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Image: Robert Smock and Lila Gierasch

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Genome-Wide Analysis in Vivo of Translation with Nucleotide Resolution Using Ribosome Profiling
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Profiling the position of ribosomes on messenger RNA allows rapid, high-precision investigation of cellular protein translation.

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Elastic Shear Anisotropy of Ferropericlase in Earth’s Lower Mantle
H. Marquardt et al.

A minor phase of the deep mantle causes marked differences in seismic travel times in different directions.

A Great Earthquake Rupture Across a Rapidly Evolving Three-Plate Boundary
K. P. Furlong et al.

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Curved Plasma Channel Generation Using Ultraintense Airy Beams
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Solar Power Wires Based on Organic Photovoltaic Materials
M. R. Lee et al.

A transparent polymer coating allows optics to compensate for the shadowing effects of a metal wire electrode.

Running Droplets of Gallium from Evaporation of Gallium Arsenide
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A broadly neutralizing antibody binds the hemagglutinin stalk of pathogenic influenza viruses to block membrane fusion.

Wingbeat Time and the Scaling of Passive Rotational Damping in Flapping Flight
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Morphology and flapping motion are combined in a model that predicts turn dynamics for flying animals ranging in size from fruit flies to cockatoos.

Coding-Sequence Determinants of Gene Expression in \textit{Escherichia coli}
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Leucine-Rich Repeat Protein Complex Activates Mosquito Complement in Defense Against \textit{Plasmodium} Parasites
M. Povelones et al.

A family of molecules, apparently unique to mosquitoes, binds to invading parasites and initiates innate immune responses.

Glioma-Derived Mutations in \textit{IDH1} Dominantly Inhibit \textit{IDH1} Catalytic Activity and Induce HIF-1α
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Demonstration of Genetic Exchange During Cyclical Development of \textit{Leishmania} in the Sand Fly Vector
N. S. Akopyants et al.

Diversity among \textit{Leishmania} parasites is not just a product of divergent mutation but also of genetic exchange.

Green Evolution and Dynamic Adaptations Revealed by Genomes of the Marine Picoeukaryotes \textit{Micromonas}
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