Map of highest surface temperature in the north polar region of Mercury superimposed on topography measured by the MESSENGER spacecraft. Red areas surrounding the pole (center) reach temperatures above 450 K. Blue and purple areas inside polar impact craters never exceed 100 K and are sufficiently cold to harbor water ice and frozen organic compounds. The largest ice-containing crater near the center of the image is ~112 km in diameter and 2.7 km deep. See pages 282, 292, 296, and 300. For the story behind the cover, go to http://scim.ag/cov6117.

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292  Evidence for Water Ice Near Mercury’s North Pole from MESSENGER Neutron Spectrometer Measurements
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296  Bright and Dark Polar Deposits on Mercury: Evidence for Surface Volatiles
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300  Thermal Stability of Volatiles in the North Polar Region of Mercury
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Spacecraft data and a thermal model show that water ice and organic volatiles are present at Mercury’s north pole.

303  An Efficient Polymer Molecular Sieve for Membrane Gas Separations
M. Carta et al.

Intrinsically porous polymers made using reactions associated with Tröger’s base manifested enhanced membrane properties.

307  Olefin Cyclopropanation via Carbene Transfer Catalyzed by Engineered Cytochrome P450 Enzymes
P. S. Coelho et al.

An oxidative enzyme has been engineered to transfer carbon to synthetic substrates in place of oxygen.

310  Metamaterial Apertures for Computational Imaging
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Metamaterial-based sensors can be used for compressive image reconstruction.

313  Climate Events Synchronize the Dynamics of a Resident Vertebrate Community in the High Arctic
B. B. Hansen et al.

Reindeer, ptarmigan, vole, and fox populations on Svalbard respond together to extreme weather.

316  Invasive Plants Have Scale-Dependent Effects on Diversity by Altering Species-Area Relationships
K. I. Powell et al.

In three different biomes, invasive plant species cause larger declines in common species than in rare species.

318  Structure of Histone mRNA Stem-Loop, Human Stem-Loop Binding Protein, and 3’/5’ Exon Ternary Complex
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Two RNA binding proteins recognize their target RNA through shape, rather than sequence.

321  Identifying Personal Genomes by Surname Inference
M. Gymrek et al.

Anonymity of male personal genome data sets can be compromised by means of publicly available data.

324  GDE2 Promotes Neurogenesis by Glycosylphosphatidylinositol-Anchor Cleavage of RECK
S. Park et al.

A molecular mechanism to inhibit Delta-Notch signaling and initiate neurogenesis is elucidated.

328  Intestinal Dendritic Cell Guidance by Haptotactic Chemokine Gradients
M. Weber et al.

In mouse skin, immune cells migrate toward lymphatic vessels along an immobilized chemokine gradient.

332  Chronic Stress Triggers Social Aversion via Glucocorticoid Receptor in Dopaminergic Neurons
J. Barik et al.

Aggressive defeat stress in mice causes glucocorticoid release and increased activity in the dopamine system.

335  Adolescent Stress–Induced Epigenetic Control of Dopaminergic Neurons via Glucocorticoids
M. Nawa et al.

Genetically susceptible mice isolated during adolescence can subsequently present schizophrenia-like symptoms.