

Curriculum Vitae

Chenzhou CUI



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Personal Information:

Gender: Male

Date of Birth: February 27, 1976

Family Status: Married, two children

Nationality: P. R. of China

Current Position:

Principle Investigator, Astroinformatics Research Group (Virtual Observatory), NAOC

Deputy Director, National Astronomical Data Center, NAOC/MOST

Education:

Ph.D. in Astronomical Techniques and Methods, NAOC, Beijing, 2003.6

Concentrations: Virtual Observatory, Grid Technology, Web Services, Scientific Databases

Thesis: System Design of Chinese Virtual Observatory

Advisor: Prof. Yongheng ZHAO (yzhao@nao.cas.cn)

M.Sc. in Astrophysics, Beijing Astronomical Observatory, Beijing, 2000.6

Concentrations: Astronomical Databases, Galactic Abundances

Thesis: Setup of SAGE Astronomical Database and Statistical Analyses of Galactic Abundances

Advisor: Prof. Gang ZHAO (gzhao@nao.cas.cn)

B.S.E. in Mechanical Engineering, Hebei University of Technology, Tianjin, 1997.6

Research Interests:

Astro-Informatics, Virtual Observatory, Data-Driven Education and Public Outreach, Cloud Computing, Big Data, Grid Technology, Astronomical Databases, Astronomical Data Center, Data Processing and Analysis, Galactic Structure and Evolution, Stellar Abundance

Working Experiences:

- Principle Investigator, Astroinformatics Research Group (Virtual Observatory), NAOC, 2019.8 –
- Deputy Director, National Astronomical Data Center, NAOC/MOST, 2019.8 -
- Director (associated professor and then professor), Center of Information and Computing, NAOC, 2009.1- 2019.7
- Lead (associated professor), Center of Information and Computing, NAOC, 2006.1-2008.12
- Researcher (lecture and then associate professor), LAMOST, NAOC, 2003.7 – 2005.12

Visiting Experiences:

- Adjunct Professor, Tianjin University, 2015.3-
- Visiting Scientist, Johns Hopkins University, USA, 2007.11.26-2007.12.24
- Lecture, International School for Young Astronomers 2007, International Astronomical Union (IAU), Malaysia, 2007.3.5-2007.3.23
- Invited Professor, Strasbourg astronomical Data Center (CDS), Strasbourg Astronomical Observatory, France, 2005.6-7

Current Professional Functions:

- Principle Investigator, Chinese Virtual Observatory. 2002 -
- Principle Investigator, Chinese Astronomical Data Center, 2011 –
- Director, Informatization Working Committee, Chinese Astronomical Society. 2018.10 -
- President, Commission B2 “Data and Documentation”, International Astronomical Union (IAU). 2021.08 –
- Editor, Astronomy and Computing, Elsevier. 2021.12 -
- Member, Steering Committee, Division B “Facilities, Technologies and Data Science”, IAU. 2021. 08 -
- Member, Organizing Committee, Commission B2 “Data and Documentation”, IAU, 2015 –
- Executive Member, International Virtual Observatory Alliance (IVOA). 2002 –
- Editor, IVOA Newsletter. 2011.4 –
- Member, IVOA Standing Committee on Science Priorities. 2018. 10 –
- Advisory Council Member, International Astroinformatics Association, 2019 -
- International Partnerships Lead, Worldwide Telescope (WWT) Advisory Board, American Astronomical Society, 2016 -
- Co-Director, NAOC-Alibaba Cloud Astronomical Big Data Joint Research Center. 2017 -
- Co-Director, NAOC-TJU Joint Laboratory in Astroinformatics, 2008 -
- Lead, Data Management Subsystem, LAMOST. 2002 –
- Member, Expert Committee, Astronomical Research Center, Shanghai Astronomy Museum, 2020 - 2022
- Editorial Member, China Terminology, 2020 -
- Scientific Editor, Astronomical Research & Technology - Publications of National Astronomical Observatories of China, 2008 –
- Scientific Editor, China Scientific Data, 2016 -
- Scientific Editor, Big Data Research, 2016 -
- Task Group Member, Committee on Data for Science and Technology (CODATA),

- International Council for Science, 2011.4 -
- Interest Group Member, Research Data Alliance (RDA), 2015 -
- Member, New Terms Committee, China National Committee for Terms in Sciences and Technologies, 2009.4 -

Past Professional Functions:

- Vice-President, Commission B2 Data and Documentation, IAU. 2018.09 – 2021.08
- Chair, Data Driven Astronomy Education and Public Outreach (DAEPO) Working Group, IAU. 2017 – 2021.08
- Chair, International Virtual Observatory Alliance (IVOA). 2019.10 – 2021.05
- Chair, IVOA Education Interest Group. 2017.05 – 2021.05
- Deputy Chair, International Virtual Observatory Alliance. 2018.6 – 2019.9
- Director (Chief Information Officer), Center of Information and Computing, NAOC, 2009.1-2019.8
- Academic Advisors, Worldwide Telescope Academic Program, Microsoft Research. 2009 - 2015
- Deputy Director, Astronomical Terms Committee, Chinese Astronomical Society, 2007 - 2018
- Deputy Director, Public Outreach Committee, Chinese Astronomical Society, 2015 - 2018
- Council Member, Beijing Astronomical Society, 2005 – 2013; 2017.11 -
- Working Group Member, IAU Commission 5. 2008 -2015
- Chair, Youth Working Committee, Beijing Astronomical Society, 2010 - 2013
- Project Manager, World Data Center for Astronomy. 2001 – 2011
- Executive Member, Federation for Internet-based Public Science Education, CAS. 2005 - 2009
- Staff, Network Administrator, LAMOST. 2000 - 2005

Professional Societies:

- International Astronomy Union (IAU), 2009.8-
- Chinese Astronomical Society, 2000-
- Beijing Astronomical Society, 2000-
- Chinese Geophysical Society, 2013.9 -

Personal Honors and Awards:

- Most Valuable Professional, Alibaba Cloud, Hangzhou, 2020
- Outstanding Contribution Award of Astronomy, Chinese Astronomical Society, Nanjing, 2012
- Advanced Individual, China National Committee for Terms in Sciences and Technologies, Beijing, 2010
- Nova in Science & Technology, Beijing Municipal Science & Technology Commission, Beijing, 2007
- Astronomical Education Award, Chinese Astronomical Society, Shanghai, 2006
- Director Scholarship, Chinese Academy of Science, Beijing, 2004
- Astronomical Education Award, Beijing Astronomical Society, Beijing, 2002

- Graduate Scholarship, Chinese Academy of Sciences, Beijing, 2002
- Yongling LIU Scholarship, Chinese Academy of Sciences, Beijing, 2000

Achievement Honors and Awards:

- “Research, Development and Application of an Automated Analysis and Distribution System for Astronomical Big Data”, Second Prize of Science and Technology Progress Award, Beijing Municipal People’s Government, Beijing, 2021
- “Basic Software and System for the Chinese Virtual Observatory”, Second Prize of Science and Technology Progress Award, Tianjin Municipal People’s Government, Tianjin, 2020
- “Observation Project Management System for Five-hundred-meter Aperture Spherical radio Telescope (FAST)”, e-Science Excellent Case in 2020, Chinese Academy of Sciences, Beijing, 2021
- “Data Research System for Large Sky Area Multi-Object Fiber Spectroscopic Telescope (LAMOST)”, e-Science Excellent Case in 2018, Chinese Academy of Sciences, Beijing, 2019
- "WWT Planetarium based on the big data of Virtual Observatory", Nomination Award of the 2018 Science and Technology Museum Development Award, Foundation for the Development of Science and Technology Museums in China (FDSTMC), Beijing, 2018
- “Virtual Observatory: AstroCloud”, e-Science Excellent Case, Chinese Academy of Sciences, Beijing, 2015
- “Virtual Observatory”, e-Science Excellent Case, Chinese Academy of Sciences, Beijing, 2010
- “CosmoStation”, Consolation prize of "Excellent EPO Website Contest", Internet Society of China, Beijing, 2005

Skills:

Java, XML, PHP, SQL, C, FORTRAN, HTML, JavaScript, Shell/UNIX
Grid and Web Services (Globus Toolkit, OGSA), Cloud Computing
Database Administration (MySQL, miniSQL, Oracle)
System Administration (Solaris, Linux, Windows)
Network Administration
Data Mining, Big Data

Languages:

Fluent in English

Hobbies: Photography, Driving

Publication List

Published as first author or corresponding author:

1. "Statistical Analysis of Fe Abundance Gradients in the Galaxy", **Chenzhou CUI**, Gang ZHAO, Yongheng ZHAO & Jianrong SHI. 2001, Science in China (Series A), 44 (1), 120-127
2. "Virtual Observatory and Grids", **Chenzhou CUI** & Yongheng ZHAO. 2002, in: Jiuling SUN & Huizhong SHI (eds.), *Scientific Data: Management and Share*, 272-290. Beijing: Chinese Science and Technology Press
3. "Technology progress of Virtual Observatory ", **Chenzhou CUI**, Yongheng ZHAO, Gang ZHAO & Yanxia ZHANG. 2002, PABei, 20 (4), 302-311. 2002PABei..20..302C
4. "Abundance Gradients in the Galactic Disk", **Chenzhou CUI**, Yuqin CHEN, Gang ZHAO & Yongheng ZHAO. 2003, Science in China (Series G), 46 (1), 52-61
5. "Architecture of Chinese Virtual Observatory", **Chenzhou Cui**, Yongheng Zhao. 2004, Astronomical Research and Technology, 1 (2), 140-151. 2004PNAOC...1..140C
6. "Research and Development Strategy and Focuses of Chinese Virtual Observatory ", **Chenzhou Cui**, Yongheng Zhao. 2004, Astronomical Research and Technology, 1 (3), 203-209. 2004PNAOC...1..203C
7. "VOFilter, Bridging Virtual Observatory and Industrial Office Applications", **Chenzhou Cui**, Markus Dolensky, Peter Quinn, Yong-heng Zhao, Françoise Genova. 2006, ChJAA, 6 (3), 379-386. 2006ChJAA...6..379C
8. "SkyMouse: A smart interface for astronomical on-line resources and services", **Chenzhou CUI**, Hua-Ping SUN, Yong-Heng ZHAO, Yu LUO & Da-Zhi QI. 2008, Chinese Science Bulletin, 53 (10), 1479-1483
9. "Search and Location of FITS Data Files", **Chen-Zhou CUI**, Wen LI, Ce YU, Zhen XU & Yong-Heng ZHAO. 2008, PNAOC, 5 (2), 116-123
10. "VIRTUAL OBSERVATORY: TOOLS AND TECHNIQUES FOR ASTRONOMICAL RESEARCH", translated by **Chen-Zhou CUI**, et al., 2010, First Edition, Beijing, Chinese Science and Technology Press. Original: "THE NATIONAL VIRTUAL OBSERVATORY: TOOLS AND TECHNIQUES FOR ASTRONOMICAL RESEARCH", Matthew J. Graham, et al., 2008, First Edition, ASP
11. "A Historical Sky Survey Project, SDSS", **Chen-Zhou CUI**. 2010, Scientific Data Communication. 1, 17-20
12. "Taking Advantages of Advanced Information Technologies for New Academic Glossary Item Collection", **Chen-Zhou CUI**. 2010, China Terminology, 3, 19-21
13. "Design and Implementation of a New Version of the Website 'Glossary of Astronomical Terms'", **Chen-Zhou CUI**, Heng YU, Yu-Lin BIAN. 2011, PNAOC, 8(2): 178-184
14. "Enhanced management of personal astronomical data with FITSManager", **Chen-Zhou CUI**, Dong-Wei FAN, Yong-Heng ZHAO, Ajit KEMBHAVI, Bo-Liang HE, Zi-Huang CAO, Jian LI, Deoyani NANDREKAR. 2011, New Astronomy, 17 (2012) 167-174. DOI: 10.1016/j.newast.2011.06.009
15. "Robotic Autonomous Observatory Network Review", **CUI Chen-zhou**, LI Jian, CAI Xu, FAN Yu-feng, WANG Feng, CAO Zi-huang, SU LI-ying, FAN Dong-wei, QIAO Cui-lan,

- HE Bo-liang, LI Chang-hua, ZHAO Yong-heng, CHEN Yue, WANG Chuan-jun, XIN Yu-xin, BAI Jin-ming, JI Kai-fan. 2013, PABei, 31 (2): 140-158
16. "Virtual Observatory, an e-Science Environment for Astronomy", **CUI Chen-zhou**, XUE Yan-jie, LI Jian, ZHAO Hong-heng, LIU Liang, CHEN Xiao. 2013, Bulletin of Chinese Academy of Sciences, 28 (4): 511-518
 17. "Astronomy research in big-data era (in Chinese)", **Cui Chen-zhou**, Yu Ce, Xiao Jian, et al. Chin Sci Bull, 2015, 60: 445–449. DOI: 10.1360/N972014-00839
 18. "IWOA HiPS Implementation in the Framework of WorldWide Telescope", Yunfei XU, **Chenzhou CUI**, Dongwei FAN, Shanshan LI, Changhua LI, Jun HAN, Linying MI, Boliang HE, Hanxi YANG, Yihan TAO, Sisi YANG, Lan HE. 2020, Astronomy and Computing (ASCOM). In print. <https://arxiv.org/abs/2003.02029>. DOI: 10.1016/j.ascom.2020.100380
 19. "Towards an Astronomical Science Platform: Experiences and Lessons Learned from Chinese Virtual Observatory ", **Chenzhou Cui**, Yihan Tao, Changhua Li, Dongwei Fan, Jian Xiao, Boliang, He, Shanshan Li, Ce Yu, Linying Mi, Yunfei Xu, Jun Han, Sisi Yang, Yongheng Zhao, Yanjie Xue, Jinxin Hao, Liang Liu, Xiao Chen, Junyi Chen, Hailong Zhang. 2020, Astronomy and Computing (ASCOM). Volume 32, July 2020, 100392. DOI: 10.1016/j.ascom.2020.100392. <https://arxiv.org/abs/2005.10501>.
 20. "GWOPS: A VO-technology Driven Tool to Search for the Electromagnetic Counterpart of Gravitational Wave Event ", Yunfei Xu, Dong Xu, **Chenzhou Cui**, Dongwei Fan, Zipei Zhu, Bangyao Yu, Changhua Li, Jun Han, Linying Mi, Shanshan Li, Boliang He, Yihan Tao, Hanxi Yang, and Sisi Yang. Publications of the Astronomical Society of the Pacific (PASP), 2020, Volume 132, Number 1016. DOI: 10.1088/1538-3873/aba69f. <https://iopscience.iop.org/article/10.1088/1538-3873/aba69f>.
 21. "Identification of BASS DR3 Sources as Stars, Galaxies and Quasars by XGBoost", Changhua Li; Yanxia Zhang; **Cui Chenzhou**; Dongwei Fan; Yongheng Zhao; Xue-Bing Wu; Boliang He; Yunfei Xu; Shanshan Li; Jun Han; Yihan Tao; Linying Mi; Hanxi Yang; Sisi Yang. Monthly Notices of the Royal Astronomical Society (MNRAS), 2021, Vol 506 (2):1651-1664. DOI: [10.1093/mnras/stab1650](https://doi.org/10.1093/mnras/stab1650).
 22. "Photometric Redshift Estimation of BASS DR3 Quasars by Machine Learning", Changhua Li; Yanxia Zhang; **Cui Chenzhou**; Dongwei Fan; Yongheng Zhao; Xue-Bing Wu; Jing-Yi Zhang; Jun Han; Yunfei Xu; Yihan Tao; Shanshan Li; Bo-Liang He. Monthly Notices of the Royal Astronomical Society (MNRAS), 2021, in print

Published as second author:

1. "Astronomy education resource gateway design based on the Virtual Observatory", Gaochao LIU, **Chenzhou CUI**, Xiaoping ZHENG, Yongheng ZHAO. 2004, PNAOC, 1 (2), 133-139. 2004PNAOC...1..133L
2. "Integrating legacy software toolkits into China-VO system", Wang Xiao-Qian, **Cui Chen-Zhou**, Zhao Yong-Heng. 2005, PNAOC, 2: 293. 2005PNAOC...2..293W
3. "Chemical Evolving Research of the Galaxy Under Grid Environment", Luo Ze, **Cui Chen-Zhou**, Nan Kai, Yan Bao-Ping. 2005, Journal of Software, 16(8), 1465-1473
4. "Grid-based Statistical Analysis of Fe Abundances Gradients in Galaxy", Luo Ze, **Cui Chen-Zhou**, Nan Kai, Yan Bao-Ping. 2005, Computer Engineering, 31(3), 45-47

5. "Construction of the Sky Node system for Chinese Virtual Observatory", Liu Bo, **Cui Chen-Zhou**, Zhao Yong-Heng. 2006, PNAOC, 3(4): 355-364
6. "Resource Information Management in Chinese Virtual Observatory", LI Chang-Hua, **CUI Chen-Zhou**, LI Lian & ZHAO Yong-Heng. 2008, PNAOC, 5 (2): 124-129
7. "Uniform Access to Astronomical Web Services and its Implementation in SkyMouse", Hua-Ping SUN, **Chen-Zhou CUI** and Yong-Heng ZHAO. 2008, PNAOC, 5 (2): 130-136
8. "Design and Implementation of a FITS File Manager", Dong-Wei FAN, **Chen-Zhou CUI**, Yong-Heng ZHAO. 2011, PNAOC, 8(3): 306-314
9. "Design and Implementation of A Shared Memory Scheduler Based GPU Resource", Chang-Hua LI, **Chen-Zhou CUI**, Peter Berczik, Sui-Jian XUE, Rainer Spurzem. 2012, e-Science Technology and Application, 3 (5): 29-33
10. "Review and Prospect of the Astronomical Database", LI Jian, **CUI Chen-zhou**, HE Bo-liang, ZHAO Yong-heng, CAO Zi-huang, FAN Dong-wei, LI Chang-hua, CHEN Yue. 2013, Progress in Astronomy (PABei), 31 (1): 1-16
11. "The Secondary Development based on Remote Telescope System – 2nd version", Li Jian, **Cui Chenzhou**, Zhao Yongheng, CAO Zihuang, Kubánek Petr. 2013, PNAOC, 10 (3): 264-272
12. "Practice and research on astronomy teaching and learning based on real data", Cui-Lan QIAO, **Chen-Zhou CUI**, Xiao-Ping ZHENG, Qin WANG, Yan XU. 2013, College Physics, 32(6):48-51
13. "Applications of IPv6 technology in China-VO astronomical cloud computing environment", Chang-Hua LI, **Chen-Zhou CUI**, Bo-Liang HE, Dong-Wei FAN, Ling-Ying MI, Shan-Shan LI, Ya ZHANG, Peng-Fei XU, Wen-Ming SONG. 2016, Journal of Computer Applications, 36 (Suppl. 1): 25-28
14. "Big data and paradigm shift for astronomy in the 21st century". Yanxia ZHANG, **Chenzhou CUI**, Yongheng ZHAO. 2016, Big Data Research, vol 6: 65-74. doi: 10.11959/j.issn.2096-0271.2016067
15. "Integration and Sharing of Chinese Traditional Star Resources with WWT". Wang-Hui WAN, **Chen-Zhou CUI**, Cui-Lan QIAO, Dong-Wei FAN, Lin-Ying MI, Rui QI, Hao-Yi WAN. 2018. PNAOC, Vol. 15(02): 240-244. DOI: 10.14005/j.cnki.issn1672-7673.20180103.013
16. "The Application of Deep Learning in Astronomy". TAO Yi-han, **CUI Chen-zhou**, ZHANG Yan-xia, XU Yun-fei, FAN Dong-wei, HAN Xu, HAN Jun, LI Chang-hua, HE Bo-liang, LI Shan-shan, MI Lin-ying, YANG Han-xi, YANG Si-si. 2020. Progress in Astronomy, Vol. 38 (2): 168-188. DOI: 10.3969/j.issn.1000-8349.2020.02.04

Published as third or later co-author:

1. "Data Mining and Knowledge Discovery in Database of Astronomy", Yanxia ZHANG, Yongheng ZHAO & **Chenzhou CUI**. 2002, PABei, 20 (4), 312-323. 2002PABei..20..312Z
2. "Data Access Service of China-VO ", Jian Sang, Yongheng Zhao, **Chenzhou Cui**. 2004, Astronomical Research and Technology, 1 (3), 216-228. 2004PNAOC...1..216C

3. "Design and implementation of China-VO Ephemeris computing service based on web services". TIAN Hai-Jun, ZHAO Yong-Heng, **CUI Chen-Zhou** & ZHENG Xiao-Ping. 2007, PNAOC, 4 (3): 283-287
4. "The Design and Implement of VO- DAS Registry". Yong LU, Chao LIU, **Chen-Zhou CUI**, Yong-Heng ZHAO. 2007, PNAOC, 4(4): 355-359
5. "Integrated Access of Distributed and Heterogeneous Astronomical Data Resources". Chao LIU, Hai-Jun TIAN, Dan GAO, Yang YANG, Yong LU, **Chen-Zhou CUI** and Yong-Heng ZHAO. 2008, PNAOC, 5 (2): 145-155
6. "The Design and Implement of Client System of Virtual Observatory Data Access Service", Yang YANG, Chao LIU, Hai-Jun TIAN, **Chen-Zhou CUI** & Yong-Heng ZHAO. 2008, PNAOC, 5 (3): 234-240
7. "Parallel massive data oriented astronomical cross-match", Qing ZHAO, Ji-Zhou SUN, Ce YU, **Chen-Zhou CUI**, Jian XIAO. 2010, Journal of Computer Applications, 30 (8), 2056-2059, 2206
8. "Distributed astronomical cross-match based on MapReduce model", Qing ZHAO, Ji-Zhou SUN, Jian XIAO, Ce YU, **Chen-Zhou CUI**, Xu LIU, AoYUAN. 2010, Application Research of Computers, 27 (9), 3322-3325
9. "Design and Implementation of Job Scheduling of Virtual Observatory Data Access System (VO-DAS)", TIAN Hai-jun, LIU Chao, GAO Dan, YANG Yang, LU Yong, **CUI Chen-zhou**, ZHAO Yong-heng, ZHENG Xiao-ping. 2011, PNAOC, 8(1):112
10. "Improved Parallel Processing Method for High-Performance Large-Scale Astronomical Cross-Match", Qing ZHAO, Ji-Zhou SUN, Ce YU, Jian XIAO, **Chen-Zhou CUI**, Xiao ZHANG. Transactions of Tianjin University, v 17, n 1, p 62-67, February 2011
11. "Constructing Data Nodes of the China-VO with the MapReduce", SONG Xuan, ZHOU Wei, HAN Ji-Zhong, **CUI Chen-Zhou**. 2012, PNAOC, 9(2):150-156
12. "Efficient Catalog Matching with Dropout Detection", Fan Dongwei, Budavári Tamás, Szalay Alexander S., **Cui Chenzhou**, Zhao Yongheng. 2013, PASP, 125 (924): 218-223
13. "Overview of Current Status and Development Strategies in China's Astronomical Facilities and Related Technologies", Xue Yanjie, Xue Suijian, Zhu Ming, **Cui Chenzhou**. 2014, Bulletin of Chinese Academy of Sciences, 29 (3): 368 -375
14. "Design and Implementation of the HXMT Data Retrieval /Publishing System Based on the Virtual Observatory", JIANG Xu, TONG Ji-Zhou, **CUI Chen-Zhou**, ZOU Zi-Ming. 2014, PNAOC, 11(4):378-387
15. "The first data release (DR1) of the LAMOST regular survey", A-Li Luo, Yong-Heng Zhao, Gang Zhao, ..., **Chen-Zhou Cui**, et al. 2015, RAA, 15 (8): 1095-1124
16. "An Overview of the BOOTES-4 at the Lijiang Observatory", Fan Yu-Feng, Xin Yu-Xin, Bai Jin-Ming, Wang Chuan-Jun, Yi Wei-Min, **Cui Chen-Zhou**, Castro-Tirado Alberto Javier, Cunniffe Ronan, Lara-Gil Oscar, Kubanek Petr, Guziy Sergiy. 2015, PNAOC, 12(1):78-88
17. "An English-Chinese Dictionary of Astronomy", Li Jing, Yu Heng, **Cui Chenzhou**. 2015, China Science and Technology Press, Beijing. ISBN 978-7-5046-6977-3/P·184
18. "An Open Experimental Platform of Astronomy Big Data Based on Cloud Computing". Jian Xiao, Chang-hua Li, Dong-wei Fan, Ce Yu, **Chen-zhou Cui**. 2016, Experimental Technology and Management, Vol 33 (12): 158-162. DOI: 10.16791/j.cnki.sjg.2016.12.039

19. "Astronomical Data Query and Release Review". Hailong Zhang, Xinchun Ye, Huijuan Li, Wang Jie, Wanqiong Wang, Tohtonur, Jun Nie, **Chenzhou Cui**, Liang Liu, Junyi Chen, Xiao Chen, Yansong Xue, Boliang He, Changhua Li, Qing Zhao, Jian Xiao, Dongwei Fan, Zihuang Cao, Shanshan Li, Linying Mi, Zherui Yang. 2016, PNAOC, vol 14 (2): 212-228. DOI: 10.14005/j.cnki.issn1672-7673.20160811.002
20. "Taurus High Performance Computing System of Xinjiang Astronomical Observatory". Hai-long Zhang, Xin-chen Ye, Jun Nie, Long-fei Chen, Tohtonur, Jie Wang, **Chenzhou Cui**, Changhua Li, Yan Zhu, Meng Zhang. 2017. PNAOC, Vol. 14(3):332-339. <http://kns.cnki.net/kcms/detail/53.1189.P.20171107.1559.002.html>. DOI : 10.14005/j.cnki.issn1672-7673.20171107.001
21. "Review on the Celestial Sphere Positioning of FITS Format Image Based on WCS and Research on General Visualization". Wen-Ming SONG, Dong-Wei FAN, Li-Ying SU, **Chen-Zhou CUI**. 2017, ACTA ASTRONOMICA SINICA, Vol. 58 (6): 52 1-17. DOI: 10.15940/j.cnki.0001-5245.2017.06.001
22. "AstroCloud: Astronomical education and scientific research informationization platform in big data era". Jian XIAO, Ce YU, **Chen-Zhou CUI**, Chang-Hua LI, Bo-Liang HE, Dong-Wei FAN, Liang LIU, Xiao CHEN, Hai-Long ZHANG, Chuan-Jun WANG. 2017. Experimental Technology and Management, Vol. 34 (10): 133-138. DOI: 10.16791/j.cnki.sjg.2017.10.033
23. "Research on Multi-Projector Image Blending for Full Dome Screen in Digital Planetariums". Ya ZHANG, Dong-Wei FAN, Li-Ying SU, Peng-Fei XU, **Chen-Zhou CUI**, Wang-Hui WAN, Zheng LI, Yue CHEN, Bo-Liang HE, Xu HAN, Chang-Hua LI, Shan-Shan LI, Lin-Ying MI, Wen-Ming SONG, Jia-Wei WANG, Si-Si YANG. PANOC, Vol. 14 (1): 124-131. DOI:10.14005/j.cnki.issn1672-7673.20150928.009
24. "AAS WorldWide Telescope: Seamless, Cross-Platform Data Visualization Engine for Astronomy Research, Education, and Democratizing Data". Philip Rosenfield, Jonathan Fay, Ronald K Gilchrist, **Chenzhou Cui**, A. David Weigel, Thomas Robitaille, Oderah Justin Otor, and Alyssa Goodman. 2018. ApJS, Vol. 236 (1): 0-22. DOI: 10.3847/1538-4365/aab776
25. "Amateur public observatory I: The observatory and hardware integration system". Jun HAN, Chuan-Zhong WANG, Dong-Wei FAN, **Chen-Zhou CUI**, Shan-Shan LI, Lin-Ying MI, Zheng LI, Yun-Fei XU, Bo-Liang HE, Chang-Hua LI, Si-Si YANG. 2018. Astronomy and Computing, Vol. 25: 89-93. DOI: 10.1016/j.ascom.2018.09.002
26. "Expert Platform for the Spectral Inspection". Guo-Hong LEI, Yang XU, Chen-Hui NIU, Hai-Jun TIAN, Yan-Xia ZHANG, **Chen-Zhou CUI**, Yong-Heng ZHAO. 2018. PNAOC, Vol. 15 (2): 216-224. DOI: 10.14005/j.cnki.issn1672-7673.20180103.008
27. "Lightweight realization of multi-tenant system and its application in large-scale instrument and equipment sharing platform". Jian XIAO, Ce YU, **Chen-Zhou CUI**, Dong-Wei FAN, Chuan-Jun WANG, Ge ZHANG. 2018. Experimental Technology and Management, Vol. 35 (5): 146-150. DOI: 10.16791/j.cnki.sjg.2018.05.038
28. "Classification of all-sky camera data based on convolutional neural network". Shun CUI, Yun-Fei XU, Li-Ying SU, **Chen-Zhou CUI**, Dong-Wei FAN, Jun HAN, Chuan-Zhong WANG, Lei ZHANG. 2018. PNAOC,

- <http://kns.cnki.net/kcms/detail/53.1189.P.20181031.1453.004.html>. DOI : 10.14005/j.cnki.issn1672-7673.20181031.002
29. "Research on Spherical Distance Computation and Accuracy Comparison". Dong-Wei FAN, Bo-Liang HE, Chang-Hua LI, Jun HAN, Yun-Fei XU, **Chen-Zhou CUI**. 2018. PNAOC, <http://kns.cnki.net/kcms/detail/53.1189.P.20180523.1147.002.html>. DOI : 10.14005/j.cnki.issn1672-7673.20180523.001
 30. "A Sky Coverage Generation Algorithm for Large-scale Astronomical Data Based on Spark". Cong-Cong XIONG, Zu-Chen TIAN, Qing ZHAO, Kou FENG, **Chen-Zhou CUI**. 2018. Journal of Tianjin University of Science & Technology, Vol. 33(5): 63 ~ 67+78. DOI: 10.13364/j.issn.1672-6510.20170159
 31. "A multi-wavelength analysis of a collection of short-duration GRBs observed between 2012-2015". S. B. Pandey, Y. Hu, A. J. Castro-Tirado,..., **Chen-Zhou CUI**, etc. 2019. Accepted to MNRAS, 2019 February 19
 32. "Astronomical data fusion: recent progress and future prospects — a survey". Ce YU, Bing-Yao LI, Jian XIAO, Chao SUN, Shang-Jiang TANG, Chong-Ke BI, **Chen-Zhou CUI**, Dong-Wei FAN. 2019. Experimental Astronomy, Vol. 47: 359-380. DOI: 10.1007/s10686-019-09633-z
 33. "Overview of Online Visualization Technology of Massive Sky Survey Data". Lei ZHANG, Dong-Wei FAN, **Chen-Zhou CUI**, Bo-Liang HE, Yun-Fei XU, Shun CUI, Chuan-Zhong WANG. 2019. Progress in Astronomy, Vol. 37(2): 158-177. DOI: 10.3969/j.issn.1000-8349.2019.02.04
 34. "Design and Realization of Remote Observatory Power Integrated Control and Monitoring Module". Chuan-Zhong WANG, Li-Ying SU, Jun HAN, **Chen-Zhou CUI**, Xian-Hai WANG, Dong-Wei Fan. 2020. Astronomical Research & Technology, Vol. 17 (1): 104-110. DOI: 10.14005/j.cnki.issn1672-7673.20190613.002
 35. "Astronomical Massive Data Processing Technology". Feng Wang, Wen-Da Cao, Denis Bastieri, Jun-Hui Fan, and **Chen-Zhou Cui**. 2020. Advances in Astronomy, Volume 2020: 1-2. DOI: 10.1155/2020/6848935
 36. "A Redistribution Tool for Long-Term Archive of Astronomical Observation Data". Chao Sun, Ce Yu, **Chenzhou Cui**, Boliang He, Jian Xiao, Zhen Li, Shanjiang Tang and Jizhou Sun. 2020. Astronomy and Computing, 2020, Vol: 32. DOI: 10.1016/j.ascom.2020.100400

Proceedings:

1. "Classification of AGNs from Stars and Normal Galaxies by Support Vector Machines", Yanxia ZHANG, **Chenzhou CUI** & Yongheng ZHAO. 2002, In: Jean-Luc Starck & Fionn D. Murtagh (eds.), *Astronomical Data Analysis II*, Proc. of SPIE, 4847, 371-178. 2002SPIE.4847..371Z
2. "Grid Based Chinese Virtual Observatory System Design", **Chenzhou CUI**, Yongheng ZHAO. 2003, Large Telescopes and Virtual Observatory: Visions for the Future, 25th meeting of the IAU, Joint Discussion 8, 17 July 2003, Sydney, Australia. 2003IAUJD...8E..11.
3. "The Most Popular Astronomical Web Server in China", **Chenzhou CUI**, Yongheng ZHAO. 2003, Effective Teaching and Learning of Astronomy, 25th meeting of the IAU, Special Session 4, 24-25 July, 2003 in Sydney, Australia, meeting abstract. 2003IAUSS...4E..91.

4. "Integrating Existing Software Toolkits into VO System", **Chenzhou Cui**, Yongheng Zhao, Xiaoqian Wang, Jian Sang, Ze Luo. 2004, In: Optimizing Scientific Return for Astronomy through Information Technologies, edited by Peter J. Quinn, Alan Bridger, Proc. of SPIE Vol. 5493: 233-241 (SPIE, Bellingham, WA, 2004). doi: 10.1117/12.550970. 2004SPIE.5493..233C
5. "The International Virtual Observatory Alliance: recent technical developments and the road ahead", P.J. Quinn, D. Barners, I. Csabai, **C. Cui**, et al. 2004, In: Optimizing Scientific Return for Astronomy through Information Technologies, edited by Peter J. Quinn, Alan Bridger, Proc. of SPIE Vol. 5493: 233-241 (SPIE, Bellingham, WA, 2004). 2004SPIE.5493..137Q
6. "SkyMouse, An Integrated On-line Astronomical Information Access System", **Chenzhou CUI**, Huaping Sun, Yongheng Zhao. 2006, In: The Virtual Observatory in Action: New Science, New Technology, and Next Generation Facilities, 26th meeting of the IAU, Special Session 3, 17-18, 21-22 August, 2006 in Prague, Czech Republic, SPS3, #55. 2006IAUSS...3E..55C
7. "An astronomical data mining application framework for virtual observatory", Liu, C., Wang, D. , Liu, B. , Gao, D. , **Cui, C.** and Zhao, Y. 2006, In: Advanced Software and Control for Astronomy. Edited by Lewis, Hilton; Bridger, Alan. Proceedings of the SPIE, Vol 6274, pp. 627415, 2006
8. "Software kits for measuring photometric redshifts", Dan Wang, Yanxia Zhang, **Chenzhou Cui**, Yongheng Zhao. 200, In: Advanced Software and Control for Astronomy. Edited by Lewis Hilton, Bridger Alan. Proceedings of the SPIE, Vol 6274, pp. 627413. doi:10.1117/12.670136; <http://dx.doi.org/10.1117/12.670136>
9. "Worldwide R&D of Virtual Observatory", **Chen-Zhou CUI**, Yong-Heng ZHAO. 2008, In: W.J.Jin, I. Platais & M.A.C. Perryman, eds. A Giant Step: from Milli- to Micro-arcsecond Astrometry, Proceedings of the International Astronomical Union (2007) Vol. 3 Symposium S248, 2008, 563-564
10. "A Paralleled Large-Scale Astronomical Cross-Matching Function", ZHAO Qing, SUN Ji-zhou, YU Ce, **CUI Chen-zhou**, Lv Li-qiang, International Conference on Algorithms and Architectures for Parallel Processing (ica3pp) 2009, LNCS5574: p604~614, Springer (EI: 20093912332041)
11. "Science Data Based Astronomy Education", Cui-Lan QIAO, **Chen-Zhou CUI**, Xiao-Ping ZHENG, Yan XU. 2010, In: Venkatesh Mahadevan and G. S. Tomar, eds. 2010 2nd International Conference on Education Technology and Computer (ICETC 2010). June 22-24, 2010, Shanghai China. Vol. 3 proceedings, 519-523
12. "A VO-driven Astronomical Data Grid in China", **Chen-Zhou CUI**, Bo-Liang HE, Yang YANG, Yong-Heng ZHAO. 2009. In: Astronomical Data Analysis Software and Systems XIX, ASP Conference Series, Vol. 434, 2010, San Francisco. Y. Mizumoto, K.-I. Morita, and M. Ohishi, eds. 175-178
13. "VO-oriented Astronomical Data Grid", **Chen-Zhou CUI**, Bo-Liang HE, Yong-Heng ZHAO. 2010, IN: Scientific Database office, CAS, eds. 2010. Proceedings of Scientific Databases and Information Technologies (2010) Vol. 10, 195-202

14. "The Revolution in Astronomy Curriculums Introduced by Worldwide Telescope", Cui-Lan QIAO, **Chen-Zhou CUI**, Xiao-Ping ZHENG, Yan XU. 2011, IN: INTED2011 Proceedings CD. 5th Edition, Valencia (Spain), 7-9 March, 2011, 128-136. ISBN: 978-84-614-7423-3
15. "Building the BOOTES world-wide Network of Robotic telescopes", Castro-Tirado, A. J.; Jelínek, M.; Gorosabel, J.; ... **Cui, C.** 2012, In: Sergey Guziy, Shashi B. Pandey, Juan C. Tello & Alberto J. Castro-Tirado eds. Astronomical Society of India Conference Series, Vol. 7, 2012, p. 313-320
16. "Cyber-Infrastructure for Astronomy Research", **CUI Chen-zhou**, XUE Yan-jie, LI Jian, ZHAO Hong-heng, LIU Liang, CHEN Xiao. 2013, In: Chinese Academy of Sciences, eds. China's e-Science Blue Book 2013. Beijing, December, 2013, 251-259. ISBN: 978--3-039323-4
17. "Data Resources and Services at CAsDC", **CUI Chenzhou**, HE Boliang, XIAO Jian, YU Ce, LI Jian, CAO Zihuang, SU Liying, FAN Dongwei, QIAO Cuilan, LI Changhua, CHEN Yue and ZHAO Yongheng. 2014, In: S. Feltzing, G. Zhao, N. A. Walton & P. A. Whitelock, eds. Setting the science for Gaia and LAMOST, Proceedings of the International Astronomical Union (2013) Symposium S298, 401. [2014IAUS..298.401C](https://doi.org/10.1017/S1743921313006686), doi:10.1017/S1743921313006686
18. "Astronomy Research in Data Intensive Era", **CUI Chen-zhou**, LI Jian, ZHAO Yong-heng. 2014, In: CODATA China eds. Scientific Discovery in Big Data Era. Science Press, Beijing, April, 2014, 33-41. ISBN: 978-7-03-040183-0
19. "Optimizing the Join Operation on Hive to Accelerate Cross-Matching in Astronomy", Liang Li, Dixin Tang, Taoying Liu, Hong Liu, Wei Li, **Chenzhou Cui**. 2014, In: Parallel & Distributed Processing Symposium Workshops (IPDPSW), 2014 IEEE International. 19-23 May 2014, Phoenix (AZ) USA. DOI 10.1109/IPDPSW.2014.193
20. "AstroCloud, a Cyber-Infrastructure for Astronomy Research: Overview". **Chenzhou Cui**, Ce Yu, Jian Xiao, Boliang He, Changhua Li, Dongwei Fan, Chuanjun Wang, Zhi Hong, Shanshan Li, Linying Mi, Wanghui Wan, Zihuang Cao, Jiawei Wang, Shucheng Yin, Yufeng Fan, and Jianguo Wang. 2015, In: A. R. Taylor and E. Rosolowsky, eds. Proceedings of Astronomical Data Analysis Software and Systems: XXIV. Astronomical Society of the Pacific. ASP Conference Series, Vol. 495,469-472
21. "AstroCloud, a Cyber-Infrastructure for Astronomy Research: Architecture". Jian Xiao, Ce Yu, **Chenzhou Cui**, Boliang He, Changhua Li, Dongwei Fan, Zhi Hong, Shucheng Yin, Chuanjun Wang, Zihuang Cao, Yufeng Fan, Shanshan Li, Linying Mi, Wanghui Wan, Jianguo Wang, and Hailong Zhang. 2015, In: A. R. Taylor and E. Rosolowsky, eds. Proceedings of Astronomical Data Analysis Software and Systems: XXIV. Astronomical Society of the Pacific. ASP Conference Series, Vol. 495,473-476
22. "AstroCloud, a Cyber-Infrastructure for Astronomy Research: Data Access and Interoperability". Dongwei Fan, Boliang He, Jian Xiao, Shanshan Li, Changhua Li, **Chenzhou Cui**, Ce Yu, Zhi Hong, Shucheng Yin, Chuanjun Wang, Zihuang Cao, Yufeng Fan, Linying Mi, Wanghui Wan, and Jianguo Wang. 2015, In: A. R. Taylor and E. Rosolowsky, eds. Proceedings of Astronomical Data Analysis Software and Systems: XXIV. Astronomical Society of the Pacific. ASP Conference Series, Vol. 495,477-481
23. "AstroCloud, a Cyber-Infrastructure for Astronomy Research: Data Archiving and Quality Control". Boliang He, **Chenzhou Cui**, Dongwei Fan, Changhua Li, Jian Xiao, Ce Yu,

- Chuanjun Wang, Zihuang Cao, Junyi Chen, Weimin Yi, Shanshan Li, Linying Mi, and Sisi Yang. 2015, In: A. R. Taylor and E. Rosolowsky, eds. Proceedings of Astronomical Data Analysis Software and Systems: XXIV. Astronomical Society of the Pacific. ASP Conference Series, Vol. 495, 483-486
24. "AstroCloud, a Cyber-Infrastructure for Astronomy Research: Cloud Computing Environments". Changhua Li, Jiawei Wang, **Chenzhou Cui**, Boliang He, Dongwei Fan, Yuecheng Yang, Junyi Chen, Hailong Zhang, Ce Yu, Jian Xiao, Chuanjun Wang, Zihuang Cao, Yufeng Fan, Zhi Hong, Shanshan Li, Linying Mi, Wanghui Wan, Jianguo Wang, and Shucheng Yin. 2015, In: A. R. Taylor and E. Rosolowsky, eds. Proceedings of Astronomical Data Analysis Software and Systems: XXIV. Astronomical Society of the Pacific. ASP Conference Series, Vol. 495, 487-490
 25. "Popular supernova project: a citizen science program based on amateur astronomical observations". Shanshan LI, Dongwei FAN, Xing GAO, **Chenzhou CUI**. 2016, In: L. Chova, A. Martínez, I. Torres eds. Proceedings of the 10th International Technology, Education and Development Conference. Valencia, Spain. 7-9 March, 2016. 7561-7569. ISBN: 978-84-608-5617-7/ISSN: 2340-1079. doi: 10.21125/inted.2016. Publisher: IATED
 26. "Fast Big Data Analysis in Geo-Distributed Cloud". Yue LI, Lai-Ping ZHAO, **Chen-Zhou CUI**, Ce YU. 2016. In 2016 IEEE International Conference on Cluster Computing, 168-9253/16. DOI 10.1109/CLUSTER.2016.28
 27. "Cyber-infrastructure Requirements and Current Status of FAST and Other Astronomical Key Science Projects (in Chinese)". **Chenzhou CUI**, Ce YU, Chang-Hua LI, Jian XIAO, You-Ling YUE, Long XU, Chao WU, Feng WANG, Ge ZHANG, Bo-Liang HE, Dong-Wei FAN, Shan-Shan LI, Lin-Ying MI, Yue CHEN, Yun-Fei XU, Jun HAN, Yi-Han TAO. 2018. In: China's e-Science Blue Book 2017. Beijing, China, 2018.6, 25-45. ISBN 978-7-121-34280-6.
 28. "Update of the China-VO AstroCloud". **Chenzhou Cui**, Ce Yu, Jian Xiao, Boliang He, Changhua Li, Dongwei Fan, Chuanjun Wang, Zhi Hong, Shanshan Li, Linying Mi, Wanghui Wan, Zihuang Cao, Jiawei Wang, Shucheng Yin, Yufeng Fan, Jianguo Wang, Sisi Yang, Yin Ling, Hailong Zhang, Junyi Chen, Liang Liu, Xiao Chen. 2016, In: N.~P.~F. Lorente and K. Shortridge eds. Proceedings of Astronomical Data Analysis Software and Systems: XXV. Astronomical Society of the Pacific. ASP Conference Series. Accepted, in print.
 29. "The LAMOST Data Archive and Data Release". Boliang He, Dongwei Fan, **Chenzhou Cui**, Shanshan Li, Changhua Li, Linying Mi. 2016, In: N.~P.~F. Lorente and K. Shortridge eds. Proceedings of Astronomical Data Analysis Software and Systems: XXV. Astronomical Society of the Pacific. ASP Conference Series. Accepted, in print.
 30. "The Design and Application of Astronomy Data Lake in China-VO ". Changhua Li, **Chenzhou Cui**, Boliang He, Dongwei Fan, Yuecheng Yang, Junyi Chen, Hailong Zhang, Ce Yu, Jian Xiao, Chuanjun Wang, Zihuang Cao, Yufeng Fan, Zhi Hong, Shanshan Li, Linying Mi, Wanghui Wan, Jianguo Wang, Shucheng Yin, Liang Liu, Xiao Chen. 2016, In: N.~P.~F. Lorente and K. Shortridge eds. Proceedings of Astronomical Data Analysis Software and Systems: XXV. Astronomical Society of the Pacific. ASP Conference Series. Accepted, in print.
 31. "AstroCloud: A Distributed Cloud Computing and Application Platform for Astronomy". **Chenzhou Cui**, Boliang He, Ce Yu, Jian Xiao, Changhua Li, Dongwei Fan, Shanshan Li,

- Linying Mi, Zihuang Cao, Sisi Yang, Yunfei Xu, Yue Chen, Zheng Li, Xu Han, Zhi Hong, Shucheng Yin, Chen Li, Chuanjun Wang, Yufeng Fan, Jianguo Wang, Junyi Chen, Hailong Zhang, Liang Liu, Na Gao, Zherui Yang, Xiao Chen, Min Liu, Cuilan Qiao, Kangyu Du, Liying Su, Wenming Song. 2016, In: The International Conference on Intelligent Cloud Computing [ICC 2016], Wuhan, China. Dec. 17-18, 2016. ISSN (Electronic Edition): 2271-2097. Accepted, in print
32. "IAU WG, Data-driven Astronomy Education and Public Outreach, current status and working plans". **Chenzhou Cui** and Shanshan Li. 2017, In the Proceedings of Astronomical Data Analysis Software and Systems: XXVII. Astronomical Society of the Pacific. ASP Conference Series. Accepted, in print.
 33. "A Conception of Engineering Design for Remote Unattended Operation Public Observatory". Jun Han, Dongwei Fan, **Chenzhou Cui**, Chuanzhong Wang, Shanshan Li, Linying Mi, Zheng Li, Yunfei Xu, Boliang He, Changhua Li, Yihan Tao, and Sisi Yang. 2017, In the Proceedings of Astronomical Data Analysis Software and Systems: XXVII. Astronomical Society of the Pacific. ASP Conference Series. Accepted, in print.
 34. "Automated Spectral Classification of Galaxies using Machine Learning Approach on Alibaba Cloud AI platform (PAI)". Yihan Tao, Yanxia Zhang, **Chenzhou Cui** and Ge Zhang. 2017, In the Proceedings of Astronomical Data Analysis Software and Systems: XXVII. Astronomical Society of the Pacific. ASP Conference Series. Accepted, in print.
 35. "A Conception of Engineering Design for Remote Unattended Operation Public Observatory". Jun HAN, Dong-Wei FAN, **Chen-Zhou CUI**, Chuan-Zhong WANG, Shan-Shan LI, Lin-Ying MI, Zheng LI, Yun-Fei XU, Bo-Liang HE, Chang-Hua LI, Yi-Han TAO, Si-Si YANG. 2018. In the Proceedings of Astronomical Data Analysis Software and Systems: XXVIII. Astronomical Society of the Pacific. ASP Conference Series. Accepted, in print.
 36. "The International Virtual Observatory Alliance in 2018". Mark G. Allen, Patrick Dowler, Janet D. Evans, **Chen-Zhou CUI**, and Tim Jenness for the IVOA Executive Committee and Technical Coordination Group. 2018. In the Proceedings of Astronomical Data Analysis Software and Systems: XXVIII. Astronomical Society of the Pacific. ASP Conference Series. Accepted, in print.