

AZƏRBAYCAN MİLLİ ELMLƏR AKADEMİYASI

AZƏRBAYCAN
ASTRONOMİYA
JURNALI

2025, Cild 20, № 2

AZERBAIJAN NATIONAL ACADEMY OF SCIENCES

AZERBAIJANI
ASTRONOMICAL
JOURNAL

2025, Vol. 20, № 2

Bakı-2025 / Baku-2025

<https://doi.org/10.59849/2078-4163.2025.2>

AZERBAIJANI ASTRONOMICAL JOURNAL

Founded in 2006 by the Azerbaijan National Academy of Sciences (ANAS)
Published in the Shamakhy Astrophysical Observatory (ShAO) named after
N. Tusi, ANAS
ISSN: 2078-4163 (Print), 2078-4171 (Online)

Editorial board

Editor-in-Chief:	Dzhalilov N.S.
Associate Editor-in-Chief:	Ismailov N.Z.
Secretary:	Adigozalzade H.N. <i>Shamakhy Astrophysical Observatory</i>
	Guliyev A.S. <i>Shamakhy Astrophysical Observatory</i>
	Babayev E.S. <i>Baku State University</i>
	Andrievsky S.M. <i>Odessa I.I.Mechnikov National University, Ukraine</i>
	Hubrig S. <i>The Leibniz Institute for Astrophysics Potsdam, Germany</i>
	Kubatova B. <i>Astronomical Institute of the Czech Academy of Sciences, Czech Republic</i>
	Pogodin M.A. <i>Main Astronomical Observatory of the Russian Academy of Sciences at Pulkovo, Russian Federation</i>
	Romanyuk I.I. <i>Special Astrophysical Observatory of the Russian Academy of Science, Russian Federation</i>
	Aret A. <i>Tartu Observatory of the University of Tartu, Estonia</i>

Kuznetsov V.D.

*Pushkov Institute of Terrestrial Magnetism,
Ionosphere and Radio Wave Propagation of Russian
Academy of Sciences, Russian Federation*

Cherepaschuk A.M.

*Lomonosov Moscow State University,
Russian Federation*

Bakış V.

Akdeniz University, Turkey

Samadov Z.A.

Baku State University Department of Astrophysics

Huseynov N.A.

Shamakhy Astrophysical Observatory

Alisheva K.I.

Baku State University Department of Astrophysics

Rustamov J.N.

Shamakhy Astrophysical Observatory

Gasimov H.A.

Baku Engineering University

Technical Editors:

Tagiyeva J.J., Salehli O.M.

Editorial Office address:

ANAS, 30, Istiglaliyyat Street, Baku, AZ-1001,
the Republic of Azerbaijan

Address for letters:

ShAO, P.O.Box №153, Central Post Office,
Baku, AZ-1000, Azerbaijan

E-mail:

azaj@shao.science.az

Phone:

(+994 12) 510 82 91

Fax:

(+994 12) 497 52 68

Online version:

<http://www.aaj.shao.az>

AZERBAIJANI ASTRONOMICAL JOURNAL

2025, Vol. 20, № 2

Contents

NEW OPPORTUNITIES FOR SEARCHING FOR MAGNETIC STAR CANDIDATES	6
<i>I.I. Romanyuk, I.A. Yakunin, E.P. Korchagina, A.V. Moiseeva, V.N. Aitov</i>	
BINARIES CAS ANALOGS: OPTICAL AND X-RAY VARIABILITY	10
<i>A.F. Kholtygin, E.B. Ryspaeva A.V. Dodinc, O.A. Tsiopa</i>	
THE ORIGIN OF COPPER IN COSMOS	15
<i>S.M. Andrievsky, S.A. Korotin</i>	
DESCRIPTION OF THE HELIO-GEOPHYSICAL CONDITIONS DURING THE MAGNETICALLY DISTURBED PERIOD OF JUNE 21–26, 2015	21
<i>S.N. Mukasheva, A.B. Andreyev, V.I. Kapytin, O.I. Sokolova, G.B. Tileua</i>	
TWO NEUTRON STAR-BLACK HOLE MERGERS OBSERVED BY THE LIGO-VIRGO COLLABORATION	25
<i>Z.Vidadi, N.Kochiashvili, N.Z. Ismailov</i>	
SPECTRAL AND PHOTOMETRICAL PROPERTIES OF SELECTED MASSIVE HERBIG AE/BE STARS	28
<i>F.S. Huseynova, N.Z. Ismailov, U.S. Veliyev</i>	

**RESEARCH OF THE RELIEF FACTORS OF THE PIRGULU
RESERVE BASED ON SATELLITE IMAGES**

36

F.I. Ismailov, N.S. Dzhililov, A.E. Humberova

**DETERMINATION OF EFFECTIVE TEMPERATURES AND SURFACE
GRAVITY OF A NUMBER F-SPECTRAL CLASS STARS BASED ON
OBSERVED PHOTOMETRIC INDICES**

39

Z.A. Samedov, U.R. Rustam, Z.F. Alieva, S.Sh. Racabova, A.A. Ganbarov