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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 Interests:

Continental tectonics; planetary tectonics; planetary landscape evolution; fault mechanics.

Teaching:

Introductory, upper-division, and graduate-level courses in Earth and planetary sciences.

Education:

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

- M.S. (1982-1983): Precambrian Geology of Northern China; Beijing University (supervisor: Prof. Xianglin Qiang) (incomplete due to transfer to the University of Southern California).
- PhD (1983-1988): 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 not filed until 1988).

Professional Appointments:

1995-2011 Institute of Geophysics and Planetary Physics, UCLA 1996-present Full Professor, UCLA 1993-1996 Associate Professor, UCLA 1988-1983 Assistant Professor, UCLA 1987-1988 Acting Assistant Professor, UCLA

Awards and Honors:

2013 Fellow, the American Geophysical Union 1994 Young Scientist Award (Donath Medal), Geological Society of America

Service at UCLA:

2018: Member of the department search committee for Deep Earth History position.

2014-2017: Vice Chair, Department of Earth, Planetary, and Space Sciences, UCLA.

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

2016: Chair of the departmental search committee for the *Surface Processes* position.

2005: Chair of the departmental search committee for the *Quaternary Geochronology* position.

1999: Chair of the departmental search committee for the Active Tectonics and Geodesy position.

1997: Chair of the departmental search committee for the Sedimentology and Tectonics position.

1996: Member of a Merit Increase Committee for the School of Letters and Sciences.

1995: Chair of the departmental search committee for the *Continental Tectonics*.

position.

1993-1995: Departmental representative in the Academic Senate.

Service as a Panel and Review Committee Member outside UCLA:

2002 Review Committee member for Dept. Geol. and Atm. Sci., University of Houston, Texas. 2000 Review Committee member for the Institute of Earth Sciences, Academia Sinica, Taipei, Taiwan 2014 Review Committee member for Dept. Geol. and Atm. Sci., University of Houston, Texas. 2017 Review Committee member for the Dept. Geol. & Geophysics, University of Texas A&M. 1993-1996 Panel member of the International Ocean Drilling Program (ODP).

Outreach Activities

- Regular outreach lectures at local elementary, middle and high schools and community colleges.
- Invited lecture at the National Youth Leadership Summer Camp for Native Americans in 2019 on planetary sciences at the Piute Indian Reservation in Bishop, California.
- Coordinator for a STEM program between UCLA and Cerritos Community College for broadening student participation from low-income/underrepresented racial groups.
- TV appearances:
 - (1) The Secretes of The Forbidden City aired by PBS and BBC, in which I illustrated the geologic setting and historical earthquakes in northern China based on modern concepts of tectonics, seismology, and earthquake geology (https://www.pbs.org/wgbh/nova/video/secrets-of-the-forbidden-city/).
 - (2) Earthquake-triggered landslides aired by Discovery Channel.

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

2019-2021: Associate Editor, *Geology* 2014-2020 Chief Editor, *Earth and Planetary Science Letters* 2007-2019 Associate Editor, *Geological Society of America Bulletin* 2011-2014 Chief Editor, *Tectonophysics* 2008-2014 Board Member, *Earth and Planetary Science Letters* 2002-2008 Associate Editor, *Journal of Asian Earth Sciences* 1996-1999: Associate Editor, *Geology*

Current Graduate Students:

- 1. Ms. Abijah Simon: Tectonics of the eastern Tibetan plateau (PhD expected in 2022)
- 2. Ms. Ashley Schoenfeld: Tectonics and dynamic modeling of ice satellites (PhD expected in 2022)
- 3. Mr. Kobe Wang: Mars glaciation history (PhD expected 2024)
- 4. Ms. Valeria Hernandez: *Tectonic development of the Limpopo orogenic belts and the Whipple Mountains detachment fault system* (PhD expected 2024)
- 5. Mr. Hanzhang Chen: Tectonic and surface processes of the Pluto system (PhD expected 2025)
- 6. Ms. Julia Miller: *Tectonic and surface processes of Pluto and Enceladus* (PhD expected 2025)

Past PhD Students

- 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. Ivy Curren (PhD 2016): Post-doctoral fellow, Weizmann Institute of Science.
- 12. Andrew Zuza (PhD 2016): Assistant Professor, University of Nevada-Reno.
- 13. Peter Haproff (PhD 2017): Assistant Professor, University of North Carolina, Wilmington.
- 14. Ernest Paylor (PhD 1994): NASA, Washington, D.C.
- 15. Jessica Watkins (PhD 2015): NASA Astronaut selected in 2017.
- 16. Jennifer Scully (PhD 2015): Research Staff, Caltech/JPL.
- 17. Erin Leonard (PhD 2019): Research Staff, Caltech/JP
- 18. Jeffery Fllipone (PhD 1993): Environmental Consulting Company, Victoria, Canada.
- 19. Peter Rumelhart (PhD 1999): EXXON-MOBILE Oil Company, Houston, Texas

20. Stephanie M. Briggs (PhD 2007): William Lettis and Associates, San Francisco, California

Past MS Students:

- 1. Mr. Christian Zarn (1989), Mineral Exploration Company, Europe.
- 2. Mr. Adam Norris (1991), GEOSCIENCE Support Services, Inc., La Verne, CA 91750.
- 3. Ms. Elizabeth Forshee (1992), Union California Oil Company, Sacramento, California.
- 4. Mr. Robert Johnston (1996), EXXON-MOBIL 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-MOBIL 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), graduate student at Stanford University
- 13. Ms. Abijah Simon (2019), PhD student at UCLA

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 Geol. 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 Geol. 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 (2017-2020) Professor, Jinlin University
- 15. Dr. Chen Wu (2018-2019) Professor (Institute of Tibetan Plateau Research, Chinese Academy of Sciences)
- 16. Dr. Xiaogan Li (2017-2018) (Chongqing University of Science and Technology, China)
- 17. Dr. Xin Xu (2018-2020) (Zhejiang University, China).

Publications

- 187. Xu, X., Zuza, A. V., Chen, L., Zhu, W., Yin, A., Fu, X., Gao, S.L., Xu, X.H., Kuang, X.T., Zhang, F.Q., Wu, L., Lin, X.,B., H.L. Chen, & Yang, S. (2021). Late Cretaceous to Early Cenozoic extension in the Lower Yangtze region (East China) driven by Izanagi-Pacific plate subduction. Earth-Science Reviews, 103790.
- 186. Wang, Y., Chen, X., Zhang, Y., Yin, Z., Zuza, A., Yin, A., Wang, Y., Ding, W., Xu, S., Shang, Y., Li, B., and Shao, Z., Superposition of Cretaceous and Cenozoic deformation in northern Tibet: A far-field response to the tectonic evolution of the Tethyan Orogenic System: GSA Bulletin https://doi.org/10.1130/B35944.1.
- 185. Li, X., Xu, G., Wu, C., **Yin, A.,** Wu, S., Zuza, A. V., & Li, Y. (2021). Pure Void Space and Fracture Pore Space in Fault Fractured Zones. Frontiers in Earth Science, 9, 349.
- 184. Wu, C., Zuza, A. V., Li, J., Haproff, P. J., **Yin, A.**, Chen, X., & Li, B. (2021). Late Mesozoic– Cenozoic cooling history of the northeastern Tibetan Plateau and its foreland derived from low-temperature thermochronology. GSA Bulletin doi: https://doi.org/10.1130/B35879.1.

- 183. Wu, C., Zuza, A.V., Yin, A., Chen X., Haproff, P.J., Li, J., Li, B., and Ding, L., Punctuated orogeny during the assembly of Asia: Tectonostratigraphic evolution of the North China craton and the Qilian Shan from the Paleoproterozoic to Early Paleozoic: Tectonics, doi.org/10.1029/2020TC006503.
- 182. Yin, A., Moon, S., & Day, M. (2021). Landform evolution of Oudemans crater and its bounding plateau plains on Mars: Geomorphological constraints on the Tharsis ice-cap hypothesis. Icarus, 360, 114332.
- 181. 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.
- 180. Kirkpatrick, H. M., Moon, S., **Yin, A.,** & Harrison, T. M. (2021). Impact of fault damage on eastern Tibet topography. Geology, 49(1), 30-34.
- 179. Leonard, E., Yin, A., and R. Pappalardo (2021) Forming relic cratered blocks: Left-lateral shear on Enceladus inferred from ice-shell deformation in the Leading Hemisphere: JGR-Planet e2020JE006499.

- 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.
- 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.

- 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.

161.

- 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.

- 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.

- 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.
- 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", <u>Acta Geologica Sinica</u>, 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.

- 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., Célérier, J., Gehrels, G.E., Grove, M., Manning, M.E., and Burgess, W.P., 2011, Cenozoic tectonic history of the Himachal Himalaya (northwestern India) and

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