Interactions between microbes and plants can vary widely, depending upon the context and the partners of the interaction. An Editorial on page 691 and a collection of Perspectives starting on page 742 discuss recent advances in our understanding of the biochemistry, signaling, and ecosystem dynamics that reflect how microbes and plants interact.

Illustration: Chris Bickel
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758 A Gene Necessary for Reproductive Suppression in Termites
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759 Representation of Confidence Associated with a Decision by Neurons in the Parietal Cortex
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Neurons in the primate parietal cortex encode information required to make a decision and also the certainty of that choice.

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764 Characterization of Multipartite Entanglement for One Photon Shared Among Four Optical Modes
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Sharing a single photon between four optical modes creates entangled states that could be used in quantum information processing.

768 N-Doping of Graphene Through Electrothermal Reactions with Ammonia
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The edges of graphene nanoribbons incorporate nitrogen atoms after heating in an atmosphere of ammonia.

772 An Experimental Design Method Leading to Chemical Turing Patterns
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Three design criteria were used to create sustained stationary patterns in the thiourea-iodate-sulfite reaction system.

775 An Observation Linking the Origin of Plasmaspheric Hiss to Discrete Chorus Emissions
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The radio waves that remove energetic electrons from Earth’s radiation belts originate outside the plasmasphere.

777 The Role of Aerosols in the Evolution of Tropical North Atlantic Ocean Temperature Anomalies
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Changes in tropical North Atlantic sea surface temperatures are caused by variability in atmospheric aerosol abundances.

781 UV Absorption Cross Sections of ClOOCI Are Consistent with Ozone Degradation Models
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784 Host Inhibition of a Bacterial Virulence Effector Triggers Immunity to Infection
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787 Development of a Second-Generation Antiandrogen for Treatment of Advanced Prostate Cancer
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791 Basin-Scale Coherence in Phenology of Shrimps and Phytoplankton in the North Atlantic Ocean
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Shrimp reproduction is primed by bottom temperature and not directly by cues from the spring phytoplankton bloom.

794 Apicomplexan Parasites Co-Opt Host Calpains to Facilitate Their Escape from Infected Cells
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Human induced pluripotent stem cells can be generated without integration of exogenous DNA into their genomes.

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804 Mammalian Expression of Infrared Fluorescent Proteins Engineered from a Bacterial Phytochrome
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811 Movement Intention After Parietal Cortex Stimulation in Humans
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Controlling mitochondrial fission.

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