

Research in Astronomy and Astrophysics

Vol. 26 No. 7

2026 July

CONTENTS

Data Paper

- Data Products and Retrieval Methods of 74 Pulsars from the Nanshan 25 m Radio Telescope
Hai-Long Zhang, Jie Wang, Jian-Ping Yuan, Ya-Zhou Zhang, Ju-Mei Yao et al. 077001

Research Papers

- Space Waterspout on Mars: MAVEN Observations of Siphoning Ion Escape from Mars through an Open Flux Tube
Pu Yang, Xiao-Jun Xu, Heng-Yan Man, Si-Qi Yi, Xing Wang et al. 075001
- The Local Tremaine-Weinberg Method for Galactic Pattern Speed: Theory and its Application to IllustrisTNG
Hangci Du (杜航慈), Yougang Wang (王有刚), Junqiang Ge (葛均强) and Rui Guo (郭锐) 075002
- MIU²Net: Weak-lensing Mass Inversion Using Deep Learning with Nested U-structures
W. G. Han, An Zhao, Xinyue Chen, Ran Li, Rui Li et al. 075003
- Magnetic Field Measurements in the Solar Chromosphere Using the H_β 4861 Å Line. I. Forward Modeling Based on 1D Models
Jiasheng Wang, Wenzian Li, Xianyong Bai, Yingzi Sun, Yuanyong Deng et al. 075004
- Evolution of Dust Properties and Disk Structure of the Young Star EX Lup
Fei Gao, Yao Liu, Dafa Li, Min Fang, Fujun Du et al. 075005
- Periodicities in Solar Microwave Emission During Solar Cycles 20–24
Mahender Aroori and Vivek Reddy Pininti 075006
- The Characteristics of Variability of AGNs Based on the Structure Function
Xuan Wei, Jie Tang and Yu Tao 075007
- Zeroth-order Efficiency Optimization of the GI Grating for the CSST Slitless Spectrograph
Nan Zhou, Jia-Qi Wang, Ke-Qiang Qiu, Zi-Chong Zhang, Hang-Xin Ji et al. 075008
- Outflow from Ummagnetized Shocked Radiative Transonic Accretion Disk Around a Black Hole
Arghya Chaudhuri, Apurba Ghosh and Sudip K Garain 075009
- Gravitational Wave Emission from Neutron Star *f*-mode Oscillations
Carlton-James Osakwe 075010
- Constraints on the ¹²C(α, γ)¹⁶O and ¹⁶O+¹⁶O Reaction Rates from Binary Black Holes Detected via Gravitational Wave Signals
Wenyu Xin, Xiaokun Hou, Xianfei Zhang, Shaolan Bi and Gang Zhao 075011
- Modeled TEC Variations between Mars and Earth Driven by Corotating Interaction Regions
Qingbao He, Yongzhang Yang and Jingjing Wang 075012
- Enhancing Cosmological Constraints with Nonlinear Tanh Transformations of Hermite - Gaussian Derivative Fields
Zhiwei Min, Ye Ma, Zhujun Jiang, Jiacheng Ding, Fenfen Yin et al. 075013
- Design and Implementation of the Operational Control Platform for the CART 40 m Radio Telescope
Zhi-Fei Wang (王智飞), Cong Liu (柳聪), Long-Ting Zhang (张龙庭) et al. 075014
- Half-year Evolution of a Decaying Solar Active Region and Peripheral Dimming Regions
Jiasheng Wang, Yu Xu and Zhenyong Hou 075015
- A Catalog of 1408 Carbon-enhanced Metal-poor Stars from LAMOST DR11
Xianqi Liu, Xiangru Li and Ziyu Fang 075016
- s*-process Heavy-element Nucleosynthesis in Low-mass Rotating AGB Stars
Xin-Yue Qu, Han-Feng Song, Rui-Yu Zhang, Ying Qin, Shi-Tao Qi et al. 075017
- Error Modeling and Surface Accuracy Analysis of LCT Segmented Mirrors
Shang-Bo Yang, Zhe Yuan, Zheng-Xiang Shen, Zheng Wang, Wei-Jie Du et al. 075018
- Magnetic Activity Cycles and Rotation in Planet-hosting and Non-hosting Solar-type Stars
Amina Boukaboul, Alessandro Sozzetti, Caroline Soubiran and Yassine Damerджи 075019
- Newly Discovered Luminous Blue Variable Candidates in M31 and M33
Sai Li (李赛), Cheng Liu (刘成) and Jincheng Guo (郭金承) 075020
- Revisiting the Excess of Bar-like Structures in TNG50 Early-type Galaxies: Consistency and Tension with Observations
Hangci Du (杜航慈), Yougang Wang (王有刚) and Junqiang Ge (葛均强) 075021
- How to Get Worthy Follow-up Candidates of Fast-rotating Asteroids from Sparse Wide Field Survey Telescope (WFST) Data
Bing-Xue Fu, Xu Kong, Jun-Qiang Lu, Shao-Han Wang, Min-Xuan Cai et al. 075022
- Impact of Satellite Constellations on Observations with the 80 cm Telescope and the Mini-SiTian at the Xinglong Observatory, NAOC
Jing Ren, Zhou Fan, Hong-Rui Gu, Qi-Qian Zhang, Yun-Fei Xu et al. 075023