139 This Week in Science

Editorial
141 Volatile Contaminants of Drinking Water

Letters
144 Scientific Integrity: J. O. Mason and L. W. Bivens; B. D. Davis ▪ Clinical and Actuarial Judgment: B. Kleinmuntz; D. Faust, P. E. Meehl, R. M. Dawes

News & Comment
148 Rockefeller Braces for Baltimore
151 How the Soviets Got the H-Bomb
152 Super Collider Advocates Tangle with Cost Cutters
154 NIH Conflict-of-Interest Guidelines Shot Down ▪ Some of the Voices from the Chorus of Protest

Research News
156 Briefings: Fleas Turn a Deaf Ear ▪ CDC Head Named ▪ Moss Landing Labs Destroyed by Quake ▪ Stanford News Director Resigns ▪ Incredible Lightness of Gyroscopes ▪ Bridging the Student-Work Gap ▪ Brain Decade ▪ Russian Moon Non-Landing ▪ Asians Up, Africans Down
158 Pushing the Envelope of Life ▪ The Third Kingdom of Life
160 Fossils and British Pride
161 What You Find When Looking for a Soccer Ball
162 Hurricane-Drought Link Bodes Ill for U.S. Coast

Articles
177 Superconductivity and the Quantization of Energy: D. G. McDonald

Research Articles

Reports
189 Changes in Mean Concentration, Phase Shifts, and Dissipation in a Forced Oscillatory Reaction: J. G. Lazar and J. Ross
192 Mountains and Arid Climates of Middle Latitudes: S. Manabe and A. J. Broccoli
COVER  Experimental angular distribution of 65–electron volts Auger electrons emitted from an atomically clean platinum [111] single-crystal surface. Lighter colors represent larger signal. Contours (green) depict the theoretical distribution from a pair of adjacent atomic layers. These results reveal that Auger electron angular distributions consist of the “silhouettes” of near-surface atoms “backlit” by Auger emission originating from atoms located deeper in the sample. See page 182. [Data acquisition and graphics by D. G. Frank, N. Batina, and A. T. Hubbard; photography by R. Shaw, University of Cincinnati, Cincinnati, OH]


198  Global Climate Change and Intensification of Coastal Ocean Upwelling: A. Bakun


205  Repression of c-fos Transcription and an Altered Genetic Program in Senescent Human Fibroblasts: T. Seshadri and J. Campisi

209  The Dominant W42 spotting Phenotype Results from a Missense Mutation in the c-kit Receptor Kinase: J. C. Tan, K. Nocka, P. Ray, P. Trakman, P. Besmer

212  Localization of an Acetylcholine Receptor Intrion to the Nuclear Membrane: S. A. Berman, S. Bursztain, B. Bowen, W. Gilbert

214  Perceptual Deficits and the Activity of the Color-Opponent and Broad-Band Pathways at Isoluminance: N. K. Logothetis, P. H. Schiller, E. R. Charles, A. C. Hurlburt


Technical Comments


Book Reviews

223  The Formation of Science in Japan, reviewed by D. E. Westney ■ Conservation for the Twenty-First Century, K. Ralls ■ The Empire of Chance, G. R. Shafer ■ Modern Planktonic Foraminifera, H. J. Spero ■ Biomolecular Data, J. Ostell ■ Books Received

Products & Materials

230  Immune-Deficient Mice for Research ■ Automated High-Performance Capillary Electrophoresis ■ Volume Rendering Software ■ Automated Viscometer ■ Gamma Counter for Absorbance Measurements ■ Centrifugal Vacuum Concentrator ■ Gas Chromatography on the Macintosh ■ Literature
Editor's Summary

This copy is for your personal, non-commercial use only.

**Article Tools**
Visit the online version of this article to access the personalization and article tools:
http://science.sciencemag.org/content/247/4939

**Permissions**
Obtain information about reproducing this article:
http://www.sciencemag.org/about/permissions.dtl