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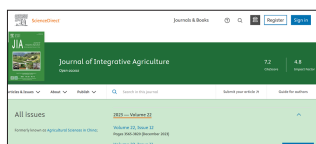
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Cover Story Digital technologies hold the potential to significantly contribute to the sustainable transformation of agriculture by improving efficiency and productivity, reducing labor and chemical inputs, enhancing access to markets, and increasing farmers' income and welfare. However, smallholders in China and many developing countries face challenges in taking advantage of digital technologies, as small farmers usually lack the necessary digital literacy and knowledge, financial capital, and are constrained by farm size and high land fragmentation. There is an urgent need for researchers and policymakers to improve their understanding of the adoption and impacts of agricultural digitalization among smallholder farmers. Against this backdrop, this special focus, with six empirical studies, provides a glimpse into the dynamic and emerging field of agricultural digitalization in smallholder contexts from three aspects: adoption behaviors, digital literacy, and impacts. The cover image, illustrating the agricultural digitalization in a smallholder landscape, was produced by Dr. Hua Zhang and Dr. Zhanli Sun, IAMO, Germany, with AI assistance. For more details, please see pages 2183–2267.