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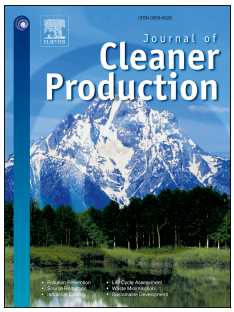

Heterogeneity evaluation of China's provincial energy technology based on large-scale technical text data mining

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Heterogeneity evaluation of China's provincial energy technology based on large-scale technical text data mining

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Abstract: The rapid growth of the Chinese economy has resulted in great pressure on the environment: technological innovation is the fundamental pathway for improvement the efficiency in the process of energy saving and emission reduction. Based on large-scale technical text data in 31 Chinese provinces from 1985 to 2017, the Latent Dirichlet Allocation (LDA) topic model is introduced to technology content analysis. Then the LDA provincial-topic model is constructed, the subject and object of energy technology are jointly modelled, and the relationship between technology subject and technology have been region studied. The energy saving and emission reduction technology research direction in 31 provinces of China in the past 30 years has been examined: the status and level of technical reserves in each province have been evaluated, and the heterogeneity of provincial patent subject content has been compared. The

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