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COVER

An image of Mare Moscoviense on the lunar farside, taken by the Terrain Camera aboard the SELENE (Kaguya) spacecraft on 17 January 2008. Crater frequency distributions derived from such images yield ages of about 2.5 billion years for several volcanic deposits in this mare, indicating that volcanism on the lunar farside lasted about 500 million years longer than previously thought. See page 905.

Image: Japan Aerospace Exploration Agency/SELENE

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897 Lunar Global Shape and Polar Topography Derived from Kaguya-LALT Laser Altimetry

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An analysis of lunar high-resolution topographic data helps explain how surface features are supported by the lithosphere.

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900 Farside Gravity Field of the Moon from Four-Way Doppler Measurements of SELENE (Kaguya)

N. Namiki et al.

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905 Long-Lived Volcanism on the Lunar Farside Revealed by SELENE Terrain Camera

J. Haruyama et al.

Images of the Moon by the SELENE spacecraft and revised dates of lava flows by crater counts imply that episodic volcanism on the farside lasted to 2.5 billion years ago.

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909 Lunar Radar Sounder Observations of Subsurface Layers Under the Nearside Maria of the Moon

T. Ono et al.

A period of reduced volcanism may account for extensive regions of radar-reflective minerals that underlie some major lunar basalt flows.

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912 Equilibrium Iron Isotope Fractionation at Core-Mantle Boundary Conditions

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S. Mühlbauer et al.

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919 Observation of Unconventional Quantum Spin Textures in Topological Insulators

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D. Fontanilla et al.

An endogenous compound is a ligand for a ubiquitously expressed receptor that binds many synthetic drugs and has been implicated in psychiatric disease.

937 When Your Gain Is My Pain and Your Pain Is My Gain: Neural Correlates of Envy and Schadenfreude

H. Takahashi et al.

Envy is strongest against those with similar attributes, and the most joy is gained from the pain of those envied the most.

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940 A Neural Mechanism for Microsaccade Generation in the Primate Superior Colliculus

Z. M. Hafed et al.

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A. Thathiah et al.

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M. L. Rowe and S. Goldin-Meadow

Pre-verbal communication through gestures can improve a child's vocabulary.

>> Science Podcast

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SCIENCEONLINE

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Sequencing and Analyses of All Known Human Rhinovirus Genomes Reveals Structure and Evolution

A. C. Palmenberg et al.

Rhinoviruses, which are a common cause of colds, fall into three or possibly four major clades and can undergo strain recombination.

10.1126/science.1165557

The Dynamic Control of Kiss-And-Run and Vesicular Reuse Probed with Single Nanoparticles

Q. Zhang et al.

A transient form of vesicle fusion that allows vesicle reuse is more prevalent early during synaptic response to a train of stimuli.

10.1126/science.1167373

Genome-Wide Analysis in Vivo of Translation with Nucleotide Resolution Using Ribosome Profiling

N. T. Ingolia et al.

Profiling the position of ribosomes on messenger RNA allows rapid, high-precision investigation of cellular protein translation.

10.1126/science.1168978

Omnidirectional Printing of Flexible, Stretchable, and Spanning Silver Microelectrodes

B. Y. Ahn et al.

Colloidal silver particles can be formed into flexible electrodes of arbitrary shape in three dimensions.

10.1126/science.1168375

TECHNICALCOMMENTS

Comment on "Dynamic Shifts of Limited Working Memory Resources in Human Vision"

N. Cowan and J. N. Rouder

full text at www.sciencemag.org/cgi/content/full/323/5916/877c

Response to Comment on "Dynamic Shifts of Limited Working Memory Resources in Human Vision"

P. M. Bays and M. Husain

full text at www.sciencemag.org/cgi/content/full/323/5916/877d

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Highlights From Our Daily News Coverage

Novel HIV-Fighting Method Finally Gels

Study reports first "success" in preventing HIV infections with vaginal microbicide.

One Giant Leap for Robot-Kind

Cockroach-inspired design could help Mars rovers and other robots traverse sandy terrain.

Flu: It's the Humidity. Absolutely

Study suggests that absolute, not relative, humidity explains why influenza is seasonal.

SCIENCE SIGNALING

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RESEARCH ARTICLE: Brx Mediates the Response of Lymphocytes to Osmotic Stress Through the Activation of NFAT5

T. Kino et al.

The guanine nucleotide exchange factor Brx is essential for osmotic stress–mediated expression of *nfat5* in lymphocytes.

MEETING REPORT: Emerging Roles of NAD⁺ and Its Metabolites in Cell Signaling

F. Koch-Nolte et al.

Scientists discussed the molecular aspects of NAD⁺ metabolism and signaling at a conference in Hamburg, Germany.

NETWATCH: Simmune Project

Build models, run simulations, and explore the dynamics of signaling pathways; in Modeling Tools.

NETWATCH: American Physiological Society Archive

Browse or search an index of peer-reviewed science education materials; in Educator Sites.

SCIENCE CAREERS

www.sciencereers.org/career_magazine

Free Career Resources for Scientists

The Man Who Wasn't There

B. L. Benderly

Douglas Prasher's story reveals a lot about the scientific labor market.

Discouraging Days for Job-Seekers

S. Carpenter

Many universities and colleges have canceled faculty searches or imposed hiring freezes.

SCIENCEPODCAST

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Download the 13 February *Science* Podcast to hear about how toddler gesturing may improve children's vocabulary, a new global view of the Moon, an update on the Neandertal genome, and more.

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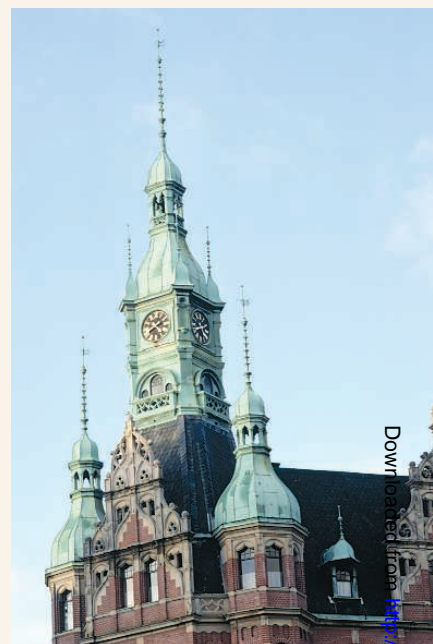
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Signaling researchers met in Hamburg.



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Science

323 (5916)

Science **323** (5916), 849-954.

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