

12 Prof. Jidong Gu



Name: Jidong Gu

Organization: University of Hong Kong

E-mail: jidonggu.hku@gmail.com

Education

Ph.D. Virginia Polytechnic Institute and State University, Blacksburg, USA, 1991

Work Experience

Lecturer, Harvard University, 1993-1998

Professor, University of Hong Kong, 1999-present

Research Interests

Environmental microbial ecology

Microbial degradation and environmental pollutants translational research

Services & Awards

Board Member: 《Ecotoxicology》、《Environmental Geochemistry and Health》、《International Biodeterioration & Biodegradation》、《Microbes and the Environment》；《Biodegradation》、《Ecologic Science》、《Journal of Polymers and the Environment》、《The Open Proteomics Journal》

Major Publications

- Li, M., Hong, Y. G., Cao, H. L., & Gu, J. D. (2011). Mangrove trees affect the community structure and distribution of anammox bacteria at an anthropogenic-polluted mangrove in the pearl river delta reflected by 16s rna and hydrazine oxidoreductase (hzo) encoding gene analyses. *Ecotoxicology*, 20(8), 1780-90.
- Li, M., Ford, T., Li, X., & Gu, J. D. (2011). Cytochrome cd1-containing nitrite reductase encoding gene nirs as a new functional biomarker for detection of anaerobic ammonium oxidizing (anammox) bacteria. *Environmental Science & Technology*, 45(8), 3547-53.
- Li, M., & Gu, J. D. (2011). Advances in methods for detection of anaerobic ammonium oxidizing (anammox) bacteria. *Applied Microbiology & Biotechnology*, 90(4), 1241-52.
- Cao, H., Hong, Y., Li, M., & Gu, J. D. (2011). Phylogenetic diversity and ecological pattern of ammonia-oxidizing archaea in the surface sediments of the western pacific. *Microbial Ecology*, 62(4), 813-23.
- Cao, H., Li, M., Dang, H., & Gu, J. D. (2011). Chapter two—responses of aerobic and anaerobic ammonia/ammonium-oxidizing microorganisms to anthropogenic pollution in coastal marine environments. *Methods in Enzymology*, 496(4), 35-62.
- Li, M., Cao, H., Hong, Y. G., & Gu, J. D. (2011). Seasonal dynamics of anammox bacteria in estuarial sediment of the mai po nature reserve revealed by analyzing the 16s rna and hydrazine oxidoreductase (hzo) genes. *Microbes & Environments*, 26(1), 15-22.

- Cao, H., Hong, Y., Li, M., & Gu, J. D. (2011). Diversity and abundance of ammonia-oxidizing prokaryotes in sediments from the coastal pearl river estuary to the south china sea. *Antonie Van Leeuwenhoek*, 100(4), 545-56.
- Li, M., Cao, H., Hong, Y., & Gu, J. D. (2013). Using the variation of anammox bacteria community structures as a bio-indicator for anthropogenic/terrestrial nitrogen inputs in the pearl river delta (prd). *Applied Microbiology & Biotechnology*, 97(22), 9875-83.
- Li, M., & Gu, J. D. (2013). Community structure and transcript responses of anammox bacteria, aoa, and aob in mangrove sediment microcosms amended with ammonium and nitrite. *Applied Microbiology & Biotechnology*, 97(22), 9859-74.
- Huiluo Cao, Yiguo Hong, Meng Li, & JiDong Gu. (2012). Lower abundance of ammonia-oxidizing archaea than ammonia-oxidizing bacteria detected in the subsurface sediments of the northern south china sea. *Geomicrobiology Journal*, 29(4), 332-339.
- M. Li , Hong, Y., Cao, H., Klotz, M. G., & J.-D. Gu. (2013). Diversity, abundance, and distribution of no-forming nitrite reductase–encoding genes in deep-sea subsurface sediments of the south china sea. *Geobiology*, 11(1), 170-179.
- Li, M., Hong, Y., Cao, H., & Gu, J. D. (2013). Community structures and distribution of anaerobic ammonium oxidizing and nirs -encoding nitrite-reducing bacteria in surface sediments of the south china sea. *Microbial Ecology*, 66(2), 281-296.
- Hong, Yiguo, Cao, Huiluo, Li, Meng, Gu, JiDong, Manna, Adhar C Manna, & Jiang, Chengjian. (2014). Anammoxosome in anaerobic ammonium-oxidizing bacteria – was it originated from endosymbiosis?. *American Journal of Current Microbiology*, 2(1).
- Meng, L., & Gu, J. D. (2016). The diversity and distribution of anammox bacteria in the marine aquaculture zones. *Applied Microbiology & Biotechnology*, 1-11.