A jumble of icebergs forms in front of the heavily crevassed calving front of Jakobshavn Isbrae, one of the fastest outlet glaciers draining the Greenland Ice Sheet. The ~5-kilometer-wide ice front rises ~80 meters out of the water and extends more than 600 meters underwater. Recent research shows that the speeds of Greenland glaciers are increasing. See page 576.

Photo: Ian Joughin
RESEARCH ARTICLE

555 Spin-Torque Switching with the Giant Spin Hall Effect of Tantalum
L. Liu et al.
Tantalum is found to generate strong spin currents that can induce switching of ferromagnets efficiently and reliably.

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559 Spin-Orbital Short-Range Order on a Honeycomb-Based Lattice
S. Nakatsuji et al.
Magnetic measurements indicate that a material remains disordered to millikelvin temperatures, thanks to its unusual lattice structure.

563 Anisotropic Energy Gaps of Iron-Based Superconductivity from Intraband Quasiparticle Interference in LiFeAs
M. P. Allan et al.
The energy needed to break up electron pairs in a pnictide superconductor depends on position on the Fermi surface.

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T. L. Zhang et al.
Venus Express observations show that magnetic reconnection occurs in the magnetotail of an unmagnetized planet.

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S. W. Squyres et al.
Analysis of data from the Mars Exploration Rover Opportunity provides evidence for past water flow near an ancient crater.

576 21st-Century Evolution of Greenland Outlet Glacier Velocities
T. Moon et al.
A decade-long compilation of velocity data for Greenland’s outlet glaciers shows complex spatial and temporal variability.

579 Imaginal Discs Secrete Insulin-Like Peptide 8 to Mediate Plasticity of Growth and Maturation
A. Garelli et al.
An insulin/relaxin-like peptide coordinates final organ size in response to fly injury and tumors.

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J. Colombani et al.
In fruit flies, growing tissues send signals to the endocrine system to coordinate growth and metamorphosis.

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A. Khita et al.
Sex-specific modifications of male water strider antennae that are important for mating require distal-less gene expression.

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P. B. Reich et al.
Long-term grassland experiments show that high-diversity species combinations become more functionally diverse with time.

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A. Sfeir and T. de Lange
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S. K. Sankusare et al.
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R. Schuetz et al.
A key design principle of bacterial metabolic networks is optimal performance, but not at the expense of adaptability.

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S. A. Stanley et al.
Gene expression in mice can be activated remotely and noninvasively by radio-wave heating of nanoparticles.

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H. Teeling et al.
Seasonal diatom growth in the North Sea results in a temporal succession of metabolically specialized bacteria.

612 Don’t Look Back in Anger! Responsiveness to Missed Chances in Successful and Nonsuccessful Aging
S. Brassen et al.
Emotionally healthy older adults show a reduced responsiveness to regret when performing a sequential decision task.
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A. N. Meckler et al.
Precipitation in Borneo, largely invariant during the last four interglacial periods, decreased during glacial terminations.
10.1126/science.1218340

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A. M. Khalti et al.
Restricted B cell signaling in the areas responsible for immune memory cell production promotes affinity maturation.
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S. P. Jadhav et al.
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Comment on "Global Resilience of Tropical Forest and Savanna to Critical Transitions"
Z. Ratajczak and J. B. Nippert
A neuronal "replay" of past experience may allow animals to retrieve specific memories and use them to guide behavior.
Full text at www.sciencemag.org/cgi/content/full/336/6081/541-c

Response to Comment on "Global Resilience of Tropical Forest and Savanna to Critical Transitions"
E. H. Van Nes et al.
Response to Comment on "Global Resilience of Tropical Forest and Savanna to Critical Transitions"
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