

Department: School of Resources and Environmental Engineering Professional field: Environmental engineering, renewable energy chemical engineering and their cross-disciplines E-mail: dinglu@ecust.edu.cn

Profile

I received support from the long-term project of the Shanghai "Thousand Talents Plan"

Shanghai International Talent Reservoir Project in 2020

Shanghai Pujiang Talent Project

Academic position: Editorial board of Journal of Environmental Accounting and Management; Scientific editor of The International Journal of Coal Science and Technology.

Guest Editor of VSI: Green to Blue Economy in Energy journal.

Between 2016 and 2019, I worked in Tokyo Institute of Technology and Luleå University of Technology as a post-doctor researcher.

Participated in more than 20 international conferences and international symposiums, and delivered 13 oral reports so far. Won the best oral presentation awards at International Conference on Applied Energy 2017, International Conference on Applied Energy 2019 and The 1st International Conference on Energy and Environment. Invited to give a keynote speech at the International Workshop on Advances in Cleaner Production in November 2019, and another keynote speech at a high-end international engineering technology strategy forum on "Environmental Ecological Security and Green Development in Guangdong-Hong Kong-Macao Greater Bay Area" of the Chinese Academy of Engineering in December 2020.

Long-term commitment to basic research and related engineering technology development of biomass/coal gasification and resource utilization of solid wastes.

Research Field

My research profile covers the following aspects:

1. Solid waste treatment by using hydrothermal technology for producing fuel, activated carbon, or fertilizer.

2. Biomass/coal gasification for H2/power generation

- 3. Application of catalysis in producing high value chemicals and fuels from biomass materials
- 4. CO2 capture and storage

I am devoting to the triad solution for independent energy production, and urban biomass waste treatment, and CO2 reduction.

Research results and selected published papers

Published over 50 journal papers. Two journal papers were ESI Highly cited papers, and another one paper was ESI hot paper, 7 authorized patents.

International cooperation

Jointly applied for the national key R&D international cooperation project, and the Shanghai 2020 "Science and Technology Innovation Action Plan"-"One Belt One Road" international cooperation project with researchers from Suez Canal University in Egypt, Agricultural University of Thailand, and Mindanao State University-Iligan Institute of Technology in the Philippines. Aiming at the research field of low-quality biomass hydrothermal carbonization and pyrolysis gasification, a total of 13 cooperative articles have been published with the international top universities and the "Belt and Road" partner university team.