

Kip Hodges

Personal Data

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Research Interests

Continental tectonics, with a special emphasis on the relationship between climate change and the evolution of mountain ranges.

Noble gas geochemistry, especially the development of new analytical protocols for $^{40}\text{Ar}/^{39}\text{Ar}$ and (U-Th)/He geochronology.

Ecosystem monitoring; the integration of *in situ* and spaceborne sensor systems to explore physical, chemical and biological process interactions in natural systems.

Planetary field science, with a special emphasis on the scientific exploration of the Moon and Mars

Educational History

1982 Ph.D. Geology, Massachusetts Institute of Technology. (B.C. Burchfiel, advisor.)
"Tectonic Evolution of the Aefjord-Sitas Area, Norway-Sweden"

1978 B.S. Geology with Highest Honors, University of North Carolina at Chapel Hill

Employment History

2006-Present Director, School of Earth and Space Exploration, Arizona State University

2006-Present Foundation Professor of Geological Sciences, Arizona State University

1993-2007 Professor, Massachusetts Institute of Technology

2002-2006 Co-Director, MIT Earth System Initiative

2002-2006 Co-Director, MIT Terrascope Program

2002-2006 MacVicar Fellow, Massachusetts Institute of Technology

1997-1999 Dean for Undergraduate Curriculum, Massachusetts Institute of Technology

1987-1993 Associate Professor, Massachusetts Institute of Technology (Tenured 1990)

1983-1987 Assistant Professor, Massachusetts Institute of Technology

1982-1983 Assistant Professor, University of Wyoming

Undergraduate Subjects Taught (Transdisciplinary)

Engineering Systems and Experimental Design (ASU); The ASU Experience (ASU)

Undergraduate Subjects Taught (Environmental Science and Environmental Policy)

Solving Complex Problems (MIT); Strange Bedfellows: Science and Environmental Policy (MIT); Terrascope Radio (MIT)

Undergraduate Subjects Taught (Earth Sciences)

Introductory Geology (MIT); Petrology (MIT); Structural Geology (MIT); Field Geology (MIT); Special Problems in Field Geology (MIT); various freshman advising seminars (MIT)

Graduate Subjects Taught (Earth Sciences)

Thermal Evolution of Orogenic Systems (ASU); Isotope Geochemistry (ASU), Written and Oral Communication in the Earth, Atmospheric, and Planetary Sciences (MIT); Seminar in Regional Tectonics (MIT); Strain Analysis in Orogenic Belts (MIT); Pressure-Temperature-Time Evolution of Orogenic Belts (MIT); Isotope Geology (MIT); Advanced Field Geology (MIT); Directed Field Studies (MIT); Advanced Directed Field Studies (MIT); The Strength of the Continental Lithosphere (MIT); Tectonic Geomorphology (MIT); numerous seminars on geochronology and regional tectonics (MIT)

Awards, Fellowships, and Honors

Amoco Foundation Scholarship; NAGT Summer Field Camp Scholarship; Phi Beta Kappa; Op White Award for Outstanding Undergraduate in Geology, University of North Carolina, 1978; National Science Foundation Graduate Fellowship; National Science Foundation Grant for Improvement of Doctoral Dissertation Research; Chris Goetze Award for the Outstanding Ph.D. Thesis in the Solid Earth Sciences, MIT, 1982; MIT Graduate Student Council Award for Teaching Excellence, 1986; Fellow, Geological Society of America; MacVicar Faculty Fellow, MIT; Best Paper Award, Structural Geology and Tectonics Division, Geological Society of America, 2005

National/International Professional Service

2008-Present	Planetary Science Subcommittee of the NASA Advisory Council
2004-Present	Editor-in-Chief, <i>Tectonics</i>
1992-2007	Editorial Board, <i>Contributions to Mineralogy and Petrology</i>
2002-2004	Best Paper Award Committee, Structural Geology and Tectonics Division, Geological Society of America
1999-2004	Editor-in-Chief, <i>Tectonophysics</i>
2001-2003	Organizing Committee, Soil and Rock America Conference 2003 (12 th Panamerican Conference and 39 th U.S. Rock Mechanics Symposium)
2001	Chair, Hot Topics, Geological Society of America Annual Meeting, Boston
1997-2000	Committee on the Career Contribution Award, Structural Geology and Tectonics Division, Geological Society of America (Chair, 1999-2000)
1999	Review Panel, New Computational Challenges – Knowledge and Distributed Intelligence Program, National Science Foundation
1997-1999	Committee on the Arthur L. Day Medal, Geological Society of America
1994-1997	Editorial Board, <i>Geology</i>
1997	Review Panel, Proposals for University-Wide Undergraduate Curriculum Reform in Science and Engineering, National Science Foundation
1992-1995	Associate Editor, <i>Geological Society of America Bulletin</i>
1990-1992	Review Panel, Tectonics Program, National Science Foundation
1992	Panelist, <i>Volcanism: Update on characterization, probability, and volcanic effects studies related to the potential high-level nuclear waste repository at Yucca Mountain, Nevada</i> , Nuclear Waste Technical Review Board

1991 Review Panel, Early-Site Suitability Evaluation for the Potential High-Level Nuclear Waste Repository at Yucca Mountain, Nevada, Department of Energy

University Service

2008-Present Faculty Advisory Committee, Origins Initiative at ASU

2007-Present Faculty International Committee

2004-2006 Presidential Task Force on the MIT Undergraduate Educational Commons (Associate Chair)

2003-2006 Henry Kendall Lectureship Committee (Chair, 2003-2004)

2001-2006 MIT Council on Environment

1983-2006 Freshman and upperclassman advisor

2001-2004 MIT Council on Educational Technology

2001-2004 Faculty Committee on the Undergraduate Program (Chair, 2001-2003)

2001-2004 James R. Killian, Jr., Faculty Achievement Award Selection Committee

2001-2003 Faculty Committee on Curricula (*Ex Officio*)

2001-2003 Faculty Policy Committee (*Ex Officio*)

1998-1999 Faculty Facilitator, MIT Leadershape Institute

1998-1999 Co-Chair, MIT Educational Design Project

1997-1999 Faculty Committee on the Undergraduate Program

1997-1999 Committee on Women Faculty in the School of Science at MIT

1997-1998 Faculty Committee on the Independent Activities Period

1992-1996 Chair, Faculty Committee on the Writing Requirement

1994 Co-Chair, Subcommittee (of the Committee on the Undergraduate Program) to Evaluate the Efficacy of the MIT Writing Requirement

1990-1992 Committee on the Hobby Shop

1987-1990 Faculty Committee on the Writing Requirement (Chair, 1989-1990)

Departmental/School Service

2006-Present Founding Director, School of Earth and Space Exploration

1999-2003 Undergraduate Education Committee

1997-2003 Crosby Visiting Professor Committee

1993-2000 Library Committee

1996-1997 Chairman, Geology and Geochemistry Faculty Committee

1990-1994 Chairman, Graduate Education Committee

1988-1990 Departmental Coordinator for the Writing Requirement

1989-1990 Chairman, Geology and Geochemistry Faculty Committee

1996-1997 Chairman, Geology and Geochemistry Graduate Education Committee

1984-1989 Graduate Admissions Committee

1986-1987 Student Research Fund Committee

Invited Lectures and Keynote Addresses

Symposia

Geological Society of America Annual Meeting, International Division Symposium and Theme Session: *Evolution and Global Consequences of the Himalayan Orogenic System*; Royal Society of London Discussion Meeting: *Himalayan Tectonics* (keynote); Geological Society of America Penrose Conference: *Metamorphic Core Complexes Revisited*; Mineralogical Society of Great Britain/Geological Society of London Conference: *What Drives Metamorphism and Metamorphic Reactions?* (keynote); Université de Cergy Pontoise/Institut Français du Pétrole International Workshop: *Geodynamics of Mediterranean Basins – Tertiary Extension Within the Alpine Orogen* (keynote); Geological Society of London Conference: *Channel Flow Tectonics* (keynote); 15th Annual Goldschmidt Conference Session: *Geochronology of Tectonic Processes* (keynote); University of Connecticut Symposium: *2005 Dimensions in Geosciences*; Geological Society of America Annual Meeting Symposium: *Thermochronology* (keynote); Symposium: *The Future of Noble Gas Thermochronology*, University of Lausanne, 2005; Symposium: *Connecting Geoscience Departments to the Future of Science: New Structures for Research and Curriculum*, National Association of Geoscience Teachers and Science Education Resource Center, Carleton College, 2007 (keynote); Southwestern and Rocky Mountain Division of AAAS, Annual Meeting: *Building the Foundations of Sustainability through Transdisciplinary Science and Engineering*, 2008 (keynote); Geological Society of America Annual Meeting, Planetary Science Committee Symposium: *The Role of Field Geology and Geophysics in the Return to the Moon* (keynote).

Short Courses

University of New Mexico: ⁴⁰Ar/³⁹Ar *Thermochronology*; Nordic Council/University of Oslo: *Late-Orogenic Extensional Tectonics*; Society of Economic Geologists: ⁴⁰Ar/³⁹Ar *Geochronology Using the Laser Microprobe*; Mineralogical Society of America/Geochemical Society Short Course: *Detrital Mineral Thermochronology*

Colloquia

Arizona State University; Boston College; Brown University; California Institute of Technology; Carleton University; Chengdu Institute of Geology (Chengdu, Szechwan, PRC); Cornell University; Geological Survey of Canada; Duke University; Harvard University; Kansas State University; Lamont-Doherty Earth Observatory; Lehigh University; Oxford University; Pennsylvania State University; Stanford University; State University of New York - Albany; Syracuse University; University of Chicago; University of Connecticut; University of Idaho; University of Kansas; University of Maine; University of Massachusetts at Amherst; University of Michigan; University of North Carolina; University of Rochester; University of Southern California; University of Texas – El Paso; Williams College; Vrije Universiteit (Amsterdam); Yale University

General Science Educational Activities

2002-2005	Lecture: <i>The Evolution of Mountain Systems</i> , Knight Journalism Fellows Program, MIT
2005	Lecture: <i>New Perspectives on Earth System Evolution</i> , MIT Club of Southern Florida, Rookery Bay National Estuarine Research Reserve, Florida
2004	Lecture: <i>Evolution of Mountain Ranges</i> , MIT Club of Southern California (Santa Monica, California), MIT Club of Boston
2004	Lectures: <i>Island Biodiversity</i> and <i>Plate Tectonics</i> , aboard <i>Le Ponant</i> , Zegraham Expeditions, western Indian Ocean (Madagascar and the Seychelles)
2003	Lectures: <i>Amazon Rainforest Ecosystems</i> and <i>Earth System Science</i> , aboard <i>La Tourmalina</i> , upper Amazon River and tributaries, Peru
2002	Lectures: <i>Geology of Baja California</i> and <i>Evolution of the Sea of Cortez</i> , aboard M/V <i>Seabird</i> , Linblad Expeditions, Sea of Cortez and Pacific Ocean, Mexico
1999	Lecture: <i>Geology of the Himalaya</i> , New Mexico Museum of Science and Technology, Albuquerque, New Mexico

- 1998 Lecture: *Geology of the Himalaya*, Spokane Community Center, Spokane, Washington
- 1996-1998 Science advisor for the MacGillivray Freeman IMAX/IWERKS film *Everest*

Current and Former Graduate Students

Adams, B.A., Applegate, J.D., Blevens, D.M., Boyce, J.W., Clark, R., Coleman, M.A., Dotson, E.A., Friedrich, A.M., Harding, M.B., House, M.A., Hubbard, M.S., Huerta, A., Hurtado, J.M., Knapp, J., Macfarlane, A., McDermott, J., McKenna, L., Huntington, K., Ruppel, C., Saltzer, S., Saylor, B., Schildgen, T., Silverberg, D., Stock, J., Tripathy, A., Tshering, P., Viskupic, K., White, A.P., and Wobus, C.

Current and Former Postdoctoral Associates

Cooper, F., Hames, W., Herren, E., Krol, M., Monteleone, B., Pringle, M., Vannay, J.-C., and Zhang, X.

Popular Publications (Chronological Order)

- Hodges, K.V., 1997, The highest fault in the world, in *Everest: Mountain Without Mercy*, edited by B. Coburn, National Geographic Books, Washington.
- Hodges, K.V., Orogeny, in *McGraw-Hill Encyclopedia of Science and Technology, 9th Edition*, McGraw-Hill Professional, New York, 2002.
- Hodges, Kip, Climate and the Evolution of Mountains, *Scientific American*, August, 2006.
- Hodges, Kip, Wie das Klima Berge versetzt (German reprint of previous reference), *Spectrum der Wissenschaft*, February, 2007.

Professional Publications (Chronological Order)

- Rogers, J.J.W., K.V. Hodges, and M.A. Ghuma, Trace elements in continental-margin magmatism; Part II, Trace elements in Ben Ghnema Batholith and nature of the Precambrian crust in central North Africa, *Geological Society of America Bulletin*, 91, 1742-1788, 1980.
- Willemin, J.H., P.L. Guth, and K.V. Hodges, Reply to discussion: High fluid pressure, isothermal surfaces, and the initiation of nappe movement, *Geology*, 8, 405-406, 1980.
- Guth, P.L., K.V. Hodges, and J.H. Willemin, Limitations on the role of pore pressure in gravity gliding, *Geological Society of America Bulletin*, 93, 606-612, 1982.
- Hodges, K.V., and F.S. Spear, Geothermometry, geobarometry and the Al₂SiO₅ triple point at Mt. Moosilauke, New Hampshire, *American Mineralogist*, 67, 1118-1134, 1982.
- Hodges, K.V., J.M. Bartley, and B.C. Burchfiel, Structural evolution of an A-type subduction zone, Lofoten-Rombak area, northern Scandinavian Caledonides, *Tectonics*, 1, 441-462, 1982.
- Hodges, K.V., and D.M. Fountain, Pogallo Line, South Alps, northern Italy: in intermediate crustal level, low-angle normal fault?, *Geology*, 12, 151-155, 1984.
- Hodges, K.V., and L.H. Royden, Geologic thermobarometry of retrograded metamorphic rocks: an indication of the uplift trajectory of a portion of the northern Scandinavian Caledonides, *Journal of Geophysical Research*, 89, 7077-7090, 1984.
- Royden, L.H., and K.V. Hodges, A technique for analyzing the thermal and uplift histories of eroding orogenic belts: A Scandinavian example, *Journal of Geophysical Research*, 89, 7091-7106, 1984.
- Spear, F.S., J. Selverstone, D. Hickmott, P. Crowley, and K.V. Hodges, P-T paths from garnet zoning: A new technique for deciphering tectonic processes in crystalline terrains., *Geology*, 12, 87-90, 1984.
- Hodges, K.V., Tectonic stratigraphy and structural evolution of the Etfjord-Sitasjaure area, northern Scandinavian Caledonides, *Bulletin - Norges Geologiske Undersokelse*, 399, 41-60, 1985.

- Hodges, K.V., and P.D. Crowley, Error estimation and empirical geothermobarometry for pelitic systems, *American Mineralogist*, 70, 702-709, 1985.
- Ramsay, W.R.H., F.S. Spear, J. Selverstone, D. Hickmott, P. Crowley, and K.V. Hodges, P-T paths from garnet zoning: A new technique for deciphering tectonic processes in crystalline terrains; discussion and reply, *Geology*, 13, 80-81, 1985.
- Tull, J.F., J.M. Bartley, K.V. Hodges, A. Andresen, M.G. Steltenpohl, and J.M. White, The Caledonides in the Ofoten region (68°N), north Norway: Key aspects of tectonic evolution, in *The Caledonide Orogen: Scandinavia and Related Areas*, edited by D.G. Gee, pp. 553-568, John Wiley and Sons, New York, 1985.
- Wernicke, B.P., K.V. Hodges, and J.D. Walker, Geological setting of the Tucki Mountain area, Death Valley national Monument, California, in *Mesozoic and Cenozoic Structural Evolution of Selected Areas, East-Central California Guidebook*, Geological Society of America, Boulder, Colorado, 1986.
- Burchfiel, B.C., K.V. Hodges, and L.H. Royden, Geology of Panamint Valley-Saline Valley pull-apart system, California: Palinspastic evidence for low-angle geometry of a Neogene range-bounding fault, *Journal of Geophysical Research*, 92, 10422-10426, 1987.
- Hodges, K.V., and L.W. McKenna, Realistic propagation of uncertainties in geologic thermobarometry, *American Mineralogist*, 72, 671-680, 1987.
- Hodges, K.V., J.D. Walker, and B.P. Wernicke, Footwall structural evolution of the Tucki Mountain detachment system, Death Valley region, southeastern California, in *Continental Extensional Tectonics*, vol. Special Publication 28, edited by M.P. Coward, J.F. Dewey and P.L. Hancock, pp. 393-408, Geological Society of London, Oxford, 1987.
- Hodges, K.V., and D.S. Silverberg, Thermal evolution of the Greater Himalaya, Garhwal, India, *Tectonics*, 7, 583-600, 1988.
- Hodges, K.V., P. LeFort, and A. Pêcher, Possible thermal buffering by crustal anatexis in collisional orogens: Thermobarometric evidence from the Nepalese Himalaya, *Geology*, 16, 707-710, 1988.
- Hodges, K.V., M.S. Hubbard, and D.S. Silverberg, Metamorphic constraints on the thermal evolution of the central Himalayan Orogen., *Philosophical Transactions of the Royal Society of London, A* 326, 257-280, 1988.
- McKenna, L.W., and K.V. Hodges, Accuracy versus precision in locating reaction boundaries: Implications for the garnet-plagioclase-aluminum silicate-quartz geobarometer., *American Mineralogist*, 73, 1205-1208, 1988.
- Ruppel, C., L. Royden, and K.V. Hodges, Thermal modeling of extensional tectonics: application to pressure-temperature-time histories of metamorphic rocks., *Tectonics*, 7, 947-957, 1988.
- Saltzer, S., and K.V. Hodges, The Middle Mountain shear zone, southern Idaho: Kinematic analysis of a Tertiary, high-temperature detachment, *Geological Society of America Bulletin*, 100, 96-103, 1988.
- Wernicke, B.P., J.D. Walker, and K.V. Hodges, Detachment surfaces in the southern Great Basin: Field guide to the northern part of the Tucki Mountain fault system, Death Valley region, southern California, in *This Extended Land: Geological Journeys in the Southern Basin and Range*, edited by D.L. Weide and M.L. Faber, pp. 58-63, Geological Society of America Cordilleran Section Field Trip Guidebook, Boulder, CO, 1988.
- Brunel, M., K.V. Hodges, P. Le Fort, and A. Pêcher, Possible thermal buffering by crustal anatexis in collisional orogens: thermobarometric evidence from the Nepalese Himalaya: comment and reply, *Geology*, 17, 575-576, 1989.
- Hodges, K., L. McKenna, J. Stock, J. Knapp, L. Page, K. Sternlof, D. Silverberg, G. Wüst, and J. Walker, Evolution of extensional basins and Basin and Range topography west of Death Valley, California, *Tectonics*, 8, 453-467, 1989.
- Wernicke, B.P., J.K. Snow, G.J. Axen, B.C. Burchfiel, K.V. Hodges, J.D. Walker, and P.L. Guth, *IGC Field Trip T138: Extensional Tectonics in the Basin and Range Province Between the Southern Sierra Nevada and the Colorado Plateau*, 1-80 pp., American Geophysical Union, Washington, DC, 1989.

- Stock, J.M., and K.V. Hodges, Pre-Pliocene extension around the Gulf of California, and the transfer of Baja California to the Pacific Plate, *Tectonics*, *8*, 99-115, 1989.
- Chen, Z., Y. Liu, K.V. Hodges, B.C. Burchfiel, L.H. Royden, and C. Deng, The Kangmar Dome - a Metamorphic Core Complex in Southern Xizang (Tibet), *Science*, *250*, 1552-1556, 1990.
- Hodges, K.V., L.W. McKenna, and M.B. Harding, Structural unroofing of the central Panamint Mountains, Death Valley region, SE California, in *Basin and Range Extensional Tectonics Near the Latitude of Las Vegas, NV, Memoir*, edited by B.P. Wernicke, pp. 377-390, Geological Society of America Memoir 176, Boulder, CO, 1990.
- Hodges, K.V., and J.D. Walker, Petrologic constraints on the unroofing history of the Funeral Mountain metamorphic core complex, California, *Journal of Geophysical Research, B, Solid Earth and Planets*, *95*, 8437-8445, 1990.
- McKenna, L.W., and K.V. Hodges, Constraints on the kinematics and timing of late Miocene-Recent extension between the Panamint and Black Mountains, southeastern California, in *Basin and Range extensional tectonics near the latitude of Las Vegas, Nevada Memoir 176*, vol. 176, edited by B.P. Wernicke, pp. 363-376, Geological Society of America, Boulder, CO, 1990.
- Stock, J.M., and K.V. Hodges, Miocene to Recent structural development of an extensional accommodation zone, northeastern Baja California, Mexico, *Journal of Structural Geology*, *12*, 315-328, 1990.
- Copeland, P., T.M. Harrison, K.V. Hodges, P. Marujol, P. LeFort, and A. Pêcher, An Early Pliocene thermal disturbance of the Main Central Thrust, central Nepal: Implications for Himalayan tectonics, *Journal of Geophysical Research*, *96*, 8475-8500, 1991.
- Hodges, K.V., Pressure-Temperature-Time Paths, *Annual Reviews of Earth and Planetary Science*, *19*, 207-236, 1991.
- Hubbard, M., L. Royden, and K. Hodges, Constraints on unroofing rates in the High Himalaya, Eastern Nepal, *Tectonics*, *10*, 287-298, 1991.
- Hurlow, H.A., A.W. Snoke, and K.V. Hodges, Temperature and pressure of mylonitization in a Tertiary extensional shear zone, Ruby Mountains - East Humboldt Range, Nevada: Tectonic implications, *Geology*, *19*, 82-86, 1991.
- Applegate, J.D.R., J.D. Walker, and K.V. Hodges, Late Cretaceous extensional unroofing in the Funeral Mountains metamorphic core complex, California, *Geology*, *20*, 519-522, 1992.
- Burchfiel, B.C., Z. Chen, K.V. Hodges, Y. Liu, L.H. Royden, C. Deng, and J. Xu, *The South Tibetan Detachment System, Himalayan Orogen: Extension Contemporaneous With and Parallel to Shortening in a Collisional Mountain Belt*, 41 pp., Geological Society of America, Boulder, CO, 1992.
- Hodges, K.V., Commentary on General Tectonics, 1992, in *SAIC-91/8001: Report of the Peer Review Panel on the Early Site Suitability Evaluation of the Potential Repository Site at Yucca Mountain, Nevada*, pp. 347-400, Science Applications International Corporation, San Diego, CA, 1992.
- Hodges, K.V., and J.D. Walker, Extension in the Cretaceous Sevier orogen, North American Cordillera, *Geological Society of America Bulletin*, *104*, 560-569, 1992.
- Hodges, K.V., A.W. Snoke, and H.A. Hurlow, Thermal Evolution of a portion of the Sevier hinterland: the northern Ruby Mountains - East Humboldt Range and Wood Hills, northeastern Nevada, *Tectonics*, *11*, 54-64, 1992.
- Hodges, K.V., R. Parrish, T. Housh, D. Lux, B.C. Burchfiel, L. Royden, and Z. Chen, Simultaneous Miocene extension and shortening in the Himalayan orogen, *Science*, *258*, 1466-1470, 1992.
- Macfarlane, A., K.V. Hodges, and D. Lux, A structural analysis of the Main Central thrust zone, Langtang National Park, central Nepal Himalaya, *Geological Society of America Bulletin*, *104*, 1389-1402, 1992.
- Hames, W.E., and K.V. Hodges, Laser $^{40}\text{Ar}/^{39}\text{Ar}$ evaluation of slow cooling and episodic loss of ^{40}Ar from a sample of polymetamorphic muscovite, *Science*, *261*, 1721-1723, 1993.

- Hodges, K.V., and J.D.R. Applegate, Age of Tertiary extension, Bitterroot metamorphic core complex, Montana-Idaho, *Geology*, 21, 161-164, 1993.
- Hodges, K.V., B.C. Burchfiel, L.H. Royden, Z. Chen, and Y. Liu, The metamorphic signature of contemporaneous extension and shortening in the central Himalayan orogen: Data from the Nyalam transect, southern Tibet, *Journal of Metamorphic Geology*, 11, 721-737, 1993.
- Wernicke, B., J.K. Snow, K.V. Hodges, and J.D. Walker, Structural constraints on Neogene tectonism in the southern Great Basin, in *Crustal evolution of the Great Basin and the Sierra Nevada: Geological Society of America, Cordilleran/Rocky Mountains Sections Meeting, Field Trip Guidebook*, edited by M.M. Lahren, J.H. Trexler and C. Spinosa, pp. 453-479, Department of Geological Sciences, University of Nevada, Reno, Reno, NV, 1993.
- Applegate, J.D.R., and K.V. Hodges, Empirical evaluation of solution models for pelitic minerals and their application to thermobarometry, *Contributions to Mineralogy and Petrology*, 117, 56-65, 1994.
- Guillot, S., K.V. Hodges, P. Le Fort, and A. Pêcher, New constraints on the age of the Manaslu leucogranite: Evidence for episodic tectonic denudation in the central Himalayas, *Geology*, 22, 559-562, 1994.
- Hodges, K.V., Geoscience Highlights: Structural Geology and Tectonics, *Geotimes*, 39, 34-35, 1994.
- Hodges, K.V., W.E. Hames, and S.A. Bowring, $^{40}\text{Ar}/^{39}\text{Ar}$ age gradients in micas from a high-temperature-low-pressure metamorphic terrain: evidence for very slow cooling and implications for the interpretation of age spectra, *Geology*, 22, 55-58, 1994.
- Hodges, K.V., W.E. Hames, W.J. Olszewski, B.C. Burchfiel, L.H. Royden, and Z. Chen, Thermobarometric and $^{40}\text{Ar}/^{39}\text{Ar}$ geochronologic constraints on Eohimalayan metamorphism in the Dinggyê area, southern Tibet, *Contributions to Mineralogy and Petrology*, 117, 151-163, 1994.
- House, M.A., and K.V. Hodges, Limits on the tectonic significance of rapid cooling events in extensional settings; insights from the Bitterroot metamorphic core complex, Idaho-Montana, *Geology*, 22, 1007-1010, 1994.
- Ruppel, C., and K.V. Hodges, Role of horizontal thermal conduction and finite time thrust emplacement in simulation of pressure-temperature-time paths, *Earth and Planetary Science Letters*, 123, 49-60, 1994.
- Ruppel, C., and K.V. Hodges, Pressure-Temperature-Time paths from two-dimensional thermal models: Prograde, retrograde, and inverted metamorphism, *Tectonics*, 13, 17-44, 1994.
- Applegate, J.D.R., and K.V. Hodges, Mesozoic and Cenozoic extension recorded by metamorphic rocks in the Funeral Mountains, California, *Geological Society of America Bulletin*, 107, 1063-1076, 1995.
- Coleman, M., and K. Hodges, Evidence for Tibetan Plateau uplift before 14 Myr ago from a new minimum age for east-west extension, *Nature*, 374, 49-52, 1995.
- Foster, D.A., M.A. House, and K.V. Hodges, Limits on the tectonic significance of rapid cooling events in extensional settings; insights from the Bitterroot metamorphic core complex, Idaho-Montana; discussion and reply, *Geology*, 23, 1051-1052, 1995.
- Harrison, T.M., K.I. Mahon, S. Guillot, K. Hodges, P. Le Fort, and A. Pêcher, New constraints on the age of the Manaslu leucogranite; evidence for episodic tectonic denudation in the central Himalaya; discussion and reply, *Geology*, 23, 478-480, 1995.
- Hodges, K.V., and S.A. Bowring, $^{40}\text{Ar}/^{39}\text{Ar}$ thermochronology of isotopically zoned micas; insights from the southwestern USA Proterozoic orogen, *Geochimica et Cosmochimica Acta*, 59, 3205-3220, 1995.
- Hodges, K.V., R.R. Parrish, and M.P. Searle, Tectonic evolution of the central Annapurna Range, Nepalese Himalayas, *Tectonics*, 15, 1264-1291, 1996.
- Huerta, A.D., L.H. Royden, and K.V. Hodges, The interdependence of deformational and thermal processes in mountain belts, *Science*, 273, 637-639, 1996.
- Parrish, R.R., and K.V. Hodges, Isotopic constraints on the age and provenance of the Lesser and Greater Himalayan sequences, Nepalese Himalaya, *Geological Society of America Bulletin*, 108, 904-911, 1996.

- Vannay, J.-C., and K.V. Hodges, Tectonometamorphic evolution of the Himalayan metamorphic core between Annapurna and Dhaulagiri, central Nepal, *Journal of Metamorphic Geology*, 14, 635-656, 1996.
- House, M.A., K.V. Hodges, and S.A. Bowring, Petrological and geochronological constraints on regional metamorphism along the northern border of the Bitterroot Batholith, *Journal of Metamorphic Geology*, 15, 753-764, 1997.
- Searle, M.P., R.R. Parrish, K.V. Hodges, A. Hurford, M.W. Ayres, and M.J. Whitehouse, Shisha Pangma leucogranite, South Tibetan Himalaya; field relations, geochemistry, age, origin, and emplacement, *Journal of Geology*, 105, 295-317, 1997.
- Coleman, M.E., and K.V. Hodges, Contrasting Oligocene and Miocene thermal histories from the hanging wall and footwall of the South Tibetan detachment in the central Himalaya from $^{40}\text{Ar}/^{39}\text{Ar}$ thermochronology, Marsyandi Valley, central Nepal, *Tectonics*, 17, 726-740, 1998.
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