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**COVER**

Autophagy, the process by which cells digest their own components, takes place in vesicles called autophagosomes (white membrane structures), the size of which are determined by the amount of a protein called Atg8. Basal amounts of Atg8 (small membrane-associated spheres) generate a small vesicle (middle left), whereas larger amounts cause formation of a full-fledged autophagosome (upper right). Autophagy provides fuel for cellular metabolism, the topic of the special section beginning on page 1337.

Painting: David S. Goodsell; Scientific Design: Zhou Du and Daniel J. Klionsky

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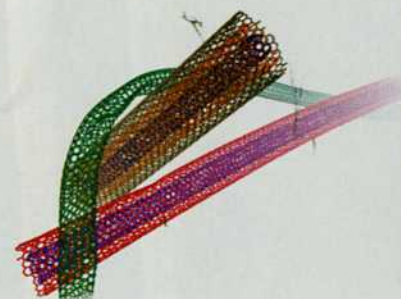
- 1359 **How Learning to Read Changes the Cortical Networks for Vision and Language**
S. Dehaene et al.
Reading changes the mind.

REPORTS

- 1364 **Carbon Nanotubes with Temperature-Invariant Viscoelasticity from -196° to 1000°C**
M. Xu et al.
A dense carbon-nanotube network shows nearly constant viscoelastic properties over an exceptionally wide temperature range.
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- 1368 **Video-Rate Molecular Imaging in Vivo with Stimulated Raman Scattering**
B. G. Saar et al.
Raman spectra can be acquired rapidly from samples that otherwise would scatter the usable signal.
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- 1371 **The Role of Particle Morphology in Interfacial Energy Transfer in CdSe/CdS Heterostructure Nanocrystals**
N. J. Borys et al.
Single-particle spectroscopy suggests that non-uniform geometries favor efficient charge separation for light harvesting.
- 1375 **A Cryptic Sulfur Cycle in Oxygen-Minimum-Zone Waters off the Chilean Coast**
D. E. Canfield et al.
Bacterial sulfur reduction and oxidation accompanies nitrogen cycling where oxygen levels at depth are low.
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- 1378 **Dynamical Response of the Tropical Pacific Ocean to Solar Forcing During the Early Holocene**
T. M. Marchitto et al.
Enhanced solar activity caused the tropical Pacific to cool into a La Niña-like state during the mid-Holocene.
- 1381 **Plasticity of Animal Genome Architecture Unmasked by Rapid Evolution of a Pelagic Tunicate**
F. Denoed et al.
A metazoan genome departs from the organization that appears rigidly established in other animal phyla.
- 1385 **Rewiring of Genetic Networks in Response to DNA Damage**
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A network comparison of genetic interactions mapped at two conditions reveals genetic responses to DNA damage in yeast.
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D. Ren et al.
Proapoptotic proteins act directly on mitochondrial "gatekeeper" proteins to initiate apoptotic events during mouse development.
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- 1393 **Arabidopsis Type I Metacaspases Control Cell Death**
N. S. Coll et al.
An ancient link between cell death control and innate immune receptor function has been discovered in plants.
- 1397 **An Antagonistic Pair of FT Homologs Mediates the Control of Flowering Time in Sugar Beet**
P. A. Pin et al.
A homolog of a *flowering time* gene has evolved a flowering repression function, affecting the seasonal cold response in beets.
- 1400 **Alleviating Neuropathic Pain Hypersensitivity by Inhibiting PKM ζ in the Anterior Cingulate Cortex**
X.-Y. Li et al.
Nerve injury increases the activity of an enzyme in the brain and contributes to chronic pain-related cortical sensitization.
- 1404 **Micro-Optical Sectioning Tomography to Obtain a High-Resolution Atlas of the Mouse Brain**
A. Li et al.
Acquisition of light microscopic data at 1-micrometer resolution for an entire mouse brain has been developed.
- 1408 **Paradoxical False Memory for Objects After Brain Damage**
S. M. McTighe et al.
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- 1410 **Frequent Mutation of BAP1 in Metastasizing Uveal Melanomas**
J. W. Harbour et al.
A gene implicated in the control of protein degradation is mutated at high frequency in a metastatic eye cancer.
- 1413 **Direct Exchange of Electrons Within Aggregates of an Evolved Syntrophic Coculture of Anaerobic Bacteria**
Z. M. Summers et al.
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