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New Research Progress on Synthesis and Properities of Eco-Friendly Insulating Gas Heptafluoroisobutyronitrile(I-C4F7N) .1967 Yuewei Wu (State Grid Shaanxi Electric Power Research Institute), Xiaochun Bai (State Grid Shaanxi Electric Power Research Institute), Jian Wu (State Grid Shaanxi Electric Power Research Institute), Pinghai Lv (State Grid Shaanxi Electric Power Research Institute), De Ding (State Grid Shaanxi Electric Power Research Institute), and Xiaobing Yu (State Grid Shaanxi Electric Power Research Institute)
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