REPORTS

1408 Magnetic Fields in the Formation of Massive Stars
J. M. Girart et al.
Observations of polarized dust emission show that the magnetic field controls the dynamical evolution of a massive star-forming region.

1411 A Radio Pulsar/X-ray Binary Link
A. M. Archibald et al.
Radio observations reveal a system undergoing the transition from a low-mass x-ray binary star to a millisecond radio pulsar.

1414 Determining the Dynamics of Entanglement
O. Jiménez Farías et al.
The evolution of quantum mechanically entangled photon pairs can now be measured as they interact with their environment.

1417 Colloidal Nanocrystals with Molecular Metal Chalcogenide Surface Ligands
M. V. Kovalenko et al.
Chalcogenide-based ligands are used to link colloidal nanocrystals together and can be converted into semiconductor complexes.

1421 Polarization Control of Electron Tunneling into Ferroelectric Surfaces
P. Maksymovych et al.
High electric fields delivered with an atomic force microscope tip pattern polarization domains in ferroelectric thin films.

1425 Isotopic Homojunction Band Engineering from Diamond
H. Watanabe et al.
Nanoscale multilayers of diamond that alternate in isotopic composition create quantum wells that confine electrons.

1428 Measuring the Charge State of an Adatom with Noncontact Atomic Force Microscopy
L. Gross et al.
Charging of gold and silver atoms on salt films changes the force detected by the tip of a scanning probe microscope.

1431 Oxygen-18 of O2 Records the Impact of Abrupt Climate Change on the Terrestrial Biosphere
J. P. Severinghaus et al.
Ice core studies show that changes in low-latitude rainfall accompanied abrupt climate change over the past 100,000 years.

1435 Boom-and-Bust Development Patterns Across the Amazon Deforestation Frontier
A. S. L. Rodrigues et al.
Rainforest loss in the Amazon is associated with ephemeral increase in people’s relative prosperity.

1438 Leading-Edge Vortices Elevate Lift of Autorotating Plant Seeds
D. Lentink et al.
Winged plant seeds use leading-edge vortices to create lift, in the same way that flying animals do.

1441 Fluorescent False Neurotransmitters Visualize Dopamine Release from Individual Presynaptic Terminals
N. G. Gubernator et al.
Optical tracking of neurotransmitter release in the brain reveals multiple synaptic populations that depend on brain activity.

1444 Structure of Rotavirus Outer-Layer Protein VP7 Bound with a Neutralizing Fab
S. T. Aoki et al.
Binding of neutralizing antibodies to rotavirus stabilizes coat-protein trimers and blocks cell entry.

1447 Extensive Demethylation of Repetitive Elements During Seed Development Underlies Gene Imprinting
M. Gehring et al.
Gene function in Arabidopsis endosperm depends on whether a gene is maternally or paternally inherited.

1451 Genome-Wide Demethylation of Arabidopsis Endosperm
T.-F. Hsieh et al.
The endosperm genome of Arabidopsis shows extensive gene imprinting.

1454 Hyper-Recombination, Diversity, and Antibiotic Resistance in Pneumococcus
W. P. Hanage et al.
Promiscuity not only leads to diversity in streptococcal bacteria, but also to an increased likelihood of acquiring drug resistance.

1457 Inhibition of Hedgehog Signaling Enhances Delivery of Chemotherapy in a Mouse Model of Pancreatic Cancer
K. P. Olive et al.
Pancreatic tumors are unresponsive to chemotherapy because their limited vasculature precludes efficient drug delivery.
In vivo RNA interference screen reveals regulators of innate immunity in Drosophila.

M. Coureuil et al.

Adhesion of bacteria to cells lining blood vessels in the brain induces them to part and allows pathogen invasion.

L. Holmes and K. Travis

CASE CLOSED: Scientists Nab Birds That Brought Down Airplane

Forensic analysis of feathers fingers culprit in Hudson River crash.

PERSPECTIVE: Finding Partners for PI3Kγ—When 84 Is Better Than 101

T. Balá

PODCAST

M. P. Wyman and A. M. VanHook

Adaptor subunits of phosphoinositide 3-kinase γ specify different cellular responses.

PHYSICISTS PUT THE QUANTUM INTO MECHANICS

Chris Bickel

A synthetic DNA analog can dynamically adapt its sequence in response to changing templates.

Self-Assembling Sequence-Adaptive Peptide Nucleic Acids

Y. Ura et al.

A way to speed networking for scientists

L. Holmes and K. Travis

Speed networking can be an effective way to promote new research collaborations.

How dost thou slither?

Maggie Aderin-Pocock's passion for science drives her career and public outreach.

Science Careers Staff

Become a Facebook fan at http://www.facebook.com/pages/ScienceCareers/11799201290.

Case Closed: Scientists Nab Birds That Brought Down Airplane

Forensic analysis of feathers fingers culprit in Hudson River crash.
Science 324 (5933), 1362-1462.