

299

Microscopic
data craters



390

Answering the frog call

NEWS & COMMENT

- NIH Escapes the Ax—For Now **292**
AIDS Research: Who Should Hold the
Purse Strings? **292**
- FDA Panel OKs Baboon Marrow Transplant **293**
- Conflict of Interest: Final Rules Put
Universities in Charge **294**
- Dana-Farber Death Sends a Warning
to Research Hospitals **295**
- Sustainable Development: China Meeting
Signals New Commitment **296**
- India: New Rules Push Researchers Closer
to Biotech Industry **297**
- Vietnam: Joint Dioxin Research Imperiled **298**

RESEARCH NEWS

- Pushing the Data Storage Envelope **299**
- How Quasars Make Heavy Metal **300**
- Protein Proves to Be a Key Link
in Innate Immunity **301**
- Plants Proving Their Worth in
Toxic Metal Cleanup **302**
- Chernobyl: Life Abounds Without People **304**
- Portuguese Rock Art Gets Younger **304**

PERSPECTIVES

- Biological Implications of the Middle
Miocene Amazon Seaway **361**
S. D. Webb
- Laminin $\beta 2$ (S-Laminin): A New
Player at the Synapse **362**
Z. W. Hall


RESEARCH ARTICLE

- Structurally Complex and Highly Active RNA
Ligases Derived from Random RNA Sequences **364**
E. H. Eklund, J. W. Szostak, D. P. Bartel

REPORTS

- Quantum Point Contact Switches **371**
D. P. E. Smith
- Ferroelectric Field Effect in Epitaxial Thin Film
Oxide $\text{SrCuO}_2/\text{Pb}(\text{Zr}_{0.52}\text{Ti}_{0.48})\text{O}_3$ Heterostructures **373**
C. H. Ahn, J.-M. Triscone, N. Archibald, M.
Decroux, R. H. Hammond *et al.*
- Luminescence Enhancement by the
Introduction of Disorder into
Poly(*p*-phenylene vinylene) **376**
S. Son, A. Dodabalapur, A. J. Lovinger, M. E. Galvin
- Cooling of Tropical Brazil (5°C) During
the Last Glacial Maximum **379**
M. Stute, M. Forster, H. Frischkorn, A. Serejo, J. F.
Clark, P. Schlosser, W. S. Broecker, G. Bonani
- Primitive Boron Isotope Composition
of the Mantle **383**
M. Chaussidon and B. Marty

DEPARTMENTS

- | | | | |
|--|-----|---|-----|
| THIS WEEK IN SCIENCE | 281 | SCIENCESCOPE | 291 |
| EDITORIAL | 283 | RANDOM SAMPLES | 305 |
| Big Questions for a Small Planet | | BOOK REVIEWS | 421 |
| LETTERS | 285 |  Long-Term Experiments in Agricultural and Ecological Sciences, reviewed by K. L. Gross • Reinventing Nature?, J. Hearn • Vignettes • Books Received • Publishers' Addresses | |
| "Adaptive Mutation": The Debate Goes On: R. E. Lenski and P. D. Sniegowski; J. A. Shapiro • Adaptive Mutation and Sex: J. Cairns; J. P. Radicella, M. S. Fox, P. U. Park • Mutation Rate of the F Episome: F. Taddei, M. Radman, J. A. Halliday; T. Galitski and J. Roth | | PRODUCTS & MATERIALS | 424 |

Board of Reviewing Editors

Frederick W. Alt
Don L. Anderson
Michael Ashburner
Stephen J. Benkovic
David E. Bloom
Piet Borst
Henry R. Bourne
Michael S. Brown
James J. Bull
Kathryn Calame

C. Thomas Caskey
Dennis W. Choi
John M. Coffin
F. Fleming Crim
Paul J. Crutzen
James E. Dahlberg
Robert Desimone
Paul T. Englund
Richard G. Fairbanks
Douglas T. Fearon

Harry A. Fozzard
Klaus Friedrich
Theodore H. Geballe
Roger I. M. Glass
Stephen P. Goff
Peter N. Goodfellow
Corey S. Goodman
Ira Herskowitz
Tomas Hökfelt
Eric F. Johnson

Stephen M. Kosslyn
Michael LaBarbera
Nicole Le Douarin
Charles S. Levings III
Alexander Levitzki
Harvey F. Lodish
Richard Losick
Reinhard Lüthmann
Diane Mathis
Anthony R. Means

Shigetada Nakanishi
Roger A. Nicoll
Stuart L. Pimm
Yeshayau Pocker
Dennis A. Powers
Ralph S. Quatrano
V. Ramanathan
Douglas C. Rees
T. M. Rice
David C. Rubie

Erkki Ruoslahti
Gottfried Schatz
Jozef Schell
Ronald H. Schwartz
Terrence J. Sejnowski
Ellen Solomon
Thomas A. Steitz
Michael P. Stryker
Robert T. N. Tjian
Emil R. Unanue

Geerat J. Vermeij
Bert Vogelstein
Arthur Weiss
Zena Werb
George M. Whitesides
Owen N. Witte
William A. Wulf