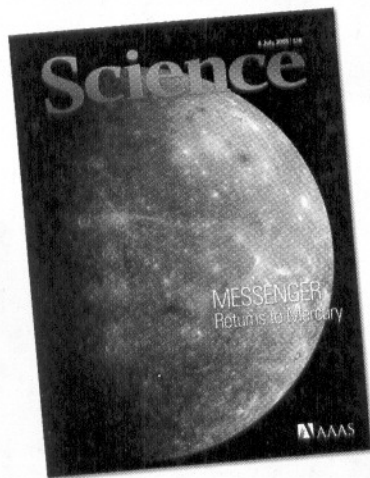




COVER

A mosaic of visible to near-infrared images of the surface of Mercury, obtained by the MESSENGER spacecraft on 14 January 2008. The circular feature in the upper right is the Caloris impact basin, 1500 kilometers in diameter. Results from the flyby are discussed in a special section beginning on page 58.

Image: NASA/Johns Hopkins University Applied Physics Laboratory/Arizona State University/Carnegie Institution of Washington

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A Global View of Gene Activity and Alternative Splicing by Deep Sequencing of the Human Transcriptome

M. Sultan et al.

Shotgun sequencing of 27–base pair segments of messenger RNA from human kidney and immune cells identifies previously undescribed transcriptional units and splice junctions.

10.1126/science.1160342

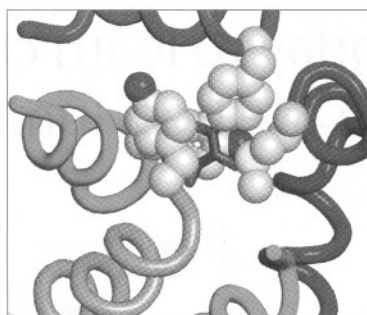
ATMOSPHERIC SCIENCE

BREVIA: N₂O₅ Oxidizes Chloride to Cl₂ in Acidic Atmospheric Aerosol

J. M. Roberts, H. D. Osthoff, S. S. Brown, A. R. Ravishankara

Laboratory studies affirm that the oxidation of chloride ions in aerosols by N₂O₅ is a significant source of chlorine in the troposphere, a major reactant that helps form ozone.

10.1126/science.1158777



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The Crystal Structure of a Sodium Galactose Transporter Reveals Mechanistic Insights into Na⁺/Sugar Symport

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The structure of a sugar transporter suggests how these proteins may rearrange to permit the sugar to enter and leave the binding site on opposite sides of the membrane.

10.1126/science.1160406

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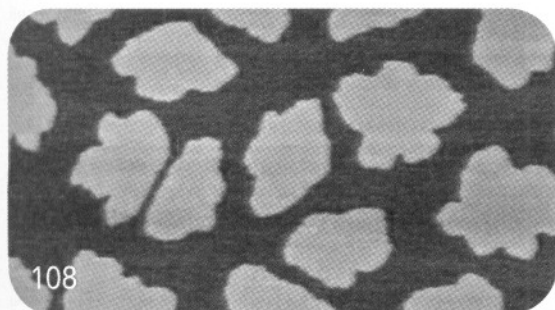
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