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- Galbraith, David W.; Harkins, Kristi R.; Maddox, Joyce M.; Ayres, Nicola M.; Sharma, Dharam P.; Firoozabady, Ebrahim: Rapid flow cytometric analysis of the cell cycle in

- intact plant tissues. v220 p1049-1051 3 June 83.
- Gale, Thomas F. See Kirby, Margaret L.
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- Gallo, Robert C.; Sarin, Prem S.; Gelmann, E. P.; Robert-Guroff, Marjorie; Richardson, Ersell; Kalyanaraman, V. S.; Mann, Dean; Sidhu, Gurdip D.; Stahl, Rosalyn E.; Zolla-Pazner, Susan; Leibowitch, Jacques; Popovic, Mikulas: Isolation of human T-cell leukemia virus in acquired immune deficiency syndrome. v220 p865-867 20 May 83.
- Gallo, Robert C. See Gelmann, Edward P.
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- Gandelman, Ronald. See Hauser, Herbert.
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- Garaci, Cristina Rinaldi; Favalli, Cartesio; Del Gobbo, Vera; Garaci, Enrico; Jaffe, Bernard M.: Is thymosin action mediated by prostaglandin release? v220 p1163-1164 10 June 83.
- Garaci, Enrico. See Garaci, Cristina Rinaldi.
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- Gerhardt, H. Carl. See Doherty, John A.
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- Gevins, Alan S.; Schaffer, Robert E.; Doyle, Joseph C.; Cuttillo, Brian A.; Tannehill, Robert S.; Bressler, Steven L.: Shadows of thought: shifting lateralization of human brain electrical patterns during brief visuomotor task. v220 p97-99 1 Apr 83.
- Ghezzi, Pietro. See Bottazzi, Barbara.
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- Glatt, Hansruedi; Protic-Sabljic, Miroslava; Oesch, Franz: Mutagenicity of glutathione and cysteine in the Ames test. v220 p961-963 27 May 83.
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- Goodenough, Ward: Margaret Mead and cultural anthropology (letter). v220 p906, 908 27 May 83.

- Goodman, Reba; Bassett, C. Andrew L.; Henderson, Ann S.: Pulsing electromagnetic fields induce cellular transcription. v220 p1283-1285 17 June 83.
- Goodman, Robert R.; Kuhar, Michael J.; Hester, Lynda; Snyder, Solomon H.: Adenosine receptors: autoradiographic evidence for their location on axon terminals of excitatory neurons. v220 p967-969 27 May 83.
- Gorski, Jack; Rollini, Pierre; Mach, Bernard: Somatic mutations of immunoglobulin variable genes are restricted to the rearranged V gene. v220 p1179-1181 10 June 83.
- Gould, Fred.: review of *Bark Beetles in North American Conifers*, edited by Jeffrey B. Mitton and Karen B. Sturgeon. v220 p708-709 13 May 83.
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- Greenberg, Dolores: review of *Energy and Transport*, edited by George H. Daniels and Mark H. Rose. v220 p1265 17 June 83.
- Greer, Helen: review of *The Molecular Biology of the Yeast Saccharomyces*, edited by Jeffrey N. Strathern, Elizabeth W. Jones, James R. Broach. v220 p1373 24 June 83.
- Gregg, John B.: Fluorides and dental caries (letter). v220 p144, 146 8 Apr 83.
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- Haas, Jonathan: review of *The Inca and the Aztec States, 1400-1800*, edited by George A. Collier, Renato I. Rosaldo, and John D. Wirth. v220 p944-945 27 May 83.
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- Hamner, William M.; Hamner, Peggy P.; Strand, Steven W.; Gilmer, Ronald W.: Behavior of antarctic krill, *Euphausia superba*: chemoreception, feeding, schooling, and molting. v220 p433-435 22 Apr 83.
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- Handler, Paul and Handler, Ellen: Climatic anomalies in the tropical Pacific Ocean and corn yields in the United States. v220 p1155-1156 10 June 83.
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- Hassel, Martin V.; Onodera, Takashi; Prabhakar, Bellur S.; Horita, Masakazu; Suzuki, Hoshibumi; Notkins, Abner Louis: Virus-induced autoimmunity: monoclonal antibodies that react with endocrine tissues. v220 p304-306 15 Apr 83.
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- Hedlund, Britta; Abens, Janis; Bartfai, Tamas: Vasoactive intestinal polypeptide and muscarinic receptors: supersensitivity induced by long-term atropine treatment. v220 p519-521 29 Apr 83.
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- Heller, Mark. See Hennessy, Kevin.
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- Henis, Jay M. S. and Tripodi, Mary K.: The developing technology of gas separating membranes. v220 p11-17 1 Apr 83.
- Hennessy, Kevin; Heller, Mark; van Santen, Vicky; Kieff, Elliott: Simple repeat array in Epstein-Barr virus DNA encodes part of the Epstein-Barr nuclear antigen. v220 p1396-1398 24 June 83.
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- Hixon, Mark A. and Brostoff, William N.: Damselfish as keystone species in reverse: intermediate disturbance and diversity of reef algae. v220 p511-513 29 Apr 83.
- Hnatowich, D. J.; Layne, W. W.; Childs, R. L.; Lanteigne, D.; Davis, M. A.; Griffin, T. W.; Doherty, P. W.: Radioactive labeling of antibody: a simple and efficient method. v220 p613-615 6 May 83.
- Hochheiser, Sheldon: review of *Pioneer Plastic*, by Robert Friedel. v220 p818-819 20 May 83.
- Hochmuth, R. M.; Evans, E. A.; Wiles, H. C.; McCown, J. T.: Mechanical measurement of red cell membrane thickness. v220 p101-102 1 Apr 83.

- Hoffmann, Jules A. See Tsoupras, Georges.
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- Hollinger, David A.: review of *The Muses Flee Hitler*, edited by Jarrell C. Jackman and Carla M. Borden. v220 p1370-1371 24 June 83.
- Honchar, Michael P.; Olney, John W.; Sherman, William R.: Systemic cholinergic agents induce seizures and brain damage in lithium-treated rats. v220 p323-325 15 Apr 83.
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- Horowitz, Alice M. and Horowitz, Herschel S.: Fluorides and dental caries (letter). v220 p142, 144 8 Apr 83.
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- Jacky, Peter B.; Beek, Bernd; Sutherland, Grant R.: Fragile sites in chromosomes: possible model for the study of spontaneous chromosome breakage. v220 p69-70 1 Apr 83.
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- Jaffe, R. B. See McGregor, W. G.
- Jakobsen, R. J.; Brown, L. L.; Hutson, T. B.; Fink, D. J.; Veis, A.: Intermolecular interactions in collagen self-assembly as revealed by Fourier transform infrared spectroscopy. v220 p1288-1290 17 June 83.
- Jan, Lily: review of *Substance P in the Nervous System*. v220 p64-65 1 Apr 83.
- Javaid, J. See Sabelli, H. C.
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- Jenkins, Farish A., Jr., and Krause, David W.: Adaptations for climbing in North American multituberculates (Mammalia). v220 p712-715 13 May 83.
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- Johnston, Michael F.; Kravitz, Edward A.;

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Kliegman, R. M.; Miettinen, E. L.; Morton, S.: Potential role of galactokinase in neonatal carbohydrate assimilation. v220 p302-304 15 Apr 83.
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 Livingston, W. and Lockwood, G. W.: Volcanic ash over Arizona in the spring of 1982: astronomical observations. v220 p300-302 15 Apr 83.
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 Lohka, Manfred J. and Masui, Yoshio: Formation in vitro of sperm pronuclei and mitotic chromosomes induced by amphibian ooplasmic components. v220 p719-721 13 May 83.
 Lovinger, Andrew J.: Ferroelectric polymers. v220 p1115-1121 10 June 83.
 Lovins, Amory B. and Lovins, L. Hunter: University budget cuts (letter). v220 p666 13 May 83.
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 Lustbader, Edward D.; Hann, Hie-Won L.; Blumberg, Baruch S.: Serum ferritin as a predictor of host response to hepatitis B virus infection. v220 p423-425 22 Apr 83.
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 Martin, Joseph B.: *Neurotensin, a Brain and Gastrointestinal Peptide*, edited by Charles B. Nemeroff and Arthur J. Prange, Jr. v220 p1147 10 June 83.
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 McGrath, James and Solter, Davor: Nuclear transplantation in the mouse embryo by microsurgery and cell fusion. v220 p1300-1302 17 June 83.
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 Mickle, G. Andrew; Stevens, Karen E.; White, Gerald A.; Gibbs, Gregory L.: Endogenous opiates mediate radiogenic behavioral change. v220 p1185-1187 10 June 83.
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- McDonald and Leslie B. Hunt. v220 p63 1 Apr 83.
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Mushinski, J. Frederic; Potter, Michael; Bauer, Steven R.; Reddy, E. Premkumar: DNA rearrangement and altered RNA expression of the *c-myc* oncogene in mouse plasmacytoid lymphosarcomas. v220 p795-798 20 May 83.

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- Naeser, Charles W. See Redden, Jack A.
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- Mosher case. v220 p1133 10 June 83.
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- Obradovich, John D. See Redden, Jack A.
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- Raybourn, Michael S.: The effects of direct-current magnetic fields on turtle retinas in vitro. v220 p715–717 13 May 83.
- Redden, Jack A.; Obradovich, John D.; Naeser, Charles W.; Zartman, Robert E.; Norton, James J.: Early Tertiary age of pitchstone in the northern Black Hills, South Dakota. v220 p1153–1154 10 June 83.
- Reddy, E. Premkumar: Nucleotide sequence analysis of the T24 human bladder carcinoma oncogene. v220 p1061–1063 3 June 83. *See also* Mushinski, J. Frederic.
- Reed, Lawrence A., III. *See* Ko, Soo Y.
- Reeves, Randall R.: review of *The Ecology of Whales and Dolphins*, by D. E. Gaskin. v220 p709 13 May 83.
- Reppert, Steven M. and Schwartz, William J.: Maternal coordination of the fetal biological clock in utero. v220 p969–971 27 May 83.
- Resnick, Lauren B.: Mathematics and science learning: a new conception. v220 p477–478 29 Apr 83.
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- Richardson, Ersell. *See* Gallo, Robert C.
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- Roberts, Norbert J., Jr.; Lu, Shin-Tsu; Michaelson, Sol M.: Human leukocyte functions and the U.S. safety standard for exposure to radio-frequency radiation. v220 p318–320 15 Apr 83.
- Robinson, Arthur L. (research news): Artificial intelligence comes to Atlantic City. v220 p185 8 Apr 83. Fractional quantum numbers in solids. v220 p702–704 13 May 83. IBM images surfaces by electron tunneling. v220 p43–44 1 Apr 83. Laser light in the extreme ultraviolet. v220 p1259–1261 17 June 83. LIMS is next step in laboratory automation. v220 p180–183 8 Apr 83. Microfabrication is not only for electronics. v220 p184–185 8 Apr 83. Nanocomputers from organic molecules? v220 p940–942 27 May 83. Using time to measure length. v220 p1367 24 June 83. (news and comment): CERN physicists have evidence of Z^0 . v220 p931 27 May 83. National Science Board okays theory center. v220 p286 15 Apr 83.
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- Rogers, Hugo H.; Thomas, Judith F.; Bingham, Gail E.: Response of agronomic and forest species to elevated atmospheric carbon dioxide. v220 p428–429 22 Apr 83.
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- Rosenwein, Robert E.: review of *Mass Psychogenic Illness*, edited by Michael J. Colligan, James W. Pennebaker, and Lawrence R. Murphy. v220 p838–841 20 May 83.
- Ross, Muriel D. and Bourne, Carol: Interrelated striated elements in vestibular hair cells of the rat. v220 p622–624 6 May 83.
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- Roth, Alvin E.: Toward a theory of bargaining: an experimental study in economics. v220 p687–691 13 May 83.
- Rothman, Steven M.: Synaptic activity mediates death of hypoxic neurons. v220 p536–537 29 Apr 83.
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- Russell, G. *See* Hansen, J.
- Russo, Andrew F. and Koshland, Daniel E., Jr.: Separation of signal transduction and adaptation functions of the aspartate receptor in bacterial sensing. v220 p1016–1020 3 June 83.
- Rutherford, F. James: Supplemental teachers of science and mathematics (letter). v220 p8 1 Apr 83.
- Rutter, William J. *See* Craik, Charles S.

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- Sabelli, H. C.; Fawcett, J.; Gusovsky, F.; Javald, J.; Edwards, J.; Jeffriess, H.: Urinary phenyl acetate: a diagnostic test for depression? v220 p1187–1188 10 June 83.
- Sable, Henry Z.: review of *From Cytochromes to Cytochromes*, edited by Nathan O. Kaplan and Arthur Robinson. v220 p707–708 13 May 83.
- Saeed, Sheikh A. *See* Strickland, Daniel M.
- Sagan, Carl: SETI petition (letter). v220 p462 29 Apr 83.
- Saha, Jnan R. *See* Dobkin, Jay F.
- Saikku, Pekka. *See* Nurminen, Marjatta.
- Salmona, Mario. *See* Bottazzi, Barbara.
- Samuelsson, Bengt: Leukotrienes: mediators of immediate hypersensitivity reactions and inflammation. v220 p568–575 6 May 83.
- Sandhouse, Mark E. *See* Man, Eugene H.
- Sarin, Prem S. *See* Gallo, Robert C.
- Schaffer, Robert E. *See* Gevins, Alan S.
- Scheefers, H. *See* Narayan, O.
- Scheinin, Mika. *See* van Kammen, Daniel P.
- Schmidt, Thomas J. *See* Thompson, Carl I.
- Schmitt, Roland W.: Building R & D policy from strength. v220 p1013–1016 3 June 83.
- Schoch, Robert M.: Evolution debate (letter). v220 p360 22 Apr 83.
- Schoeninger, Margaret J.; DeNiro, Michael J.; Tauber, Henrik: Stable nitrogen isotope ratios of bone collagen reflect marine and terrestrial components of prehistoric human diet. v220 p1381–1383 24 June 83.
- Schultz, Arthur J.; Teller, Raymond G.; Beno, Mark A.; Williams, Jack M.; Brookhart, M.; Lamanna, W.; Humphrey, M. Beth: Argonne intense pulsed neutron source used to solve the molecular structure of a novel organometallic complex. v220 p197–199 8 Apr 83.
- Schultz, Eric T. *See* Meyer, Judy L.
- Schutzer, Steven E.; Fischetti, Vincent A.; Zabriske, John B.: Toxic shock syndrome and lysogeny in *Staphylococcus aureus*. v220 p316–318 15 Apr 83.
- Schwartz, Rochelle D. and Kellar, Kenneth J.: Nicotinic cholinergic receptor binding sites in the brain: regulation in vivo. v220 p214–216 8 Apr 83.
- Schwartz, William J. *See* Reppert, Steven M.
- Schworer, Madge E. *See* DeBold, C. Rowan.
- Scott, J. Michael and Kepler, Cameron B.: Hawaii's upland forests (letter). v220 p1002 3 June 83.
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- Senne, D. A. *See* Hinshaw, V. S.
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- Shah, S. M. Ibrahim. *See* Gingerich, Philip D.
- Sharma, Dharam P. *See* Galbraith, David W.
- Sharpless, K. Barry. *See* Ko, Soo Y.
- Shaw, D. D.; Wilkinson, P.; Coates, D. J.: Increased chromosomal mutation rate after hybridization between two subspecies of grasshoppers. v220 p1165–1167 10 June 83.
- Shearman, David J. C. *See* Tyler, Michael J.
- Shepard, Roger N. and Zare, Susan L.: Path-guided apparent motion. v220 p632–634 6 May 83.
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- Shimomura, Koichiro; Hanjura, Sunita; Ki, Ping F.; Kishimoto, Yasuo: An unusual glucocerebroside in the crustacean nervous system. v220 p1392–1393 24 June 83.
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- Sidhu, Gurdip. *See* Gelmann, Edward P. *See also* Gallo, Robert C.
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- Siegler, Robert S.: review of *The Developmental Psychology of Time*, edited by William J. Friedman. v220 p845–846 20 May 83.
- Siegmán, Marion J. *See* Butler, Thomas M.
- Sievers, Robert E.: Revitalizing EPA (letter). v220 p462 29 Apr 83.
- Silver, Jerry and Ogawa, Michael Y.: Postnatally induced formation of the corpus callosum in acallosal mice on glia-coated cellulose bridges. v220 p1067–1069 3 June 83.
- Silverman, Martin S. *See* Tootell, Roger B. H.
- Simberloff, Daniel: When is an island community in equilibrium? v220 p1275–1277 17 June 83.
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- Skirboll, Lana R. *See* Vincent, Steven R.
- Slatkin, D. N.; Stoner, R. D.; Adams, W. H.; Kycia, J. H.; Siegelman, H. W.: Atypical pulmonary thrombosis caused by a toxic cyanobacteria peptide. v220 p1383–1385 24 June 83.
- Silaty, Steve N. and Aposhian, H. Vasken: Gene transfer by polyoma-like particles assembled in a cell-free system. v220 p725–727 13 May 83.
- Slovic, P. *See* Hohenemser, C.
- Smith, Barry H. *See* Dick, Steven J.
- Smith, David V.: review of *The Neural Basis of Feeding and Reward*, edited by Bartley G. Hoebel and Donald Novin. v220 p945–946 27 May 83.
- Smith, G. David. *See* Duax, William L.
- Smith, Harlan J.: review of *Extraterrestrials: Where Are They?*, edited by Michael H. Hart and Ben Zuckerman. v220 p846–847 20 May 83. Texas telescope (letter). v220 p908 27 May 83.
- Smith, J. Jeffrey: Burford ignored advice on DOE reactor (news and comment). v220 p38 1 Apr 83.
- Smith N. J. H. *See* Plucknett, D. L.
- Smith, R. H. *See* Norris, R.
- Smith, R. Jeffrey (news and comment): Communications satellite rescue in real jeopardy. v220 p484–485 29 Apr 83. Congress questions binary weapons plan. v220 p802 20 May 83. The newly improved MX missile. v220 p486 29 Apr 83. Reagan launches campaign for the MX. v220 p585 6 May 83. Reagan plans new ABM effort. v220 p170–171 8 Apr 83. Satellite accident may delay shuttle flights. v220 p385–386 22 Apr 83.

Satellite troubles curtail spacelab data. v220 p803 20 May 83. Scientists challenge claims of Soviet treaty violations. v220 p1254 17 June 83. Scientists fault charges of Soviet cheating. v220 p695-697 13 May 83. Soviet scientists attack Reagan ABM speech. v220 p585-586 6 May 83. Soviets reject test ban changes. v220 p286-287 15 Apr 83. White House names new EPA chief. v220 p35-36 1 Apr 83.

Smithson, K. W.: Diffusion barrier in the small intestine (technical comment). v220 p222 8 Apr 83.

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Sobel, Burton E. See Bergmann, Steven R.

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Solomon, Paul R.; Solomon, Scott D.; Vander Schaaf, Ellen; Perry, Holly E.: Altered activity in the hippocampus is more detrimental to classical conditioning than removing the structure. v220 p329-331 15 Apr 83.

Solomon, Scott D. See Solomon, Paul R.

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Soltoff, Stephen P. and Mandel, Lazaro: Amiloride directly inhibits the Na,K-ATPase activity of rabbit kidneys tubules. v220 p957-959 27 May 83.

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Spiet, Robert F. G.: Women in anthropology (letter). v220 p554 6 May 83.

Spriggs, Dale R.; Bronson, Roderick T.; Fields, Bernard N.: Hemagglutinin variants of reovirus type 3 have altered central nervous system tropism. v220 p505-507 29 Apr 83.

Springer, James P. See Barash, Isaac.

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Spruit, H. C.: review of *Solar Magnetohydrodynamics*, by Eric R. Priest. v220 p191-192 8 Apr 83.

Srikumaran, S.; Guidry, A. J.; Goldsby, R. A.: Bovine $\times$ mouse hybridomas that secrete bovine immunoglobulin G. v220 p522-524 29 Apr 83.

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Stanley, Julian C. and Durden, William G.: Supplemental teachers of science and mathematics (letter). v220 p6, 8 1 Apr 83.

Steinmann, Gerhard; Conlon, Paul; Hefen-eider, Steven; Gillis, Steven: Serological visualization of interleukin 2. v220 p1188-1190 10 June 83.

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_____ and DeNiro, Michael J.: Isotopic composition of cellulose from C₃, C₄, and CAM plants growing near one another. v220 p947-949 27 May 83.

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Stewart, Robert W.: review of *Oceanography: The Present and Future*, edited by Peter G. Brewer. v220 p1267 17 June 83.

Stoller, Walter. See Koevary, Steven.

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Strickland, Daniel M.; Saeed, Sheikh A.; Casey, M. Linette; Mitchell, Murray D.: Stimulation of prostaglandin biosynthesis by urine of the human fetus may serve as a trigger for parturition. v220 p521-522 29 Apr 83.

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Tannenbaum, Gloria Shaffer; Guyda, Harvey J.; Posner, Barry I.: Insulin-like growth factors: a role in growth hormone negative feedback and body weight regulation via brain. v220 p77-79 1 Apr 83.

Tarter, Jill C.: SETI program (letter). v220 p359 22 Apr 83.

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Thompson, Carl I.; Kreider, John W.; Black, Paul L.; Schmidt, Thomas J.; Margules, David L.: Genetically obese mice: resistance to metastasis of B16 melanoma and enhanced T-lymphocyte mitogenic responses. v220 p1183-1185 10 June 83.

Thomson, J. Nichol. See Hedgecock, Edward M.

Thornton, E. C. and Seyfried, W. E., Jr.: Thermofusional transport in pelagic clay: implications for nuclear waste disposal in geological media. v220 p1156-1158 10 June 83.

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Todd, Ian A.: review of *An Island Polity*, edited by Colin Renfrew and Malcolm Wagstaff. v220 p837-838 20 May 83.

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Tootell, Roger B. H.; Silverman, Martin S.; De Valois, Russell L.; Jacobs, Gerald H.: Functional organization of the second cortical visual area in primates. v220 p737-739 13 May 83.

Trainin, Ze'ev; Wernicke, Dorothee; Ungar-Waron, Hannah; Essex, Max: Suppression of the humoral antibody response in natural retrovirus infections. v220 p858-859 20 May 83.

Trigger, Bruce G.: review of *The Establishment of Human Antiquity*, by Donald K. Grayson. v220 p834-835 20 May 83.

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Tuttle, Jeremy B.: Interaction with membrane remnants of target myotubes maintains transmitter sensitivity of cultured neurons. v220 p977-979 27 May 83.

Tuttle, Russell H.: review of *A History of American Physical Anthropology, 1930-1980*, edited by Frank Spencer. v220 p832-834 20 May 83.

Tyler, Michael J.; Shearman, David J. C.; Franco, Rony; O'Brien, Paul; Seemark, R. F.; Kelly, R.: Inhibition of gastric acid secretion in the gastric brooding frog, *Rheobatrachus silus*. v220 p609-610 6 May 83.

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Van De Water, L.; Destree, A. T.; Hynes, R. O.: Fibronectin binds to some bacteria but does not promote their uptake by phagocytic cells. v220 p201-204 8 Apr 83.

Van Dilla, M. A.; Langlois, R. G.; Pinkel, D.; Yajko, D.; Hadley, W. K.: Bacterial characterization by flow cytometry. v220 p620-622 6 May 83.

van Kammen, Daniel P.; Mann, Lee S.; Sternberg, David E.; Scheinin, Mika; Ninan, Philip T.; Marder, Stephen R.; van Kammen, Welmoet B.; Rieder, Ronald O.; Linnoila, Markku: Dopamine- β -hydroxylase activity and homovanillic acid in spinal fluid of schizophrenics with brain atrophy. v220 p974-977 27 May 83.

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Vincent, Steven R.; Hökfelt, Tomas; Skirboll, Lana R.; Wu, Jang-Yen: Hypothalamic γ -aminobutyric acid neurons project to the neocortex. v220 p1309-1311 17 June 83.

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vom Saal, Frederick S.; Grant, William M.; McMullen, Carol W.; Laves, Kurt S.: High fetal estrogen concentrations: correlation with increased adult sexual activity and decreased aggression in male mice. v220 p1306-1309 17 June 83.

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Waddington, John L.; Cross, Alan J.; Gamble, Stephen J.; Bourne, Rachel C.: Spontaneous orofacial dyskinesia and dopaminergic function in rats after 6 months of neuroleptic treatment. v220 p530-532 29 Apr 83.

Waldrop, M. Mitchell (research news): High

- energy physics looks to the future. v220 p809-811 20 May 83. The infrared astronomy satellite (I). v220 p1365-1366, 1368 24 June 83. Neutrino exploration of the earth. v220 p1142 10 June 83. New ways to accelerate? v220 p1264 17 June 83. Supersymmetry and supergravity. v220 p491-493 29 Apr 83. The uses of a large array. v220 p808 20 May 83. (news and comment): Astronomers ponder a Catch-22. v220 p698 13 May 83. Commerce deputy resigns over satellite sale. v220 p934-935 27 May 83. Landsat agonistes (continued). v220 p699 13 May 83. Research council questions shuttle launch projections. v220 p586 6 May 83. Space telescope in trouble. v220 p172-174 8 Apr 83. Weather satellite sale gets a hearing. v220 p485 29 Apr 83.
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- Walker, Dan B.; Gysi, Jürg; Sternberg, Leonel; DeNiro, Michael J.: Direct respiration of lipids during heat production in the inflorescence of *Philodendron selloum*. v220 p419-421 22 Apr 83.
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- Waszczak, Barbara L. and Walters, Judith R.: Dopamine modulation of the effects of γ -aminobutyric acid on substantia nigra pars reticulata neurons. v220 p218-221 8 Apr 83.
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- Weinstein, Alan I.: Improved weather prediction (letter). v220 p1106, 1108 10 June 83.
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- Westoby, Mark: review of *Resource Competition and Community Structure*, by David Tilman. v220 p494-496 29 Apr 83.
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- Wilson, David L.: review of *Axoplasmic Transport*, edited by D. G. Weiss and *Axoplasmic Transport in Physiology and Pathology*, edited by D. G. Weiss and A. Gorio. v220 p709-710 13 May 83.
- Wilson, Vincent L. and Jones, Peter A.: DNA methylation decreases in aging but not in immortal cells. v220 p1055-1057 3 June 83.
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- Winner, Langdon: review of *Energy and American Values*, by Ian Barbour, Harvey Brooks, Sanford Lakoff, and John Opie. v220 p399 22 Apr 83.
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- Wu, Chun-Fang; Ganetzky, Barry; Haugland, Frank N.; Liu, An-Xi: Potassium currents in *Drosophila*: different components affected by mutations of two genes. v220 p1076-1078 3 June 83.
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- Yajko, D. *See* Van Dilla, M. A.
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- Zavada, Jan. *See* Little, Lynn M.
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- Zimmer, H.-G.: Normalization of depressed heart function in rats by ribose. v220 p81-82 1 Apr 83.
- Zimmer, Russel L. and Woollacott, Robert M.: Mycoplasma-like organisms: occurrence with the larvae and adults of a marine bryozoan. v220 p208-210 8 Apr 83.
- Zimmerman, Robert A.: review of *The Eukaryotic Ribosome*, edited by Heinz Bielka. v220 p401-402 22 Apr 83.
- Zin, Walter A. *See* De Troyer, André.
- Zolla-Pazner, Susan. *See* Gallo, Robert C.
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- Zucker, Irving: review of *Vertebrate Circadian Systems*, edited by J. Aschoff, S. Daan, and G. A. Groos. v220 p854-855 20 May 83.
- Zuiches, James J.: High technology and the social sciences. v220 p779 20 May 83.
- Zwally, H. Jay; Parkinson, C. L.; Comiso, J. C.: Variability of antarctic sea ice and changes in carbon dioxide. v220 p1005-1012 3 June 83.