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Wind turbines near the Great Wall in Shanxi, China. The Chinese government has aggressively fostered wind power development and tripled its target for the year 2020 to 100 gigawatts of installed capacity. Combining assimilated meteorology with current turbine technologies and concession policies, McElroy et al. (page 1378) report on the total wind power potential of China and its prospects for reducing China’s CO₂ emissions.

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BREVIA
1359 30,000-Year-Old Wild Flax Fibers
E. Kvavadze et al.
Dyed flax fibers from 30,000 years ago show that humans in the Caucasus were making colored twine at that time.

RESEARCH ARTICLE
1360 Entropy Landscape of Phase Formation Associated with Quantum Criticality in Sr$_3$Ru$_2$O$_7$
A. W. Rost et al.
The thermodynamic properties of strongly correlated electron systems can be probed near their quantum critical point.

REPORTS
1364 Laser Tunnel Ionization from Multiple Orbitals in HCl
H. Akagi et al.
Ion imaging shows that electrons can tunnel out of states below the highest occupied orbital of a molecule.

1367 Extremely Efficient Multiple Electron-Hole Pair Generation in Carbon Nanotube Photodiodes
N. M. Gabor et al.
The decay of photexcited electrons in a carbon nanotube device creates multiple pairs of charge carriers.

1371 Underplating in the Himalaya-Tibet Collision Zone Revealed by the Hi-CLIMB Experiment
J. Nábe ˘lek et al.
A seismic study delineates the position and local thickening of the Indian plate underlying the Himalayas and southern Tibet.

1374 Dynamic Processes Governing Lower-Tropospheric HDO/H$_2$O Ratios as Observed from Space and Ground
C. Frankenberg et al.
Tropospheric distributions of light and heavy water reveal previously unrecognized features of atmospheric circulation.

1378 Potential for Wind-Generated Electricity in China
M. B. McElroy et al.
Wind power could accommodate the electricity demand projected for China in 2030, which is about twice the current level of consumption.

1380 Endogenous Nitric Oxide Protects Bacteria Against a Wide Spectrum of Antibiotics
I. Gusarov et al.
Bacteria deploy nitric oxide synthases to counter oxidative stress from natural toxins and antibiotic drugs.

1384 A Dimeric Structure for Archaeal Box C/D Small Ribonucleoproteins
F. Bleichert et al.
Electron microscopy and single-particle analysis show that a small nuclear ribonucleoprotein forms a dimeric structure.

1388 An Acidic Matrix Protein, Pif, Is a Key Macromolecule for Nacre Formation
M. Suzuki et al.
A matrix protein is identified that regulates nacre formation in the Japanese pearl oyster.

1391 Tuned for Transposition: Molecular Determinants Underlying the Hyperactivity of a Stowaway MITE
G. Yang et al.
A transposable element in rice enhances its own transposition using another unrelated element’s transposase.

1394 The RNA-Binding Protein NANOS2 Is Required to Maintain Murine Spermatogonial Stem Cells
A. Sada et al.
Cell lineage tracing reveals the factor that preserves stem cells in the undifferentiated state in the mouse male germ line.

1398 Activation of Rho GTPases by DOCK Exchange Factors Is Mediated by a Nucleotide Sensor
J. Yang et al.
Crystal structures reveal the mechanism of a nucleotide exchange factor regulating cytoskeleton and cell signaling networks.

1402 A G Protein–Coupled Receptor Is Essential for Schwann Cells to Initiate Myelination
K. R. Monk et al.
A G protein–coupled receptor family member elevates cyclic adenosine monophosphate in Schwann cells to trigger myelination in zebrafish.

1405 Energy-Efficient Action Potentials in Hippocampal Mossy Fibers
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Mammalian neurons have developed highly efficient ways to limit energy consumption while propagating neuronal information.

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A newly identified insect looks just like a malaria mosquito. May complicate control efforts when startled birds take off. Special feathers create warning noises. Pigeon wings sound the alarm. Duplicated genes may make much of life’s diversity possible. Regulator of chromosome condensation 2 is a component of fibronectin-activated signaling pathways that regulate cell migration. EGFR and downstream signaling networks contribute to the hallmark characteristics of glioma. EGFR and downstream signaling networks contribute to the hallmark characteristics of glioma. Changes in membrane composition stimulate fer activity to regulate actin remodeling and drive cell migration. 

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The Transmissibility and Control of Pandemic Influenza A (H1N1) Virus

Y. Yang et al.

A detailed picture of the pandemic potential of swine-origin influenza offers guidance for effective mitigation strategies.

10.1126/science.1177373

>> Science Podcast

Using Neural Measures of Economic Value to Solve the Public Goods Free-Rider Problem

I. Krajbich et al.

Neuroimaging measures of individuals’ valuation of public goods suggest a path to a coherent public goods economy.

10.1126/science.1177302

RNAi in Budding Yeast

I. A. Drinnenberg et al.

Although the Saccharomyces cerevisiae lineage has lost RNA interference, the pathway can be restored by adding genes from *S. castellii*.

10.1126/science.1176945

Reconstruction of Molecular Orbital Densities from Photoemission Data

P. Puschnig et al.

Maps of photoelectron momentum can reveal the orbital geometries of aromatic molecules adsorbed on surfaces.

10.1126/science.1176105

Repetitive Readout of a Single Electronic Spin via Quantum Logic with Nuclear Spin Ancillae

L. Jiang et al.

Controlled interactions with nearby nuclear spins help improve the quantum memory of a nitrogen vacancy in diamond.

10.1126/science.1176496

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A. Ernst et al.

Synthetic PDZ domain variants with random mutations reveal the remarkable robustness of this domain for ligand recognition.

**RESEARCH ARTICLE:** Proteomic Analysis of Integrin-Associated Complexes Identifies RCC2 as a Dual Regulator of Rac1 and Arf6

J. D. Humphries et al.

Regulator of chromosome condensation 2 is a component of fibronectin-activated signaling pathways that regulate cell migration.

**RESEARCH ARTICLE:** The Tyrosine Kinase Fer Is a Downstream Target of the PLD-PA Pathway That Regulates Cell Migration

T. Itoh et al.

Changes in membrane composition stimulate fer activity to regulate actin remodeling and drive cell migration.

**REVIEW:** Oncogenic EGFR Signaling Networks in Glioma

P. H. Huang et al.

EGFR and downstream signaling networks contribute to the hallmark characteristics of glioma.

**PODCAST**

S. S. Sidhu and A. M. VanHook

Synthetic PDZ domain variants reveal how this domain can evolve to produce proteins with different binding specificities.

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