characteristics and risk assessment of organophosphate esters in mollusks along the coast of South China. ***Mar. Pollut. Bull.*** 210, 117317.
27. Shi J, Tanentzap AJ, Sun Y, Wang J, Xing B, Rillig MC, Li C, **Jin L**, Wang F, Adyel, TM, Shang J, Wang X, Wang J*. Microplastics Generate Less Mineral Protection of Soil Carbon and More CO_2 Emissions. ***Adv. Sci.*** 2025, 12, 2409585.
28. Rillig MC*, Li C, **Jin LN**, Kim SW. Understanding the soil plastisphere and its environmental impacts. ***One Earth*** 7, 2095-2098.
29. Luo M*, Yang W, Bai L, Zhang L, Huang JW, Cao Y, Xie Y, Tong L, Zhang H, Yu L, Zhou LW, Shi Y, Yu P, Wang Z, Yuan Z, Zhang P, Zhang Y, Ju F, Zhang H, Wang F, Cui Y, Zhang J, Jia G, Wan D, Ruan C, Zeng Y, Wu P, Gao Z, Zhao W, Xu Y, Yu G, Tian C, **Jin LN**, Dai J*, Xia B*, Sun B*, Chen F*, Gao YZ*, Wang H*, Wang B*, Zhang D*, Cao X*, Wang H*, Huang T*. Artificial intelligence for life sciences: A comprehensive guide and future trends. ***Innov. Life*** 2025, 2, 100105.
30. He T, Xie J, **Jin L**, Zhao J, Zhang X, Liu H, Li X. Seasonal dynamics of the phage-bacterium linkage and associated antibiotic resistome in airborne $PM_{2.5}$ of urban areas. ***Environ. Int.*** 2024, 194, 109155.
31. Zhang Q, Yu M, Liu H, Tang J, Yu X, Wu H, **Jin L**, Sun J*. Efficient degradation of tetracycline by peroxymonosulfate activated with Ni-Co bimetallic oxide derived from bimetallic oxalate. ***Toxics*** 2024, 12, 816.
32. Li C, Liu J, Rillig MC, Bank MS, Fantke P, Zhu D, Zhu YG, **Jin LN***. What harmful microbes are lurking in the world's 7 billion tonnes of plastic waste? ***Nature*** 634, 30-32. **(Invited Comment)**
33. Jin X, Yao R, Yao S, Yu X, Tang J, Huang J, Yao R, **Jin L**, Liang Q, Sun J*. Metabolic perturbation and oxidative damage induced by tris(1,3-dichloro-2-propyl) phosphate

(TDCIPP) and tris(2-ethylhexyl) phosphate (TEHP) on Escherichia coli through integrative analyses of metabolome. ***Ecotoxicol. Environ. Saf.*** 2024, 283, 116797.

34. Adomako MO, **Jin L**, Li C, Liu J, Adu D, Seshie VI, Yu FH*. Mechanisms underpinning microplastic effects on the natural climate solutions of wetland ecosystems. ***Sci. Total Environ.*** 2024, 954, 176491

35. Yang S, Fang M, **Jin L**, Shao Z, Zhang X, Han Y, Du B, Yang D, Gu AZ, Chen Y, Li D*, Chen J. In situ and rapid toxicity assessment of air pollutions by self-assembly passive colonization hydrogel. ***Environ. Sci. Technol.*** DOI: 10.1021/acs.est.4c04807

36. Rillig MC*, Li C, del Rio AR, Zhu YG, **Jin L**. Elevated levels of antibiotic resistance genes as a factor of human-caused global environmental change. ***Glob. Change Biol.*** 2024, 30, e17419.

37. Li C, Li X, Bank MS, Dong T, Fang JKH, Leusch FDL, Rillig MC, Wang J, Wang L, Xia Y, Xu EX, Yang Y, Zhang C, Zhu D, Liu J*, **Jin L***. The "microplastome" – A holistic perspective to capture the real-world ecology of microplastics. ***Environ. Sci. Technol.*** 2024, 58, 4060–4069. **(Supplementary cover; ESI Top 1% Highly Cited Paper)**

38. Li C, Gillings MR, Zhang C, Chen Q, Zhu D, Wang J, Zhao K, Xu Q, Leung PHM, Li X, Liu J*, **Jin L***. Ecology and risks of the global plastisphere as a newly expanding microbial habitat. ***The Innovation*** 2024, 5, 100543. **(Featured article; Most Popular Paper Award)**

39. Zhu X, Yu Y, Meng W, Huang J, Su G, Zhong Y, Yu X, Sun J, **Jin L**, Peng P, Zhu L. Aerobic microbial transformation of fluorinated liquid crystal monomer: New pathways and mechanism. ***Environ. Sci. Technol.*** 2024, 58, 510–521.

40. Liu L, Xin J, Liu Z, Zeng W, Li Q, **Jin L**, You R, Liu M, Liu H. Are wearable local cooling devices effective in Chinese residential kitchens during hot summer? ***Build. Environ.*** 2024, 257, 111532.

41. Leung RKL, **Jin L**, Kong HK, Su C, Ren X, Liu X, Wang Y, Hu M, Kwok KWH, Wu RSS, Chui APY*, Fang JKH*. Development of a multiple-biomarker approach using the green-lipped mussel *Perna viridis* for marine pollution monitoring: a case study in Victoria Harbour, Hong Kong. ***Mar. Pollut. Bull.*** 2024, 201, 116086.

42. Lv B, Jiang C, Han Y, Wu D, **Jin L**, Zhu G, An T, Shi J. Diverse bacterial hosts and potential risk of antibiotic resistomes in ship ballast water revealed by metagenomic binning. ***Environ. Res.*** 2024, 206, 116684.

43. Li JY, Yao S, Mo Z, Miao Y, Chen Y, He W, **Jin L**, Tang W. Submerged plant-biochar composite system exhibits effective control over residual organic pollutants in the benthic organisms of aquaculture ponds. ***Environ. Pollut.*** 2024, 351, 124078.

44. Li Q, Yao S, Wen H, Li W, **Jin L**, Huang X. Improving lead phytoremediation using endophytic bacteria isolated from the pioneer plant *Ageratina adenophora* (*Spreng.*) from a mining area. ***Toxics*** 2024, 12, 291.

45. Luo W, Yao S, Huang J, Wu H, Zhou H, Du M, Jin L, Sun J. Distribution and risk assessment of organophosphate esters in agricultural soils and plants in the coastal areas of South China. ***Toxics*** 2024, 12, 286.

46. Ai T, Yao S, Yu Y, Peng K, **Jin L**, Zhu X, Zhou H, Huang J, Sun J, Zhu L. Transformation process and phytotoxicity of sulfamethoxazole and N4-acetyl-sulfamethoxazole in rice. ***Sci. Total Environ.*** 2024, 918, 170857.

47. Leung RKL, Chui APY, Liu X, Lee HW, Leung MML, Wang Y, Hu M, Kwok KWH, Wu RSS, **Jin L**, Kong HK, Fang JKH*. Bioaccumulation of pollutants in the green-lipped mussel *Perna viridis*: Assessing pollution abatement in Victoria Harbour and its adjacent aquaculture area, Hong Kong, and the minimal human health risks from mussel consumption. ***Mar. Pollut. Bull.*** 2024, 201, 116086.

48. Huang Z, Haile K, Gedefaw Lealem, Lau BWM, **Jin L**, Yip SP*, Huang CL*. Blood biomarkers as prognostic indicators for neurological injury in COVID-19 patients: A systematic review and meta-analysis. ***Int. J. Mol. Sci.*** 2023, 24, 15738.
49. Wu D, Xie J, Liu Y, **Jin L**, Li G, An T. Metagenomic and machine learning meta-analyses characterize airborne resistome features and their hosts in China megacities. ***Environ. Sci. Technol.*** 2023, 57, 16414–16423.
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53. Xing HH, Yu XL, Sun JT*, Lu GN, Zhu MF, Liang JH, **Jin L**, Zhu LZ. Interaction between phthalate ester and rice plants: Novel transformation pathways and metabolic-network perturbations. ***Environ. Sci. Technol.*** 2023, 57, 8870–8882.
54. Yu YY, Huang JH, **Jin L**, Yu M, Yu XL, Zhu XF, Sun JT*, Zhu LZ. Translocation and metabolism of tricresyl phosphate in rice and microbiome system: Isomer-specific processes and overlooked metabolites. ***Environ. Int.*** 2023, 172, 107793.
55. Yu Y, Yu X, Zhang D, **Jin L**, Huang J, Zhu X, Sun JT*, Yu M, Zhu LZ. Biotransformation of organophosphate esters by rice and rhizosphere microbiome: Multiple metabolic pathways, mechanism, and toxicity assessment. ***Environ. Sci. Technol.*** 2023, DOI: 10.1021/acs.est.2c07796
56. Li C, **Jin L**, Zhang C, Li S, Zhou T, Hua Z, Wang L, Ji S, Wang Y, Gan Y, Liu J*. Destabilized microbial networks with distinct performances of abundant and rare biospheres in maintaining networks under increasing salinity stress. ***iMeta*** 2023, 2, e79.
57. He TT[#], **Jin L**[#], Li XD* On the triad of air PM pollution, pathogenic bioaerosols, and lower respiratory infection. ***Environ. Geochem. Health*** 2023, 45, 1067-1077. **(Invited review)**
58. Zhao J, **Jin L**, Wu D, Xie JW, Li J, Fu XW, Cong ZY, Fu PQ, Zhang Y, Luo XS, Feng XB, Zhang G, Tiedje JM*, Li XD*. Global airborne bacterial community—interactions with Earth's microbiomes and anthropogenic activities. ***Proc. Natl. Acad. Sci. U.S.A.*** 2022, 119, e2204465119.
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63. Xie JW, **Jin L**, Wu D, Pruden A, Li XD* Inhalable antibiotic resistome from wastewater treatment plants to urban areas: Bacterial hosts, dissemination risks, and source contributions. ***Environ. Sci. Technol.*** 2022, 56, 7040–7051
64. **Jin L**, Xie JW, He TT, Wu D, Li XD* Airborne transmission as an integral environmental dimension of antimicrobial resistance through the "One Health" lens. ***Crit. Rev. Environ. Sci. Technol.*** 2022. 52, 4172–4193. **(Invited review)**
65. Wu D[#], Zheng HT[#], Li Q*, **Jin L**, Lyu R, Ding X, Huo YQ, Zhao B, Jiang JK, Chen JM, Li XD*, Wang SX*. Toxic potency-adjusted control of air pollution for solidfuel combustion. ***Nat. Energy.*** 2022, 7, 194–202.
66. He TT[#], **Jin L**[#], Xie JW, Yue SY, Fu PQ, Li XD* Intracellular and extracellular antibiotic resistance genes in airborne $PM_{2.5}$ for respiratory exposure in urban areas. ***Environ. Sci. Technol. Lett.*** 2021. 8, 128–134. **(Supplementary cover)**
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75. Li XD*, **Jin L**, Kan HD. Air pollution: a global problem needs local fixes. ***Nature*** 2019, 570, 437-439. **(Invited comment)**
76. **Jin L**, Xie JW, Wong CKC, Chan SKY, Abbaszade G, Schnelle-Kreis J, Zimmermann R, Li J, Zhang G, Fu PQ, Li XD*. Contributions of city-specific $PM_{2.5}$ to differential in vitro oxidative stress and toxicity implications between Beijing and Guangzhou of China. ***Environ. Sci. Technol.*** 2019, 53, 2881-2891**.**
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84. Xie JW[#], **Jin L**[#], Luo XS, Zhao Z, Li XD*. Seasonal disparities of airborne bacteria and associated antibiotic resistance genes in $PM_{2.5}$ between urban and rural sites. ***Environ. Sci. Technol. Lett.*** 2018, 5: 74–79. **(Best Paper Award in 2018)**
85. Luo XS*, Zhao Z, Xie JW, Luo J, Chen Y, Li HB, **Jin L**. Pulmonary bioaccessibility of trace metals in $PM_{2.5}$ from different megacities simulated by lung fluid extraction and DGT method. ***Chemosphere*** 2018, 218: 915-921.
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87. Yu N[#], Guo H[#], Yang J, **Jin L**, Wang X, Shi W, Zhang X, Yu H, Wei S*. Non-target and suspect screening of per- and polyfluoroalkyl substances in airborne particulate matter in China. ***Environ. Sci. Technol.*** 2018, 52: 8205–8214.
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89. Li JY, Shi WX, Li ZH, Chen YQ, Shao L, **Jin L***. Equilibrium sampling informs seafood tissue residue and remediation measures for pyrethroid insecticides in mariculture. ***Sci. Total Environ.*** 2018, 616-617: 639-646.
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91. **Jin L**, Luo XS, Fu PQ, Li XD*. Airborne particulate matter pollution in urban China: A chemical mixture perspective from sources to impacts. ***Natl. Sci. Rev.*** 2017, 4: 593–610.
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95. Li VWT, Tsui MMP, Chen X, Hui MNY, **Jin L**, Lam RHW, Yu RMK, Murphy MB, Cheng J, Lam PKS, Cheng SH*. Effects of 4-methylbenzylidene camphor (4-MBC) on neuronal and muscular development in zebrafish (*Danio rerio*) embryos. ***Environ. Sci. Pollut. Res.*** 2016, 23: 8275-8285.

96. **Jin L**, Escher BI*, Limpus CJ, Gaus C. Coupling passive sampling and in vitro bioassays to screen combined effect of bioaccumulative chemicals in blood of marine turtles. ***Chemosphere*** 2015, 138: 292-299.

97. **Jin L**, Gaus C, Escher BI*. Adaptive stress response pathways induced by environmental mixtures of bioaccumulative chemicals in dugongs. ***Environ. Sci. Technol.*** 2015, 49: 6963–6973.

98. Li JY, Cui Y, Su L, Chen YQ, **Jin L***. Polycyclic aromatic hydrocarbons in the largest deepwater port of East China Sea: impact of port construction and operation. ***Environ. Sci. Pollut. Res.*** 2015, 22: 12355-12365.

99. Li J, Yu N, Zhang B, **Jin L**, Li M, Hu M, Zhang X, Wei S*, Yu HX*. Occurrence of organophosphate flame retardants in drinking water from China. ***Water Res.*** 2014, 54: 53-61.

100. Li JY*, Tang JYM, **Jin L**, Escher BI. Understanding bioavailability and toxicity of sediment-associated contaminants by combining passive sampling with in vitro bioassays in an urban river catchment. ***Environ. Toxicol. Chem.*** 2013, 32: 2888-2896.

101. **Jin L***, Gaus C, van Mourik L, Escher BI. Applicability of passive sampling to bioanalytical screening of bioaccumulative chemicals in marine wildlife. ***Environ. Sci. Technol.*** 2013, 47: 7982-7988.

102. Leung HW, **Jin L**, Wei S, Tsui MMP, Zhou BS, Jiao L, Cheung PK, Chun YK, Murphy MB*, Lam PKS*. Pharmaceuticals in tap water: Human health risk assessment and proposed monitoring framework in China. ***Environ. Health Perspect.*** 2013, 121: 839-846.

103. Chan WH, Mak YL, Wu JJ, **Jin L**, Sit WH, Lam JCW, de Mitcheson S, Chan LL, Lam PKS, Murphy MB*. Spatial distribution of ciguateric fish in Republic of Kiribati. ***Chemosphere*** 2011, 84: 117-123.

104. Mak YL, Taniyasu S, Yeung LWY, Lu G, **Jin L**, Yang Y, Lam PKS*, Kannan K, Yamashita N*. Perfluorinated compounds in tap water from China and several other countries. ***Environ. Sci. Technol.*** 2009, 43: 4824-4829.

Editorials

1. **Jin L**, Li XD*. Materials Science in the Quest for Sustainability. ***ACS Environ. Au*** 2024, 4, 54-55.

2. **Jin L**, Apte JS, Miller SL, Wang SX, Tao S, Jiang GB, Li XD*. Global endeavors to address the health effects of urban air pollution. ***Environ. Sci. Technol.*** 2022, 56, 6793-6798.

3. **Jin L**, Li XD*. *ACS Environmental Au*—Gold Open Access toward a Greener Future. ***ACS Environ. Au*** 2022, 2, 74-76.

Book chapters

1. **Jin L**, Jiang GB, Li XD*. 2020. Transforming Environmental Chemistry and Toxicology to Meet the Anthropocene Sustainability Challenges Beyond Silent Spring. (eds, GB Jiang,

XD Li) A New Paradigm for Environmental Chemistry and Toxicology, Springer Nature, Singapore. pp 263-276.

2. **Jin L**, Gaus C, Escher BI*. **2015**. Bioanalytical approaches to understanding the toxicological implications of mixtures of persistent organic pollutants in marine wildlife. (ed., E.Y. Zeng) Persistent Organic Pollutants (POPs): Analytical Techniques, Environmental Fate and Biological Effects. Elsevier, UK. pp 650.
3. **Jin L,** Murphy MB, Lam JCW, Lam PKS*, **2011**, Use of bioassays in Environmental Monitoring (eds, CX Wang, LZ Zhu, GB Jiang) Environmental Chemistry, Science Press, Beijing, China. (In Chinese)
4. **Jin L**, Lam JCW, Murphy MB, Lam PKS*. **2011**. Temporal trends of polybrominated diphenyl ethers and hexabromocyclododecanes in marine mammals with special reference to Hong Kong, South China. (eds., B.G. Loganathan and P.K.S. Lam) Global Contamination Trends of Persistent Organic Chemicals. Taylor & Francis, Washington DC.
5. Murphy MB, **Jin L**, Lam PKS*. **2010**. Temporal trends of organochlorines and trace elements in marine mammals from Hong Kong. (eds., T. Isobe, K. Nomiyama, A. Subramanian and S. Tanabe) Interdisciplinary studies on environmental Chemistry – Environmental Specimen Bank. TERRAPUB, Japan.

Technical reports

1. Gaus C, Grant S, **Jin NL**, Goot K, Chen L, Villa AC, Neugebauer F, Qi L, Limpus C. **2012**. Haematology, blood chemistry and environmental contaminants in green turtle blood from the Gladstone Port, Report to: Gladstone Ports Corporation Limited and Department of Environment and Resource Management.
2. Poulsen A, Leusch F, Goodwin M, Tang J, Maylin E, **Jin L**, Escher BI. **2011.** Development of bio-analytical techniques to assess the potential human health impacts of recycled water. Part A: Literature review of in vitro bioassays for assessing adverse effects of trace organic pollutants in water. Report number: WateReuse-10-07, Affiliation: WateReuse Research Foundation.

Conference & Symposium Organisation

1. Session Chair, Session on Early Warning and Control of Bioaerosols, The 9th National Bioaerosol Conference, 21-23 March 2025
2. Session Chair, Session on Environmental Sustainability and Ecological Management, Global Chinese Environmental Protection Conference 2024, 24-27 May 2024
3. Session Convener, Session on Impacts of Microbe-Pollutant Interplay in the Environment, The 9th Youth Forum on Earth Sciences, 17-20 May 2024
4. Organizing committee, The 1st International Conference on Bacteria and Global Health, 18-20 January 2023
5. Co-chair, Training Session on Pollution Assessment and Management of East Asian Sea Congress 2021, 26 November 2021
6. Organising Committee and Session Chair, The 1st International Symposium on Marine Science and Engineering for Young Scientists and Postgraduates, 12-14 July 2021

Presentations

Invited Talks & Lectures

1. *"One Health"-oriented research on chemical-microbial interplay in the environment, Hunan Agricultural University, 13 July 2025*
2. *"One Health"-oriented research on chemical-microbial interplay in the environment, Shantou University, 21 October 2024*
3. *Identifying low-concentration but high-potency toxic components in $PM_{2.5}$.* ABaCAS 2024, Shanghai, 20-22 September 2024.
4. *"One Health"-oriented research on chemical-microbial interplay in the environment.* Institute of Geochemistry Chinese Academy of Sciences, 9 July 2024.
5. *Airborne transmission as an integral environmental dimension of antimicrobial resistance through the "One Health" lens.* The 1st International Conference on Bacteria and Global Health, Shenzhen, China, 20 January 2024.
6. *Anthropogenic impacts on coastal bacteriome and antibiotic resistome.* 10th International Conference on Marine Pollution and Ecotoxicology, Hong Kong, 6 January 2024.
7. *"One Health"-oriented research on chemical-microbial interplay in the environment.* Southern University of Science and Technology, 8 January 2024.
8. *Quantitative contribution of legacy and emerging pollutants to mixture effects in marine and atmospheric environments.* Chongqing University, 27 December 2023
9. *"One Health"-oriented research on chemical-microbial interplay in the environment.* Southwest University, China, 26 December 2023
10. *Microbial ecology and risks of the global plastisphere.* Yunnan University, 15 December 2023
11. *Contribution of endotoxins to $PM_{2.5}$ in vitro bioactivities.* University of Rostock, Germany, 6 December 2023
12. *Dissecting the toxic components driving the in vitro toxicity of biomass burning aerosols.* The International Expert Workshop on Volatile Organic Compounds 2023, Hong Kong, 29 November 2023
13. *"Clean Air Education" lecture to secondary students from St Francis Xavier's School Tsuen Wan,* The Hong Kong Polytechnic University, Hong Kong, 22 November 2023
14. *Community structure and source tracking of coastal airborne bacteria and fungi.* 11th National Conference on Environmental Chemistry, Wuhan, China, 20 November 2023
15. *Air pollution, pathogenic bioaerosols, and respiratory infection.* 11th National Conference on Indoor Environment and Health, Hohhot, China, 17 June 2023
16. *Identifying major toxicity drivers in the coastal habitat of endangered marine megafauna using species-specific cells.* East Asia Marine Cooperation Platform Qingdao Forum, Qingdao, China, June 2023
17. *Airborne transmission of antimicrobial resistance.* 2022 Annual Meeting of Division of Atmospheric Environment, Chinese Society of Environmental Sciences, 22 November 2022
18. *Airborne transmission of antimicrobial resistance.* Chongqing University, 14 October 2022
19. *Air pollution, pathogenic bioaerosols, and respiratory infection.* East China Normal University, 20 September 2022
20. *Implications of antibiotic resistomes in mariculture for coastal environmental quality and seafood safety.* 1st International Academic Forum on Marine Environmental Pollution Prevention and Marine Ecological Civilization Construction, Shanghai, 5 December 2021
21. *Toxicity assessment of chemical mixtures.* Training Session on Pollution Assessment and Management of East Asian Sea Congress 2021, Cambodia, 26 November 2021

22. *Advancing bioanalytical approaches to understanding health impacts of chemical mixtures in marine wildlife.* The 1st International Symposium on Marine Science and Engineering for Young Scientists and Postgraduates, Hong Kong, 12 July 2021
23. *Emerging approaches to understanding health impacts of pollutant cocktails in marine mammals.* 2021 International Cetacean Symposium, Hong Kong, 11 June 2021
24. *Hydrophobic Organic Contaminants: Application of Passive Sampling and Assessment of Mixture Toxicity.* Shanghai Ocean University, 10 April 2015

Selected Conference Presentations

1. Society of Environmental Toxicology and Chemistry (SETAC) Asia Pacific 14th Biennial Meeting. Tianjin, China, September 2024.
   Less is more: Challenges in identifying low-concentration but high-potency toxic components in airborne particulate matter pollution [Oral]
2. The 11th National Conference on Environmental Chemistry. Wuhan, China, November 2023
   Identifying major toxicity drivers in the waters of the Indo-Pacific finless porpoise using species-specific cells [Oral]
   Implications of antibiotic resistomes in mariculture for coastal environmental quality and seafood safety [Oral]
3. The 8th National Conference on Ecotoxicology, Shaoxing, China, October 2023.
   Identifying major toxicity drivers in the waters of the Indo-Pacific finless porpoise using species-specific cells [Oral]
4. National Conference on Environmental Chemistry, Tianjin, China, August 2019
   Contribution of metals, PAHs and endotoxins to $PM_{2.5}$-induced oxidative stress [Oral]
5. International High-Level Forum on Toxicology and Health of Air Pollution, Beijing, China, October 2018
   Airborne bacteria and associated antibiotic resistance genes (ARGs) in $PM_{2.5}$ across China [Poster]
6. National Conference on Environmental Chemistry, Hangzhou, China, October 2017
   Contribution of toxic components to $PM_{2.5}$-induced oxidative stress in human lung cells [Oral]
7. Gordon Research Conference on Marine Molecular Ecology, Hong Kong, August 2015
   Molecular approaches to assessing the biological cycling and mixture effects of chemical stressors in the marine ecosystem [Poster]
8. International Conference on Environmental Specimen Banks, Shanghai, China, October 2013
   Novel tools to facilitate effect screening of bioaccumulative chemicals in marine wildlife archives [Oral]
9. SETAC Australasia, Melbourne, Australia, October 2013
   Toxic potential of chemical cocktails in dugongs: A decade-long story [Oral]
10. International Symposium on Halogenated Persistent Organic Pollutants (DIOXIN), Cairns, Australia, August 2012
    Testing the applicability of passive sampling to chemical exposure and effect screening in marine wildlife [Oral]
11. SETAC Asia Pacific Annual Meeting, Guangzhou, China, 4–7 June 2010
    Endocrine-disrupting activity and neurotoxic effect of 4-methylbenzylidene-camphor, a common sunscreen ingredient [Oral]

12. Copenhagen Workshop on Endocrine Disrupters, Copenhagen, Denmark, May 2009
Modulation of adrenocortical hormone production by UV filters in the H295R cell line [Oral]

Teaching & Supervision Experience

Instructor – The Hong Kong Polytechnic University

1. Environmental Engineering (CSE29964)
2. Environmental Impact Assessment – Theory and Practice (CSE40462)
3. Environmental Impact Assessment (CSE508)
4. Risk Assessment and Management (CSE532)
5. Environmental Management Systems (CSE539)

Supervision – The Hong Kong Polytechnic University

6 Postdoctoral Fellows, 11 PhD students, 11 MSc dissertations, 20 undergraduate final year projects, 2 Undergraduate Research and Innovation Scheme projects, 10 undergraduate and MSc part-time student assistants, and 9 summer interns

Teaching Grants

1. Ten Thousand People Scheme (滬港城市氣溶膠耐藥基因污染及健康風險研究 Antibiotic Resistance Gene Pollution and Health Risks in Urban Aerosols of Hong Kong and Shanghai), Ministry of Education, 2024-2025
2. Ten Thousand People Scheme (“太湖-浦江”水域特徵耐藥菌群污染及潛在風險研究（線上線下相結合）Pollution and Risks of Characteristic Antibiotic-Resistant Bacterial Communities in the “Taihu Lake–Huangpu River” Waters (Hybrid Online–Offline Study)), Ministry of Education, 2023

Journal Review (17)

Lancet Planetary Health, Global Change Biology, National Science Review, Environmental Science and Technology, Environmental Science and Technology Letters, Water Research, Environment International, ACS Environmental Au, Journal of Hazardous Materials, Environmental Pollution, ACS Omega, Science of the Total Environment, Chemosphere, RSC Advances, Royal Society Open Science, Environmental Toxicology and Chemistry, Journal of Environmental Sciences, Aerosol and Air Quality Research, Regional Studies in Marine Science

Grant Review (1)

Czech Science Foundation, 2015

Professional Affiliation

Member, American Chemical Society (ACS)
Member, International Society of Microbial Ecology (ISME)
Member, Society of Environmental Toxicology and Chemistry (SETAC)
Member, State Key Laboratory of Marine Environmental Health (formerly State Key Laboratory of Marine Pollution), City University of Hong Kong

Member, Hong Kong Branch of Southern Laboratory of Ocean Science and Engineering Guangdong Laboratory (Guangzhou), The Hong Kong University of Science and Technology