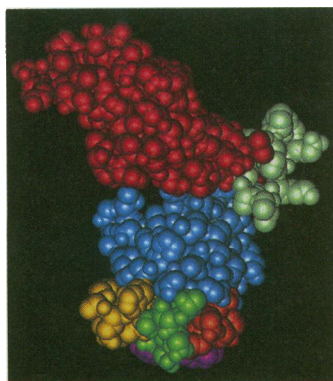


**1896**  
The biology of learning disabilities



**1906 & 1984**  
T cell receptor  $\beta$  chain

## NEWS & COMMENT

- Arguing Over Why Johnny Can't Read 1896
- Patent Award Stirs a Controversy 1899
- Commotion Over *E. coli* Project 1899
- Agency Merger Plan Faces High Hurdles 1900
- Swedish Science: Political Spat Threatens Funding for Basic Research 1901
- Asian Network Seeks Data Sharing 1902
- Critical Technologies: Report Says U.S. Holds Lead 1902

## RESEARCH NEWS

- Switching On a Brilliant Light 1904
- Taking a First Look at a T Cell Receptor  1906
- When It Comes to Evolution, Humans Are in the Slow Class 1907
- The Earliest Art Becomes Older—and More Common 1908
- Earth's Solid Iron Core May Skew Its Magnetic Field  1910
- Pacific Warming Unsettles Ecosystems 1911
- Hubble Glimpses a Hazy Day on Mars 1912

## FRONTIERS IN MATERIALS SCIENCE

### NEWS

- Nonlinear Competition Heats Up 1918
- Blue-Light Special 1920
- Paving the Information Superhighway With Plastic 1921
- Putting Proteins Under Glass 1922

### ARTICLES

- Formation of Glasses from Liquids and Biopolymers 1924
- C. A. Angell

## POLICY FORUM

- Science: Opening the Next Chapter of Conservation History 1954
- B. Babbitt

## PERSPECTIVE

- Hostile Landscapes and the Decline of Migratory Songbirds  1956
- R. A. Askins

## RESEARCH ARTICLE

- Architectures of Class-Defining and Specific Domains of Glutamyl-tRNA Synthetase 1958
- O. Nureki, D. G. Vassilyev, K. Katayanagi, T. Shimizu, S.-i. Sekine, T. Kigawa, T. Miyazawa, S. Yokoyama, K. Morikawa

## DEPARTMENTS

THIS WEEK IN SCIENCE	1885	BOOK REVIEWS	2012
EDITORIAL	1887	<i>The Paleobiogeography of China</i> , reviewed by D. H. Erwin • <i>The Milky Way Galaxy and Statistical Cosmology, 1890–1924</i> , D. DeVorkin • <i>Marine Mammals and the Exxon Valdez</i> , R. C. Helm • Vignettes	
LETTERS	1889	PRODUCTS & MATERIALS	2017
SCIENCESCOPE	1895	QUARTERLY AUTHOR INDEX	2023
RANDOM SAMPLES	1903		

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Molecular dynamics representations of two low-temperature amorphous states of water, which are characterized by different, incompatible short-range orderings of the molecules. The white spheres represent hydrogen and the red spheres oxygen. Polyamorphism, important in biopolymers, is one of the most recently

recognized features of the glassy state. See page 1939. Amorphous materials and glasses are the focus of a special section on Materials Science, which begins on page 1918. [Images: P. H. Poole, Dalhousie University, Halifax, Nova Scotia]



A Topographic View of Supercooled Liquids and Glass Formation F. H. Stillinger	1935
The Microscopic Basis of the Glass Transition in Polymers from Neutron Scattering Studies B. Frick and D. Richter	1939
Physical Aging in Polymer Glasses I. M. Hodge	1945
Metallic Glasses A. L. Greer	1947

## REPORTS

Spatially Resolved Visible Luminescence of Self-Assembled Semiconductor Quantum Dots R. Leon, P. M. Petroff, D. Leonard, S. Fafard	1966
Design and Application of Electron-Transporting Organic Materials M. Strukelj, F. Papadimitrakopoulos, T. M. Miller, L. J. Rothberg	1969
High-Pressure Elasticity of Iron and Anisotropy of Earth's Inner Core L. Stixrude and R. E. Cohen	1972
Biogeological Mineralization in Deep-Sea Hydrothermal Deposits T. L. Cook and D. S. Stakes	1975
Atmospheric Methyl Bromide (CH <sub>3</sub> Br) from Agricultural Soil Fumigations K. Yagi, J. Williams, N.-Y. Wang, R. J. Cicerone	1979
Signatures of the Martian Atmosphere in Glass of the Zagami Meteorite K. Marti, J. S. Kim, A. N. Thakur, T. J. McCoy, K. Keil	1981
Crystal Structure of the $\beta$ Chain of a T Cell Antigen Receptor G. A. Bentley, G. Boulot, K. Karjalainen, R. A. Mariuzza	1984

Regional Forest Fragmentation and the Nesting Success of Migratory Birds S. K. Robinson, F. R. Thompson III, T. M. Donovan, D. R. Whitehead, J. Faaborg	1987
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Requirement of Serine Phosphorylation for Formation of STAT-Promoter Complexes X. Zhang, J. Blenis, H.-C. Li, C. Schindler, S. Chen-Kiang	1990
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Switching Recognition of Two tRNA Synthetases with an Amino Acid Swap in a Designed Peptide D. S. Auld and P. Schimmel	1994
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Rapid Adaptation of Cardiac Ryanodine Receptors: Modulation by Mg <sup>2+</sup> and Phosphorylation H. H. Valdivia, J. H. Kaplan, G. C. R. Ellis-Davies, W. J. Lederer	1997
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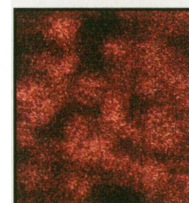
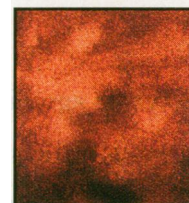
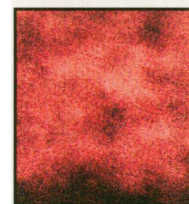
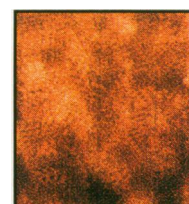
Altered Cytokine Export and Apoptosis in Mice Deficient in Interleukin-1 $\beta$ Converting Enzyme K. Kuida, J. A. Lippke, G. Ku, M. W. Harding, D. J. Livingston, M. S.-S. Su, R. A. Flavell	2000
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Requirement for Phosphatidylinositol-3 Kinase in the Prevention of Apoptosis by Nerve Growth Factor R. Yao and G. M. Cooper	2003
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High-Frequency Motility of Outer Hair Cells and the Cochlear Amplifier P. Dallos and B. N. Evans	2006
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## TECHNICAL COMMENTS

Models of Ca <sup>2+</sup> Release Channel Adaptation H. Cheng, M. Fill, H. Valdivia, W. J. Lederer; F. Sachs, F. Qin, P. Palade	2009
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1966  
Illuminating quantum dots

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