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Research Interests

- Plant nutrition
- Chemical engineering and process
- Production technology of controlled release fertilizer
- Fertilizer formulation and fertilization
- Organic fertilizer

Publication

Impact of fertilization schemes with different ratios of urea to controlled release nitrogen fertilizer on environmental sustainability, nitrogen use efficiency and economic benefit of rice production: A study case from Southwest China, Journal of Cleaner Production, 2021, DOI: 10.1016/j.jclepro.2021.126198

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Performance comparison of cement production before and after implementing heat recovery power generation based on emergy analysis and economic evaluation: A case from China, Journal of Cleaner Production, 2018, DOI: 10.1016/j.jclepro.2021.125901

Nitrogen release characteristics of polyethylene-coated controlled-release fertilizers and their dependence on membrane pore structure, Particuology, 2017

An asymmetric membrane of polyimide 6FDA-BDAF and its pervaporation desulfurization for n-heptane/thiophene mixtures, Journal of Integrative Agriculture, 2015, DOI: 10.1016/S2095-3119(15)61213-8

Emergy evaluation and economic analysis of compound fertilizer production: A case study from China, Journal of Cleaner Production, 2020, DOI: 10.1016/j.jclepro.2020.121095

Research on permeability coefficient of a polyethylene controlled release film coating for urea and relevant nutrient release pathways, PolymerTesting, 2017, DOI: 10.1016/j.polymertesting.2017.01.019

Morphological structure and pore property of polyethylene controlled-release film sprayed on urea(CN), Journal of Plant Nutrition and Fertilizers, 2019, DOI: 10.11674/zwyf.19315

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Effect of components of polyethylene solution on release characteristics of controlled release fertilizer(CN), Chemical Engineering (China), 2009

Effect of atomization on membrane structure and characteristics during manufacture of polymer coated controlled release fertilizer(CN), Journal of Chemical Industry and Engineering (China), 2008

New fertilizers(CN), Beijing/Science Press, 2013, ISBN: 9787030388322

Fertilization system and soil sustainable development(CN), Beijing/Science Press, 2013, ISBN: 9787030357649