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The bibliographical entries for *Individual Stars* and *Collections of Data*, as well as a few *General* entries, are categorized according to the following coding scheme. Data from archives or databases, or previously published, are identified with an asterisk. The observation codes in the first four groups may be followed by one of the following wavelength codes.

- g.  $\gamma$ -ray. i. infrared. m. microwave. o. optical  
 r. radio u. ultraviolet x. x-ray

**1. Photometric data**

- a. CCD b. Photoelectric c. Photographic d. Visual

**2. Spectroscopic data**

- a. Radial velocities b. Spectral classification c. Line identification d. Spectrophotometry

**3. Polarimetry**

- a. Broad-band b. Spectropolarimetry

**4. Astrometry**

- a. Positions and proper motions b. Relative positions only c. Interferometry

**5. Derived results**

- a. Times of minima b. New or improved ephemeris, period variations  
 c. Parameters derivable from light curves d. Elements derivable from velocity curves  
 e. Absolute dimensions, masses f. Apsidal motion and structure constants  
 g. Physical properties of stellar atmospheres h. Chemical abundances  
 i. Accretion disks and accretion phenomena j. Mass loss and mass exchange  
 k. Rotational velocities

**6. Catalogues, discoveries, charts**

- a. Catalogues b. Discoveries of new binaries and novae  
 c. Identification of optical counterparts of  $\gamma$ -ray, x-ray, IR, or radio sources d. Finding charts

**7. Observational techniques**

- a. New instrument development b. Observing techniques  
 c. Reduction procedures d. Data-analysis techniques

**8. Theoretical investigations**

- a. Structure of binary systems b. Circumstellar and circumbinary matter  
 c. Evolutionary models d. Loss or exchange of mass and/or angular momentum

**9. Statistical investigations**

**10. Miscellaneous**

- a. Abstract b. Addenda or errata

**Abbreviations**

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AD	accretion disk	IP	intermediate polar	RV	radial velocity
BH	black hole	LC	light curve	SB	spectroscopic binary
CB	close binary	LMXB	low-mass x-ray binary	WD	white dwarf
CV	cataclysmic variable	NS	neutron star	WR	Wolf-Rayet star
EB	eclipsing binary	PSR	pulsar	GW	gravitational wave
HMXB	high-mass x-ray binary	QPO	quasi-periodic oscillation		

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## Individual Stars

EG And	<i>Shagatova, N. et al.</i> (6 authors) 2021, A&A 646, A116. (2aco, 5j) Wind mass transfer in the S-type symbiotic binary.
RY Aqr	<i>Khaliullina, A.I.</i> 2021, ARep 65, 126. (5b) EB orbital period variation.
CK Aqr	<i>Bonnardeau, M.</i> 2020, OEJV 209. (1a, 5abc) EB with third body.
DO Aql	<i>Harvey, E.J. et al.</i> (11 authors) 2020, MNRAS, 499, 2959. (1io, 2aco, 5j, 6d) Discovery of a nova shell.
V923 Aql (HD 183656)	<i>Wolf, M. et al.</i> (12 authors) 2021, A&A 647, A97. (1ao, 2ao, 5i) Long-term, orbital, and rapid variations of the Be star.
V1315 Aql	<i>Fang, X., Qian, S.</i> 2021, MNRAS 501, 3046. (5gj, 8ad) The system will not enter into hibernation.
V1405 Aql (XB 1916–053)	<i>Iaria, R. et al.</i> (8 authors) 2021, A&A 646, A120. (2cx, 5ahj) Evidence of non-conservative mass transfer in the ULX source.
V1487 Aql (GRS 1915+105)	<i>Banerjee, A. et al.</i> (4 authors) 2020, RAA 20, 208. (2dx, 5ij) Spectral analysis of $\chi$ class data using Two-Component Convective Flow (TCAF). <i>Garg, A., Misra, R., Sen, S.</i> 2020, MNRAS, 498, 2757. (2dx, 5i, 8b) Identifying the radiative components responsible for the BH system QPOs. <i>Koljonen, K.I.I., Hovatta, T.</i> 2021, A&A 647, A173. (1ax, 3ar, 5j) ALMA/NICER observations indicate a return to a hard state. <i>Kong, L.D. et al.</i> (98 authors) 2021, ApJL 906, L2. (1x, 2x) Fast transition from the jet- to wind-dominated state during a huge flare. <i>Liu, H. et al.</i> (8 authors) 2021, ApJ 909, 63. (2x) Testing evolution of low-frequency QPOs with mass accretion rate. <i>Ratheesh, A. et al.</i> (6 authors) 2021, A&A 646, A154. (2x, 5j) Variable magnetic disc wind.
V1828 Aql (NSVS 14256825)	<i>Wolf, M. et al.</i> (7 authors) 2021, A&A 647, A65. (1a, 5b) Possible substellar companion in the dwarf EB.
V341 Ara	<i>Segura, N.C. et al.</i> (24 authors) 2021, MNRAS 501, 1951. (1ao, 2ac, 5cdegi) Bow shocks, nova shells, disc winds and tilted discs.
V801 Ara (4U 1635–536)	<i>Li, C. et al.</i> (5 authors) 2021, MNRAS 501, 168. (1x, 5cgi) Multi-peaked type-I X-ray bursts.
V821 Ara (GX 339-4)	<i>Sonbas, E. et al.</i> (5 authors) 2020, MNRAS, 499, 2513. (1x, 2dx, 5i) RXTE data to extract a characteristic minimal time-scale for the spectral states. <i>Tripathi, A. et al.</i> (6 authors) 2021, ApJ 907, 31. (2x) Kerr BH hypothesis tested using the system's thermal spectrum and reflection features.
SS Aur	<i>Godon, P., Sion, E.M.</i> 2021, ApJ 908, 173. (2co*, 5g) CV WD photospheric abundances.
MW Aur	<i>Yang, D.-Y., Li, L.-F., Han, Q.-W.</i> 2021, RAA 21, 22. (1ao, 2ao, 5abcde) Poorly studied detached EB.
OV Boo	<i>Schwope, A., Worpel, H., Traulsen, I.</i> (5 authors) 2021, A&A 646, A181. (1ux, 5j) Eclipsing CV with a degenerate donor.
CO Cam	<i>Fuller, J. et al.</i> (4 authors) 2020, MNRAS, 498, 5730. (8a) Tidally trapped pulsations in the binary system.
OQ Cam	<i>Guo, Y.-N. et al.</i> (6 authors) 2020, RAA 20, 179. (1ao, 5abcj) The first photometric investigation of the contact binary.
EG Cnc	<i>Kimura, M. et al.</i> (47 authors) 2021, PASJ 73, 1. (1ao, 5i) The WZ Sge-type dwarf nova 2018 superoutburst.

EH Cnc	<i>Alton, K.B., Nelson, R.H., Stępień, K.</i> 2020, JApA 41, 26. (1ao, 2ao, 5abcde) A comprehensive investigation of the variable overcontact system.
IL Cnc	<i>Liu, N.-P. et al.</i> (4 authors) (4 authors) 2020, PASJ 72, 73. (1ao, 2ao, 5abcde) Active early K-type contact system.
IO Cnc	<i>Liao, W.-P. et al.</i> (4 authors) 2021, RAA 21, 41. (1ao, 5abcj, 9) The first photometric investigation of the G-type shallow contact binary.
$\eta$ Car	<i>Abraham, Z. et al.</i> (5 authors) 2020, MNRAS, 499, 2493. (1m, 5j) High-angular resolution continuum, H30 $\alpha$ , and He30 $\alpha$ ALMA images. <i>Gull, T.R. et al.</i> (7 authors) 2020, MNRAS 499, 5269. (1r, 2cg) Far IR/submillimetre spectral lines detected.
V906 Car (ASASSN-18fv)	<i>Sokolovsky, K.V. et al.</i> (18 authors) 2020, MNRAS, 497, 2569. (1agox, 2cdgx, 4a, 5hij) The brightest $\gamma$ -ray nova.
RZ Cas	<i>Lehmann, H. et al.</i> (6 authors) 2020, A&A 644, A121. (2ac, 5bdgk) Parameters from long-term spectroscopic monitoring of the Algol system.
UU Cas	<i>Mennickent, R.E. et al.</i> (10 authors) 2020, A&A 642, A211. (1aio, 5bcei) Massive interacting binary.
BC Cas	<i>Kato, T., Kojiguchi, N.</i> 2020, PASJ 72, 98. (1ao, 5ij) First detection of an IW And-type phenomenon in the post-eruption nova.
HT Cas	<i>Neustroev, V.V., Zharikov, S.V.</i> 2020, A&A 642, A100. (2bco, 5abi) CV AD expansion beyond the accretor's Roche lobe.
MT Cas	<i>Jiang, L. et al.</i> (4 authors) 2021, JApA 42, 10. (1ao, 5abcj) Short-period EB.
V615 Cas (LS I +61 $^{\circ}$ 303)	<i>Kravtsov, V. et al.</i> (11 authors) 2020, A&A 643, A170. (3ao) New constraints on the HMXB orbital parameters. <i>Massi, M. et al.</i> (10 authors) 2020, MNRAS, 498, 3592. (1grx, 2dgx, 5ij) Evidence for periodic accretion-ejection events. <i>Sharma, R. et al.</i> (9 authors) 2021, MNRAS 500, 4166. (1rx, 5cg, 8a) Radio/X-ray correlations and variability.
V772 Cas	<i>Kochukhov, O. et al.</i> (7 authors) 2021, MNRAS 500, 2577. (1ao, 2ac, 5abcdeg) An ellipsoidal HgMn star in an EB.
V779 Cen (Cen X-3)	<i>Tomar, G., Pradham, P., Paul, B.</i> 2021, MNRAS 500, 3454. (1x, 5cdgi) New measurements of the cyclotron line energy. <i>Sanjurjo-Ferrín, G. et al.</i> (6 authors) 2021, MNRAS 501, 5892. (1x, 5cgi) Evidence for inhomogeneous accretion flows.
V885 Cen (HD 101584)	<i>Kluska, J. et al.</i> (12 authors) 2020, A&A 642, A152. (4cir, 5ij) The close environment of the evolved post-RGB binary.
V1200 Cen	<i>Marcadon, F. et al.</i> (8 authors) 2020, MNRAS, 499, 3019. (1ao, 2ao, 5abcdeg) EB in a multiple stellar system.
CW Cep	<i>Lee, J.W., Hong, K.</i> 2021, AJ 161, 32. (1ao, 5bcde) $\beta$ Cephei pulsations in the high-mass detached EB.
ES Cet	<i>Bgkowska, K. et al.</i> (5 authors) 2021, A&A 645, A114. (2cd, 5i) Disc accretion and evidence of eclipses in the He-rich binary.
HP Cet	<i>Nucita, A.A. et al.</i> (4 authors) 2020, MNRAS, 498, 2688. (1xuo, 2dx, 5bi) XMM-Newton study of the IP candidate.
ET Cha	<i>Ginski, C. et al.</i> (28 authors) 2020, A&A 642, A119. (4ci, 6b) A low-mass companion to the $\eta$ Cha cluster member.
T CrB	<i>Pavlenko, Y.V. et al.</i> (8 authors) 2020, MNRAS, 498, 4853. (2ic, 5h) Isotopic ratios in the red giant component of the recurrent nova.

DD CrB (NSVS 7826147)	<i>Wolf, M. et al.</i> (7 authors) 2021, A&A 647, A65. (1a, 5b) Dwarf EB with a possible substellar companion.
W Crv	<i>Eaton, J.A., Odell, A.P., Nitschelm, C.</i> 2021, MNRAS 500, 145. (2ac, 5dgj) Doppler profiles.
RT Cru	<i>Danekhar, A. et al.</i> (4 authors) 2021, MNRAS 500, 4801. (1x, 5cgi) Long-term X-ray variability.
BP Cru (GX 301-2)	<i>Ji, L. et al.</i> (103 authors) 2021, MNRAS 501, 2522i. (1x, 5cgi) Absorption and emission features.
V404 Cyg	<i>Asuma, K. et al.</i> 2020, PASJ 72, 77. (1r, 5ij) Observations during the 2015 outburst by the Nasu telescope array at 1.4 GHz.
V1341 Cyg (Cyg X-2)	<i>Psaradaki, I. et al.</i> (10 authors) 2020, A&A 642, A208. (2dx) Interstellar O along the line of sight to the LMXB.
V1357 Cyg (Cyg X-1)	<i>Kantzas, D. et al.</i> (13 authors) 2021, MNRAS 500, 2112. (1gmr, 5cgi, 8a) A new lepto-hadronic model for the HMXB. <i>Miller-Jones, J.C.A. et al.</i> (26 authors) 2021, Science 371, 1046. (4cr, 5ij) Contains a 21 solar mass BH – Implications for massive stellar winds. <i>Neijssel, C.J. et al.</i> (8 authors) 2021, ApJ 908, 118. (8a) Wind mass-loss rates of stripped stars. <i>Palit, I., Janiuk, A., Czerny, B.</i> 2020, ApJ 904, 21. (8bd) Clumpy wind accretion to explain short timescale variability. <i>Zhao, X. et al.</i> (9 authors) 2021, ApJ 908, 117. (2x*) Re-estimating the BH spin parameter.
V1521 Cyg (Cyg X-3)	<i>Cangemi, F. et al.</i> (6 authors) 2021, A&A 645, A60. (2bx) INTEGRAL discovery of a high-energy tail in the microquasar. <i>Egron, E. et al.</i> (19 authors) 2021, ApJ 906, 10. (1r) Mini and giant radio flare episodes. <i>Sinitsyna, V.G., Sinitsyna, V.Y.</i> 2021, AN 342, 337. (1g) The system is a $\gamma$ -ray binary.
V1679 Cyg (WR 137)	<i>St-Louis, N. et al.</i> (42 authors) 2020, MNRAS, 497, 4448. (1ao, 2ao, 5ijk) Wind asymmetries in the dust-forming WC7 binary.
V1687 Cyg (WR 140)	<i>Zhekov, S.</i> 2021, MNRAS 500, 4837. (1x, 5cgj, 8a) Colliding stellar winds.
V2364 Cyg	<i>Yuan, H.-Y. et al.</i> (5 authors) 2020, RAA 20, 203. (1ao, 5abcj) IR-excess EB.
V2466 Cyg	<i>Antipin, S.V. et al.</i> (6 authors) 2020, AstL 46, 677. (1a, 5bc, 6b). The 2003 and 2019 superoutbursts of the long-period dwarf nova.
$\alpha$ Del	<i>Gardner, T. et al.</i> (22 authors) 2021, AJ 161, 40. (2ao, 4ac, 5cde) Orbit of the B-type binary triple companion.
NN Del	<i>Kniazev, A.</i> 2020, Ap&SS 365, 169. (2ao, 5de) Long-period EBs: towards the true mass-luminosity relation. II. Absolute parameters.
$\kappa$ Dra	<i>Saad, S.M. et al.</i> (4 authors) 2021, RMxAA 57, 91. (2ao, 5d) SB1 time variability and line profile variations.
$\nu$ Gem	<i>Gardner, T. et al.</i> (22 authors) 2021, AJ 161, 40. (2ao, 4ac, 5cde) Orbit of the B-type binary triple companion.
U Gem	<i>Takeo, M. et al.</i> (5 authors) 2021, PASJ 73, 143. (2cdx, 5i) Spatial distribution of the X-ray-emitting plasma in quiescence and outburst.
$\pi^1$ Gru	<i>Homan, W. et al.</i> (38 authors) 2020, A&A 644, A61. (4cr, 5j, 6b) First detection of a new companion and its effect on the AGB star inner wind.

AH Her	<i>Echevarria, J. et al.</i> (10 authors) 2021, MNRAS 501, 596. (2abc, 5bdeg) Evidence for material outside the tidal radius.
AM Her	<i>Schwöpe, A.D. et al.</i> (4 authors) 2020, A&A 642, A134. (2dx, 5i) Accretion models from multi wavelengths in high accretion states.
DI Her	<i>Anderson, K.R., Lai, D.</i> 2021, ApJ 906, 17. (8ad) Excitation of spin-orbit misalignments in stellar binaries with circumbinary disks.
HZ Her (Her X-1)	<i>Brumback, M.C. et al.</i> (8 authors) 2021, ApJ 909, 186. (1x, 2x) Precessing AD and pre-eclipse dip. <i>Caiazzo, I., Heyl, J.</i> 2021, MNRAS 501, 129. (8a) Polarized emission. <i>Kolesnikov, D.A. et al.</i> (16 authors) 2020, MNRAS, 499, 1747. (1ao, 5cdi) The 35-d superorbital cycle in the IMXB <i>B</i> and <i>V</i> LCs. <i>Leay, D., Wang, Y.</i> 2020, ApJ 902, 146. (1x) Observations of 35-day cycle consistent with precessing AD model. <i>Staubert, R. et al.</i> (9 authors) 2020, A&A 642, A196. (2dx, 5i) Constant cyclotron line energy since 2012.
V1094 Her	<i>Jiang, L. et al.</i> (4 authors) 2021, JApA 42, 10. (1ao, 5abcj) Short-period EB.
V1179 Her	<i>Broens, E.</i> 2021, MNRAS 501, 4935. (1ao, 5abcceg) Photometry/period.
V1460 Her	<i>Ashley, R.P. et al.</i> (9 authors) 2020, MNRAS, 499, 149. (1uo, 2abcuo, 5abcdgijk) CV with a fast spinning WD accreting from an evolved donor.
V1511 Her	<i>Broens, E.</i> 2021, MNRAS 501, 4935. (1ao, 5abcceg) Photometry/period.
AR Lac	<i>Karakuş, O., Ekmekiçi, F.</i> 2021, RMxAA 57, 167. (1ao, 2do, 5ij) Extended matter around the cooler component.
$\alpha$ Leo A	<i>Gies, D.R. et al.</i> (9 authors) 2020, ApJ 902, 25. (2ao, 5be) Spectroscopic detection of a pre-WD companion.
AM Leo	<i>Gorda, S.Yu.</i> 2020, ARep 64, 922. (1a, 5c). Cyclical changes in the extra-eclipse brightness and the period of the W UMA-type CB.
OW Leo	<i>Zhou, X., Qian, S.-B.</i> 2021, RAA 21, 27. (1ao, 5abce) Orbital period correction and LC modeling of the W-subtype shallow contact binary.
$\beta$ Lyr	<i>Brož, M. et al.</i> (10 authors) 2021, A&A 645, A51. (2aco, 4co, 5j) The optically thin circumstellar medium.
V583 Lyr (KIC 4245897)	<i>Zhang, J., Qian, S.B., Lyu, B.</i> 2020, PASP 132, 114201. (1a, 2a, 5cde) Low-mass-ratio semidetached binary.
TU Men	<i>Godon, P., Sion, E.M.</i> 2021, ApJ 908, 173. (2co*, 5g) CV WD photospheric abundances.
U Mon	<i>Vega, L.D. et al.</i> (10 authors) 2021, ApJ 909, 138. (1dux, 2a, 4c, 5i) Long-term variability explained by binary interactions with a circumbinary disk.
V680 Mon	<i>Volkov, I.M., Kravtsova, A.S., Chochol, D.</i> 2021, ARep 65, 184. (1a, 5abcef). EB with the highest known eccentricity.
V959 Mon	<i>Nelson, T. et al.</i> (10 authors) 2021, MNRAS 500, 2798. (1gx, 5cg, 8a) X-ray evolution.
QX Nor (4U 1608–52)	<i>Šimon, V.</i> 2020, PASJ 72, 100. (2dx, 5ij) A quasi-persistent X-ray source.
V2293 Oph (GRS 1716–249)	<i>Cúneo, V.A. et al.</i> (15 authors) 2020, MNRAS, 498, 25. (1aox, 2ao, 5i) Discovery of optical outflows and inflows in a BH candidate.
V1055 Ori (4U 0614+091)	<i>Marino, A. et al.</i> (12 authors) 2020, MNRAS, 498, 3351. (1aox, 2dx, 5i) Testing jet geometries and disc-jet coupling in the LMXB NS with the internal shocks model.

X Per	<i>Zamanov, R.K. et al.</i> (10 authors) 2020, MNRAS 499, 3650. (2c, 5dgi, 8b) An eccentric wave in the circumstellar disc.
IM Per	<i>Lee, J.W., Hong, K., Kim, H.-Y.</i> 2021, AJ 161, 129. (1ao, 5bc) Tidally excited modes and $\delta$ Scuti pulsations in the eclipsing triple system.
V1023 Per	<i>Samec, R., Caton, D., Faulkner, D.R.</i> 2020, AJ 160, 175. (1ao, 5abc) Detached pre-WUMa binary with polar spots and complex LC behavior.
AI Phe	<i>Marted, P.F.L. et al.</i> (12 authors) 2020, MNRAS, 498, 332. (1ao, 5acefg) Masses and radii from TESS data using different LC analysis methods. <i>Miller, N.J., Marted, P.F.L., Smalley, B.</i> 2020, MNRAS, 497, 2899. (1auio, 2o, 5cegh) Method to derive EB effective temperatures.
12 Psc	<i>Bowler, B.P. et al.</i> (10 authors) 2021, AJ 161, 106. (2ao, 4ic, 5de) WD companion detected.
ZZ PsA	<i>Wadhwa, S. et al.</i> (7 authors) 2021, MNRAS 501, 229. (1ao, 5abceg, 8a) The first multiband photometric analysis.
V445 Pup	<i>Nyamai, M.M. et al.</i> (6 authors) 2021, MNRAS 501, 1394. (1r, 5cg, 8a) Radio LCs and imaging.
V505 Sgr	<i>Khaliullina, A.I.</i> 2020, ARep 64, 915. (5b) EB orbital period variation.
V3890 Sgr	<i>Page, K.L. et al.</i> (9 authors) 2020, MNRAS 499, 4814. (1oux, 2bc, 5cdgi) The 2019 eruption. <i>Singh, K.P. et al.</i> (6 authors) 2021, MNRAS 501, 36. (1x, 5cg) X-ray observations during the 2019 outburst.
V4362 Sgr	<i>Harvey, E.J. et al.</i> (11 authors) 2020, MNRAS, 499, 2959. (lio, 2aco, 5j, 6d) Discovery of a nova shell.
V4580 Sgr (SAX J1808.4–3658)	<i>Baglio, M.C. et al.</i> (10 authors) 2021, ApJ 905, 87. (1avix*, 3a) The XB variable and polarized jet. <i>Goodwin, A.J. et al.</i> (15 authors) 2020, MNRAS, 498, 3429. (1aoux, 2bc-dox, 5ij) Enhanced optical activity in the LMXB 12 days before X-ray activity, and a 4-day X-ray delay during the outburst rise.
V5512 Sgr (GX 13+1)	<i>Tomaru, R. et al.</i> (5 authors) 2020, MNRAS, 497, 4970. (2cdx, 5ij) The NS X-ray absorption lines.
AK Sco	<i>Gómez de Castro, I. et al.</i> (5 authors) 2020, ApJ 904, 120. (2cdu) Accretion and intercycle variations.
AR Sco	<i>Takata, J. et al.</i> (7 authors) 2021, ApJ 907, 115. (1x, 2x) WD binary.
V818 Sco (Sco X-1)	<i>Ding, G.Q., Chen, T.T., Qu, J.L.</i> 2021, MNRAS 500, 772. (1x*, 5cgi, 8a) The hard X-ray spectral tails.
V884 Sco (4U 1700–37)	<i>Martinez-Chicharro, M. et al.</i> (9 authors) 2021, MNRAS 501, 5646. (2dx, 5dg) High-resolution X-ray spectroscopy.
V1007 Sco (HD 152248)	<i>Rosu, S. et al.</i> (6 authors) 2020, A&A 642, A221. (5f, 8ac) Apsidal motion in the massive binary.
V659 Sct	<i>Jack, D. et al.</i> (7 authors) 2020, AN 341, 781. (2c) Nova optical spectra time series.
AO Ser	<i>Park, J.H. et al.</i> (5 authors) 2020, AJ 160, 247. (1ao, 2ao, 5bcde) Primary is a $\delta$ Scuti star.
NP Ser (GX 17+2)	<i>Malu, S., Sriram, K., Agrawal, V.K.</i> 2020, MNRAS, 499, 2214. (1x, 2dx, 5ci) Coronal vertical structure variations in normal branch, an AstroSat's SXT and LAXPC perspective.
SW Sex	<i>Fang, X. et al.</i> (4 authors) 2020, ApJ 901, 113. (1ao, 5b) Period variations could be due to Applegate mechanism or a giant planet.

VZ Sex AY Sex (PSR J1023+0038) V818 Tau	<i>Nucita, A.A. et al.</i> (6 authors) 2021, ApJ 906, 134. (2dx) IP confirmed. <i>Bhattacharyya, S.</i> 2020, MNRAS, 498, 728. (8) The NS's apparent permanent ellipticity. <i>Brogaard, K. et al.</i> (24 authors) 2021, A&A 645, A25. (1ao, 2ao, 5cdeh) EB in the Hyades.
V928 Tau	<i>van Dam, D.M. et al.</i> (24 authors) 2020, AJ 160, 285. (1ai, 5i) A substellar companion eclipsing one component of the pre-main-sequence binary.
QU TrA (4U 1543–624) KV UMa (XTE J1118+480) HU Vel (Vela Pulsar) KQ Vel	<i>Koliopanos, F. et al.</i> (4 authors) 2021, MNRAS 500, 5603. (1x, 5cgi) Disappearance of the Fe K $\alpha$ emission line. <i>Debnath, D. et al.</i> (5 authors) 2020, RAA 20, 175. (2dx, 5ij) Accretion flow properties of the HMXB during the 2005 outburst. <i>Montoli, A. et al.</i> (4 authors) 2020, A&A 642, A223. (9) Bayesian estimate of the superfluid moments of inertia from the 2016 glitch. <i>Schöller, M. et al.</i> (7 authors) 2020, A&A 642, A188. (1ao, 2dx, 4ci) The near-IR companion of the Bp star could be an F8V+F8V CB.
TW Vir	<i>Dai, Z., Szkody, P., Garnavich, P.M.</i> 2021, AJ 161, 34. (1ao, 5i) Dwarf nova Kepler LC modeling and disk behavior.
AK Vir GK Vir	<i>Khaliullina, A.I.</i> 2021, ARep 65, 126. (5b) EB orbital period variation. <i>Almeida, L.A. et al.</i> (6 authors) 2020, MNRAS, 497, 4022. (1ao, 5abf) A possible Jupiter-like planet in a circumbinary orbit.
UY Vol (EXO 0748–676) AX Vul CK Vul (Nova Vul 1670) (Nova 1670)	<i>Parikh, A.S. et al.</i> (8 authors) 2021, MNRAS 501, 1453. (1ux, 5cgi) Accretion behavior. <i>Khaliullina, A.I.</i> 2021, ARep 65, 126. (5b) EB orbital period variation. <i>Kamiński, T. et al.</i> (6 authors) 2021, A&A 646, A1. (4cr, 5j) A 3D view of the molecular remnant gas distribution and velocity field. <i>Kamiński, T. et al.</i> (8 authors) 2020, A&A 644, A59. (4cr) Properties and enigmatic origin of the molecular remnant gas.

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## HR, HD, HDE, BD, CoD, CPD, SAO Objects

HD 18163 (TYC 4700-815-1) HD 18378	<i>Hernandez, M.S. et al.</i> (15 authors) 2021, MNRAS 501, 1677. (1aoi, 2abcx, 4a, 5cdeg, 6b) WD CB with a G-type secondary star. <i>Matthews, E.C. et al.</i> (11 authors) 2021, AJ 161, 78. (1a, 5i) Late-type stellar companion detected.
HD 19257B	<i>Matthews, E.C. et al.</i> (11 authors) 2021, AJ 161, 78. (1a, 5i) Late-type stellar companion detected.
HD 27130	(see V818 Tau)
HD 40865 (GJ 225.1) HD 41004	<i>Tokovinin, A.</i> 2020, AstL 46, 612. (4a) Quadruple system orbits and structure. <i>Narang, M. et al.</i> (9 authors) 2021, MNRAS 500, 4818. (1r, 5cg) Search for radio emission from exoplanets in the K1V+M2V binary.
HD 54236A	<i>Cunningham, J.M.C. et al.</i> (13 authors) 2020, AJ 160, 187. (2d, 5e) EB in a young triple system.
HD 58730 (KELT J072709+072007) HD 63021	<i>Stevens, D.J. et al.</i> (24 authors) 2020, MNRAS 499, 3775. (1ao, 2ac, 5cdeg, 6b) Extreme-mass ratio, short-period EB. <i>Whelan, D.G. et al.</i> (16 authors) 2021, AJ 161, 67. (2ao, 5dkj) Chromospheric activity and mass transfer in the semidetached CB.



HD 69479/80	<i>Griffin, R.E., Griffin, R.F.</i> 2020, AN 341, 791. (1ao, 5degk) A 90-day SB2 with a cool-giant primary.
HD 70271	<i>Lloyd, Ch. et al.</i> (4 authotrs) 2020, OEJV 207. (1a, 2b) Bright EB is not a variable.
HD 74423	<i>Fuller, J. et al.</i> (4 authors) 2020, MNRAS, 498, 5730. (8a) Tidally trapped pulsations in the binary system.
HD 101584	(see V885 Cen)
HD 116546 (TYC 4962-1205-1)	<i>Hernandez, M.S. et al.</i> (15 authors) 2021, MNRAS 501, 1677. (1aoi, 2abcx, 4a, 5cdeg, 6b) WD CB with G-type secondary star.
HD 133778B	<i>Matthews, E.C. et al.</i> (11 authors) 2021, AJ 161, 78. (1a, 5i) Late-type stellar companion detected.
HD 152248	(see V1007 Sco)
HD 159062	<i>Bowler, B.P. et al.</i> (10 authors) 2021, AJ 161, 106. (2ao, 4ic, 5de) WD companion orbit updated.
HD 183656	(see V923 Aql)
HD 215227 (MWC 656)	<i>Staritsin, E.</i> 2021, A&A 646, A90. (8cd) B-star increasing spin during the common envelope stage.
HD 225524 (KIC 4851217)	<i>Zamanov, R.K. et al.</i> (5 authors) 2021, AN 342, 531. (1ao*, 2ao, 5bek) Be star radius, rotational period and inclination in the Be/ $\gamma$ -ray binary.
HD 259440 (MWC 148)	<i>Liakos, A.</i> 2020, A&A 642, A91. (1ao*, 2abo, 5cde) Detached EB with a pulsating $\delta$ Scuti component.
HD 336780 (FIN 332)	<i>Zamanov, R.K. et al.</i> (5 authors) 2021, AN 342, 531. (1ao*, 2ao, 5bek) Be star radius, rotational period and inclination in the Be/ $\gamma$ -ray binary.
BD+38°3661 (KIC 3858884)	<i>Tokovinin, A.</i> 2020, AstL 46, 612. (4a) Quadruple system orbits and structure.
	<i>Manzoori, D.</i> 2020, MNRAS, 498, 1871. (1ao, 5bcefk) PHOEBE analysis of the Kepler LC of this rare pulsating EB, including tidal oscillations.

## Objects with names including RA and DEC

3XMM J004301.4+413017	<i>Pshirkov, M.S., Popov, S.B., Zolotukhin, I.Yu.</i> 2021, AstL 47, 12. (2dx, 6, 9) Search for magnetars in M31 as periodic X-ray sources.
IRAS 00500+6713	<i>Oskinova, L.M. et al.</i> (5 authors) 2020, A&A 644, L8. (1x, 2dx, 5i) Super-Chandrasekhar object reveals an ONe and a CO WD merger product embedded in a putative SN Iax remnant.
ASAS J011416+0426.4	<i>Yang, D.-Y., Li, L.-F., Han, Q.-W.</i> 2021, RAA 21, 22. (1ao, 2ao, 5abcde) Poorly studied detached EB.
2MASS J02454526+5259198 (TYC 3700-1384-1)	<i>Broens, E.</i> 2021, MNRAS 501, 4935. (1ao, 5abcegj) Photometric analysis and period study.
PSR J0437–4715	<i>Reardon, D.J. et al.</i> (20 authors) 2020, ApJ 904, 104. (1r, 5f) Orbital dynamics from interstellar scintillation.
1RXS J050526.3–684628	<i>Vasilopoulos, G. et al.</i> (6 authors) 2020, MNRAS, 499, 2007. (1aox, 2dx, 5i, 6bcd) Discovery of a $\approx$ 30-yr-duration post-nova pulsating supersoft source in the LMC.
4U 0520–72 (LMC X-2)	<i>Agrawal, V.K., Nandi, A.</i> 2020, MNRAS, 497, 3726. (2dx, 5i) AstroSat view: evolution of broad-band X-ray spectral properties along a complete Z-track.

1RXS J053855.5–640457 (LMC X-3)	<i>Bhuvana, G.R. et al.</i> (5 authors) 2021, MNRAS 501, 5457. (1x*, 5cegi) An AstroSat perspective.
2MASS J05393883–6944356 (LMC X-1)	<i>Bhuvana, G.R. et al.</i> (5 authors) 2021, MNRAS 501, 5457. (1x*, 5cegi) An AstroSat perspective.
4U 0614+091	<i>Mudambi, S.P. et al.</i> (5 authors) 2020, MNRAS, 498, 4404. (1x, 2dx, 5ik) Estimation of the BH spin using AstroSat.
ASASSN-V J063123.82+192341.9	(see V1055 Ori)
	<i>Yang, D.-Y., Li, L.-F., Han, Q.-W.</i> 2021, RAA 21, 22. (1ao, 2ao, 5abcde) Poorly studied detached EB.
MAXI J0637–430	<i>Tetarenko, B.E. et al.</i> (7 authors) 2021, MNRAS 501, 3406. (1oux, 2bc, 5cdgi) Geometry and structure of the irradiated AD.
2MASS J06415294–5547419 (TIC 278825952)	<i>Mitnyan, T. et al.</i> (5 authors) 2020, MNRAS 498, 6034. (1aio, 5bcdeh, 6b) Discovery of a triply eclipsing triple system using TESS, with outer orbit highly coplanar and surprisingly circular.
KELT J072709+072007	(see HD 58730)
PSR J0737–3039B	<i>Noutsos, A. et al.</i> (14 authors) 2020, A&A 643, A143. (4cr, 5j) Improved pulse timing.
PSR J0742–2822	<i>Dang, S.-J. et al.</i> (16 authors) 2021, RAA 21, 42. (1gr, 5b) The PSR spin-down and emission variations.
EXO 0748–676	(see UY Vol)
SGR 0755–2933	<i>Doroshenko, V. et al.</i> (4 authors) 2021, A&A 647, A165. (2bx) A new HMXB with the wrong name.
2MASS J08073948+1814382 (TYC 1380-957-1)	<i>Hernandez, M.S. et al.</i> (15 authors) 2021, MNRAS 501, 1677. (1aio, 2abcx, 4a, 5cdeg, 6b) WD CB with G-type secondary star.
Swift J0820.6–2805	<i>Nucita, A.A. et al.</i> (4 authors) 2020, MNRAS, 498, 2688. (1oux, 2dx, 5bi) IP candidate.
SDSS J082239.54+304857.2	<i>Kosakowski, A., Kilic, M., Brown, W.</i> 2021, MNRAS 500, 5098. (1ior, 5abce) Multiband LC analysis.
1SWASP J084356.46–113327.5	<i>Hong, K. et al.</i> (8 authors) 2021, AJ 161, 137. (1ao, 2ao, 5bcde) EB with a pre-He WD companion.
WOCS J0850269+114831 (WOCS 11028)	<i>Sandquist, E.L. et al.</i> (11 authors) 2021, AJ 161, 59. (2d, 5e) Detached EB and turnoff star in the old open cluster M67.
NGTS J0930–18	<i>Acton, J.S. et al.</i> (23 authors) 2020, MNRAS, 498, 3115. (1ao, 2ao, 5abcde, 6bd) An eclipsing M-dwarf close to the hydrogen burning limit.
4FGL J0940.3–7610	<i>Swihart, S.J. et al.</i> (6 authors) 2021, ApJ 909, 185. (1gox, 2ao) A new redback millisecond PSR candidate.
PSR J1023+0038	(see AY Sex)
WD 1032+011	<i>Casewell, S.L. et al.</i> (14 authors) 2020, MNRAS, 497, 3571. (1ao, 2abcdoi, 5bcdeg, 6b) Third brown dwarf known to eclipse a non-accreting WD.
SDSS J103533.02+055158.3	<i>Schwope, A., Worpel, H., Traulsen, I.</i> (5 authors) 2021, A&A 646, A181. (1ux, 5j) Eclipsing CV with a degenerate donor.
XTE J1118+480	(see KV UMa)
2MASS J12123849+2638114 (LB 1)	<i>Safarzadeh, M., Ramirez-Ruiz, E., Kilpatrick, C.</i> 2020, ApJ 901, 116. (8c) System is inconsistent with the X-ray source population and PSR-BH binary searches in the Milky Way.
	<i>Shao, Y., Li, X.-D.</i> 2021, ApJ 908, 67. (8ad) Population synthesis of Galactic Be-He star binaries.

RX J121857.7+471558 (NGC 4258 X-3)	<i>Akyuz, A. et al.</i> (6 authors) 2020, MNRAS, 499, 2138. (1aox, 2dx, 5i, 6bcd) The ULX X-ray and optical properties.
PSR B1259–63	<i>Fujita, Y. et al.</i> (5 authors) 2020, PASJ 72, L9. (1r, 5ij) ALMA observations of the HMXB in an inactive period: variable circumstellar disk?
MAXI J1348–630	<i>Garcia, F. et al.</i> (6 authors) 2021, MNRAS 501, 3173. (1x, 5cgij) A two-component Comptonization model.
FIRST J141918.9+394036	<i>Zhang, J. et al.</i> (19 authors) 2020, MNRAS, 499, 851. (1x, 2x, 5i) NICER observations reveal that this X-ray transient is a BH XB.
SDSS J143547.87+373338.5	<i>Lee, K.H. et al.</i> (5 authors) 2020, ApJL 902, L23. (1r) Radio flare from binary NS merger.
PSR B1534+12	<i>Wolf, M. et al.</i> (7 authors) 2021, A&A 647, A65. (1a, 5b) Possible sub-stellar companion in the dwarf EB.
MAXI J1535–571	<i>Wang, S.Q. et al.</i> (13 authors) 2020, ApJL 902, L13. (1r) Observed in two emission states.
4U 1543–624	<i>Russell, T.D. et al.</i> (26 authors) 2020, MNRAS, 498, 5772. (1imorx, 3ar, 5ij) Six epochs quasi-simultaneous multi-frequency study of the BH binary show rapid compact jet quenching.
2XMM J160050.7–514245 (Apep Plume)	(see QU TrA)
4U 1608–52	<i>Han, Y. et al.</i> (9 authors) 2020, MNRAS, 498, 5604. (1i, 2d, 4ab, 5j) Resolved IR imagery of the central binary and dust plume of the extreme colliding-wind system.
4U 1630–47	(see QX Nor)
MAXI J1631–472	<i>Connors, M.T. et al.</i> (14 authors) 2021, ApJ 909, 146. (2dx*, 5i) Reflection modeling of the BH binary.
4U 1636–536	<i>Monageng, I.M. et al.</i> (8 authors) 2021, MNRAS 501, 5776. (1x, 4cr, 5cg) Radio flaring and dual radio loud/quiet behavior in the BH XB candidate.
PSR J1641+3627F	(see V801 Ara)
XTE J1650–500	<i>Cadelano, M. et al.</i> (8 authors) 2020, ApJ 905, 63. (1aou, 2dox, 5be, 6b) A detached WD+NS EB in M13.
MAXI J1659–152	<i>Chatterjee, A. et al.</i> (4 authors) 2020, MNRAS, 497, 4222. (1x, 5i) Evidence of disc-jet connection from the analysis of time-domain variability properties during the 2001 outburst.
4U 1700–37	<i>Torres, M.A.P. et al.</i> (5 authors) 2021, MNRAS 501, 2174. (1o*, 2a, 5cdegi) Delimiting the BH mass with H $\alpha$ spectroscopy.
IGR J17091–3624	(see V884 Sco)
SAX J1712.6–3739	<i>Katoch, T. et al.</i> (6 authors) 2021, MNRAS 501, 6123. (1x, 5cgi) Decoding the pulse in the heartbeat state.
GRS 1716–249	<i>Lin, J., Yu, W.</i> 2020, ApJ 903, 37. (1x) LMXB 4 thermonuclear bursts.
4U 1728–34	(see V2293 Oph)
XTE J1739–285	<i>Wang, D.-H., Zhang, C.-M.</i> 2020, MNRAS, 497, 2893. (1x, 5ij) Disc and radial accretion in the LMXB.
GRO J1744–28	<i>Bult, P. et al.</i> (13 authors) 2021, ApJ 907, 79. (1x) LMXB X-ray bursts.
IGR J17494–3030	<i>Doroshenko, V. et al.</i> (5 authors) 2020, A&A 643, A62. (2dx, 5i) The bursting PSR in quiescence.
	<i>Köbig, O. et al.</i> (11 authors) 2020, A&A 643, A128. (2cdx, 5i) NuSTAR observations at low mass accretion rate.
	<i>Ng, M. et al.</i> (14 authors) ApJL 908, L15. (1x, 2x) Discovery of millisecond X-Ray pulsations and an ultracompact orbit.

XTE J1752–223	<i>Zdziarski, A. et al.</i> (5 authors) 2021, ApJ 906, 69. (2dx, 5i) The AD in the hard state.
Swift J1756.9–2508	<i>Koliopanos, F. et al.</i> (4 authors) 2021, MNRAS 500, 5603. (1x, 5cgi) Disappearance of the Fe K $\alpha$ emission line.
IGR J18027–2016	<i>Fogantini, F.A. et al.</i> (4 authors) 2021, A&A 647, A75. (1x, 5i) EB stellar wind structures.
1RXS J180408.9–342058	<i>Tse, K. et al.</i> (5 authors) 2021, MNRAS 500, 34. (1x, 5bcg) Detection of mHz QPOs.
HESS J1804–216	<i>Feijen, K. et al.</i> 2020, PASA 37, e056. (1r, 2cr) The interstellar gas towards the still unidentified TeV $\gamma$ -ray source.
MAXI J1807+132	<i>Albayati, A.C. et al.</i> (16 authors) 2021, MNRAS 501, 261. (1x, 5cg) Discovery of thermonuclear Type-I X-ray bursts.
SAX J1808–3658	(see V4580 Sgr)
PSR J1810+1744	<i>Romani, R.W. et al.</i> (5 authors) 2021, ApJL 908, L46. (2aiou, 5de) Companion darkening and a high NS mass.
4U 1812–12	<i>Armas Padilla, M. et al.</i> (9 authors) 2020, A&A 644, A63. (1ao, 2cdo, 5ij) Ultra-compact XB seen through an H II region.
MAXI J1820+070 (ASASSN-18ey)	<i>Chakraborty, S. et al.</i> (4 authors) 2020, MNRAS, 498, 5873. (1x, 2dx, 5hi) BH binary AstroSat and NuSTAR study. <i>Shaw, A.W. et al.</i> (11 authors) 2021, ApJ 907, 34. (1rxx*, 2rxx*) Disk-jet coupling during descent to quiescence. <i>Zdziarski, A.A. et al.</i> (5 authors) 2021, ApJL 909, L9. (2x) Accretion geometry in the hard state.
IGR J18214–1318	<i>Cusumano, G. et al.</i> (4 authors) 2020, MNRAS, 498, 2750. (1x, 2dx, 5ij) Swift unveils the HMXB orbital period.
MAXI J1836–194	<i>Lucchini, M. et al.</i> (7 authors) 2021, MNRAS 501, 5910. (1rx, 5cgij) Correlating spectral and timing properties in the evolving jet.
Swift J1858.6–0814	<i>Buisson, D.J.K. et al.</i> (14 authors) 2020, MNRAS, 498, 68. (1x, 2ac, 5ij) X-ray emission lines as clues for disc atmosphere or wind. <i>Buisson, D.J.K. et al.</i> (25 authors) 2020, MNRAS, 499, 793. (1x, 5i) Discovery of thermonuclear (Type I) X-ray bursts in the LMXB.
4U 1901+03	<i>Beri, A. et al.</i> (4 authors) 2021, MNRAS 500, 1350. (1x, 5cgi) Evolution of timing and spectral characteristics.
4U 1909+07	<i>Jaisawal, G.K. et al.</i> (6 authors) 2020, MNRAS, 498, 4830. (1x, 2dx, 5ij) Spectral and timing study of the HMXB using NuSTAR and Astrosat.
PSR J1909–3744	<i>Liu, K. et al.</i> (13 authors) 2020, MNRAS, 499, 2276. (1r, 5beg, 8acd) Timing analysis and an astrophysical study of the binary millisecond PSR.
2MASS J19135355+4222482 (KIC 6852488)	<i>Shi, X.-D. et al.</i> (4 authors) 2021, AJ 161, 46. (1ao, 5bc) Flaring and spot activity on the semidetached binary.
GRS 1915+105	(see V1487 Aql)
XB 1916–053	(see V1405 Aql)
2MASS J19245582+5704084 (CzeV1731)	<i>Zasche, P. et al.</i> (17 authors) 2020, A&A 642, A63. (1ao*, 2ao, 5cd) Unique doubly eclipsing quadruple system.
2MASS J19311995+3756133 (KIC 2719436)	<i>Zhang, J., Qian, S.B., Lyu, B.</i> 2020, PASP 132, 114201. (1a, 2a, 5cde) Low-mass-ratio semidetached binary.
2MASS J19312915+4559061 (KIC 9406652)	<i>Kimura, M., Osaki, Y., Kato, T.</i> 2020, PASJ 72, 94. (1ao, 5fij, 8a) A CV tilted disk laboratory.

2MASS J19404263+4017085 (KIC 5111815)	<i>Soydugan, E. et al.</i> (4 authors) 2020, AJ, 160, 245. (1ao, 2ao, 5cde) EB in the NGC 6819 open cluster.
2MASS J19413767+4014326 (KIC 5113146)	<i>Soydugan, E. et al.</i> (4 authors) 2020, AJ, 160, 245. (1ao, 2ao, 5cde) EB in the NGC 6819 open cluster.
4U 1954+31	<i>Hinkle, K.H. et al.</i> (8 authors) 2020, ApJ 904, 143. (2cd, 5e) HMXB rather than a LMXB.
2MASS J19542217+4641258 (KIC 9850387)	<i>Sekaran, S. et al.</i> (12 authors) 2020, A&A 643, A162. (1co*, 2aco, 5cdegk) Detached EB with a g-mode pulsating component.
2MASS J19561361+4754336 (KIC 10686876)	<i>Liakos, A.</i> 2020, A&A 642, A91. (1ao*, 2abo, 5cde) Detached EB with a pulsating $\delta$ Scuti component.
MASTER OT J213908.79+161240.2 (AT 2020ugj)	<i>Goranskij, V. et al.</i> (7 authors) 2020, PZ 40, No. 12. (1a) High-amplitude optical transient.
PSR J2215+5135	<i>Voisin, G. et al.</i> (5 authors) 2020, MNRAS, 499, 1758. (1ao, 5g, 8a) Model for redistributing heat over the surface of irradiated spider companions.
2MASS J224050.50+484404.2	<i>Wang, J.-H. et al.</i> (5 authors) 2021, ChAA 45, 67. (1ao, 2abo, 5abcdeg, 6bd) Magnetically active binary discovered in the Yunnan-Hong Kong Wide Field Survey.
ZTF J2243+5242	<i>Burdge, K.B. et al.</i> (16 authors) 2020, ApJL 905, L7. (1ao, 5e) An 8.8-minute period eclipsing double WD binary.
MASTER OT J224524.92+211742.0 (AT 2020ray)	<i>Goranskij, V. et al.</i> (7 authors) 2020, PZ 40, No. 12. (1a, 2c) High-amplitude optical transient.
PSR J2339–0533	<i>Kandel, D. et al.</i> (5 authors) 2020, ApJ 903, 39. (1aoi, 2diou, 5cde) Hot spots and likely magnetic poles on the redback companion.

### X-ray sources with constellation or galaxy names

Cen X-3	(see V779 Cen)
Cyg X-1	(see V1357 Cyg)
Cyg X-2	(see V1341 Cyg)
Cyg X-3	(see V5121 Cyg)
Her X-1	(see HZ Her)
LMC X-1	(see 2MASS J05393883–6944356)
LMC X-2	(see 4U 0520–72)
LMC X-3	(see 1RXS J053855.5–640457)
M51 ULX-7	<i>Hu, C.-P., Ueda, Y., Enoto, T.</i> 2021, ApJ 909, 5. (2dx) Periodic X-ray dips in the pulsating ULX.
	<i>Vasilopoulos, G. et al.</i> (7 authors) 2021, ApJ 909, 50. (2dx) Evidence of propeller transition and X-ray dips modulated with orbital period.
NGC 4258 X-3	(see RX J121857.7+471558)
Sco X-1	(see V818 Sco)
47 Tuc W	<i>Hebbar, P.R. et al.</i> (5 authors) 2021, MNRAS 500, 1139. (1x*, 5cgi, 8a) Vanishing orbital X-ray variability of the EB millisecond PSR.

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## Objects with other designations

ADS 48	<i>Kiyaeva, O.V., Zhuchkov, R.Ya., Izmailov, I.S.</i> 2020, <i>AstBu</i> 75, 425. (4a) Relative motion in the hierarchical triple based on Gaia DR2 and 26-inch Refractor of Pulkovo Observatory data.
Apep Plume	(see 2XMM J160050.7–514245)
ASASSN-18ey	(see MAXI J1820+070)
ASASSN-18fv	(see V906 Car)
AT 2020iko	<i>Soraisam, M.D. et al.</i> (14 authors) 2021, <i>AJ</i> 161, 15. (1ao, 2od, 6b) WZ Sge-type dwarf nova candidate with an anomalous precursor event.
AT 2020ray	(see MASTER OT J224524.92+211742.0)
AT 2020ugj	(see MASTER OT J213908.79+161240.2)
CDF-S XT2	<i>Lü, H.-J. et al.</i> (6 authors) 2021, <i>RAA</i> 21, 47. (8a) The X-ray transient electromagnetic and gravitational-wave radiation.
CzeV1731	(see 2MASS J19245582+5704084)
EPIC 216747137	<i>Silvotti, R. et al.</i> (11 authors) 2021, <i>MNRAS</i> 500, 2461. (1ao, 5bcegk) Photometric study and system parameters.
ETHOS 1 (PN G068.1+11.0)	<i>Munday, J. et al.</i> (10 authors) 2020, <i>MNRAS</i> , 498, 6005. (1o, 2ac, 5bcde) PN central binary.
EVR-CB-004	<i>Ratzloff, J.K. et al.</i> (13 authors) 2020, <i>ApJ</i> 902, 92. (5b, 6b) Hot O subdwarf + unseen WD companion discovered with Evryscope.
FIN 332	(see HD 336780)
Gaia18aen	<i>Merc, J. et al.</i> (23 authors) 2020, <i>A&amp;A</i> 644, A49. (1ao, 2ciou, 5g) First symbiotic star discovered by Gaia.
GJ 225.1	(see HD 40865)
GSC 07418-01521	<i>Khruslov, A.V.</i> 2020, <i>PZ</i> 40, No. 13. (1a, 5b, 6b) $\delta$ Scuti pulsator with an eclipsing companion.
GSC 08977-08895	<i>Khruslov, A.V.</i> 2020, <i>PZ</i> 40, No. 13. (1a, 5b, 6b) Doubly eclipsing system.
GW170817 (AT 2017gfo)	<i>Murguia-Berthier, A. et al.</i> (6 authors) 2021, <i>ApJ</i> 908, 152. (8) The lifetime of the merger remnant and its imprint on the jet. <i>Nakar, E., Piran, T.</i> 2021, <i>ApJ</i> 909, 114. (1*iorx) Afterglow constraints on the viewing angle of binary NS mergers. <i>Nathanail, A., Most, E.R., Rezzolla, L.</i> 2021, <i>ApJ</i> 908, L28. (8) Maximum mass discussion. <i>Nedora, V. et al.</i> (10 authors) 2021, <i>ApJ</i> 906, 98. (4c, 8) Numerical relativity simulations of the NS merger. <i>Salafia, O.S., Giacomazzo, B.</i> 2021, <i>A&amp;A</i> 645, A93. (8b) Accretion-to-jet energy conversion efficiency. <i>Troja, E. et al.</i> (10 authors) 2020, <i>MNRAS</i> , 498, 5643. (1xr, 5j, 8bd) Continued X-ray emission a thousand days after the merger. <i>Wang, H., Giannios, D.</i> 2021, <i>ApJ</i> 908, 200. (8) Multimessenger parameter estimation: jet structure and Hubble constant.
GW190521	<i>Gayathri, V. et al.</i> (10 authors) 2021, <i>ApJL</i> 908, L34. (8) Measuring the Hubble constant. <i>Belczynski, K.</i> 2020, <i>ApJL</i> 905, L15. (1x, 2x) Formation of the BH-BH merger. <i>Nitz, A.H., Capano, C.D.</i> 2021, <i>ApJL</i> 907, L9. (8) May be an intermediate-mass-ratio inspiral.

	<i>Rice, J.R., Zhang, B.</i> 2021, ApJ 908, 59. (8bd) Growth of the stellar-mass BH in dense molecular clouds.
	<i>Romero-Shaw, I. et al.</i> (4 authors) 2020, ApJL 903, L5. (5f) Likely eccentric orbit, dynamic formation in the binary BH merger.
GW190814	<i>Arca Sedda, M.</i> 2021, ApJL 908, L38. (8) Dynamical formation of the merger.
	<i>Godzieba, D.A., Radice, D., Bernuzzi, S.</i> 2021, ApJ 908, 122. (8) NS maximum mass.
	<i>Nathanail, A., Most, E.R., Rezzolla, L.</i> 2021, ApJ 908, L28. (8) Maximum mass discussion.
	<i>Olejak, A. et al.</i> (7 authors) 2020, ApJL 901, L39. (8cd) Evolutionary channels for BH mergers with unequal masses.
	<i>Roupas, Z.</i> 2021, Ap&SS 366, 9. (8a) The secondary component as an anisotropic NS.
	<i>Tews, I. et al.</i> (8 authors) 2021, ApJL 908, L1. (8) Nature of the GW source and its impact on the understanding of supranuclear matter.
	<i>Tsokaros, A., Ruiz, A., Shapiro, S.L.</i> 2020, ApJL 905, 48. (5e, 8ac) Spin and equation of state of the NS companion.
	<i>Vasylyev, S.S., Filippenko, A.V.</i> 2020, ApJ 902, 149. (8cd) The Hubble constant from gravity waves.
GX 13+1	(see V5512 Sgr)
GX 17+2	(see NP Ser)
GX 301-2	(see BP Cru)
GX 339-4	(see V821 Ara)
HIP 11352	<i>Al-Tawalbeh, Y.M. et al</i> (10 authors) 2021, AstBu 76, 71. (4a, 5e). Precise masses, ages, and orbital parameters.
HIP 18856	<i>Efremova, P. et al.</i> (8 authors) 2021, RAA 21, 58. (4aco, 5e) Binary.
HIP 70973	<i>Al-Tawalbeh, Y.M. et al</i> (10 authors) 2021, AstBu 76, 71. (4a, 5e). Precise masses, ages, and orbital parameters.
HIP 72479	<i>Al-Tawalbeh, Y.M. et al</i> (10 authors) 2021, AstBu 76, 71. (4a, 5e). Precise masses, ages, and orbital parameters.
KIC 2719436	(see 2MASS J19311995+3756133)
KIC 3858884	(see BD+38°3661)
KIC 4245897	(see V583 Lyr)
KIC 4851217	(see HD 225524)
KIC 5111815	(see 2MASS J19404263+4017085)
KIC 5113146	(see 2MASS J19413767+4014326)
KIC 6852488	(see 2MASS J19135355+4222482)
KIC 9406652	(see 2MASS J19312915+4559061)
KIC 9850387	(see 2MASS J19542217+4641258)
KIC 10686876	(see 2MASS J19561361+4754336)
LB 1	(see 2MASS J12123849+2638114)
LS I +61°303	(see V615 Cas)
LVC S200224ca	<i>Klingler, N.J. et al.</i> (44 authors) 2021, ApJ 907, 97. Multiwavelength follow-up and implications for binary BH mergers.
MWC 148	(see HD 259440)
MWC 656	(see HD 215227)

Nova 1670	(see CK Vul)
Nova Vul 1670	(see CK Vul)
NSV 16624	<i>Arhipova, V.P. et al.</i> (4 authors) 2020, <i>AstL</i> 46, 601. (1a, 2a, 5) The PN H 3-75 binary central star.
NSVS 7826147	(see DD CrB)
NSVS 14256825	(see V1828 Aql)
PN G068.1+11.0	(see ETHOS 1)
PN G283.7-05.1	<i>Jones, D. et al.</i> (11 authors) 2020, <i>A&amp;A</i> 642, A108. (1aio, 2aco, 5cd) A PN post-common-envelope binary central star.
S190510g	<i>Garcia, A. et al.</i> (93 authors) 2020, <i>ApJ</i> 903, 75. (1ao) Search for the optical counterpart of the LIGO/Virgo GW binary NS merger candidate.
TIC 63328020	<i>Fuller, J. et al.</i> (4 authors) 2020, <i>MNRAS</i> , 498, 5730. (8a) Tidally trapped pulsations in the binary system.
TIC 278825952	(see 2MASS J06415294–5547419)
TYC 1380-957-1	(see 2MASS J08073948+1814382)
TYC 3700-1384-1	(see 2MASS J02454526+5259198)
TYC 4700-815-1	(see HD 18163)
TYC 4962-1205-1	(see HD 116546)
TYC 6408-989-1	<i>Tian, X.-M.</i> 2021, <i>RAA</i> 21, 62. (1ao, 2ao, 5cdk, 6a) The shortest period Am-type EB.
UCAC2 46706450	<i>Werner, K. et al.</i> (8 authors) 2020, <i>A&amp;A</i> 642, A228. (2acdou, 5egh) An extremely hot WD with a rapidly rotating K-type subgiant companion.
UCAC4 721-037069	<i>Clavel, M. et al.</i> (4 authors) 2021, <i>A&amp;A</i> 645, A72. (1x, 2aox, 5de) A test case for using RVs to reveal BHs in binaries.
Vela Pulsar	(see HU Vel)
WOCS 11028	(see WOCS J0850269+114831)
WR 137	(see V1679 Cyg)
WR 140	(see V1687 Cyg)

## General

*Abdusalam, K. et al.* (6 authors) 2020, *ApJ* 902, 125. (8c) Formation and evolution of ULX PSR binaries to PSR-NS and PSR-WD systems.

*Anagnostou, O., Trenti, M., Melatos, A.* 2020, *PASA* 37, e044. Dynamically formed BH binaries: in-cluster versus ejected mergers.

*Banerjee, S. et al.* (5 authors) 2020, *ApJ* 901, 29. (8bcd) Simulations of early kilonova emission from NS mergers.

*Bavera, S.S. et al.* (16 authors) 2021, *A&A* 647, A153. (8cd) The impact of mass-transfer physics on the observable properties of field binary BH populations.

*Bera, S. et al.* (4 authors) 2020, *ApJ* 902, 79. (10) Inferring the Hubble constant from binary BH-Galaxy cross-correlations.



- Bonnerot, C., Stone, N.C.* 2021, *Space Sci. Rev.* 217, No. 16. (8bd) Formation of an accretion flow.
- Bozzo, E., Ducci, L., Falanga, M.* 2021, *MNRAS* 501, 2403. A semi-analytical treatment to wind accretion in NS supergiant HMXBs – I. Eccentric orbits.
- Cardoso, V., Macedo, C.F.B.* 2020, *MNRAS*, 498, 1963. (8abd) Drifting through the medium: kicks and self-propulsion of binaries within ADs and other environments.
- Cardoso, V., Maselli, A.* 2020, *A&A* 644, A147. (8bcd) Constraints on the astrophysical environment of binaries with GW observations.
- Chakrabarti, S. et al.* (5 authors) 2021, *ApJL* 907, L26. (8) Measurement of the Galactic plane mass density from binary PSR accelerations.
- Chen, H.-Y. et al.* (4 authors) 2021, *ApJL* 908, L4. (8, 9) A program for multimessenger standard siren cosmology in the era of LIGO A+, Rubin Observatory, and beyond.
- Chen, K., Dai, Z.G.* 2021, *ApJ* 909, 4. (8) Charging and EM radiation during the inspiral of a BH-NS binary.
- Comerford, T.A.F., Izzard, R.G.* 2020, *MNRAS*, 498, 2957. (8abcd) Estimating the outcomes of common envelope evolution in triple stellar systems.
- Cyr, I.H. et al.* (6 authors) 2020, *MNRAS*, 497, 3525. (8abd) Spiral density enhancements in Be binary systems.
- Deal, M., Richard, O., Vauclair, S.* 2021, *A&A* 646, A160. (8cd) Matter accretion in metal-poor stars down to extremely metal-poor stars and the lithium problem.
- Decin, L. et al.* (35 authors) 2020, *Science* 369, 1497. (4cr, 5j, 8d) (Sub)stellar companions shape the winds of evolved stars.
- Deng, Z.-L. et al.* (4 authors) 2021, *ApJ* 909, 174. (8ac) Evolution of LMXBs under different magnetic braking prescriptions.
- Di Carlo, U.N. et al.* (12 authors) 2020, *MNRAS*, 498, 495. (8acd) Binary BHs in young star clusters: the impact of metallicity.
- Ding, Q., Tong, X., Wang, Y.* 2021, *ApJ* 908, 78. (8) Gravitational collider physics via PSR-BH binaries.
- Dong, J.M.* 2021, *MNRAS* 500, 1505. NS r-mode instability in LMXBs: effects of Fermi surface depletion and superfluidity of dense matter.
- Evans, F.A., Renzo, M., Rossi, E.M.* 2020, *MNRAS*, 497, 5344. (8acd) Core-collapse SNe in binaries as the origin of galactic hyper-runaway stars.
- Foucart, F. et al.* (6 authors) 2020, *ApJL* 902, L27. (8c) Modeling neutrino transport in binary NS mergers.
- Fragione, G., Loeb, A., Rasio, F.A.* 2020, *ApJL* 902, L26. (8c) Formation of high mass BH binaries via repeated mergers in star clusters.

*Fujibayashi, S. et al.* (6 authors) 2020, ApJL 901, 122. (8c) Postmerger mass ejection of low-mass binary NS mergers.

*Fu, J.-N. et al.* (12 authors) 2020, RAA 20, 167. Overview of the LAMOST-Kepler project.

*Fuller, J.* 2021, MNRAS 501, 483. Inverse tides in pulsating binary stars.

*Galiullin, I., Gilfanov, M.* 2021, A&A 646, A85. (2cx, 5hj) Populations of super-soft X-ray sources in galaxies of different morphological types.

*Giridhar, S.* 2020, JApA 41, 44. Recent advances in RV Tauri stars.

*González, E. et al.* (8 authors) 2021, ApJL 908, L29. (8) Intermediate-mass BHs from high massive-star binary fractions in young star clusters.

*Habumugisha, I. et al.* (4 authors) 2020, JApA 41, 24. (8) On the structure of quasi-Keplerian ADs surrounding millisecond X-ray PSRs.

*Hameury, J.-M., Lasota, J.-P.* 2020, A&A 643, A171. (8abc) Models of ULX transient sources.

*Han, Z.-W. et al.* (4 authors) 2020, RAA 20, 161. (9) Binary population synthesis.

*Hayashi, T., Suto, Y.* 2021, ApJ 907, 48. (8) Unveiling the architecture of a PSR-binary BH triple system with PSR arrival time analysis.

*Hillman, Y., Kashi, A.* 2021, MNRAS 501, 201. Simulations of multiple nova eruptions induced by wind accretion in symbiotic systems.

*Hirsh, K. et al.* (5 authors) 2020, MNRAS, 498, 2936. (8abd) On the cavity size in circumbinary discs.

*Huber, D. et al.* (4 authors) 2021, A&A 646, A91 (8ab) Relativistic fluid modelling of  $\gamma$ -ray binaries. I. The model.

*Ivanov, P.B., Papaloizou, J.C.B.* 2021, MNRAS 500, 3335. On the evolution of a binary system with arbitrarily misaligned orbital and stellar angular momenta due to quasi-stationary tides.

*Jeffery, C.S., Zhang, X.* 2020, JApA 41, 48. (8c) Merged WDs and nucleosynthesis.

*Karino, S.* 2020, PASJ 72, 95. (8) Spin evolution of NSs in wind-fed HMXBs.

*Kimpson, T., Kinwah, W., Zane, S.* 2020, MNRAS, 497, 5421. (8d) Orbital spin dynamics of a millisecond PSR around a massive BH with a general mass quadrupole.

*Kinugawa, T., Nakamura, T., Nakano, H.* 2020, MNRAS, 498, 3946. (8acd, 9) Chirp mass and spin of binary BHs from first star remnants.

*Kolbin, A.I., Borisov, N.V.* 2020, AstL 46, 812. (8) Mapping of WDs in AM Her systems.

*Kotrlová, A. et al.* (9 authors) 2020, A&A 643, A31. (8ab) Models of high-frequency QPOs and BH spin estimates in Galactic microquasars.

- Kramer, M. et al.* (7 authors) 2020, A&A 642, A97. (8abcd) Formation of sdB-stars via common envelope ejection by substellar companions.
- Kuranov, A.G., Postnov, K.A., Yungelson, L.R.* 2020, AstL 46, 658. (8ac) Population synthesis of ULX sources with magnetized NSs.
- Lagos, F. et al.* (15 authors) 2020, MNRAS, 498, 2662. (10b) Erratum: The WD Binary Pathways Survey - III. Contamination from hierarchical triples containing a WD (2020, MNRAS, 494, 915).
- Layek, B., Yadav, P.* 2020, JApA 41, 14. (8) Bursts of GWs due to crustquake from PSRs.
- Lazzarini, M. et al.* (10 Authors) 2021, ApJ 906, 120. (1oux) Multiwavelength characterization of the HMXB population of M31.
- Lehmer, B.D. et al.* (10 Authors) 2021, ApJ 907, 17. (1\*uoix) The metallicity dependence of the HMXB luminosity function.
- Li, D., Mustill, A.J., Davies, M.B.* 2020, MNRAS, 499, 1212. (8acd) Encounters involving planetary systems in birth environments: the significant role of binaries.
- Liu, C., Li, X.-D.* 2021, RAA 21, 52. On the torque exerted by a warped, magnetically threaded AD.
- Lu, L.-N. et al.* (4 authors) 2020, RAA 20, 196. A method for estimating masses of W UMa-type binaries.
- Lyutykh, A.V., Pruzhinskaya, M.V., Blinnikov, S.I.* 2021, AstL 47, 1. (5c, 8) LCs of Type Ia SNe.
- Maccarone, T.J. et al.* (4 authors) 2020, MNRAS, 499, 957. (8ab) Eclipses of jets and discs of XBs as a powerful tool for understanding jet physics and binary parameters.
- MacLeod, M., Loeb, A.* 2020, ApJ 902, 85. (8d) Hydromagnetic winds from massive CBs.
- Magee, M.R., Maguire, K.* 2020, A&A 642, A189. An investigation of  $^{56}\text{Ni}$  shells as the source of early LC bumps in type Ia SNe.
- Marcel, G., Neilsen, J.* 2021, ApJ 906, 106. (8) Can Lense-Thirring precession produce QPOs in supersonic accretion flows?
- Mazzola, C.N. et al.* (23 authors) 2020, MNRAS, 499, 1607. (2i, 9) The CB fraction as a function of stellar parameters in APOGEE: a strong anticorrelation with  $\alpha$  abundances.
- Michaely, E., Perets, H.B.* 2020, MNRAS, 498, 4924. (8ad, 9) High rate of gravitational waves mergers from flyby perturbations of wide BH triples in the field.
- Mottez, F., Zarka, P., Voisin, G.* 2020, A&A 644, A145. (8bd) Repeating fast radio bursts caused by small bodies orbiting a PSR or a magnetar.
- Muñoz, D.J., Lithwick, Y.* 2020, ApJ 905, 106. (8ab) Long-lived eccentric modes in circumbinary disks.
- Mushkin, J., Katz, B.* 2020, MNRAS, 498, 665. (8b) A simple random walk model explains the disruption process of hierarchical, eccentric three-body systems.

*Neugent, K.F.* 2021, ApJ 908, 87. (10\*i\*u\*) The red supergiant binary fraction as a function of metallicity in M31 and M33.

*Neunteufel, P. et al.* (4 authors) 2021, A&A 646, L8. (8cd) Predicted spatial and velocity distributions of ejected companion stars of helium accretion-induced thermonuclear SNe.

*Nitz, A.H., Schäfer, M., Canton, T.D.* 2020, ApJL 902, L29. (8c) Forecasting detection of binary NS mergers.

*Oomen, G.-M. et al.* (4 authors) 2020, A&A 642, A234. (8abcd) Disc-binary interactions in depleted post-AGB binaries.

*Pattnaik, R. et al.* (8 authors) 2021, MNRAS 501, 3457. A machine-learning approach for classifying LMXBs based on their compact object nature.

*Pelisoli, I. et al.* (5 authors) 2020, A&A 642, A180. (4a, 9) Alone but not lonely: Observational evidence that binary interaction is always required to form hot subdwarf stars.

*Pjanka, P., Stone., J.M.* 2020, ApJ 904, 90. (8b) Stratified global magnetohydrodynamic models of ADs.

*Rana, P., Mangalam, A.* 2020, ApJ 903, 121. (8b) Relativistic precession model to explain QPOs in BH XBs.

*Ren, J.-J. et al.* (25 authors) 2020, ApJ 905, 38. (1aio, 6b) Identified 23 new binaries that are likely progenitors of type Ia SNe.

*Rose, J.C. et al.* (4 authors) 2021, ApJ 909, 207. (8ac) Where binary NSs merge: predictions from IllustrisTNG.

*Sand, C. et al.* (5 authors) 2020, A&A 644, A60. (8c) Common-envelope evolution with an asymptotic giant branch star.

*Sarkar, S., Chattopadhyay, I., Laurent P.* 2020, A&A 642, A209. (8ab) Two-temperature solutions and emergent spectra from relativistic ADs around BHs.

*Sberna, L., Toubiana, A., Miller, M.C.* 2021, ApJ 908, 1. (8) Golden Galactic binaries for LISA: mass-transferring WD-BH binaries.

*Scepi, N., Begelman, M.C., Dexter, J.* 2021, MNRAS 500, 1547. QPOs in compact binaries from small-scale eruptions in an inner magnetized disc.

*Schneider, F.R.N., Podsiadlowski, P., Müller, B.* 2021, A&A 645, A5. (8cd) Pre-SN evolution, compact-object masses, and explosion properties of stripped binary stars.

*Schroeder, G. et al.* (10 authors) 2020, ApJ 902, 82. (1r) Constraints on the remnants of NS mergers.

*Song, H. et al.* (9 authors) 2020, ApJ 905, 39. (8a) Energy transport induced by horizontal turbulence in W-type W UMa binaries.

- Sotomayor Checa, P., Romero, G.E., Bosch-Ramon, V.* 2021, *Ap&SS* 366, 13. (8a) Equatorial outflows driven by jets in Population III microquasars.
- Stassun, K.G., Torres, G.* 2021, *ApJL* 907, L33. (9) Parallax systematics and photocenter motions of benchmark EBs in Gaia EDR3.
- Tokovinin, A., Petr-Gotzens, M.G., Briceño, C.* 2020, *AJ* 160, 268. (1a, 4a, 9) Statistics of wide pre-main-sequence binaries in the Orion OB1 association.
- van der Merwe, C.J.T. et al.* (5 authors) 2020, *ApJ* 904, 91. (8b) Intrabinary shock emission from black widows and redbacks.
- Van Rensbergen, W., De Greve, J.P.* 2020, *A&A* 642, A183. (8c) Magnetic braking at work in binaries.
- Veske, D. et al.* (8 authors) 2021, *ApJL* 907, L48. (8, 9) Search for BH merger families.
- Vigna-Gómez, A. et al.* (6 authors) 2021, *ApJL* 907, L19. (8) Massive stellar triples leading to sequential binary BH mergers in the field.
- Vinciguerra, S. et al.* (10 authors) 2020, *MNRAS*, 498, 4705. (8abcd) Be XBs in the SMC as indicators of mass-transfer efficiency.
- Wang, A. et al.* (5 authors) 2020, *PASA* 37, e051. The capability of the Australian Square Kilometre Array Pathfinder to detect prompt radio bursts from NS mergers.
- Wang, X., Vassh, N.* 2020, *ApJL* 903, L3. (8c)  $\gamma$ -ray emission as signature of decay of r-process elements.
- Wiktorowicz, G. et al.* (7 authors) 2021, *ApJ* 905, 134. (8ab) Noninteracting BH binaries with Gaia and LAMOST.
- Yoshida, S.* 2021, *ApJ* 906, 29. (8, 4c) d-Hz GWs from double WD merger remnants.
- You, Z.-Q. et al.* (5 authors) 2021, *ApJ* 908, 215. (8) Standard-siren cosmology using GWs from binary BHs.
- Zapartas, E. et al.* (6 authors) 2021, *A&A* 645, A6. (8bcd) Effect of binary evolution on the inferred initial and final core masses of hydrogen-rich, Type II SN progenitors.
- Zeke, D.B., Tessema, S.B., Negu, S.H.* 2021, *RAA* 21, 23. (8ab) Effects of dynamo magnetic fields on observational properties of accreting millisecond X-ray PSRs.
- Zhang, Z.-H. et al.* (5 authors) 2020, *RAA* 20, 205. The influences of observational strategies of PSR timing on the properties of PSR clocks.
- Zhao, Z.Y. et al.* (5 authors) 2021, *ApJ* 907, 111. (8) Dispersion and rotation measures from the ejecta of compact binary mergers: clue to the progenitors of fast radio bursts.
- Zou, Y. et al.* (11 authors) 2020, *MNRAS*, 497, 2855. (8abd) Bipolar PNe from outflow collimation by common envelope evolution.

Zrake, J. et al. (4 authors) 2021, ApJL 909, L13. (8) Equilibrium eccentricity of accreting binaries.

## Collections of data

*Antipin, S.V. et al.* (6 authors) 2020, AstL 46, 677. (6b) Discovery of 20 new EBs: Gaia DR2 1974967627907459712, 1974968624339881216, 1974969075315507328, 1975057860881196544, 1975058032679877888, 1975058818649939456, 1975061606092649088, 1975062087128987520, 1975062362006883328, 1975067275449796352, 1975157023084723584, 1975157774697150208, 1975158049575115008, 1975251198825190400, 1975251409287359232, 1975253535287510656, 1975253775805720320, 1975255704254613248, 1975255837390008832, 1975256524584779776.

*Anupama, G.C., Pavana, M.* 2020, JApA 41, 43. (2c, 5g) Recurrent novae: single degenerate progenitors of type Ia SNe. RS Oph, T Pyx, V3890 Sgr, U Sco, M31N 2008-12a.

*Auer, R.F.* 2021, OEJV 210. (5a) 167 times of minima for 69 EBs in 2020: UU And, WZ And, HS And, PX And, PV Boo, UU Cam, AW Cam, PP Cam, V474 Cam, V530 Cam, AH Cas, EY Cas, HT Cas, V1312 Cas, V1324 Cas, GW Cep, V698 Cep, V796 Cep, V919 Cep, EF Dra, EX Dra, V567 Dra, V585 Dra, FG Gem, V722 Her, EM Lac, EO Lac, MW Lac, BK Peg, IP Peg, V1260 Tau, QQ UMa, EQ UMa, NU UMa, CSS J003227.2+411407, ASASSN-V J003242.76+412307.0, WISE J013215.0+704856, ASASSN-V J013410.10+711512.1, ZTF J0146571.07+552932.4, ASASSN-V J014802.06+553251.7, ASASSN-V J060633.11+281722.2, CSS J065209.5+380857, CSS J065249.1+381317, CSS J065302.9+381408 (ASASSN101135ab Aur), CSS J066350.8+382226, ROTSE1 J153139.25+374359.0, ROTSE1 J161034.46+371538.9, CSS J171143.8+425004, ASASSN-V J180737.64+693804.1, WISE J192224.2+564857, CzeV488, CzeV490, CzeV492, CzeV1227, CzeV1640, CzeV1731, CzeV1905, CzeV1925, CzeV1942, CzeV1994, MNIC V20, NSVS 260293, NSVS 49125 UMi, NSVS 6306374, NSVS 880674, SERIV 104, TSVSC1 TN-N110200230-12-82-2, USNO-B1.0 1382-0235440, USNO-B1.0 1478-0002611.

*Bahramian, A. et al.* (14 authors) 2020, ApJ 901, 57. (2dx, 6a) The MAVERIC survey: Chandra/ACIS catalog of faint X-Ray sources in 38 Galactic globular clusters (more than 1100 X-ray sources listed).

*Bao, T., Li, Z.* 2020, MNRAS, 498, 3513. (1x, 2dx, 5bij, 6bc, 9) Periodic X-ray sources in the Galactic bulge: application of the Gregory-Loredo algorithm. Detection of 23 periodic X-ray sources classified as CVs.

*Beuermann, K. et al.* (5 authors) 2021, A&A 645, A56. (1aox, 2do, 5bj) Neglected X-ray discovered polars. III. RX J0154.0–5947, 1RXS J060033.1–270918, RX J0859.1+0537, RX J0953.1+1458, 1RXS J100211.4–192534.

*Boztepe, T. et al.* (4 authors) 2020, MNRAS, 498, 2734. (2dx, 5i, 8a) Strengthening the bounds on the r-mode amplitude with X-ray observations of millisecond PSRs: PSR J0952–0607, PSR J1231–1411, PSR J1400–1431, PSR J1723–2837, PSR J1744–1134, PSR J1810+1744, PSR J2241–5236, PSR J2256–1024.

*Calissendorff, P., Janson, M., Bonnefoy, M.* 2020, A&A 642, A57. (2bdi, 5g) Characterizing young visual M-dwarf binaries with near-IR integral field spectra: 2MASS J01112542+1526214, J03323578+2843554, J04595855–0333123, J06112997–7213388, J10140807–7636327, J10364483+1521394, J23495365+2427493.

*Carmo, A. et al.* (8 authors) 2020, MNRAS, 498, 2833. (1o, 5bce, 9) Recovering variable stars in large surveys: Unknown-period Algol-type binaries in the Catalina Real-Time Transient Survey: CSS J003441.8–135033, J145100.7+052843, J162549.4+102124, J020021.5+213412, J071357.2+342138, J080549.6+403108, J084835.7+253917, J090355.4+533132.

*Corcoran, K. A. et al.* (15 authors) 2021, AJ 161, 143. (2ai, 5d) Analysis of previously classified WD-main-sequence binaries using data from the APOGEE survey. Post-common-envelope systems: 2MASS J01575656–0244460, J04322373+1745026, J10243847+1624582, J10552625+4729228, J11463394+0055104, J12154411+5231013, J13054173+3037005, J14544500+4626456, J15150334+3628203.

*Deneva, J.S. et al.* (10 authors) 2021, ApJ 909, 6. (1ag, 4cr) Timing of eight binary millisecond PSRs found with Arecibo in Fermi-LAT unidentified sources: PSR J0251+2606, J1048+2339, J1625–0021, J1805+0615, J1824+1014, J1908+2105, J2006+0148, J2052+1219.

*Doroshenko, V. et al.* (4 authors) 2020, A&A 643, A173. (2dx\*, 5i) An observational argument against accretion in magnetars: GK Per, V725 Tau (1A 0535+262), 4U 0142+61, PSR B1509–58, 1RXS J170849.0–400910, 1E 1841–045.

*El Mellah, I. et al.* (5 authors) 2020, A&A 643, A9. (Erratum: 2020, A&A 644, C1) (8d) Radiography in HMXBs: Micro-structure of the stellar wind through variability of the column density. V1357 Cyg (Cyg X-1), V884 Sco (4U 1700–377), GP Vel (Vel X-1), IGR J00370+6122.

*Ferrigno, C., Bozzo, E., Romano, P.* 2020, A&A 642, A73. (2dx, 5i) Monitoring clumpy wind accretion in supergiant fast-X-ray transients with XMM-Newton: IGR J16328–4726, IGR J16418–4532, IGR J16479–4514, SAX J1818.6–1703, IGR J18450–0435, IGR J18483–0311, AX J1949.8+2534.

*Fuentes-Morales, I. et al.* (8 authors) 2021, MNRAS 501, 6083. (5be, 8ad) New periods of six faint novae: X Cir (3.71 h), IL Nor (1.62 h), DY Pup (3.35 h), V363 Sgr (3.03 h), V2572 Sgr (3.75 h), and CQ Vel (2.7 h), and revised periods for the old novae OY Ara, RS Car, V365 Car, V849 Oph, V728 Sco, WY Sge, XX Tau, and RW UMi.

*Gazeas, K. et al.* (16 authors) 2021, MNRAS 501, 2897. (1ao, 2a, 5abcdeg) Physical parameters of CBs: HV Aqr, OO Aql, FI Boo, TX Cnc, OT Cnc, EE Cet, RW Com, KR Com, V401 Cyg, V345 Gem, AK Her, V502 Oph, V566 Oph, V2612 Oph, V1363 Ori, V351 Peg, V357 Peg, Y Sex, V1123 Tau, and W UMa.

*Getley, A.K. et al.* (4 authors) 2020, MNRAS, 498, 4356. (1ao, 5abf) Stability of planetary, single M dwarf, and binary star companions to Kepler detached EBs and a possible five-body system: KIC 5255552, 5653126, 5731312, 7670617, 7821010, 8023317, 10268809, 10296163, 11519226, 11558882, 12356914.

*Graczyk, D. et al.* (20 authors) 2020, ApJ 904, 13. (1aio, 2ao, 5cde, 6d) A distance determination to the SMC with an accuracy of better than two percent based on ten late-type EBs: OGLE SMC-ECL-0019, 0439, 0727, 0970, 1492, 1859, 2761, 2876, 3529, 3678.

*Gramajo, L.V. et al.* (7 authors) 2020, PASA 37, e054. (1ao, 5abc, 6ab, 9) A hundred new EB candidates studied in a near-IR window in the VVV survey.

*Guo, D.-F. et al.* (8 authors) 2020, MNRAS, 497, 3381. (1ao, 5abcej, 6b) Twenty-four EBs identified in the area of RA=02:21:36 and DEC=+57:11:32, presenting 23 photometric solutions: DK Per, WISE J021308.0+572942, 2MASS J02142425+5706188 (TYC 3694-2483-1), WISE

J021609.8+565324, 2MASS J02173203+5611597 (NEV64), 2MASS J02181450+5809347 (NSV 772), 2MASS J02181739+5655224 (Mis V1395), 2MASS J02200296+5711186 (NSVS 1908107), 2MASS J02214106+5845446 (GSC 03698-01618), 2MASS J02221108+5854290 (GSC 03693-00082), 2MASS J02222743+5703174 (NAIT000731), ASASSN-V J022203.26+551739.7, 2MASS J02230773+5752335 (TSVSC1 TN-N3111323 10-22-86-2), 2MASS J02240150+5717241 (NSVS 1911335), 2MASS J02255536+5801369 (NAIS000024), 2MASS J02264468+5650320 (NSVS 1913053), 2MASS J02283415+5833491 (NSVS 1916261), 2MASS J02291161+5853024 (NSVS 1917038), ASASSN-V J023009.35+563849.7, WISE J023214.5+555624, GSC 03698-00022, N311132364, NEV61, NSVS 1908490.

*Han, Z. et al.* (8 authors) 2020, PASJ 72, 76. (2bco, 5i) Spectroscopic properties of the dwarf nova-type CVs observed by LAMOST: AR And, PQ And, FS Aur, SS Aur, HW Boo, NZ Boo, SY Cnc, AK Cnc, AT Cnc, CC Cnc, DW Cnc, EG Cnc, GY Cnc, GZ Cnc, HH Cnc, HT Cas, GO Com, SS Cyg, EM Cyg, BF Eri, U Gem, IR Gem, V660 Her, V1239 Her, X Leo, IU Leo, RZ LMi, SX LMi, YZ LMi, AC LMi, EZ Lyn, V344 Lyr, CZ Ori, V344 Ori, IP Peg, V367 Peg, V368 Peg, V405 Peg, V537 Peg, V627 Peg, GK Per, TY Psc, AY Psc, EI Psc, HY Psc, NY Ser, VZ Sex, V1208 Tau, TW Tri, WY Tri, CY UMa, ER UMa, KS UMa, MR UMa, V355 UMa, SDSS J003303.94+380105.4, HS 0218+3229, 2MASS J04260931+3541451, PTF1 J071912.13+485834.0, SDSS J080846.19+313106.0, SDSS J081256.85+191157.8, SDSS J081610.83+453010.1, SDSS J083845.23+491055.5, SDSS J084358.08+425036.8, SDSS J090628.24+052656.9, SDSS J094002.56+274942.0, SDSS J100658.41+233724.4, SDSS J105550.08+095620.4, SDSS J113950.58+455817.9, SDSS J124417.89+300401.0, SDSS J153015.04+094946.3, SDSS J153634.42+332851.9, SDSS J155720.75+180720.2, SDSS J213559.30+052700.5, UCAC3 232-65219, US 691.

*Hogg, M.A. et al.* (11 authors) 2020, MNRAS, 498, 12. (1aio, 2aibd) Confirming new WD-ultracool dwarf binary candidates using optical and NIR photometry and spectroscopy: SDSS J074231.98+285727.3, J075132.16+200226.8, J090759.59+053638.13, J095042.31+011506.5, J103736.57+013905.11, J154806.89+000639.4.

*Jeong, M.-J. et al.* (8 authors) 2020, OEJV 205. (5a) 88 CCD times of minima for 56 eccentric EBs: V871 Aql, AG Ari, AL Ari, CG Aur, EQ Boo, WW Cam, AS Cam, DT Cam, V399 Cam, V534 Cam, LT CMa, IT Cas, OX Cas, V381 Cas, V744 Cas, V785 Cas, V799 Cas, V821 Cas, V1018 Cas, CW Cep, V397 Cep, V839 Cep, V898 Cep, V919 Cep, V957 Cep, V961 Cep, Y Cyg, V796 Cyg, V2647 Cyg, CM Dra, V425 Dra, OZ Hya, RW Lac, CO Lac, GX Lac, MZ Lac, V401 Lac, CF Mon, V498 Mon, V521 Mon, V578 Mon, V684 Mon, FT Ori, IM Per, IQ Per, V871 Per, V495 Vul, 2MASS J03314391+3631523, 2MASS J03520066+4003477, 2MASS J04370204+4205520, 2MASS J05421802+2003391, 2MASS J06194134-1107556, 2MASS J07412319+0253210, 2MASS J07505239+0048040, 2MASS J18432690+0841321, 2MASS J19033272+3941003.

*Joshi, Y.C. et al.* (6 authors) 2020, MNRAS, 499, 618. (1ao, 5bce, 6bd) Variable stars in the field of intermediate-age open cluster NGC 559 (four EBs): Gaia DR2 512422725508267520, 512610638914324864, 512422416270626816, 512603835686182528.

*Katoh, N., Itoh, Y., Sato, B.* 2021, PASJ 73, 78. (2ao, 5g, 7d) Searching for periodic variations in SB RVs after the removal of orbital motions: 94 Aqr (HD 219834), 29 Ari (HD 15814), DE Boo (HD 131511), h Dra (HD 153597),  $\zeta$  Her (HD 150680), 36 LMi (HD 92000),  $\epsilon$  Lib (HD 137052), 49 Lib (HD 143333), c UMa (HD 79028), PV UMa (HD 77247), HD 9312, HD 9939, HD 11613, HD 14214, HD 35956, HD 36859, HD 43587, HD 43821, HD 54563, HD 82674, HD 105982, HD 112048, HD 139461, HD 160346, HD 162596, HD 163840, HD 170829, HD 172831, HD 178428, HD 210763, HD 213429, HD 219420, HD 220007.



*Kato, M., Hachisu, I.* 2020, PASJ 72, 82. Supersoft X-ray phases of recurrent novae as an indicator of their WD masses: RS Oph, T Pyx, U Sco, V745 Sco, LMC N 1968, LMC N 2009a, M31N 2008-12a, and candidate LMC N 2012a.

*Kazarovets, E.V. et al.* (6 authors) 2020, PZ 40, No. 6. (6a) The 82nd name-list of variable stars. Part III – RA 20h to 24h and novae.

*Khruslov, A.V.* 2020, PZP 20, No. 3. (1a, 5b, 6b) 14 new eclipsing variables: GSC 00733-01267, GSC 02397-00879, GSC 02897-00549, GSC 02897-00982, GSC 02898-00479, GSC 02898-01983, GSC 02902-03186, GSC 03331-00963, GSC 03345-02514, GSC 03695-01701, GSC 03699-01986, GSC 03709-00539, GSC 03713-00648, USNO-B1.0 1371-0127827.

*Khruslov, A.V., Kusakina, A.V., Reva, I.* 2020, PZP 20, No. 4. (1a, 5b, 6b). Seven new EBs: 2MASS 22014813+5452217, USNO-B1.0 1466-0054614, USNO-B1.0 1423-0437691, USNO-B1.0 1446-0386135, USNO-B1.0 1446-0386201, USNO-B1.0 1447-0384861, USNO-B1.0 1447-0384889.

*Knudstrup, E. et al.* (13 authors) 2020, MNRAS, 499, 1312. (1aou, 2oa, 5cdek) Extremely precise age and metallicity of the open cluster NGC 2506 using detached EBs: V943 Mon (NGC 2506 ADG V4), 2MASS J08001149–1050190 (NGC 2506 2375, NGC 2506 RGB433), 2MASS J08001818–1049216 (TYC 5416-422-1, NGC 2506 RGB526), Gaia DR2 3038041994390283776 (NGC 2506 RGB231), Gaia DR2 3038044880608377216 (NGC 2506 V2032), NGC 2506 ADG V5, NGC 2506 2255 (NGC 2506 RGB913), NGC 2506 4274 (NGC 2506 RGB2358), NGC 2506 2402 (NGC 2506 RGB383).

*Koliopanos, F. et al.* (4 authors) 2021, MNRAS 501, 548. (1x\*, 5cg) The chemical composition of the AD and donor star in ULX binaries: BW Ant (XTE J0929–314), V1405 Aql (4U 1916–05), V1055 Ori (4U 0614+091), QU TrA (4U 1543–624), KZ TrA (4U 1626–67), 4U 0513–40, 2S 0918–549, IGR J17062–6143, 4U 1728–34, XTE J1751–305, Swift J1756.9–2508, XTE J1807–294, 4U 1820–30 (Sgr X-4), 4U 1850–087, M15 X-2, NGC 6440 X-2.

*Lapukhin, E.G. et al.* (4 authors) 2020, PZP 20, No. 2. (1a, 5b, 6b) Variable stars in Lacerta: area of  $2.3^\circ \times 2.3^\circ$ , center  $\alpha = 22^{\text{h}}50^{\text{m}}$ ,  $\delta = 54^\circ00'$  (2000.0). Part I: GW Lac, 2MASS J22422744+5446311, J22424022+5453367, J22425392+5439498, J22432652+5411584, J22433683+5429587, J22433818+5446306, J22445835+5444382, J22451103+5455516, J22452107+5404582, J22455849+5403481, J22461098+5412447, J22461174+5313329, J22461700+5333039, J22462507+5416558, J22470097+5252338, J22471267+5501098, J22472426+5443010, J22472546+5258001, J22472590+5407249, J22474631+5436463, J22483237+5425461, J22483941+5402365, J22484109+5336474, J22484376+5314071, J22484526+5340053, GSC 03984-00503.

*Latković, O, Čeki, A.* 2021, PASJ 73, 132. (1ao, 5ac) LC analysis of six totally eclipsing W UMa binaries: OV Eri (1SWASP J050904.45–074144.4), 1SWASP J000437.82+033301.2, 1SWASP J195900.31-252723.1, 2MASS J21031997+0209339, 2MASS J21042404+0731381, 1SWASP J212454.61+203030.8.

*Lau, R.M. et al.* (9 authors) 2021, ApJ 909, 113. (1i, 2oi) Efficient dust formation at low metallicity in extragalactic carbon-rich WR binaries: SPIRITS 14apu, 14bqe, 16df, 16ln, 18hb, 19q.

*Leahy, D.A., Chen, Y.* 2020, ApJS 250, 23. (1u, 6b) Discovery of 15 LMXBs in M31.

*Lehký, M. et al.* (61 authors) 2021, OEJV 211. (5a) Variable Star and Exoplanet Section of the Czech Astronomical Society, B.R.N.O. contributions No. 41: 2109 times of minima for 965 EBs. List of systems: [https://oejv.physics.muni.cz/issues/data\\_0211.txt](https://oejv.physics.muni.cz/issues/data_0211.txt).

*Liakos, A.* 2020, PZP 20, No. 5. (1a, 5b, 6b) Discovery of five new variables, including two of type EW and one EA: USNO-A2.0 0975-15110240, USNO-A2.0 1125-14844300, USNO-A2.0 1425-11421951.

*Li, G. et al.* (7 authors) 2020, MNRAS, 497, 4363. (1ao, 5f) The effect of tides on near-core rotation: analysis of 35 Kepler  $\gamma$  Doradus stars in EBs and SBs: KIC 1295531, 2438249, 3228863, 3341457, 3867593, 3869825, 4142768, 4150611, 4932691, 4947528, 5565486, 5809827, 6048106, 6206751, 6290382, 6292398, 7385478, 7515679, 8197406, 8197761, 8330092, 8429450, 8548416, 8569819, 9108579, 9236858, 9592855, 9850387, 9851944, 10080943A, 10080943B, 10486425, 11820830, 11973705, 12470041A, 12470041B, 12785282.

*Li, X.-D.* 2020, RAA 20, 162. The youngest XBs: V1343 Aql (SS433, 3A 1909+048), BR Cir (Cir X-1, 3A 1516–569), MCSNR J0513–6724, CXOU J053600.0–673507, SXP 1062, SXP 1323.

*Li, X.-Z., Liu, L.* 2021, AJ 161, 35. (1ao, 5c) Seven Kepler contact binaries in the field of NGC 6819: V2866 Cyg (KIC 5022573), 2MASS J19404704+4021019 (KIC 5199489), 2MASS J19405396+4031355 (KIC 5374883), 2MASS J19412500+4000106 (KIC 4937217), 2MASS J19422635+4035539 (KIC 5376552), 2MASS J19443966+4004480 (KIC 4941060), KIC 5198934.

*Li, X.-Z., Liu, L., Zhu, L.-Y.* 2020, PASJ 72, 103. (1ao, 5c, 6a, 8a) Distribution of physical parameters for 380 contact binaries in the Kepler field.

*Lu, H.-P. et al.* (4 authors) 2020, ApJ 901, 169. (1ao, 5abc) Magnetic activity and period variation studies of 4 W Uma-type binaries: V853 Aur (NSVS 4484038), V550 Dra (2MASS J15471055+5302107), UV Lyn, V781 Tau.

*Lu, Q.-W., Wang, Z.-X., Xing, Y.* 2021, RAA 21, 57. (1g, 5i, 6ac) Searching for  $\gamma$ -ray emission from LOTAAS PSRs.

*Lutovinov, A. et al.* (8 authors) 2020, NewAR 91, 101547. INTEGRAL view of CVs and symbiotic binaries. CVs: V1082 Sgr (pre-CV), IGR J12489–6243 (?), IGR J15293–5609 (?), IGR J15529–5029 (?), IGR J18184–2352 (?), RX J2015.6+37117 (CV + blazar), IGR J21095+4322 (?). CVs of AM Her type: V1432 Aql, BY Cam, V834 Cen, AM Her, V2301 Oph, IGR J14536–5522. Dwarf novae: SS Cyg, EI Psc. IPs: V515 And, FO Aqr, XY Ari, V405 Aur, MU Cam, V709 Cas, V1033 Cas, V1025 Cen, TV Col, V2069 Cyg, V2306 Cyg, DO Dra, PQ Gem, EX Hya, NY Lup, V2400 Oph, V2731 Oph, TW Pic, AO Psc, V667 Pup, V1223 Sgr, V1062 Tau, IGR J04571+4527, RX J0525.3+2413, SWIFT J0746.3–1608, 1RXS J080114.6–46232, IGR J08390–4833, SWIFT J0958.0–4208, IGR J14091–6108, IGR J14257–6117, IGR J15094–6649, IGR J16167–4957, IGR J16500–3307, IGR J16547–1916, IGR J17014–4306, IGR J17195–4100, AX J1740.2–2903, CXOGBS J174954.5–294335, IGR J18048–1455, IGR J18088–2741 (?), IGR J18151–1052 (?), IGR J18173–2509, IGR J18293–1213 (?), IGR J18308–1232, AX J1832.3–0840, IGR J19267+1325, IGR J19552+0044 (pre-polar or IP), 1RXS J211336.1+54222, IGR J21335+5105. Symbiotics: T CrB, RT Cru, CH Cyg, IGR J10109–5746, IGR J16358–4726, IGR J17200–3116 (?), 1RXS J174607.8–21333, IGR J17586–2129 (?). Miscellany: V2487 Oph (nova or IP?), GK Per (IP, dwarf nova, nova), V347 Pup (nova-like, pre-CV), IGR J05104–6910 (double degenerate polar?), IGR J12123–5802 (nova-like or IP?), IGR J17404–3655 (CV or IP?). Note: (?) indicates uncertain type.

*Melnik, A.M., Dambis, A.K.* 2021, ARep 65, 71. (4a, 8) Contribution of binary stars to the velocity dispersion inside OB associations with Gaia DR2 data.

*Misra, D. et al.* (5 authors) 2020, A&A 642, A174. (8) The origin of pulsating ULX sources: Low- and intermediate-mass XBs containing NS accretors: Swift J0243.6+6124, 1RXS J031823.5–663612 (NGC 1313 X-2), M51 ULX-8, M82 X-2, NGC 300 UIX1, NGC 5907 ULX1, NGC 7793 P13.

*Nine, A.C. et al.* (7 authors) 2020, AJ 160, 169. (2ao, 5d) WIYN Open Cluster Study. LXXXII. RV measurements and SB orbits in the open cluster NGC 7789: 60 SB1 and 21 SB2 orbital solutions.

*Oh, K.* (4 authors) 2020, MNRAS, 498, 292. (1x, 6bcd) Multi-epoch Chandra X-ray imaging of the globular cluster M62. Counterparts of 12 CVs, 4 XBs, 2 millisecond PSRs and 1 BH binary identified.

*Qian, S.-B. et al.* (7 authors) 2020, RAA 20, 163. (5g, 6a) Contact binaries at different evolutionary stages (parameters for 9149 systems).

*Ratajczak, M. et al.* (11 authors) 2021, MNRAS 500, 4972. (1ao, 2ac, 5deg) Orbital and physical parameters of EBs from the ASAS catalogue – XI. CHIRON investigation of long-period binaries: V643 Ori (HD 294651, ASAS J060700.9–025458), HD 265111 (ASAS J065114+0753.9), CD–33°2771 (ASAS J061016–3321.3), CPD–54°810 (ASAS J051753–5406.0), ASAS J062926–2513.5 (TYC 6511-1799-1), ASAS J090232–5653.4 (TYC 8590-374-1), ASAS J110814–5555.4 (TYC 8620-1809-1).

*Samus, N.N. et al.* (5 authors) 2020, PZ 40, No. 8. (6a) The 83rd name-list of variable stars. Variables in globular clusters and novae.

*Sapozhnikov, S.A. et al.* (4 authors) 2020, ARep 64, 756. (6a, 9) Binary star population with common proper motion in Gaia DR2.

*Sikora, J., Wade, G.A., Rowe, J.* 2020, MNRAS, 498, 2456. (1ao, 2abcd, 5dghk, 6b) A spectroscopic test of the rotational modulation origin of periodic Kepler photometric variability of A-type stars. Binaries discovered: HD 177061 (KIC 6106152), HD 179618 (KIC 5436432), HD 181094A (KIC 10724634), HD 183257 (KIC 11189959), HD 184469 (KIC 4567097), HD 184482 (KIC 8692626), HD 187139 (KIC 7974841), HD 187254 (KIC 8703413), HD 187710 (KIC 7383872), HD 189375 (KIC 8390826).

*Strassmeier, K.G. et al.* (10 authors) 2020, A&A 644, A104. (1ao, 2ao, 5bcd) BRITE photometry and STELLA spectroscopy of bright stars in Auriga: Rotation, pulsation, orbits, and eclipses:  $\alpha$  Aur,  $\beta$  Aur,  $\epsilon$  Aur,  $\zeta$  Aur,  $\eta$  Aur,  $\theta$  Aur,  $\nu$  Aur,  $\iota$  Aur, IQ Aur,  $\kappa^1$  Cet,  $\beta$  Tau, V711 Tau.

*Sun, B. et al.* (6 authors) 2020, MNRAS, 499, 3006. (1x, 2xcd, 5bikj) X-ray spectra and LCs of cooling novae and a nova like: V794 Aql, EY Cyg, V2491 Cyg, KT Eri.

*Tokovinin, A.* 2021, AJ 161, 144. (2a, 4c, 5d) Inner and outer orbits 13 resolved hierarchical stellar systems: 2 Cam (HD 29316),  $\iota$  Cas (HD 15089), 42 Cet (HD 8036), 37 Peg (HD 213235), BB Scl (HD 9770),  $\psi$  Ser (HD 140538), V998 Tau (HD 29310), HD 5408, HD 144362, HD 154621, HD 156034, HD 185655, HD 286955.

*Tokovinin, A., Latham, D.W.* 2020, AJ 160(6), 251. (2a, 4a, 5d) Orbits of five triple stars: V371 And (HD 12376), HD 19771, HD 89795, HD 152027, HD 190412.

*van Kooten, M.A.M., Kenworthy, M., Doelman, N.* 2020, MNRAS, 499, 2817. (1ao, 5bce) Periodic brightening of Kepler LCs: investigating the possibility of forward scattering due to dust clouds: HD 183125 (KIC 6862114), 2MASS J18484933+4338266 (KIC 7870350), 2MASS J19080614+4924445 (KIC 11498661), 2MASS J19155288+4917322 (KIC 11397541), 2MASS J19334062+3928591 (KIC 4371947), 2MASS J19353561+4453386 (KIC 8694536), 2MASS J19365894+4805401 (KIC 10737327), 2MASS J19460629+4330274 (KIC 7837214).

*Wang, D.-H. et al.* (4 authors) 2020, A&A 642, A117. (2dx\*, 5i) kHz QPOs as probes of the X-ray color-color diagram and NS AD structure for Z sources: V1341 Cyg (Cyg X-2), V818 Sco (Sco X-1), NP Ser (GX 17+2), 4U 1758–25 (GX 5-1).

*Xiang, M. et al.* (7 authors) 2021, ApJS 253, 22. (6a) Data-driven spectroscopic estimates of absolute magnitude, distance, and binarity: method and catalog of 16,002 O- and B-type stars from LAMOST.

*Zasche, P. et al.* (5 authors) 2020, A&A 643, A130. (1ao\*, 5ac) Light-time effect in 14 EBs: V1928 Aql, KU Aur, GU CMa, V1297 Cas, V2486 Cyg, GQ Dra, DK Her, V624 Her, V1134 Her, DI Lyn, GH Mon, AZ Vel, HD 24105, KIC 6187893.

*Zhang, X.-D., Qian, S.-B.* 2020, MNRAS, 497, 3493. (9) Orbital period cut-off of W UMa systems using compiled data from 365 systems.

## Proceedings of Conferences, Symposia, and Monographs

*Kocian, R., Ed.* 2020, OEJV 208, Proceedings of the 51st Conference on Variable Stars Research, Planetarium Ostrava, November 1-3, 2019, Czech Republic.

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