

EDITORIAL

- 1538 The Enlightenment Returns
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- 1551 An Unseen Link May Solve the Mystery of the Sun's Superhot Corona
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- 1557 A Lifetime of Work Gone to Waste?
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- 1562 Sustaining Life
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reviewed by D. P. Mindell
- 1563 Surviving 1,000 Centuries
R.-M. Bonnet and L. Woltjer,
reviewed by G. F. Bignami

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- 1564 Monitoring and Regulating Offshore Stem Cell Clinics
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- 1566 Flexible Electronics
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- 1570 Fullerides in a Squeeze
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- 1572 Copper Puts Arenes in a Hard Position
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BREVIA

- 1574 Flagellum Mediates Symbiosis
T. Shimoyama et al.
A bacterium uses its flagellum to grip its archaeal symbiotic partner and to stimulate hydrogen consumption.

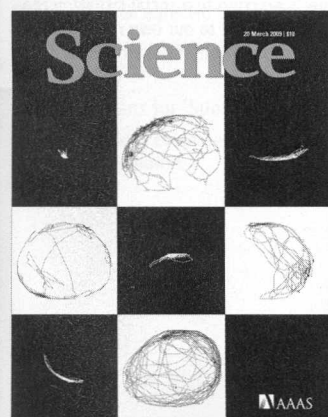
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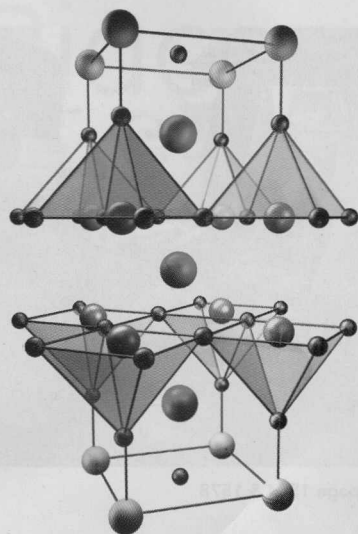
COVER

Movement trajectories, each recorded during a 1-hour time period, for rats with brain lesions that reduce dopamine signaling. These animals serve as a model of Parkinson's disease and display severe difficulty in initiating movements, as illustrated by the white trajectories (on black background) showing limited locomotion. Black trajectories (on white background) illustrate the recovery of locomotive activity induced by electrical stimulation of the dorsal columns of the spinal cord. See page 1578.

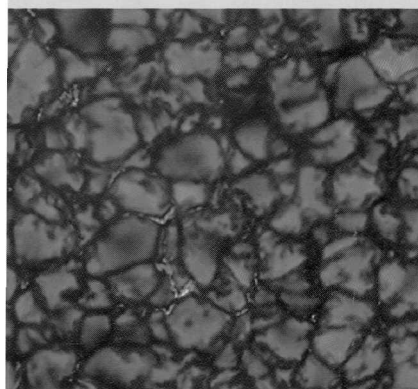
Photo illustration: Yael Kats/Science; images: Per Petersson

DEPARTMENTS

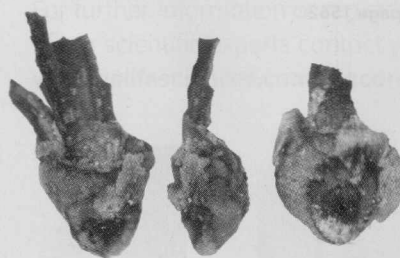
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- 1575 Giant-Stroke, Superelastic Carbon Nanotube Aerogel Muscles**
A. E. Aliev et al.
Applying a high voltage to very low density sheets of carbon nanotubes causes rapid expansion in one direction.
>> *Perspective p. 1571*
- 1578 Spinal Cord Stimulation Restores Locomotion in Animal Models of Parkinson's Disease**
R. Fuentes et al.
Epidural stimulation of spinal neural pathways produces specific shifts in activity in neural circuits affecting movement.
>> *News story p. 1554; Science Express Report by V. Gradinaru et al.*

REPORTS

- 1582 Alfvén Waves in the Lower Solar Atmosphere**
D. B. Jess et al.
A special type of plasma wave has been observed that can heat the solar atmosphere to millions of degrees Celsius.
>> *News story p. 1551; Science Podcast*
- 1585 The Disorder-Free Non-BCS Superconductor Cs_3C_{60} Emerges from an Antiferromagnetic Insulator Parent State**
Y. Takabayashi et al.
A well-ordered body-centered cubic phase of Cs_3C_{60} reveals a pressure-driven transition from an insulator to a superconductor.
>> *Perspective p. 1570*
- 1590 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.
>> *Perspective p. 1566*
- 1593 A Meta-Selective Copper-Catalyzed C-H Bond Arylation**
R. J. Phipps and M. J. Gaunt
A copper catalyst functionalizes benzene derivatives at ring positions complementary to those accessed by standard methods.
>> *Perspective p. 1572*

- 1597 The Burgess Shale Anomalocaridid *Hurdia* and Its Significance for Early Euarthropod Evolution**
A. C. Daley et al.
Hurdia, a Cambrian fossil, clarifies the morphology and evolution of early arthropod limbs and head.
- 1600 A Role for RNAi in the Selective Correction of DNA Methylation Defects**
F. K. Teixeira et al.
An RNA interference-dependent DNA methylation rescue system helps to preserve a subset of DNA methylation marks in *Arabidopsis*.
>> *Perspective p. 1568*
- 1605 Genetic Incompatibility Drives Sex Allocation and Maternal Investment in a Polymorphic Finch**
S. R. Pryke and S. C. Griffith
Female Gouldian finches bias the sex of their offspring on the basis of their partner's color phenotype.
- 1607 The Domestication Process and Domestication Rate in Rice: Spikelet Bases from the Lower Yangtze**
D. Q. Fuller et al.
Remains of domestic and wild rice trace the process of rice domestication in China to between 6900 and 6600 years ago.
>> *News story p. 1550*
- 1610 Variants of the Antibody Herceptin That Interact with HER2 and VEGF at the Antigen Binding Site**
J. Bostrom et al.
The antigen binding site of a therapeutic antibody for cancer simultaneously binds two proteins required for tumor growth.
>> *Perspective p. 1567*
- 1614 Ankyrin-G Promotes Cyclic Nucleotide-Gated Channel Transport to Rod Photoreceptor Sensory Cilia**
K. Kizhatil et al.
The assembly and function of key photoreceptor proteins in neonatal mouse retinas is mediated by the protein ankyrin-G.
- 1617 The Surprising Power of Neighborly Advice**
D. T. Gilbert et al.
A stranger's reaction to a social situation is a more accurate guide to our own reaction than is a written description of the situation.
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