

Hai Cheng's curriculum vitae



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Education

Nanjing University, China	Geochemistry	B.S.	1982.02
Chinese Academy of Geological Sciences, China	Geochemistry	M.S.	1985.02
Nanjing University, China	Geochemistry	Ph.D.	1988.02

Position

Academica Sinica, Beijing	Postdoctoral Fellow	1988
Kyoto University	Research Fellow	1989
Macquarie University	Research Fellow	1991-1992
University of Minnesota	Senior Research Scientist	1993-2009
Xi'an Jiaotong University	Professor	2010-present

Recent Honors

The Chinese National Science Fund for Distinguished Oversea Young Scholars (2003)
The Gary C. Comer Abrupt Climate Change Fellowship (2007)
Thomson Reuters China Citation Laureates 2014 *Highly Cited Researcher*
Thomson Reuters China Citation Laureates 2014 *International Citation Impact Award (The only one from the entire Chinese geoscience community up to now)*
Sanqin Friendship Award (2014)
Geochemical Fellow of Geochemical Society and European Association of Geochemistry (2015)
Ten major scientific and technological progresses of China's colleges and universities (2016)
Highly Cited Researches (2014 - 2023) (Thomson Reuters/Clarivate Analytics)
Highly Cited Scholars in China (2015 - 2023) (*Elsevier*)
AGU Fellow (2017)
Best Researcher Award of Xi'an Jiaotong University 2018
AGU Eminiani Lecturer, 2019 (*to honor the life and work of the renowned paleoceanography/paleoclimate researcher*)
First-class science and technology award (2020, *Shanxi Academy of Sciences*)
MEL Distinguished Visiting Fellowship 2020
International senior scientist award (*National Natural Science Foundation of China*) (2021)
The 10 Most Astonishing Archaeological Discoveries of 2021 (*by Archaeology*).
The EGU Milutin Milankovic Medal (2022)
Foreign Corresponding Member of the Austrian Academy of Sciences (2022)

Professional Society Memberships

American Geophysical Union; European Geophysical Union;
Geochemical Society and European Association of Geochemistry;
Chinese Geological Society; Chinese Association of Quaternary Research

Recent Service

Editor-in-chief: *The Innovation Geoscience*

Associate Editor: *The Innovation* (IF: 33.1); *Science Bulletin* (IF: 18.9).

Editorial board member: *Quaternary Geochronology, Speleology, Journal of Earth Environment, Science China-Earth Sciences, Scientific Report, Geological Review, and Quaternary Sciences*

Member of the Earth System Panel of the European Research Council. Member of the Geochemical Fellows Award Committee of the Geochemical Society and the European Association for Geochemistry. Member of selection board of the AGU Eminiani Lecturer. Member of selection board of the EGU Milutin Milankovic Medal. Members of many panels of Chinese National Natural Science Foundation of China. Member of USERN (Universal Scientific Education and Research Network). Scientific Committee member of International Research Center on Karst under the Auspices of UNESCO, *etc.*

Gradual Students/Postdocs

Master degree students: 13; Ph D degree students: 19; Postdocs: 10

Technical Specialization

Thermal ionization mass spectroscopy
Multi-collector-ICP mass spectroscopy
Trace metal separation techniques
U-series dating techniques
Triple-oxygen-isotope analysis

Synergistic Activities

Role in development of mass spectrometric ^{231}Pa dating techniques of carbonates (coral and speleothems) and $^{231}\text{Pa}/^{235}\text{U}$ measurement of igneous rocks.
Re-determine half-life of ^{234}U and ^{230}Th for U-Th dating.
Development of Uranium-thorium-protactinium dating systematics.
Development of MC-ICP MS U-Th dating technique
Development of laser ablation and isotope dilution U-Pb dating techniques for Quaternary carbonate samples
Development of triple-oxygen-isotope analytical technique
Speleothem study, paleoclimate reconstruction and correlation to global climate change

Mentor and Assistance of Young Scholars

Seraina Badertscher (Switzerland), Ronny Boch (Austria), Yanjun Cai (US), Shitao Chen (China), Hong-Wei Chiang (Taiwan), Alan Chu (Taiwan), Kim Cobb (US), Francisco da Cruz (Brazil), David Dominguez-Villar (Spain), Jeff Dorale (US), Carolyn Dykoski (US), Christina Gallup (US), Ben Hardt (US), Mayuri Inoue (Japan), Xiouyang Jiang (China), Lisa Kanner (US), Gayatri Kathayat (India), Megan Kelly (US), Cutler, Kirsten (US), Xinggong Kong (China), Claire Li (Taiwan), Hongchuan Li (US), Hanyin Li (China), Xianglei Li (China), Xuoyan Li (China), Fuyang Liang (US), Kris Ludwig (US), Yanbin Lv (China), Chengcheng Ma (China), Christian Millo (Brazil), Angela Min (US), Jean-Sebastian Moquet (Brazil), Zhiguo Rao (China), Sushmita Ray (US), Julie Retrum (US), Stacy Rosner (US), Lijuan Sha (China); Guanjun Shen (China), Chun-Chou Shen (Taiwan), Erik Smith (US), Heather

Stoll (Spain), Nicolas M. Stríkis (Brazil), Liangcheng Tan, Ming Tan (China), Rebecca Thomas (US), Ana M. Vicente (Spain), Xianfeng Wang (US), Yongjin Wang (China), Yao Xu (China), Yan Yang (China), Kan Zhao, (China), Xinnan Zhao (China), Dezhong Zhang (China), Xiaoyan Zhu (China), Yongfeng Ning (China), Baoyun Zong (China), Wenjing Du (China), Jingyao Zhao (China), Pengzhen Duan (China), Jiayu Lu (China), Youwei Li (China), Ye Tian (China), Fan Zhang (China), Maomao Wang (China), Xiyu Dong (China), Jian Wang (China), Binglin Meng (China), Xiaowen Niu (China), Yassine Ait Brahim (Morocco), Carlos Perez-Mejías (Spain), Jonathan Baker Lloyd (US), Gabriella Koltai (Hungary), Jasper Alexander Wassenbury (Germany), Julie B. Retrum (US), Mirona Chirienco (Romania), Valdir Felipe Novello (Brazil), Ny Riavo G. Voarintsoa (Madagascar), David Domínguez-Villar (Espanola), Kristina Krklec (Hrvatsko), Haiwei Zhang (China), Pu Zhang (China), Sasadhar Mahata (India), Xunlin Yang (China), Liang Yi (China), Yuan Yao (China), Weijian Zhou (China), Weiguo Liu (China), Dianbing Liu (China), Youbing Peng (China), Hongbin Zhang (China), Jianjun Yin (China), Jo Kyoung-nam (South Korea), Taotao Zhang (China), Wuhui Duan (China), Fengmei Ban (China), Jiaoyang Ruan (China), and many others.

Collaborators

J. Adkins (US), K.D. Adams (US), Z.S. An (China), Y. Asmerom (US), A.S. Auler (Brazil), S. Bayari (Turkey), M. Bender (US), R. Boch (Austria), W. S. Broecker (US), G.A. Brook (US), S.J. Burns (US), C.D. Charles (US), P. Clark (US), K.M. Cobb (US), F.W. Cruz (Brazil), G.H. Denton (US), D. Domínguez-Villar (Spain), J.A. Dorale (US), R. Drysdale (Australia), H.N. Edmonds (UK), R.L. Edwards (US), V. Ersek (UK), D. Fleitmann (UK), M. Gagan (Australia), C.D. Gallup (US), D. Genty (France), Z.T. Guo (China), P. Hearty (Australia), J. Hellstrom (Australia), Inoue (Japan), A. Klimchouk (Ukraine), M.S. Lachniet (US), Z.H. Li (US); D. McGee (US), A. Mix (US), F.H. Nader (Lebanon), B. Plessen (Germany), R. Potts (US), H. Qing (Canada), J. Quade (US), M.K. Reagan (US), D.A. Richards (UK), B. Sebastian (Germany), C.C. Shen (Taiwan), A. Sinha (US), K. Sieh (Singapore), J. Southern (US), R. Speed (US), C. Spotl (Austria), G.S. Springer (US), L.D. Stott (US), V.C. Tewari (India), M. Tan (China), S. Verheyden (Belgium), R.C. Walter (US), Y.J. Wang (China), X.F. Wang (US), J.F. Wehmiller (US), K.S. Woo (Korean), J. Woodhead (Australia), F.Y. Wu (China), D.X. Yuan (China), P.Z. Zhang (China), B. Luz (Israel), Q.Z. Yin (US), Krause, C.E. (Australian). Y.F. Zheng (China), F.H. Chen (China), H.Y. Lv (China), N.Q. Wu (China). H.Y. Lu (China), H.C. Zhang (China), C.Y. Hu (China), and many others.

Invited Speeches and Lectures

1996 Spring AGU Meeting; 1997 Fall AGU Meeting; 2000, 2002 and 2009 Institute of Karst Geology; 2003 University of Paris; 2004 and 2006, Lanzhou University; 2004 Nanjing University; 2005 Taiwan National University; 2005 Institute of Geology; 2005 University of Southern California; Taiwan; 2005 Lamont Doherty Earth Observatory of Columbia University; 2005 Southern China Normal University; 2005 and 2009 Institute of Geochemistry, Guangzhou; 2006; IQUA Congress; 2006 Goldschmidt Conference; 2007 Institute of Speleology and Karstology, Simferopol, Ukraine; 2007 EGU Meeting, Vienna; 2007 9th International Conference on Paleoceanography; 2008 University of Bern; 2008 EGU Meeting, Vienna; 2008 European Science Foundation; 2009 L'Institut national de recherches archéologiques preventives, France; 2009 U-series and sea-level workshop, WHOI; 2009 University of Sao Paulo. 2010 AGU Taipei Meeting, Taiwan. 2010 AGU Brazil Meeting, Iguassu, Brazil; 2010 Shanghai Global Monsoon Meeting; 2010 Oregon Syntrace Synthesis Workshop; 2011 Institute of Tibetan Plateau Research, Chinese Academy of Sciences; 2011 Global climate change workshop, Chinese NSF; 2011 INQUA (Geochronology session); 2012 Modes of Variability in the Climate System: Past-Present-Future, Obergurgl, Austria (PAGES). AOGS-AGU (WPGM), Singapore, 2012. Helmholtz-Zentrum Potsdam, Deutsches GFZ, Germany, 2012. Symposium on the interplaying between high and low latitude climate systems, Fuzhou, China, 2012. International Symposium on Climate Change- Past, Present and Future, Trends, Variations and Impacts, Agadir, Morocco, 2012. Growth of the Tibetan Plateau and Eastern Asia Climate: Clues to Understanding the Hydrological

Cycle, Workshop, Xian, China 2012; 2013. 02 Wadia Institute of Himalayan Geology, Dehradun, India; 2013. 04, International Symposium on Karst Water under Global Change Pressure, Guilin, China, 2013.08, Conference on Isotopes of Carbon, Water, and Geotracers in Paleoclimate Research, Bern, Switzerland; 2013.11, Institute of Earth and Environmental Science, University of Potsdam, Potsdam, Germany; 2013.11, Geography Department, Humboldt University, Berlin, Germany; 2014.10, Comer Abrupt Climate Change Meeting, Wisconsin, US; 2015.10, Comer Climate Conference, Wisconsin, US; 2016 Goldschmidt Conference, Japan; 2016.8, 35th International Geological Congress, Capetown, South Africa; 2016.7, 4th Conference on Earth System Science, Shanghai, China; 2016.12, AGU Fall Meeting, US (two); 2017.5, IntCal Working Group Meeting, Belfast, UK; 2017.06, SISAL Workshop, Duplin, Ireland; 2017.09, IODP-PAGES Workshop on Global Monsoon in Long-term Records, Shanghai, China; 2019.11, University of Science and Technology of China, He Fei, China; 2019 AGU Fall Meeting, US (two). Workshop of Abrupt Climate and Ecosystem Transitions in Paleoclimate, 2020.10, Copenhagen. 2021.11, 2020 Northeast Asian Symposium Program, online; 2022.05, PAGES 6th OSM, Agadir. 2022.05, EGU2022, Vienna. 2022.06, Sustainability Research+Innovation Conference, online. 2023.05, Caribbean – Mesoamerican Climate Science Workshop, Puerto Rico. 2023.07, The XXI INQUA Congress, Rome. 2023.12, AGU23 Meeting, San Francisco, and many others.

Research Overview and Highlights

Hai Cheng has over the past three decades been at the leading edge in the technical developments of U-series and other techniques to address many fundamental questions in paleoclimatology and global climate change research. As one of world-leading experts, he has focused largely on studies of cave records worldwide, and produced an incredible body of work, which has led to a clearer understanding of the Earth's climate history on a wide range of timescales. The broad international significance of his contributions is attested by >660 peer-reviewed papers, including 29 in *Nature and Science*, >70 in *Nature and Science Sub-Journals* and *PNAS* (*Google Scholar*: H-index: 116 and citations: >85000,). He is a 'Highly Cited Researches' (continuously from 2014 to 2023, *Thomson Reuters/Clarivate Analytics*) and his current world citation rank is ~20th in the geoscience field (up to the top five, *ESI, Web of Science*).

U-series dating systematics. Cheng's most widely recognized technical achievement is his role in the persistent improvement of U-series dating techniques in U-Th, U-Pa and U-Pb dating systematics, including significant improvements in precision in age, large reductions in sample-size requirements, doubling of the time range appropriate for U/Th dating extending to older times, ²³¹Pa and ²³⁰Th dating systematics, and re-determinations of ²³⁰Th and ²³⁴U half-lives that have been widely accepted and used by the U-series community (e.g., Cheng et al., 1998, 2000, 2013a; Wang (*his student*) et al., 2022). These improvements impact a whole set of fields including geology, oceanography, atmospheric science, anthropology, archeology, and art history. During the last decade, for example, his group has provided innumerable U-series dates for his team and collaborators who have made groundbreaking discoveries on paleoclimatic changes globally, as well as anchoring archeological records of human evolution in Asia, Europe and elsewhere.

Cave records in numerous climate systems. On the basis of state-of-the-art U-series dating techniques, he has played a key role in the reconstruction of the longest climate history in numerous climate domains using cave records, including the longest East Asian (640 ka, Cheng et al., 2016) and longest Indian (280 ka, Kathayat (*his student*) et al., 2016) monsoon records, the longest Westerly climate record from West China (500 ka, Cheng et al., 2012), central Asia (150 ka, Cheng et al., 2016) and North America (335 ka, Cheng et al., 2019), and the longest record from the Amazon Basin (250 ka, Cheng et al., 2013b). These records are milestones in the paleoclimate reconstruction in these climate systems and have played an important role in understanding, correlating and calibrating global climate variability on various timescales. Before his and his colleagues' work, the main long (tens to

hundreds of thousands of years) climate records were largely dominated by marine and ice core records. Today, cave records have become the strong third leg of this paleoclimate triumvirate.

Global Monsoon and orbital theory of climate. Cheng and his colleagues have established a large number of cave records that characterize global monsoon variations on orbital-decadal timescales, particularly the Asian (Cheng et al., 2016) and South American (Cheng et al., 2013b) monsoon records. On the basis of new correlation strategies (Cheng et al., 2006, 2009, 2016, 2020, 2021a), he correlated the monsoon records to ice core and marine sediment records, thereby transferring precise cave chronologies to other archives with their own rich proxies of hydroclimate. As one of results, the cave data suggested that the Greenland and Antarctic ice-core chronologies require +320- and +400-year adjustments around the time of Heinrich Stadial 2, respectively (Dong (his student) et al., 2022), which is supported by extant volcanic evidence and radiocarbon ages. The correlations also provided the timing and sequence of events surrounding ice age terminations, proving new insights into the causes and mechanisms involved, especially the positive feedback mechanisms caused by perturbation of the ocean-atmosphere carbon and heat cycles by the initial melting of the ice sheets (Cheng et al., 2009, 2016). Because of the absolutely dated chronology of cave records, the comparison with Earth's insolation kept clear of circular reasoning, which attests that the ice age terminations are separated by four or five precession cycles, supporting the idea that the 100-ka ice age cycle is an average of 4 or 5 discrete precession cycles (Cheng et al., 2016). Taking the advantage of cave records, he has coined two long-standing problems concerning orbital-scale variations of the Asian monsoon ever since 30 years ago as the “Chinese 100 kyr problem” and the “sea-land precession-phase paradox”, respectively regarding (1) discrepancies between the dominant 100-ka periodicity in Chinese loess magnetic susceptibility records and almost pure precession periodicity (20-ka) in Chinese cave $\delta^{18}\text{O}$ records, and (2) the nearly opposite precession phases between Asian continental cave records and marine sediment records from oceans surrounding the Asian continent especially the Arabian Sea (Cheng et al., 2021b). He has well reconciled the discrepancies with a new interpretation framework, the “monsoon system science”, and showed that the loess, marine, and cave records are complementary, rather than incompatible, with each record preferentially describing a certain aspect of Asian monsoon dynamics/thermodynamics (Cheng et al., 2021b, 2022). From the point of view of orbital dynamic and thermodynamic forcings and climate dual responses in low- and high-latitudes, he proposed blending the global monsoon with Milankovitch orbital theory of climate to formulate a new orbital hypothesis, which explains the observed dual nature of orbital hydrodynamics of the ice sheet and monsoon systems (Cheng et al., 2021b, 2022).

Andes to Amazon climate change. Cheng and his colleagues have carried out a series of work for more than ten years in the South American monsoon domain. His work precisely characterized the timing and nature of pluvial events of South American monsoon that broadly correlate with Heinrich Stadials in the North Atlantic and weak Asian monsoon events (Cheng et al., 2013b, 2020, 2021b). The cave records revealed a quasi-dipole pattern of orbital-scale precipitation between western and eastern Amazonia, and a modest increase in precipitation amount in western Amazonia but a significant drying in eastern Amazonia during the last glacial period. He then suggested that higher biodiversity in western Amazonia, contrary to ‘Refugia Hypothesis’, is maintained under relatively stable climatic conditions. In contrast, the glacial–interglacial climatic perturbations might have been instances of loss rather than gain in biodiversity in eastern Amazonia (Cheng et al., 2013b). He also showed that while the initial onset in the North Atlantic was essentially synchronous with Amazon rainfall increase, the initial termination of Heinrich Stadial 4 commenced significantly earlier in the South American monsoon, resulting in a large reduction in the Amazon River runoff hundreds of years prior the termination of Heinrich Stadial 4. He thus hypothesized a new mechanism that the runoff reduction may contribute to the resumption of the Atlantic meridional ocean circulation, eventually triggering the Heinrich Stadial 4 termination (Cheng et al., 2021a).

Cultural changes and last stages of hominid evolution. In the research forefront of cultural changes and last stages of hominid evolution, cave work from Cheng and colleagues have shown links

between rainfall changes and the rise and fall of Chinese dynasties/Neolithic cultures, for example, summer monsoon rainfall was plentiful during the Northern Song Dynasty when rice became the staple of the Chinese diet and the Chinese population tripled (Zhang, Cheng* et al., 2008); a plausible role of climate change in shaping the important chapters of the history of human civilization in the Indian subcontinent (Kathayat (*his student*), Cheng* et al., 2017, 2022); and chronological framework of the earliest known parietal art in the form of children's hand- and footprints in Tibet (Zhang*, Bennett*, Cheng* et al., 2021); evidence that the Liangzhu culture in the Yangtze River Delta, one of the world's most advanced Neolithic cultures, collapsed within a short and anomalously wet period around 4300 years ago (Zhang*, Cheng* et al., 2021); an important role of climate in the rise and fall of the Neo-Assyrian Empire (Sinha et al., 2019); and many others.

¹⁴C calibration and radiocarbon changes in the atmosphere. Cheng had played a leading role in the ¹⁴C calibration using speleothems, which provided a critical ¹⁴C dataset for reconstruction of atmospheric ¹⁴C back to the ¹⁴C dating limit of around 54,000 years ago (Cheng et al., 2018). A precise and accurate ¹⁴C calibration has been considered the Holy Grail of radiocarbon dating ever since Nobel Laureate Willard Libby originally developed the method about 70 years ago. The older half of the timescale lacked precision and accuracy for a long time. In collaboration with R.L. Edwards & J. Southon and Chinese colleagues, he completed the full calibration of the radiocarbon timescale with reasonable precision and accuracy via paired measurements of U-Th and ¹⁴C ages of two stalagmites from the now iconic Hulu cave (Cheng et al., 2018). The new calibration adjusts calibrated ages for much of the older half of the ¹⁴C timescale, therefore affecting a whole set of ages, such as estimated length of overlap between Neanderthals and Homo sapiens in Europe. The new dataset also allows us to link the ¹⁴C changes with the oceanic carbon cycle and in the geomagnetic field, for instance, the high atmospheric ¹⁴C associated with the Laschamps magnetic excursion as well as Heinrich Stadial 4.

Recent developments. Cheng and his students/postdocs have developed triple-oxygen-isotope analytical technique for carbonate, and obtained for the first time a number of novel ¹⁷O_{excess} datasets from cave and marine samples, which provided new insights (additional to δ¹⁸O) into hydroclimate changes and underlying dynamics in many climate systems (Sha (*his student*) et al., 2020, 2021, 2022, 2024). In the past a few years, Cheng and his students extended cave climate records substantially beyond the U-Th dating upper limit (~650 ka) to the Late Pliocene (~3.6 Ma ago) using U-Pb dating techniques (Wang (*his student*) et al., 2022), leading to potential breakthroughs in the research forefront of the Earth's long-term climate evolution (Niu (*his student*) et al., 2024).

Outreach

The public has always had access to Cheng's researches through reports in Magazines and newspapers. For example, the BBC report, by Roger Harrabin, BBC's Environment analyst, was aired in the context of the United Nations – sponsored climate talks in Tianjin, China in 2010. Harrabin's piece from a field trip to Kulishu cave in Beijing with Cheng and a visit to Cheng's Lab in Xi'an highlighted the research by Hai Cheng's group, including the research history of cave records and the results, which suggests that a multi-decadal weakening trend in the Asia summer monsoon dynamics was largely caused by humans. He always actively communicates scientific results with the public and has made a series of lectures to the public about the challenges and solutions associated with climate change. For example, he gave a lecture for the 2021/2022 China popular science creation conference and annual conference of the China Science Popularization Writers Association entitled "*Asian Monsoon and the Indian-Chinese Civilization history*". He has also written a number of popular science article, for example, his 2022 article "*Let the stalagmite isotopes speak*" published in a popular magazine "*People's Weekly*".

Publications

(> 660 papers, including 29 in *Science and Nature*, and > 70 in *PNAS, Nature and Science sub- Journals; Google Scholar: citations >85000 & h-index 116*)

2024

- Ballesteros, D.*, Pérez-Mejías, C., Moreno, D., Moreno-Sánchez, M., Reyes-Carmona, C., Alfonso-Jorde, D., Martín-Perea, D., García-Orellana, J., Bartolomé, M., Hellstrom, J., **Cheng, H.**, Edwards, R.L., García-Basabe, Y., Vázquez-Navarro, J.A., Morales, J., Hoyos, M., Rossi, C., Unveiling the potential of karst vadose deposits in constraining Quaternary tectonic subsidence, *Earth Surface Processes and Landforms*, 2024(2024),1–19;
- Bartolomé, M.*, Moreno, A.*, Sancho, C., Cacho, I., Stoll, H., Haghypour, N., Belmonte, A., Spötl, C., Hellstrom, J., Edwards, R.L., **Cheng, H.**, Reconstructing land temperature changes of the past 2,500 years using speleothems from Pyrenean caves (NE Spain), *Climate of the Past*, 20(3)(2024), 467-494;
- Columbu, A.*, Pérez-Mejías, C., Regattieri, E., Lugli, F., Dong, X.Y., Depalmas, A., Melis, R., Cipriani, A., **Cheng, H.**, Zanchetta, G., Waele, J., Speleothems uncover Late Holocene environmental changes across the Nuragic period in Sardinia (Italy): A possible human influence on land use during bronze to post-Iron Age cultural shifts, *Quaternary Science Reviews*, 328(2024), 108534;
- Cui, J.H., Zhao, J.Y.*, Dong, X.Y., Pérez-Mejías, C., Lu, J., Tian, Y., Wang, J., Pan, L.K., Zhang, H.W., **Cheng, H.**, Precisely constrained 134-ka strong monsoon event in the penultimate deglaciation by an annually laminated speleothem from the Asian monsoon domain. *Quaternary Research*, 118(2024), 116-125;
- Cui, Y.F., Xu, H., Liang, Y.J.*, Zhao, K., Chen, J.S., Wang, Y.J., Cong, J.Q., **Cheng, H.**, Tan, L.C., Chronological features of Heinrich Stadial 2 based on a high-resolution analysis of $\delta^{18}\text{O}$ stalagmite records from China, and possible links to changes in Atlantic Meridional Overturning Circulation, *Palaeogeography, Palaeoclimatology, Palaeoecology*, 633(2023), 111875;
- Duan, P.Z., Li, H.Y.*, Kathayat, G., Zhang, H.W., Ning, Y.F., Zhu, G.Y., **Cheng, H.***, Opposite Hydrological Conditions between the Younger Dryas and the 8.2 ka Event Revealed by Stalagmite from Northwest Madagascar in East Africa. *Minerals*, 14(4)(2024), 348;
- Duan, P.Z., Li, H.Y.*, Ma, Z.B., Zhao, J.Y., Dong, X.Y., Sinha, A., Hu, P., Zhang, H.W., Ning, Y.F., Zhu, G.Y., **Cheng, H.***, A series of climate oscillations around 8.2 ka revealed through multi-proxy speleothem records from North China, *Climate of the Past*, 20(6)(2024), 1401-1414;
- Dublyansky, Y.*, Töchterle, P., Steck, M.M., Sperlich, D.W., **Cheng, H.**, Zhang, H.W., Smirnov, S., Spötl, C., Size–shape–stable isotope (C and O) relationships of cryogenic cave carbonates formed in permafrost settings, *Chemical Geology*, 661(2024), 122183;
- Gupta, P., Gupta, A.K.*, Clemens, S.C., **Cheng, H.***, Majhi, B., Coupled Ocean-atmospheric forcing on Indian Summer Monsoon variability during the middle Holocene: Insights from the Core Monsoon Zone speleothem record, *Palaeogeography, Palaeoclimatology, Palaeoecology*, 647(2024), 112279;
- Held, F.*, **Cheng, H.**, Edwards, R.L., Tüysüz, O., Koç, K., Fleitmann, D.*, Dansgaard-Oeschger cycles of the penultimate and last glacial period recorded in stalagmites from Türkiye. *Nature Communications*, 15(2024), 1183;
- Hess, K.*, Fu, R.R., Piascik, S., Stríkis, N.M., Trindade, R-IF., Kukla, T., Brenner, A.R., Jaqueto, P., Petaev, M.I., Cruz, F.W., Buarque, P.F.S.M., Pérez-Mejías, C., **Cheng, H.**, Investigating speleothem magnetism as a proxy for dust mobilization and rainfall. *Quaternary Science Reviews*, 330(2024), 108598;
- Huang, S.Y., Cai, Y.J.*, **Cheng, H.**, Xue, G., Cheng, X., He, M., Li, R.X., Ma, L., Wei, Y.Y., Lu, Y.B., Yang, L., Edwards, R.L., An integrated study of constraining the initial ^{230}Th of a stalagmite and its implications, *Quaternary Geochronology*, 80(2023), 101497;
- Krause, C.E., Kimbrough, A.K.*, Gagan, M.K., Hopcroft, P.O., Dunbar, G.B., Hantoro, W.S., Hellstrom, J.C., **Cheng, H.**, Edwards, R.L., Wong, H., Suwargadi, B.W., Valdes, P.J., Rifai, H., Tropical vegetation productivity and atmospheric methane over the last 40,000 years from model simulations and stalagmites in Sulawesi, Indonesia. *Quaternary Research*, 118(2024), 1-16;

- Li, N., Wang, X.D., Feng, J.X., Chen, F., Zhou, Y., Wang, M.Y., Chen, T.Y., Bayon, G., Peckmann, J., **Cheng, H.**, Edwards, R.L., Chen, D.F., Feng, D.*, Intermediate water warming caused methane hydrate instability in South China Sea during past interglacials. *Bulletin*, 136(3-4)(2024), 917-927;
- Li, Q.*, Liu, Y., Wang, L., Pang, W.X., Zhang, X.C., Xu, L., Song, H.M., Guo, W., Sun, C.F., Cai, Q.F., Ren, M., **Cheng, H.**, Regime-shift relationship between soil moisture and temperature since the 1950s over the permafrost region of Northeast China, *Land Degradation & Development*, (2023), 1-11;
- Nehme, C.*, Verheyden, S., Kluge, T., Nader, F.H., Edwards, R.L., **Cheng, H.**, Eiche, E., Claeys, P., Climate variability in the northern Levant from the highly resolved Qadisha record (Lebanon) during the Holocene optimum. *Quaternary Research*, 118(2024), 180-194;
- Peral, M.*, Marchegiano, M., Verheyden, S., Goderis, S., Helden, T.V., Vanhaecke, F., Acker, T.V., Jia, X., **Cheng, H.**, Fiebig, J., Fourcade, T., Snoeck, C., Claeys, P., A new insight of the MIS 3 Dansgaard-Oeschger climate oscillations in western Europe from the study of a Belgium isotopically equilibrated speleothem. *Quaternary Science Reviews*, 329(2024), 108564;
- Sha, L.J., Tian, L.J., Sha, L.F., Li, Y.X., Wang, X.J., Hu, P., Liang, Q.S., Zong, B.Y., Duan, P.Z.*, **Cheng, H.***, Triple oxygen isotope compositions reveal transitions in the moisture source of West China Autumn Precipitation. *Communications Earth & Environment*, 5(1)(2024), 188;
- Stríkis, N.M.*, Buarque, Plácido-Fabício.S.M., Cruz, F.W., Bernal, J.P., Vuille, M., Tejedor, E., Santos, M.S., Shimizu, M.H., Ampuero, A., Du, W.J., Sampaio, G., Sales, H.R., Campos, J.L., Kayano, M.T., Apaestegui, J., Fu, R.R., **Cheng, H.**, Edwards, R.L., Mayta, V.C., Francischini, D.S., Arruda, M.A.Z., Novello, V.F., Modern anthropogenic drought in Central Brazil unprecedented during last 700 years. *Nature Communications*, 15(1)(2024), 1728;
- Tan, L.C.*, **Cheng, H.**, Li, D., Orozbaev, R., Li, Y.Z., Xu, H., Edwards, R.L., Song, Y.G., Ma, L., Lin, F.Y., Sinha, A., An, Z.S.*, Hydroclimatic changes on multiple timescales since 7800 y BP in the winter precipitation-dominated Central Asia. *Proceedings of the National Academy of Sciences of the United States of America*, 121(4)(2024), e2321645121;
- Tang, H.R., Tan, L.C.*, Gao, Y.L.*, Zang, J.J., Ma, L., Li, Y.Z., Edwards, R.L., **Cheng, H.**, Sinha, A., Wang, X.Q., Cheng, X., Garcia, Á.A., Alexander, E.C., Mid-Holocene hydroclimatic change and hurricane activity in Central America recorded by an Isla de Mona Stalagmite, *Marine Geology*, 471(2024), 107289;
- Tian, L.J.*, Tao, T., Duan, W.H., Ruan, J.Y., Hu, C.Y., Li, Y.X., Li, X.L., **Cheng, H.**, Tan, M.*, Reevaluating Hendy Test with Modern Cave Calcite from the Monsoon Region of China, *Minerals*, 14(8)(2024), 747;
- Vonhof, H.*, Verheyden, S., Bonjean, D., Pirson, S., Weber, M., Scholz, D., Hellstrom, J., **Cheng, H.**, Xue, J., Di Modica, K., Abrams, G., Nunen, M., Ruiter, J., Does, M., Böhl, D., Lubbe, J., Improving the age constraints on the archeological record in Scladina Cave (Belgium): new speleothem U-Th ages and paleoclimatological data, *Climate of the Past Discussions*, 2024(2024), 1-30;
- Wang, T.L., Yao, P.H., Shen, C.C., Chawchai, S., Torfstein, A., Sinha, A., Xu, H., Yu, T.L., Lin, F.Y., Wang, X.Q., Li, D., **Cheng, H.**, Edwards, R.L., An, Z.S., Tan, L.C.*, Anthropogenically-induced atmospheric Pb cycle in low-latitude Asia since the Industrial Revolution recorded by high-resolution stalagmites. *Global and Planetary Change*, 232(2024), 104337;
- Wolf, A.*, Baker, J.L.*, Tjallingii, R., Cai, Y.J., Osinzev, A., Antonosyan, M., Amano, N., Johnson, K.R., Skiba, V., McCormack, J., Kwiecien, O., Chervyatsova, O.Y., Dublyansky, Y.V., Dbar, R.S., **Cheng, H.**, Breitenbach, S.F.M., Western Caucasus regional hydroclimate controlled by cold-season temperature variability since the Last Glacial Maximum, *Communications Earth & Environment*, 5(1)(2023), 66;
- Zhang, R., Zhang, H.W.*, Spötl, C., **Cheng, H.**, Cai, Y.J., Pérez-Mejías, C., Dong, X.Y., Sha, L.J., Li, Y.W., Tan, L.C., Zang, J.J., Yang, X.L., Wang, M.M., Lu, J.Y., Ning, Y.F., Dual pathways of aragonite-to-calcite transformation in stalagmites: Implications for paleoclimate reconstructions, *Geochimica et Cosmochimica Acta*, 378(2024), 45-57;
- Zhao, X.N.*, Wang, J., Zhao, W., **Cheng, H.**, Hydroclimate and Paleoenvironmental Variability from the Tonle Sap Lake Basin during the Angkor Period, *Minerals*, 14(6)(2024), 581;

2023

- Bao, Y.Y., Zhang, H.W., Niu, X.W., Zhang, R., Lu, J., Meng, B.L., Lu, J.Y., Tan, L.C., Cai, Y.J., **Cheng, H.**, Seasonal variations and controlling factors of speleothem multi-proxy in southeastern China: Implications for the reconstruction of precipitation seasonality, *Frontiers in Earth Science*, 11(2023), 1135901;
- Bartolomé, M., Moreno, A., Sancho, C., Cacho, I., Stoll, H., Haghypour, N., Belmonte, A., Spötl, C., Hellstrom, J., Edwards, R.L., **Cheng, H.**, Reconstructing land temperature changes of the past 2,500 years using speleothems from Pyrenean caves (NE Spain), *Climate of the Past*, In review, (2023);
- Bernal-Wormull, J.L., Moreno, A., Bartolomé, M., Arriolabengoa, M., Pérez-Mejías, C., Iriarte, E., Osácar, C., Spötl, C., Stoll, H., Cacho, I., Edwards, R.L., **Cheng, H.**, New insights into the climate of northern Iberia during the Younger Dryas and Holocene: The Mendukilo multi-speleothem record, *Quaternary Science Reviews*, 305(2023), 108006;
- Bilbao-Lasa, P., Aranburu, A., Álvarez, I., Val, del.M., **Cheng, H.**, Arriolabengoa, M., Iriarte, E., Record of the last interglacial sea level highstand based on new coastal deposits in the Cantabrian margin (Northern Iberian Peninsula), *Continental Shelf Research*, 266(2023), 105096;
- Brahim, Y.A., Sha, L.J., Wassenburg, J.A., Azenoud, K., **Cheng, H.**, Cruz, F.W., Bouchaou, L., The spatiotemporal extent of the Green Sahara during the last glacial period, *iScience*, 26(7)(2023), 107018;
- Cai, Y.J., **Cheng, H.**, Cheng, X., Shi, Z.G., Lu, Y.B., Ma, L., Pérez-Mejías, C., Zhang, H.W., Wei, Y.Y., Xue, G., Li, H.Y., He, M., Wang, T., Edwards, R.L., An, Z.S., Orbital- to millennial-scale variation of the speleothem $\delta^{18}\text{O}$ record during Marine Isotope Stages 5 to 3 on the southeast Chinese Loess Plateau and its climatic and environmental implications, *Journal of Quaternary Science*, 38(3)(2023), 295-307;
- Chen, X.L., Zhang, H.B., Griffiths, M.L., Peng, X.G., Yang, L.Z., Yu, M., Huang, J.H., Xue, S.Y., **Cheng, H.**, Chen, S., Northern high-latitude sea ice variation linked with East Asian monsoon anomalies during the Younger Dryas, *Palaeogeography, Palaeoclimatology, Palaeoecology*, 626(2023), 111702;
- Cuevas-González, J., Díez-Canseco, D., Elez, J., Pérez-Mejías, C., **Cheng, H.**, Cañaveras, J.C., Inland Record of the Last Interglacial Maximum in the Western Mediterranean: Revealing the Aljezares Pleistocene Basin (Alicante, SE-Spain), *Geosciences*, 13(12)(2023), 385;
- Cui, J.H., Zhao, J.Y., Dong, X.Y., Pérez-Mejías, C., Lu, J., Tian, Y., Wang, J., Pan, L.K., Zhang, H.W., **Cheng, H.**, Precisely constrained 134-ka strong monsoon event in the Penultimate Deglaciation by an annually laminated speleothem from the Asian monsoon domain, *Quaternary Research*, (2023), 1-10;
- Duan, P.Z., Li, H.Y., Ma, Z.B., Zhao, J.Y., Dong, X.Y., Sinha, A., Hu, P., Zhang, H.W., Ning, Y.F., Zhu, G.X., **Cheng, H.**, A series of climate oscillations around 8.2 ka BP revealed through multi-proxy speleothem records from North China, *Climate of the Past Discussions*, In review (2023);
- Duan, P.Z., Li, H.Y., Ma, Z.B., Zhao, J.Y., Sinha, A., Hu, P., Zhang, H.W., Cai, Y.J., Ning, Y.F., Edwards, R.L., **Cheng, H.**, Interdecadal to Centennial Climate Variability Surrounding the 8.2 ka Event in North China Revealed Through an Annually Resolved Speleothem Record From Beijing, *Geophysical Research Letters*, 50(1)(2023), e2022GL101182;
- Duan, R., Li, T.Y., Li, J.Y., Spötl, C., Li, H.C., Wang, H.B., **Cheng, H.**, Ning, Y.F., Shen, C.C., Zhou, J.L., Chen, C.J., Yu, T.L., Edwards, R.L., Liu, Z.Q., Karst-ecological changes during the middle and late Holocene in Southwest China revealed by $\delta^{18}\text{O}$ and $\delta^{13}\text{C}$ records in a stalagmite, *Palaeogeography, Palaeoclimatology, Palaeoecology*, 615(2023), 111437;
- Gao, T., Zhang, P.Z., **Cheng, H.**, Zhang, L.L., Li, X.H., Shi, H.Y., Jia, W., Ning, Y.F., Li, H.Y., Edwards, R.L., An annually laminated stalagmite from the eastern Qinghai-Tibetan Plateau provides evidence of climate instability during the early MIS5e in the Asian summer monsoon, *Science China Earth Sciences*, 66(5)(2023), 1147-1164;
- Honiati, C., Koltai, G., Dublyansky, Y., Edwards, R.L., Zhang, H.W., **Cheng, H.**, Spötl, C., A paleoprecipitation and paleotemperature reconstruction of the Last Interglacial in the southeastern Alps, *Climate of the Past*, 19(6)(2023), 1177-1199;
- Ibarra, D.E., Dai, J.G., Gao, Y., Lang, X.H., Duan, P.Z., Gao, Z.J., Chen, J.Q., Methner, K., Sha, L.J., Tong, H., Han, X., Zhu, D.C., Li, Y.L., Tang, J.X., **Cheng, H.**, Chamberlain, C.P., Wang, C.S., High elevation Tibetan Plateau prior to India-Eurasia collision recorded by triple oxygen isotopes, *Nature Geoscience*, 16(2023), 810-815;
- Intxaurbe, I., Arriolabengoa, M., Garate, D., **Cheng, H.**, Pérez-Mejías, C., Virtual reconstruction of the Palaeolithic landscape in Santimamine cave (Bizkaia, Spain), *Journal of Archaeological Science: Reports*, 52(2023), 104219;

- Jia, W., Zhang, P.Z., Wang, X.F., He, S.N., Liu, G.X., Shi, H.Y., Cai, B.G., Yuan, S.F., Zhang, W.F., Deng, R.T., Zhang, L.L., Gao, T., Sun, Q.B., **Cheng, H.**, Ning, Y.F., Edwards, R.L., The spatio-temporal pattern of Asian summer monsoon during glacial Termination II recorded by Chinese stalagmite $\delta^{18}\text{O}$, *Quaternary Science Reviews*, 313(2023), 108193;
- Kimbrough, A.K., Gagan, M.K., Dunbar, G.B., Hantoro, W.S., Shen, C.C., Hu, H.M., **Cheng, H.**, Edwards, R.L., Rifai, H., Suwargadi, B.W., Multi-proxy validation of glacial-interglacial rainfall variations in southwest Sulawesi, *Communications Earth & Environment*, 4(2023), 210;
- Krause, C., Kimbrough, A., Gagan, M.K., Hopcroft, P., Dunbar, G., Hantoro, W., Hellstrom, J., **Cheng, H.**, Edwards, R.L., Wong, H., Suwargadi, B., Valdes, P.J., Rifai, H., New insights on tropical vegetation productivity and atmospheric methane over the last 40,000 years from stalagmites in Sulawesi, *Quaternary Research*, Online (2023);
- Li, Q., Liu, Y., Sinha, A., Kathayat, G., Duan, X.Y., Liu, R.S., Xu, C.X., Song, H.M., Fang, C.X., Siddiqui, M.F., **Cheng, H.**, Indian summer monsoon and winter Total Solar Irradiance signals in the tree-ring $\delta^{18}\text{O}$ from foothills of High Asia, northern Pakistan, *International Journal of Climatology*, 43(3)(2023), 1610-1620;
- Li, Y.W., Fleitmann, D., Wang, X.L., Pérez-Mejías, C., Sha, L.J., Dong, X.Y., Wang, D.Y., Zhang, R., Qu, X.L., **Cheng, H.**, 550-Year Climate Periodicity in the Yunnan-Guizhou Plateau During the Late Mid-Holocene: Insights and Implications, *Geophysical Research Letters*, 50(11)(2023), e2023GL103523;
- Medina, N.M.M., Cruz, F.W., Winter, A., Zhang, H.W., Ampuero, A., Vuille, M., Mayta, V.C., Campos, M.C., Ramírez, V.M., Utida, G., Zúñiga, A.C., **Cheng, H.**, Atlantic ITCZ variability during the Holocene based on high-resolution speleothem isotope records from northern Venezuela, *Quaternary Science Reviews*, 307(2023), 108056;
- Nehme, C., Verheyden, S., Kluge, T., Nader, F.H., Edwards, R.L., **Cheng, H.**, Eiche, E., Claeys, P., Climate variability in the northern Levant from the highly resolved Qadisha record (Lebanon) during the Holocene optimum, *Quaternary Research*, (2023), 1–15;
- Pan, L.K., Zhao, J.Y., Yang, Y., Wang, K.X., Pérez-Mejías, C., Cui, J.H., Dong, X.Y., Zhang, R., **Cheng, H.**, Different responses of precipitation patterns to the East Asian summer monsoon weakening: The 7.2 and 8.2 ka events, *Quaternary Science Reviews*, 319(2023), 108329;
- Ramirez, V.M., Cruz, F.W., Vuille, M., Novello, V.F., Stríkis, N.M., **Cheng, H.**, Zhang, H.W., Bernal, J.P., Du, W.J., Ampuero, A., Deininger, M., Chiessi, C.M., Tejedor, E., Campos, J.L., Brahim, Y.A., Edwards, R.L., Summer insolation controlled movements of Intertropical Convergence Zone during last glacial cycle in northern South America, *Communications Earth & Environment*, 4(1)(2023), 495;
- Ramsey, C.B., Adolphi, F., Austin, W., Bard, E., Bayliss, A., Blaauw, M., **Cheng, H.**, Edwards, R.L., Friedrich, M., Heaton, T., Hogg, A., Hua, Q., Hughen, K., Kromer, B., Manning, S., Muscheler, R., Palmer, J., Pearson, C., Reimer, P., Reimer, R., Richards, D., Scott, M., Southon, J., Turney, C., Wacker, L., Development of the Intcal Database, *Radiocarbon*, (2023), 1-17;
- Sha, L.J., Wassenburg, J.A., Sha, L.F., Li, Y.W., Zhou, S.L., Liang, Q.S., Zhao, J.Y., Ruan, J.Y., Li, H.Y., Zhao, X.N., Duan, P.Z., Wang, J., Lu, J.Y., Zhang, H.W., Kathayat, G., Mahata, S., Ban, F.M., Li, T.Y., **Cheng, H.**, Continental-scale variations in triple oxygen isotope of modern speleothems from the Asian monsoon regions, *Communications Earth and Environment*, 4(1)(2023), 384;
- Sha, Y.Y., Shi, Z.G., Li, X.Z., **Cheng, H.**, Liu, X.D., An, Z.S., Distinct orographic controls on the asymmetrical onset of the South Asian summer monsoon: Hindu Kush versus Himalaya-Tibet, *Journal of Climate*, 36(19)(2023), 6649-6667;
- Shi, L.Y., Zhang, H.W., Li, M., Niu, X.X., **Cheng, H.**, Tang, H.S., Discovery of a new genre of rock paintings at Luobao town, Sichuan province, China, *Rock Art Research*, 40(1)(2023), 13-18;
- Stoll, H.M., Day, C., Lechleitner, F., Kost, O., Endres, L., Sliwinski, J., Pérez-Mejías, C., **Cheng, H.**, Scholz, D., Distinguishing the combined vegetation and soil component of $\delta^{13}\text{C}$ variation in speleothem records from subsequent degassing and prior calcite precipitation effects, *Climate of the Past*, 19(2023), 2423-2444;
- Tian, Y., Fleitmann, D., Zhang, Q., Sha, L.J., Wassenburg, J.A., Axelsson, J., Zhang, H.W., Li, X.L., Hu, J., Li, H.Y., Zhao, L., Cai, Y.J., Ning, Y.F., **Cheng, H.**, Holocene climate change in southern Oman deciphered by speleothem multi-proxy records and climate model simulations, *Nature Communications*, 14(2023), 4718;

- Utida, G., Cruz, F.W., Vuille, M., Ampuero, A., Novello, V.F., Maksic, J., Sampaio, G., **Cheng, H.**, Zhang, H.W., Andrade, F.R., D., Edwards, R.L., Spatiotemporal ITCZ dynamics during the last three millennia in Northeastern Brazil and related impacts in modern human history, *Climate of the Past*, 19(2023), 1975-1992;
- Wang, L.B., Zhang, H.W., Zhang, D.D., **Cheng, H.**, Zhang, S.D., Li, T., Zhang, Y., Wang, X.Q., Wu, Z.F., Wang, Y.F., Chen, F.H., New evidence of prehistoric human activity on the central Tibetan plateau during the early to middle Holocene, *The Holocene*, 33(10)(2023), 1196-1206;
- Wang, Q., Yuan, S.Y., Liang, Y.J., Zhao, K., Shao, Q.F., Zhang, Z.Q., Zhu, J.J., Kong, X.G., Wang, Y.J., Lan, J.H., **Cheng, H.**, Xia, C.W., Li, Y., Ice-volume and insolation influences on hydroclimate changes in central eastern China during the antepenultimate glacial period, *Science China Earth Sciences*, 66(1)(2023), 71-79;
- Wu, Y., Li, T.Y., Li, J.Y., **Cheng, H.**, Ning, Y.F., Shen, C.C., Yang, Y., Zhao, J.Y., Chen, C.J., Liang, M.Q., Xiao, S.Y., Qiu, H.Y., Xu, Y.Z., Huang, Y.Y., Yu, T.L., Edwards, R.L., Variations in Asian summer monsoon and hydroclimate during Heinrich stadials 4 revealed by stalagmite stable isotopes and trace elements, *Quaternary Science Reviews*, 299(2023), 107869;
- Xue, G., Cai, Y.J., Cheng, P., Lechleitner, F.A., Zhang, H.W., Zheng, Y.H., Wei, Y.Y., Huang, S.Y., Yang, L., Cheng, X., Lu, Y.B., Zhou, J., Ma, L., **Cheng, H.**, Edwards, R.L., The Climate Control of Soil Organic Carbon Dynamics Inferred From Speleothem Radiocarbon Ages, *Geophysical Research Letters*, 50(3)(2023), e2022GL101875;
- Yao, Y., Wang, L., Huang, Y. S., Liang, J., Vachula, R.S., Cai, Y.J., **Cheng, H.**, Pre-Industrial (1750-1850 CE) Cold Season Warmth in Northeastern China, *Geophysical Research Letters*, 50(10)(2023), e2023GL103591;
- Yao, Y., Wang, L., Li, X.Z., **Cheng, H.**, Cai, Y.J., Vachula, R.S., Liang, J., Li, H.Y., Liu, G.X., Zhao, J.Y., Zhang, H.W., Li, Q., Unexpected cold season warming during the Little Ice Age on the northeastern Tibetan Plateau, *Communications Earth & Environment*, 4 (2023), 182;
- Yang, W., Wang, F., Ma, L., Zhao, W., Long, H., Zhu, H., Spötl, C., **Cheng, H.**, An international journal of Earth science, *The Innovation Geoscience*, 1(1)(2023), 100001;
- Zhan, Z.J., Pang, H.X., Wu, S.Y., Liu, Z.Y., Zhang, W.B., Xu, T., **Cheng, H.**, Hou, S.G., Determining key upstream convection and rainout zones affecting $\delta^{18}\text{O}$ in water vapor and precipitation based on 10-year continuous observations in the East Asian Monsoon region, *Earth and Planetary Science Letters*, 601(2023), 117912;
- Zhao, D.B., Lu, Z.Y., Wan, S.M., **Cheng, H.**, Shi, X.F., Li, A.C., Quaternary rainfall variability is governed by insolation in northern China and ice-sheet forcing in the South, *Communications Earth & Environment*, 4(1)(2023), 7;
- Zhao, J.Y., **Cheng, H.**, Cao, J., Sinha, A., Dong, X.Y., Pan, L.K., Pérez-Mejías, C., Zhang, H.W., Li, H.Y., Wang, J., Wang, K.X., Cui, J.H., Yang, Y., Orchestrated decline of Asian summer monsoon and Atlantic meridional overturning circulation in global warming period, *The Innovation geoscience*, 1(1)(2023), 100011;
- 高涛, 张平中, **程海**, 张磊磊, 李新虎, 石宏宇, 贾伟, 宁有丰, 李瀚瑛, Edwards, R.L., 青藏高原东部 MIS5e 早期亚洲夏季风气候不稳定性年纹层石笋印迹, *中国科学: 地球科学*, 53(05)(2023), 1143-1162;
- 彭友兵, 吴仪, **程海**, 郝赢玺, 崔瑜, 基于 LMR 的中国石笋氧同位素记录在过去千年气候同化中的应用初探, *第四纪研究*, 43(4)(2023), 1066-1075;
- 王权, 袁莎悦, 梁怡佳, 赵侃, 邵庆丰, 张振球, 朱军吉, 孔兴功, 汪永进, 蓝江湖, **程海**, 夏程尉, 李毅, 倒数第三次冰期冰量和太阳辐射对中国东部水文气候的影响, *中国科学: 地球科学*, 53(01)(2023), 72-81;
- 章典, 王蕾彬, **程海**, 张海伟, 张盛达, 李腾, 张悦, 苏佳佳, 陈诗敏, 西藏邱桑温泉古人类手脚印的年代测定及其岩面艺术价值, *地球环境学报*, 14(1)(2023), 1-8;

2022

- Cai, Y.J., **Cheng, H.**, Cheng, X., Shi, Z.G., Lu, Y.B., Ma, L., Pérez-Mejías, C., Zhang, H.W., Wei, Y.Y., Xue, G., Li, H.Y., He, M., Wang, T., Edwards, R.L., An, Z.S., Orbital-to millennial-scale variation of the speleothem $\delta^{18}\text{O}$ record during Marine Isotope Stages 5 to 3 on the southeast Chinese Loess Plateau and its climatic and environmental implications, *Journal of Quaternary Science*, 38(2022), 295-307;
- Chen, J.S., Zhao, K., Wang, Y.J., Cui, Y.F., Liang, Y.J., Shao, Q.F., **Cheng, H.**, Edwards, R.L., Duan, F.C., Chen, S.T., Pian, C., Zhu, J.J., ENSO effect on hydroclimate changes in southeastern China over the past two millennia, *Quaternary Science Reviews*, 285(2022), 107539;

- Chen, Q.M., Cheng, X., Cai, Y.J., Luo, Q.Z., Zhang, J.L., Tang, L., Hu, Y., Ren, J.G., Wang, P., Wang, Y., Zhang, Y., Xue, G., Zhou, J., **Cheng, H.**, Edwards, R.L., Hong, Z.L., Asian Summer Monsoon Changes Inferred from a Stalagmite $\delta^{18}\text{O}$ Record in Central China During the Last Glacial Period, *Frontiers in Earth Science*, 10(2022), 863829;
- Cheng, H.**, Li, H.Y., Sha, L.J., Sinha, A., Shi, Z.G., Yin, Q.Z., Lu, Z.Y., Zhao, D.B., Cai, Y.J., Hu, Y.Y., Hao, Q.Z., Tian, J., Kathayat, G., Dong, X.Y., Zhao, J.Y., Zhang, H.W., Milankovitch theory and monsoon, *The Innovation*, 3(6)(2022), 100338;
- Columbu, A., Spötl, C., Fohlmeister, J., Hu, H.M., Chiarini, V., Hellstrom, J., **Cheng, H.**, Shen, C.C., Waele, J.D., Central Mediterranean rainfall varied with high northern latitude temperatures during the last deglaciation, *Communications Earth & Environment*, 3 (2022), 181;
- Cui, Y.F., Liang, Y.J., Zhao, K., Wang, Y.J., Zhu, J.J., Zhang, J.W., **Cheng, H.**, Climate and ecology changes during the last deglaciation revealed by stalagmite from Shima Cave, central China, *Quaternary International*, 637(2022), 12-20;
- Dong, X.Y., Kathayat, G., Rasmussen, S.O., Svensson, A., Severinghaus, J.P., Li, H.Y., Sinha, A., Xu, Y., Zhang, H.W., Shi, Z.G., Cai, Y.J., Pérez-Mejías, C., Baker, J.L., Zhao, J.Y., Spötl, C., Columbu, A., Ning, Y.F., Stríkis, N.M., Chen, S.T., Wang, X.F., Gupta, A.K., Dutt, S., Zhang, F., Cruz, F.W., An, Z.S., Edwards, R.L., **Cheng, H.**, Coupled atmosphere-ice-ocean dynamics during Heinrich Stadial 2, *Nature Communications*, 13(2022), 1-14;
- Duan, W.H., **Cheng, H.**, Tan, M., Ma, Z.B., Chen, S.T., Wang, L.S., Wang, X.F., Cui, L.L., Structural similarity between Termination III and I, *Quaternary Science Reviews*, 296(2022), 107808;
- Dupont, L.A., Railsback, L.B., Liang, F.Y., Brook, G.A., **Cheng, H.**, Edwards, R.L., Episodic deposition of stalagmites in the northeastern Democratic Republic of the Congo suggests Equatorial Humid Periods during insolation maxima, *Quaternary Science Reviews*, 286(2022), 107552;
- Erkan, G., Bayari, C.S., Fleitmann, D., **Cheng, H.**, Edwards, L., Özbakir, M., Late Pleistocene–Holocene climatic implications of high-resolution stable isotope profiles of a speleothem from south-central Anatolia, Turkey, *Journal of Quaternary Science*, 37(3)(2022), 503-515;
- Fleitmann, D., Burns, S.J., Matter, A., **Cheng, H.**, Affolter, S., Moisture and seasonality shifts recorded in Holocene and Pleistocene speleothems from south-eastern Arabia, *Geophysical Research Letters*, 49(2022), e2021GL097255;
- Fleitmann, D., Haldon, J., Bradley, R.S., Burns, S.J., **Cheng, H.**, Edwards, R.L., Raible, C.C., Jacobson, M., Matter, A., Droughts and societal change: The environmental context for the emergence of Islam in late Antique Arabia, *Science*, 376(6599)(2022), 1317-1321;
- Hitt, N.T., Sayani, H.R., Atwood, A.R., Grothe, P.R., Maupin, C., O'Connor, G.K., Walter, R.M., Gebregiorgis, D., Hardt, M.E., Lu, Y.B., **Cheng, H.**, Edwards, R.L., Cobb, K.M., Central Equatorial Pacific Warming and Freshening in the Twentieth Century: Insights From a Coral Ensemble Approach, *Geophysical Research Letters*, 49(1)(2022), e2021GL094051;
- Honiat, C., Festi, D., Wilcox, P.S., Edwards, R.L., **Cheng, H.**, Spötl, C., Early Last Interglacial environmental changes recorded by speleothems from Katerloch (south-east Austria), *Journal of Quaternary Science*, 37(4)(2022), 664-676;
- Jaqueto, P., Trindade, R.I.F., Terra-Nova, F., Feinberg, J.M., Novello, V.F., Stríkis, N.M., Schroedl, P., Azevedo, V., Strauss, B.E., Cruz, F.W., **Cheng, H.**, Edwards, R.L., Stalagmite paleomagnetic record of a quiet mid-to-late Holocene field activity in central South America, *Nature Communications*, 13(2022), 1349;
- Jia, W., Zhang, P.Z., Zhang, L.L., Li, X.H., Gao, T., Wang, H.C., Zhang, H.W., Li, H.Y., **Cheng, H.**, Edwards, R.L. Highly resolved $\delta^{13}\text{C}$ and trace element ratios of precisely dated stalagmite from northwestern China: Hydroclimate reconstruction during the last two millennia, *Quaternary Science Reviews*, 291(2022), 107473;
- Jia, W., Zhang, P.Z., Wang, X.F., **Cheng, H.**, He, S.N., Shi, H.Y., Gao, T., Li, X.H., Zhang, L.L., Zhang, H.W., Li, H.Y., Edwards, R.L., Chinese Interstadials 14–17 recorded in a precisely U-Th dated stalagmite from the northern edge of the Asian summer monsoon during the MIS 4/3 boundary, *Palaeogeography, Palaeoclimatology, Palaeoecology*, 607(2022), 111265;
- Kathayat, G., Sinha, A., Breitenbach, S.F.M., Tan, L.C., Spötl, C., Li, H.Y., Dong, X.Y., Zhang, H.W., Ning, Y.F., Allan, R.J., Damodaran, V., Edwards, R.L., **Cheng, H.**, Protracted Indian monsoon droughts of the past

- millennium and their societal impacts, *Proceedings of the National Academy of Sciences of the United States of America*, 119(39)(2022), e2207487119;
- Li, M.F., Wang, F., Cai, B.G., Cao, Q., **Cheng, H.**, Shen, C.C., Tan, M., Edwards, R.L., Timing and structure of 10.9 and 10.3 ka BP events revealed by annually laminated stalagmite records from Shihua Cave, northern China, *Paleoceanography and Paleoclimatology*, 37(10)(2022), e2022PA004459;
- Li, Q., Liu, Y., Sinha, A., Kathayat, G., Duan, X.Y., Liu, R.S., Xu, C.X., Song, H.M., Fang, C.X., Siddiqui, M.F., **Cheng, H.**, Indian Summer Monsoon and winter Total Solar Irradiance signals in the tree-ring $\delta^{18}\text{O}$ from foothills of High Asia, northern Pakistan, *International Journal of Climatology*, 43(3)(2022), 1610-1620;
- Li, Q., Liu, Y., Song, H.M., Liu, R.S., Cai, Q.F., Sun, C.F., Fang, C.X., **Cheng, H.**, Sensitive climate response of tree-ring $\delta^{18}\text{O}$ to current warming in the Qinling Mountains along a climate boundary in China, *Climate Dynamics*, 60(9-10)(2022), 2597-2612;
- Li, Y.W., Pérez-Mejías, C., Zhao, J.Y., Li, H.Y., Zhang, H.W., Lu, J.Y., Wang, J., Duan, P.Z., Dong, X.Y., Wang, H.B., Ning, Y.F., Qian, Z., Edwards, R.L., **Cheng, H.**, Indian summer monsoon variations during the Younger Dryas as revealed by a laminated stalagmite record from the Tibetan Plateau, *Quaternary Science Reviews*, 278(2022), 107375;
- Liang, Y.J., Chen, S.T., Wang, Y.J., Zhao, K., Yang, S.H., Wang, Z.J., Huang, Y.Z., **Cheng, H.**, Edwards, R.L., Asian monsoon intensity coupled to Antarctic climate during Dansgaard-Oeschger 8 and Heinrich 4 glacial intervals, *Communications earth & environment*, 3(2022), 298;
- Liang, Y.J., Zhao, K., Wang, Y.J., Edwards, R.L., **Cheng, H.**, Shao, Q.F., Chen, S.T., Wang, J.Y., Zhu, J.J., Different response of stalagmite $\delta^{18}\text{O}$ and $\delta^{13}\text{C}$ to millennial-scale events during the last glacial, evidenced from Huangjin Cave, northern China, *Quaternary Science Reviews*, 276(2022), 107305;
- Libera, D.E.M., Novello, V.F., Cruz, F.W., Orrison, R., Vuille, M., Maezumi, S.Y., de Souza, J., Cauhy, J., Campos, J.L.P.S., Ampuero, A., Utida, G., Strikis, N.M., Stumpf, C.F., Azevedo, V., Zhang, H.W., Edwards, R.L., **Cheng, H.**, Paleoclimatic and paleoenvironmental changes in Amazonian lowlands over the last three millennia, *Quaternary Science Reviews*, 279(2022), 107383;
- Lu, J.Y., Zhang, H.W., Li, H.Y., Sha, L.J., Zhang, R., Zhao, J.Y., Li, Y.W., Wang, J., Dong, X.Y., Edwards, R.L., Qian, Z., **Cheng, H.**, Climatic and anthropogenic influence on vegetation in southeastern China during the past 120 years inferred from speleothem, *Quaternary International*, 625(2022), 60-65;
- Niu, X.W., Zhang, H.W., Li, H.Y., Wang, J., Bao, Y.Y., **Cheng, H.**, Spatial variation of precipitation in eastern China over the past 150 years based on speleothem multi-proxy analysis, *Quaternary International*, 622(2022), 89-96;
- Railsback, L.B., Liang, F.Y., Brook, G.A., **Cheng, H.**, Edwards R.L. Additional multi-proxy stalagmite evidence from northeast Namibia supports recent models of wetter conditions during the 4.2 ka Event in the Southern Hemisphere, *Palaeogeography, Palaeoclimatology, Palaeoecology*, 586(2022), 110756;
- Scroton, N., Gagan, M.K., Ayliffe, L.K., Hantoro, W.S., Hellstrom, J.C., **Cheng, H.**, Edwards, R.L., Zhao, J.X., Suwargadi, B.W., Rifai, H., Antiphase response of the Indonesian-Australian monsoon to millennial-scale events of the last glacial period, *Scientific Reports*, 12(2022), 20214;
- Shi, X., Yang, Y., **Cheng, H.**, Zhao, J.Y., Li, T.Y., Lei, L.D., Liang, S., Feng, X.X., Edwards, R.L., Influences on Asian summer monsoon during Dansgaard-Oeschger events 19 to 25 (70-115 kyr BP), *Palaeogeography, Palaeoclimatology, Palaeoecology*, 587(2022), 110798;
- Stoll, H.M., Cacho, I., Gasson, E., Sliwinski, J., Kost, O., Moreno, A., Iglesias, M., Torner, J., Perez-Mejias, C., Haghypour, N., **Cheng, H.**, Edwards, R.L., Rapid northern hemisphere ice sheet melting during the penultimate deglaciation, *Nature Communications*, 13(2022), 3819;
- Val, M-del., Alonso, M.J., Duval, M., Arriolabengoa, M., Álvarez, I., Bodego, A., **Cheng, H.**, Hermoso de Mendoza, A., Aranburu, A., Iriarte, E., Luminescence and ESR dating of the sedimentary infill from the multi-level cave system of Alkerdi-Zelaieta (Navarre, N Spain), *Quaternary Geochronology*, 73(2022), 101380;
- Wang, F., Cai, B.G., Shen, C.C., **Cheng, H.**, Li, M.F., Li, T.T., Tan, M., Edwards, R.L., Multi-decadal to centennial scales variability in the East Asian Summer Monsoon around the 5.5 kyr BP climate event, *Palaeogeography, Palaeoclimatology, Palaeoecology*, 607(2022), 111262;
- Wang, H.B., Wang, X.Y., Pérez-Mejías, C., Li, Y.W., Li, H.Y., Cai, Y.J., Zhang, H.W., Han, J.E., Duan, P.Z., Lu, J.Y., Ning, Y.F., Edwards, R.L., **Cheng, H.**, Orbital-scale hydroclimate variations in the southern Tibetan Plateau over the past 414,000 years, *Quaternary Science Reviews*, 291(2022), 107658;

- Wang, L., Yao, Y., Huang, Y.S., Cai, Y.J., **Cheng, H.**, Group 1 phylogeny and alkenone distributions in a freshwater volcanic lake of northeastern China: Implications for paleotemperature reconstructions, *Organic Geochemistry*, 172(2022), 104483;
- Wang, T.L., Li, D., Cheng, X., Lan, J.H., Edwards, R.L., **Cheng, H.**, Liu, X.X., Xue, G., Xu, H., Ma, L., Zang, J.J., Wang, Y.Q., Gao, Y.L., Sinha, A., Tan, L.C., Hydroclimatic changes in south-central China during the 4.2 ka event and their potential impacts on the development of Neolithic culture, *Quaternary Research*, 109(2022), 39-52;
- Wang, Z.J., Yin, J.J., **Cheng, H.**, Ning, Y.F., Meyer, M.C., Climatic controls on travertine deposition in southern Tibet during the late Quaternary, *Palaeogeography, Palaeoclimatology, Palaeoecology*, 589(2022), 110852;
- Wang, Z.J., Chen, S.T., Wang, Y.J., Zhao, K., Liang, Y.J., **Cheng, H.**, Shao, Q.F., Wang, X.F., Zhang, J.W., Wang, Q., Zhai, X.M., Edwards, R.L., A high-resolution stalagmite record from Luoshui Cave, Central China over the past 23.5 kyr, *Quaternary Science Reviews*, 282(2022), 107443;
- Wang, Z.J., Chen, S.T., Wang, Y.J., Zhao, K., Liang, Y.J., Li, X.L., Zhang, J.W., Yang, S.H., Zhang, Z.Q., Chen, G.Z., Zhai, X.M., **Cheng, H.**, Edwards, R.L., Climatic implication of stalagmite $\delta^{13}\text{C}$ in the middle reaches of the Yangtze River since the Last Glacial Maximum and coupling with $\delta^{18}\text{O}$, *Palaeogeography, Palaeoclimatology, Palaeoecology*, 608(2022), 111290;
- Yao, Y., Huang, Y.S., Zhao, J.J., Wang, L., **Cheng, H.**, Lipid biomarkers in Lake Wudalianchi record abrupt environmental changes from the volcanic eruption in 1776, *Organic Geochemistry*, 164(2022), 104349;
- Zhao, J.Y., Tan, L.C., Li, D., Pérez-Mejías, C., Dong, X.Y., Wang, J., Zhang, H.W., **Cheng, H.**, The Seasonally Altered Atmosphere Moisture Circulations with Rainfall and Rainfall Isotopes in Southwest China, *Frontiers in Earth Science*, 10(2022), 795857;
- Zhu, J.J., Zhao, K., Wang, Y.J., Cui, Y.F., Liang, Y.J., **Cheng, H.**, Edwards, R.L., Kong, X.G., Shao, X.H., Chen, S.T., Pang, L., Decadal modulation of East Asian summer monsoon variations by external forcing and internal variability, *Quaternary Science Reviews*, 293(2022), 107720;
- 王健, 牛晓雯, 康乐, 张海伟, 张普, 宁有丰, 贾雪雪, 梁峰, 蔡演军, 储著银, 郭敬辉, 程海, 第四纪洞穴次生碳酸盐激光及同位素稀释剂法 U-Pb 定年, 第四纪研究, 42(5)(2022), 1410-1419;
- 张海伟, 包艳艳, 张瑞, 孟秉霖, 蔡演军, 程海, 江西峨嵋洞石笋微层特征及其形成机制, 第四纪研究, 42(4)(2022), 1148-1158;

2021

- Al-Mikhlaifi, A.S., Hibbert, F.D., Edwards, R.L., **Cheng, H.**, Holocene relative sea-level changes and coastal evolution along the coastlines of Kamaran Island and As-Salif Peninsula, Yemen, southern Red Sea, *Quaternary Science Reviews*, 252(2021), 106719;
- Audra, P., Heresanu, V., Barriquand, L., Boutchich, M.E.K., Jaillet, S., Pons-Branchu, E., Bosak, P., **Cheng, H.**, Edwards, R.L., Renda, M., Bat guano minerals and mineralization processes in Chameau Cave, Eastern Morocco, *International Journal of Speleology*, 50(1)(2021), 91-109;
- Azevedo, V., Strikis, N.M., Novello, V.F., Roland, C.L., Cruz, F.W., Santos, R.V., Vuille, M., Utida, G., Andrade, F.R.D.D., **Cheng, H.**, Edwards, R.L., Paleovegetation seesaw in Brazil since the Late Pleistocene: A multiproxy study of two biomes, *Earth and Planetary Science Letters*, 563(2021), 116880;
- Bartolomé, M., Sancho, C., Benito, G., Medialdea, A., Calle, M., Moreno, A., Leunda, M., Luetscher, M., Muñoz, A., Bastida, J., **Cheng, H.**, Edwards, R.L., Effects of glaciation on karst hydrology and sedimentology during the Last Glacial Cycle: The case of Granito cave, Central Pyrenees (Spain), *Catena*, 206(2021), 105252;
- Bernal-Wormull, J.L., Moreno, A., Pérez-Mejías, C., Bartolomé, M., Aranburu, A., Arriolabengoa, M., Iriarte, E., Cacho, I., Spötl, C., Edwards, R.L., **Cheng, H.**, Immediate temperature response in northern Iberia to last deglacial changes in the North Atlantic, *Geology*, 49(8)(2021), 999-1003;
- Brovkin, V., Brook, E., Williams, J.W., Bathiany, S., Lenton, T.M., Barton, M., DeConto, R.M., Donges, J.F., Ganopolski, A., McManus, J., Praetorius, S., de Vernal, A., Abe-Ouchi, A., **Cheng, H.**, Claussen, M., Crucifix, M., Gallopín, G., Iglesias, V., Kaufman, D.S., Kleinen, T., Lambert, F., van der Leeuw, S., Liddy, H., Loutre, M.F., McGee, D., Rehfeld, K., Rhodes, R., Seddon, A.W.R., Trauth, M.H., Vanderveken, L., Yu, Z.C., Past abrupt changes, tipping points and cascading impacts in the Earth system, *Nature Geoscience*, 14(2021), 550-558;

- Cai, Y.J., Cheng, X., Ma, L., Mao, R.X., Breitenbach, S.F.M., Zhang, H.W., Xue, G., **Cheng, H.**, Edwards, R.L., An, Z.S., Holocene variability of East Asian summer monsoon as viewed from the speleothem $\delta^{18}\text{O}$ records in central China, *Earth and Planetary Science Letters*, 558(2021), 116758;
- Campa-Bousoño, C., García-Pérez, A., Moreno, A., Iglesias, M., **Cheng, H.**, Edwards, R.L., Stoll, H., Continuous color model as a tool to improve speleothem age model development, *International Journal of Speleology*, 50(3)(2021), 9;
- Chen, C.J., Huang, R., Yuan, D.X., Zhang, J., **Cheng, H.**, Ning, Y.F., Yu, T.L., Shen, C.C., Edwards, R.L., Long, X.Y., Wang, T., Xiao, S.Y., Wu, Y., Liu, Z.Q., Li, T.Y., Li, J.Y. Karst hydrological changes during the Late-Holocene in Southwestern China, *Quaternary Science Reviews*, 258(2021), 106865;
- Chen, C.J., Yuan, D.X., **Cheng, H.**, Yu, T.L., Shen, C.C., Edwards, R.L., Wu, Y., Xiao, S.Y., Zhang, J., Wang, T., Huang, R., Liu, Z.Q., Li, T.Y., Li, J.Y., Human activity and climate change triggered the expansion of rocky desertification in the karst areas of Southwestern China, *Science China Earth Sciences*, 64(10)(2021), 1761-1773;
- Cheng, H.**, Xu, Y., Dong, X.Y., Zhao, J.Y., Li, H.Y., Baker, J., Sinha, A., Spötl, C., Zhang, H.W., Du, W.J., Zong, B.Y., Jia, X., Kathayat, G., Liu, D.B., Cai, Y.J., Wang, X.F., Strikis, N.M., Cruz, F.W., Auler, A.S., Gupta, A.K., Singh, R.L., Jaglan, S., Dutt, S., Liu, Z.Y., Edwards, R.L., Onset and termination of Heinrich Stadial 4 and the underlying climate dynamics, *Communications Earth & Environment*, 2(2021), 230;
- Cheng, H.**, Zhang, H.W., Cai, Y.J., Shi, Z.G., Yi, L., Deng, C.L., Hao, Q.Z., Peng, Y.B., Sinha, A., Li, H.Y., Zhao, J.Y., Tian, Y., Baker, J., Perez-Mejias, C. Orbital-scale Asian summer monsoon variations: Paradox and exploration, *Science China Earth Sciences*, 64(2021), 529-544;
- Cisneros, M., Cacho, I., Moreno, A., Stoll, H., Torner, J., Catala, A., Edwards, R.L., **Cheng, H.**, Fornos, J.J. Hydroclimate variability during the last 2700 years based on stalagmite multi-proxy records in the central-western Mediterranean, *Quaternary Science Reviews*, 269(2021), 107137;
- Duan, P.Z., Li, H.Y., Sinha, A., Voarintsoa, N.R.G., Kathayat, G., Hu, P., Zhang, H.W., Ning, Y.F., **Cheng, H.**, The timing and structure of the 8.2 ka event revealed through high-resolution speleothem records from northwestern Madagascar, *Quaternary Science Reviews*, 268(2021), 107104;
- Dutt, S., Gupta, A.K., **Cheng, H.**, Clemens, S.C., Singh, R.K., Tewari, V.C., Indian summer monsoon variability in northeastern India during the last two millennia, *Quaternary International*, 571(2021), 73-80;
- He, C.F., Liu, Z.Y., Otto-Bliesner, B.L., Brady, E.C., Zhu, C., Tomas, R., Clark, P.U., Zhu, J., Jahn, A., Gu, S., Zhang, J., Nusbaumer, J., Noone, D., **Cheng, H.**, Wang, Y., Yan, M., Bao, Y., Hydroclimate footprint of pan-Asian monsoon water isotope during the last deglaciation, *Science Advances*, 7(4)(2021), eabe2611;
- Honiat, C., Festi, D., Wilcox, P.S., Edwards, R.L., **Cheng, H.**, Spötl, C., Early Last Interglacial environmental changes recorded by speleothems from Katerloch (south-east Austria), *Journal of Quaternary Science*, 37(4)(2021), 664-676;
- Jacobson, M.J., Flohr, P., Gascoigne, A., Leng, M.J., Sadekov, A., **Cheng, H.**, Edwards, R.L., Tüysüz, O., Fleitmann, D. Heterogeneous late Holocene climate in the Eastern Mediterranean-The Kocain Cave record from SW Turkey, *Geophysical Research Letters*, 48(2021), e2021GL094733;
- Jaglan, S., Gupta, A.K., Clemens, S.C., Dutt, S., **Cheng, H.**, Singh, R.K., Abrupt Indian summer monsoon shifts aligned with Heinrich events and DO cycles since MIS 3, *Palaeogeography, Palaeoclimatology, Palaeoecology*, 110658(2021);
- Kathayat, G., Sinha, A., Tanoue, M., Yoshimura, K., Li, H.Y., Zhang, H.W., **Cheng, H.**, Interannual oxygen isotope variability in Indian summer monsoon precipitation reflects changes in moisture sources, *Communications Earth & Environment*, 2(2021), 96;
- Koltai, G., Spötl, C., Jarosch, A.H., **Cheng, H.**, Cryogenic cave carbonates in the Dolomites (northern Italy): insights into Younger Dryas cooling and seasonal precipitation; *Climate of the Past*, 17(2021), 775-789;
- Lee, J.M., Lam, P.J., Vivancos, S.M., Pavia, F.J., Anderson, R.F., Lu, Y.B., **Cheng, H.**, Zhang, P., Edwards, R.L., Xiang, Y., Webb, S.M., Changing chemistry of particulate manganese in the near-and far-field hydrothermal plumes from 15° S East Pacific Rise and its influence on metal scavenging, *Geochimica et Cosmochimica Acta*, 300(2021), 95-118;
- Li, H.Y., Hu, P., Zhang, Q., Sinha, A., **Cheng, H.**, Understanding Interannual Variations of the Local Rainy Season over the Southwest Indian Ocean, *Advances in Atmospheric Sciences*, 38(11)(2021), 1852-1862;

- Li, T.Y., Baker, J.L., Wang, T., Zhang, J., Wu, Y., Li, H.C., Blyakharchuk, T., Yu, T.L., Shen, C.C., **Cheng, H.**, Kong, X.G., Xie, W.L., Edwards, R.L., Early Holocene permafrost retreat in West Siberia amplified by reorganization of westerly wind systems, *Communications Earth & Environment*, 2(2021), 199;
- Li, T.Y., Wu, Y., Shen, C.C., Li, J.Y., Chiang, H.W., Lin, K., Tan, L.C., Jiang, X.Y., **Cheng, H.**, Edwards, R.L., High precise dating on the variation of the Asian summer monsoon since 37 ka BP, *Scientific Reports*, 11(2021), 9375;
- Li, T.Y., Xiao, S.Y., Shen, C.C., Zhang, J., Chen, C.J., **Cheng, H.**, Spötl, C., Huang, R., Wang, T., Li, J.Y., Wu, Y., Liu, Z.Q., Edwards, R.L., Yu, T.L., Little Ice Age climate changes in Southwest China from a stalagmite $\delta^{18}\text{O}$ record, *Palaeogeography, Palaeoclimatology, Palaeoecology*, 562(2021), 110167;
- Lin, F.Y., Tan, L.C., Xue, G., Cheng, X., Zhang, H.W., **Cheng, H.**, Edwards, R.L., Wang, T.L., Li, D., Gao, Y.L., An, Z.S., Seasonality of precipitation recorded in a modern (1907-2008) annually laminated stalagmite from central China, *Palaeogeography, Palaeoclimatology, Palaeoecology*, 576(2021), 110489;
- Lu, J.Y., Zhang, H.W., Li, H.Y., Sha, L.J., Zhao, J.Y., Li, Y.W., Wang, J., Dong, X.Y., Edwards, R.L., Qing, Z., **Cheng, H.**, A 120-year seasonally resolved speleothem record of precipitation seasonality from southeastern China, *Quaternary Science Reviews*, 264(2021), 107023;
- Pérez-Mejías, C., Moreno, A., Bernal-Wormull, J., Cacho, I., Osácar, M.C., Edwards, R.L., **Cheng, H.**, Oldest Dryas hydroclimate reorganization in the eastern Iberian Peninsula after the iceberg discharges of Heinrich Event 1, *Quaternary Research*, 101(2021), 67-83;
- Sha, L.J., Brahim, Y.A., Wassenburg, J.A., Yin, J.J., Lu, J.Y., Cruz, F.W., Cai, Y.J., Edwards, R.L., **Cheng, H.**, The “Hockey Stick” imprint in Northwest African speleothems, *Geophysical Research Letters*, 48(17)(2021), e2021GL094232;
- Sha, L.J., Mahata, S., Duan, P.Z., Zong, B.Y., Ning, Y.F., Zhang, P., Wang, J., Cai, Y.J., **Cheng, H.**, Preparation of high-precision CO_2 with known triple oxygen isotope for oxygen isotope analysis, *Isotopes in Environmental and Health studies*, 57(2021), 443-456;
- Shi, Z.G., Zhou, P., Li, X.Z., **Cheng, H.**, Sha, Y.Y., Xie, X.N., Liu, H., Wu, J. and Liu, X.D., Distinct Holocene precipitation trends over arid Central Asia and linkages to westerlies and Asian monsoon, *Quaternary Science Reviews*, 266(2021), 107055;
- Spötl, C., Dublyansky, Y., Koltai, G., **Cheng, H.**, Hypogene speleogenesis and paragenesis in the Dolomites, *Geomorphology*, 382(2021), 107667;
- Spötl, C., Koltai, G., Jarosch, A.H., **Cheng, H.**, Increased autumn and winter precipitation during the Last Glacial Maximum in the European Alps, *Nature Communications*, 12(2021), 1839;
- Sun, X.F., Wen, S.Q., Lu, C.Q., Zhou, B.Y., Curnoe, D., Lu, H.Y., Li, H.C., Wang, W., **Cheng, H.**, Yi, S.W., Jia, X., Du, P.X., Xu, X.H., Lu, Y.M., Lu, Y., Zheng, H.X., Zhang, H., Sun, C., Wei, L.H., Han, F., Huang, J., Edwards, R.L., Jin, L., Li, H., Ancient DNA and multimethod dating confirm the late arrival of anatomically modern humans in southern China, *Proceedings of the National Academy of Sciences*, 118(8)(2021), e2019158118;
- Tan, L.C., Dong, G.H., An, Z.S., Edwards, R.L., Li, H.Y., Li, D., Spengler, R., Cai, Y.J., **Cheng, H.**, Lan, J.H., Orozbaev, R., Liu, R.L., Chen, J.H., Xu, H., Chen, F.H., Megadrought and cultural exchange along the proto-silk road, *Science Bulletin*, 66(6)(2021), 603-611.
- Tian, Y., Zhang, H.W., Zhang, R., Zhang, F., Liang, Z.Y., Cai, Y.J., **Cheng, H.**, Seasonal and Inter-Annual Variations of Stable Isotopic Characteristics of Rainfall and Cave Water in Shennong Cave, Southeast China, and Its Paleoclimatic Implication, *Frontiers in Earth Science*, 9(2021), 794762;
- Utida, G., Cruz, F.W., Santos, R.V., Sawakuchi, A.O., Wang, H., Pessenda, L.C.R., Novello, V.F., Vuille, M., Strauss, A.M., Borella, A.C., Strikis, N.M., Guedes, C.C.F., Andrade, F. R.D.D., Zhang, H.W., **Cheng, H.**, Edwards, R.L., Climate changes in Northeastern Brazil from deglacial to Meghalayan periods and related environmental impacts, *Quaternary Science Reviews*, 250(2021), 106655;
- Verheyden, S., Marinova, E., Ivanova, S., Burlet, C., **Cheng, H.**, Edwards, R.L., Goovaerts, T., Gurova, M., Speleothem-based chronology and environmental context of deposits from the Mishin Kamik Cave, NW Bulgaria-A contribution to the archaeological study of the Late Pleistocene human occupation in the Balkans, *Journal of Quaternary Science*, 36(7)(2021), 1221-1233;
- Wang, X.F., Duan, W.H., Tan, M., Cai, B.G., Zhao, J.Y., Sha, L.J., Ning, Y.F., **Cheng, H.**, Wang, L.S., Ma, Z.B., Edwards, R.L., Xiao, J.L., Variability of PDO identified by a last 300-year stalagmite $\delta^{18}\text{O}$ record in Southwest China, *Quaternary Science Reviews*, 261(2021), 106947;

- Wassenburg, J.A., Vonhof, H.B., **Cheng, H.**, Martínez-García, A., Ebner, P-R., Li, X. L., Zhang, H.W., Sha, L.J., Tian, Y., Edwards, R.L., Fiebig, J., Haug, G.H., Penultimate deglaciation Asian monsoon response to North Atlantic circulation collapse, *Nature Geoscience*, 14(12)(2021), 937-941;
- Wendt, K.A., Li, X.L., Edwards, R.L., **Cheng, H.**, Spötl, C., Precise timing of MIS 7 substages from the Austrian Alps, *Climate of the Past*, 17(2021), 1443-1454;
- Yao, Y., Huang, Y.S., Zhao, J.J., Wang, L., **Cheng, H.**, Lipid biomarkers in Lake Wudalianchi record abrupt environmental changes from the volcanic eruption at CE 1776, *Organic Geochemistry*, 164(2021), 104349;
- Yao, Y., Huang, Y.S., Zhao, J.J., Wang, L., Ran, Y.H., Liu, W.G., **Cheng, H.**, Permafrost thaw induced abrupt changes in hydrology and carbon cycling in Lake Wudalianchi, northeastern China, *Geology*, 49(2021), 1117-1121;
- Zhang, D.D., Bennett, M.R., **Cheng, H.**, Wang, L.B., Zhang, H.W., Reynolds, S.C., Zhang, S.D., Wang, X.Q., Li, T., Urban, T., Pei, Q., Wu, Z.F., Zhang, P., Liu, C.R., Wang, Y.F., Wang, C., Zhang, D.J., Edwards, R.L., Earliest parietal art: Hominin hand and foot traces from the middle Pleistocene of Tibet, *Science Bulletin*, 66(24)(2021), 2506-2515;
- Zhang, H.W., **Cheng, H.**, Sinha, A., Spötl, C., Cai, Y.J., Liu, B., Kathayat, G., Li, H.Y., Tian, Y., Li, Y.W., Zhao, J.Y., Sha, L.J., Lu, J.Y., Meng, B.L., Niu, X.W., Dong, X.Y., Liang, Z.Y., Zong, B.Y., Ning, Y.F., Lan, J.H., Edwards, R.L., Collapse of the Liangzhu and other Neolithic cultures in the lower Yangtze region in response to climate change, *Science Advances*, 7(48)(2021), eabi9275;
- Zhang, H.W., **Cheng, H.**, Spötl, C., Zhang, X., Cruz, F.W., Sinha, A., Auler, A.S., Strikis, N.M. Wang, X.F., Kathayat, G., Li, X.L., Li, H.Y., Pérez-Mejías, C., Cai, Y.J., Ning, Y.F., Edwards, R.L., Gradual South-North Climate Transition in the Atlantic Realm Within the Younger Dryas, *Geophysical Research Letters*, 48(8)(2021), e2021GL092620;
- Zhang, H.W., Zhang, X., Cai, Y.J., Sinha, A., Spötl, C., Baker, J., Kathayat, G., Liu, Z.Y., Tian, Y., Lu, J.Y., Wang, Z.Q., Zhao, J.Y., Jia, X.X., Du, W.J., Ning, Y.F., An, Z.S., Edwards, R.L., **Cheng, H.**, A data-model comparison pinpoints Holocene spatiotemporal pattern of East Asian summer monsoon, *Quaternary Science Reviews*, 26(2021), 106911;
- Zhang, J.W., Zhao, K., Kong, X.G., Wang, Y.J., Wang, X.F., Liu, S.S., Wang, Z.J., **Cheng, H.**, Edwards, R.L., Summer monsoon rainfall variability in central China over the past 4700 years and its possible link to solar activity, *Journal of Meteorological Research*, 35(4)(2021), 594-606;
- Zhang, J.W., Zhao, K., Wang, Y.J., Kong, X.G., Shao, X.H., Liang, Y.J., Cui, Y.F., **Cheng, H.**, Edwards, R.L., Shao, Q.F., Modulation of centennial-scale hydroclimate variations in the middle Yangtze River Valley by the East Asian-Pacific pattern and ENSO over the past two millennia, *Earth and Planetary Science Letters*, 576(2021), 117220;
- Zhao, J.Y., **Cheng, H.**, Yang, Y., Liu, W., Zhang, H.W., Li, X.L., Li, H.Y., Brahim, Y.A., Pérez-Mejías, C., Qu, X.L., Role of the summer monsoon variability in the collapse of the Ming dynasty: Evidences from speleothem records, *Geophysical Research Letters*, 48(11)(2021), e2021GL093071;
- Zhao, J.Y., Tan, L.C., Yang, Y., Perez-Mejias, C., Brahim, Y.A., Lan, J.H., Wang, J., Li, H.Y., Wang, T.L., Zhang, H.W., **Cheng, H.**, New insights towards an integrated understanding of NE Asian monsoon during mid to late Holocene, *Quaternary Science Reviews*, 254(2021), 106793;
- 陈朝军, 袁道先, 程海, Yu, T.L., Shen, C.C., Edwards, R.L., 吴尧, 肖思雅, 张键, 王涛, 黄冉, 刘子琦, 李廷勇, 李俊云. 人类活动和气候变化触发了中国西南石漠化的扩张, *中国科学: 地球科学*, 51(11)(2021): 1950-1963;
- 陈越, 王欢, 刘宏, 王芳, 李苗发, 程海, 马志邦, 蔡炳贵, 肖举乐, 高分辨率石笋记录的近 700 年来滇西南夏季风降水变化, *第四纪研究*, 41(2)(2021), 398-410;
- 程海, 张海伟, 蔡演军, 石正国, 易亮, 邓成龙, 郝青振, 彭友兵, Sinha, A., 李瀚瑛, 赵景耀, 田野, Baker, J., Pérez-Mejías, C., 轨道尺度的亚洲夏季风演变: “困惑”与探索, *中国科学: 地球科学*, 51(04)(2021), 507-522;
- 段鹏珍, Mahata, S., 宗保云, 沙丽娟, 张普, 宁有丰, 程海, 质谱与光谱技术高精度测试水中三氧同位素的对比, *科学通报*, 66(2021), 4691-4699;

- Abram, N.J., Wright, N.M., Ellis, B., Dixon, B.C., Wurtzel, J.B., England, M.H., Ummenhofer, C.C., Philibosian, B., Cahyarini, S.Y., Yu, T.L., Shen, C.C., **Cheng, H.**, Edwards, R.L., Heslop, D., Coupling of Indo-Pacific climate variability over the last millennium, *Nature*, 579(2020), 385-392;
- Arriolabengoa, M., Intxaurbe, I., Medina-Alcaide, M.Á., Rivero, O., Rios-Garaizar, J., LÍbano, I., Bilbao, P., Aranburu, A., **Cheng, H.**, Edwards, R.L., Garate, D., From cave geomorphology to Palaeolithic human behaviour: speleogenesis, palaeoenvironmental changes and archaeological insight in the Atxurra-Armiña cave (northern Iberian Peninsula), *Journal of Quaternary Science*, 35(2020), 841-853;
- Ballesteros, D., Álvarez-Vena, A., Monod-Del Dago, M., Rodríguez-Rodríguez, L., Sanjurjo-Sánchez, J., Álvarez-Lao, D., Pérez-Mejías, C., Valenzuela, P., DeFelipe, I., Laplana, C., **Cheng, H.**, Jiménez-Sánchez, M., Paleoenvironmental evolution of Picos de Europa (Spain) during marine isotopic stages 5c to 3 combining glacial reconstruction, cave sedimentology and paleontological findings, *Quaternary Science Reviews*, 248(2020), 106581;
- Chen, C.Y., McGee, D., Woods, A., Pérez, L., Hatfield, R.G., Edwards, R.L., **Cheng, H.**, Valero-Garcés, B.L., Lehmann, S.B., Stoner, J.S., Schwalb, A., Tal, I., Seltzer, G.O., Tapia, P.M., Abbott, M.B., Rodbell, D.T., U-Th dating of lake sediments: Lessons from the 700 ka sediment record of Lake Junín, Peru, *Quaternary Science Reviews*, 244(2020), 106422;
- Cheng, H.**, Future Earth and Sustainable Developments, *The Innovation*, 1(2020), 100055;
- Cheng, H.**, Zhang, H.W., Spötl, C., Baker, J., Sinha, A., Li, H.Y., Bartolomé, M., Moreno, A., Kathayat, G., Zhao, J.Y., Dong, X.Y., Li, Y.W., Ning, Y.F., Jia, X., Zong, B.Y., Brahim, Y.A., Pérez-Mejías, C., Cai, Y.J., Novello, V.F., Cruz, F.W., Severinghaus, J.P., An, Z.S., Edwards, R.L., Timing and structure of the Younger Dryas event and its underlying climate dynamics, *Proceedings of the National Academy of Sciences*, 117(2020), 23408-23417;
- Columbu, A., Chiarini, V., Spötl, C., Benazzi, S., Hellstrom, J., **Cheng, H.**, De Waele, J. Speleothem record attests to stable environmental conditions during Neanderthal-modern human turnover in southern Italy, *Nature Ecology & Evolution*, 4(9)(2020), 1188-1195;
- Dee, S.G., Cobb, K.M., Emile-Geay, J., Ault, T.R., Edwards, R.L., **Cheng, H.**, Charles, C.D., No consistent ENSO response to volcanic forcing over the last millennium, *Science*, 367(6485)(2020), 1477-1481;
- Dutt, S., Gupta, A.K., **Cheng, H.**, Clemens, S.C., Singh, R.K., Tewari, V.C., Indian summer monsoon variability in northeastern India during the last two millennia, *Quaternary International*, 571(2020), 73-80;
- Feng, X.X., Yang, Y., **Cheng, H.**, Zhao, J.Y., Kong, X.G., Zhang, P., He, Z.L., Shi, X., Edwards, R.L., The 7.2 ka climate event: Evidence from high-resolution stable isotopes and trace element records of stalagmite in Shuiming Cave, Chongqing, China, *The Holocene*, 30(1)(2020), 145-154;
- Ghadiri, E., Affolter, S., Brennwald, M.S., Fleitmann, D., Häuselmann, A.D., **Cheng, H.**, Maden, C., Leuenberger, M., Kipfer, R., Estimation of temperature-altitude gradients during the Pleistocene-Holocene transition from Swiss stalagmites, *Earth and Planetary Science Letters*, 544(2020), 116387;
- Jaglan, S., Gupta, A.K., **Cheng, H.**, Clemens, S.C., Dutt, S., Balaji, S., Indian summer monsoon variability during the last millennium as recorded in stalagmite from Baratang Mahadev cave, Andaman Islands, *Palaeogeography, Palaeoclimatology, Palaeoecology*, 557(2020), 109908;
- Koç, K., Koşun, E., **Cheng, H.**, Demirtaş, F., Edwards, R.L., Fleitmann, D., Black carbon traces of human activities in stalagmites from Turkey, *Journal of Archaeological Science*, 123(2020), 105255;
- Koltai, G., Spötl, C., Jarosch, A.H., **Cheng, H.**, Cryogenic cave carbonates in the Dolomites (Northern Italy): insights into Younger Dryas cooling and seasonal precipitation, *Climate of the Past*, 17(2)(2021), 775-789;
- Li, H.Y., Sinha, A., André, A.A., Spötl, C., Vonhof, H.B., Meunier, A., Kathayat, G., Duan, P.Z., Voarintsoa, N.R.G., Ning, Y.F., Biswas, J., Hu, P., Li, X.L., Sha, L.J., Zhao, J.Y., Edwards, R.L., **Cheng, H.**, A multimillennial climatic context for the megafaunal extinctions in Madagascar and Mascarene Islands, *Science Advances*, 6(2020), eabb2459;
- Li, H.Y., Spötl, C., **Cheng, H.**, A high-resolution speleothem proxy record of the Late Glacial in the European Alps: extending the NALPS19 record until the beginning of the Holocene, *Journal of Quaternary Science*, 36(1)(2021), 29-39;

- Li, Y.X., Rao, Z.G., Xu, Q.H., Zhang, S.R., Liu, X.K., Wang, Z.L., **Cheng, H.**, Edwards, R.L., Chen, F.H., Inter-relationship and environmental significance of stalagmite $\delta^{13}\text{C}$ and $\delta^{18}\text{O}$ records from Zhenzhu Cave, north China, over the last 130 ka, *Earth and Planetary Science Letters*, 536(2020), 116149;
- Liang, Y.J., Zhao, K., Edwards, R.L., Wang, Y.J., Shao, Q.F., Zhang, Z.Q., Zhao, B., Wang, Q., **Cheng, H.**, Kong, X.G., East Asian monsoon changes early in the last deglaciation and insights into the interpretation of oxygen isotope changes in the Chinese stalagmite record, *Quaternary Science Reviews*, 250(2020), 106699;
- Liu, G., Li, X., Chiang, H.W., **Cheng, H.**, Yuan, S., Chawchai, S., He, S., Lu, Y., Aung, L.T., Maung, P.M., Tun, W.N., Oo, K.M., Wang, X., On the glacial-interglacial variability of the Asian monsoon in speleothem $\delta^{18}\text{O}$ records, *Science Advances*, 6(7)(2020), eaay8189;
- Nehme, C., Kluge, T., Verheyden, S., Nader, F., Charalambidou, I., Weissbach, T., Gucel, S., **Cheng, H.**, Edwards, R.L., Satterfield, L., Eiche, E., Claey, P., Speleothem record from Pentadactylos cave (Cyprus): new insights into climatic variations during MIS 6 and MIS 5 in the Eastern Mediterranean, *Quaternary Science Reviews*, 250(2020), 106663;
- Nicholson, S.L., Pike, A.W.G., Hosfield, R., Roberts, N., Sahy, D., Woodhead, J., **Cheng, H.**, Edwards, R.L., Affolter, S., Leuenberger, M., Burns, S.J., Matter, A., Fleitmann, D., Pluvial periods in Southern Arabia over the last 1.1 million-years, *Quaternary Science Reviews*, 229(2020), 106112;
- Railsback, L.B., Dupont, L.A., Liang, F.Y., Brook, G.A., Burney, D.A., **Cheng, H.**, Edwards, R.L., Relationships between climate change, human environmental impact, and megafaunal extinction inferred from a 4000-year multi-proxy record from a stalagmite from northwestern Madagascar, *Quaternary Science Reviews*, 234(2020), 106244;
- Reimer, P.J., Austin, W.E.N., Bard, E., Bayliss, A., Blackwell, P.G., Bronk Ramsey, C., Butzin, M., **Cheng, H.**, Edwards, R.L., Friedrich, M., Grootes, P.M., Guilderson, T.P., Hajdas, I., Heaton, T.J., Hogg, A.G., Hughen, K.A., Kromer, B., Manning, S.W., Muscheler, R., Palmer, J.G., Pearson, C., van der Plicht, J., Reimer, R.W., Richards, D.A., Scott, E.M., Southon, J.R., Turney, C.S.M., Wacker, L., Adolphi, F., Büntgen, U., Capano, M., Fahrni, S.M., Fogtmann-Schulz, A., Friedrich, R., Köhler, P., Kudsk, S., Miyake, F., Olsen, J., Reinig, F., Sakamoto, M., Sookdeo, A., Talamo, S., The IntCal20 Northern Hemisphere radiocarbon age calibration curve (0-55 cal kBP), *Radiocarbon*, 62(2020), 725-757;
- Sanchez, S.C., Westphal, N., Haug, G.H., **Cheng, H.**, Edwards, R.L., Schneider, T., Cobb, K.M., Charles, C.D., A Continuous Record of Central Tropical Pacific Climate Since the Midnineteenth Century Reconstructed From Fanning and Palmyra Island Corals: A Case Study in Coral Data Reanalysis, *Paleoceanography and Paleoclimatology*, 35(2020), e2020PA003848;
- Sha, L.J., Mahata, S., Duan, P.Z., Luz, B., Zhang, P., Baker, J., Zong, B.Y., Ning, Y.F., Brahim, Y.A., Zhang, H.W., Edwards, R.L., **Cheng, H.**, A novel application of triple oxygen isotope ratios of speleothems, *Geochimica et Cosmochimica Acta*, 270(2020), 360-378;
- Shao, X.H., Wang, T., Wang, Y.J., **Cheng, H.**, Zhao, K., Kong, X.G., ENSO-Like Pacing of the Asian Summer Monsoon during the Early Holocene, *Journal of Meteorological Research*, 34(2)(2020), 325-335;
- Tan, L.C., Li, Y.Z., Wang, X.Q., Cai, Y.J., Lin, F.Y., **Cheng, H.**, Ma, L., Sinha, A., Edwards, R.L., Holocene Monsoon Change and Abrupt Events on the Western Chinese Loess Plateau as Revealed by Accurately Dated Stalagmites, *Geophysical Research Letters*, 46(2020), e2020GL090273;
- Tan, L.C., Liu, W., Wang, T.L., Cheng, P., Zang, J.J., Wang, X.Q., Ma, L., Li, D., Lan, J.H., Edwards, R.L., **Cheng, H.**, Xu, H., Ai, L., Gao, Y.L., Cai, Y.J., A multiple-proxy stalagmite record reveals historical deforestation in central Shandong, northern China, *Science China Earth Sciences*, 63(10)(2020), 1622-1632;
- Utida, G., Cruz, F.W., Santos, R.V., Sawakuchi, A.O., Wang, H., Pessenda, L.C.R., Novello, V.F., Vuille, M., Strauss, A.M., Borella, A.C., Strikis, N.M., Guedes, C.C.F., Dias De Andrade, F.R., Zhang, H.W., **Cheng, H.**, Edwards, R.L., Climate changes in Northeastern Brazil from deglacial to Meghalayan periods and related environmental impacts, *Quaternary Science Reviews*, 250(2020), 106655;
- Wei, Y.Y., Cai, Y.J., Cheng, X., Xue, G., Lu, Y.B., Ma, L., Huang, S.Y., He, M., **Cheng, H.**, Edwards, R.L., Holocene and deglaciation hydroclimate changes in northern China as inferred from stalagmite growth frequency, *Global and Planetary Change*, 195(2020), 103360;
- Winter, A., Zanchettin, D., Lachniet, M., Vieten, R., Pausata, F.S.R., Ljungqvist, F.C., **Cheng, H.**, Edwards, R.L., Miller, T., Rubineti, S., Rubino, A., Taricco, C., Initiation of a stable convective hydroclimatic regime in Central America circa 9000 years BP, *Nature Communications*, 11(2020), 716;

- Yao, Y., Lan, J.H., Zhao, J.J., Vachula, R.S., Xu, H., Cai, Y.J., **Cheng, H.**, Huang, Y.S., Abrupt freshening since the early Little Ice Age in Lake Sayram of arid central Asia inferred from an alkenone isomer proxy, *Geophysical Research Letters*, 47(16)(2020), e2020GL089257;
- Zhang, H.W., **Cheng, H.**, Cai, Y.J., Spötl, C., Sinha, A., Kathayat, G., Li, H.Y., Effect of precipitation seasonality on annual oxygen isotopic composition in the area of spring persistent rain in southeastern China and its paleoclimatic implication, *Climate of the Past*, 16(2020), 211-225;
- Zhang, J.W., Kong, X.G., Zhao, K., Wang, Y.J., Liu, S.S., Wang, Z.J., Liu, J.W., **Cheng, H.**, Edwards, R.L., Centennial-scale climatic changes in Central China during the Holocene climatic optimum, *Palaeogeography, Palaeoclimatology, Palaeoecology*, 558(2020), 109950;
- Zhao, C., Zhang, P., Li, X.Z., Ning, Y.F., Tan, L.C., Edwards, R.L., Yao, X.N., **Cheng, H.**, Distribution characteristics and influencing factors of uranium isotopes in Saline Lakewaters in the Northeast of Qaidam Basin, *Minerals*, 10(2020), 74;
- Zhao, K., Wang, Y.J., Edwards, R.L., **Cheng, H.**, Kong, X.G., Liu, D.B., Shao, Q.F., Cui, Y.F., Huang, C.C., Ning, Y.F., Yang, X.L. Late Holocene monsoon precipitation changes in southern China and their linkage to Northern Hemisphere temperature, *Quaternary Science Reviews*, 232(2020), 106191.
- 程海, 李瀚瑛, 张旭, 张海伟, 易亮, 蔡演军, 胡永云, 石正国, 彭友兵, 赵景耀, Kathayat, G., Sinha, A., 欧-亚-非大陆季风: 超级大陆与超级季风的雏形, *第四纪研究*, 40(6)(2020), 1381-1396;
- 谭亮成, 刘文, 王甜莉, 程鹏, 臧婧杰, 王曦谦, 马乐, 李东, 蓝江湖, 艾思本, 程海, 徐海, 艾莉, 高永利, 蔡演军, 石笋多指标记录揭示的山东中部森林采伐历史, *中国科学: 地球科学*, 50(11)(2020), 1643-1654;
- 田野, 张海伟, 宗保云, Vonhof, H.B., Dublyansky, Y.V., 宁有丰, Spötl, C., 蔡演军, 程海, 利用 Picarro 测试石笋包裹体水氢、氧同位素的方法, *科学通报*, 65(32)(2020), 3626-3634;

2019

- Affolter, S.*, Häuselmann, A., Fleitmann, D., Edwards, R.L., **Cheng, H.**, Leuenberger, M., Central Europe temperature constrained by speleothem fluid inclusion water isotopes over the past 14,000 years, *Science Advances*, 5(6)(2019), eaav3809;
- Akers, P.D.*, Brook, G.A., Railsback, L.B., Cherkinsky, A., Liang, F.Y., Ebert, C.E., Hoggarth, J.A., Awe, J.J., **Cheng, H.**, Edwards, R.L., Integrating U-Th, ¹⁴C, and ²¹⁰Pb methods to produce a chronologically reliable isotope record for the Belize River Valley Maya from a low-uranium stalagmite, *Holocene*, 29(7)(2019), 1234-1248;
- Azevedo, V.*, Stríkis, N.M., Santos, R.A., Souza, J.G., Ampuero, A., Cruz, F.W., Oliveira, P., Iriarte, J., Stumpf, C.F., Vuille, M., Mendes, V.R., **Cheng, H.**, Edwards, R.L., Medieval Climate Variability in the eastern Amazon-Cerrado regions and its archeological implications, *Scientific Reports*, 9(2019), 20306;
- Batchelor, C.J.*, Orland, I.J., Marcon, S.A., Slaughter, R., Edwards, R.L., Zhang, P., Li, X.L., **Cheng, H.**, Distinct Permafrost Conditions Across the Last Two Glacial Periods in Midlatitude North America, *Geophysical Research Letters*, 46(22)(2019), 13318-13326;
- Brahim, Y.A.*, Bouchaou, L., Sifeddine, A., Beraaouz, E.H., Wanaim, A., **Cheng, H.**, Hydro-climate characteristics of the karst system of Wintimdouine cave (Western High Atlas, Morocco): monitoring and implications for paleoclimate research, *Environmental Earth Sciences*, 78(16)(2019), 508;
- Brahim, Y.A.*, Wassenburg, J.A., Sha, L.J., Cruz, F.W., Deininger, M., Sifeddine, A., Bouchaou, L., Spötl, C., Edwards, R.L., **Cheng, H.**, North Atlantic Ice-Rafting, Ocean and Atmospheric Circulation During the Holocene: Insights from Western Mediterranean Speleothems, *Geophysical Research Letters*, 46(13)(2019), 7614-7623;
- Burns, S.J.*, Welsh, L.K., Scroton, N., **Cheng, H.**, Edwards, R.L., Millennial and orbital scale variability of the South American Monsoon during the penultimate glacial period, *Scientific Reports*, 9(2019), 1234;
- Cailhol, D., Audra, P.*, Nehme, C., Nader, F.H., Garasic, M., Heresanu, V., Gucel, S., Charalambidou, I., Satterfield, L., **Cheng, H.**, Edwards, R.L., The contribution of condensation-corrosion in the morphological evolution of caves in semi-arid regions: preliminary investigations in the Kyrenia range, Cyprus, *Acta Carsologica*, 48(1)(2019), 5-27;
- Cheng, H.***, Zhang, H.W., Zhao, J.Y., Li, H.Y., Ning, Y.F., Kathayat, G., Chinese stalagmite paleoclimate researches: A review and perspective, *Science China Earth Sciences*, 62(10)(2019), 1489-1513;

- Cheng, H.**, Springer, G.S.*, Sinha, A., Hardt, B.F., Yi, L., Li, H.Y., Tian, Y., Li, X.L., Rowe, H.D., Kathayat, G., Ning, Y.F., Edwards, R.L., Eastern North American climate in phase with fall insolation throughout the last three glacial-interglacial cycles, *Earth and Planetary Science Letters*, 522(2019), 125-134;
- Columbu, A.*, Drysdale, R., Hellstrom, J., Woodhead, J., **Cheng, H.**, Hua, Q., Zhao, J.X., Montagna, P., Pons-Branchu, E., Edwards R.L., U-Th and radiocarbon dating of calcite speleothems from gypsum caves (Emilia Romagna, North Italy), *Geochronology*, 52(2019), 51-62;
- Comas-Bru, L.*, Harrison, S.P., Werner, M., Rehfeld, K., Scroxton, N., Veiga-Pires, C., Ahmad, S.M., Brahim, Y.A., Mozhehi, S.A., Arienzo, M., Atsawawanunt, K., Baker, A., Braun, K., Breitenbach, S., Burstyn, Y., Chawchai, S., Columbu, A., Deininger, M., Demény, A., Dixon, B., Hatvani, I.G., Hu, J., Kaushal, N., Kern, Z., Labuhn, I., Lachniet, M.S., Lechleitner, F.A., Lorrey, A., Markowska, M., Nehme, C., Novello, V.F., Oster, J., Pérez-Mejías, C., Pickering, R., Sekhon, N., Wang, X.F., Warken, S., Atkinson, T., Ayalon, A., Baldini, J., Bar-Matthews, M., Bernal, J.P., Boch, R., Borsato, A., Boyd, M., Brierley, C., Cai, Y.J., Carolin, S., **Cheng, H.**, Constantin, S., Couchoud, I., Cruz, F., Denniston, R., Dragusin, V., Duan, W.H., Ersek, V., Finné, M., Fleitmann, D., Fohlmeister, J., Frappier, A., Genty, D., Holzkämper, S., Hopley, P., Johnston, V., Kathayat, G., Keenan-Jones, D., Koltai, G., Li, T.Y., Lone, M.A., Luetscher, M., Matthey, D., Moreno, A., Moseley, G., Psomiadis, D., Ruan, J.Y., Scholz, D., Sha, L.J., Smith, A.C., Strikis, N., Treble, P., Ünal-Imer, E., Vaks, A., Vansteenberghe, S., Voarintsoa, N.R.G., Wong, C., Wortham, B., Wurtzel, J., Zhang, H., Evaluating model outputs using integrated global speleothem records of climate change since the last glacial, *Climate of the Past*, 15(4)(2019), 1557-1579;
- Du, W.J., **Cheng, H.***, Xu, Y., Yang, X.L., Zhang, P.Z., Sha, L.J., Li, H.Y., Zhu, X.Y., Zhang, M.L., Strikis, N.M., Cruz, F.W., Edwards, R.L., Zhang, H.W., Ning, Y.F., Timing and structure of the weak Asian Monsoon event about 73,000 years ago, *Quaternary Geochronology*, 53(2019), 101003;
- Duan, W.H.*, **Cheng, H.**, Tan, M.*, Li, X.L., Edwards, R.L., Timing and structure of Termination II in north China constrained by a precisely dated stalagmite record, *Earth and Planetary Science Letters*, 512(2019), 1-7.
- Gupta, A.K.*, Dutt, S.*, **Cheng, H.**, Singh, R.K., Abrupt changes in Indian summer monsoon strength during the last ~900 years and their linkages to socio-economic conditions in the Indian subcontinent, *Palaeogeography Palaeoclimatology Palaeoecology*, 536 (2019), 109347;
- Kerans, C.*, Zahm, C., Bachtel, S.L., Hearty, P., **Cheng, H.**, Anatomy of a late Quaternary carbonate island: Constraints on timing and magnitude of sea-level fluctuations, West Caicos, Turks and Caicos Islands, BWI, *Quaternary Science Reviews*, 205(2019), 193-223;
- Krause, C.E.*, Gagan, M.K., Dunbar, G.B., Hantoro, W.S., Hellstrom, J.C., **Cheng, H.**, Edwards, R.L., Suwargadi, B.W., Abram, N.J., Rifai, H., Spatio-temporal evolution of Australasian monsoon hydroclimate over the last 40,000 years, *Earth and Planetary Science Letters*, 513(2019), 103-112.
- Li, D., Tan, L.C.*, Cai, Y.J., Jiang, X.Y., Ma, L., **Cheng, H.**, Edwards, R.L., Zhang, H.W., Gao, Y.L., An, Z.S., Is Chinese stalagmite $\delta^{18}\text{O}$ solely controlled by the Indian summer monsoon? *Climate Dynamics*, 53(2019), 2969-2983;
- Li, D., Tan, L.C.*, Guo, F., Cai, Y.J., Sun, Y.B., Xue, G., Cheng, X., Yan, H., **Cheng, H.**, Edwards, R.L., Gao, Y.L., Kelley, J., Application of Avaatech X-ray fluorescence core-scanning in Sr/Ca analysis of speleothems, *Science China-Earth Sciences*, 62(6)(2019), 964-973;
- Magiera, M.*, Lechleitner, F.A., Erhardt, A.M., Hartland, A., Kwiecien, O., **Cheng, H.**, Bradbury, H.J., Turchyn, A.V., Riechelmann, S., Edwards, R.L., Breitenbach, S.F.M., Local and Regional Indian Summer Monsoon Precipitation Dynamics During Termination II and the Last Interglacial, *Geophysical Research Letters*, 46(21)(2019), 12454-12463;
- Macario, K.D.*, Strikis, N.M., Cruz, F.W., Hammerschlag, I., Alve, E.Q., Novello, V.F., Edwards, R.L., **Cheng, H.**, Andrade, F.R.D., Buarque, P.F.S.M., Garbelim, J.A.S., Assessing the dead carbon proportion of a modern speleothem from central Brazil, *Quaternary Geochronology*, 52(2019), 29-36;
- Novello, V.F.*, Cruz, F.W., McGlue, M.M., Wong, C.I., Ward, B.M., Vuille, M., Santos, R.A., Jaqueto, P., Pessenda, L.C.R., Atorre, T., Ribeiro, L.M.A.L., Karmann, I., Barreto, E.S., **Cheng, H.**, Edwards, R.L., Paula, M.S., Scholz, D., Vegetation and environmental changes in tropical South America from the last glacial to the Holocene documented by multiple cave sediment proxies, *Earth and Planetary Science Letters*, 524(2019), 115717;
- Pavia, F.J.*, Anderson, R.F., Black, E.E., Kipp, L.E., Vivancos, S.M., Fleisher, M.Q., Charette M.A., Sanial, V., Moore, W.S., Hult, M., Lu, Y.B., **Cheng, H.**, Zhang, P., Edwards, R.L., Timescales of hydrothermal scavenging

- in the South Pacific Ocean from ^{234}Th , ^{230}Th , and ^{228}Th , *Earth and Planetary Science Letters*, 506(2019), 146-156.
- Pavia, F.J.*, Anderson, R.F., Lam, P.J., Cael, B.B., Vivancos, S.M., Fleisher, M.Q., Lu, Y.B., Zhang, P., **Cheng, H.**, Edwards, R.L., Shallow particulate organic carbon regeneration in the South Pacific Ocean, *Proceedings of the National Academy of Sciences of the United States of America*, 116(20)(2019), 9753-9758;
- Pérez-Mejías, C.*, Moreno, A., Sancho, C., Martín-García, R., Spötl, C., Cacho, I., **Cheng, H.**, Edwards, R. L., Orbital-to-millennial scale climate variability during Marine Isotope Stages 5 to 3 in northeast Iberia, *Quaternary Science Reviews*, 224(2019), 105946;
- Pérez-Mejías, C.*, Sancho, C., Gázquez, F., Moreno, A., Bartolomé, M., Osácar, M.C., **Cheng, H.**, Insights into the speleogenesis of Ejulve cave (Iberian Range, NE Spain): quaternary hydrothermal karstification? *Journal of Iberian Geology*, 45(3)(2019), 511-527;
- Sha, L.J., Brahim, Y.A., Wassenburg, J.A., Yin, J.J., Peros, M., Cruz, F.W., Cai, Y.J., Li, H.Y., Du, W.J., Zhang, H.W., Edwards, R. L., **Cheng, H.***, How far north did the African Monsoon fringe expand during the African Humid Period?-Insights from Southwest Moroccan speleothems, *Geophysical Research Letters*, 46(23)(2019), 14093-14102;
- Sinha, A.*, Kathayat, G.*, Weiss, H., Li, H.Y., **Cheng, H.**, Reuter, J., Schneider, A.W., Berkelhammer, M., Adali, S.F., Stott, L.D., Edwards R.L., Role of climate in the rise and fall of the Neo-Assyrian Empire, *Science Advances*, 5(11)(2019), eaax6656;
- Tan, L.C.*, Shen, C.C.*, Löwemark, L., Chawchai, S., Edwards, R.L., Cai, Y.J., Breitenbach, S.F.M., **Cheng, H.**, Chou, Y.C., Duerrast, H., Partin, J.W., Cai, W.J., Chabangborn, A., Gao, Y.L., Kwiecien, O., Wu, C.C., Shi, Z.G., Hsu, H.H., Wohlfarth, B., Rainfall variations in central Indo-Pacific over the past 2,700 y, *Proceedings of the National Academy of Sciences*, 116(35)(2019), 17201-17206;
- Turner, J.*, Cacho, I., Moreno, A., Sierro, F.J., Martrat, B., Rodriguez-Lazaro, J., Frigola, J., Arnau, P., Belmonte, A., Hellstrom, J., **Cheng, H.**, Edwards, R.L., Stoll, H., Ocean-atmosphere interconnections from the last interglacial to the early glacial: An integration of marine and cave records in the Iberian region, *Quaternary Science Reviews*, 226(2019), 106037;
- Vansteenberghe, S.*, Verheyden, S., Genty, D., Blamart, D., Goderis, S., Van Malderen, S.J.M., Vanhaecke, F., Hodel, F., Gillikin, D., Ek, C., Quinif, Y., **Cheng, H.**, Edwards, R.L., Claeys, P., Characterizing the Eemian-Weichselian transition in northwestern Europe with three multiproxy speleothem archives from the Belgian Han-sur-Lesse and Remouchamps cave systems, *Quaternary Science Reviews*, 208(2019), 21-37;
- Voarintsoa, N.R.G.*, Matero, I.S.O., Railsback, L.B., Gregoire, L.J., Tindall, J., Sime, L., **Cheng, H.**, Edwards, R.L., Brook, G.A., Kathayat, G., Li, X.L., Rakotondrazafy, A.F.M., Razanatseno, M.O.M., Investigating the 8.2 ka event in northwestern Madagascar: Insight from data-model comparisons, *Quaternary Science Reviews*, 204(2019), 172-186;
- Walker, M.*, Gibbard, P., Head, M.J., Berkelhammer, M., Björck, S., **Cheng, H.**, Cwynar, L.C., Fisher, D., Gkinis, V., Long, A., Lowe, J., Newnham, R., Rasmussen, S.O., Weiss, H., Formal Subdivision of the Holocene Series/Epoch: A Summary, *Harvey Weiss Journal of the Geological Society of India*, 93(2)(2019), 135-141;
- Walker, M.*, Head, M.J., Lowe, J., Berkelhammer, M., Björck, S., **Cheng, H.**, Cwynar, L.C., Fisher, D., Gkinis, V., Long, A., Newnham, R., Rasmussen, S.O., Weiss, H., Subdividing the Holocene Series/Epoch: formalization of stages/ages and subseries/subepochs, and designation of GSSPs and auxiliary stratotypes, *Journal of Quaternary Science*, 34(3)(2019), 173-186;
- Wang, L.X.*, Brook, G.A., Burney, D.A., Voarintsoa, N.R.G., Liang, F.Y., **Cheng, H.**, Edwards, R.L., The African Humid Period, rapid climate change events, the timing of human colonization, and megafaunal extinctions in Madagascar during the Holocene: Evidence from a 2m Anjohibe Cave stalagmite, *Quaternary Science Reviews*, 210(2019), 136-153;
- Ward, B.M.*, Wong, C.I., Novello, V.F., McGee, D., Santos, R.V., Silva, L.C.R., Cruz, F.W., Wang, X.F., Edwards, R.L., **Cheng, H.**, Reconstruction of Holocene coupling between the South American Monsoon System and local moisture variability from speleothem $\delta^{18}\text{O}$ and $^{87}\text{Sr}/^{86}\text{Sr}$ records, *Quaternary Science Reviews*, 210(2019), 51-63;
- Wendt, K.A.*, Häuselmann, A.D., Fleitmann, D., Berry, A.E., Wang, X.F., Auler, A.S., **Cheng, H.**, Edwards, R.L., Three-phased Heinrich Stadial 4 recorded in NE Brazil stalagmites, *Earth and Planetary Science Letters*, 510(2019), 94-102;

- Wu, X.J., Pei, S.W.*, Cai, Y.J.*, Tong, H.W., Li, Q., Dong, Z., Sheng, J.C., Jin, Z.T., Ma, D.D., Xing, S., Li, X.L., Cheng, X., **Cheng, H.**, de la Torre, I., Edwards, R.L., Gong, X.C., An, Z.S., Trinkaus, E.*, Liu, W.*, Archaic human remains from Hualongdong, China, and Middle Pleistocene human continuity and variation, *Proceedings of the National Academy of Sciences of the United States of America*, 116(20)(2019), 9820-9824;
- Xue, G., Cai, Y.J.*, Ma, L., Cheng, X., **Cheng, H.**, Edwards, R.L., Li, D., Tan, L.C., A new speleothem record of the penultimate deglacial: Insights into spatial variability and centennial-scale instabilities of East Asian monsoon, *Quaternary Science Reviews*, 210(2019), 113-124;
- Yang, X.L.*, Yang, H., Wang, B.Y., Huang, L.J., Shen, C.C., Edwards R.L., **Cheng, H.**, Early-Holocene monsoon instability and climatic optimum recorded by Chinese stalagmites, *The Holocene*, 29(6)(2019), 1059-1067;
- Zhang, H.W.*, Brahim, Y.A., Li, H.Y., Zhao, J.Y., Kathayat, G., Tian, Y., Baker, J., Wang, J., Zhang, F., Ning, Y.F., Edwards, R.L., **Cheng, H.***, The Asian summer monsoon: Teleconnections and forcing mechanisms-A review from Chinese speleothem $\delta^{18}\text{O}$ records, *Quaternary*, 2(3)(2019), 26;
- Zhang, P.*, **Cheng, H.***, Liu, W.G.*. Mo, L.T., Li, X.Z., Ning, Y.F., Ji, M., Zong, B.Y., Zhao. C., Geochemical and isotopic (U, Th) variations in lake waters in the Qinghai Lake Basin, Northeast Qinghai-Tibet Plateau, China: origin and paleoenvironmental implications, *Arabian Journal of Geosciences*, 12(3)(2019), 92;
- Zhao, J.Y., **Cheng, H.***, Yang, Y., Tan, L.C., Spötl, C., Ning, Y.F., Zhang, H.W., Cheng, X., Sun, Z., Li, X.L., Li, H.Y., Liu, W., Edwards R.L., Reconstructing the western boundary variability of the Western Pacific Subtropical High over the past 200 years via Chinese cave oxygen isotope records, *Climate Dynamics*, 52(5-6)(2019), 3741-3757;
- Zhao, X.N., **Cheng, H.***, Sinha, A., Zhang, H.W., Baker, J.L., Chen, S.T., Kong, X.G., Wang, Y.J., Edwards R.L., Ning, Y.F., Zhao, J.Y., A high-resolution speleothem record of Marine Isotope Stage 11 as a natural analog to Holocene Asian summer monsoon variations, *Geophysical Research Letters*, 46(16)(2019), 9949-9957;
- 程海*, 张海伟, 赵景耀, 李瀚瑛, 宁有丰, Kathayat, G., 中国石笋古气候研究的回顾与展望. 中国科学: 地球科学, 49(10)(2019), 1565-1589;
- 董西瑀, 程海*, Kathayat, G.*, 张帆, 李瀚瑛, 张海伟, 赵景耀, 宁有丰, 李向磊, 成星, 曲晓丽, 石笋记录的印度季风 Heinrich 2 事件结束过程, 第四纪研究, 39(4)(2019), 878-893;
- 李瀚瑛*, Ashish, S.*, 程海*, Spötl, C., 宁有丰, 西南印度洋罗德里格斯岛石笋记录的新仙女木事件, 第四纪研究, 39(4)(2019), 1006-1017;
- 彭友兵*, 程海, 陈凯, 黄少鹏, 过去千年中国东部持续性严重干旱事件的模拟研究, 第四纪研究, 39(2)(2019), 282-293;
- 王健, 程海*, 赵景耀, 李瀚瑛, 宁有丰, 张美良, 朱晓燕, 小冰期多尺度气候波动: 贵州董哥洞高分辨率石笋记录, 第四纪研究, 39(3)(2019), 775-785;
- 张海伟*, 程海*, 蔡演军, Kathayat, G., 宁有丰, Edwards, R. L., 孟秉霖, 赣北石笋记录的新仙女木事件, 第四纪研究, 39(4)(2019), 994-1005;

2018

- Adolphi, F., Ramsey, C.B., Erhardt, T., Edwards, R.L., **Cheng, H.**, Turney, C.S., Cooper, A., Svensson, A., Rasmussen, S.O., Fischer, H., Muscheler, R., Connecting the Greenland ice-core and U/Th timescales via cosmogenic radionuclides: testing the synchronicity of Dansgaard-Oeschger events, *Climate of the Past*, 14(11)(2018), 1755-1781;
- Al-Mikhlafi, A.S., Edwards, L.R., **Cheng, H.**, Sea-level history and tectonic uplift during the last-interglacial period (LIG): Inferred from the Bab al-Mandab coral reef terraces, southern Red Sea, *Journal of African Earth Sciences*, 138(2018), 133-148;
- Apaéstegui, J., Cruz, F.W., Vuille, M., Fohlmeister, J., Espinoza, J.C., Sifeddine, A., Strikis, N., Guyot, J.L., Ventura, R., **Cheng, H.**, Edwards, R.L., Precipitation changes over the eastern Bolivian Andes inferred from speleothem ($\delta^{18}\text{O}$) records for the last 1400 years, *Earth and Planetary Science Letters*, 494(2018), 124-134;
- Brahim, Y.A., Wassenburg, J.A., Cruz, F.W., Sifeddine, A., Scholz, D., Bouchaou, L., Dassié, E.P., Jochum, K.P., Edwards, R.L., **Cheng, H.**, Multi-decadal to centennial hydro-climate variability and linkage to solar forcing in the Western Mediterranean during the last 1000 years, *Scientific reports*, 8(2018), 17446;

- Cheng, H.**, Edwards, R.L., Southon, J., Matsumoto, K., Feinberg, J.M., Sinha, A., Zhou, W.J., Li, H.Y., Li, X.L., Xu, Y., Chen, S.T., Tan, M., Wang, Q., Wang, Y.J., Ning, Y.F., Atmospheric $^{14}\text{C}/^{12}\text{C}$ changes during the last glacial period from Hulu Cave, *Science*, 362(6420)(2018), 1293-1297;
- Domínguez-Villar, D., Lojen, S., Krklec, K., Kozdon, R., Edwards, R.L., **Cheng, H.**, Ion microprobe $\delta^{18}\text{O}$ analyses to calibrate slow growth rate speleothem records with regional $\delta^{18}\text{O}$ records of precipitation, *Earth and Planetary Science Letters*, 482(2018), 367-376;
- Dublyansky, Y., Moseley, G.E., Lyakhnitsky, Y., **Cheng, H.**, Edwards, L.R., Scholz, D., Koltai, G., Spötl, C., Late Palaeolithic cave art and permafrost in the Southern Ural, *Scientific reports*, 8(2018), 12080;
- Dupont, N., Quinif, Y., Dubois, C., **Cheng, H.**, Kaufmann, O., Karstic system of Sprimont (Belgium). Holotype of a speleogenesis by ghost-rock karstification, *BSGF-Earth Sciences Bulletin*, 189(1)(2018);
- Ghadiri, E., Vogel, N., Brennwald, M.S., Maden, C., Häuselmann, A.D., Fleitmann, D., **Cheng, H.**, Kipfer, R., Noble gas based temperature reconstruction on a Swiss stalagmite from the last glacial–interglacial transition and its comparison with other climate records, *Earth and Planetary Science Letters*, 495(2018), 192-201;
- Hayes, C.T., Anderson, R.F., **Cheng, H.**, Conway, T.M., Edwards, R.L., Fleisher, M.Q., Ho, P., Huang, K.F., John, S.G., Landing, W.M., Little, S.H., Lu, Y.B., Morton, P.L., Moran, S.B., Robinson, L.F., Shelley, R.U., Shiller, A.M., Zheng, X.Y., Replacement times of a spectrum of elements in the North Atlantic based on thorium supply, *Global Biogeochemical Cycles*, 32(9)(2018), 1294-1311;
- Kathayat, G., **Cheng, H.**, Sinha, A., Berkelhammer, M., Zhang, H.W., Duan, P.Z., Li, H.Y., Li, X.L., Ning, Y.F., Edwards, R.L., Evaluating the timing and structure of the 4.2 ka event in the Indian summer monsoon domain from an annually resolved speleothem record from Northeast India, *Climate of the Past*, 14(12)(2018), 1869-1879;
- Koltai, G., **Cheng, H.**, Spötl, C., Palaeoclimate significance of speleothems in crystalline rocks: a test case from the Late Glacial and early Holocene (Vinschgau, northern Italy), *Climate of the Past*, 14(3)(2018), 369-381;
- Koltai, G., Ostermann, M., **Cheng, H.**, Spötl, C., Can vein-filling speleothems constrain the timing of deep-seated gravitational slope deformation? A case study from the Vinschgau (Italian Alps), *Landslides*, 15(2018), 2243-2254;
- Li, H.Y., **Cheng, H.**, Sinha, A., Kathayat, G., Spötl, C., André, A.A., Meunier, A., Biswas, J., Duan, P.Z., Ning, Y.F., Edwards, R.L., Hydro-climatic variability in the southwestern Indian Ocean between 6000 and 3000 years ago, *Climate of the Past*, 14(12)(2018), 1881-1891;
- Li, Q., Li, G.X., Chen, M.T., **Cheng, H.**, Xu, J.S., Ding, D., Ma, Y.Y., Qiao, L.L., Zhang, Q., Zhang, Y., Wang, H.Y., An, Z.Z., Min, J.X., Wang, L.Y., East Asian summer monsoon variations during the last deglaciation, recorded from a stalagmite at Linyi, northern China, *Quaternary International*, 464(2018), 327-335;
- Liang, Y.J., Chen, S.T., Zhang, Z.Q., Yang, S.H., Li, M.X., **Cheng, H.**, Wang, Y.J., Abrupt monsoonal shifts over the precessional cycles documented in Yongxing Cave in China during the antepenultimate glacial period, *Environmental Earth Sciences*, 77(6)(2018), 228;
- Liu, D.B., Wang, Y.J., **Cheng, H.**, Edwards, R.L., Kong, X.G., Chen, S.T., Liu, S.S., Contrasting patterns in abrupt Asian summer monsoon changes in the last glacial period and the Holocene, *Paleoceanography and Paleoclimatology*, 33(2)(2018), 214-226;
- Nehme, C., Verheyden, S., Breitenbach, S.F.M., Gillikin, D.P., Verheyden, A., **Cheng, H.**, Edwards, R.L., Hellstrom, J., Noble, S.R., Farrant, A.R., Sahy, D., Goovaerts, T., Salem, G., Claeys, P., Climate dynamics during the penultimate glacial period recorded in a speleothem from Kanaan Cave, Lebanon (central Levant), *Quaternary Research*, 90(1)(2018), 10-25;
- Pavia, F., Anderson, R., Vivancos, S., Fleisher, M., Lam, P., Lu, Y.B., **Cheng, H.**, Zhang, P., Edwards, R.L., Intense hydrothermal scavenging of ^{230}Th and ^{231}Pa in the deep Southeast Pacific, *Marine Chemistry*, 201(2018), 212-228;
- Peng, Y.B., **Cheng, H.**, Shen, C.M., Xu, Y., Bei, N.F., Past Millennium Contrasting Hydroclimate Patterns Between Monsoonal Northern China and Arid Central Asia: a Modeling Study, *Asia-Pacific Journal of Atmospheric Sciences*, 54(2018), 445-455;
- Railsback, L.B., Brook, G.A., Liang, F.Y., Voarintsoa, N.R.G., **Cheng, H.**, Edwards, R.L., A multi-proxy climate record from a northwestern Botswana stalagmite suggesting wetness late in the Little Ice Age (1810-1820 CE) and drying thereafter in response to changing migration of the tropical rain belt or ITCZ, *Palaeogeography, Palaeoclimatology, Palaeoecology*, 506(2018), 139-153;

- Railsback, L.B., Liang, F.Y., Brook, G.A., Voarintsoa, N.R.G., Sletten, H.R., Marais, E., Hardt, B., **Cheng, H.**, Edwards, R.L., The timing, two-pulsed nature, and variable climatic expression of the 4.2 ka event: A review and new high-resolution stalagmite data from Namibia, *Quaternary Science Reviews*, 186(2018), 78-90;
- Stríkis, N.M., Cruz, F.W., Barreto, E.A.S., Naughton, F., Vuille, M., **Cheng, H.**, Voelker, A.H.L., Zhang, H.W., Karmann, I., Edwards, R.L., Auler, A.S., Santos, R.V., Sales, H.R., South American monsoon response to iceberg discharge in the North Atlantic, *Proceedings of the National Academy of Sciences*, 115(15)(2018), 3788-3793;
- Tan, L.C., Cai, Y.J., **Cheng, H.**, Edwards, L.R., Gao, Y.L., Xu, H., Zhang, H.W., An, Z.S., Centennial- to decadal-scale monsoon precipitation variations in the upper Hanjiang River region, China over the past 6650 years, *Earth and Planetary Science Letters*, 482, 580-590;
- Tan, L.C., Cai, Y.J., **Cheng, H.**, Edwards, L.R., Lan, J.H., Zhang, H.W., Li, D., Ma, L., Zhao, P.P., Gao, Y.L., High resolution monsoon precipitation changes on southeastern Tibetan Plateau over the past 2300 years, *Quaternary Science Reviews*, 195(2018), 122-132;
- Tan, L.C., Shen, C.C., Cai, Y.J., **Cheng, H.**, Edwards, R.L., Great flood in the middle-lower Yellow River reaches at 4000 a BP inferred from accurately-dated stalagmite records, *Science Bulletin*, 63(4)(2018), 206-208;
- The GEOTRACES Project Members, The GEOTRACES Intermediate Data Product 2017, *Chemical Geology*, 493(2018), 210-223;
- Trindade, R.I.F., Jaqueto, P., Terra-Nova, F., Brandt, D., Hartmann, G.A., Feinberg, J.M., Strauss, B.E., Novello, V.F., Cruz, F.W., Karmann, I., **Cheng, H.**, Edwards, R.L., Speleothem record of geomagnetic South Atlantic Anomaly recurrence, *Proceedings of the National Academy of Sciences*, 115(52)(2018), 13198-13203;
- Wendt, K.A., Dublyansky, Y.V., Moseley, G.E., Edwards, R.L., **Cheng, H.**, Spötl, C., Moisture availability in the southwest United States over the last three glacial-interglacial cycles, *Science advances*, 4(10)(2018), eaau1375;
- Zhang, H.B., Griffiths, M.L., Chiang, J.C.H., Kong, W.W., Wu, S.T., Atwood, A., Huang, J.H., **Cheng, H.**, Ning, Y.F., Xie, S.C., East Asian hydroclimate modulated by the position of the westerlies during Termination I, *Science*, 362(6414)(2018), 580-583;
- Zhang, H.W., **Cheng, H.**, Cai, Y.J., Spötl, C., Kathayat, G., Sinha, A., Tan, L.C., Hydroclimatic variations in southeastern China during the 4.2 ka event reflected by stalagmite records, *Climate of the Past*, 14(11)(2018), 1805-1817;
- Zhang, H.W., **Cheng, H.**, Spötl, C., Cai, Y.J., Sinha, A., Tan, L.C., Yi, L., Yan, H., Kathayat, G., Ning, Y.F., Li, X.L., Zhang, F., Zhao, J.Y., Edwards, R.L., A 200-year annually laminated stalagmite record of precipitation seasonality in southeastern China and its linkages to ENSO and PDO, *Scientific reports*, 8(1)(2018), 12344;
- Zhang, N., Yang, Y., **Cheng, H.**, Zhao, J.Y., Yang, X.L., Liang, S., Nie, X.D., Zhang, Y.H., Edwards, R.L., Timing and duration of the East Asian summer monsoon maximum during the Holocene based on stalagmite data from North China, *The Holocene*, 28(10)(2018), 1631-1641;
- Zhang, Z.Q., Wang, Y.J., Liu, D.B., **Cheng, H.**, Huang, W., Wang, Q., Liang, Y.J., Multi-scale variability of the Asian monsoon recorded in an annually-banded stalagmite during the Neoglacial from Qixing Cave, Southwestern China, *Quaternary International*, 487(2018), 78-86;
- 李瀚瑛, 程海, 王健, 田野, 宁有丰, 激光诱导击穿光谱仪在古气候研究中的应用: 建立石笋微量元素记录, 第四纪研究, 38(6)(2018), 1549-1551;

2017

- Bai, Y.J., Zhang, P.Z., Gao, T., Yu, R.Z., Zhou, P.C., **Cheng, H.**, The 5400 a BP extreme weakening event of the Asian summer monsoon and cultural evolution, *Science China: Earth Sciences*, 60(6)(2017), 1171-1182;
- Brahim, Y.A., **Cheng, H.**, Sifeddine, A., Wassenburg, J.A., Cruz, F.W., Khodri, M., Sha, L.J., Pérez-Zanón, N., Beraouz, E.H., Apaestegui, J., Guyot, J.L., Jochum, K.P., Bouchaou, L., Speleothem records decadal to multidecadal hydroclimate variations in southwestern Morocco during the last millennium, *Earth and Planetary Science Letters*, 476(2017), 1-10;
- Cai, Y.J., Chiang, J.C.H., Breitenbach, S.F.M., Tan, L.C., **Cheng, H.**, Edwards, R.L., An, Z.S., Holocene moisture changes in western China, Central Asia, inferred from stalagmites, *Quaternary Science Reviews*, 158(2017), 15-28;

- Dominguez-Villar, D., Krklec, K., Pelicon, P., Fairchild, I.J., **Cheng, H.**, Edwards, L.R., Geochemistry of speleothems affected by aragonite to calcite recrystallization-Potential inheritance from the precursor mineral, *Geochimica et Cosmochimica Acta*, 200(2017), 310-329;
- Domínguez-Villar, D., Wang, X.F., Krklec, K., **Cheng, H.**, Edwards, R.L., The control of the tropical North Atlantic on Holocene millennial climate oscillations, *Geology*, 45(4)(2017), 303-306;
- Flohr, P., Fleitmann, D., Zorita, E., Sadekov, A., **Cheng, H.**, Bosomworth, M., Edwards, R.L., Matthews, W., Matthews, R., Late Holocene droughts in the Fertile Crescent recorded in a speleothem from northern Iraq, *Geophysical Research Letters*, 44(3)(2017), 1528-1536;
- Haddad-Martim, P.M., Hubbe, A., Giannini, P.C.F., Auler, A.S., Piló, L.B., Hubbe, M., Mayer, E., Wang, X.F., **Cheng, H.**, Edwards, R.L., Neves, W.A., Quaternary depositional facies in cave entrances and their relation to landscape evolution: The example of Cuvieri Cave, eastern Brazil, *Catena*, 157(2017), 372-387;
- Jo, K.N., Yi, S., Lee, J.Y., Woo, K.S., **Cheng, H.**, Edwards, L.R., Kim, S.T., 1000-Year Quasi-Periodicity of Weak Monsoon Events in Temperate Northeast Asia since the Mid-Holocene, *Scientific Reports*, 7(1)(2017), 15196;
- Kathayat, G., **Cheng, H.**, Sinha, A., Yi, L., Li, X.L., Zhang, H.W., Li, H.Y., Ning, Y.F., Edwards, R.L., The Indian monsoon variability and civilization changes in the Indian subcontinent, *Science Advances*, 3(12)(2017), e1701296;
- Koltai, G., Spötl, C., Luetscher, M., **Cheng, H.**, Barrett, S.J., Müller, W., The nature of annual lamination in carbonate flowstones from non-karstic fractures, Vinschgau (northern Italy), *Chemical Geology*, 457(2017), 1-14;
- Lechleitner, F.A., Breitenbach, S.F.M., **Cheng, H.**, Plessen, B., Rehfeld, K., Goswami, B., Marwan, N., Eroglu, D., Adkins, J., Haug, G., Climatic and in-cave influences on $\delta^{18}\text{O}$ and $\delta^{13}\text{C}$ in a stalagmite from northeastern India through the last deglaciation, *Quaternary Research*, 88(3)(2017), 458-471;
- Li, T.Y., Han, L.Y., **Cheng, H.**, Edwards, R.L., Shen, C.C., Li, H.C., Li, J.Y., Huang, C.X., Zhang, T.T., Zhao, X., Evolution of the Asian summer monsoon during Dansgaard/Oeschger events 13-17 recorded in a stalagmite constrained by high-precision chronology from southwest China, *Quaternary Research*, 88(1)(2017), 121-128;
- Li, X.L., **Cheng, H.**, Tan, L.C., Ban, F.M., Sinha, A., Duan, W.H., Li, H.Y., Zhang, H.W., Ning Y.F., The East Asian summer monsoon variability over the last 145 years inferred from the Shihua Cave record, North China, *Scientific Reports*, 7(1)(2017), 1-11;
- Liu, D.B., Wang, Y.J., **Cheng, H.**, Edwards, R.L., Kong, X.G., Remote vs. local control on the Preboreal Asian hydroclimate and soil processes recorded by an annually-laminated stalagmite from Daoguan Cave, southern China, *Quaternary International*, 452(2017), 79-90;
- McCOY, M.D., Mulrooney, M.A., Horrocks, M., **Cheng, H.**, Ladefoged, T.N., Evaluating agricultural bet-hedging strategies in the Kona Field System: New high-precision $^{230}\text{Th}/\text{U}$ and ^{14}C dates and plant microfossil data from Kealakekua Hawai'i Island, *Archaeology in Oceania*, 52(1)(2017), 70-80;
- Millo, C., Strikis, N.M., Vonhof, H.B., Deininger, M., Cruz, F.W., Wang, X.F., **Cheng, H.**, Edwards, R.L., Last glacial and Holocene stable isotope record of fossil dripwater from subtropical Brazil based on analysis of fluid inclusions in stalagmites, *Chemical Geology*, 468(2017), 84-96;
- Moreno, A., Pérez-Mejías, C., Bartolomé, M., Sancho, C., Cacho, I., Stoll, H., Delgado-Huertas, A., Hellstrom, J., Edwards, R.L., **Cheng, H.**, New speleothem data from Molinos and Ejulve caves reveal Holocene hydrological variability in northeast Iberia, *Quaternary Research*, 88(2)(2017), 223-233;
- Novello, V.F., Cruz, F.W., Vuille, M., Strikis, N.M., Edwards, R.L., **Cheng, H.**, Emerick, S., Paula, M.S., Li, X.L., Barreto, E.D.S., Karmann I., Santos, R.V., A high-resolution history of the South American Monsoon from Last Glacial Maximum to the Holocene, *Scientific Reports*, 7(2017), 44267;
- Pérez-Mejías, C., Moreno, A., Sancho, C., Bartolomé, M., Stoll, H., Cacho, I., **Cheng, H.**, Edwards, R.L., Abrupt climate changes during Termination III in Southern Europe, *Proceedings of the National Academy of Sciences*, 114(38)(2017), 10047-10052;
- Railsback, L.B., Liang, F.Y., Vidal-Romaní, J.R., Garrett, K.B., Sellers, R.C., Vaquero-Rodríguez, M., Grandal-d'Anglade, A., **Cheng, H.**, Edwards, R.L., Radiometric, isotopic, and petrographic evidence of changing interglacials over the past 550,000 years from six stalagmites from the Serra do Courel in the Cordillera Cantábrica of northwestern Spain, *Paleogeography, Paleoclimatology, Paleoecology*, 466(2017), 137-152;

- Tan, L.C., Cai, Y.J., An, Z.S., **Cheng, H.**, Shen, C.C., Gao, Y.L., Edwards, R.L., Decreasing monsoon precipitation in southwest China during the last 240 years associated with the warming of tropical ocean, *Climate Dynamics*, 48(5-6)(2017), 1769-1778;
- Toth, L.T., **Cheng, H.**, Edwards, R.L., Ashe, E., Richey, J.N., Millennial-scale variability in the local radiocarbon reservoir age of south Florida during the Holocene, *Quaternary Geochronology*, 42(2017), 130-143;
- Voarintsoa, N.R.G., Brook, G.A., Liang, F.Y., Marais, E., Hardt, B., **Cheng, H.**, Edwards, R.L., Railsback, L.B., Stalagmite multi-proxy evidence of wet and dry intervals in northeastern Namibia: Linkage to latitudinal shifts of the Inter-Tropical Convergence Zone and changing solar activity from AD 1400 to 1950, *The Holocene*, 27(3)(2017), 384-396;
- Voarintsoa, N.R.G., Railsback, L.B., Brook, G.A., Wang, L.X., Kathayat, G., **Cheng, H.**, Li, X.L., Edwards, R.L., Rakotondrazafy, A.F.M., Razanatsheho, M.O.M., Three distinct Holocene intervals of stalagmite deposition and nondeposition revealed in NW Madagascar, and their paleoclimate implications, *Climate of the Past*, 13(12)(2017), 1771-1790;
- Voarintsoa, N.R.G., Wang, L.X., Railsback, L.B., Brook, G.A., Liang, F.Y., **Cheng, H.**, Edwards, R.L., Multiple proxy analyses of a U/Th-dated stalagmite to reconstruct paleoenvironmental changes in northwestern Madagascar between 370 CE and 1300 CE, *Paleogeography, Paleoclimatology, Paleoecology*, 469(2017), 138-155;
- Wang, L.S., Ma, Z.B., Sun, Z.L., Wang, Y.J., Wang, X.F., **Cheng, H.**, Xiao, J.L., U concentration and $^{234}\text{U}/^{238}\text{U}$ of seawater from the Okinawa Trough and Indian Ocean using MC-ICPMS with SEM protocols, *Marine Chemistry*, 196(2017), 71-80;
- Wang, P.X., Wang, B., **Cheng, H.**, Fasullo, J., Guo, Z.T., Kiefer, T., Liu, Z.Y., The global monsoon across time scales: Mechanisms and outstanding issues, *Earth-Science Reviews*, 174(2017), 84-121;
- Wang, X.F., Edwards, R.L., Auler, A.S., **Cheng, H.**, Kong, X.G., Wang, Y.J., Cruz, F.W., Dorale, J.A., Chiang, H.W., Hydroclimate changes across the Amazon lowlands over the past 45,000 years, *Nature*, 541 (2017), 204-207;
- Wolff, C., Plessen, B., Dudashvili, A.S., Breitenbach, S.F.M., **Cheng, H.**, Edwards, L.R., Strecker, M.R., Precipitation evolution of Central Asia during the last 5000 years, *The Holocene*, 27(1)(2017), 142-154;
- Zhang, T.T., Li, T.Y., **Cheng, H.**, Edwards, R.L., Shen, C.C., Spötl, C., Li, H.C., Han, L.Y., Li, J.Y., Huang, C.X., Zhao, X., Stalagmite-inferred centennial variability of the Asian summer monsoon in southwest China between 58 and 79 ka BP, *Quaternary Science Reviews*, 160(2017), 1-12;
- Zhang, Z.Q., Wang, Y.J., Liu, D.B., **Cheng, H.**, Huang, W., Wang, Q., Liang, Y.J., Multi-scale variability of the Asian monsoon recorded in an annually-banded stalagmite during the Neoglacial from Qixing Cave, Southwestern China, *Quaternary International*, 487(2017), 78-86;
- Zhu, Z.M., Feinberg, J.M., Xie, S.C., Bourne, M.D., Huang, C.J., Hu, C.Y., **Cheng, H.**, Holocene ENSO-related cyclic storms recorded by magnetic minerals in speleothems of central China, *Proceedings of the National Academy of Sciences*, 114(5)(2017), 852-857;
- 韩建恩, 邵兆刚, **程海**, 孟宪刚, 王津, 余佳, 杨朝斌, 孟庆伟, 胥彪, 西藏昌都崩勒溶洞石笋 7 ka BP 以来高分辨 $\delta^{18}\text{O}$ 、 $\delta^{13}\text{C}$ 记录的气候变化, *地质学报*, 91(11)(2017), 2545-2556;
- 蒋文静, 赵侃, 陈仕涛, 汪永进, **程海**, 宁有丰, 小冰期十年际尺度亚洲季风变化的四川黑竹沟洞石笋记录, 第四纪研究, 37(1)(2017), 118-129;
- 王权, 汪永进, 刘殿兵, 赵侃, 邵庆丰, **程海**, 黄伟, DO3 事件的湖北神农架高分辨率年纹层石笋记录, 第四纪研究, 37(1)(2017), 108-117;
- 王振峰, 张道军, 刘新宇, 尤丽, 罗威, 易亮, 谭亮成, 祝幼华, 秦华峰, **程海**, 李忠权, 谢强, 车志伟, 邓成龙, 朱日祥, 基于古地磁与 ^{230}Th 定年的西沙西科 1 井乐东组生物礁沉积年代的初步研究, *地球物理学报*, 60(3)(2017), 1027-1038;
- 赵景耀, **程海**, 激光扫描共聚焦显微镜在古气候纹层学的应用, 第四纪研究, 37(6)(2017), 1472-1474;

2016

- Akers, P.D., Brook, G.A., Railsback, L.B., Liang, F.Y., Iannone, G., Webster, J.W., Reeder, P.P., **Cheng, H.**, Edwards, R.L., An extended and higher-resolution record of climate and land use from stalagmite MC01 from Macal

- Chasm, Belize, revealing connections between major dry events, overall climate variability, and Maya sociopolitical changes, *Palaeogeography, Palaeoclimatology, Palaeoecology*, 459(2016), 268-288;
- Bernal, J.P., Cruz, F.W., Stríkis, N.M., Wang, X.F., Deininger, M., Catunda, M.C.A., Obregón, C.O., **Cheng, H.**, Edwards, R.L., Auler, A.S., High-resolution Holocene South American monsoon history recorded by a speleothem from Botuverá Cave, Brazil, *Earth and Planetary Science Letters*, 450(2016), 186-196;
- Chen, S.T., Wang, Y.J., **Cheng, H.**, Edwards, R.L., Wang, X.F., Kong, X.G., Liu, D.B., Strong coupling of Asian Monsoon and Antarctic climates on sub-orbital timescales, *Scientific Reports*, 6(2016), 32995;
- Cheng, H.**, Edwards, R.L., Sinha, A., Spötl, C., Yi, L., Chen, S.T., Kelly, M., Kathayat, G., Wang, X.F., Li, X.L., Kong, X.G., Wang, Y.J., Ning, Y.F., Zhang, H.W., The Asian monsoon over the past 640,000 years and ice age terminations, *Nature*, 534(7609)(2016), 640-646;
- Cheng, H.**, Spötl, C., Breitenbach, S.F.M., Sinha, A., Wassenburg, J.A., Jochum, K.P., Scholz, D., Li, X.L., Yi, L., Peng, Y.B., Lv, Y.B., Zhang, P.Z., Votintseva, A., Loginov, V., Ning, Y.F., Kathayat, G., Edwards, R.L., Climate variations of Central Asia on orbital to millennial timescales, *Scientific Reports*, 6(2016), 36975;
- Driese, S.G., Li, Z.H., **Cheng, H.**, Harvill, J.L., Sims, J., High-resolution rainfall records for middle and late Holocene based on speleothem annual UV fluorescent layers integrated with stable isotopes and U/Th dating, Raccoon Mountain Cave, Tennessee, USA, *Special Paper of the Geological Society of America*, 516(2016), 231-246;
- Duan, W.H., **Cheng, H.**, Tan, M., Edwards, R.L., Onset and duration of transitions into Greenland Interstadials 15.2 and 14 in northern China constrained by an annually laminated stalagmite, *Scientific Reports*, 6(2016), 20844;
- Grothe, P.R., Cobb, K.M., Bush, S.L., **Cheng, H.**, Santos, G.M., Southon, J.R., Edwards, R.L., Deocampo, D. M., Sayani, H. R., A comparison of U/Th and rapid-screen ^{14}C dates from Line Island fossil corals, *Geochemistry, Geophysics, Geosystems*, 17(3)(2016), 833-845;
- Han, L.Y., Li, T.Y., **Cheng, H.**, Edwards, R.L., Shen, C.C., Li, H.C., Huang, C.X., Li, J.Y., Yuan, N., Wang, H.B., Zhang, T.T., Zhao, X., Potential influence of temperature changes in the Southern Hemisphere on the evolution of the Asian summer monsoon during the last glacial period, *Quaternary International*, 392(2016), 239-250;
- Huang, W., Wang, Y.J., **Cheng, H.**, Edwards, R.L., Shen, C.C., Liu, D.B., Shao, Q.F., Deng, C., Zhang, Z.Q., Wang, Q., Multi-scale Holocene Asian monsoon variability deduced from a twin-stalagmite record in southwestern China, *Quaternary Research*, 86(1)(2016), 34-44;
- Jaubert, J., Verheyden, S., Genty, D., Soulier, M., **Cheng, H.**, Blamart, D., Burlet, C., Camus, H., Delaby, S., Deldicque, D., Edwards, R.L., Ferrier, C., Cuyaubère, F.L., Lévêque, F., Maksud, F., Mora, P., Muth, X., Régnier, É., Rouzaud, J.N., Santos, F., Early Neanderthal constructions deep in Bruniquel Cave in southwestern France, *Nature*, 534(7605)(2016), 111-114;
- Kathayat, G., **Cheng, H.**, Sinha, A., Spötl, C., Edwards, R.L., Zhang, H.W., Li, X.L., Yi, L., Ning, Y.F., Cai, Y.J., LuiLui, W.G., Breitenbach, S.F.M., Indian monsoon variability on millennial-orbital timescales, *Scientific Reports*, 6(2016), 24374;
- Lascu, I., Feinberg, J.M., Dorale, J.A., **Cheng, H.**, Edwards, R.L., Age of the Laschamp excursion determined by U-Th dating of a speleothem geomagnetic record from North America, *Geology*, 44(2)(2016), 139-142;
- Liu, D.B., Wang, Y.J., **Cheng, H.**, Edwards, R.L., Kong, X.G., Li, T.Y., Strong coupling of centennial-scale changes of Asian monsoon and soil processes derived from stalagmite $\delta^{18}\text{O}$ and $\delta^{13}\text{C}$ records, southern China, *Quaternary Research*, 85(3)(2016), 333-346;
- Moquet, J.S., Cruz, F.W., Novello, V.F., Stríkis, N.M., Deininger, M., Karmann, I., Santos, R.V., Millo, C., Apaestegui, J., Guyot, J.L., Siffedine, A., Vuille, M., **Cheng, H.**, Edwards, R.L., Santini, W., Calibration of speleothem $\delta^{18}\text{O}$ records against hydroclimate instrumental records in Central Brazil, *Global and Planetary Change*, 139(2016), 151-164;
- Moseley, G.E., Edwards, R.L., Wendt, K.A., **Cheng, H.**, Dublyansky, Y., Lu, Y.B., Boch, R., Spötl, C., Reconciliation of the Devils Hole climate record with orbital forcing, *Science*, 351(6269)(2016), 165-168;
- Novello, V.F., Vuille, M., Cruz, F.W., Stríkis, N.M., de Paula, M.S., Edwards, R.L., **Cheng, H.**, Karmann, I., Jaqueto, P.F., Trindade, R.I.F., Hartmann, G.A., Moquet, J.S., Centennial-scale solar forcing of the South American Monsoon System recorded in stalagmites, *Scientific Reports*, 6(2016), 24762;
- Putnam, A.E., Putnam, D.E., Hayles, L.A., Cook, E.R., Palmer, J.G., Clark, E.H., Wang, C.Z., Chen, F., Denton, G.H., Boyle, D.P., Bassett, S.D., Birkel, S.D., Fernandez, J.M., Hajdas, I., Southon, J., Garner, C.B., **Cheng, H.**,

- Broecker, W.S., Little Ice Age wetting of interior Asian deserts and the rise of the Mongol Empire, *Quaternary Science Reviews*, 131(2016), 33-50;
- Railsback, L.B., Brook, G.A., Liang, F.Y., Marais, E., **Cheng, H.**, Edwards, R.L., A multi-proxy stalagmite record from northwestern Namibia of regional drying with increasing global-scale warmth over the last 47kyr: The interplay of a globally shifting ITCZ with regional currents, winds, and rainfall, *Palaeogeography, Palaeoclimatology, Palaeoecology*, 461(2016), 109-121;
- Ruan, J., Kherbouche, F., Genty, D., Blamart, D., **Cheng, H.**, Dewilde, F., Hachi, S., Edwards, R.L., Régnier, E., Michelot, J.L., Evidence of a prolonged drought ca. 4200 yr BP correlated with prehistoric settlement abandonment from the Gueldaman GLD1 Cave, Northern Algeria, *Climate of the Past*, 12(1)(2016), 1-14;
- Scroxton, N., Gagan, M.K., Dunbar, G.B., Ayliffe, L.K., Hantoro, W.S., Shen, C.C., Hellstrom, J.C., Zhao, J.X., **Cheng, H.**, Edwards, R.L., Sun, H.L., Rifai, H., Natural attrition and growth frequency variations of stalagmites in southwest Sulawesi over the past 530,000 years, *Palaeogeography, Palaeoclimatology, Palaeoecology*, 441(2016), 823-833;
- Spötl, C., Fohlmeister, J., **Cheng, H.**, Boch, R., Modern aragonite formation at near-freezing conditions in an alpine cave, Carnic Alps, Austria, *Chemical Geology*, 435(2016), 60-70;
- Wassenburg, J.A., Scholz, D., Jochum, K.P., **Cheng, H.**, Oster, J., Immenhauser, A., Richter, D.K., Häger, T., Jamieson, R.A., Baldini, J.U.L., Hoffmann, D., Breitenbach, S.F.M. Determination of aragonite trace element distribution coefficients from speleothem calcite–aragonite transitions, *Geochimica et Cosmochimica Acta*, 190(2016), 347-367;
- Zhang, H.B., Griffiths, M.L., Huang, J.H., Cai, Y.J., Wang, C.F., Zhang, F., **Cheng, H.**, Ning, Y.F., Hu, C.Y., Xie, S.C., Antarctic link with East Asian summer monsoon variability during the Heinrich Stadial–Bølling interstadial transition, *Earth and Planetary Science Letters*, 453(2016), 243-251;
- Zhao, K., Wang, Y.J., Edwards, R.L., **Cheng, H.**, Liu, D.B., Kong, X.G., Ning, Y.F., Contribution of ENSO variability to the East Asian summer monsoon in the late Holocene, *Palaeogeography, Palaeoclimatology, Palaeoecology*, 449(2016), 510-519;

2015

- Allan, M., Fagel, N., Van Rangelbergh, M., Baldini, J., Riotte, J., **Cheng, H.**, Edwards, R.L., Gillikin, D., Quinif, Y., Verheyden, S., Lead concentrations and isotope ratios in speleothems as proxies for atmospheric metal pollution since the industrial revolution, *Chemical Geology*, 401(2015), 140-150;
- An, Z.S., Wu, G.X., Li, J.P., Sun, Y.B., Liu, Y.M., Zhou, W.J., Cai, Y.J., Duan, A.M., Li, L., Mao, J.Y., **Cheng, H.**, Shi, Z.G., Tan, L.C., Yan, H., Ao, H., Chang, H., Feng, J., Global Monsoon dynamics and climate change, *Annual Review of Earth and Planetary Sciences*, 43(2015), 29-77;
- Bartolomé, M., Moreno, A., Sancho, C., Stoll, H.M., Cacho, I., Spötl, C., Belmonte, Á., Edwards, R.L., **Cheng, H.**, Hellstrom, J., Hydrological change in Southern Europe responding to increasing North Atlantic overturning during Greenland Stadial 1, *Proceedings of the National Academy of Sciences*, 112(21)(2015), 6568-6572;
- Bartolomé, M., Sancho, C., Moreno, A., Oliva-Urcia, B., Belmonte, Á., Bastida, J., **Cheng, H.**, Edwards, R.L., Upper Pleistocene interstratal piping-cave speleogenesis: The Seso Cave System (Central Pyrenees, Northern Spain), *Geomorphology*, 228(2015), 335-344;
- Bourne, M.D., Feinberg, J.M., Strauss, B.E., Hardt, B., **Cheng, H.**, Rowe, H.D., Springer, G., Edwards, R.L., Long-term changes in precipitation recorded by magnetic minerals in speleothems, *Geology*, 43(7)(2015), 595-598;
- Buizert, C., Cuffey, K.M., Severinghaus, J.P., Baggenstos, D., Fudge, T.J., Steig, E.J., Markle, B.R., Winstrup, M., Rhodes, R.H., Brook, E.J., Sowers, T.A., Clow, G.D., **Cheng, H.**, Edwards, R.L., Sigl, M., McConnell, J.R., Taylor, K.C., The WAIS-Divide deep ice core WD2014 chronology-Part 1: Methane synchronization (68-31 ka BP) and the gas age-ice age difference, *Climate of the Past*, 11(2)(2015), 153-173;
- Burns, S.J., Kanner, L.C., **Cheng, H.**, Edwards, R.L., A Tropical Speleothem Record of Glacial Inception, the South American Summer Monsoon from 125 to 115 ka, *Climate of the Past*, 11(6)(2015), 931-938;
- Cai, Y.J., Fung, I.Y., Edwards, R.L., An, Z.S., **Cheng, H.**, Lee, J.E., Tan, L.C., Shen, C.C., Wang, X.F., Day, J.A., Zhou, W.J., Kelly, M.J., Chiang, J.C.H., Variability of stalagmite-inferred Indian monsoon precipitation over the past 252,000 y, *Proceedings of the National Academy of Sciences*, 112(10)(2015), 2954-2959;

- Cheng, H.**, Sinha, A., Verheyden, S., Nader, F.H., Li, X.L., Zhang, P.Z., Yin, J.J., Yi, L., Peng, Y.B., Rao, Z.G., Ning, Y.F., Edwards, R.L., The climate variability in northern Levant over the past 20,000 years, *Geophysical Research Letters*, 42(20)(2015), 8641-8650;
- Cross, M., McGee, D., Broecker, W.S., Quade, J., Shakun, J.D., **Cheng, H.**, Lu, Y.B., Edwards, R.L., Great Basin hydrology, paleoclimate, and connections with the North Atlantic: A speleothem stable isotope and trace element record from Lehman Caves, NV, *Quaternary Science Reviews*, 127(2015), 186-198;
- Dodero, A., Bartolomé, M., Sancho, C., Moreno, A., Oliva-Urcia, B., Meléndez, A., Sanz, E., Edwards, R.L., **Cheng, H.**, Incisión fluvial a partir del conjunto multinivel de cuevas de La Galiana (Parque Natural del río Lobos, Soria), *Geogaceta*, 58(2015), 111-114;
- Duan, F.C., Wu, J.Y., Wang, Y.J., Edwards, R.L., **Cheng, H.**, Kong, X.G., Zhang, W.H., A 3000-yr annually laminated stalagmite record of the Last Glacial Maximum from Hulu Cave, China, *Quaternary Research*, 83(2)(2015), 360-369;
- Dutt, S., Gupta, A.K., Clemens, S.C., **Cheng, H.**, Singh, R.K., Kathayat, G., Edwards, R.L., Abrupt changes in Indian summer monsoon strength during 33,800 to 5500 years B.P., *Geophysical Research Letters*, 42(13)(2015), 5526-5532;
- González-Lemos, S., Müller, W., Pisonero, J., **Cheng, H.**, Edwards, R.L., Stoll, H.M., Holocene flood frequency reconstruction from speleothems in northern Spain, *Quaternary Science Reviews*, 127(2015), 129-140;
- Häuselmann, A.D., Fleitmann, D., **Cheng, H.**, Tabersky, D., Günther, D., Edwards, R.L., Timing and nature of the penultimate deglaciation in a high alpine stalagmite from Switzerland speleothems, *Quaternary Science Reviews*, 126(2015), 264-275;
- Hayes, C.T., Anderson, R.F., Fleisher, M.Q., Huang, K.F., Robinson, L.F., Lu, Y.B., **Cheng, H.**, Edwards, R.L., Moran, S.B., ^{230}Th and ^{231}Pa on GEOTRACES GA03, the US GEOTRACES North Atlantic transect, and implications for modern and paleoceanographic chemical fluxes, *Deep Sea Research Part II: Topical Studies in Oceanography*, 116(2015), 29-41;
- Hayes, C.T., Anderson, R.F., Fleisher, M.Q., Vivancos, S.M., Lam, P.J., Ohnemus, D.C., Huang, K.F., Robinson, L.F., Lu, Y.B., **Cheng, H.**, Edwards, R.L., Moran, S.B., Intensity of Th and Pa scavenging partitioned by particle chemistry in the North Atlantic Ocean, *Marine Chemistry*, 170(2015), 49-60;
- Hudson, A.M., Quade, J., Huth, T.E., Lei, G.L., **Cheng, H.**, Edwards, L.R., Olsen, J.W., Zhang, H.C., Lake level reconstruction for 12.8-2.3 ka of the Ngangla Ring Tso closed-basin lake system, southwest Tibetan Plateau, *Quaternary Research*, 83(1)(2015), 66-79;
- Labuhn, I., Genty, D., Vonhof, H., Bourdin, C., Blamart, D., Douville, E., Ruan, J.Y., **Cheng, H.**, Edwards, R.L., Pons-Branchu, E., Pierre, M., A high-resolution fluid inclusion $\delta^{18}\text{O}$ record from a stalagmite in SW France: modern calibration and comparison with multiple proxies, *Quaternary Science Reviews*, 110(2015), 152-165;
- Liang, F.Y., Brook, G.A., Kotlia, B.S., Railsback, L.B., Hardt, B., **Cheng, H.**, Edwards, R.L., Kandasam, S., Panigarh cave stalagmite evidence of climate change in the Indian Central Himalaya since AD 1256: Monsoon breaks and winter southern jet depressions, *Quaternary Science Reviews*, 124(2015), 145-161;
- Liu, D.B., Wang, Y.J., **Cheng, H.**, Edwards, R.L., Kong, X.G., Cyclic changes of Asian monsoon intensity during the early mid-Holocene from annually-laminated stalagmites, central China, *Quaternary Science Reviews*, 121(2015), 1-10;
- Liu, W., Martínón-Torres, M., Cai, Y.J., Xing, S., Tong, H.W., Pei, S.W., Sier, M.J., Wu, X.H., Edwards, R.L., **Cheng, H.**, Li, Y.Y., Yang, X.X., Bermúdez de Castro, J.M., Wu, X.J., The earliest unequivocally modern humans in southern China, *Nature*, 526(2015), 696-699;
- Luetscher, M., Boch, R., Sodemann, H., Spötl, C., **Cheng, H.**, Edwards, R.L., Frisia, S., Hof, F., Müller, W., North Atlantic storm track changes during the Last Glacial Maximum recorded by Alpine speleothems, *Nature Communications*, 6(2015), 6344;
- Moseley, G.E., Spötl, C., **Cheng, H.**, Boch, R., Min, A., Edwards, R.L., Termination-II interstadial/stadial climate change recorded in two stalagmites from the north European Alps, *Quaternary Science Reviews*, 127(2015), 229-239;
- Orland, I.J., Edwards, R.L., **Cheng, H.**, Kozdon, R., Cross, M., Valley, J.W., Direct measurements of deglacial monsoon strength in a Chinese stalagmite, *Geology*, 43(6)(2015), 555-558;

- Peng, Y.B., Shen, C.M., **Cheng, H.**, Xu, Y., Simulation of the Interdecadal Pacific Oscillation and its impacts on the climate over eastern China during the last millennium, *Journal of Geophysical Research: Atmospheres*, 120(15)(2015), 7573-7585;
- Railsback, L.B., Brook, G.A., Ellwood, B.B., Liang, F.Y., **Cheng, H.**, Edwards, R.L., A record of wet glacial stages and dry interglacial stages over the last 560 kyr from a standing massive stalagmite in Carlsbad Cavern, New Mexico, USA, *Palaeogeography, Palaeoclimatology, Palaeoecology*, 438(2015), 256-266;
- Sinha, A., Kathayat, G., **Cheng, H.**, Breitenbach, S.F.M., Berkelhammer, M., Mudelsee, M., Biswas, J., Edwards, R.L., Trends and Oscillations and Anomalies in the Indian Summer Monsoon Rainfall over the Last Two Millennia, *Nature Communications*, 6(2015), 6309;
- Steponaitis, E., Andrews, A., McGee, D., Quade, J., Hsieh, Y.T., Broecker, W.S., Shuman, B.N., Burns, S.J., **Cheng, H.**, Mid-Holocene drying of the US Great Basin recorded in Nevada speleothems, *Quaternary Science Reviews*, 127(2015), 174-185;
- Stoll, H., Mendez-Vicente, A., Gonzalez-Lemos, S., Moreno, A., Cacho, I., **Cheng, H.**, Edwards, R.L., Interpretation of orbital scale variability in mid-latitude speleothem $\delta^{18}\text{O}$: Significance of growth rate controlled kinetic fractionation effects, *Quaternary Science Reviews*, 127(2015), 215-228;
- Stríkis, N.M., Chiessi, C.M., Cruz, F.W., Vuille, M., **Cheng, H.**, de Souza Barreto, E.A., Mollenhauer, G., Kasten, S., Karmann, I., Edwards, R.L., Bernal, J.P., dos Reis Sales, H., Timing and structure of Mega-SACZ events during Heinrich Stadial 1, *Geophysical Research Letters*, 42(13)(2015), 5477-5484A;
- Tan, L.C., Cai, Y.J., An, Z.S., **Cheng, H.**, Shen, C.C., Breitenbach, S.F.M., Gao, Y.L., Edwards, R.L., Zhang, H.W., Du, Y.J., A Chinese cave links climate change, social impacts, and human adaptation over the last 500 years, *Scientific Reports*, 5(2015), 12284;
- Tan, L.C., Cai, Y.J., **Cheng, H.**, Edwards, R.L., Shen, C.C., Gao, Y.L., An, Z.S., Climate significance of speleothem $\delta^{18}\text{O}$ from central China on decadal timescale, *Journal of Asian Earth Sciences*, 106(2015), 150-155;
- Toth, L.T., Aronson, R.B., **Cheng, H.**, Edwards, R.L., Holocene variability in the intensity of wind-gap upwelling in the tropical eastern Pacific, *Paleoceanography*, 30(8)(2015), 1113-1131;
- Toth, L.T., Aronson, R.B., Cobb, K.M., **Cheng, H.**, Edwards, R.L., Grothe, P.R., Sayani, H.R., Climatic and biotic thresholds of coral-reef shutdown, *Nature Climate Change*, 5(4)(2015), 369-374;
- Toth, L.T., Kuffner, I.B., **Cheng, H.**, Edwards, R.L., A new record of the late Pleistocene coral *Pocillopora palmata* from the Dry Tortugas, Florida reef tract, USA, *Palaios*, 30(12)(2015), 827-835;
- Van Rampelbergh, M., Verheyden, S., Allan, M., Quinif, Y., **Cheng, H.**, Edwards, L.R., Keppens, E., Claeys, P., A 500-year seasonally resolved $\delta^{18}\text{O}$ and $\delta^{13}\text{C}$, layer thickness and calcite aspect record from a speleothem deposited in the Han-sur-Lesse cave, Belgium, *Climate of the Past*, 11(6)(2015), 789-802;
- Winter, A., Zanchettin, D., Miller, T., Kushnir, Y., Black, D., Lohmann, G., Burnett, A., Haug, G.H., Estrella-Martínez, J., Breitenbach, S.F.M., Beaufort, L., **Cheng, H.**, Persistent drying linked to volcanic forcing, *Nature Communications*, 6(2015), 7627;
- Woo, K.S., Ji, H., Jo, K.N., Yi, S., **Cheng, H.**, Edwards, R.L., Hong, G.H., Reconstruction of the Northeast Asian monsoon climate history for the past 400 years based on textural, carbon and oxygen isotope record of a stalagmite from Yongcheon lava tube cave, Jeju Island, Korea, *Quaternary International*, 384(2015), 37-51;
- Zhao, K., Wang, Y.J., Edwards, R.L., **Cheng, H.**, Liu, D.B., Kong, X.G., A high-resolved record of the Asian Summer Monsoon from Dongge Cave, China for the past 1200 years, *Quaternary Science Reviews*, 122(2015), 250-257;
- Zhu, X.Y., Zhang, M.L., **Cheng, H.**, Wu, X., Edwards, R.L., Centennial-scale monsoon climate fluctuations from a stalagmite record during the mid-Holocene Epoch in Fulu cave of Huaping, Yunnan, China, *Environmental Earth Sciences*, 74(2015), 929-935;

2014

- Apaéstegui, J., Cruz, F.W., Sifeddin, A., Espinoza, J.C., Guyot, J.L., Khodri, M., Stríkis, N., Santos, R.V., **Cheng, H.**, Edwards, R.L., Carvalho, E., Santini, W., Hydroclimate variability of the South American Monsoon System during the last 1600 yr inferred from speleothem isotope records of the north-eastern Andes foothills in Peru, *Climate of the Past*, 10(1)(2014), 533-561;
- Badertscher, S., Borsato, A., Frisia, S., **Cheng, H.**, Edwards, R.L., Tüysüz, O., Fleitmann, D., Precise dating and impact of the Late Bronze Age Minoan eruption, *Earth and Planetary Sciences*, 392(2014), 58-66;

- Berkehamer, M., Sinha, A., Mudelsee, M., **Cheng, H.**, Yoshimura, K., Biswas, J., On the low-frequency component of the ENSO-Indian monsoon relationship: a paired proxy perspective, *Climate of the Past*, 10(2)(2014), 733-744;
- Duan, F.C., Liu, D.B., **Cheng, H.**, Wang, X.F., Wang, Y.J., Kong, X.G., Chen, S.T., A high-resolution monsoon record of millennial-scale oscillations during Late MIS 3 from Wulu Cave, south-west China, *Journal of Quaternary Science*, 29(1)(2014), 83-90;
- Duan, F.C., Wang, Y.J., Shen, C.C., Wang, Y., **Cheng, H.**, Wu, C.C., Hu, H.M., Kong, X.G., Liu, D.B., Zhao, K., Evidence for solar cycles in a late Holocene speleothem record from Dongge Cave, China, *Scientific Reports*, 4(2014), 5159;
- Duan, W.H., Tan, M., Ma, Z.B., **Cheng, H.**, The palaeoenvironmental significance of $\delta^{13}\text{C}$ of stalagmite BW-1 from Beijing, China during Younger Dryas intervals inferred from the grey level profile, *Boreas*, 43(2014), 243-250;
- Feng, W.M., Hardt, B.F., Banner, J.L., Meyer, K.J., James, E.W., Musgrove, M., Edwards, R.L., **Cheng, H.**, Min, A., Changing amounts and sources of moisture in the U.S. southwest since the Last Glacial Maximum in response to global climate change, *Earth and Planetary Science Letters*, 401(2014), 47-56;
- Grant, K.M., Rohling, E.J., Ramsey, C.B., **Cheng, H.**, Edwards, R.L., Florindo, F., Heslop, D., Marra, F., Roberts, A.P., Tamisiea, M.E., Williams, F., Sea-level variability over five glacial cycles, *Nature Communications*, 5(2014), 5076;
- Jo, K.N., Woo, K.S., Yi, S., Yang, D.Y., Lim, H.S., Wang, Y.J., **Cheng, H.**, Edwards, R.L., Mid-latitude interhemispheric hydrologic seesaw over the past 550,000 years, *Nature*, 508(7496)(2014), 378-382;
- Kutzbach, J.E., Chen, G.S., **Cheng, H.**, Edwards, R.L., Liu, Z.Y., Potential role of winter rainfall in explaining increased moisture in the Mediterranean and Middle East during periods of maximum orbitally-forced insolation seasonality, *Climate Dynamics*, 42(2014), 1079-1095;
- Li, Z.H., Driese, S.G., **Cheng, H.**, A multiple cave deposit assessment of suitability of fossil speleothem $\delta^{13}\text{C}$ and $\delta^{18}\text{O}$ for reconstructing paleo-vegetation and paleo-temperature-A case study in Raccoon Mountain Cave, southern Appalachians, USA, *Sedimentology*, 61(3)(2014), 749-766;
- Liu, Z.Y., Wen, X.Y., Brady, E.C., Otto-Bliesner, B., Yu, G., Lu, H.Y., **Cheng, H.**, Wang, Y.J., Zheng, W.P., Ding, Y.H., Edwards, R.L., Cheng, J., Liu, W., Yang, H., Chinese cave records and the East Asia Summer Monsoon, *Quaternary Science Reviews*, 83(2014), 115-128;
- Martínez-Pillado, V., Aranburu, A., Arsuaga, J.L., Ruiz-Zapata, B., Gil-García, M.J., Stoll, H., Yusta, I., Iriarte, E., Carretero, J.M., Edwards, R.L., **Cheng, H.**, Upper Pleistocene and Holocene palaeoenvironmental records in Cueva Mayor karst (Atapuerca, Spain) from different proxies: speleothem crystal fabrics, palynology and archaeology, *International Journal of Speleology*, 43(1)(2014), 1-14;
- Moseley, G.E., Spötl, C., **Cheng, H.**, Svendsen, A., Brandstätter, S., Edwards, R.L., Multi-speleothem record reveals tightly coupled climate between central Europe and Greenland during Marine Isotope Stage 3, *Geology*, 42(12)(2014), 1043-1046;
- Muangsong, C., Pumijumng, N., Cai, B.G., Pumijumng, N., Hu, C.Y., **Cheng, H.**, An annually laminated stalagmite record of Thailand monsoon change over the past 387 years and its relationship to IOD and ENSO, *Quaternary International*, 349(2014), 90-97;
- Peng, Y.B., Shen, C., **Cheng, H.**, Xu, Y., Modeling of severe persistent droughts over eastern China during the last millennium, *Climate of the Past*, 10(3)(2014), 1079-1091;
- Railsback, L.B., Xiao, H.L., Liang, F.Y., Akers, P.D., Brook, G.A., Dennis, W.M., Lanier, T.E., Tan, M., **Cheng, H.**, Edwards, R.L., A stalagmite record of abrupt climate change and possible Westerlies-derived atmospheric precipitation during the Penultimate Glacial Maximum in northern China, *Palaeogeography, Palaeoclimatology, Palaeoecology*, 393(2014), 30-44;
- Spötl, C., **Cheng, H.**, Holocene climate change, permafrost and cryogenic carbonate formation: insights from a recently deglaciated, high-elevation cave in the Austrian Alps, *Climate of the Past*, 10(4)(2014), 1349-1362;
- Springer, G.S., Rowe, H.D., Hardt, B., **Cheng, H.**, Edwards, R.L., East central North America climates during marine isotope stages 3-5, *Geophysical Research Letters*, 41(9)(2014), 3233-3237;
- Tan, L.C., An, Z.S., Huh, C.A., Cai, Y.J., Shen, C.C., Shiao, L.J., Yan, L.B., **Cheng, H.**, Edwards, R.L., Cyclic precipitation variation on the western Loess Plateau of China during the past four centuries, *Scientific Reports*, 4(2014), 6381;

- Tan, L.C., Shen, C.C., Cai, Y.J., Lo, L., **Cheng, H.**, An, Z.S., Trace-element variations in an annually layered stalagmite as recorders of climatic changes and anthropogenic pollution in Central China, *Quaternary Research*, 81(2)(2014), 181-188;
- Wang, P.X., Wang, B., **Cheng, H.**, Fasullo, J., Guo, Z.T., Kiefer, T., Liu, Z.Y., The global monsoon across timescales: coherent variability of regional monsoons, *Climate of the Past*, 10(6)(2014), 2007-2052;
- Yin, J.J., Yuan, D.X., Li, H.C., **Cheng, H.**, Li, T.Y., Edwards, R.L., Lin, Y.S., Qin, J.M., Tang, W., Zhao, Z.Y., Mii, H.S., Variation in the Asian monsoon intensity and dry-wet conditions since the Little Ice Age in central China revealed by an aragonite stalagmite, *Climate of the Past*, 10(5)(2014), 1803-1816;
- Zhang, W.H., Wang, J. Y., Wang, Y., Wang, Y.J., **Cheng, H.**, Kong, X.G., Duan, F.C., A detailed East Asian monsoon history surrounding the 'Mystery Interval' derived from three Chinese speleothem records, *Quaternary Research*, 82(1)(2014), 154-163;

2013

- Bard, E., Ménot, G., Rostek, F., Licari, L., Böning, P., Edwards, R.L., **Cheng, H.**, Wang, Y.J., Heaton, T.J., Radiocarbon calibration/comparison records based on marine sediments from the Pakistan and Iberian Margins, *Radiocarbon*, 55(4)(2013), 1999-2019;
- Cheng, H.**, Edwards, R.L., Shen, C.C., Polyak, V.J., Asmerom, Y., Woodhead, J., Hellstrom, J., Wang, Y.J., Kong, X.G., Spötl, C., Wang, X.F., Improvements in ^{230}Th dating, ^{230}Th and ^{234}U half-life values, and U-Th isotopic measurements by multi-collector inductively coupled plasma mass spectrometry, *Earth and Planetary Science Letters*, 371-372(2013), 82-91;
- Cheng, H.**, Sinha, A., Cruz, F.W., Wang, X., Edwards, R.L., d'Horta, F.M., Ribas, C.C., Vuille, M., Stott, L.D., Auler, A.S., Climate change patterns in Amazonia and biodiversity, *Nature Communications*, 4(2013), 1411;
- Cobb, K.M., Westphal, N., Sayani, H.R., Watson, J.T., Lorenzo, E.D., **Cheng, H.**, Edwards, R.L., Charles, C.D., Highly variable El Niño-Southern Oscillation throughout the Holocene, *Science*, 339(6115)(2013), 67-70;
- Domínguez-Villar, D., Carrasco, R.M., Pedraza, J., **Cheng, H.**, Edwards, R.L., Willenbring, J.K., Early maximum extent of paleoglaciers from Mediterranean mountains during the last glaciation, *Scientific Reports*, 3(2013), 2034;
- Hereid, K.A., Quinn, T.M., Taylor, F. W., Shen, C.C., Edwards, R.L., **Cheng, H.**, Coral record of reduced El Niño activity in the early 15th to middle 17th centuries, *Geology*, 41(1)(2013), 51-54;
- Kanner, L.C., Burns, S.J., **Cheng, H.**, Edwards, R.L., Vuille, M., High-resolution variability of the South American summer monsoon over the last seven millennia: insights from a speleothem record from the central Peruvian Andes, *Quaternary Science Reviews*, 75(2013), 1-10;
- Liu, D.B., Wang, Y.J., **Cheng, H.**, Edwards, R.L., High-resolution stalagmite $\delta^{13}\text{C}$ record of soil processes from southwestern China during the early MIS 3, *Chinese Science Bulletin*, 58(7)(2013), 796-802;
- Liu, D.B., Wang, Y.J., **Cheng, H.**, Kong, X.G., Chen, S.T., Centennial-scale Asian monsoon variability during the mid-Younger Dryas from Qingtian Cave, central China, *Quaternary Research*, 80(2)(2013), 199-206;
- McCabe-Glynn, S., Johnson, K.R., Strong, C., Berkelhammer, M., Sinha, A., **Cheng, H.**, Edwards, R.L., Variable North Pacific influence on drought in southwestern North America since AD 854, *Nature Geoscience*, 6(8)(2013), 617-621;
- Rao, Z.G., Chen, F.H., **Cheng, H.**, Liu, W.G., Wang, G.A., Lai, Z.P., Bloemendal, J., High-resolution precipitation variations in the western Chinese Loess Plateau during the last glacial, *Scientific Reports*, 3(2013), 2785;
- Reimer, P.J., Bard, E., Bayliss, A., Beck, J.W., Blackwell, P.G., Ramsey, C.B., Buck, C.E., **Cheng, H.**, Edwards, R.L., Friedrich, M., Grootes, P.M., Guilderson, T.P., Haflidason, H., Hajdas, I., Hatté, C., Heaton, T.J., Hoffmann, D.L., Hogg, A.G., Hughen, K.A., Kaiser, H.F., Kromer, B., Manning, S.W., Niu, M., Reimer, R.W., Richards, D.A., Scott, E.M., Southon, J.R., Staff, R.A., Turney, C.S.M., van der Plicht, J., IntCal13 and MARINE 13 radiocarbon age calibration curves 0-50,000 years cal BP, *Radiocarbon*, 55(4)(2013), 1869-1887;
- Rodysill, J.R., Russell, J.M., Crausbay, S.D., Bijaksana, S., Vuille, M., Edwards, R.L., **Cheng, H.**, A severe drought during the last millennium in East Java, Indonesia, *Quaternary Science Reviews*, 80(2013), 102-111;
- Shen, C.C., Lin, K., Duan, W.H., Jiang, X.Y., Partin, J.W., Edwards, R.L., **Cheng, H.**, Tan, M., Test the annual nature of stalagmite banding, *Scientific Reports*, 3(2013), 2633;

- Sletten, H.R., Railsback, L.B., Liang, F.Y., Brook, G.A., Marias, E., Hardt, B.F., **Cheng, H.**, Edwards, R.L., A petrographic and geochemical record of climate change over the last 4600 years from a stalagmite from northern Namibia, with evidence of abruptly wetter climate at the beginning of southern Africa's Iron Age, *Palaeogeography, Palaeoclimatology, Palaeoecology*, 376(2013), 149-162;
- Stoll, H.M., Moreno, A., Mendez-Vicente, A., Gonzalez-Lemos, S., Jimenez-Sanchez, M., Dominguez-Cuesta, M.J., Edwards, R.L., **Cheng, H.**, Wang, X.F., Paleoclimate and growth rates of speleothems in the northwestern Iberian Peninsula over the last two glacial cycles, *Quaternary Research*, 80(2)(2013), 284-290;
- Tan, L.C., Yi, L., Cai, Y.J., Shen, C.C., **Cheng, H.**, An, Z.S., Quantitative temperature reconstruction based on growth rate of annually-layered stalagmite: a case study from central China, *Quaternary Science Reviews*, 72(2013), 137-145;
- Tong, H.P., Feng, D., **Cheng, H.**, Yang, S.X., Wang, H.B., Min, A.G., Edwards, R.L., Chen, Z., Chen, D.F., Authigenic carbonates from seeps on the northern continental slope of the South China Sea: New insights into fluid sources and geochronology, *Marine and Petroleum Geology*, 43(2013), 260-271;
- Van Rangelbergh, M., Fleitmann, D., Verheyden, S., **Cheng, H.**, Edwards, L., De Geest, P., De Vleeschouwer, D., Burns, S.J., Matter, A., Claeys, P., Keppens, E., Mid- to late Holocene Indian Ocean Monsoon variability recorded in four speleothems from Socotra Island, Yemen, *Quaternary Science Reviews*, 65(2013), 129-142;
- Villa, E., Stoll, H., Farias, P., Adrados, L., Edwards, R.L., **Cheng, H.**, Age and significance of the quaternary cemented deposits of the Duje valley (Picos de Europa, northern Spain), *Quaternary Research*, 79(1)(2013), 1-5;
- WAIS Divide Project Members, Deglacial warming in West Antarctica driven by both local orbital and Northern Hemisphere forcing, *Nature*, 500(2013), 440-444;

2012

- Breitenbach, S.F.M., Rehfeld, K., Goswami, B., Baldini, J.U.L., Ridley, H.E., Kennett, D.J. Pruffer, K.M., Aquino, V.V., Asmerom, Y., Polyak, V.J., **Cheng, H.**, Kurths, J., Marwan, N. COConstructing Proxy-Record from Age Models (COPRA), *Climate of the Past*, 8(2012), 1765-1779;
- Cai, Y.J., Zhang, H.W., **Cheng, H.**, An, Z.S., Edwards, R.L., Wang, X.F., Tan, L.C., Liang, F.Y., Wang, J., Kelly, M., The Holocene Indian monsoon variability over the southern Tibetan Plateau and its teleconnections, *Earth and Planetary Science Letters*, 335-336(2012), 135-144;
- Cheng, H.**, Sinha, A., Wang, X.F., Cruz, F.W., Edwards, R.L., The Global Paleomonsoon as seen through speleothem records from Asia and the Americas, *Climate Dynamics*, 39(2012), 1045-1062;
- Cheng, H.**, Zhang, P.Z., Spötl, C., Edwards, R.L., Cai, Y.J., Zhang, D.Z., Sang, W.C., Tan, M., An, Z.S., The climate cyclicity in semiarid-arid central Asia over the past 500,000 years, *Geophysical Research Letters*, 39(2012), L01705;
- Clark, P.U., Shakun, J.D, Baker, P.A., Bartlein, P.J., Brewer, S., Brook, E., Carlson, A.E., **Cheng, H.**, Kaufman, D.S., Liu, Z.Y., Marchitto, T.M., Mix, A.C., Morrill, C., Otto-Bliesner, B.L., Pahnke, K., Russell, J.M., Whitlock, C., Adkins, J.F., Blois, J.L., Clark, J., Colman, S.M., Curry, W.B., Flower, B.P., He, F., Johnson, T.C., Lynch-Stieglitz, J., Markgraf, V., McManus, J., Mitrovica, J.X., Moreno, P.I., Williams, J.W., Global climate evolution during the last deglaciation, *Proceedings of the National Academy of Sciences*, 109(19)(2012), E1134-1142;
- Cui, Y.F., Wang, Y.J., **Cheng, H.**, Zhao, K., Kong, X.G., Isotopic and lithologic variations of one precisely-dated stalagmite across the Medieval/LIA period from Heilong Cave, central China, *Climate of the Past*, 8(5)(2012), 1541-1550;
- Ersek, V., Clark, P.U., Mix, A.C., **Cheng, H.**, Edwards, R.L., Holocene winter climate variability in mid-latitude western North America, *Nature Communications*, 3(2012), 1219;
- Goder-Goldberger, M., **Cheng, H.**, Edwards, R.L., Marder, O., Peleg, Y., Yeshurun, R., Frumkin, A., Manuel Cave: The Site and its bearing on early middle Paleolithic technological variability. *Paléorient*, 38(1-2)(2012), 203-225;
- Kanner, L.C., Burns, S.J., **Cheng, H.**, Edwards, R.L., High-Latitude Forcing of the South American Summer Monsoon During the Last Glacial, *Science*, 335(6068)(2012), 570-573;
- Lacustrine cave carbonates: novel archives of paleohydrologic change in the Bonneville Basin (Utah, USA), *Earth and Planetary Science Letters*, 351(2012), 182-194;

- Novello, V.F., Cruz, F.W., Karmann, I., Burns, S.J., Strikis, N.M., Vuille, M., **Cheng, H.**, Edwards, R.L., Santos, R.V., Frigo, E., Barreto, E.A.S., Multidecadal climate variability in Brazil Nordeste during the last 3000 years based on speleothem isotope records, *Geophysical Research Letters*, 39(2012), L23706;
- Ma, Z.B., **Cheng, H.**, Tan, M., Edwards, R.L., Li, H.C., You, C.F., Duan, W.H., Wang, X., Kelly, M.J., Timing and structure of the Younger Dryas event in northern China, *Quaternary Science Reviews*, 41(2012), 83-93;
- Schewe, J., Levermann, A., **Cheng, H.**, A critical humidity threshold for monsoon transitions. *Climate of the Past*, 8(2)(2012), 535-544;
- Shen, C.C., Wu, C.C., **Cheng, H.**, Edwards, R.L., Hsieh, Y.T., Gallet, S., Chang, C.C., Li, T.Y., Lam, D.D., Kano, A., Hori, M., Spötl, C., High-precision and high-resolution carbonate ^{230}Th dating by MC-ICP-MS with SEM protocols, *Geochimica et Cosmochimica Acta*, 99(2012), 71-86;
- Southon, J., Noronha, A.L., **Cheng, H.**, Edwards, R.L., Wang, Y.J., A high-resolution record of atmospheric ^{14}C based on Hulu Cave speleothem H82, *Quaternary Science Reviews*, 33(2012), 32-41;
- Toth, L.T., Aronson, R.B., Vollmer, S.V., Hobbs, J.W., Urrego, D.H., **Cheng, H.**, Enochs, I.C., Combosch, D.J., Woesik, R.V., Macintyre, I.G., ENSO Drove 2500-Year Collapse of Eastern Pacific Coral Reefs, *Science*, 337(6090)(2012), 81-84;
- Vuille, M., Burns, S.J., Taylor, B.L., Cruz, F.W., Bird, B.W., Abbott, M.B., Kanner, L.C., **Cheng, H.**, Novello, V.F., A review of the South American Monsoon history as recorded in stable isotopic proxies over the past two millennia, *Climate of the Past*, 8(4)(2012), 1309-1321;
- Wu, J.Y., Wang, Y.J., **Cheng, H.**, Kong, X.G., Liu, D.B., Stable isotope and trace element investigation of two contemporaneous annually-laminated stalagmites from northeastern China surrounding the “8.2 ka event”, *Climate of the Past*, 8(5)(2012), 1497-1507;

2011

- Badertscher, S., Fleitmann, D., **Cheng, H.**, Edwards, R.L., Göktürk, O.M., Zumbühl, A., Leuenberger, M., Tüysüz, O., Pleistocene water intrusions from the Mediterranean and Caspian seas into the Black Sea, *Nature Geoscience*, 4 (2011), 236-239;
- Boch, R., **Cheng, H.**, Spötl, C., Edwards, R.L., Wang, X.F., Häuselmann, Ph., NALPS: A precisely dated European climate record 120-60 ka, *Climate of the Past*, 7(4)(2011), 1247-1259;
- Cartwright, A., Quade, J., Stine, S., Adams, K.D., Broecker, W., **Cheng, H.**, Chronostratigraphy and lake-level changes of Laguna Cari-Laufquén, Río Negro, Argentina, *Quaternary Research*, 76(3)(2011), 430-440;
- Corrêa, D., Auler, A.S., Wang, X.F., Edwards, R.L., **Cheng, H.**, Geomorphology and genesis of the remarkable Araras Ridge tufa deposit, Western Brazil, *Geomorphology*, 134(1-2)(2011), 94-101;
- Domínguez-Villar, D., Vázquez-Navarro, J.A., **Cheng, H.**, Edwards, R.L., Freshwater tufa record from Spain supports evidence for the past interglacial being wetter than the Holocene in the Mediterranean region, *Global and Planet, Change*, 77(3-4)(2011), 129-141;
- Göktürk, O.M., Fleitmann, D., Badertscher, S., **Cheng, H.**, Edwards, R.L., Leuenberger, M., Fankhauser, A., Tüysüz, O., Kramers, J., Climate on the southern Black Sea coast during the Holocene: implications from the Sofular Cave record, *Quaternary Science Reviews*, 30(19-20)(2011), 2433-2445;
- Jo, K.N., Woo, K.S., Lim, H.S., **Cheng, H.**, Edwards, R.L., Wang, Y.J., Jiang, X.Y., Kim, R., Lee, J.I., Yoon, H.I., Yoo, K.C. Holocene and Eemian climatic optima in the Korean Peninsula based on textural and carbon isotopic records from the stalagmite of the Daeya Cave, South Korea, *Quaternary Science Reviews*, 30(9-10)(2011), 1218-1231;
- Ludwig, K.A., Shen, C.C., Kelley, D.S., **Cheng, H.**, Edwards, R.L. U-Th systematics and ^{230}Th ages of carbonate chimneys at the Lost City hydrothermal field, *Geochimica et Cosmochimica Acta*, 75(7)(2011), 1869-1888;
- Railsback, L.B., Liang, F.Y., Romaní, J.R.V., d'Anglade, A.G., Rodríguez, M.V., Fidalgo, L.S., Mosquera, D.F., **Cheng, H.**, Edwards, R.L., Petrographic and isotopic evidence for Holocene long-term climate change and shorter-term environmental shifts from a stalagmite from the Serra do Courel of northwestern Spain, and implications for climatic history across Europe and the Mediterranean, *Palaeogeography, Palaeoclimatology, Palaeoecology*, 305(2011), 172-184;

- Rushdi, A.I., Clark, P.U., Mix, A.C., Ersek, V., Simoneit, B.R.T., **Cheng, H.**, Edwards, R.L., Composition and sources of lipid compounds in speleothem calcite from southwestern Oregon and their paleoenvironmental implications, *Environmental Earth Sci*, 62(2011), 1245-1261;
- Shakun, J.D., Burns, S.J., Clark, P.U., **Cheng, H.**, Edwards, R.L., Milankovitch-paced Termination II in a Nevada speleothem? *Geophysical Research Letters*, 38(18)(2011), L18701;
- Sinha, A., Stott, L., Berkelhammer, M., **Cheng, H.**, Edwards, R.L., Buckley, B., Aldenderfer, M., Mudelsee, M., A Global Context for Megadroughts in Monsoon Asia during the Past Millennium, *Quaternary Science Reviews*, 30(1-2)(2011), 47-62;
- Sinha, A., Berkelhammer, M., Stott, L., Mudelsee, M., **Cheng, H.**, Biswas, J. The leading mode of Indian Summer Monsoon precipitation variability during the last Millennium, *Geophysical Research Letters*, 38(15)(2011), L15703;
- Stríkis, N.M., Cruz, F.W., **Cheng, H.**, Karmann, I., Edwards, R.L., Vuille, M., Wang, X.F., de Paula, M.S., Novello, V.F., Auler, A.S., Abrupt variations in South American monsoon rainfall during the Holocene based on a speleothem record from central-eastern Brazil, *Geology*, 39(11)(2011), 1075-1078;
- Tan, L.C., Cai, Y.J., An, Z.S., Edwards, R.L., **Cheng, H.**, Shen, C.C., Zhang, H.W., Centennial- to decadal-scale monsoon precipitation variability in the semi-humid region, northern China during the last 1860 years: Records from stalagmites in Huangye Cave, *The Holocene*, 21(2)(2011), 287-296;
- Winter, A., Miller, T., Kushnir, Y., Sinha, A., Timmermann, A., Jury, M.R., Gallup, C., **Cheng, H.**, Edwards, R.L., Evidence for 800 years of North Atlantic multi-decadal variability from a Puerto Rican speleothem, *Earth and Planetary Science Letters*, 308(1-2)(2011), 23-28;

2010

- Araoka, D., Inoue, M., Suzuki, A., Yokoyama, Y., Edwards, R.L., **Cheng, H.**, Matsuzaki, H., Kan, H., Shikazono, N., Kawahata, H., Historic 1771 Meiwa tsunami confirmed by high-resolution U/Th dating of massive Porites coral boulders at Ishigaki Island in the Ryukyus, Japan, *Geochemistry Geophysics Geosystem*, 11(6) (2010), 1527-2027;
- Berkelhammer, M., Sinha, A., Mudelsee, M., **Cheng, H.**, Edwards, R.L., Cannariato, K., Persistent multidecadal power of the Indian Summer Monsoon, *Earth and Planetary Science Letters*, 290(1-2)(2010), 166-172;
- Broecker, W.S., Denton, G.H., Edwards, R.L., **Cheng, H.**, Alley, R.B., Putnam, A.E., Putting the Younger Dryas cold event into context, *Quaternary Science Reviews*, 29(9-10)(2010), 1078-1081;
- Cai, Y.J., **Cheng, H.**, An, Z.S., Edwards, R.L., Wang, X.F., Tan, L.C., Wang, J., Large variations of oxygen isotopes in precipitation over south-central Tibet during Marine Isotope Stage 5, *Geology*, 38(3)(2010), 243-246;
- Cai, Y.J., Tan, L.C., **Cheng, H.**, An, Z.S., Edwards, R.L., Kelly, M.J., Kong, X.G., Wang, X.F., The variation of summer monsoon precipitation in central China since the last deglaciation, *Earth and Planetary Science Letters*, 291(1-4)(2010), 21-31;
- Cosford, J., Qing, H.R., Lin, Y., Eglinton, B., Matthey, D., Chen, Y.G., Zhang, M.L., **Cheng, H.**, The East Asian monsoon during MIS 2 expressed in a speleothem $\delta^{18}\text{O}$ record from Jintanwan Cave, Hunan, China, *Quaternary Research*, 73(3)(2010), 541-549;
- Dasgupta, S., Saar, M.O., Edwards, R.L., Shen, C.C., **Cheng, H.**, Alexander Jr, E.C., Three thousand years of extreme rainfall events recorded in stalagmites from Spring Valley Caverns, Minnesota, *Earth and Planetary Science Letters*, 300(1-2)(2010), 46-54;
- Dong, J.G., Wang, Y.J., **Cheng, H.**, Hardt, B., Edwards, R.L., Kong, X.G., Wu, J.Y., Chen, S.T., Liu, D.B., Jiang, X.Y., Zhao, K., A high-resolution stalagmite record of the Holocene East Asian Monsoon from Mount Shennongjia, central China, *The Holocene*, 20(2)(2010), 257-264;
- Feng, D., Robert, H.H., **Cheng, H.**, Peckmann, J., Bohrmann, G., Edwards, R.L., Chen, D.F., U/Th dating of cold-seep carbonates: An initial comparison, *Deep Sea Research II: Topical Studies in Oceanography*, 57(21-23)(2010), 2055-2060;
- Hardt, B., Rowe, H.D., Springer, G.S., **Cheng, H.**, Edwards, R.L., The seasonality of east central North American precipitation based on three coeval Holocene speleothems from southern West Virginia, *Earth and Planetary Science Letters*, 295(3-4)(2010), 342-348;

- Jiang, X.Y., Kong, X.G., Wang, Y.J., **Cheng, H.**, Wu, J.Y., Chen, S.T., Orbital- and millennial-scale variability of the Asian monsoon during MIS8 from Sanbao Cave at Mount Shennongjia, central China, *Chinese Science Bulletin*, 55(11)(2010), 1041-1046;
- Jo, K.N., Woo, K.S., **Cheng, H.**, Edwards, R.L., Wang, Y.J., Kim, R., Jiang, X.Y., Textural and carbon isotopic evidence of monsoonal changes recorded in a composite-type speleothem from Korea since MIS 5a, *Quaternary Research*, 74(1)(2010), 100-112;
- Liu, D.B., Wang, Y.J., **Cheng, H.**, Edwards, R.L., Kong, X.G., Wang, X.F., Hardt, B., Wu, J.Y., Chen, S.T., Jiang, X.Y., He, Y.Q., Dong, J.G., Zhao, K., Sub-millennial variability of Asian monsoon intensity during the early MIS 3 and its analogue to the ice age terminations, *Quaternary Science Reviews*, 29(9-10)(2010), 1107-1115;
- Liu, W., Jin, C.Z., Zhang, Y.Q., Cai, Y.J., Xing, S., Wu, X.J., **Cheng, H.**, Edwards, R.L., Pan, W.S., Qin, D.G., An, Z.S., Trinkaus, E., Wu, X.Z., Human remains from Zhirendong, South China, and modern human emergence in East Asia, *Proceedings of the National Academy of Sciences*, 107(45)(2010), 19201-19206;
- Masson-Delmotte, V., Stenni, B., Blunier, T., Cattani, O., Chappellaz, J., **Cheng, H.**, Dreyfus, G., Edwards, R.L., Falourd, S., Govin, A., Kawamura, K., Johnsen, S.J., Jouzel, J., Landais, A., Lemieux-Dudon, B., Lourdantou, A., Marshall, G., Minster, B., Mudelsee, M., Pol, K., R othlisberger, R., Selmo, E., Waelbroeck, C., An abrupt change of Antarctic moisture origin at the end of Termination II, *Proceedings of the National Academy of Sciences*, 107(27)(2010), 12091-12094;
- Springer, G.S., White, D.M., Rowe, H.D., Hardt, B., Mihimdukulasooriya, L.N., **Cheng, H.**, Edwards, R.L., Multiproxy evidence from caves of Native Americans altering the overlying landscape during the Late Holocene of east-central North America, *The Holocene*, 20(2)(2010), 275-283;
- Su, R.X., Sun, D.H., **Cheng, H.**, Chen, X.M., Li, Z.J., Evolution of Asian monsoon variability revealed by oxygen isotopic record of middle Holocene massive coral in the northern South China Sea, *Quaternary International*, 213(1-2)(2010), 56-68;
- Woodhead, J., Reisz, R., Fox, D., Drysdale, R., Hellstrom, J., Maas, R., **Cheng, H.**, Edwards, R.L., Speleothem climate records from deep time? An example from the Permian, *Geology*, 38(5)(2010), 455-458;
- Yang, Y., Yuan, D.X., **Cheng, H.**, Zhang, M.L., Qin, J.M., Lin, Y.S., Zhu, X.Y., Edwards, R.L., Precise dating of abrupt shifts in the Asian Monsoon during the last deglaciation based on stalagmite data from Yamen Cave, Guizhou Province, *Science China Earth Sciences*, 53(5)(2010), 633-641;
- Zhang, D.Z., Zhang, P.Z., Sang, W.C., **Cheng, H.**, Wu, X.P., Yuan, Y., Bai, Y.J., Wang, J.L., Jia, J.H., Implications of stalagmite density for past climate change: An example from stalagmite growth during the last deglaciation from Wanxiang Cave, western Loess Plateau, *Chinese Science Bulletin*, 55(34)(2010), 3936-3943;
- Zhao, K., Wang, Y.J., Edwards, R.L., **Cheng, H.**, Liu, D.B., High-resolution stalagmite $\delta^{18}\text{O}$ records of Asian monsoon changes in central and southern China spanning the MIS 3/2 transition, *Earth and Planetary Science Letters*, 298(1-2)(2010), 191-198;
- 段武辉, 谭明, **程海**, 张勇, 云南仙人洞文石类石笋年层结构电镜分析, *第四纪研究*, 30(5)(2010), 1066-1067;
- 谭明, 王颖, 何华春, **程海**, 南京三台溶洞地貌形成与长江古水面关系初探, *第四纪研究*, 30(5)(2010), 877-882;
- 杨勋林, 张平中, 袁道先, **程海**, 黄龙洞年轻石笋的 ^{210}Pb 测年研究, *地质论评*, 56(4)(2010), 543-548;
- 杨琰, 袁道先, **程海**, 张美良, 覃嘉铭, 林玉石, 朱晓燕, Edwards, R.L., 末次冰消期亚洲季风突变事件的精确定年: 以贵州衙门洞石笋为例, *中国科学: D辑*, (2)(2010), 199-210;
- 张德忠, 张平中, 桑文翠, **程海**, 吴秀平, 袁野, 白益军, 王江林, 贾继红, 石笋密度蕴含的过去气候变化信息: 以末次冰消期黄土高原西部武都万象洞石笋为例, *科学通报*, (31)(2010), 3040-3047;

2009

- Auler, A.S., Smart, P.L., Wang, X.F., Pilo, L.B., Edwards, R.L., **Cheng, H.**, Cyclic sedimentation in Brazilian caves: Mechanisms and palaeoenvironmental significance, *Geomorphology*, 106(1-2)(2009), 142-153;
- Broecker, W.S., McGee, D., Adams, K.D., **Cheng, H.**, Edwards, R.L., Oviatt, C.G., Quade, J., A Great Basin-wide dry episode during the first half of the Mystery Interval, *Quaternary Science Reviews*, 28(25-26)(2009), 2557-2563;
- Cheng, H.**, Edwards, R.L., Broecker, W.S., Denton, G.H., Kong, X.G., Wang, Y.J., Zhang, R., Wang, X.F., Ice Age Terminations, *Science*, 326(248)(2009), 248-252;

- Cheng, H.**, Fleitmann, D., Edwards, R.L., Wang, X.F., Cruz, F.W., Auler, A.S., Mangini, A., Wang, Y.J., Kong, X.G., Burns, S.J., Matter, A., Timing and structure of the 8.2 kyr B.P. event inferred from $\delta^{18}\text{O}$ records of stalagmites from China, Oman and Brazil, *Geology*, 37(11)(2009), 1007-1010;
- Cruz, F.W., Vuille, M., Burns, S.J., Wang, X.F., **Cheng, H.**, Werner, M., Edwards, R.L., Karmann, I., Auler, A.S., Nguyen, H., Orbitally driven east-west antiphasing of South American precipitation, *Nature Geoscience*, 2(2009), 210-214;
- Domínguez-Villar, D., Fairchild, I.J., Baker, A., Wang, X.F., Edwards, R.L., **Cheng, H.**, Oxygen isotope precipitation anomaly in the North Atlantic region during the 8.2 ka event, *Geology*, 37(12)(2009), 1095-1098;
- Ersek, V., Hostetler, S.W., **Cheng, H.**, Clark, P.U., Anslow, F.S., Mix, A. C., Edwards, R.L., Environmental influences on speleothem growth in southwestern Oregon during the last 380000 years, *Earth and Planetary Science Letters*, 279(3-4)(2009), 316-325;
- Fleitmann, D., **Cheng, H.**, Badertscher, S., Edwards, R.L., Mudelsee, M., Göktürk, O.M., Fankhauser, A., Pickering, R., Raible, C.C., Matter, A., Kramers, J., Tüysüz, O., Timing and climatic impact of Greenland interstadials recorded in stalagmites from northern Turkey, *Geophysical Research Letters*, 36(2009), L19707;
- Jin, C., Pan, W., Zhang, Y., Cai, Y., Xu, Q., Tang, Z., Wang, W., Wang, Y., Liu, J., Qin, D., Edwards, R.L., **Cheng, H.**, The Homo sapiens Cave hominin site of Mulan Mountain, Jiangzhou District, Chongzuo, Guangxi with emphasis on its age, *Chinese Science Bulletin*, 54(21)(2009), 3848-3856;
- Reuter, J., Stott, L., Khider, D., Sinha, A., **Cheng, H.**, Edwards, R.L., A new perspective on the hydroclimate variability in northern South America during the Little Ice Age, *Geophysical Research Letters*, 36(2009), L21706;
- Springer, G.S., Rowe, H.D., Hardt, B., Cocina, F.G., Edwards, R.L., **Cheng, H.**, Climate driven changes in river channel morphology and base level during the Holocene and late Pleistocene of southeastern West Virginia, *Journal of Cave and Karst Studies*, 71(2)(2009), 121-129;
- Tan, L.C., Cai, Y.J., **Cheng, H.**, An, Z.S., Edwards, R.L., Summer monsoon precipitation variations in central China over the past 750 years derived from a high-resolution absolute-dated stalagmite, *Palaeogeography, Palaeoclimatology, Palaeoecology*, 280(3-4)(2009), 432-439;
- Wu, J.Y., Wang, Y.J., **Cheng, H.**, Edwards, R.L., An exceptionally strengthened East Asian summer monsoon event between 19.9 and 17.1 ka BP recorded in a Hulu stalagmite, *Science In China Series D-Earth Sciences*, 52(3)(2009), 360-368;
- 吴江滢, 汪永进, **程海**, Edwards R.L., 葫芦洞石笋记录的 19.9~17.1 ka BP 东亚夏季风增强事件, 中国科学 D 辑: 地球科学, 39(1)(2009), 61-69;
- 张美良, 朱晓燕, **程海**, 林玉石, 覃嘉铭, 冉景丞, 王华, 何师意, 贵州荔波 1200 年来石笋高分辨率的古气候环境记录, 地球学报, 30(6)(2009), 831-840;

2008

- Cai, B.G., Edwards, R.L., **Cheng, H.**, Tan, M., Wang, X., Liu, T.S., A dry episode in the Younger Dryas and decadal to centennial-scale weak monsoon events during the early Holocene: a high-resolution stalagmite record from the southeast of the Loess Plateau, China, *Geophysical Research Letters*, 35(2)(2008), L02705;
- Cheng, H.**, Fleitmann, D., Edwards, R.L., Burns, S.J., Matter, A., Timing of the 8.2-kyr event in a stalagmite from Northern Oman, *PAGES news*, 16(3)(2008), 29-30;
- Cosford, J., Qing, H.R., Eglinton, B., Matthey, D., Yuan, D.X., Zhang, M.L., **Cheng, H.**, East Asian monsoon variability since the Mid-Holocene recorded in a high-resolution, absolute-dated aragonite speleothem from eastern China, *Earth and Planetary Science Letters*, 275(3-4)(2008), 296-307;
- Cosford, J., Qing, H.R., Yuan, D.X., Zhang, M.L., Holmden, C., Patterson, W., **Cheng, H.**, Millennial-Scale Variability in the Asian Monsoon: evidence from oxygen isotope records from stalagmites in southeastern China, *Palaeogeography, Palaeoclimatology, Palaeoecology*, 266(1-2)(2008), 3-12;
- Domínguez-Villar, D., Wang, X.F., **Cheng, H.**, Martín-Chivelet, J., Edwards, R.L., A high-resolution late Holocene speleothem record from Kaite Cave, northern Spain: $\delta^{18}\text{O}$ variability and possible causes, *Quaternary International*, 187(1)(2008), 40-51;

- Frisia, S., Badertscher, S., Borsato, A., Susini, J., Gokturk, O.M., **Cheng, H.**, Edwards, R.L., Tuyuz, O., Fleitmann, D., The use of stalagmite geochemistry to detect past volcanic eruptions and their environmental impacts, *PAGES News*, 16(3)(2008), 25-26;
- Liu, D.B., Wang, Y.J., **Cheng, H.**, Edwards, R.L., Kong, X.G., Wang, X.F., Wu, J.Y., Chen, S.T., A detailed comparison of Asian Monsoon intensity and Greenland temperature during the Allerød and Younger Dryas events, *Earth and Planetary Science Letters*, 272(3-4)(2008), 691-697;
- Liu, J.H., Zhang, P.Z., **Cheng, H.**, Chen, F.H., Yang, X.L., Zhang, D.Z., Zhou, J., Jia, J.H., An, C.L., Sang, W.C., Johnson, K.R., Asian summer monsoon precipitation recorded by stalagmite oxygen isotopic composition in the western Loess Plateau during AD1875-2003 and its linkage with ocean-atmosphere system, *Chinese Science Bulletin*, 53(13)(2008), 2041-2049;
- Shen, C.C., Li, K.S., Sieh, K., Natawidjaja, D., **Cheng, H.**, Wang, X.F., Edwards, R.L., Lam, D.D., Hsieh, Y.T., Fan, T.Y., Meltzner, A.J., Taylor, F.W., Quinn, T.M., Chiang, H.W., Kilbourne, K.H., Variation of initial $^{230}\text{Th}/^{232}\text{Th}$ and limits of high precision U-Th dating of shallow-water corals, *Geochimica et Cosmochimica Acta*, 72(17)(2008), 4201-4223;
- Sieh, K., Natawidjaja, D.H., Meltzner, A.J., Shen, C.C., Suwargadi, B.W., Galetzka, J., Li, K.S., **Cheng, H.**, Edwards, R.L., Earthquake Supercycles Inferred from Sea-Level Changes Recorded in the Corals of West Sumatra, *Science*, 322(5908)(2008), 1674-1678;
- Springer, G.S., Rowe, H.D., Hardt, B., Edwards, R.L., **Cheng, H.**, Solar forcing of Holocene droughts in a stalagmite record from West Virginia in east-central North America, *Geophysical Research Letters*, 35(17)(2008), L17703;
- Valero Garces, B.L., Moreno, A., Navas, A., Mata, P., Machin, J., Delgado Huertas, A., Samperiz, P. Gonzalez., Schwalb, A., Morellona, M., **Cheng, H.**, Edwards, R.L., The Taravilla lake and tufa deposits (Central Iberian Range, Spain) as palaeohydrological and palaeoclimatic indicators, *Palaeogeography, Palaeoclimatology, Palaeoecology*, 259(2-3)(2008), 136-156;
- Wang, X.F., Cruz, F.W., Auler, A.S., **Cheng, H.**, Edwards, R.L., Millennial-scale climate variability recorded in Brazilian speleothems, *PAGES News*, 16(3)(2008), 31-32;
- Wang, Y.J., **Cheng, H.**, Edwards, R.L., Kong, X.G., Shao, X.H., Wu, J.Y., Jiang, X.Y., Wang, X.F., An, Z.S., Millennial- and orbital- scale changes in the East Asian Monsoon over the past 224,000 years, *Nature*, 451(2008), 1090-1093;
- Zhang, P.Z., **Cheng, H.**, Edwards, R.L., Chen, F.H., Wang, Y.J., Yang, X.L., Liu, J., Tan, M., Wang, X.F., Liu, J.H., An, C.L., Dai, Z.B., Zhou, J., Zhang, D.Z., Jia, J.H., Jin, L.Y., Johnson, K.R., A test of climate, sun, and culture relationships from a 1810-year Chinese Cave record, *Science*, 322(5903)(2008), 940-942;
- 姜修洋, 汪永进, 孔兴功, 陈仕涛, 李明霞, **程海**, 末次间冰期东亚季风气候不稳定的神农架洞穴石笋记录, 沉积学报, 26(1)(2008), 139-143;
- 刘敬华, 张平中, **程海**, 陈发虎, 杨勋林, 张德忠, 周静, 贾继红, 安春雷, 桑文翠, Johnson, K.R., 黄土高原西缘在 AD1875-2003 期间石笋氧同位素记录的季风降水变化与海气系统的联系, 科学通报, 53(22)(2008), 2801-2808;
- 覃嘉铭, 袁道先, 林玉石, 张会领, 张美良, **程海**, 王华, 杨琰, 冉景丞, 公元 8 世纪以来贵州荔波石笋高分辨率的气候变化记录, 中国岩溶, 27(3)(2008), 266-272;
- 王军彬, 孔兴功, **程海**, 汪永进, Edwards, R.L., 61~50kaBP 亚洲季风百年尺度气候振荡的黔西南石笋记录, 海洋地质与第四纪地质, 28(05)(2008), 85-92;
- 杨琰, 袁道先, **程海**, 覃嘉铭, 林玉石, 张美良, 朱晓燕, 文石-方解石石笋 U/Th 体系的封闭性判断及意义, 地球化学, 37(2)(2008), 97-106;
- 杨琰, 袁道先, **程海**, 覃嘉铭, 林玉石, 张美良, 朱晓燕, 洞穴石笋初始 $^{234}\text{U}/^{238}\text{U}$ 值变化的古气候记录意义, 地质学报, 82(5)(2008), 692-701;
- 杨琰, 袁道先, **程海**, 覃嘉铭, 林玉石, 张美良, 朱晓燕, 贵州荔波董歌洞较老石笋 ICP-MS ^{230}Th 测年研究及古气候应用, 地层学杂志, 32(2)(2008), 201-206;

2007

- Fritz, S.C., Baker, P.A., Seltzer, G.O., Ballantyne, A., Tapia, P., **Cheng, H.**, Edwards, R.L., Quaternary glaciation and hydrologic variation in the South American tropics as reconstructed from the Lake Titicaca drilling project, *Quaternary Research*, 68(3)(2007), 410-420;
- Shen, G., Wang, W., **Cheng, H.**, Edwards, R.L., Mass spectrometric U-series dating of Laibin hominid site in Guangxi, southern China, *Journal of Archaeological Science*, 34(12)(2007), 2109-2114;
- Sinha, A., Cannariato, K.G., Stott, L.D., **Cheng, H.**, Edwards, R.L., Yadava, M.G., Ramesh, R., Singh, I.B., A 900-year (600 to 1500 A.D.) record of the Indian summer monsoon precipitation from the core monsoon zone of India, *Geophysical Research Letter*, 34(2007), L16707;
- Treble, P.C., Schmitt, A.K., Edwards, R.L., McKeegan, K.D., Harrison, T.M., Grove, M., **Cheng, H.**, Wang, Y.J., High resolution Secondary Ionisation Mass Spectrometry (SIMS) $\delta^{18}\text{O}$ analyses of Hulu Cave speleothem at the time of Heinrich Event 1, *Chemical Geology*, 238(3-4)(2007), 197-212;
- Wang, W., Potts, R., Yuan, B.Y., Huang, W.W., **Cheng, H.**, Edwards, R.L., Ditchfield, P., Sequence of mammalian fossils, including hominoid teeth, from the Bubing Basin caves, South China, *Journal of Human Evolution*, 52(4)(2007), 370-379;
- Wang, X.F., Auler, A.S., Edwards, R.L., **Cheng, H.**, Ito, E., Wang, Y.J., Kong, X.G., Solheid, M., Millennial-scale precipitation changes in southern Brazil over the past 90,000 years, *Geophysical Research Letter*, 34(2007), L23701;
- Wang, X.F., Edwards, R.L., Auler, A.S., **Cheng, H.**, Ito, E., Millennial-scale interhemispheric asymmetry of low-latitude precipitation: speleothem evidences and possible high-latitude forcing, *American Geophysical Union Monograph*, 173(2007), 279-294;
- Webster, J.W., Brook, G.A., Railsback, L.B., **Cheng, H.**, Edwards, R.L., Alexander, C., Reeder, P.P., Stalagmite evidence from Belize indicating significant droughts at the time of Preclassic Abandonment, the Maya Hiatus, and the Classic Maya Collapse, *Palaeogeography, Palaeoclimatology, Palaeoecology*, 250(1-4)(2007), 1-17;
- Xia, Z.F., Kong, X.G., Jiang, X.Y., **Cheng, H.**, Precise dating of East-Asian-Monsoon D/O events during 95-56 ka BP: Based on stalagmite data from Shanbao Cave at Shennongjia, China, *Science In China Series D: Earth Sciences*, 50(2)(2007), 228-235;
- Yang, X.L., Zhang, P.Z., Chen, F.H., Huh, C.A., Li, H.C., **Cheng, H.**, Johnson, K.R., Liu, J.H., An, C.L., Modern stalagmite oxygen isotopic composition and its implications of climatic change from a high-elevation cave in the eastern Qinghai-Tibet Plateau over the past 50 years, *Chinese Science Bulletin*, 52(9)(2007), 1238-1247;
- 杨勋林, 张平中, 陈发虎, 扈治安, 李红春, 程海, Johnson, K.R., 刘敬华, 安春雷, 近 50 a 来青藏高原东部高海拔洞穴现代石笋氧同位素组成及其含义, *科学通报*, 52(6)(2007), 698-706;

2006

- Cai, Y.J., An, Z.S., **Cheng, H.**, Edwards, R.L., Kelly, M.J., Liu, W.G., Wang, X.F., Shen, C.C., High-resolution absolute-dated Indian Monsoon record between 53 and 36 ka from Xiaobailong Cave, southwestern China, *Geology*, 34(8)(2006), 621-624;
- Cheng, H.**, Edwards, R.L., Wang, Y.J., Kong, X.G., Ming, Y.F., Kelly, M.J., Wang, X.F., Gallup, C. D., Liu, W.G., A penultimate glacial monsoon record from Hulu Cave and two-phase glacial terminations, *Geology*, 34(3)(2006), 217-220;
- Kelly, M.J., Edwards, R.L., **Cheng, H.**, Yuan, D.X., Cai, Y., Zhang, M.L., Lin, Y.S., An, Z.S., High resolution characterization of the Asian Monsoon between 146,000 and 99,000 years B.P. from Dongge Cave, China and global correlation of events surrounding Termination II, *Paleogeography Paleoclimatology Paleoecology*, 236(1-2)(2006), 20-38;
- Natawidjaja, D.H., Sieh, K., Chlieh, M., Galetzka, J., Suwargadi, B.W., **Cheng, H.**, Edwards, R.L., Avouac, J.P., Ward, S.N., Source parameters of the great Sumatran megathrust earthquakes of 1797 and 1833 inferred from coral microatolls, *Journal of Geophysical Research: Solid Earth*, 111(2006), B06403;
- Riker-Coleman, K.E., Gallup, C.D., Wallace, L.M., Webster, J.M., **Cheng, H.**, Edwards, R.L., Evidence of Holocene uplift in east New Britain, Papua New Guinea, *Geophysical Research Letters*, 33(18)(2006), L18612;
- Shao, X.H., Wang, Y.J., **Cheng, H.**, Kong, X.G., Wu, J.Y., Edwards, R.L., Long-term trend and abrupt events of the Holocene Asian monsoon inferred from a stalagmite $\delta^{18}\text{O}$ record from Shennongjia in Central China, *Chinese Science Bulletin*, 51(2)(2006), 221-228;

- Verheyden, S., Baele, J.M., Keppens, E., Genty, D., Cattani, O., **Cheng, H.**, Edwards, R.L., Zhang, H.C., Strijdonck, M.V., Quinif, Y., The Proserpine Stalagmite (Han-Sur-Lesse Cave, Belgium): Preliminary environmental interpretation of the last 1000 years as recorded in a layered speleothem, *Geologica Belgica*, 9(3-4)(2006), 245-256;
- Wang, X.F., Auler, A.S., Edwards, R.L., **Cheng, H.**, Ito, E., Solheid, M., Interhemispheric anti-phasing of rainfall during the last glacial period, *Quaternary Science Reviews*, 25(23-24)(2006), 3391-3403;
- 陈仕涛, 汪永进, 孔兴功, 刘殿兵, **Cheng, H.**, Edwards R.L., 倒数第三次冰消期亚洲季风气候可能的类 Younger Dryas 事件, 中国科学 D 辑: 地球科学, 36(5)(2006), 445-452;
- 邵晓华, 汪永进, **程海**, 孔兴功, 吴江滢, 全新世季风气候演化与干旱事件的湖北神农架石笋记录, 科学通报, 51(1)(2006), 80-86;
- 夏志锋, 孔兴功, 汪永进, 姜修洋, **程海**, 东亚季风 95~56ka BP 期间 D/O 事件年代的精确测定: 以中国神农架山宝洞石笋为例, 中国科学 D 辑: 地球科学, 36(9)(2006), 830-837;
- 张美良, **程海**, 林玉石, 覃嘉铭, 朱晓燕, 冉景丞, 杨琰, 陈会明, Edwards, R. L., 贵州荔波地区 2000 年来石笋高分辨率的气候记录, 沉积学报, 24(3)2006, 339-348;

2005

- Asmerom, Y., DuFrane, A., Mukasa, S.B., **Cheng, H.**, Edwards, R.L., Time-scale of magma differentiation in arcs from protactinium-radium isotopic data, *Geology*, 33(8)(2005), 633-636;
- Balch, D.P., Cohen, A.S., Schnurrenberger, D.W., Haskell, B.J., Valero Garces, B.L., Beck, J.W., **Cheng, H.**, Edwards, R.L., Ecosystem and paleohydrological response to Quaternary climate change in the Bonneville Basin, Utah, *Paleogeography, Paleoclimatology, Paleoecology*, 221(1-2)(2005), 99-122;
- Dykoski, C.A., Edwards, R.L., **Cheng, H.**, Yuan, D.X., Cai, Y.J., Zhang, M.L., Lin, Y.S., Qing, J.M., An, Z.S., Revenaugh, J., A high resolution, absolute-dated Holocene and deglacial Asian monsoon record from Dongge Cave, China, *Earth and Planetary Science Letters*, 233(1-2)(2005), 71-86;
- He, Y.Q., Wang, Y.J., Kong, X.G., **Cheng, H.**, High resolution stalagmite $\delta^{18}\text{O}$ records over the past 1000 years from Dongge Cave in Guizhou, *Chinese Science Bulletin*, 50(10)(2005), 1003-1008;
- Jiang, X.Y., Wang, Y.J., Kong, X.G., Wu, J.Y., Shao, X.H., Xia, Z.F., **Cheng, H.**, Abrupt climate change of East Asian Monsoon at 130 ka BP inferred from a high resolution stalagmite $\delta^{18}\text{O}$ record, *Chinese Science Bulletin*, 50(23)(2005), 2765-2769;
- Kong, X.G., Wang, Y.J., Wu, J.Y., **Cheng, H.**, Edwards, R.L., Wang, X.F., Complicated responses of stalagmite $\delta^{13}\text{C}$ to climate change during the last glaciation from Hulu Cave, Nanjing, China, *Science in China Series D: Earth Sciences*, 48(12)(2005), 2174-2181;
- Li, H.C., Ku, T.L., You, C.F., **Cheng, H.**, Edwards, R.L., Ma, Z.B., Tsai, W.S., Li, M.D., $^{87}\text{Sr}/^{86}\text{Sr}$ and Sr/Ca in speleothems for paleoclimate reconstruction in Central China between 70 and 280 kyr ago, *Geochimica et Cosmochimica Acta*, 69(16)(2005), 3933-3947;
- Piló, L.B., Auler, A.S., Neves, W.A., Wang, X.F., **Cheng, H.**, Edwards, R.L., Geochronology, sediment provenance, and fossil emplacement at Sumidouro Cave, a classic late Pleistocene/early Holocene Paleoanthropological site in eastern Brazil, *Geoarchaeology*, 20(8)(2005), 751-764;
- Qin, J.M., Yuan, D.X., **Cheng, H.**, Lin, Y.S., Zhang, M.L., Wang, F.X., Edwards, R.L., Wang, H., Ran, J.C., The Y.D. and climate abrupt events in the early and middle Holocene: Stalagmite oxygen isotope record from Maolan, Guizhou, China, *Science in China Series D: Earth Sciences*, 48(4)(2005), 530-537;
- Sinha, A., Cannariato, K.G., Stott, L.D., Li, H.C., You, C.F., **Cheng, H.**, Edwards, R.L., Singh I.B., Variability of Southwest Indian summer monsoon precipitation during the Bølling-Allerød, *Geology*, 33(10)(2005), 813-816;
- Sun, D.H., Gagan, M.K., **Cheng, H.**, Scott-Gagan, H., Dykoski, C.A., Edwards, R.L., Su, R.X., Seasonal and interannual variability of the mid-Holocene East Asian monsoon in coral $\delta^{18}\text{O}$ records from the South China Sea, *Earth and Planetary Science Letters*, 237(1-2)(2005), 69-84;
- Taylor, F.W., Mann, P., Bevis, M.G., Edwards, R.L., **Cheng, H.**, Cutler, K.B., Gray, S.C., Burr, G.S., Beck, J.W., Phillips, D.A., Cabioch, G., Recy, J., Rapid forearc uplift and subsidence caused by impinging bathymetric features: Examples from the New Hebrides and Solomon Arcs, *Tectonics*, 24(6)(2005), TC6005;

- Vacco, D.A., Clark, P.U., Mix, A.C., **Cheng, H.**, Edwards, R.L., A speleothem record of Younger Dryas cooling, Klamath Mountains, Oregon, *Quaternary Research*, 64(2)(2005), 249-256;
- Wang, Y.J., **Cheng, H.**, Edwards, R.L., He, Y.Q., Kong, X.G., An, Z.S., Wu, J.Y., Kelly, M.J., Dykosk, C.A., Li, X.D., The Holocene Asian monsoon: links to solar changes and North Atlantic climate, *Science*, 308(5723)(2005), 854-857;
- 蔡炳贵, **程海**, 侯居峙, 刘宏, 王国安, 刘东生, 云南石林地区土壤侵蚀的石笋记录与现代观测, 第四纪研究, 25(02)(2005), 170-175;
- 蔡演军, **Cheng, H.**, 安芷生, Edwards, R.L., 王先锋, Shen, C.C., 洞穴碳酸盐 ^{230}Th - ^{234}U - ^{238}U 测年初始钍校正的等时线研究, 地球科学进展, 20(4)(2005), 414-420;
- 程海**, 艾斯本, 王先锋, 汪永进, 孔兴功, 袁道先, 张美良, 林玉石, 覃嘉铭, 冉景丞, 中国南方石笋氧同位素记录的重要意义, 第四纪研究, 25(2)(2005), 157-163;
- 何尧启, 汪永进, 孔兴功, **程海**, 贵州董哥洞近 1000a 来高分辨率洞穴石笋 $\delta^{18}\text{O}$ 记录, 科学通报, 50(11)(2005), 1114-1118;
- 姜修洋, 汪永进, 孔兴功, 吴江滢, 邵晓华, 夏志锋, **程海**, 130 ka BP 左右东亚季风突变过程的洞穴石笋记录, 科学通报, 50(23)(2005), 2644-2648;
- 孔兴功, 汪永进, 吴江滢, **Cheng, H.**, Edwards R.L., Wang, X.F., 南京葫芦洞石笋 $\delta^{13}\text{C}$ 对冰期气候的复杂响应与诊断, 中国科学 D 辑: 地球科学, 35(11)(2005), 1047-1052;
- 林玉石, 张美良, 覃嘉铭, 朱晓燕, **程海**, 再论洞穴石笋的沉积速率, 地质论评, 51(4)(2005), 435-442;
- 覃嘉铭, 袁道先, 林玉石, 张美良, 章程, 王华, 冯玉梅, 涂林玲, 杨琰, **程海**, Edwards, R.L., 冉景丞, 陈会明, 末次冰消期以来气候期划分的准确定位与定年, 地球学报, 26(2005), 209-212;
- 张美良, 覃嘉铭, 张会领, **程海**, 林玉石, 杨琰, 艾思本, 朱晓燕, 云南寻甸中全新世降温事件的石笋同位素记录, 地球与环境, 33(2) (2005), 16-22;

2004

- Auler, A.S., Wang, X. F., Edwards, R.L., **Cheng, H.**, Cristalli, P.S., Smart, P.L., Richards, D.A., Quaternary ecological and geomorphic changes associated with rainfall events in presently semiarid northeastern Brazil, *Journal of Quaternary Science*, 19(7)(2004), 693-701;
- Cheng, H.** Abrupt climate change: Debate or action, *Chinese Science Bulletin*, 49(18)(2004), 1997-2002;
- Cutler, K.B., Gray, S.C., Burr, G.S., Edwards, R.L., Taylor, F.W., Cabioch, G., Beck, J.W., **Cheng, H.**, Moore, J., Radiocarbon calibration to 50 ky B.P. with paired ^{14}C and ^{230}Th dating of corals from Vanuatu and Papua New Guinea, *Radiocarbon*, 46(3)(2004), 1127-1160;
- Edmonds, H.N., Moran, S.B., **Cheng, H.**, Edwards, R.L., ^{230}Th and ^{231}Pa in the Arctic Ocean: Implications for particle fluxes and basin-scale Th/Pa fractionation, *Earth and Planetary Science Letters*, 227(1-2)(2004), 155-167;
- Hearty, P.J., Olson, S.L., Kaufman, D.S., Edwards, R.L., **Cheng, H.**, Stratigraphy and geochronology of pitfall accumulations in caves and fissures, Bermuda, *Quaternary Science Reviews*, 23(9-10)(2004), 1151-1171;
- Natawidjaja, D.H., Sieh, K., Ward, S.N., **Cheng, H.**, Edwards, R.L., Galetzka, J., Suwargadi, B.W., Paleogeodetic records of seismic and aseismic subduction from central Sumatran microatolls, Indonesia, *Journal of Geophysical Research: Solid Earth*, 109(B4)(2004), B04306;
- Piló, L.B., Auler, A.S., Neves, W.A., Wang, X.F., **Cheng, H.**, Edwards, R.L., Revisitando a Lapa do Sumidouro: Morco paleo-antropologico do Quaternario Americano, *Revista Brasileira de Paleontologia*, 7(3)(2004), 337-348;
- Shen, G.J., **Cheng, H.**, Edwards, R.L., Mass spectrometric U-series dating of New Cave at Zhoukoudian, China, *Journal of Archaeological Science*, 31(3)(2004), 337-342;
- Speed, R.C., **Cheng, H.**, Evolution of marine terraces and sea level in the last interglacial, Cave Hill, Barbados, *Geological Society of America Bulletin*, 116(1-2)(2004), 219-232;
- Wang, X.F., Auler, A.S., Edwards, R.L., **Cheng, H.**, Cristalli, P.S., Smart, P.L., Richards, D.A., Shen, C.C., Wet periods in northeastern Brazil over the past 210 kyr linked to distant climate anomalies, *Nature*, 432(2004), 740-743;

- Wehmiller, J.F., Simmons, K.R., **Cheng, H.**, Edwards, R.L., Martin-McNaughton, J., York, L.L., Krantz, D.E., Shen, C.C., Uranium-series coral ages from the US Atlantic Coastal Plain—the “80 kyr problem” revisited, *Quaternary International*, 120(1)(2004), 3-14;
- Yuan, D.X., **Cheng, H.**, Edwards, R.L., Dykoski, C.A., Kelly, M.J., Zhang, M.L., Qing, J.M., Lin, Y.S., Wang, Y.J., Wu, J.Y., Dorale, J.A., An, Z.S., Cai, Y.J., Timing, duration, and transitions of the Last Interglacial Asian Monsoon, *Science*, 304(5670)(2004), 575-578;
- Zhang, M.L., Yuan, D.X., Lin, Y.S., **Cheng, H.**, Qin, J.M., Zhang, H.L., The record of paleoclimatic change from stalagmites and the determination of termination II in the south of Guizhou Province, China, *Science in China Series D: Earth Sciences*, 47(1)(2004), 1-12;
- Zhang, M.L., Yuan, D.X., Lin, Y.S., Qin, J.M., Bin, L., **Cheng, H.**, Edwards, R.L., A 6000-year high-resolution climatic record from a stalagmite in Xianshui Cave, Guilin, China, *The Holocene*, 14(5)(2004), 697-702;
- 林玉石, 袁道先, 张美良, 覃嘉铭, **程海**, 王兆荣, 冉景丞, 洞穴石笋沉积特征研究——以贵州荔波董歌洞 4 号石笋为例, *地球学报*, 25(4)(2004), 459-466;
- 覃嘉铭, 袁道先, **程海**, 林玉石, 张美良, 贵州荔波董歌洞 D3 石笋碳氧稳定同位素及微量元素记录的环境变化, *地球学报*, 25(6)(2004), 625-632;
- 覃嘉铭, 袁道先, **程海**, 林玉石, 张美良, 王福星, 王华, 新仙女木及全新世早中期气候突变事件: 贵州茂兰石笋氧同位素记录, *中国科学 D 辑: 地球科学*, 34(1)(2004), 69-74;
- 覃嘉铭, 袁道先, **程海**, 林玉石, 张美良, 王华, 冯玉梅, 涂琳玲, 贵州都匀七星洞石笋剖面晚更新世高分辨率的气候地层学, *第四纪研究*, 24(3)(2004), 318-324;
- 覃嘉铭, 袁道先, **程海**, 林玉石, 张美良, 章程, 王福星, 王华, 冯玉梅, 涂林玲, 张会领, 冉景丞, 过去 25 万年黔桂地区千年尺度东亚季风气候的变化, *中国岩溶*, 23(4)(2004), 261-266;
- 张美良, **程海**, 林玉石, 覃嘉铭, 王华, 冯玉梅, 涂琳玲, 张会领, 桂林地区水南洞 14~25 万年石笋的碳氧同位素记录和古气候重建, *古地理学报*, 6(1)(2004), 57-68;
- 张美良, **程海**, 林玉石, 覃嘉铭, 张会领, 涂琳玲, 王华, 冯玉梅, 贵州荔波 1.5 万年以来石笋高分辨率古气候环境记录, *地球化学*, 33(1)(2004), 65-74;
- 张美良, **程海**, 袁道先, 林玉石, 覃嘉铭, 章程, 末次冰期贵州七星洞石笋高分辨率气候记录与 Heinrich 事件, *地球学报*, 25(3)(2004), 337-344;

2003

- Brook, G.A., Embabi, N., Ashour, M.M., Edwards, R.L., **Cheng, H.**, Cowart, J.B., Dabous, A.A., Quaternary environmental change in the Western Desert of Egypt: Evidence from cave speleothems, spring tufas, and playa sediments, *Zeitschrift fur Geomorphologie, Supplementband*, 131(2003), 59-87;
- Cobb, K.M., Charles, C.D. **Cheng, H.**, Edwards, R.L., Kastner, M., U/Th-dating living and fossil corals from the central tropical Pacific: the initial Th correction and its uncertainties, *Earth and Planetary Science Letters*, 210(1-2)(2003), 91-103;
- Cobb, K.M., Charles, C.D., **Cheng, H.**, Edwards, R.L., El Niño/Southern Oscillation and tropical Pacific climate during the last millennium, *Nature*, 424(2003), 271-276;
- Cutler, K.B., Edwards, R. L., Taylor, F.W., **Cheng, H.**, Adkins, J., Gallup, C.D., Cutler, P.M., Burr, G.S., Bloom, A.L., Rapid sea-level fall and deep-ocean temperature change since the last interglacial period, *Earth and Planetary Science Letters*, 206(3-4)(2003), 253-271;
- Edwards, R.L., Gallup, C.D., **Cheng, H.**, Uranium-series Dating of Marine and Lacustrine Carbonates, *Reviews in Mineralogy and Geochemistry*, 52(1)(2003), 363-405;
- Hou, J.Z., Tan, M., **Cheng, H.**, Liu, T.S., Stable isotope records of plant cover change and monsoon variation in the past 2200 years: evidence from laminated stalagmites in Beijing, China, *Boreas*, 32(2)(2003), 304-313;
- Kong, X.G., Wang, Y.J., Wu, J.Y., **Cheng, H.**, A continuous 3000-year precipitation record of ENSO variability during LGM from a stalagmite in Nanjing, *Chinese Science Bulletin*, 48(5)(2003), 480-484;

- Reagan, M.K., Sims, K.W.W., Erich, J., Thomas, R.B., **Cheng, H.**, Edwards, R.L., Layne, G., Ball, L., Time-scales of Differentiation from Mafic Parents to Rhyolite in North American Continental Arcs, *Journal of Petrology*, 44(9)(2003), 1703-1726;
- Shen, C.C., **Cheng, H.**, Edwards, R.L., Moran, S.B., Edmonds, H.N., Hoff, J.A., Thomas, R.B., Measurement of Attogram Quantities of ^{231}Pa in Dissolved and Particulate Fractions of Seawater by Isotope Dilution Thermal Ionization Mass Spectroscopy, *Analytical Chemistry*, 75(5)(2003), 1075-1079;
- 程海**, 艾思本, 汪永进, 南京直立人的 U/Th 和 U/Pa 年代, 高校地质学报, 9(4)(2003), 667-677.
- 孔兴功, 汪永进, 吴江滢, **Cheng, H.**, 末次盛冰期连续 3ka 南京降水记录中 ENSO 周期, 科学通报, 48(3)(2003), 277-281;
- 林玉石, 张美良, **程海**, 袁道先, 覃嘉铭, 王兆荣, 冉景丞, 贵州荔波第四纪晚近期石笋地质年表与气候事件, 地学前缘, 10(2)(2003), 341-350;
- 张美良, 林玉石, 覃嘉铭, 章程, 涂林玲, **程海**, 黔南七星洞石笋古气候变化记录及末次间冰期终止点的确定, 沉积学报, 21(3)(2003), 473-481;
- 张美良, 袁道先, 林玉石, 覃嘉铭, 章程, **程海**, 桂林响水洞 6.00 ka BP 以来石笋高分辨率的气候记录, 地球学报, 24(5)(2003), 439-444;

2002

- Adkins, J.F., Griffin, S., Kashgarian, M., **Cheng, H.**, Druffel, E.R.M., Boyle, E.A., Edwards, R. L., Shen, C.C., Radiocarbon Dating of Deep-Sea Corals, *Radiocarbon*, 44(2)(2002), 567-580;
- Gallup, C.D., **Cheng, H.**, Taylor, F.W., Edwards, R.L., Direct Determination of the Timing of Sea Level Change During Termination II, *Science*, 295(5553)(2002), 310-313;
- Kuang, R.Y., Wang, Y.J., Zhang, X.G., **Cheng, H.**, Implications for soil environment from uranium isotopes of stalagmites, *Chinese Science Bulletin*, 47(19)(2002), 1653-1658;
- Shen, C.C., Edwards, R.L., **Cheng, H.**, Dorale, J.A., Thomas, R.B., Bradley Moran, S., Weinstein, S.E., Edmonds, H.N., Uranium and thorium isotopic and concentration measurements by magnetic sector inductively coupled plasma mass spectrometry, *Chemical Geology*, 185(3-4)(2004), 165-178;
- Thomas, R.B., Hirschmann, M.M., **Cheng, H.**, Reagan, M.K., Edwards, R.L., ($^{231}\text{Pa}/^{235}\text{U}$)-($^{230}\text{Th}/^{238}\text{U}$) of young mafic volcanic rocks from Nicaragua and Costa Rica and the influence of flux melting on U-series systematics of arc lavas, *Geochimica et Cosmochimica Acta*, 66(24)(2002), 4287-4309;
- Wang, Y.J., Wu, J. Y., Liu, D.B., Cai, Y.J., **Cheng, H.**, A quick cooling event of the East Asian monsoon responding to Heinrich Event 1: Evidence from stalagmite $\delta^{18}\text{O}$ records, *Science in China Series D: Earth Sciences*, 45(1)(2002), 88-96;
- Wu, J.Y., Wang, Y.J., **Cheng, H.**, Chen, J., A high-resolution stalagmite O-C isotope record from Nanjing and its rapid response to climatic events, *Chinese Science Bulletin*, 47(2)(2002), 139-142;
- 程海**, 铀系年代学新进展—ICP-MS ^{230}Th 测年, 第四纪研究, 22(3)(2002), 292-292;
- 况润元, 汪永进, 张向华, **程海**, 石笋铀同位素对土壤环境的影响, 47(13)(2002), 1022-1026;
- 石丽, 金幸生, **程海**, 沈冠军, 浙江桐庐人类头骨的铀系年代, 人类学学报, 21(4)(2002), 323-324;
- 谭明, 侯居峙, **程海**, 定量重建气候历史的石笋年层方法, 第四纪研究, 22(3)(2002), 209-219;
- 汪永进, 吴江滢, 刘殿兵, 吴金全, 蔡演军, **程海**, 石笋记录的东亚季风气候 H₁ 事件突变性特征, 中国科学 (D 辑), 32(3)(2002), 227-233;
- 张美良, 林玉石, 覃嘉铭, **程海**, 黔南洞穴石笋古气候变化记录及终止点II的确定, 中国科学 (D 辑), 32(11)(2002), 942-950;

2001

- Musgrove, M.L., Banner, J.L., Mack, L.E., Combs, D.M., James, E.W., **Cheng, H.**, Edwards, R.L., Geochronology of Late Pleistocene to Holocene speleothems from Central Texas: Implications for regional paleoclimate, *Geological Society of America Bulletin*, 113(12)(2001), 1532-1543;
- Shen, G.J., Ku, T.L., **Cheng, H.**, Edwards, R.L., Yuan, Z.X., Wang, Q., High-precision U-series Dating of Locality 1 at Zhoukoudian, China, *Journal of Human Evolution*, 41(6)(2001), 679-688;
- Wang, Y.J., **Cheng, H.**, Edwards, R.L., An, Z.S., Wu, J.Y., Shen, C.C., Dorale, J.A., A high-resolution absolute-dated late Pleistocene monsoon record from Hulu Cave, China, *Science*, 294(5550)(2001), 2345-2348;
- 侯居峙, 谭明, **程海**, Edwards, R.L., 郑伟, 沈凛梅, 张军, 本溪水洞石笋微层年代学初步研究, 中国科学 (D 辑), 31(5)(2001), 387-392;
- 吴江滢, 汪永进, **程海**, 陈骏, 南京汤山石笋高分辨率氧-碳同位素记录对气候事件的快速响应, 科学通报, 46(15)(2001), 1307-1311;

2000

- Asmerom, Y., **Cheng, H.**, Thomas, R.B., Hirschmann, M., Edwards, R.L., Melting of the lithospheric mantle inferred from protactinium-thorium-uranium isotope data, *Nature*, 406(2000), 293-296;
- Cheng, H.**, Edwards, R.L., Hoff, J., Gallup, C.D., Richards, D.A., Asmerom, Y., The half-life of uranium-234 and thorium-230, *Chemical Geology*, 169(1-2)(2000), 17-33;
- Cheng, H.**, Adkins, J., Edwards, R.L., Boyle, E.A., U-Th dating of deep-sea corals, *Geochimica et Cosmochimica Acta*, 64(14)(2000), 2401-2416;
- Walter, R.C., Buffler, R.T., Bruggemann, J.H., Guillaume, M.M.M., Berhe, S.M., Negassi, B., Libsekal, Y., **Cheng, H.**, Edwards, R.L., von Cosel, R., Neraudeau, D., Gagnon, M., Yemane, T., Early human occupation of the Red Sea coast of Eritrea during the last interglacial, *Nature*, 405(2000), 65-69;
- 李红春, 顾德隆, Paulsen, D., 王非, 陈文寄, 尹功明, **程海**, Edwards, R.L., 陕南石笋稳定同位素记录中的古气候和古季风信息, 地震地质, 22(B12)(2000), 63-78;
- 谭明, **程海**, Edwards, R.L., 侯居峙, 刘东生, 甚年轻石笋的 $\text{TIMS-}^{230}\text{Th}$ 定年及其年层确定, 第四纪研究, 20(4)(2000), 391-391;

1999

- Hearty, P., Kindler, P., **Cheng, H.**, Edwards, R.L., A+20 m middle Pleistocene sea-level highstand (Bermuda and the Bahamas) due to partial collapse of Antarctic ice, *Geology*, 27(4)(1999), 375-378;
- Grant, L.B., Mueller, K.J., Gath, E.M., **Cheng, H.**, Edwards, R.L., Kennedy, G.L., Late Quaternary uplift and earthquake potential of the San Joaquin Hills, southern Los Angeles basin, California. *Geology*, 27(11)(1999), 1031-1034;
- Wang, Y.J., **Cheng, H.**, Lu, C.L., Xia, Y.F., Wu, J.Y., Chen, J., TIMS U-series ages of speleothems from the Tangshan caves, Nanjing, *Chinese Science Bulletin*, 44(21)(1999), 1987-1991;
- 汪永进, **Cheng, H.**, 陆从伦, 夏应菲, 吴江滢, 陈骏, 南京汤山碳酸盐沉积物的电离质谱铀系年代, 科学通报, 44(14)(1999), 1548-1551;
- 周春林, 汪永进, **程海**, 刘泽纯, 论南京直立人化石的年代, 人类学学报, 18(4)(1999), 255-262;

1998

- Adkins, J.F., **Cheng, H.**, Boyle, E.A., Druffel, E.R.M., Edwards, R.L., Deep-sea coral evidence for rapid change in ventilation of the deep North Atlantic 15400 years ago, *Science*, 280(5664)(1998), 725-728;
- Cheng, H.**, Edwards, R.L., Murrell, M.T., Benjamin, T.M., Uranium-thorium-protactinium dating systematics, *Geochimica et Cosmochimica Acta*, 62(21-22)(1998), 3437-3452;
- Cheng, H.**, Edwards, R.L., Wang, Y.J., U/Th and U/Pa dating of nanjing man and peking man, *Chinese Science Bulletin*, 43(1 Supplement)(1998), 26-26;

1997

Chung, S.L., **Cheng, H.**, Jahn, B.M., O'Reilly, S.Y., Zhu, B.Q., Major and trace element, and Sr-Nd isotope constraints on the origin of Paleogene volcanism in South China prior to the South China Sea opening, *Lithos*, 40(2-4)(1997), 203-220;

Edwards, R.L., **Cheng, H.**, Murrell, M.T., Goldstein, S.J., Protactinium-231 Dating of Carbonates by Thermal Ionization Mass Spectrometry: Implications for Quaternary Climate Change, *Science*, 276(5313)(1997), 782-786;

Before 1997

Chen, J.K., Taylor, F.W., Edwards, R.L., **Cheng, H.**, Burr, G.S., Recent emerged reef terraces of the Yenkahe resurgent block, Tanna, Vanuatu: implications for volcanic, landslide and tsunami hazards, *The Journal of Geology*, 103(5)(1995), 577-590;

程海, 浙西北晚元古代岛弧火山岩的地球化学研究, *地球化学*, 22(1)(1993):18-27;

周新华, 程海, 陈海泓, Meier, M., 湖南黔阳镁铁-超镁铁质岩 Sm-Nd 年龄测定, *地质科学*, 27(4)(1992), 391-393;

Nohda, S., **Cheng, H.**, Tatsumi, Y., Geochemical stratification in the upper mantle beneath NE China, *Geophysical Research Letters*, 18(1991), 97-100;

程海, 胡世玲, 唐朝辉, 赣东北铁砂街变质混杂岩块的同位素年代, *中国区域地质*, (2)(1991), 151-154;

程海, 浙西北晚元古代早期碰撞造山带的初步研究, *地质论评*, 37(3)(1991), 203-213;

从柏林, 程海, 80年代中国新生代火山岩的研究, *科学通报*, 35(23)(1990), 1761-1767;

程海, 与钨矿有关的两类花岗岩的元素演化趋势, *湖南地质*, 7(2)(1988), 43-52;

Books

Speed, R.C., **Cheng, H.**, Emergence and Evolution of Barbados, *The Geological Society of America*, 2021, America;

Edwards, R.L., **Cheng, H.**, Cutler, K.B., Gallup, C.D., Geochemical Evidence for Quaternary Sea-level Changes, *Treatise on Geochemistry*, 2013, America;