

**Updated on 01/08/2021**

**An Yin,**

*Professor of Geology*

*Department of Earth, Planetary, and Space Sciences*

*University of California,*

*Los Angeles, CA 90095-1567*

*USA*

*Email: ayin54@gmail.com*

**Research:**

I have throughout my career tried to seek the fundamental understanding of geological processes by integrating field-based observations and quantitative modeling in the context of regional and global tectonics. This approach has been expanded to my current planetary studies.

**Teaching:**

I have taught (1) GE courses (e.g. *Introduction to Earth Sciences and Solar System*), (2) courses for our geology majors including the capstone Summer Field Camp, and (3) a wide range of graduate courses (e.g., *Processes and History of Plate Tectonics on Earth; Planetary Surfaces; Rock Mechanics; Advanced Structural Geology; Tectonic Evolution of Asia; Tectonic Evolution of North American Cordillera; Tectonic Geomorphology; Glaciers and Glacier Physics from a Planetary Perspective*).

**Education:**

B.S. (1982): Geomechanics, Beijing University.

M.S. (1983): Precambrian Geology; Beijing University (supervisor: Prof. Xianglin Qiang) (incomplete due to transfer to the University of Southern California).

PhD (1988): Structural Geology with thesis title of "*Geometry, Kinematics, and Mechanics of the Lewis Thrust System in Glacier National Park, Montana*", University of Southern California (supervisor Prof. Gregory A. Davis) (thesis defended in 1987 but was not officially filed until 1988).

**Professional Appointments:**

1987-1988 Acting Assistant Professor, UCLA

1988-1983 Assistant Professor, UCLA

1993-1997 Associate Professor, UCLA

1997-present Full Professor, UCLA

1995-2011 Member of the Institute of Geophysics and Planetary Physics, UCLA

**Awards and Honors:**

1986 Chevron Graduate Student Fellowship.

1994 Young Scientist Award (Donath Medal), Geological Society of America.

1994 Fellow, the Geological Society of America.

2013 Fellow, the American Geophysical Union

**Service within UCLA:**

2005-2011: Merit Increase Committee Chair, Institute of Geophysics and Planetary Physics, UCLA.

2014-2017, Vice Chair in charge of academic promotion, Department of Earth, Planetary, and Space Sciences, UCLA.

1995-present: served as the search committee chair for the following positions at UCLA: (1) Continental Tectonics (1995), (2) Sedimentology and Tectonics (1997), (3) Active Tectonics and Geodesy (1999), (4) Quaternary Geochronology (2005), and (5) Surface Processes (2016).

**Service as a Panel and Review Committee Member outside UCLA:**

1993-1996 Panel member of the International Ocean Drilling Program (ODP)

2000 Review Committee member for the Institute of Earth Sciences, Academia Sinica, Taipei, Taiwan

2002 Review Committee member for Department of Geological and Atmospheric Sciences, University of Houston, Texas.

2014 Review Committee member for the Department of Earth and Atmospheric Sciences, University of Houston, Texas.

2017 Review Committee member for the Department of Geology and Geophysics, University of Texas A&M.

#### **Service as Associate Editor, Chief Editors, and Board Member of Professional Journals:**

1996-1999 and 2019-2021: Associate Editor, *Geology*

2013-present Associate Editor, *Geology*

2002-2008 Associate Editor, *Journal of Asian Earth Sciences*

2007-2019 Associate Editor, *Geological Society of America Bulletin*

2008-2014 Board Member, *Earth and Planetary Science Letters*

2011-2014 Chief Editor, *Tectonophysics*

2014-present Chief Editor, *Earth and Planetary Science Letters*

#### **Service on Advisory Boards:**

2012-present: SinoProbe Project, the Chinese Academy of Geological Sciences.

2017-present: the Planetary and Space Research Center, Beijing University.

2017-present: School of Earth Sciences, Nanjing University.

#### **Employment of Past PhD Students in Academia**

1. Thomas K. Kelty (PhD 2000): *Professor, California State University, Long Beach, California*
2. Michael A. Murphy (PhD 2001): *Professor, University of Houston, GSA Fellow.*
3. Paul A. Kapp (PhD 2002): *Professor, University of Arizona, GSA fellow and Donath medalist.*
4. Eric S. Cowgill (PhD 2002): *Professor, University of California, Davis, GSA fellow.*
5. Michael H. Taylor (PhD 2003): *Professor, University of Kansas, Lawrence, Kansas, GSA fellow*
6. Alexander C. Robinson (PhD 2004): *Associate Professor, University of Houston, Huston, Texas.*
7. Carrie Menold (PhD 2006): *Professor, Albion College, Michigan, Albion, Michigan.*
8. A. Alexander G. Webb (PhD 2008): *Associate Professor, Hong Kong University.*
9. Michael W. McRivette (PhD 2011): *Associated Professor, Albion College, Michigan, Albion, Michigan.*
10. Sara Cina (PhD 2011): *Instructor and Academic Program Coordinator, School of Earth and Environmental Sciences, Stanford University, California.*
11. Jinyu Zhang (PhD 2014 co-supervisor at China University of Geosciences-Beijing): *Research Professor, Institute of Earth Sciences, China Earthquake Administration.*
12. Chen WU (PhD 2016 co-supervisor at China University of Geosciences-Beijing): *Research Professor at the Institute of Tibetan Plateau Research, Chinese Academy of Sciences.*
13. Ivy Curren (PhD 2016): *post-doctoral fellow, Weizmann Institute of Science.*
14. Andrew Zuza (PhD 2016): *Assistant Professor, University of Nevada-Reno.*
15. Peter Harproff (PhD 2017): *Assistant Professor, University of North Carolina, Wilmington.*

#### **Employment of Past PhD Students with NASA**

1. Ernest Paylor (PhD 1994), NASA, Washington, D.C.
2. Jessica Watkins (PhD 2015): NASA Astronaut selected in 2017.
3. Jennifer Scully (PhD 2015): Research Staff, Caltech/JPL.
4. Erin Leonard (PhD 2019): Research Staff, Caltech/JPL

#### **Employment of Past PhD Students in Industry**

1. Jeffery Fllipone (PhD 1993), Environmental Consulting Company, Victoria, Canada.
2. Peter Rumelhart (PhD 1999), EXXON-MOBILE Oil Company, Houston, Texas
3. Stephanie M. Briggs (PhD 2007), William Lettis and Associates, San Francisco, California

#### **Employment of Past MS Students:**

1. Mr. Christian Zarn (1989), Mineral Exploration Company, Europe.
2. Mr. Adam Norris (1991), GEOSCIENCE Support Services, Inc., 620 Arrow Hwy., Ste. 2000, La Verne, CA 91750.

3. Ms. Elizabeth Forshee (1992), Union California Oil Company, Sacramento, California.
4. Mr. Robert Johnston (1996), EXXON-MOBILE Oil Company, Houston, Texas.
5. Mr. Matt Spurlin (1998), Environmental Consulting Company, Denver, Colorado.
6. Ms. C.Y. (Queena) Chou (2005), Consulting Company, Calgary, Canada.
7. Ms. Kristin Ebert (2006), EXXON-MOBILE Oil Company, Fairbank, Alaska.
8. Mr. Robert Lovdhal (2011), Geotechnical Consulting Company, Irvine, California.
9. Ms. Sarah Byram (2011), Energy Company, Kansas City.
10. Ms. Robin Reith (2013), Hydrothermal Energy Company, Reno, Nevada.
11. Ms. Diya Chudhury (2013), Applied GeoSolutions, 87 Packers Falls Road, Durham, NH 03824.
12. Ms. Margaret Deng (2019), High school teacher, Mountain View, California

#### **Current Graduate Students:**

1. Ms. Abijah Simon: Tectonics of the eastern Tibetan plateau (PhD expected in 2021)
2. Ms. Ashley Schoenfeld: *Tectonics and dynamic modeling of ice satellites* (PhD expected in 2021)
3. Mr. Kobe Wang: *Mars glaciation history* (PhD expected 2024)
4. Ms. Valeria Hernandez: *Tectonic development of the Barberton and Limpopo orogenic belts and the early Earth history* (PhD expected 2024)
5. Mr. Hanzhang Chen: Tectonic and surface processes of Charon (PhD expected 2025)
6. Ms. Julia Miller: *Tectonic and surface processes of Pluto and Enceladus* (PhD expected 2025)

#### **Employment of Past Post-doctoral Fellows:**

1. Dr. Bradley R. Hacker (1987-1988): Professor of Geology, UC Santa Barbara (AGU fellow).
2. Dr. Shang-You Nie (1992-1994): Senior Geologist, Shell Oil Company.
3. Dr. Phillip Law (1992-1993): Senior Engineer, Boeing Company.
4. Dr. Brian Horton (1997-1998): Professor, University of Texas, Austin (Donath Medalist).
5. Dr. Xiang-Hong Kong (1996-1998): Computer software engineer, Los Angeles.
6. Prof. Lin Ding (2001): Institute of Tibetan Plateau Research, Chinese Academy of Sciences; (elected as a member of the Chinese Academy of Sciences in 2017).
7. Dr. Xuanhua Chen (2007-2008): Professor, Chinese Academy of Geological Sciences, Beijing, China.
8. Dr. Hengmao Tong (2009-2010): Professor, China University of Petroleum, Beijing, China.
9. Dr. Yuxiu Zhang (2010-2011): Professor, University of Chinese Academy of Sciences.
10. Dr. Haiyan Wang (2011): Professor, Chinese Academy of Geological Sciences, Beijing.
11. Dr. Xiao-Song Xiong (2011): Associate Professor, Chinese Academy of Geological Sciences, Beijing.
12. Dr. Jufeng Gong (2010-2012): Associate Professor, Zhejiang University, Hangzhou, China.
13. Dr. Korhan Esat (2015-2016): Assistant Professor, Ankara University, Turkey.
14. Dr. Xiangjiang Yu: Professor, Jinlin University

#### **Publications**

##### ***Papers under review or in press:***

**Yin, A.**, Moon, S., and Mackenzie Day, Landform evolution of Oudemans crater and its bounding plateau plains on Mars: Geomorphological constraints on the Tharsis ice-cap hypothesis: Icarus, revised manuscript in review.

Leonard, E., **Yin, A.**, and R. Pappalardo, Forming relic cratered blocks: Left-lateral shear on Enceladus inferred from ice-shell deformation in the Leading Hemisphere: JGR-Planet, in press.

##### ***Published papers***

##### ***2021***

180. Xu, X., Zuza, A. V., **Yin, A.**, Lin, X., Chen, H., & Yang, S. (2021). Permian plume-strengthened Tarim lithosphere controls the Cenozoic deformation pattern of the Himalayan-Tibetan orogen. *Geology*, 49(1), 96-100.

179. Kirkpatrick, H. M., Moon, S., **Yin, A.**, & Harrison, T. M. (2021). Impact of fault damage on eastern Tibet topography. *Geology*, 49(1), 30-34.

## 2020

178. Haproff, P. J., Odlum, M. L., Zuza, A. V., **Yin, A.**, & Stockli, D. F. (2020). Structural and Thermochronologic Constraints on the Cenozoic Tectonic Development of the Northern Indo - Burma Ranges. *Tectonics*, 39(9), e2020TC006231.
177. Watkins, J. A., Ehlmann, B. L., & **Yin, A.** (2020). Spatiotemporal evolution, mineralogical composition, and transport mechanisms of long-runout landslides in Valles Marineris, Mars. *Icarus*, 113836.
176. **Yin, A.**, Brandl, G., & Kröner, A. (2020). Plate-tectonic processes at ca. 2.0 Ga: Evidence from >600 km of plate convergence. *Geology*, 48(2), 103-107.
175. Leonard, E. J., **Yin, A.**, & Pappalardo, R. T. (2020). Ridged plains on Europa reveal a compressive past. *Icarus*, 113709.

## 2019

174. Wu, C., Zuza, A.V., Zhou, Z., **Yin, A.**, Li, R., McRivette, M.W., Chen, X., Ding, L., Wang, G., Liu, C., & Geng, J. (2019). Mesozoic-Cenozoic basin evolution of central Tibet during the Indo-Asian collision: *Lithosphere*, 11(4), 524-550.
173. Haproff, P., Zuza, A.V., **Yin, A.**, Harrison, T.M., Mapping, C.E., Dubey, C.S., Ding, L., Wu, C., and Chen, J.L. (2019). Geologic framework of the northern Indo-Burma Ranges and lateral correlation of Himalayan-Tibetan lithologic units across the eastern Himalayan syntaxis. *Geosphere*, 15, 1–26, <https://doi.org/10.1130/GES02054.1>.
172. McRivette, M. W., **Yin, A.**, Chen, X., & Gehrels, G. E. (2019). Cenozoic basin evolution of the central Tibetan plateau as constrained by U-Pb detrital zircon geochronology, sandstone petrology, and fission-track thermochronology. *Tectonophysics*, 751, 150-179.
171. **Yin, A.**, & Xie, Z. (2019). Anisotropic viscoplasticity explains slow-slip M0-T scaling at convergent plate margins. *Tectonophysics*, 751, 229-244.

## 2018

170. Leonard, E. J., Pappalardo, R. T., & **Yin, A.** (2018). Analysis of very-high-resolution Galileo images and implications for resurfacing mechanisms on Europa. *Icarus*, 312, 100-120.
169. Zhang, J. Y., Liu-Zeng, J., Scherler, D., **Yin, A.**, Wang, W., Tang, M. Y., & Li, Z. F. (2018). **ERRATUM:** Spatiotemporal variation of late Quaternary river incision rates in southeast Tibet, constrained by dating fluvial terraces. *Lithosphere*, 10(5), 676-676.
168. Zhang, J. Y., Liu-Zeng, J., Scherler, D., **Yin, A.**, Wang, W., Tang, M. Y., & Li, Z. F. (2018). Spatiotemporal variation of late Quaternary river incision rates in southeast Tibet, constrained by dating fluvial terraces. *Lithosphere*, 10(5), 662-675.
167. **Yin, A.** (2018). Water hammers tremors during plate convergence. *Geology*, 46(12), 1031-1034.
166. **Yin, A.**, Xie, Z., & Meng, L.S. (2018). A viscoplastic shear-zone model for deep (15–50 km) slow-slip events at plate convergent margins. *EPSL* 491, 81-94.
165. Sun, M., **Yin, A.**, Yan, D., Ren, H., Mu, H., Zhu, L., & Qiu, L. (2018). Role of pre-existing structures in controlling the Cenozoic tectonic evolution of the eastern Tibetan plateau: New insights from analogue experiments. *EPSL* 491, 207-215.
164. Zuza, A.V., Wu, C., Reith, R.C., **Yin, A.**, Li, J., Zhang, J., Zhang, Y., Wu, L., & Liu, W. (2018). Tectonic evolution of the Qilian Shan: An early Paleozoic orogen reactivated in the Cenozoic. *GSA Bulletin* 130 (5-6): 881-925. DOI: <https://doi.org/10.1130/B31721.1>.
163. Chen, J.L., **Yin, A.**, Xu, J.F., Xu, J.F., Dong Y.H., Wang, B.D., Kang, Z.Q., Late Cenozoic magmatic inflation, crustal thickening, and >2 km of surface uplift in central Tibet: *Geology*, 46, 19–22.
162. Haproff, P. J., Zuza, A. V., and **Yin, A.** (2018). West-directed thrusting south of the eastern Himalayan syntaxis indicates clockwise crustal flow at the indenter corner during the India-Asia collision. *Tectonophysics*, 722, 277-285.

## 2017

161. Fan, S., Ding, L., Murphy, M. A., Yao, W., and **Yin, A.** (2017). Late Paleozoic and Mesozoic evolution of the Lhasa Terrane in the Xainza area of southern Tibet. *Tectonophysics*, 721, 415-434.
160. Zuza, A.V., and **Yin, A.**, Balkatach hypothesis: A new model for the evolution of the Pacific, Tethyan, and Paleo-Asian oceanic domains: *Geosphere*, 13 (5), 1664-1712.
159. Webb, A.A.G., Guo, H.C., Clift, P.D., Husson, L., Müller, T., Costantino, D., **Yin, A.**, Xu, Z.Q, Cao, H., and Wang, Q. (2017). The Himalaya in 3D: Slab dynamics controlled mountain building and monsoon intensification: *Lithosphere*, L636-1.
158. Duan, B., Liu, L. and **Yin, A.**, Seismic shaking in the North China Basin expected from ruptures of a possible seismic gap: *Geophysical Research Letters* DOI: 10.1002/2017GL072638.
157. Wu, C., Zuza, A.V., **Yin, A.**, Liu, C., Reith, R.C., Zhang, J., Liu, W. and Zhou, Z., 2017. Geochronology and geochemistry of Neoproterozoic granitoids in the central Qilian Shan of northern Tibet: Reconstructing the amalgamation processes and tectonic history of Asia: *Lithosphere*, pp. L640-1.
156. Zuza, A. V., **Yin, A.**, Lin, J., & Sun, M. (2017). Spacing and strength of active continental strike-slip faults. *Earth and Planetary Science Letters*, 457, 49-62.

## 2016

155. Watkins, J. A., Ehlmann, B. L., and **Yin, A.** (2016). Forum reply to comments on "Long-runout landslides and the long-lasting effects of early water activity on Mars": *Geology* 44 (5), E387-E387.
154. **Yin, A.**, Zuza, A.V. and Pappalardo, R.T.. "Corrigendum to" Mechanics of evenly spaced strike-slip faults and its implications for the formation of tiger-stripe fractures on Saturn's moon Enceladus"[*Icarus* 266 (2016) 204-216]." *Icarus* 277 (2016): 466-466.
153. Wu, C., **Yin, A.**, Zuza, A. V., Zhang, J., Liu, W., & Ding, L. (2016). Pre-Cenozoic geologic history of the central and northern Tibetan Plateau and the role of Wilson cycles in constructing the Tethyan orogenic system. *Lithosphere*, 8(3), 254-292.
152. Zhang, J.Y., **Yin, A.**, Liu, W. C., Ding, L., & Xu, X. M. (2016). First geomorphological and sedimentological evidence for the combined tectonic and climate control on Quaternary Yarlung river diversion in the eastern Himalaya. *Lithosphere*, 8(3), 293-316.
151. Menold, C., Grove, M., Manning, C.E., **Yin, A.**, Young, E.D., and Ziegler, K., 2016, Argon and Oxygen isotopic evidence for pervasive metasomatism during ultrahigh-pressure continental subduction: *EPSL*, v. 446, p. 56–67.
150. Zuza, A.V., and **Yin, A.**, 2016, Continental deformation accommodated by non-rigid passive bookshelf faulting: An example from the Cenozoic tectonic development of northern Tibet: *Tectonophysics*, v. 677–678, p. 227–240.
149. Zuza, A.V., Cheng, X., and **Yin, A.**, 2016, Testing models of Tibetan Plateau formation with Cenozoic shortening estimates across the Qilian Shan–Nan Shan thrust belt: *Geosphere*, v. 12, no. 2, p. 1–32, doi:10.1130/GES01254.1.
148. **Yin, A.**, Zuza, A.V., and R. T. Pappalardo, 2015, Mechanics of evenly spaced strike-slip faults and its implications for the formation of tiger-stripe fractures on Saturn’s moon Enceladus: *Icarus*, v. 266, p. 204–216, doi:10.1016/j.icarus.2015.10.027.
147. Dash, B., Boldbaatar, E., Zorigtkhuu, O., and **Yin, A.**, Geochronology, geochemistry and tectonic implications of Late Triassic granites in the Mongolian Altai Mountains: *Journal of Asian Earth Sciences*, v. 117, p. 225–241, doi:10.1016/j.jseaes.2015.11.024.

## 2015

146. Chen, X., Gehrels, G., **Yin, A.**, Zhou, Q., and Huang, P., Geochemical and Nd-Sr-Pb-O isotopic constrains on Permo-Triassic magmatism in eastern Qaidam Basin, northern Tibetan plateau: Implications for the evolution of the Paleo-Tethys: *Journal of Asian Earth Sciences*, v. 114, p. 674-682.

145. Dong, S., Barosh, P.J., Yang, Z., and **Yin, A.**, 2015, Guest editors for a special volume on "Mesozoic Lithospheric Structures and Tectonic Development of East Asia": *Journal of Asian Earth Sciences*, v. 114, p. 611-770.
144. **Yin, A.**, and Pappalardo, R. T., 2015, Gravitational spreading, bookshelf faulting, and tectonic evolution of the South Polar Terrain of Saturn's moon Enceladus: *Icarus*, v. 260, p. 409-439.
143. Li, J., Dong, S., **Yin, A.**, Zhang, Y., and Shi, W., 2015, Mesozoic tectonic evolution of the Daba Shan Thrust Belt in the southern Qinling orogen, central China: Constraints from surface geology and reflection seismology: *Tectonics*, v. 34, doi:10.1002/2014TC003813.
142. Guo, X., Gao, R., Xu, X., Keller, G. R., **Yin, A.**, and Xiong, X., 2015, Longriba fault zone in eastern Tibet: An important tectonic boundary marking the westernmost edge of the Yangtze block: *Tectonics*, v. 34, p. 970-985.
141. Watkins, J. A., Ehlmann, B. L., and **Yin, A.**, 2015, Long-runout landslides and the lasting effects of water activities on Mars: *Geology*, v. 43, p. 107-110.
140. Scully J. E. C., Russell, C. T., **Yin, A.**, Jaumann, R., Carey, E., McSween, H. Y., Castillo-Rogez, J., Raymond, C. A., Reddy, V., and Le Corre, L., 2015, Geomorphological evidence for transient water flow on Vesta: *EPSL*, v. 411, p. 151-163.
139. **Yin, A.**, Yu, X.J., Shen, Z.K., and Liu-Zeng, J. 2015, A possible seismic gap and high earthquake hazard in the North China Basin: *Geology*, doi: 10.1130/G35986.1, v. 43 no. 1 p. 19-22.
138. Dash, B., **Yin, A.**, Jiang, N., Tseveendorj, B., and Han, B., 2015, Petrology, structural setting, age, and geochemistry of Cretaceous volcanic rocks in eastern Mongolia: Implications for their tectonic origin. *Gondwana Research*, v. 27, p. 281-299.

#### 2014

137. Scully, J.E.C., **Yin, A.**, Russell, C.T., Buczkowski, D.L., Williams, D.A., Blewett, D.T., Ruesch, O., Hiesinger, H., Mercer, C.M., Le Corre, L., Garry, W.B., Yingst, R.A., Jaumann, R., Roatsch, T., Preusker, F., Gaskell, R.W., Schröder, S.E., Ammannito, E., Pieters, C.M., Raymond, C.A., and the Dawn Science Team. Geomorphology and Structural Geology of Saturnalia Fossae and Adjacent Structures in the Northern Hemisphere of Vesta, *Icarus*, v. 244, p. 23-40.

#### 2013

136. Li, Q. Wang, X., Xie, G., and **Yin, A.**, 2013, Oligocene-Miocene Mammalian Fossils from Hongyazi Basin and its Bearing on Tectonics of Danghe Nanshan in Northern Tibetan Plateau: *PLoS*, v. 8, 2013DOI: 10.1371/journal.pone.0082816, p. 1- 9.
135. Gao, R., Wang, H.Y., **Yin, A.**, Dong, S.W., Kuang, Z., Zuza, A.V., Li, W., and Xiong, X., 2013, Tectonic development of the northeastern Tibetan Plateau as constrained by high-resolution deep seismic reflection data: *Lithosphere*, v. 5, p. 555-574.
134. Dong, S., Gao, R., **Yin, A.**, Guo, T., Zhang, Y., Hu, J., Li, J., Shi, W., and Li, Q., 2013, What drove continued continent-continent convergence after ocean closure? Insights from high-resolution seismic-reflection pro ling across the Daba Shan in central China. *Geology*, v. 41, p. 671-674.
133. Webb, A.A.G., **Yin, A.**, and Dubey, C.S., 2013, U-Pb zircon geochronology of major lithologic units in the eastern Himalaya: Implications for the origin and assembly of Himalayan rocks. *Geological Society of America Bulletin*, v. 125, p. 499-522, doi: 10.1130/B30626.

#### 2012

132. **Yin, A.**, 2012. An episodic slab-rollback model for the origin of the Tharsis rise on Mars: Implications for initiation of local plate subduction and final unification of a kinematically linked global plate-tectonic network on Earth. *Lithosphere*, v. 4, 553-593, doi: 10.1130/L195.1.
131. Burgess, W.P., **Yin, A.**, Dubey, C. S., Shen, Z.K., and Kelty, T.K., 2012, Holocene shortening across the Main Frontal Thrust zone in the eastern Himalaya. *Earth and Planetary Science Letters*, V. 357-358, p. 152-167.
130. Dupont-Nivet, D., **A. Yin**, and P. Clift: Introduction to the "Asian Climate and Tectonics" special issue, *Journal of Asian Earth Sci.* **V.44**, p.1-2 (2012) 2 pages.
129. Li, Y.L., C.S. Wang, X.X. Zhao, **A. Yin**, and C. Ma: "Cenozoic thrust system, basin evolution, and uplift of the Tanggula Range in the Tuotuohe region, central Tibet", *Gondwana Research*, **V. 22**, 482-492, 9 figures (2012) 11 pages.
128. Chen., X.H. G.E. Gehrels, **A. Yin**, L. Li, and R.B. Jiang: "Paleozoic and Mesozoic basement magmatism of eastern Qaidam basin, northern Qinghai-Tibet plateau: LA-ICP-MS zircon U-Pb

- geochronology and its geologic significance”, *Acta Geologica Sinica*, **V. 86**, 350-369, 9 figures (2012) 20 pages.
127. Zhang, J.Y., **A. Yin**, W.C. Liu, F.Y. Wu, Ding Lin and M. Grove, 2012, Coupled U-Pb dating and Hf isotopic analysis of detrital zircon of modern river sand from the Yalu River (Yarlung Tsangpo) drainage system in southern Tibet: Constraints on the transport processes and evolution of Himalayan rivers *Geological Society of America Bulletin*, v. 124, p. 1449-1473.
126. **Yin, A.**, 2012. Structural analysis of the southern Valles Marineris trough zones and implications for large-scale strike-slip faulting on Mars. *Lithosphere*, v. 4, p. 286–330, doi: 10.1130/L192.1.
125. Wang, Y., Deng, T., Flynn, L., Wang, X.M., **Yin, A.**, Xu, Y.F., Lochner, E., Parker, W., E. Lochner, C.F. Zhang, and D. Biasatti, 2012. A high-resolution record of late Neogene environmental changes and its implications for tectonic development of southern Tibet. *Journal of Asian Earth Sciences*, **44** (2012) 62–76.
- 2011**
124. Gehrels, G., Kapp, P. DeCelles, P. Pullen, A., Blakey, B., Weislogel, A., Ding, L., Guynn, J., Martin, A., McQuarrie, N., and **Yin, A.**, 2011, Detrital zircon geochronology of pre-Tertiary strata in the Tibetan-Himalayan orogen. *Tectonics* 30, TC5016, doi:10.1029/2011TC002868.
123. Webb, A.A.G., **Yin, A.**, Harrison, T.M., C  lerier, J., Gehrels, G.E., Grove, M., Manning, M.E., and Burgess, W.P., 2011, Cenozoic tectonic history of the Himachal Himalaya (northwestern India) and its constraints on the formation mechanism of the Himalayan orogen. *Geosphere* 7; 1013–1061; doi: 10.1130/GES00627.1.
122. **Yin, A.**, and Taylor, M.H., 2011. Mechanics of V-shaped conjugate strike-slip faults and the corresponding continuum mode of continental deformation. *Geological Society of America Bulletin* 123; 1798–1821; doi: 10.1130/B30159.1.
121. Wang, C.S., Gao, R., **Yin, A.**, Wang, H.Y., Zhang, Y.X., Guo, T., Q. Li, and Li, Y.L., 2011, A mid-crustal strain-transfer model for continental deformation: A new perspective from high-resolution deep seismic-reflection profiling across NE Tibet. *Earth and Planetary Science Letters* 306, 279–288.
120. Tong, H.M., and **Yin, A.**, 2011. Reactivation tendency analysis: A theory for predicting the temporal evolution of preexisting weakness under uniform stress state. *Tectonophysics*, v. 503, p. 195–200
- 2010**
119. Robinson, A.C., **Yin, A.**, and Lovera, O.M., 2010. The role of footwall deformation and denudation in controlling cooling age patterns of detachment systems: An application to the Kongur Shan extensional system in the Eastern Pamir, China. *Tectonophysics*, v. 496, p. 28-43.
118. **Yin, A.**, 2010, Preface: A special issue on the great 12 May 2008 Wenchuan earthquake (Mw7.9): Observations and unanswered questions. *Tectonophysics*, v. 491, p. 1-9.
117. **Yin, A.**, 2010, Cenozoic tectonics of Asia: A preliminary synthesis. *Tectonophysics*, v. 488, p. 293–325.
116. **Yin, A.**, Dubey, C.S., Kelty, T.K., Webb, A.A.G., Harrison, T.M., Chou, C.Y., and C  lerier, J., 2010b, Geologic correlation of the Himalayan orogen and Indian craton (part 2): Structural geology, geochronology and tectonic evolution of the eastern Himalaya: *Geological Society of America Bulletin*, v. 122; no. 3/4; p. 360–395; doi: 10.1130/B26461.1.
115. **Yin, A.**, Dubey, C.S., Webb, A.A.G., Kelty, T.K., Grove, M., Gehrels, G.E., and Burgess, W.P., 2010a, Geologic correlation of the Himalayan orogen and Indian craton (part 1): Structural geology, U-Pb Zircon geochronology, and tectonic evolution of the Shillong Plateau and its neighboring regions in NE India: *Geological Society of America Bulletin*, 122; no. 3/4; p. 336–359; doi: 10.1130/B26460.1.
- 2009**
114. Webb, A.A.G., **Yin, A.**, Harrison, T.M., C  lerier, J., and Burgess, P.W., 2009, Reply to comments on “The leading edge of the Greater Himalayan Crystalline complex revealed in the NW Indian Himalaya: Implications for the evolution of the Himalayan orogen”, *Geology*: v. 37, p. e189-e190.
113. Chen, X.H., **Yin, A.**, Gehrels, G., Jiang, R.B., Chen, Z.L., and Bai, Y.F., 2009, Geothermochronology and tectonic evolution of the Eastern Altyn Tagh Mountains, Northwestern China, *Earth Science Frontiers*, v. 16(3), p. 207-219 (In Chinese with English Abstract).
112. Cina, S.E., **Yin, A.**, Grove, M., Dubey, C.S., Shukla, D.P., Kelty, K.T., Gehrels, G.E., and D. A.

- Foster, 2009, Gangdese arc detritus within the eastern Himalayan Neogene foreland basin: Implications for the Neogene evolution of the Yalu-Brahmaputra river system: *Earth and Planetary Science Letters*, v. 285, p. 150–162.
111. Briggs, S.M., **Yin, A.**, Manning, C.E., Chen, Z.L., and Wang, X.F., 2009, Tectonic development of the southern Chinese Altai Range as determined by structural geology, thermobarometry,  $^{40}\text{Ar}/^{39}\text{Ar}$  thermochronology, and Th/Pb ion-microprobe monazite geochronology: *Geological Society of America Bulletin*, 121;1381-1393, doi: 10.1130/B26344.1
110. C  lerier, J., Harrison, T.M., Webb, A.A.G., and **Yin, A.**, 2009, Geology of the Kumaun and Garwhal Lesser Himalaya in NW India (Part 1): Structure and stratigraphy: *Geological Society of America Bulletin*, v. 121, p. 1262-1280. doi: 10.1130/B26344.1.
109. Li, D., and **Yin, A.**, 2009, Reply to “A comment on “Orogen-parallel, active left-slip faults in the Eastern Himalaya: Implications for the growth mechanism of the Himalayan Arc” by Li and Yin (Earth Planet Sci. Lett. 274 (2008) 258–267)” by Van der Woerd et al., *Earth and Planetary Science Letters*, v. 285, p. 223.
108. Menold, C.A., Manning, C.E., **Yin, A.**, Chen, X.-H., and Wang, X.-F., 2009, Metamorphic evolution, mineral chemistry and thermobarometry of orthogneiss hosting ultrahigh-pressure eclogites in the North Qaidam metamorphic belt, Western China: *Journal of Asian Earth Sciences*, v. 35, p. 273-284.
107. Taylor, M.H., and **Yin, A.**, 2009, Active faulting on the Tibetan Plateau and sounding regions: Relationships to earthquakes, contemporary strain, and late Cenozoic volcanism. *Geosphere*, v. 5; no. 3; p. 199–214; doi: 10.1130/GES00217.1.

#### 2008

106. Li, D.W., and **Yin, A.**, 2008, Orogen-parallel, active left-slip faults in the Eastern Himalaya: Implications for the growth mechanism of the Himalayan Arc: *Earth and Planetary Science Letters*, 274, 258–267.
105. Dai, J.G., **Yin, A.**, Liu, W.C., and Wang, C.S., 2008, Nd isotopic compositions of the Tethyan Himalayan Sequence in southeastern Tibet: *Science in China Series D-Earth Sciences*, v. 51, p. 1306-1316.
104. **Yin, A.**, Dang, Y.-Q., Wang, L.-C., Jiang, W.-M., Zhou, S.-P., Chen, X.-H., Gehrels, G. E., and McRivette, M. W., 2008, Cenozoic tectonic evolution of Qaidam basin and its surrounding regions (Part 1): The southern Qilian Shan-Nan Shan thrust belt and northern Qaidam basin: *Geological Society of America Bulletin*, v. 120, p. 813-846.
103. **Yin, A.**, Dang, Y.-Q., Zhang, M., Chen, X.-H., and McRivette, M. W., 2008, Cenozoic tectonic evolution of the Qaidam basin and its surrounding regions (Part 3): Structural geology, sedimentation, and regional tectonic reconstruction: *Geological Society of America Bulletin*, v. 120, p. 847-876.
102. Kelty, T.K., **Yin, A.**, Dash, B., Gehrels, G.E., and Ribeiro, A., 2008, Detrital-zircon geochronology of Paleozoic sedimentary rocks in the Hangay-Hentey basin, north-central Mongolia: Implications for the tectonic evolution of the Mongol-Okhotsk Ocean in central Asia: *Tectonophysics*, v. 451, p. 290-311.
101. Jiang, R.B., Chen, X.H., Dang, Y.Q., **Yin, A.**, Wang, L.C., Jiang, W.M., Wan, J.L., Li, L., and Wang, X.F., 2008, Two phases of Mesozoic to Cenozoic Thrusting in the eastern Qaidam basin as revealed by fission-track dating: *Chinese Journal of Geophysics*, v. 51, p. 117-125.

#### 2007

100. **Yin A.**, Dang Y Q, Chen X H, Wang, L.C., Jiang, W.M., Jiang, R.B., Wang, X.F., Zhou, S.P., Liu, M.D., and Ma, L.X., 2007, Cenozoic evolution and tectonic reconstruction of Qaidam Basin: Evidence from seismic Profiles: *Journal of Geomechanics*, v. 13, p.193~211 (in Chinese).
99. **Yin, A.**, Dang, Y.Q., Zhang, McRivette, M.W., and Burgess, W.P., Chen, X.H., 2007, Cenozoic tectonic evolution of Qaidam basin and its surrounding regions (part 2): Wedge tectonics in southern Qaidam basin and the Eastern Kunlun Range: *Geological Society of America Special Paper* 433, p. 369-390.
98. Webb, A.A.G., **Yin, A.**, Harrison, T.M., C  lerier, J., and Burgess, W.P., 2007, The leading edge of the Greater Himalayan Crystalline complex revealed in the NW Indian Himalaya: Implications for the evolution of the Himalayan orogen: *Geology*, v. 35; no. 10; p. 955–958; doi: 10.1130/G23931A.



97. Zhou, J.Y., Wang, J.H., Brian, K.H., **Yin, A.**, and Matthew, M.S., 2007, Sedimentology and chronology of Paleogene coarse clastic rocks in east-central Tibet and their relationship to early tectonic uplift of Tibet: *Acta Geoscientica Sinica* v. 81 (3), p. 398-408.
96. Robinson, A., **Yin, A.**, Manning, C.E., Harrison, T.M., Zhang, S.H., and Wang, X.F., 2007, Cenozoic evolution of the eastern Pamir: Implications for strain-accommodation mechanisms at the western end of the Himalayan-Tibetan orogen: *Geological Society of American Bulletin*, v. 119: p. 882-896.
95. Briggs, S.M., **Yin, A.** Manning, C.E., Chen, Z.L., Wang, X.F., and Grove, M., 2007, Late Paleozoic Tectonic History of the Ertix Fault in the Chinese Altai and its Implications for the Development of the Central Asian Orogenic System: *Geological Society of American Bulletin*, v. 119, p. 944-960.
94. **Yin, A.**, Manning, C.E., Lovera, O., Menold, C., Chen, X., and Gehrels, G.E., 2007, Early Paleozoic tectonic and thermomechanical evolution of ultrahigh-pressure (UHP) metamorphic rocks in the northern Tibetan plateau of NW China: *International Geology Review*, v. 49, p. 681-716.
93. Arita, K., **Yin, A.**, Singh, S., and Okada, H. (editors), 2007, Special issue: The 19th Himalaya-Karakoram-Tibet workshop (HKT19) held at Niseko, Hokkaido, Japan, 10-13 July 2004: *Journal of Asian Earth Sciences*, v. 29 (2-3): p. 185-187.
92. Guo, Z.-J., **Yin, A.**, Robinson, A., and Jia, C.-Z., 2007, Reply to Zhang et al.'s comment on "Geochronology and geochemistry of deep-drill-core samples from the basement of the central Tarim basin": *Journal of Asian Earth Sciences*, v. 29, p. 181-182.

#### 2006

91. **Yin, A.**, 2006. Correction on "Cenozoic tectonic evolution of the Himalayan orogen as constrained by along-strike variation of structural geometry, exhumation history, and foreland sedimentation (vol 76, pg 1, 2006): *Earth-science Reviews*, v. 79, p. 163-164.
90. **Yin, A.**, 2006, Cenozoic tectonic evolution of the Himalayan orogen as constrained by along-strike variation of structural geometry, exhumation history, and foreland sedimentation: *Earth-science Reviews*, v. 76 (1-2), p. 1-131.
89. **Yin, A.**, Dubey, C.S., Kelty, T.K., Gehrels, G.E., Chou, C.Y., Grove, M., and Lovera, O., 2006, Structural evolution of the Arunachal Himalaya and implications for asymmetric development of the Himalayan orogen: *Current Science* (an Indian journal), v. 90 (2), p. 195-206.

#### 2005

88. Spurlin, M.S., **Yin, A.**, Horton, B.K., Zhou, J., and Wang, J., 2005, Structural evolution of the Yushu-Nangqian region and its relationship to syncollisional igneous activity east-central Tibet: *Geological Society of America Bulletin*, v. 117 (9-10): 1293-1317.
87. Kapp, P., **Yin, A.**, Harrison, T.M., and Ding, L., 2005, Cretaceous-Tertiary shortening, basin development, and volcanism in central Tibet: *Geological Society of America Bulletin*, v. 117 (7-8), p., 865-878.
86. Guo, Z.J., **Yin, A.**, Robinson, A., and Jia, C.Z., 2005, Geochronology and geochemistry of deep-drill-core samples from the basement of the central Tarim basin: *Journal of Asian Earth Sciences*, v. 25, p. 45-56.

#### 2004

85. **Yin, A.**, and Y. John Chen, 2004, Cenozoic tectonic evolution of Asia, a preliminary synthesis, in "Environment, natural hazards, and global tectonics of the Earth" edited by Chen, Y.J., Chinese Higher Education Press, p. 98-133 (in Chinese).
84. **Yin, A.**, 2004, Gneiss domes and gneiss dome systems, In Whitney, D.L., Teyssier, C., and Siddway, C.S., eds., Gneiss Domes in Orogeny, Boulder Colorado, *Geological Society of America Special Paper* 380, p. 1-14.
83. Cowgill, E., **Yin, A.**, Arrowsmith, J.R., Feng, W.X., and Zhang, S.H., 2004, The Akato Tagh bend along the Altyn Tagh fault, northwest Tibet 1: Smoothing by vertical-axis rotation and the effect of topographic stresses on bend-flanking faults: *Geological Society of America Bulletin*, v. 116 (11-12), p. 1423-1442.
82. Cowgill, E., Arrowsmith, J.R., **Yin, A.**, Wang, X.F., and Chen, Z.L., 2004, The Akato Tagh bend along the Altyn Tagh fault, northwest Tibet 2: Active deformation and the importance of transpression and strain hardening within the Altyn Tagh system: *Geological Society of America Bulletin*, v. 116 (11-12), p. 1443-1464.

81. Chen, Z.L., Wang, X.F., **Yin, A.**, Chen, B.L., and Chen, X.H., 2004, Cenozoic left-slip motion along the central Altyn Tagh Fault as inferred from the sedimentary record: *International Geology Review*, v. 46 (9), p. 839-856.
80. Robinson, A.C., **Yin, A.**, Manning, C.E., Harrison, T.M., Zhang, S.H., and Wang, X.F., 2004, Tectonic evolution of the northeastern Pamir: Constraints from the northern portion of the Cenozoic Kongur Shan extensional system, western China: *Geological Society of America Bulletin*, v. 116 (7-8): 953-973.
79. Dupont-Nivet, G., Robinson, D., Butler, R.F., **Yin, A.**, and Melosh, H.J., 2004, Concentration of crustal displacement along a weak Altyn Tagh fault: Evidence from paleomagnetism of the northern Tibetan Plateau: *Tectonics*, v. 23, TC1020, doi:10.1029/2002TC001397.

### 2003

78. Gehrels, G.E., **Yin, A.**, and Wang, X.F., 2003, Magmatic history of the northeastern Tibetan Plateau: *Journal of Geophysical Research*, v. 108, NO. B9, 2423, doi:10.1029/2002JB001876.
77. Chen, X.H., **Yin, A.**, Gehrels, G.E., Cowgill, E.S., Grove, M., Harrison, T.M., and Wang, X.F., 2003, Two phases of Mesozoic north-south extension in the eastern Altyn Tagh range, northern Tibetan Plateau: *Tectonics*, v. 22, NO. 5, 1053, doi:10.1029/2001TC001336.
76. Taylor M., **A. Yin**, F. J. Ryerson, P. Kapp, and L. Ding, 2003, Correction to “Conjugate strike-slip faulting along the Bangong-Nujiang suture zone accommodates coeval east-west extension and north-south shortening in the interior of the Tibetan Plateau”, *Tectonics*, v. 22 (5), 1056, doi:10.1029/2003TC001580.
75. Taylor, M., **Yin, A.**, Ryerson, F.J., Kapp, P., and Ding, L., 2003, Conjugate strike-slip faulting along the Bangong-Nujiang suture zone accommodates coeval east-west extension and north-south shortening in the interior of the Tibetan Plateau: *Tectonics*, v. 22 (4), 1044, doi:10.1029/2002TC001361.
74. Kapp, P., **Yin, A.**, Manning, C.E., Harrison, T.M., Taylor, M.H., and Ding, L., 2003, Tectonic evolution of the early Mesozoic blueschist-bearing Qiangtang metamorphic belt, central Tibet: *Tectonics*, v. 22 (4), 1043, doi:10.1029/2002TC001383.
73. Dupont-Nivet, G., Butler, R.F., **Yin, A.**, and Chen, X.H., 2003, Paleomagnetism indicates no Neogene vertical axis rotations of the northeastern Tibetan Plateau: *Journal of Geophysical Research*, v. 108, NO. B8, 2386, doi:10.1029/2003JB002399.
72. Cowgill, E., **Yin, A.**, Harrison, T.M., and Wang, X.F., 2003, Reconstruction of the Altyn Tagh fault based on U-Pb geochronology: Role of back thrusts, mantle sutures, and heterogeneous crustal strength in forming the Tibetan Plateau: *Journal of Geophysical Research*, v. 108, NO. B7, 2346, doi:10.1029/2002JB002080.
71. Kapp, P., Murphy, M.A., **Yin, A.**, Harrison, T.M., Ding, L., and Guo, J.H., 2003, Mesozoic and Cenozoic tectonic evolution of the Shiquanhe area of western Tibet: *Tectonics*, v. 22 (4), 1029, doi:10.1029/2001TC001332.
70. Gehrels, G.E., **Yin, A.**, and Wang, X.F., 2003, Detrital-zircon geochronology of the northeastern Tibetan plateau: *Geological Society of America Bulletin*, v. 115 (7), p. 881-896.
69. Wang, J.H., **Yin, A.**, Harrison, T.M., Grove, M., Zhou, J.Y., Zhang, Y.Q., and Xie, G.H., 2003, Thermochemical constraints on two pulses of Cenozoic high-K magmatism in eastern Tibet: *Science in China Series D\_ Earth Sciences*, v. 46 (7), p. 719-729.
68. Murphy, M.A., and **Yin, A.**, 2003, Structural evolution and sequence of thrusting in the Tethyan fold-thrust belt and Indus-Yalu suture zone, southwest Tibet: *Geological Society of America Bulletin*, v. 115 (1), p. 21-34.

### 2002

67. **Yin, A.**, Peng, C., Gao, R., and Li, P., Tectonic evolution of the Himalaya and Tibetan plateau: Implications for the growth of the Asian continent. In “Structure, Dynamics, and Evolution of the Earth” edited by Y.X. Zhang and A. Yin, Chinese Higher Education Press, Beijing, pp. 207-282, 2002 (in Chinese).
66. Deng, X.G., Ding, L., Liu, X.H., **Yin, A.**, Kapp, P.A., Murphy, M.A., Manning, C.E., 2002, Geochemical characteristics of the blueschists and its tectonic significance in the central Qiangtang area, Tibet: *Acta Petrologica Sinica*, v. 18 (4), p. 517-525.
65. **Yin, A.**, Rumelhart, P.E., Butler, R., Cowgill, E., Harrison, T.M., Foster, D.A., Ingersoll, R.V., Zhang, Q., Zhou, X.Q., Wang, X.F., Hanson, A., and Raza, A., 2002, Tectonic history of the Altyn Tagh

- fault system in northern Tibet inferred from Cenozoic sedimentation: *Geological Society of America Bulletin*, v. 114 (10), p. 1257-1295.
64. Horton, B.K., **Yin, A.**, Spurlin, M.S., Zhou, J.Y., and Wang, J.H., 2002, Paleocene-Eocene syncontractional sedimentation in narrow, lacustrine-dominated basins of east-central Tibet: *Geological Society of America Bulletin*, v. 114 (7), p. 771-786.
63. Murphy, M.A., **Yin, A.**, Kapp, P., Harrison, T.M., Manning, C.E., Ryerson, F.J., Ding, L., and Guo, J.H., 2002, Structural evolution of the Gurla Mandhata detachment system, southwest Tibet: Implications for the eastward extent of the Karakoram fault system: *Geological Society of America Bulletin*, v. 114 (4), 428-447.
62. Dupont-Nivet, G., Butler, R.F., **Yin, A.**, and Chen, X.H., 2002, Paleomagnetism indicates no Neogene rotation of the Qaidam Basin in northern Tibet during Indo-Asian collision: *Geology*, v. 30 (3), p. 263-266.
61. Yin, A., 2002, Passive-roof thrust model for the emplacement of the Pelona-Orocopia Schist in southern California, United States: *Geology*, v. 30 (2), 183-186.

### 2001

60. **Yin, A.**, 2001, Geologic evolution of the Himalayan orogen and Tibetan plateau: *Acta Geoscientica Sinica*, v. 22, p. 193-245 (in Chinese).
59. **Yin, A.**, 2001, Book review of "Geologic Atlas of China: An Application of the Tectonic Facies Concept to the Geology of China" by Kenneth J. Hsü and Chen Haihong, assisted by Sun Shu, Wang Qingchen, and Li Jiliang, Elsevier, New York, 1999, 262 pp. with 11 color plates: *GSA Today*, v. 10, No. 11, p. 22.
58. Wang, J.H., Qi, L., **Yin, A.**, and Xie, G.H., 2001, Emplacement age and PGE geochemistry of lamprophyres in the Laowangzhai gold deposit, Yunnan, SW China: *Science in China Series D-Earth Sciences*, v. 44, p. 146-154.
57. Shen, Z.K., Wang, M., Li, Y.X., Jackson, D.D., **Yin, A.**, Dong, D.N., and Fang, P., 2001, Crustal deformation along the Altyn Tagh fault system, western China, from GPS: *Journal of Geophysical Research*, v. 106 (B12), p. 30607-30621.
56. Ding, L., Zhong, D.L., **Yin, A.**, Kapp, P., and Harrison, T.M., 2001, Cenozoic structural and metamorphic evolution of the eastern Himalayan syntaxis (Namche Barwa): *Earth and Planetary Science Letters*, v. 192 (3), p. 423-438.
55. Kapp, P., **Yin, A.**, and Manning, C.E., 2001, Blueschist-bearing metamorphic core complexes in the Qiangtang block reveal deep crustal structure of northern Tibet: Reply: *Geology*, v. 29 (7), p. 664-664.
54. Wang, J.H., **Yin, A.**, Harrison, T.M., Grove, M., Zhang, Y.Q., and Xie, G.H., 2001, A tectonic model for Cenozoic igneous activities in the eastern Indo-Asian collision zone: *Earth and Planetary Science Letters*, v. 188 (1-2), p. 123-133.
53. Johnston, R.E., and **Yin, A.**, 2001, Kinematics of the Uinta fault system (Southern Wyoming and northern Utah) during the Laramide orogeny: *International Geology Review*, v. 43, p. 52-68.

### 2000

52. **Yin, A.**, 2000, Book review of "Himalaya and Tibet: Mountain Roots to Mountain Tops" by Allison Macfarlane, Rasoul B. Sorkhabi, and Jay Quade, Geological Society of America Special Paper 328, 330 pp": *Journal of Asian Earth Sciences*, v. 4, pp.
51. **Yin, A.**, Yang, J., Butler, R., Otofujii, T.-t., Rumelhart, P.E., Cowgill, E., 2000, Correction of "Cenozoic Vertical-axis Rotation of the Altyn Tagh Fault System" by Rumelhart et al., *Geology*, v. 27, p. 819-822: *Geology*, v. 28, p. 480.
50. Kapp, P., **An, Y.**, Manning, C.E., Murphy, M., Harrison, T.M., Spurlin, M., Ding, L., Deng, X.G., and Wu, C.M., 2000, Blueschist-bearing metamorphic core complexes in the Qiangtang block reveal deep crustal structure of northern Tibet: *Geology*, v. 28 (1), p. 19-22.
49. **Yin, A.**, Kelty, T.K., 2000, An elastic wedge model for the development of coeval normal and thrust faulting in the Mauna Loa-Kilauea rift system in Hawaii: *Journal of Geophysical Research*, v. 105 (B11), p. 25909-25925.
48. **Yin, A.**, 2000, Mode of Cenozoic east-west extension in Tibet suggesting a common origin of rifts in Asia during the Indo-Asian collision: *Journal of Geophysical Research*, v. 105 (B9), p. 21745-21759.

47. Harrison, T.M., **Yin, A.**, Grove, M., Lovera, O.M., Ryerson, F.J., and Zhou, X.H., 2000, The Zedong Window: A record of superposed Tertiary convergence in southeastern Tibet: *Journal of Geophysical Research*, v. 105 (B8), p. 19211-19230.
46. **Yin, A.**, Harrison, T.M., 2000, Geologic evolution of the Himalayan-Tibetan orogen: Annual Review of Earth and Planetary Sciences, v. 28, p. 211-280.
45. Murphy, M.A., **Yin, A.**, Kapp, P., Harrison, T.M., Lin, D., and Guo, J.H., 2000, Southward propagation of the Karakoram fault system, southwest Tibet: Timing and magnitude of slip: *Geology*, v. 28 (5), p. 451-454.
44. Shen, Z.K., Zhao, C.K., **Yin, A.**, Li, Y.X., Jackson, D.D., Fang, P., and Dong, D.N., 2000, Contemporary crustal deformation in east Asia constrained by Global Positioning System measurements: *Journal of Geophysical Research*, v. 105 (B3), p. 5721-5734.
43. Cowgill, E., **Yin, A.**, Feng, W.X., and Qing, Z., 2000, Is the North Altyn fault part of a strike-slip duplex along the Altyn Tagh fault system?: *Geology*, v. 28 (3), p. 255-258.

#### 1999

42. **Yin, A.**, Harrison, T.M., Murphy, M.A., Grove, M., Nie, S., Ryerson, F.J., Feng, W.X., and Le, C.Z., 1999, Tertiary deformation history of southeastern and southwestern Tibet during the Indo-Asian collision: *Geological Society of America Bulletin*, v. 111 (11), p. 1644-1664.
41. Rumelhart, P.E., **Yin, A.**, Cowgill, E., Butler, R., Zhang, Q., and Wang, X.F., 1999, Cenozoic vertical-axis rotation of the Altyn Tagh fault system: *Geology*, v. 27 (9), p. 819-822.
40. Murphy, M.A., **Yin, A.**, and Harrison, T.M., 1999, Did the Indo-Asian collision alone create the Tibetan plateau?: Reply: *Geology*, v. 27 (3), p. 285-286.
39. **Yin, A.**, Kapp, P.A., Murphy, M.A., Manning, C.E., Harrison, T.M., Grove, M., Ding, L., Deng, X.G., and Wu, C.M., 1999, Significant late Neogene east-west extension in northern Tibet: *Geology*, v. 27 (9):, p. 787-790.

#### 1998

38. **Yin, A.**, Nie, S., Craig, P., Harrison, T.M., Ryerson, F.J., Qian, X.L., Yang, G., 1998, Late Cenozoic tectonic evolution of the southern Chinese Tian Shan: *Tectonics*, v. 17 (1): 1-27.

#### 1997

37. Yin, A., Fillipone, J.A., Harrison, M., Sample, J.A., and Gehrels, G.E., 1997, Fault kinematics of the Western Lewis and Clark line in northern Idaho and northwestern Montana: Implications for possible mechanisms of Mesozoic arc segmentation, in Belt Symposium III (1993) Special Volume, edited by R.B. Berg, Montana Bureau of Mines and Geology Special Publication 112, p. 244-253.
36. **Yin, A.** 1997, A book Chapter: "Geology of the Tian Shan Region, Central Asia," in Encyclopedia Of European And Asian Regional Geology, edited by Moores, E. M. Fairbridge, R. W.
35. Zheng, Y., G.A. Davis, and **A. Yin** (editors), Structural Geology and Geomechanics, Proceedings of the 30th International Geological Congress, volume 14, VSP, 311 pp, 1997
34. **Yin, A.**, and Ingersoll, R. V., A model for evolution of Laramide axial basins in the southern Rocky Mountains, USA: *International Geology Review*, v. 39, p. 1113-1123, 1997
33. Murphy, M.A., **Yin, A.**, Harrison, T.M., Durr, S.B., Chen, Z., Ryerson, F.J., Kidd, W.S.F., Wang, X., and Zhou, X., 1997, Did the Indo-Asian collision alone create the Tibetan plateau?: *Geology*, v. 25 (8), p. 719-722.
32. Kong, X., **Yin, A.**, Harrison, T.M., 1997, Evaluating the role of preexisting weaknesses and topographic distributions in the Indo-Asian collision by use of a thin-shell numerical model: *Geology*, v. 25 (6), p. 527-530.
31. Quidelleur, X., Grove, M., Lovera, O.M., Harrison, T.M., **Yin, A.**, and Ryerson, F.J., 1997, Thermal evolution and slip history of the Renbu Zedong thrust, southeastern Tibet: *Journal of Geophysical Research*, v. 102 (B2), p. 2659-2679.
30. Harrison, T.M., Ryerson, F.J., LeFort, P., **Yin, A.**, Lovera, O.M., and Catlos, E.J., 1997, A Late Miocene-Pliocene origin for the Central Himalayan inverted metamorphism: *Earth and Planetary Science Letters*, v. 146 (1-2), p. E1-E7.

#### 1996

29. **Yin, A.**, and Harrison, T.M. (editors). The Tectonic Evolution of Asia, Cambridge University Press, 666 pp, 1996

28. **Yin, A.**, and Nie, S., 1996, A Phanerozoic palinspastic reconstruction of China and its neighboring regions, *in* The Tectonic Evolution of Asia edited by A. Yin and T.M. Harrison, Cambridge University Press, p. 442-485.

#### **1995**

27. **Yin, A.**, and Oertel, G., 1995, Strain analysis of the Ninemile fault zone, Western Montana - Insights into multiply deformed regions: *Tectonophysics*, v. 247 (1-4), p. 133-143.
26. Nie, S.Y., **Yin, A.**, Rowley, D.B., and Jin, Y.G., 1995, Exhumation of the Dabie-Shan ultra-high-pressure rocks and accumulation of the Songpan-Ganzi flysch sequence, Central China - Reply: *Geology*, v. 23 (8), p. 765-766.
25. Forshee, E.J., and **Yin, A.**, 1995, Evolution of monolithological breccia deposits in Supradetachment Basins, Whipple Mountains, California: *Basin Research*, v. 7, p. 181-197.
24. Fillipone., J.A., **Yin, A.**, Harrison, T.M., Gehrels, G., Smith, M., and Sample, J.C., 1995, Age and magnitude of dip-slip faulting deduced from differential cooling histories - An example from the Hope Fault, Northwest Montana: *Journal of Geology*, v. 103 (2): p. 199-211.

#### **1994**

23. **Yin, A.**, 1994, A review of "Thrust Tectonics" edited by K.R. McClay, *GSA Today* (November Issue).
22. **Yin, A.**, 1994, Mechanics of monoclinial systems in the Colorado Plateau during the Laramide Orogeny: *Journal of Geophysical Research*, v. 99 (B11), p. 22043-22058.
21. Nie, S.Y., **Yin, A.**, Rowley, D.B., and Jin, Y.G., 1994, Exhumation of the Dabie-Shan ultra high-pressure rocks and accumulation of the Songpan-Ganzi flysch sequence, Central China: *Geology*, v. 22 (11), p. 999-1002.
20. **Yin, A.**, Harrison, T.M., Ryerson, F.J., Chen, W.J., Kidd, W.S.F., and Copeland, P., 1994, Tertiary structural evolution of the Gangdese thrust system, southeastern Tibet: *Journal of Geophysical Research*, v. 99 (B9), p. 18175-18201.
19. Fillipone, J.A., and **Yin, A.**, 1994, Age and regional tectonic implications of late Cretaceous thrusting and Eocene extension, Cabinet Mountains, northwest Montana and northern Idaho: *Geological Society of America Bulletin*, v. 106 (8), p. 1017-1032.
18. **Yin, A.**, 1994, Mechanics of wedge-shaped fault blocks 2. An elastic solution for extensional wedges: *Journal of Geophysical Research*, v. 99 (B4), p. 7045-7055.

#### **1993**

17. Paylor, E., and **A. Yin**, 1993, Left-slip evolution of the North Owl Creek fault system, Wyoming, during Laramide shortening, *in* Laramide Basement Deformation in the Rocky Mountain Foreland of the Western United States, edited by C.J. Schmidt, R.B. Chase, and E.A. Erslev, *Geological Society of America Special Paper* 280, p. 229-242.
16. **Yin, A.**, 1993, Does magmatism influence low-angle normal faulting - Comment: *Geology*, v. 21 (10), p. 956-956.16.
15. **Yin, A.**, 1993, Mechanics of wedge-shaped fault blocks .1. An elastic solution for compressional wedges: *Journal of Geophysical Research*, v. 98 (B8), p. 14245-14256.
14. **Yin, A.**, and Nie, S.Y., 1993, An indentation model for the north and south China collision and the development of the Tan-Lu and Honam fault systems, eastern Asia: *Tectonics*, v. 12, 801-813.
13. **Yin, A.**, and Oertel, G., 1993, Kinematics and strain distribution of a thrust-related fold system in the Lewis Thrust plate, northwestern Montana (USA): *Journal of Structural Geology*, v. 15 (6), p. 707-719.

#### **1992**

12. Lageson, D. and **Yin, A.** 1992, Structural and stratigraphy of the Rocky Mountain foothills and front ranges, Crowsnest pass, Alberta to Sun River Canyon, Montana: A field-trip guide to the western Montana thrust belt, 1992 AAPG Annual Meeting, Calgary, Alberta, 54 pp.
11. **Yin, A.**, and Dunn, J.F., 1992, Structural and stratigraphic development of the Whipple-Chemehuevi detachment fault system, southeastern California - Implications for the geometrical evolution of domal and basinal low-angle normal faults: *Geological Society of America Bulletin*, v. 104 (6): 659-674.
10. Harrison, T.M., Copeland, P., Kidd, W.S.F., and **Yin, A.**, 1992, Raising Tibet: *Science*, v. 255 (5052), p. 1663-1670.

9. Hacker, B.R., **Yin, A.**, Christie, J.M., and Davis, G.A., 1992, Stress magnitude, strain rate, and rheology of extended middle continental-crust inferred from quartz grain sizes in the Whipple Mountains, California: *Tectonics*, v. 11 (1), p. 36-46.

#### **1991**

8. **Yin, A.**, and Kelty, T.K., 1991, Structural evolution of the Lewis Plate in Glacier-National-Park, Montana - Implications for regional tectonic development: *Geological Society of America Bulletin*, v. 103 (8), p. 1073-1089.
7. **Yin, A.**, 1991, Mechanisms for the formation of domal and basinal detachment faults - A 3-dimensional analysis: *Journal of Geophysical Research*, v. 96 (B9), p. 14577-14594.
6. **An, Y.**, and T.K. Kelty, 1991, Development of normal faults during emplacement of thrust sheets: an example from the Lewis allochthon, Glacier National Park, Montana, U.S.A., *Journal of Structural Geology*, v. 13, p. 37-47.
5. **Yin, A.**, 1991, Complex pre-Lewis thrust deformation, southern Glacier National Park, Montana: *Rocky Mountain Geologists*, v. 28, p. 91-103.

#### **1990**

4. Hacker, B.R., **Yin, A.**, Christie, J.M., and Snoke, A.W., 1990, Differential stress, strain rate, and temperatures of mylonitization in the Ruby Mountains, Nevada - Implications for the rate and duration of uplift: *Journal of Geophysical Research*, v. 95 (B6), p. 8569-8580.
3. **Yin, A.**, 1990, Origin of regional, rooted low-angle normal faults - A mechanical model and its tectonic implications - Reply: *Tectonics*, v. 9 (3), p. 547-549.

#### **1989**

2. **Yin, A.**, Kelty, T.K., and Davis, G.A., 1989, Duplex development and abandonment during evolution of the Lewis thrust system, southern Glacier-National-Park, Montana: *Geology*, v. 17 (9), p. 806-810.
1. **Yin, A.**, 1989, Origin of regional, rooted low-angle normal faults - a mechanical model and its tectonic implications: *Tectonics*, v. 8 (3), p. 469-482.

#### **Past Visiting Scholars:**

1. Prof. Bartulzi Dash (Mongolian University of Science and Technology).
2. Prof. Chandra S. Dubey (Delhi University).
3. Prof. Jianghai Wang (Guangzhou Institute of Geochemistry, Chinese Academy of Sciences);
4. Prof. Zhaojie Guo (Peking University).
5. Prof. Bei Xu (Peking University).
6. Prof. Cao Yuan (Hong Kong University).
7. Prof. Louise Teng (Taiwan National University).
8. Prof. Jianguy Zhou (China University of Geosciences-Wuhan).
9. Prof. Xiaofeng Wang (Institute of Geomechanics, Chinese Academy of Geological Sciences).
10. Prof. Zhengle Chen (Institute of Geomechanics, Chinese Academy of Geological Sciences).
11. Prof. Yueqiao Zhang (Institute of Geomechanics, Chinese Academy of Geological Sciences).
12. Prof. Wanming Deng (Institute of Geology and Geophysics, Chinese Academy of Geological Sciences).
13. Prof. Guibin Zhang (China University of Geosciences, Beijing).
14. Prof. Ke Hu (China University of Geosciences, Beijing).
15. Prof. Dewei Li (China University of Geosciences, Wuhan).
16. Prof. Jian-Hua Li (Nanjing University).
17. Mr. Xiangjiang Yu, exchange PhD student (Beijing University).
18. Prof. Hossein Hassani (Faculty of Mining and Metallurgical Engineering, Amirkabir University of Technology, Tehran, Iran).
19. Prof. Xiaogan Cheng (Zhejiang University, China).
20. Mr. Wen-Liang Jian, exchange student (Institute of Crustal Dynamics, China Earthquake Administration, Beijing).

21. Prof. Jianlin Chen (Guangzhou Institute of Geochemistry, Chinese Academy of Sciences, Guangzhou, China).
22. Prof. Yuxiu Zhang (Graduate School, Chinese Academy of Sciences, Beijing, China).
23. Mr. Junpeng Wang (exchange student, China University of Geosciences, Wuhan, China).
24. Mr. Zhen-Zheng Wang, visiting PhD graduate student (Peking University, China).
25. Prof. Dapeng Li (China University of Geosciences, Beijing, China).
26. Prof. Li-Jun Song (Xi'an Shiyou University, China).
27. Ms. Ming Sun, exchange PhD student, (China University of Geosciences, Beijing, China).
28. Mr. Xing-Qiang Chen, exchange PhD student, (Chinese Academy of Geol. Sci., Beijing, China).
29. Mr. Jingqiang Wang, exchange PhD student (Nanjing University, China).
30. Prof. Xiao-Gang Li (Chongqing University of Science and Technology, China).
31. Mr. Yi-Ping Zhang (visiting PhD graduate student, Chinese Academy of Geological Sciences)
32. Prof. Chuanxin Li (visiting scholar, China University of Geosciences-Beijing)
33. Prof. Jiafu Chen (Northeastern University)
34. Mr. Kaixuan An (Zhejiang University)
35. Dr. Chulin Li (Chinese Academy of Sciences)
36. Prof. Shichao Li (Jinlin University): analogue modeling of ice satellites
37. Dr. Xi Xue (Zhejiang University): tectonic synthesis of eastern Asia
38. Professor Hui-Min Jin (Ninbo University): numerical modeling of ice satellite tectonics
39. Professor Weifeng Xiao (Chinese Academy of Geological Sciences): central Asia orogenic system
40. Professor Lin Chen (Chinese Academy of Sciences): numerical modeling ice satellite tectonics and continental deformation
41. Professor Yan Tang (Chang'An University): tectonic evolution of eastern Tibet