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- Field, Jeffrey; Xu, Hao-Peng; Michaeli, Tamar; Ballester, Roymarie; Sass, Philip; Wigler, Michael; Colicelli, John: Mutations of the adenyl cyclase gene that block RAS function in *Saccharomyces cerevisiae*. p464 26 Jan 1990.
- Fink, G. *See* Mobbs, C. V.
- Finkbeiner, Steven M. *See* Cornell-Bell, Ann H.
- Finn, Patricia W. *See* Liou, Hsiou-Chi.
- Fiorillo, Anthony R.: review of *Dinosaur Tracks and Traces*, edited by David D. Gillette and Martin G. Lockley. p732 9 Feb 1990.
- Fisher, C. R.; Kennicutt, M. C., II; Brooks, J. M.: Stable carbon isotopic evidence for carbon limitation in hydrothermal vent vestimentiferans. p1094 2 Mar 1990.
- Fiske, Richard S. *See* Delaney, Paul T.
- Foner, Nancy: review of *The Informal Economy*, edited by Alejandro Portes, Manuel Castells, and Lauren A. Benton. p727 9 Feb 1990.
- Foot, Christopher S.: A broken system? (letter). p1388 23 Mar 1990.
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- Foster, Russell G. *See* Ralph, Martin R.
- Foukal, P. and Lean, J.: An empirical model of total solar irradiance variation between 1874 and 1988. p556 2 Feb 1990.
- Fox, Lucius S.; Kozik, Mariusz; Winkler, Jay R.; Gray, Harry B.: Gaussian free-energy dependence of electron-transfer rates in iridium complexes. p1069 2 Mar 1990.
- Fox, Maurice S.; Magasanik, Boris; Signer, Ethan R.; Solomon, Frank; Gellert, Martin F.; Haber, James E.: The genome project: pro and con (letter). p270 19 Jan 1990.
- Frackowiak, Richard. *See* Lindvall, Olle.
- Franchi, A. *See* Sardet, C.
- Franchini, Genoveffa. *See* Lusso, Paolo.
- Frank, Douglas G.; Batina, Nikola; Golden, Teresa; Lu, Frank; Hubbard, Arthur T.: Imaging surface atomic structure by means of Auger electrons. p182 12 Jan 1990.
- Frank, Martin: NIH budget crisis (letter). p393 26 Jan 1990.
- Franklin, Jerry F. *See* Harmon, Mark E.
- Frei, Emil, III. *See* Teicher, Beverly A.
- Friedman, William E.: Double fertilization in *Ephedra*, a nonflowering seed plant: its bearing on the origin of angiosperms. p951 23 Feb 1990.
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- Fuchs, Victor R.: The health sector's share of the gross national product. p534 2 Feb 1990.
- Fulkerson, William; Reister, David B.; Auerbach, Stanley I.; Perry, Alfred M.; Crane, Alan T.; Kash, Don E.: Global warming (letter). p620 9 Feb 1990.
- Fung, Inez Y. *See* Tans, Pieter P.
- Funk, Walter D. *See* Burch, Anita M.
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- Gaffield, Livia. *See* Lin, Jih-Jing.
- Gai, Pratibha L. and McCarron, Eugene M., III: Direct observation and analysis of CuO₂ shear defects in La_{2-x}Sr_xCuO₄. p553 2 Feb 1990.
- Gaissner, Thomas K.: Gamma rays and neutrinos as clues to the origin of high energy cosmic rays. p1049 2 Mar 1990.
- Galaburda, Albert M.: Molecule of the Year (letter). p904 23 Feb 1990.
- Galambos, Louis: review of *Control Through Communication*, by JoAnne Yates. p474 26 Jan 1990.
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- Gallant, Jonathan A. and Prothero, John W.: Department size and quality (letter). p1530 30 Mar 1990.
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- Gardner, Martin: *Discover's* advertisements (letter). p515 2 Feb 1990.
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- Gee, J. B. L. *See* Mossman, B. T.
- Gelb, Michael H. *See* Farnsworth, Christopher C.
- Gellert, Martin F. *See* Fox, Maurice S.
- Gerhardt, Martin; Schuster, Heike; Tyson, John J.: A cellular automaton model of excitable media including curvature and dispersion. p1563 30 Mar 1990.
- Ghanshani, Sanjiv. *See* Chandy, K. George.
- Giaid, Adel. *See* Yoshizawa, Toshihiro.
- Gibbons, Ann (news): Paleontology by bulldozer. p1407 23 Mar 1990.
- Gibbs, James. *See* Weller, Aron.
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- Gill, Stanley J. *See* Murphy, Kenneth P.
- Gingras, Yves: review of *The Uses of Experiment*, edited by David Gooding, Trevor Pinch, and Simon Schaffer. p1592 30 Mar 1990.
- Girosi, F. *See* Poggio, T.

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 Golub, Edward S.: review of *A History of Immunology, 1930-1980*, edited by Pauline M. H. Mazumdar. p347 19 Jan 1990.
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 Greene, B. I.; Orenstein, J.; Schmitt-Rink, S.: All-optical nonlinearities in organics. p679 9 Feb 1990.
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S.; O'Leary, Dennis D. M.: Target control of collateral extension and directional axon growth in the mammalian brain. p217 12 Jan 1990.
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 Heinrichs, Volker; Bach, Montserrat; Winkelmann, Gerd; Lüthmann, Reinhard: U1-specific protein C needed for efficient complex formation of U1 snRNP with a 5' splice site. p69 5 Jan 1990.
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 Herman, Terence S. *See* Teicher, Beverly A.
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 Hernández-Cruz, Arturo; Sala, Francisco; Adams, Paul R.: Subcellular calcium transients visualized by confocal microscopy in a voltage-clamped vertebrate neuron. p858 16 Feb 1990.
 Hershey, Andrew D. and Krause, James E.: Molecular characterization of a functional cDNA encoding the rat substance P receptor. p958 23 Feb 1990.
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 Itoh, Naoto; Yonehara, Shin; Schreurs, Jolanda; Gorman, Daniel M.; Maruyama, Kazuo; Ishii, Ai; Yahara, Ichiro; Arai, Ken-ichi; Miyajima, Atsushi: Cloning of an interleukin-3 receptor gene: a member of a distinct receptor gene family. p324 19 Jan 1990.
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 Jastrow, Robert: Global warming report (letter). p14 5 Jan 1990.
 Jeang, Kuan-Teh; Widen, Steven G.; Semmes, Oliver J., IV; Wilson, Samuel H.: HTLV-I trans-activator protein, Tax, is a trans-repressor of the human β -polymerase gene. p1082 2 Mar 1990.
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Lieberman, K.; Harush, S.; Lewis, A.; Kopelman, R.: A light source smaller than the optical wavelength. p59 5 Jan 1990.

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Liou, Hsiou-Chi; Boothby, Mark R.; Finn, Patricia W.; Davidson, Ruth; Nabavi, Nasrin; Zelezniak-Le, Nancy J.; Ting, Jenny P.-Y.; Glimcher, Laurie H.: A new member of the leucine zipper class of proteins that binds to the HLA DR α promoter. p1581 30 Mar 1990.

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—; Schiller, P. H.; Charles, E. R.; Hurlbert, A. C.: Perceptual deficits and the activity of the color-opponent and broad-band pathways at isoluminance. p214 12 Jan 1990.

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Lusso, Paolo; Veronese, Fulvia di Marzo; Ensoli, Barbara; Franchini, Genoveffa; Jemma, Cristina; DeRocco, Susan E.; Kalyanaraman, V. S.; Gallo, Robert C.: Expanded HIV-1 cellular tropism by phenotypic mixing with murine endogenous retroviruses. p848 16 Feb 1990.

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Maisonnier, Peter C.; Belluscio, Leonardo; Squinto, Stephen; Ip, Nancy Y.; Furth, Mark E.; Lindsay, Ronald M.; Yancopoulos, George D.: Neurotrophin-3: a neurotrophic factor related to NGF and BDNF. p1446 23 Mar 1990.

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- Matayoshi, Edmund D.; Wang, Gary T.; Krafft, Grant A.; Erickson, John: Novel fluorogenic substrates for assaying retroviral proteases by resonance energy transfer. p954 23 Feb 1990.
- Matsubara, Rie; Toraya, Hideo; Tanaka, Satoshi; Sawamoto, Hiroshi: Precision lattice-parameter determination of (Mg,Fe)SiO₃ tetragonal garnets. p697 9 Feb 1990.
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- Mauk, Marcia R. See Burch, Anita M.
- Mazumder, A.; Taylor, W. D.; McQueen, D. J.; Lean, D. R. S.: Effects of fish and plankton on lake temperature and mixing depth. p312 19 Jan 1990.
- McBride, Heyoung L. See Trent, Jeffrey M.
- McCann, John D. See Welsh, Michael J.
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- McClelland, Gary M. See Farley, Francis W.
- McCune, Joseph M.; Namikawa, Reiko; Shih, Chu-Chih; Rabin, Linda; Kaneshima, Hideo: Suppression of HIV infection in AZT-treated SCID-hu mice. p564 2 Feb 1990.
- McDonald, D. G.: Superconductivity and the quantization of energy. p177 12 Jan 1990.
- McGaughey, W. H. See Van Rie, J.
- McKinney, Michael L.: review of *Mass Extinctions*, edited by Stephen K. Donovan. p475 26 Jan 1990.
- McLafferty, Fred W.: Studies of unusual simple molecules by neutralization-reionization mass spectrometry. p925 23 Feb 1990.
- McNeill, William H.: review of *Death by Migration*, by Philip D. Curtin. p474 26 Jan 1990.
- McQuade, T. J.; Tomasselli, A. G.; Liu, L.; Karacostas, V.; Moss, B.; Sawyer, T. K.; Heinrichson, R. L.; Tarpley, W. G.: A synthetic HIV-1 protease inhibitor with antiviral activity arrests HIV-like particle maturation. p454 26 Jan 1990.
- McQueen, D. J. See Mazumder, A.
- Meech, Karen J. See Green, Daniel W. E.
- Meehl, Paul E. See Faust, David.
- Meese, Eckart U. See Trent, Jeffrey M.
- Megee, Paul C.; Morgan, Brian A.; Mittman, Barbara A.; Smith, M. Mitchell: Genetic analysis of histone H4: essential role of lysines subject to reversible acetylation. p833 16 Feb 1990.
- Mehrke, Gerhard. See Daut, Jürgen.
- Menaker, Michael. See Ralph, Martin R.
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- Metsis, Madis. See Persson, Håkan.
- Metzger, Joseph M. and Moss, Richard L.: Calcium-sensitive cross-bridge transitions in mammalian fast and slow skeletal muscle fibers. p1088 2 Mar 1990.
- Michaeli, Tamar. See Field, Jeffrey.
- Miklius, Asta. See Delaney, Paul T.
- Milburn, Michael V.; Tong, Liang; deVos, Abraham M.; Brünger, Axel; Yamaizumi, Ziro; Nishimura, Susumu; Kim, Sung-Hou: Molecular switch for signal transduction: structural differences between active and inactive forms of protooncogenic *ras* proteins. p939 23 Feb 1990.
- Milford, J. B. See Russell, A. G.
- Milkman, Roger: review of *Gene Transfer in the Environment* by Stuart B. Levy and Robert V. Miller. p350 19 Jan 1990.
- Miller, Christopher. See Richard, Edwin A.
- Miller, Robert W. and Brent, Robert L.: Low-dose radiation exposure (letter). p1166 9 Mar 1990.
- Mitrani, Eduardo and Shimoni, Yael: Induction by soluble factors of organized axial structures in chick epiblasts. p1092 2 Mar 1990.
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- Miyajima, Atsushi. See Itoh, Naoto.
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- Mobbs, C. V.; Fink, G.; Pfaff, D. W.: HIP-70: a protein induced by estrogen in the brain and LH-RH in the pituitary. p1477 23 Mar 1990.
- Moffat, Anne (news): Fiber fracas at FASEB. p1412 23 Mar 1990. "Rocking" on the banks of the Columbia River. p1413 23 Mar 1990.
- Moldowan, J. Michael; Fago, Frederick J.; Lee, Cathy Y.; Jacobson, Stephen R.; Watt, David S.; Slougui, Nacer-Eddine; Jeganathan, Alwarsamy; Young, Donald C.: Sedimentary 24-n-propylcholestanes, molecular fossils diagnostic of marine algae. p309 19 Jan 1990.
- Moody, William J. See Block, Melodye L.
- Moore, Geoffrey R. See Burch, Anita M.
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- Morris, Peter J. T.: review of *Synthetic Fuel Technology Development in the United States*, by Michael Crow, Barry Bozeman, Walter Meyer, and Ralph Shangraw, Jr. p1593 30 Mar 1990.
- Morrow, Daniel G. See Bower, Gordon H.
- Moser, Amy Rapaich; Pitot, Henry C.; Dove, William F.: A dominant mutation that predisposes to multiple intestinal neoplasia in the mouse. p322 19 Jan 1990.
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- Moss, Richard L. See Metzger, Joseph M.
- Mossman, B. T.; Bignon, J.; Corn, M.; Seaton, A.; Gee, J. B. L.: Asbestos: scientific developments and implications for public policy. p294 19 Jan 1990.
- Muller, Alexander J. See Lugo, Tracy G.
- Muller, William A. See Newman, Peter J.
- Murphy, Kenneth P.; Privalov, Peter, L.; Gill, Stanley J.: Common features of protein unfolding and dissolution of hydrophobic compounds. p559 2 Feb 1990.
- Muschel, Louis H.: The genome project: pro and con (letter). p270 19 Jan 1990.
- Mustelin, T.; Coggeshall, K. M.; Isakov, N.; Altman, A.: T cell antigen receptor-mediated activation of phospholipase C requires tyrosine phosphorylation. p1584 30 Mar 1990.
- Myslinski, Evelyne; Ségault, Véronique; Brantlant, Christiane: An intron in the genes for U3 small nucleolar RNAs of the yeast *Saccharomyces cerevisiae*. p1213 9 Mar 1990.
- Nabavi, Nasrin. See Liou, Hsiou-Chi.
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- Nagle, Raymond B. See Trent, Jeffrey M.
- Nakamura, Takanori; Takio, Koji; Eto, Yuzuru; Shibai, Hiroshi; Titani, Koiti; Sugino, Hiro-omu: Activin-binding protein from rat ovary is follistatin. p836 16 Feb 1990.
- Namikawa, Reiko. See McCune, Joseph M.
- Nance, John: The Tasaday debate (letter). p790 16 Feb 1990.
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- Nelbock, Peter. See Olsen, Henrik S.
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- Nelson, Thomas J.; Collin, Carlos; Alkon, Daniel L.: Isolation of a G protein that is modified by learning and reduces potassium currents in *Hermissenda*. p1479 23 Mar 1990.
- Neupert, Walter. See Hartl, Franz-Ulrich.
- Neurath, Hans: NIH budget crisis (letter). p394 26 Jan 1990.
- Newman, Peter J.; Berndt, Michael C.; Gorski, Jack; White, Gilbert C., II; Lyman, Suzanne; Paddock, Cathy; Muller, William A.: PECAM-1 (CD31) cloning and relation to adhesion molecules of the immunoglobulin gene superfamily. p1219 9 Mar 1990.
- Nicklas, Janice A. See Allegretta, Mark.
- Niederhuber, John E. See Dymecki, Susan M.
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- Nierenberg, William A.: Global warming report (letter). p14 5 Jan 1990.
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- Norman, Colin (news): Army, Air Force eye SDI spinoffs. p1284 16 Mar 1990. Bush budget highlights R&D. p517 2 Feb 1990. Bush names science committee. p629 9 Feb 1990. Defense research after the Cold War. p272 19 Jan 1990. How the Soviets got the H-bomb. p151 12 Jan 1990. MIT tenure case heads for trial. p1536 30 Mar 1990. Science indicators: healthy . . . for now. p803 16 Feb 1990. SDI heads for fiscal crash. p1283 16 Mar 1990. The ups and downs of strategic defense weapons. p1285 16 Mar 1990.
- Obeyskare, Upul R. See Pabo, Carl O.
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- Okamura, Arnold T. See Delaney, Paul T.
- O'Leary, Dennis D. M. See Heffner, Christopher D.
- Olney, J. W.; Labruyere, J.; Price, M. T.: Phencyclidine, dizocilpine, and cerebrocortical neurons (technical comment). p221 12 Jan 1990.
- Olsen, Henrik S.; Nelbock, Peter; Cochrane, Alan W.; Rosen, Craig A.: Secondary structure is the major determinant for interaction of HIV *rev* protein with RNA. p845 16 Feb 1990.
- Olson, Lars. See Persson, Håkan.
- Orenstein, J. See Greene, B. I.
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- Ostell, James: review of *Biomolecular Data*, edited by Rita R. Colwell, David G. Swartz, and Michael T. Macdonell. p226 12 Jan 1990.
- Owen, Thomas A. See Holthuis, Joost.
- Pabo, Carl O.; Aggarwal, Anel K.; Jordan, Steven R.; Beamer, Lesa J.; Obeyskare, Upul R.; Harrison, Stephen C.: Conserved residues make similar contacts in two repressor-operator complexes. p1210 9 Mar 1990.
- Paddock, Cathy. See Newman, Peter J.
- Palca, Joseph (news): AAAS rides electronic wave. p1024 2 Mar 1990. Article on Gallo prompts inquiry. p19 5 Jan 1990. BITNET headed for new frontiers. p520 2 Feb 1990. Dallas AIDS survey raises expectations. p1023 2 Mar 1990. Fetal research ban on shaky ground? p629 9 Feb 1990. Getting to the heart of the cholesterol debate. p1170 9 Mar 1990. NIH conflict-of-interest guidelines shot down. p154 12 Jan 1990. Old law puts a new wrinkle in fraud probes. p802 16 Feb 1990. Shooting at a new HIV target. p410 26 Jan 1990. Soviet reforms: promises, promises. p1025 2 Mar 1990. Trials and tribulations of AIDS drug

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Perin, Romeo V.: SSC magnet development (letter). p790 16 Feb 1990.

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Persson, Håkan; Ayer-Le Lievre, Christiane; Söder, Olof; Villar, Marcelo J.; Metsis, Madis; Olson, Lars; Ritzen, Martin; Hökfelt, Tomas: Expression of β -nerve growth factor receptor mRNA in Sertoli cells downregulated by testosterone. p704 9 Feb 1990.

Petersilia, Joan. See Klein, Stephen.

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Philibert, Daniel and Teutsch, Georges: RU 486 development (letter). p622 9 Feb 1990.

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Pisano, Gary P.: review of *Gene Dreams*, by Robert Teitelman. p1241 9 Mar 1990.

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Radick, Richard R.; Lockwood, G. W.; Baliunas, Sallie L.: Stellar activity and brightness variations: a glimpse at the sun's history. p39 5 Jan 1990.

Ralls, Katherine: review of *Conservation for the Twenty-First Century*, edited by David Western and Mary C. Pearl. p224 12 Jan 1990.

Ralph, Martin R.; Foster, Russell G.; Davis, Fred C.; Menaker, Michael: Transplanted suprachiasmatic nucleus determines circadian period. p975 23 Feb 1990.

Ramesh, R.; Hwang, D. M.; Venkatesan, T.; Ravi, T. S.; Nazar, L.; Inam, A.; Wu, X. D.; Dutta, B.; Thomas, G.; Marshall, A. F.; Geballe, T. H.: Direct observation of structural defects in laser-deposited superconducting Y-Ba-Cu-O thin films. p57 5 Jan 1990.

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Reasenber, Paul A. and Matthews, Mark V.: California aftershock model uncertainties. p343 19 Jan 1990.

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Retallack, Gregory J.; Dugas, D. P.; Bestland, E. A.: Fossil soils and grasses of a middle Miocene East African grassland. p1325 16 Mar 1990.

Reyes, Gregory R.; Purdy, Michael A.; Kim, Jungshuh P.; Luk, Ka-Cheung; Young, La-Vonne M.; Fry, Kirk E.; Bradley, Daniel W.: Isolation of a cDNA from the virus responsible for enterically transmitted non-A, non-B hepatitis. p1335 16 Mar 1990.

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Roberts, Leslie (news): CF screening delayed for awhile, perhaps forever. p1296 16 Mar 1990.

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Rötzschke, Olaf. See Schild, Hansjörg.

Roy, Sophie; Katze, Michael G.; Parkin, Neil T.; Edery, Isaac; Hovanessian, Ara G.; Sonenberg, Nahum: Control of the interferon-induced 68-kilodalton protein kinase by the HIV-1 *tat* gene product. p1216 9 Mar 1990.

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Rushton, J. Philippe: Shockley: a scholar (letter). p905 23 Feb 1990.

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S

Sachs, A. B. and Davis, R. W.: Translation initiation and ribosomal biogenesis: involvement of a putative rRNA helicase and RPL46. p1077 2 Mar 1990.

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Sardet, C.; Counillon, L.; Franchi, A.; Pouysségur, J.: Growth factors induce phosphorylation of the Na⁺/H⁺ antiporter, a glycoprotein of 110 kD. p723 9 Feb 1990.

Sarkar, Gobinda: DNA fingerprinting (letter). p1018 2 Mar 1990.

Sarver, Nava; Cantin, Edouard M.; Chang, Pairoj S.; Zaia, John A.; Ladne, Paula A.; Stephens, Delilah A.; Rossi, John J.: Ribozymes as potential anti-HIV-1 therapeutic agents. p1222 9 Mar 1990.

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- Scheuer, Todd; Auld, Vanessa J.; Boyd, Shelley; Offord, James; Dunn, Robert; Catterall, William A.: Functional properties of rat brain sodium channels expressed in a somatic cell line. p854 16 Feb 1990.
- Schild, Hansjörg; Röttschke, Olaf; Kalbacher, Hubert; Rammensee, Hans-George: Limit of T cell tolerance to self proteins by peptide presentation. p1587 30 Mar 1990.
- Schiller, P. H. See Logothetis, N. K.
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- Schutz, Bernard F.: review of *Frontiers in Numerical Relativity*, edited by Charles R. Evans, Lee S. Finn, and David W. Hobill. p1128 2 Mar 1990.
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- Shew, Jin-Yuh. See Bookstein, Robert.
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- Smith, M. Mitchell. See Megee, Paul C.
- Smith, Mark R.; Liu, Ya-lun; Kim, Hyun; Rhee, Sue Goo; Kung, Hsiang-fu: Inhibition of serum- and Ras-stimulated DNA synthesis by antibodies to phospholipase C. p1074 2 Mar 1990.
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- Spencer, Roy W. and Christy, John R. (news): Precise monitoring of global temperature trends from satellites. p1410 23 Mar 1990.
- Spero, Howard J.: review of *Modern Planktonic Foraminifera*, by Ch. Hemleben, M. Spindler, and O. R. Anderson. p225 12 Jan 1990.
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- Standbridge, Eric J.: Identifying tumor suppressor genes in human colorectal cancer. p12 5 Jan 1990. See also Trent, Jeffrey M.
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- Stein, Janet L. See Holthuis, Joost.
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- and Mac Dougall, James E.: Quantum confinement and host/guest chemistry: probing a new dimension. p669 9 Feb 1990.
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- Sugawara, Osamu; Oshimura, Mitsuo; Koi, Minoru; Annab, Lois A.; Barrett, J. Carl: Induction of cellular senescence in immortalized cells by human chromosome 1. p707 9 Feb 1990.
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- Sun, J. Z.; Lairson, B.; Eom, C. B.; Bravman, J.; Geballe, T. H.: Elimination of current dissipation in high transition temperature superconductors. p307 19 Jan 1990.
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- : Sonochemistry. p1439 23 Mar 1990.
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- Suzuki, Akinori. See Kawakami, Atsushi.
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- Swan, H. T.: The antibiotic record (letter). p1387 23 Mar 1990.
- Switzer, Jay A.; Shane, Michael J.; Phillips, Richard J.: Electrodeposited ceramic superlattices. p444 26 Jan 1990.
- Szuromi, Phillip (news): Ceramic membranes. p283 19 Jan 1990. CO₂ in space. p283 19 Jan 1990. Getting the blues. p283 19 Jan 1990. Mountain in the sea. p283 19 Jan 1990. Reaching for the ring. p283 19 Jan 1990.
- Szwergold, Benjamin S.; Kappler, Francis; Brown, Truman R.: Identification of fructose 3-phosphate in the lens of diabetic rats. p451 26 Jan 1990.

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- Takio, Koji. See Nakamura, Takanori.
- Tan, Jimmy C.; Nocka, Karl; Ray, Prabir; Traktman, Paula; Besmer, Peter: The dominant *W⁴²* spotting phenotype results from a missense mutation in the *c-kit* receptor kinase. p209 12 Jan 1990.
- Tanaka, Satoshi. See Matsubara, Ric.
- Tang, Chieh-ju Chang. See Lichter, Peter.
- Tans, Pieter P.; Fung, Inez Y.; Takahashi, Taro: Observational constraints on the global atmospheric CO₂ budget. p1431 23 Mar 1990.
- Tao, Terence; Gong, Bang-Jian; Leavis, Paul C.: Calcium-induced movement of troponin-I relative to actin in skeletal muscle thin filaments. p1322 16 Mar 1990.
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- Teyke, Thomas; Weiss, Klaudiusz R.; Kupfermann, Irving: An identified neuron (CPR) evokes neuronal responses reflecting food arousal in *Aplysia*. p85 5 Jan 1990.
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 Weiner, A. M.; Leaird, D. E.; Wiederrecht, Gary P.; Nelson, Keith A.: Femtosecond pulse sequences used for optical manipulation of molecular motion. p1317 16 Mar 1990.
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 Wood, Warren W.; Kraemer, Thomas F.; Hearn, Paul P., Jr.: Intracellular diffusion: an important mechanism influencing solute transport in clastic aquifers? p1569 30 Mar 1990.
 Woodland, David; Happ, Mary Pat; Bill, Jerome; Palmer, Ed: Requirement for cotolerogenic gene products in the clonal deletion of I-E reactive T cells. p958 23 Feb 1990.
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