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On the Cover: The modular assembly of genetic parts into synthetic circuits of different complexity enables the engineering of novel functionalities as well as the understanding of complex signaling and metabolic networks in plants. Synthetic biology offers new possibilities to revolutionize the field of plant biology by improving and expanding endogenous properties of the plant and developing novel traits. In the future, these "smart plants" will contribute to enhanced crop productivity and thereby help overcoming the global challenge of feeding an ever-growing world population. Image credit: Justine Braguy.

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