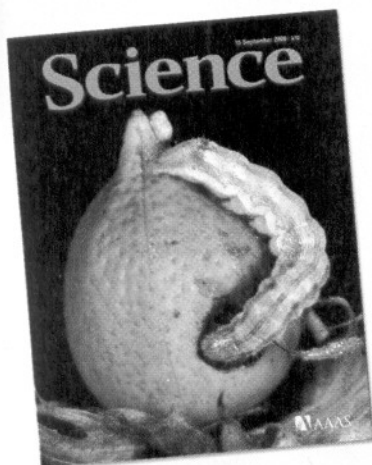




COVER

A cotton bollworm larva (*Helicoverpa armigera*) feeds on a cotton boll. Transgenic Bt cotton was designed to resist this and other caterpillar pests. See page 1676.

Image: Nigel Cattlin/Visuals Unlimited Inc.

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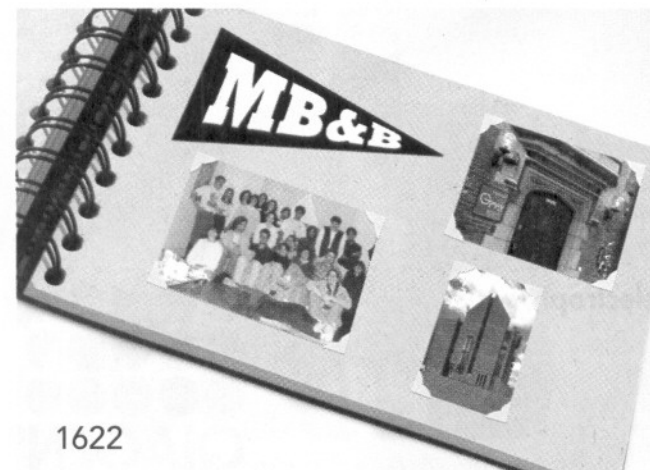
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www.sciencexpress.org

PHYSICS

A High Phase-Space-Density Gas of Polar Molecules

K.-K. Ni et al.

Raman laser irradiation can cool a cloud of KRb molecules to ultralow translational, vibrational, and rotational temperatures, a step toward forming molecular condensates.

10.1126/science.1163861

IMMUNOLOGY

Innate Immunity in *Caenorhabditis elegans* Is Regulated by Neurons Expressing NPR-1/GPCR

K. L. Styer et al.

In the nematode *Caenorhabditis elegans*, sensory neurons surprisingly can inhibit innate immune responses, in part through the mitogen-activated protein kinase signaling pathway.

10.1126/science.1163673

CELL BIOLOGY

White Fat Progenitor Cells Reside in the Adipose Vasculature

W. Tang et al.

Adipocytes (fat cells) originate from precursor cells that reside within the walls of the blood vessels that feed fat tissue.

10.1126/science.1156232

CHEMISTRY

Catalytic Conversion of Biomass to Monofunctional Hydrocarbons and Targeted Liquid-Fuel Classes

E. L. Kunkes et al.

A set of two reactors, one that breaks down biomass sugars and a second that directs chain formation, can synthesize various hydrocarbon fuels.

10.1126/science.1159210

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J. Pederson et al.

full text at www.sciencemag.org/cgi/content/full/321/5896/1634b

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P. A. Pearthree, J. E. Spencer, J. E. Faulds, P. K. House

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V. Polyak, C. Hill, Y. Asmerom

full text at www.sciencemag.org/cgi/content/full/321/5896/1634d

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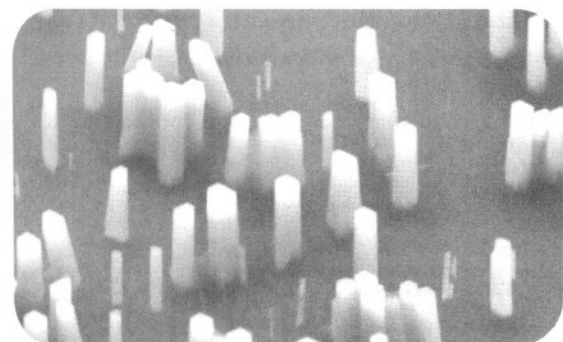
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Ancient Permafrost and a Future, Warmer Arctic

1648

D. G. Froese et al.

The existence of a 700,000-year-old patch of permafrost in sub-Arctic Canada shows that ground ice far from the pole can resist melting during warm intervals.



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Transient Electronic Structure and Melting of a Charge Density Wave in TbTe_3

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F. Schmitt et al.

Photoemission spectroscopy is extended to reveal the dynamics of correlated electronic phase transitions, showing how ordered electrons "melt" upon heating of TbTe_3 .

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Coupled Superconducting and Magnetic Order in CeCoIn_5

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M. Kenzelmann et al.

Unlike other superconductors, magnetic ordering coexists with and is stabilized by superconductivity in the exotic superconductor CeCoIn_5 .

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P. Nolte et al.

Pyramidal rhodium nanoparticles flatten upon surface oxidation at high temperatures but revert upon reduction, allowing the study of how structure affects catalytic activity.

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1658

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An array that can support millions of thin, flexible polymer pens can be used to deposit tiny molecular ink dots of variable size over large areas.

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D.-S. Yang, C. Lao, A. H. Zewail

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D. J. Haydon et al.

A small synthetic molecule directed against a microbial protein required for cell division protects mice infected with *Staphylococcus aureus* from death. >> *Perspective p. 1644*

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- Suppression of Cotton Bollworm in Multiple Crops in China in Areas with Bt Toxin-Containing Cotton** 1676

K.-M. Wu, Y.-H. Lu, H.-Q. Feng, Y.-Y. Jiang, J.-Z. Zhao

Planting engineered cotton that expresses a natural toxin reduces pest damage to both the cotton itself and to other crops planted nearby, reducing the need for insecticidal spray.

ECOLOGY

- Can Catch Shares Prevent Fisheries Collapse?** 1678

C. Costello, S. D. Gaines, J. Lynham

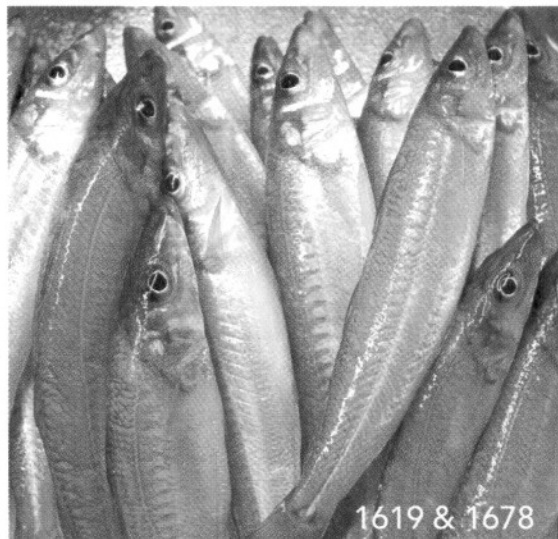
Global catch statistics since 1950 suggest that fisheries will be half as likely to collapse if fisherman have a sustainability incentive through a guaranteed right of harvest. >> *News story p. 1619*

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