

Research in Astronomy and Astrophysics

Vol. 25 No. 9

2025 September

CONTENTS

Data Paper

Measurements of the Diffuse Interstellar Bands at 5780, 5797, and 6614 Å in the Hot Stellar Spectra of the LAMOST LRS DR10

Xiao-Xiao Ma, A-Li Luo, Jian-Jun Chen, Jing Chen and Jun-Chao Liang 097001

Research Papers

The FAST Detection of an HI Cloud around Supernova Remnant G116.6–26.1

Tiantian Liang, Jie Wang, Tao Wang, Haibo Yuan, Ping Zhou et al. 095001

Statistical Study of DH Type II Bursts and Associated CMEs During Solar Cycle 24

Tulsi Thapa and Yihua Yan 095002

NEA Detection Method with Neural Network in Sidereal Tracking

Yijun Tang, Yunxiao Jiang, Zhen Zhang, Chenchen Ying, Songqi Zhang et al. 095003

Empirically Predicted Absolute Magnitudes for Red Clump Stars in Mephisto and CSST Filters

Zheng Yu, Bing-Qiu Chen and Xiao-Wei Liu 095004

Polycyclic Aromatic Hydrocarbons in the Circumstellar Medium of Herbig Ae/Be Stars

Roy Arun, Blesson Mathew, Baskaran Shridharan et al. 095005

Enhancing Galaxy Classification with U-Net Variational Autoencoders for Image Denoising

S. S. Mirzoyan 095006

Spins of SMBHs in Distant Low Luminosity AGNs

M. Yu. Piotrovich, S. D. Buliga and T. M. Natsvlashvili 095007

Rotational Spectra of Interstellar Cyanopolyne $\text{HC}_{(2n+1)}\text{N}(n = 0 - 8)$ Neutrals and Cations

Yihong Wang, Qi Lin, Huaping Xiao and X. J. Yang 095008

Investigating the Origin of Ultra-high-energy γ -ray Sources from Supernova Remnants Interacting with Molecular Clouds

Yu-Jun Xian and Jun Fang 095009

To Detect Strong Nugget with an Acoustic Array

Hao-Yang Qi and Ren-Xin Xu 095010

Analysis of a Double-lined Spectroscopic Binary System Using LAMOST and TESS Data

Daoye Yang, Jianrong Shi, Ali Esamdin, Chunqian Li, Xiang-Lei Chen et al. 095011

Searching for Changing-look AGN Candidates through Optical and Mid-infrared Variability

Zhi-Qiang Chen, Wei-Jian Guo, Hu Zou, Ming-Feng Liu and Qi-Rong Yuan 095012

A Helium Nova [HP99]159: Past, Present and Future

Xin-Jie Luo, Dong-Dong Liu and Bo Wang 095013

Broadband Spectral Analysis of 1ES 2344+514: A Multi-epoch Study

Kishor Chaudhury, Abhradeep Roy, Varsha R. Chitnis, Prajval Shastri and Rajat K. Dey 095014

Unveiling Galactic Substructures with M Giant Stars: A Kinematic and Chemical Study Based on LAMOST DR9, Gaia DR3 and APOGEE DR17

Longfei Ding, Jing Li, Xiang-Xiang Xue, Hao Tian, Zhengzhou Yan and Gang Zhao 095015

Search for Short-timescale Variations in Magnetar Polarization Degree

Wei Chen, Mingyu Ge, Fei Xie, Wei Deng, Wenhao Wei et al. 095016

StRD: A New Automatic Spectral Classification Algorithm for Stars

Jia-Ming Yang, Liang-Ping Tu, Jian-Xi Li and Jia-Wei Miao 095017

NR Cam: A New Active Low Mass-ratio Contact Binary with a Potential Third Companion

Jie Wei, Chao-Yue Li, Lin-Qiao Jiang, Jie Zheng, Kai Huang et al. 095018

Understanding the Magnetic Mechanism of an X6.4 Class Confined Flare in AR 13590

Aiyi Duan, Xiaohan Wu and Chaowei Jiang 095019

Tracing the Evolutionary Stage of Low-mass Dense Cores by Using the Abundance Ratio of SO to SO₂

Meng-Yao Tang, Sheng-Li Qin, Tie Liu, Ya-Ping Peng, Dong-Ting Yang et al. 095020

Corrigendum

Corrigendum: “Search for Binarity in Asymptotic Giant Branch Stars Utilizing the Future Chinese Space Station Telescope” (2025, RAA, 25, 085003)

Zhi-Meng Li (李至萌) and Yong Zhang (张泳) 099501