



1923 & 1977

Cosmic energy gap



1941, 2002 & 2005

Medfly transformed

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Suit Alleges Misuse of Peer Review 1912
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NAE: Governing Body Clamps Down On Its New Chief Executive 1915

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Search for Better Crystals Explores Inner, Outer Space 1921

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Does a Cosmic Ray Gap Open the Door on New Physics? 1923

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Novel Center Seeks to Add Spark to Origins of Life 1925

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Plasmodesmata: Plant Channels for Molecules on the Move 1943
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ARTICLE

An STS-Based Map of the Human Genome 1945

T. J. Hudson, L. D. Stein, S. S. Gerety, J. Ma, A. B. Castle, J. Silva, D. K. Slonim, R. Baptista, L. Kruglyak, S.-H. Xu, X. Hu, A. M. E. Colbert, C. Rosenberg, M. P. Reeve-Daly, S. Rozen, L. Hui, X. Wu, C. Vestergaard, K. M. Wilson, J. S. Bae, S. Maitra, S. Ganiatsas, C. A. Evans, M. M. DeAngelis, K. A. Ingalls, R. W. Nahf, L. T. Horton Jr., M. O. Anderson, A. J. Collymore, W. Ye, V. Kouyoumjian, I. S. Zemsteva, J. Tam, R. Devine, D. F. Courtney, M. T. Renaud, H. Nguyen, T. J. O'Connor, C. Fizames, S. Fauré, G. Gyapay, C. Dib, J. Morissette, J. B. Orlin, B. W. Birren, N. Goodman, J. Weissenbach, T. L. Hawkins, S. Foote, D. C. Page, E. S. Lander

REPORTS

Role of Langmuir Circulation in the Deepening of the Ocean Surface Mixed Layer 1955
 M. Li, K. Zahariev, C. Garrett

Mantle Melting and Basalt Extraction by Equilibrium Porous Flow 1958
 C. C. Lundstrom, J. Gill, Q. Williams, M. R. Perfit

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 A New Form of Matter Unveiled

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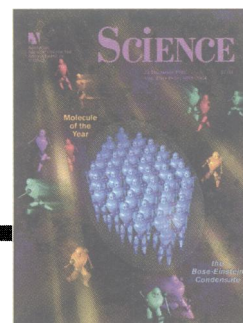
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Artist's conception of supercooled atoms in an exotic phase of matter called the Bose-Einstein condensate, which is Molecule of the Year for 1995. Each of the atoms in the condensate (in blue) has the same quantum mechanical wave function, and so they all move as

one. Atoms outside the condensate move faster and in all directions. See Editorial on page 1901 and Molecule of the Year section beginning on page 1902. [Illustration: Steve Keller]



Complexity of Holocene Climate as Reconstructed from a Greenland Ice Core 1962
S. R. O'Brien, P. A. Mayewski, L. D. Meeker, D. A. Meese, M. S. Twickler, S. I. Whitlow

Al Coordination Changes in High-Pressure Aluminosilicate Liquids 1964
J. L. Yarger, K. H. Smith, R. A. Nieman, J. Diefenbacher, G. H. Wolf, B. T. Poe, P. F. McMillan

High-Resolution Microcoil ¹H-NMR for Mass-Limited, Nanoliter-Volume Samples 1967
D. L. Olson, T. L. Peck, A. G. Webb, R. L. Magin, J. V. Sweedler

Unusually Mild and Selective Hydrocarbon C-H Bond Activation with Positively Charged Iridium(III) Complexes 1970
B. A. Arndtsen and R. G. Bergman

Direct Perception of Three-Dimensional Motion from Patterns of Visual Motion 1973
C. Fermüller and Y. Aloimonos

A Gap in the Highest Energy Cosmic Ray Spectrum as a Signature of Unification Scale Physics 1977
G. Sigl, S. Lee, D. N. Schramm, P. Bhattacharjee

Selective Trafficking of KNOTTED1 Homeodomain Protein and Its mRNA Through Plasmodesmata 1980
W. J. Lucas, S. Bouché-Pillon, D. P. Jackson, L. Nguyen, L. Baker, B. Ding, S. Hake

Interaction of Tobamovirus Movement Proteins with the Plant Cytoskeleton 1983
M. Heinlein, B. L. Epel, H. S. Padgett, R. N. Beachy

Inhibition of Leaf Senescence by Autoregulated Production of Cytokinin 1986
S. Gan and R. M. Amasino

Tobacco MAP Kinase: A Possible Mediator in Wound Signal Transduction Pathways 1988
S. Seo, M. Okamoto, H. Seto, K. Ishizuka, H. Sano, Y. Ohashi

Tissue Plasminogen Activator Induction in Purkinje Neurons After Cerebellar Motor Learning 1992
N. W. Seeds, B. L. Williams, P. C. Bickford

A Subclass of bHLH Proteins Required for Cardiac Morphogenesis 1995
D. Srivastava, P. Cserjesi, E. N. Olson

The ARF1 GTPase-Activating Protein: Zinc Finger Motif and Golgi Complex Localization 1999
E. Cukierman, I. Huber, M. Rotman, D. Cassel

Gene Transfer into the Medfly, *Ceratitis capitata*, with a *Drosophila hydei* Transposable Element 2002
T. G. Loukeris, I. Livadaras, B. Arcà, S. Zabalou, C. Savakis

The *white* Gene of *Ceratitis capitata*: A Phenotypic Marker for Germline Transformation 2005
L. J. Zwiebel, G. Saccone, A. Zacharopoulou, N. J. Besansky, G. Favia, F. H. Collins, C. Louis, F. C. Kafatos

Identification of a Member of the MAPKKK Family as a Potential Mediator of the TGF- β Signal Transduction 2008
K. Yamaguchi, K. Shirakabe, H. Shibuya, K. Irie, I. Oishi, N. Ueno, T. Taniguchi, E. Nishida, K. Matsumoto

Evolution of Body Size in the Woodrat over the Past 25,000 Years of Climate Change 2012
F. A. Smith, J. L. Betancourt, J. H. Brown

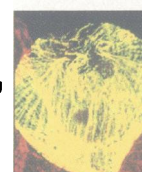
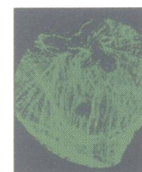
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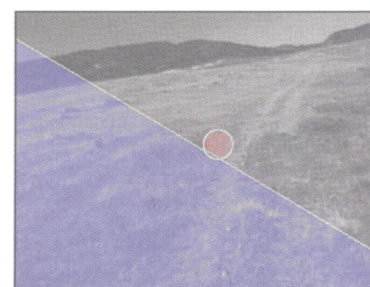
The Effect of Sodium Salicylate and Aspirin on NF- κ B 2017
B. Frantz and E. A. O'Neill; S. Ghosh and E. Kopp

Neurotrophins and Excitotoxicity 2019
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