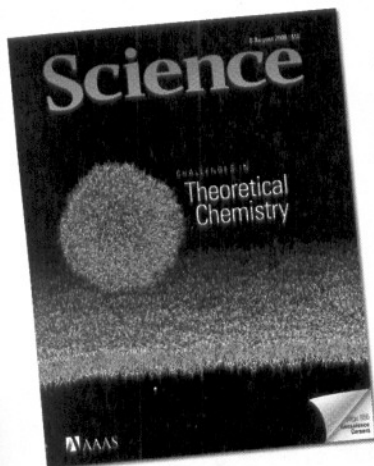




COVER

Simulation of a vesicle interacting with a lipid bilayer (lipid head groups in green and blue, tails in cyan; water is not shown). The computation uses a coarse-grained model with over 1 million interaction sites, equivalent to more than 10 million atoms. See the special section beginning on page 783.

Image: Wataru Shinoda/Research Institute for Computational Sciences, National Institute of Advanced Industrial Science and Technology, Japan; Mike Klein/Center for Molecular Modeling, University of Pennsylvania

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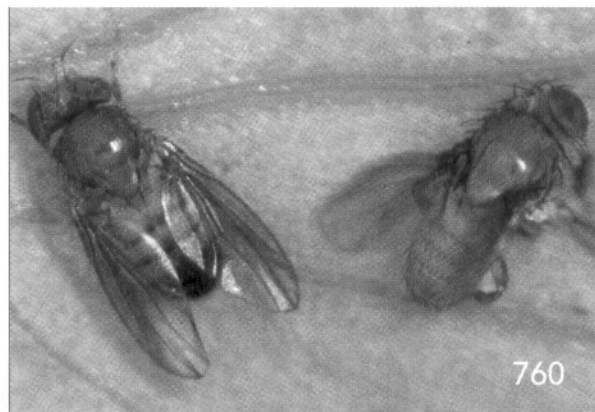
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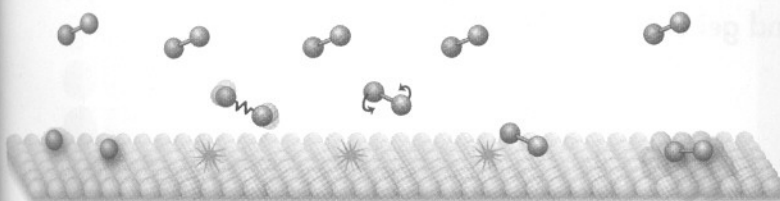


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ATMOSPHERIC SCIENCE

Atmospheric Warming and the Amplification of Precipitation Extremes
R. P. Allan and B. J. Soden

Satellite data show that in the tropics, heavy rain events have increased in warmer months and decreased in colder months, more than predicted by climate models.
 10.1126/science.1160787

BIOCHEMISTRY

Helical Structures of ESCRT-III Are Disassembled by VPS4
S. Lata et al.

A protein responsible for the final separation of daughter cells or budding viruses forms heteromeric complexes on the inside of the membrane to regulate the abscission step.
 10.1126/science.1161070

MATERIALS SCIENCE

A Rubberlike Stretchable Active Matrix Using Elastic Conductors
T. Sekitani et al.

A carbon nanotube-polymer film containing organic transistors and coated with silicon rubber can maintain its electrical properties while being stretched up to 70 percent.
 10.1126/science.1160309

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Parasite Treatment Affects Maternal Investment in Sons
T. E. Reed et al.

Mother seabirds that are infected by parasitic nematodes are less able to gather food and feed their fast-growing sons, shifting the sex ratio and affecting population viability.
 10.1126/science.1159466

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Latent Fingerprint Chemical Imaging by Mass Spectrometry 805

D. R. Iff, N. E. Manicke, A. L. Dill, R. G. Cooks

Imaging of fingerprints in the field with a portable mass spectrometer can reveal the presence of drugs, explosives, or other materials and help resolve overlapping prints.

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PSYCHOLOGY

The Rupture and Repair of Cooperation in Borderline Personality Disorder
B. King-Casas et al.

In a game, patients with personality disorder cannot build trust with normal partners, possibly because they cannot distinguish between trusting and distrusting acts in others.

>> Perspective p. 778; Science Podcast

BIOCHEMISTRY

The Crystal Structure of a Sodium Galactose Transporter Reveals Mechanistic Insights into Na⁺/Sugar Symport
S. Faham et al. 810

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. >> Perspective p. 781

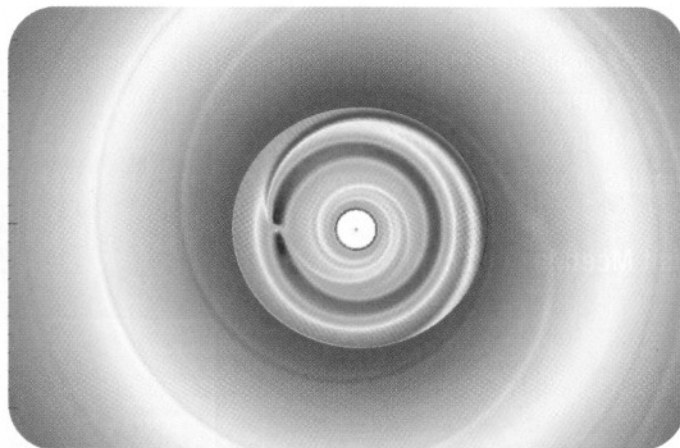
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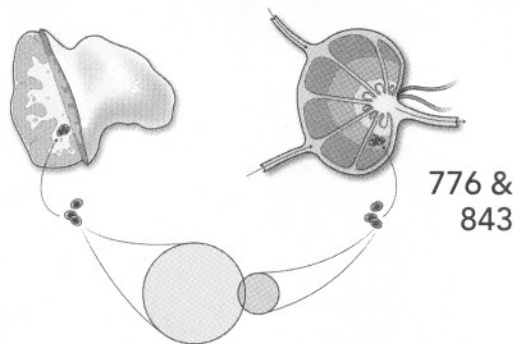
E. W. Thommes, S. Matsumura, F. A. Rasio

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P. Yin et al.

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The Role of Excited-State Topology in Three-Body Dissociation of *sym*-Triazine 826

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D. T. L. Alexander, P. A. Crozier, J. R. Anderson

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N. Miyake et al.

A signaling protein that helps nerve fibers find their correct target muscles is required for innervation of the eye muscles and, if defective, causes an eye movement disorder.

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