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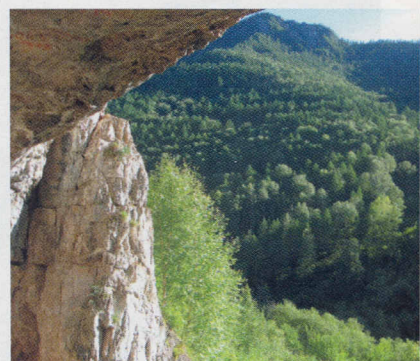
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False-colored backscattered electron image of a small rocky particle, 150 micrometers in size, recovered from the surface of near-Earth asteroid 25143 Itokawa by the Japanese spacecraft Hayabusa. Mineralogy and chemistry of the particle indicate that the asteroid consists of very primitive solar system material and has had a complex formation history. See the series of Reports beginning on page 1113.

Image: Japanese Aerospace Exploration Agency

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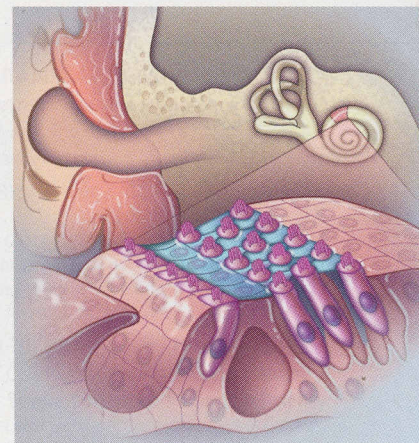
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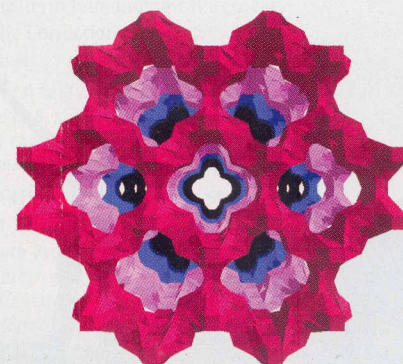
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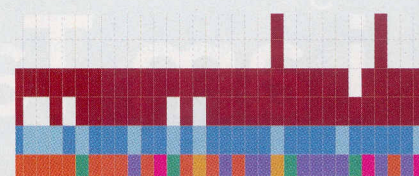
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- 1131** Synthesis and Structure Determination of the Hierarchical Meso-Microporous Zeolite ITQ-43
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- 1137** *optix* Drives the Repeated Convergent Evolution of Butterfly Wing Pattern Mimicry
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- 1154** Exome Sequencing of Head and Neck Squamous Cell Carcinoma Reveals Inactivating Mutations in *NOTCH1*
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SCIENCEEXPRESS

www.sciencexpress.org

Promoting the Peace Process by Changing Beliefs About Group Malleability

E. Halperin et al.

A belief that the beliefs of other groups are changeable rather than fixed is conducive to negotiation.

10.1126/science.1202925

The Shaping of Modern Human Immune Systems by Multiregional Admixture with Archaic Humans

L. Abi-Rached et al.

Viral defense and embryo implantation mechanisms have been shaped by contributions from Neandertal and Denisovan genes.

10.1126/science.1209202

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MED12, the Mediator Complex Subunit 12 Gene, Is Mutated at High Frequency in Uterine Leiomyomas

N. Mäkinen et al.

Uterine fibroids frequently harbor mutations in a specific gene that has been implicated in transcriptional regulation.

10.1126/science.1208930

Transformation of a Star into a Planet in a Millisecond Pulsar Binary

M. Bailes et al.

Timing observations of a millisecond pulsar reveal a planet that is far denser than any known planet.

10.1126/science.1208890

A Reservoir of Ionized Gas in the Galactic Halo to Sustain Star Formation in the Milky Way

N. Lehner and J. C. Howk

Clouds of ionized gas located inside our galaxy provide a major supply of matter for fueling ongoing star formation.

10.1126/science.1209069

TECHNICALCOMMENTS

Comment on "Drought-Induced Reduction in Global Terrestrial Net Primary Production from 2000 Through 2009"

A. Samanta et al.

Full text at www.sciencemag.org/cgi/content/full/333/6046/1093-c

Comment on "Drought-Induced Reduction in Global Terrestrial Net Primary Production from 2000 Through 2009"

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Full text at www.sciencemag.org/cgi/content/full/333/6046/1093-d

Response to Comments on "Drought-Induced Reduction in Global Terrestrial Net Primary Production from 2000 Through 2009"

M. Zhao and S. W. Running

Full text at www.sciencemag.org/cgi/content/full/333/6046/1093-e

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Highlights From Our Daily News Coverage

'Eco-Friendly' Chilean Sea Bass

May Not Be So Green

A genetic study finds the first evidence of mislabeling in fish certified as sustainable.

<http://scim.ag/ecoseabass>

Immune System Protects Female Bedbugs From Traumatic Sex

Insects anticipate infections from violent male insemination.

<http://scim.ag/bedbugbacteria>

Lager Beer's Mystery Yeast

Scientists identify a microbe that is key to the brewing process.

<http://scim.ag/lageryeast>

SCIENCE SIGNALING

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The Signal Transduction Knowledge Environment

23 August issue: <http://scim.ag/ss082311>

RESEARCH ARTICLE: Tumor Progression Locus 2 Mediates Signal-Induced Increases in Cytoplasmic Calcium and Cell Migration

M. Hatzia Apostolou et al.

The kinase Tpl2 triggers calcium signaling and cell migration downstream of various receptors implicated in cancer and inflammation.

PERSPECTIVE: TBK1 Mediates Crosstalk Between the Innate Immune Response and Autophagy

H. Weidberg and Z. Elazar

Phosphorylation of an autophagy adaptor by a kinase involved in innate immune responses limits pathogenic bacterial growth.

PODCAST

H. D. Mansvelder and A. M. VanHook

β2 subunit-containing nicotinic acetylcholine receptors in the prefrontal cortex are sufficient for acetylcholine-mediated enhancement of attentional focus.

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Experimental Error: This Is Only a Test

A. Rubin

As we are training to become fully fledged scientists, we ourselves are the test subjects.

http://scim.ag/EE_Testing

Creating Your Own Job: From Engineer to Entrepreneur

S. A. Holgate

A layoff set engineer Diana Hodgins on a new career path, leading eventually to managing her own company.

http://scim.ag/Diana_Hodgins

In Person: A Sabbatical in Namibia

L. A. Levin and D. M. Checkley

On the heels of our feature on doing science in Namibia, two scientists describe their sabbatical experiences there.

http://scim.ag/Namibia_Sabbatical

SCIENCE TRANSLATIONAL MEDICINE

www.sciencetranslationalmedicine.org

Integrating Medicine and Science

24 August issue: <http://scim.ag/stm082411>

COMMENTARY: Herding CATS

G. A. Petsko

The National Center for Advancing Translational Sciences seems primed to polarize scientists while possibly failing to drive biomedical research and development forward.

RESEARCH ARTICLE: Long-Term Persistence of a Polyclonal T Cell Repertoire After Gene Therapy for X-Linked Severe Combined Immunodeficiency

H. B. Gaspar et al.

RESEARCH ARTICLE: Hematopoietic Stem Cell Gene Therapy for Adenosine Deaminase-Deficient Severe Combined Immunodeficiency Leads to Long-Term Immunological Recovery and Metabolic Correction

H. B. Gaspar et al.

PERSPECTIVE: A Tale of Two SCIDS

K. L. Shaw and D. B. Kohn

Gene therapy can restore immune and metabolic function in immunodeficient patients.

RESEARCH ARTICLE: Potent Kinetic Stabilizers That Prevent Transthyretin-Mediated Cardiomyocyte Proteotoxicity

M. M. Alhamadsheh et al.

A screen for transthyretin ligands that inhibit protein aggregation identifies agents that prevent amyloid toxicity in cardiomyocytes.

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On the 26 August Science Podcast: dust particles from asteroid Itokawa, new insights into the Denisovans, drawing to learn in science, and more.

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Science Policy News and Analysis

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