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- Glick, Thomas F.: review of *Geography Yesterday and Tomorrow*, edited by E. H. Brown. v211 p377-378 23 Jan 81.
- Goetz, Alexander F. H. and Rowan, Lawrence C.: Geologic remote sensing. v211 p781-791 20 Feb 81.
- Gold, Philip. *See* Weingartner, Herbert.
- Golden, Charles J.; Gruber, Benjamin; Blose, Irwin; Berg, Richard; Coffman, Jeffrey; Bloch, Solomon: Difference in brain densities between chronic alcoholic and normal control patients. v211 p508-510 30 Jan 81.
- Goldman, David. *See* Merrill, Carl R.
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- Golgar, Dietmar H.; Kloner, Robert A.; Muller, James; DeBoer, Laurence W. V.; Brauwald, Eugene; Clark, Leland C., Jr.: Fluorocarbons reduce myocardial ischemic damage after coronary occlusion. v211 p1439-1441 27 Mar 81.
- Gollan, J. *See* Weisiger, R.
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- Gordon, Glen E.: review of *Entropy*, by Jeremy Rifkin with Ted Howard. v211 p1340-1341 20 Mar 81.
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- Gouras, Peter and Zrenner, Eberhart: Wavelength-dependent enhancement in brain and behavior (technical comment). v211 p733 13 Feb 81.
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- Grau, E. Gordon; Dickhoff, Walton W.; Niishioka, Richard S.; Bern, Howard A.; Folmar, Leroy C.: Lunar phasing of the thyroxine surge preparatory to seaward migration of salmonid fish. v211 p607-609 6 Feb 81.
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- Gregg, Richard E.; Zech, Loren A.; Schaefer, Ernst J.; Brewer, H. Bryan, Jr.: Type III hyperlipoproteinemia: defective metabolism of an abnormal apolipoprotein E. v211 p584-586 6 Feb 81.
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- H**
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- Halmi, Nicholas S.; Peterson, Mark E.; Colurso, Gloria J.; Liotta, Anthony S.; Krieger, Dorothy T.: Pituitary intermediate lobe in dog: two cell types and high bioactive adrenocorticotropin content. v211 p72-74 2 Jan 81.
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- Hayward, Gary; Carlsen, William; Siegman, Anthony; Stryer, Lubert: Retinal chromophore of rhodopsin photoisomerizes within picoseconds. v211 p942-944 27 Feb 81.
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- Herbst, Eberhard W.; Pluznik, Dov H.; Gropp, Alfred; Uthgenannt, Hermann: Trisomic hemopoietic stem cells of fetal origin restore hemopoiesis in lethally irradiated mice. v211 p1175-1177 13 Mar 81.
- Herd, Darrell G.; Youd, T. Leslie; Meyer, Hansjürgen; Arango C., Jorge Luis; Person, Waverly J.; Mendoza, Carlos: The great Tumaco, Colombia earthquake of 12 December 1979. v211 p441-445 30 Jan 81.
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- Holick, M. F.; MacLaughlin, J. A.; Doppelt, S. H.: Regulation of cutaneous previtamin D₃ photosynthesis in man: skin pigment is not

an essential regulator. v211 p590-593 6 Feb 81.

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Hudson, B.; Flynn, G. J.; Fraundorf, P.; Hohenberg, C. M.; Shirck, J.: Noble gases in stratospheric dust particles: confirmation of extraterrestrial origin. v211 p383-386 23 Jan 81.

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Hutchings, John B.: review of *Close Binary Stars*, edited by Mirek J. Plavec, Daniel M. Popper, and Roger K. Ulrich. v211 p48 2 Jan 81.

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Kunos, George; Farsang, Csaba; Ramirez-Gonzales, Maria Dolores: β-Endorphin: possible involvement in the antihypertensive effect of central α-receptor activation. v211 p82-84 2 Jan 81.

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- M**
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- Maxfield, F. R.; Willingham, M. C.; Pastan, I.; Dragsten, P.; Cheng, S.-Y.: Binding and mobility of the cell surface receptors for 3,5'-triiodo-L-thyronine. v211 p63-65 2 Jan 81.
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Walker, James C. G.: review of *Environmental Chemistry of the Elements*, by J. M. Bowen. v211 p273 16 Jan 81.

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Waish, John (news and comment): AAAS protests more cuts for NSF science education. v211 p1142 13 Mar 81. Brown departs research subcommittee. v211 p599 6 Feb 81. Carter transmits an interim budget. v211 p459-461 30 Jan 81. Disagreeing to agree. v211 p908 27 Feb 81. Fredrickson asked to be a holdover again at NIH. v211 p558 6 Feb 81. Hard times, hard choices for Michigan universities. v211 p1142-1143 13 Mar 81. Is R & D the key to the productivity problem? v211 p685-688 13 Feb 81. New niche for science on reference shelf. v211 p263-264 16 Jan 81. New university law decreed in Chile. v211 p1403, 1406 27 Mar 81. Nonproliferation shuffle. v211 p1024 6 Mar 81. Senate westerners stake a claim. v211 p558-559 6 Feb 81. Space telescope

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Walters, Edgar T.; Carew, Thomas J.; Kandel, Eric R.: Associative learning in *Aplysia*: evidence for conditioned fear in an invertebrate. v211 p504-506 30 Jan 81.

Wang, Andrew H.-J.; Quigley, Gary J.; Kolpak, Francis J.; van der Marel, Gijs; van Boom, Jacques H.; Rich, Alexander: Left-handed double helical DNA: variations in the backbone conformation. v211 p171-176 9 Jan 81.

Warner, Kenneth E.: Cigarette smoking in the 1970's: the impact of the antismoking campaign on consumption. v211 p729-731 13 Feb 81.

Wason, Cam. *See* Graebner, Robert.

Wasserman, Gerald S.: Wavelength-dependent enhancement in brain and behavior (technical comment). v211 p732-733 13 Feb 81.

Watkinson, J. H. *See* Sarathchandra, S. U.

Weiner, Denise: Global seminar held in New Delhi (AAAS). v211 p568-569 6 Feb 81.

Weingartner, Herbert; Gold, Philip; Ballenger, James C.; Smallberg, Sheila A.; Summers, Richard; Rubinow, David R.; Post, Robert M.; Goodwin, Frederick K.: Effects of vasopressin on human memory functions. v211 p601-603 6 Feb 81.

Weingartner, Herbert. *See* Ferguson, H. Bruce.

Weinstein, R. *See* Maciag, T.

Weisiger, R.; Gollan, J.; Ockner, R.: Receptor for albumin on the liver cell surface may mediate uptake of fatty acids and other albumin-bound substances. v211 p1048-1051 6 Mar 81.

West, James R.; Hodges, Cheryl A.; Black, Asa C., Jr.: Prenatal exposure to ethanol alters the organization of hippocampal mossy fibers in rats. v211 p957-959 27 Feb 81.

West, Mark O. *See* Deadwyler, Sam A.

Wexler, Bernard C. *See* McMurtry, John P.

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Wheeler, J. W.; Olubajo, O.; Storm, C. B.; Duffield, R. M.: Anabaseine: venom alkaloid of *Aphaenogaster* ants. v211 p1051-1052 6 Mar 81.

Wilcox, John M.: review of *Nonradial and Nonlinear Stellar Pulsation*. v211 p1341-1342 20 Mar 81.

Wilder, M. Byron; Farley, Glenn R.; Starr, Arnold: Endogenous late positive component of the evoked potential in cats corresponding to P300 in humans. v211 p605-607 6 Feb 81.

Williams, G. J., III. *See* Cook, R. J.

Williams, R. *See* Wyrtki, Klaus.

Willingham, M. C. *See* Maxfield, F. R.

Willson, R. C.; Gulkis, S.; Janssen, M.; Hudson, H. S.; Chapman, G. A.: Observations of solar irradiance variability. v211 p700-702 13 Feb 81.

Wilson, Jean D.; George, Frederick W.; Griffin, James E.: The hormonal control of sexual development. v211 p1278-1284 20 Mar 81.

Wilson, Ruth. *See* Woodside, Barbara.

Witherspoon, P. A.; Cook, N. G. W.; Gale, J. E.: Geologic storage of radioactive waste: field studies in Sweden. v211 p894-900 27 Feb 81.

Wolfe, Jack A.: review of *Climates throughout Geologic Time*, by L. A. Frakes. v211 p1414-1415 27 Mar 81.

Wolff, George T.; Kelly, Nelson A.; Ferman, Martin A.: On the sources of summertime haze in the eastern United States. v211 p703-705 13 Feb 81.

Wong, C. S. *See* Stukas, V. J.

Woods, D. C. *See* Chuan, R. L.

Woodside, Barbara; Wilson, Ruth; Chee, Phyllis; Leon, Michael: Resource partitioning during reproduction in the Norway rat. v211 p76-77 2 Jan 81.

Woof, Patricia: Scientific spoofs (letter). v211 p438 30 Jan 81.

Wortzman, M. S. and Baker, R. F.: Two classes of single-stranded regions in DNA from sea urchin embryos. v211 p588-590 6 Feb 81.

Wrangham, R. W.: review of *Baboon Mothers and Infants*, by Jeanne Altmann. v211 p573 6 Feb 81.

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Yamin, Michael A.: Cellulose metabolism by the flagellate *Trichonympha* from a termite is independent of endosymbiotic bacteria. v211 p58-59 2 Jan 81.

Yost, Michael and Moore, A. D.: Air ion research (letter). v211 p1114, 1116 13 Mar 81.

Youd, T. Leslie. *See* Herd, Darrell G.

Young, William W., Jr., and Hakomori, Sen-itiroh: Therapy of mouse lymphoma with monoclonal antibodies to glycolipid: selection of low antigenic variants in vivo. v211 p487-489 30 Jan 81.

Yoxen, Edward J.: review of *The Cancer Mission*, by Kenneth E. Studer and Daryl E. Chubin. v211 p378-379 23 Jan 81.

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Zimmerman, Mark B.; Blaine, Edward H.; Stricker, Edward M.: Water intake in hypovolemic sheep: effects of crushing the left atrial appendage. v211 p489-491 30 Jan 81.

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Zrenner, Eberhart. *See* Gouras, Peter.