

THE BULLETIN OF THE VILNIUS ASTRONOMICAL OBSERVATORY: A COMPREHENSIVE OVERVIEW (1960–1992)

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Abstract: During the eighteenth century professional astronomy started in Lithuania, and over time the first extensive astronomical publications appeared. The tradition of publishing a periodical astronomical *Bulletin* started in 1921, when Vilnius Astronomical Observatory was led by Polish astronomer Professor Władysław Dziwulski. The outbreak of the Second World War stopped the publication of *Bulletins*, and 1960 was a crucial year in the rebirth of astronomy in Lithuania. The revitalization of the *Bulletin* was very important for the Observatory's research and the expansion of the library. During the Soviet occupation, Lithuanian astronomers had limited links abroad. Thus, the *Bulletin* served as a way to disseminate astronomical research and establish links with international research institutions. This paper examines the history, personalities, contributions and importance to the scientific community of the *Bulletin of the Vilnius Astronomical Observatory*.

Keywords: astronomical publications, *Bulletin of the Vilnius Astronomical Observatory*, Vilnius University, Vilnius astronomers, history of astronomy

1 INTRODUCTION

Astronomy has been a popular subject for enthusiasts and professionals alike for centuries, and the history of astronomy magazines in Europe reflects this fascination. Astronomical research carried out in the observatories had to be shared with astronomers and the wider public. The need to exchange information and share new findings between the researchers prompted the emergence of the first astronomical publications.

The earliest on-going publication of astronomical papers in Europe can probably be dated back to 1665, with the appearance of the *Philosophical Transactions of the Royal Society of London*. Over the years, many other astronomical magazines and journals were founded throughout Europe. In France, *La Connaissance du Temps* was first published in 1679, and has continued through to the present day. In Spain, the Royal Institute and Observatory of the Navy of San Fernando, Cádiz, has published a nautical almanac since 1792. In Germany, the journal *Astronomische Nachrichten* was established in 1821 and has been a leading publication in the field ever since.

The Astronomical Observatory of Vilnius University was founded in 1753 at the University building, located at the center of Vilnius city. Throughout more than a century, the astronomers at the Observatory of Vilnius University conducted research on planets, their satellites, asteroids, comets and the eclipses of the Sun and Moon. The earliest astronomical works were published in the first half of nineteenth century by the Observatory astronomers Michał Hłuszniewicz (1797–1862) and Piotr Sławiński (1795–1881). A huge fire in the second half of the nineteenth century damaged the Observatory and halted astronomical research. The tradition of publishing astronomical findings was only restored after the First World War, when Vilnius University reopened as Stefan Batory University in 1919. Polish astronomer Władysław Dziwulski (1878–1962) initiated the construction of the new Observatory in the outskirts of Vilnius city (now in M.K. Čiurlionio 29 str.). Dziwulski soon began conducting astronomical research, and he founded a periodical astronomical bulletin.

Following the Second World War, a crucial moment in the rebirth of astronomy in Lithuania emerged with the establishment of the *Bulletin of the Vilnius Astronomical Observatory* which



Figure 1 (left): An 1838 watercolor painting by Marcell Januszewicz of Vilnius University Observatory (courtesy: Vilnius University Library); right: a recent photograph of the Observatory building (courtesy: Vilnius University).

was introduced in 1960. In 1962, the Institute of Physics laid the groundwork for astronomical advancements by founding the Department of Astrophysics. Subsequently, in 1969, the landscape of Lithuanian astronomy underwent a significant transformation with the construction of Molėtai Astronomical Observatory (MAO).

In the twentieth century, with the advent of new technologies such as photography and printing, the popularity of astronomical magazines and journals continued to grow. On the occasion of the two hundred and seventieth anniversary of the founding of Vilnius University Observatory (1753–2023), we outline an important chapter of its history.

2 THE BEGINNING OF THE ASTRONOMICAL BULLETIN

2.1 First Comprehensive Publications

The first astronomical Observatory was established at Vilnius University in 1753. The observatory was at the University, in the center of the city (Figure 1). During the second half of the eighteenth century the astronomers at the Observatory mainly studied solar and lunar eclipses, planets and stars, and determined geographical coordinates of various locations.

At that time astronomers mostly published the results of their observations individually, and more interesting findings were published in local newspapers. For example, comet observations were published in the daily newspapers *Wiadomosci Warszawskie* and *Gazeta Warszawska*, and in the Vilnius calendar (Butkus et al., 2016). In 1835 astronomer Piotr Sławiński (1795–1881) published the first extensive work “*Remarques sur les observations faites à l’Observatoire de Vilna, au cercle répétiteur de Reichenbach de dix-huit pouces de diameter*” on the Observatory’s history, its research and instruments. This 18-page publication was writ-

ten in French and included information about the observations made with the Reichenbach repeating circle (*ibid.*). The first attempt to establish periodical journal was made in 1838 when Vilnius Observatory astronomers Michał Hlouschnevitch and Piotr Sławiński (1795–1881) began publishing “*Extrait des Observations Faites à l’Observatoire de l’Académie Impériale des Sciences à Vilna*”. There were four issues published in all, in 1838 (with observational data from 1834–1835), 1841 (1837–1838), 1842 (1839–1840) and 1843 (1841–1842) (see Matulaitytė, 2004). The astronomers wrote about the positions of planets and minor planets, lunar occultations and eclipses of Jupiter’s satellites. These publications reached the most prominent scientific centers of the time. However, these early issues did not have characteristics attributed to the periodical journals: they were not numbered sequentially and there was no continuity (Butkus et al., 2016; Slavinsky and Hlouschnevitch, 1838).

In the second half of the nineteenth century, from 1860 till 1863, Vilnius University Observatory issued the first scientific journal in the whole Russian Empire, named *Vestnik Matematicheskikh Nauk* (Butkus et al., 2016). This journal was dedicated to all sciences that applied mathematical methods. Therefore, issues of the journal contained papers on mathematics, physics and astronomy.

The Observatory at Vilnius University was damaged by a fire in 1876. The fire, and deteriorating observing conditions due to city lights, dust and smoke halted research at the Old Vilnius University Observatory.

2.2 Launch of the First Bulletin

After the First World War, during the Polish occupation of Vilnius, the Vilnius University was reopened in 1919 and renamed after Stefan



Figure 2 (left): The Director of Vilnius Stefan Batory University Observatory Professor Władysław Dziewulski; (right): and the Observatory in M.K.Čiurlionio str., which was built between 1921 and 1936 (courtesy: Naukowe Archiwum Cyfrowe).



Figure 3 (left to right): The back and front and covers of *Bulletin de l'Observatoire Astronomique de Wilno* (No. 2, 1922), and the front cover of the last *Bulletin* (No. 22, 1939) (courtesy: Vilnius University Museum).

Batory. Scientists from various fields came from Poland, including the astronomer Professor Władysław Dziewulski (1878–1962) (Figure 2). From the time of his arrival Professor Dziewulski, inspired by the old Observatory's legacy, renewed astronomical research at the University. Under his initiative, in 1921 the University began the construction of the new Observatory on the outskirts of Vilnius (Supruniuk and Szudy, 2020).

In 1921 Dziewulski founded the *Bulletin de l'Observatoire Astronomique de Wilno* (Figure 3), and served as the Editor. The journal contained two parts: astronomical and meteorological. According to Dziewulski, the main reason for initiating publication of astronomical research was to restore the astronomical library, which sustained huge losses during the war. At that time, university astronomers had limited contact with foreign observatories. Thus, Dziewulski believed that establishment of the *Bulletin* would help to stimulate scientific dialogue

with foreign and international publishers, and academic institutions, which would have a positive impact on the development of the Observatory library (*Bulletin*, 1921). Dziewulski mentioned in his first publication that the newly founded *Bulletin* would mostly contain short papers, while more extensive publications would be published in the journal of the Polish Astronomical Society.

In the period from 1921 till 1939, 22 different *Bulletins* were published. Papers in the *Bulletins* were published in English, Polish, German and French languages. Publication was halted by Second World War. During the war, the astronomers moved to Poland.

3 THE NEW ERA OF BULLETIN

In 1944 Vilnius fell into Soviet hands and the second Soviet occupation began. The work of destroyed Vilnius University was renewed. At the end of 1944, the eight faculties resumed their work, including the Faculty of Physics–

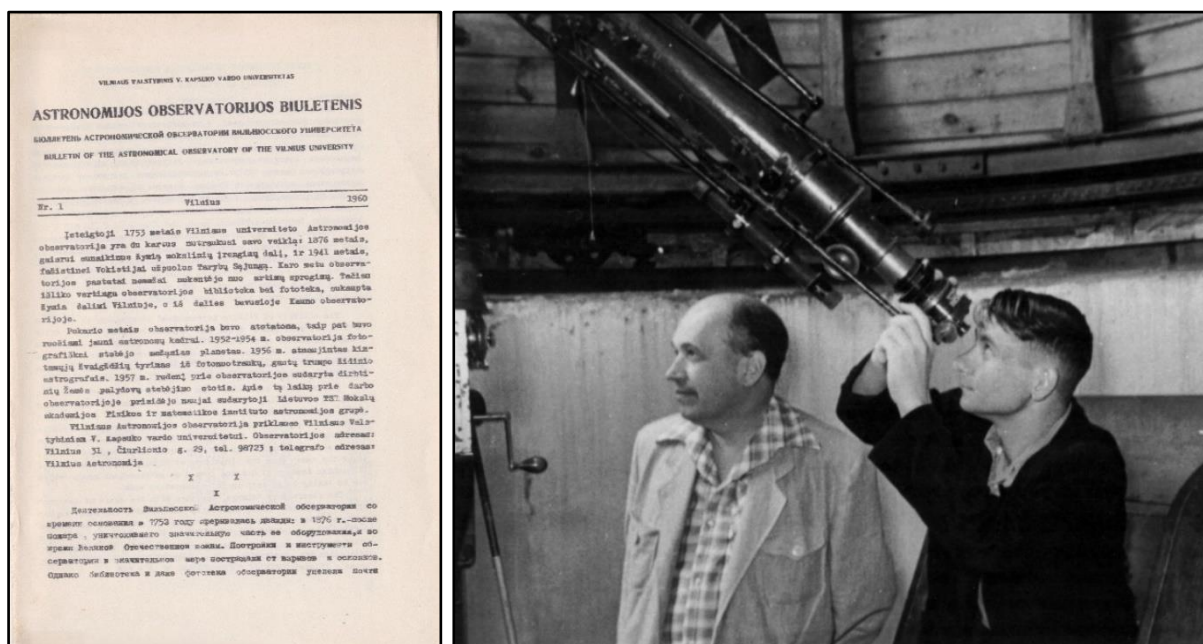


Figure 4: Left photo: the front cover of *Bulletin of the Vilnius Astronomical Observatory* No. 1, which was published in 1960 (courtesy: Library of Moletai Astronomical Observatory); right: Director of Vilnius University Observatory Paulius Slavėnas (left) and astronomer and future Director of the Observatory Vytautas Straižys (right) around 1957–1958 at the Observatory in Čiurlionis str. (courtesy: Danguolė Straižytė).

Mathematics. Throughout this period the Department of Astronomy operated in the Physics–Mathematics Faculty ([Verikaitė, 2008](#)).

In the post-war years and beyond, astronomers had difficulties accessing publications from foreign observatories, and contacts with them were limited. The number of publications received from foreign observatories was also significantly reduced because Vilnius Observatory did not have a publication that it could exchange with foreign observatories for their publications.

In 1960 the first *Bulletin* named *Vilniaus Astronomijos Observatorijos Biuletenis* (*Bulletin of the Vilnius Astronomical Observatory*) was published (Figure 4). In those days, most of the world's leading observatories had their own periodic publications, where they published large data catalogues, celestial and spectral atlases, and other material that could not be issued in relatively short scientific papers published in astronomical journals. An Observatory publication was planned as a collection of scientific papers, like Vilnius Observatory's pre-war publication, the *Bulletin*. Professor Paulius Slavėnas, the Director of the Observatory, insisted that the new Observatory's new publication also should be called the *Bulletin* (Straizys, 2010).

3.1 Challenges

The first challenges that astronomers faced at the beginning of publishing *Bulletin* was lack of financial resources and limited access to quality

printing presses. The first editions of the *Bulletin* had poor print quality, and in some places, letters and even individual words were not visible. Astronomer and Editor V. [Straizys \(2010\)](#) mentioned in his diary that the first papers in the *Bulletin* had to be printed by the astronomers themselves. The first *Bulletins* even lacked front covers, but from *Bulletin* No.19 (1967) they had covers and each issue was printed in a different color (see [Figure 5](#)).

The second problem was the use of Russian language for the papers, which meant that they were not understood by astronomers in most countries. Therefore, at the end of each paper, the authors added as much detail as possible in English, Lithuanian and Russian summaries. According to [Straižys \(2010\)](#), in those days one could only dream about printing the *Bulletins* in English. For example, his first paper in English (“The Vilnius photometric system for three-dimensional classification of stars and determination of interstellar reddening”) was only published in 1973, in Bulletin No. 36 ([Straižys, 1973](#)). It was only from 1989 that papers were published in English. The Independence Movement encouraged the use of English language. Despite the language barriers, the *Bulletin* was sent to hundreds of observatories around the world. Even now, more than 50 years later, papers in the *Bulletin* can be downloaded from NASA’s Astronomical Data Center at Harvard, even though they were printed in Russian and only had English abstracts.

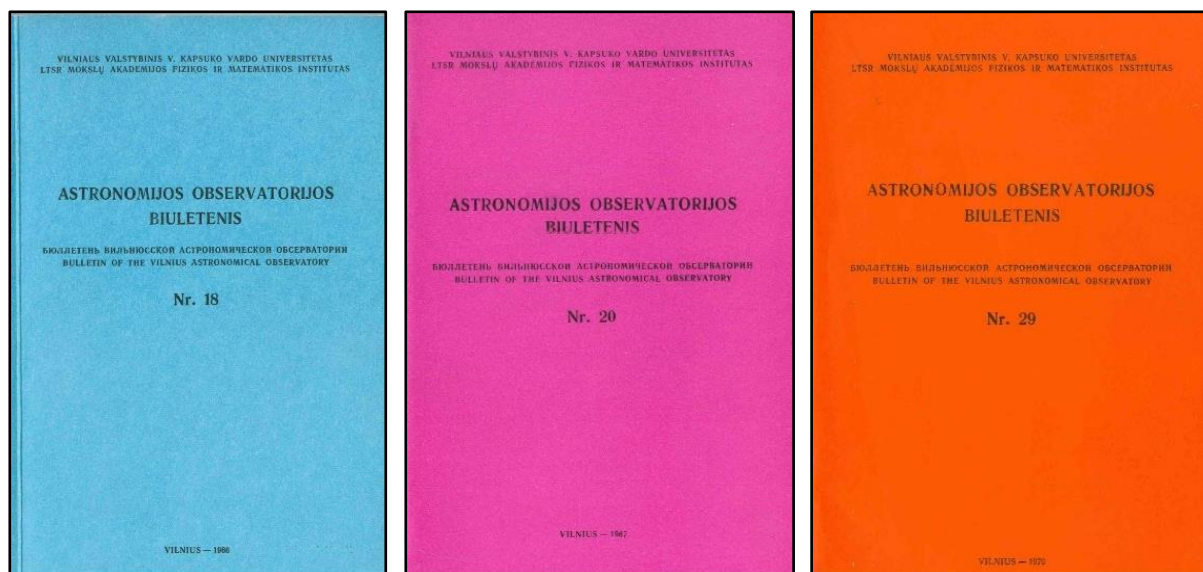


Figure 5 (left to right): The front covers of *Vilnius Astronomical Observatory Bulletins* No. 18 (1966), No. 20 (1967) and No. 29 (1970) (courtesy: Vilnius University Museum).

The third challenge was censorship. During the Soviet occupation (1940–1990) all informational material from the fields of science, culture and art was reviewed before publication by the official censorship and state secret protection organisation called ‘Glavlit’ (Pukinskaitė, 2004). For example, in 1963 Vilnius Astronomical Observatory *Bulletin* No. 5, which consisted of three V. Straizys papers on the UBV and RGU photometry systems and the study of interstellar extinction in the direction of the Orion Nebula, was held up by Soviet censorship. Officials even wanted the name of the publication to be changed (Straizys, 2010).

The fourth challenge was the limited links with foreign institutions and their information sources. The Soviet aim to plan and coordinate science, not only strengthened control over research and publishing, but it also limited international links and discourse (Streikus, 2018). In addition, during the Soviet era, contacts with foreign countries were severely restricted, and for every international official letter permission was required. Besides that, everything was very slow, a letter sent abroad took 2–3 weeks to reach its mailing address, and there was a similar delay in receiving a reply. In 1961 astronomers complained that they could not send *Bulletin* No. 3 because they have to wait for authorization from the Ministry of Education (Straizys, 2010). More than six months later permission was finally given, but all the mailed *Bulletins* were returned because it was forbidden to send them in sealed envelopes.

Despite all the challenges eventually the *Bulletins* did manage to reach overseas observatories, astronomers, research institutes and universities in Europe, Australia and New Zea-

land, Africa, and the Americas. Received feedback showed that the *Bulletins* were regarded as important publications and were appreciated, and that Vilnius Observatory was recognized internationally. The *Vilnius Astronomical Observatory Bulletin* stands as a significant repository of astronomical research and observations spanning the years 1960–1992. For three decades this publication served as a crucial platform for disseminating scientific knowledge, featuring a diverse range of papers covering various facets of astronomy. While originating from Vilnius, the content reflected a global perspective with observations, studies, and collaborations extending beyond the immediate region. In all, 86 volumes of the *Vilnius Astronomical Observatory Bulletin* were published between 1960 and 1992, and these contained 331 research papers. The *Bulletin* was published under the ISSN: 0136-3697.

3.2 The Editorial Board of the *Bulletin*, 1960–1992

The members of the first Editorial Board were Paulius Slavėnas (1901–1991), Adolfas Jucys (1904–1974), Viktoras Kybartas (1929–1996) and Vytautas Žitkevičius (b. 1933) (see Figure 6).

The first member of the Editorial Board shown in Figure 6 was Paulius Slavėnas, a mathematician, astronomer and science historian. In 1925–1928 Slavėnas studied astronomy at Yale University, where he obtained a PhD in astronomy (Tenn, 2023). From 1944 he was a Professor at Vilnius University, and Director of the Observatory from 1956 to 1969. He was one of the first in Vilnius to conduct professional level research, and he published many science



Figure 6: First members of the Editorial Board of the *Bulletin* (left to right): Paulius Slavėnas, Adolfas Jucys, Viktoras Kybartas, Vytautas Žitkevičius (courtesy: *Visuotinė Lietuvių Enciklopedija*, Vilnius University Faculty of Physics, Emilio Segrè Visual Archives, Vilnius University).

popularization articles, including about astronomy ([Matulaitytė, 2001](#)). Another Editorial Board member, Adolfas Jucys was one of Lithuania's most famous scientists. He is widely known around the world as one of the founders of the theory of multi-electron atoms, and was Head of the Vilnius School of Atomic Theory. He also was a pioneer in the use of computers in Lithuania, establishing a computing center at the Institute of Physics and Mathematics in 1962 ([Voverienė, 2009](#)). Another Board member, Viktoras Kybartas, was a physicist in the field of theoretical atomic spectroscopy and radiophysics. During 1958–1946 he was the Dean of Vilnius University's Faculty of Physics–Mathematics ([Ivaška, 2009](#)). The final Board Member shown in [Figure 6](#), Vytautas Žitkevičius, is a physicist and astronomer. In 1961 he started working in the Faculty of Physics–Mathematics as a researcher, and from 1987 he was based at Vilnius Astronomical Observatory. His main field of the research is variable stars. Žitkevičius ([Figure 7](#)) is also an author of papers about the history of the Observatory ([Makariūnienė and Kivilšienė, 2010](#)).

The Editors-in-Chief of the *Bulletin* changed over the years. After P. Slavėnas (1960–1968) it was Algimantas Ažusienis (1969–1976), followed by Vytautas Straižys (1977–1991) and Jokūbas Sūdžius (1992). Meanwhile, new members of the Editorial Board were the scientists Jurgis Viščakas (in 1965), Henrikas Horodničius, Boleslovas Styra and Vladas Vanagas (all in 1968), Mifodijus Sapagovas (1969), Romualdas Kalytis (1977–1992), Zinaida Sviderskienė (1977–1983), Genė Kurilienė (1981–1991), and Stanislava Bartašiūtė and Vladas Vansevičius (both in 1992).

3.3 Themes

In addition to the scientific papers, there were six chronicles, in the years 1963, 1965, 1968, 1970, 1973, 1978; and five notes or recaps: a note on the Visiting Assembly of the Astronomi-

cal Council of the USSR Academy of Science held at Vilnius on 23–26 August, in 1960; from the Editorial Board, in 1969; the second Vilnius intermediate band photometric system for three-dimensional classification of stars, in 1970; the 63-cm reflector at the Molėtai Astronomical Observatory, in 1975; and an obituary for Paulius Slavėnas (1901–1991), in 1992.

The *Bulletins* encompassed a wide array of topics within the field of astronomy. Papers included photometric studies of celestial objects, observations of variable stars, investigations into interstellar absorption, photometric systems development (such as Vilnius Photometric System) and studies on the energy distribution in stellar spectra. Other papers delved into the photometry of novae, the dynamics of celestial bodies, and the calibration of various photometric systems.

Regarding the key themes, a substantial portion of the *Bulletins* focused on photometric studies, covering a plethora of stars of different spectral types and luminosities. The interactions and properties of the interstellar medium were explored, including the effects of interstellar extinction on observations and the determination of reddening laws. Several papers were dedicated to the cataloging and classification of stars based on their spectral characteristics, metallicity and other parameters. Discussions on observational techniques were prevalent, covering topics like the correction of response curves, selection of spectral regions for heterochromatic photometry, and advancements in photoelectric and electronographic photometry.

4 EVOLUTION OVER TIME

Astronomical research was given a new impetus with the construction of a new Vilnius University Observatory. In 1968 a site was chosen in the Moletai district, about 70 km north of Vilnius ([Figure 8](#)), and research there began in



Figure 7: Astronomers and long-standing Editors of the *Bulletin* Vytautas Žitkevičius (left) and Vytautas Straižys (right) on the roof of the Astronomer's House near the Observatory in around 1960–1961, examining a meteorite (courtesy: Vytautas Žitkevičius and Danguolė Straižytė).



Figure 8: Molėtai Astronomical Observatory owned and operated by the Vilnius University Institute of Theoretical Physics and Astronomy (courtesy: Vilnius University).

1970 (Straižys, 2012). The instruments in the two domes shown in Figure 8 were a 63-cm Cassegrain reflector (in the left-hand dome), and a 165-cm Richey-Crétien reflector in the 'tower observatory'. The first of these has recently been replaced by a larger 80-cm telescope. The Richey-Crétien telescope, which hosts the high-resolution spectrograph VUES, is primarily dedicated to determining stellar atmospheric parameters and chemical composition, as well as measuring stellar radial velocities. The small roll-off roof telescope enclosure on the right-hand side of the photograph

houses a 35/51-cm Maksutov reflector, which is used to search for and observe asteroids and comets, and to monitor exoplanet transits.

The *Bulletin* demonstrated consistent publication over the three decades, indicating a sustained commitment to disseminating astronomical research. In Appendix 10.2, Table 1, we provide a complete list of all papers published in the *Bulletin*, ordered chronologically and published between 1960 and 1992. The production of issues was irregular, with the publication of between 1 and 5 issues annually depending on the year (except in 1991 when there were no

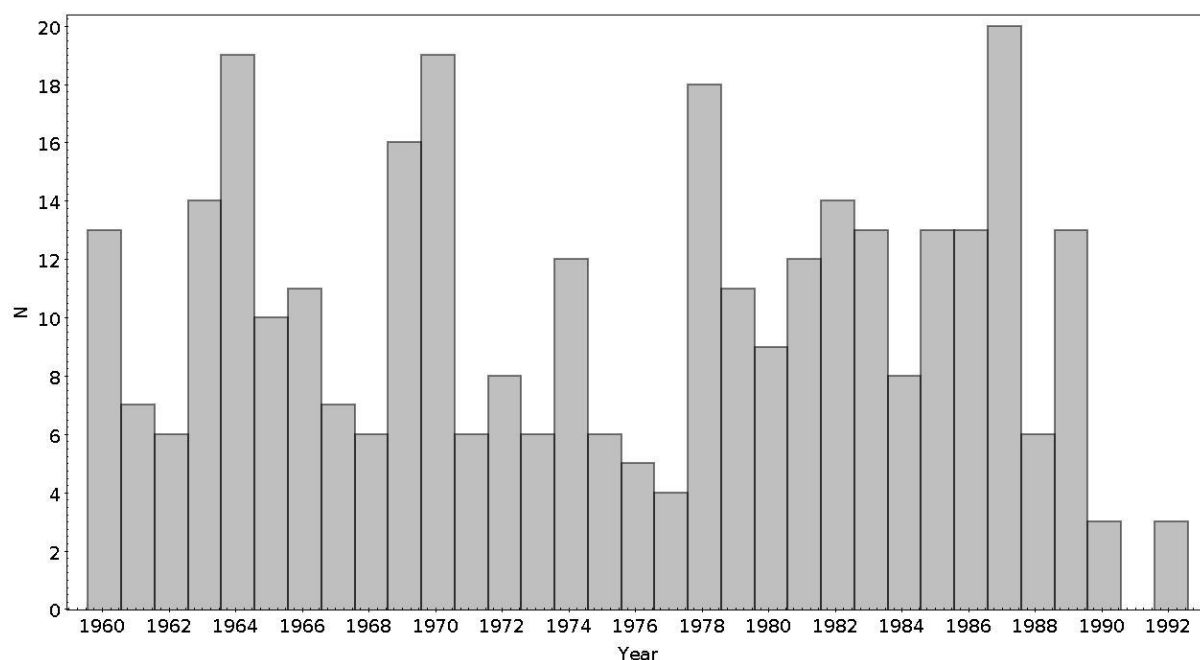


Figure 9: Graph showing the number of papers published per year (plot: the authors).

Issue). For example, in 1978 and 1985, five issues were published, while in 1961, 1962, 1968, 1976, 1977, 1988, 1990 and 1992 there was only a single issue. Note that *Bulletin* Numbers 50, 52 and 54 were published in 1979 while Numbers 51, 53 and 55 were published in 1980.

The number of papers published per year also fluctuated (see Figure 9). The marked changes in this histogram at the right-hand end were prompted by Lithuania's struggle for independence and its regaining independence. The end of the *Bulletin of the Vilnius Astronomical Observatory* coincided with Lithuania's independence from the Soviet Union. This paved the way to a new publication with greater international projection and visibility. Under the name *Baltic Astronomy*, a modern scientific journal published in English was founded in 1992, and this included papers from several Baltic astronomical institutes located in Tartu, Riga and Vilnius. Its Editor-in-Chief from the journal's beginning was V. Straizys. In 2017, the journal changed its name again to *Open Astronomy* (see Figure 10, and Appendix 10.1).

5 NOTABLE CONTRIBUTIONS AND INFLUENCE ON THE SCIENTIFIC COMMUNITY

Contributions came from a diverse group of researchers, including P. Slavėnas, and included collaborations and individual efforts. To date, the *Bulletin* has received more than a thousand citations, many of them recent and in high-impact scientific journals, which proves its importance in the scientific arena. The most cited

paper in the *Bulletin* according to NASA-ADS records is “Energy distribution in the stellar spectra of different spectral types and luminosities”, by Straizys and Sviderskienė (1972), with almost a hundred citations. The cover of this paper, along with the title page, are shown in Figure 11.

Over the period of 1960–1992 forty-one different scientists published papers in the *Bulletin*. Many of the papers in the *Bulletin* reported studies using the Vilnius Photometric System, a medium-band seven-color photometric system (UPXYZVS), that was created between 1962 and 1965 by V. Straizys and K. Zdanavičius. This system gained wide international recognition, and a variant of it was proposed for the GAIA Space Mission (Straizys and Høg, 1995).

Bulletin authors also made a contribution to history of astronomy. In 1979 was published *Bulletin* No. 50 for the commemoration of the 225th anniversary of the Vilnius Observatory (1753–1978), it brings together papers about various historical periods of observatory and astronomy (Figure 12).

6 CONCLUDING REMARKS

The *Bulletin of the Vilnius Astronomical Observatory* played a vital role in fostering international scientific collaboration and disseminating astronomical knowledge. It contributed significantly to the advancement of observational techniques, the development of photometric systems and the understanding of stellar properties. In conclusion, this bulletin stands as a testament to the rich and varied astronomical

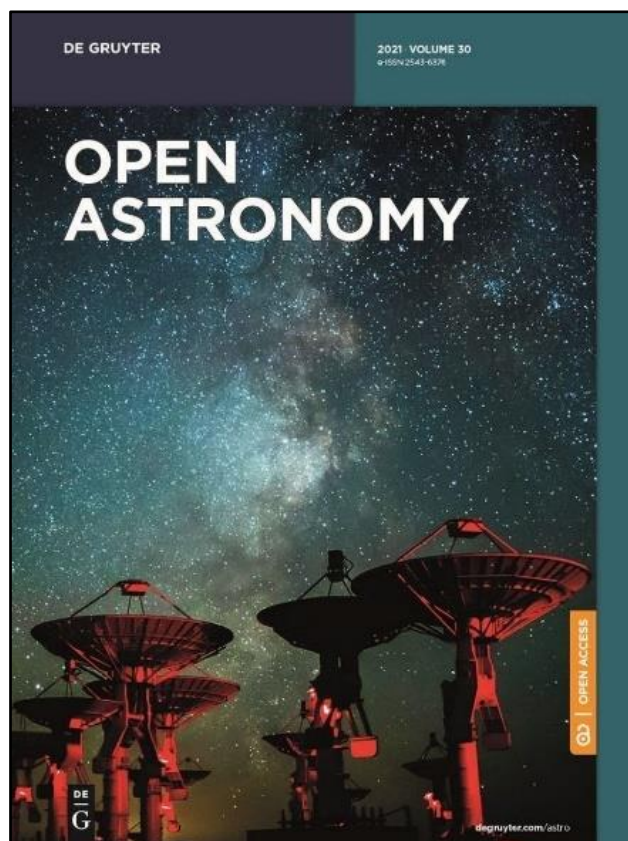
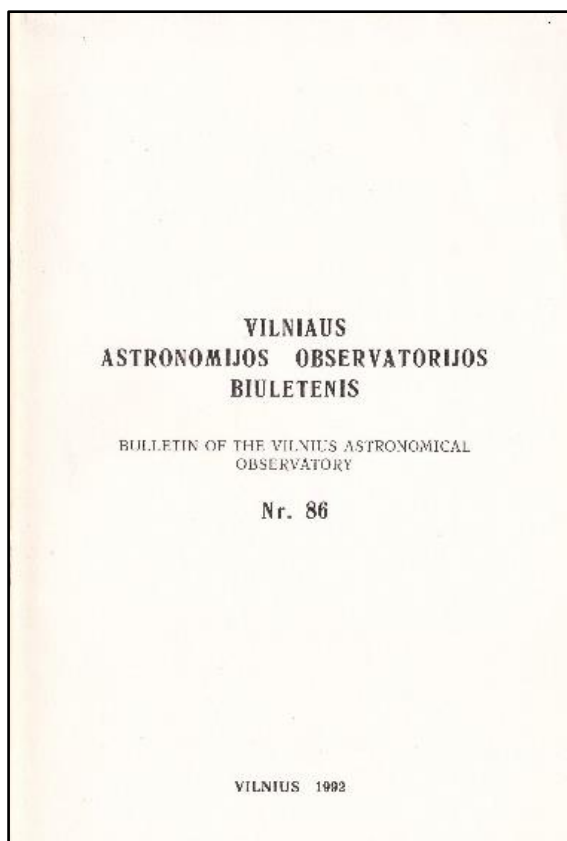


Figure 10 (top left): The cover of the last issue of the *Vilnius Astronomical Observatory Bulletin* (No. 86, 1992) (courtesy: Library of Molėtai Astronomical Observatory); top right: the colorful cover of *Open Astronomy*; right: the cover of *Baltic Astronomy* (courtesy: De Gruyter).

research conducted at Vilnius Astronomical Observatory during the mid- to late-twentieth century. Its legacy lives on as a valuable resource for astronomers and researchers interested in the developments of that era.

7 NOTES

1. All papers published in the *Bulletin of the Vilnius Astronomical Observatory* between 1960 and 1992 are available on this web site:
https://ui.adsabs.harvard.edu/search/p_0&q=vilob&sort=date%20asc%2C%20bibcode%20asc

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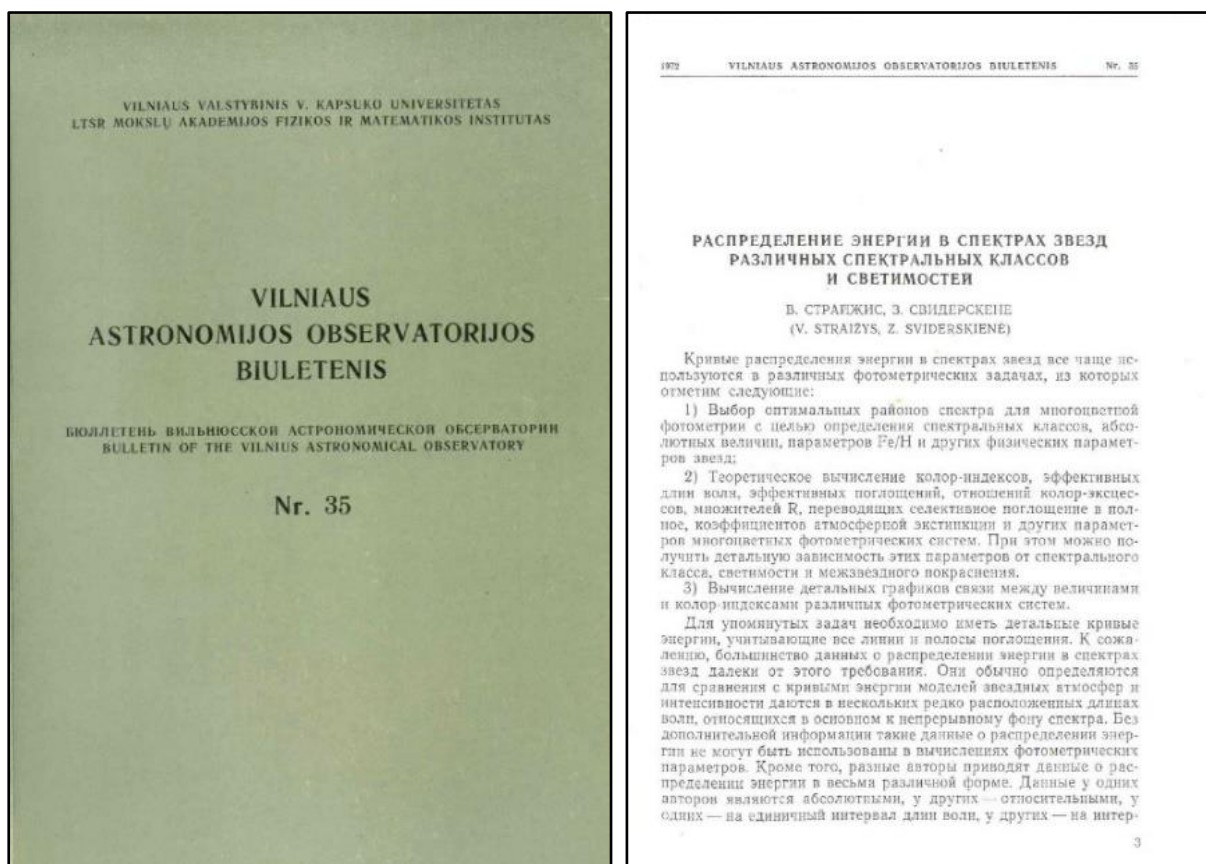


Figure 11: The paper by V. Straizys and Z. Sviderskienė on “Energy distribution in the stellar spectra of different spectral types and luminosities”, which was published in 1972 in No. 35 (Straizys and Sviderskienė, 1972; courtesy: Library of Molėtai Astronomical Observatory).

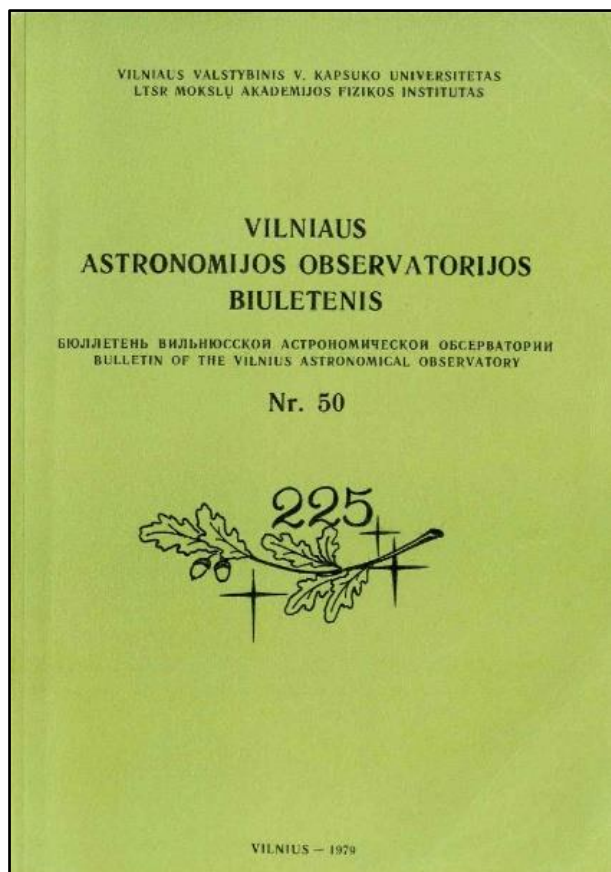


Figure 12: The front cover of special 1979 Bulletin No. 50 commemorating the 225th Anniversary of Vilnius Observatory (1753–1978) (courtesy: Library of Molėtai Astronomical Observatory).

graphic Services, and the Libraries at Moletai Astronomical Observatory (MAO) and Vilnius University.

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10 APPENDICES

10.1 Evolution of the *Bulletin*

Table 1: Evolution of the *Bulletin* over the years.

Name	Years	No.	Periodicity	Languages	Editors-in-Chief
<i>Bulletin de l'Observatoire Astronomique de Wilno</i>	1921–1939	22	Yearly	English, Polish, German, French	W. Dziewulski
<i>Bulletin of the Vilnius Astronomical Observatory (Astronomijos Observatorijos Vilniaus Astronomijos Observatorijos Biuletenis)</i>	1960–1992	86	1–5 per year	Russian (summaries in Lithuanian and in English)	P. Slavėnas, V. Straizys, A. Ažusienis, J. Sudžius
<i>Baltic Astronomy</i>	1992–2017	100	Quarterly	English	Vytautas Straizys (Acting Editor)
<i>Open Astronomy</i>	2017–present	8	Yearly	English	Beatriz Barbuy, Crescenzo Tortora

10.2 A Complete List of Papers Published in the *Bulletin of the Vilnius Astronomical Observatory*

Table 1: Complete list of papers published in the *Bulletin* 1960–1992, listed chronologically.

Author(s)	Year	Title	Volume	Page
Masnauskas, J.	1960	A photometric study of UZ CYGNI, BG Lacertae and CM Lacertae	1	3
Jasevicius, V.	1960	Photographic observations of TX Lacertae	1	17
Straizys, V.	1960	On the structure of tails of comet Arend-Roland	1	22
Straizys, V.	1960	Aurorae borealis in 1959	1	27
Zdanavicius, K.	1960	Intense aurora borealis on July 16, 1959	1	29
No author	1960	Editorial Board of Bulletin	1	31

No author	1960	Note on the Visiting Assembly of the Astronomical Council of USSR Academy of Science held at Vilnius on August 23-26, 1960	2	1
Jucys, A., & Vizbaraitė, J.	1960	On the improvement of the calculation of the forbidden spectral lines	2	3
Misiunas, A.	1960	Temperature influence on the self broadening of spectral lines	2	6
Melnikov, O.	1960	Historical outlines of astrospectroscopy	2	11
Zukauskas, K.	1960	Automatic obtaining of the curves from digital data	2	17
Zhongolovitch, I.	1960	Historical premises of modern methods for the determination of the irregular rotation and the figure of the Earth from observations of its satellites	2	20
Straizys, V.	1960	Photometric observations of Nova V446 Herculis (1960)	2	29
Kosuba, P.	1961	Photometric study of SU Draconis	3	1
Bartkus, R., & Pucinskas, A.	1961	DX Geminorum	3	9
Masnauskas, J.	1961	Photographic observations of SY Aurigae	3	17
Vyskupaitis, V.	1961	Photographic study of VZ Cygni, MR Cygni, RT Lacertae CS Lacertae and DE Lacertae	3	21
Zdanavicius, K.	1961	Chromatic curves of three astrographs of Vilnius Astronomical Observatory	3	37
Straizys, V.	1961	Comet Burnham (1959 k)	3	43
Straizys, V., & Zukas, A.	1961	Noctilucent clouds	3	46
Bartkevicius, A.	1962	On the light variation of the GH Cygni	4	1
Azusienis, A., & Zdanavicius, K.	1962	A photometric study of EP Lyrae	4	5
Azusienis, A., & Zdanavicius, K.	1962	Supplementary remarks on the EP Lyrae	4	18
Pucinskas, A.	1962	On the form of light curves of the W Gem and RS Ori	4	24
Bartkus, R.	1962	On the irregular variable DD Ori	4	32
Balaisyte, V., & Voronkov, B.	1962	Calculation of periodical orbits in the restricted problem of three bodies in space by numerical integration	4	34
Straizys, V.	1963	Investigation of the photometric systems U, B, V and R, G, U	5	1
Kopylov, I. M., & Straizys, V.	1963	The distribution of stars around the Great Orion Nebula	5	18
Straizys, V.	1963	Interstellar absorption in the region of southern part of Orion association	5	35
No author	1963	Chronicle	5	37
Straizys, V.	1963	The selection of spectral regions for heterochromatic photometry. I	6	1
Straizys, V.	1963	On the reductions of stellar magnitudes and color-indices to the system U, B, V	6	9
Straizys, V.	1963	On the variations of total to selective absorption ratio with galactic longitude	6	23
Zdanavicius, K.	1963	B,V magnitudes of some stars in the vicinity of RU Cep and BY And	6	26
Straizys, V.	1963	On the correlation between photometric system	6	29
Straizys, V. L.	1963	The catalogue of O-FO stars in the southern part of Orion association	7	1
Straizys, V.	1963	Supplementary remark to the catalogue	7	34
Azusienis, A., & Kakaras, G.	1963	The spectrophotometry of RU Cep in the yellow-red spectral region	8	1
Straizys, V.	1963	Interstellar absorption in the region of southern part of Orion association	8	18
Straizys, V.	1963	Reddening lines in the U, B, V system	8	29
Mogilnickaite, E.	1964	Photometric observations of RW Aurigae	9	1
Straizys, V.	1964	The catalogue of F-M stars in the southern part of Orion association	9	4

Nevskaya, N.	1964	To the history of the Vilnius Astronomical Observatory	9	22
Juodokas, A.	1964	Visual estimates of Beta Lyrae	9	28
Jasevicius, V.	1964	The relative proper motions in ADS 439	9	31
Jasevicius, V.	1964	The spherical aberration and astigmatism of 18" parabolic mirror of 18" reflector of Vilnius Observatory	10	1
Kakaras, G., & Straizys, V.	1964	Spectrophotometry of Nova Herculis 1963	10	5
Jasevicius, V.	1964	On three colour system used in Vilnius Observatory and its reduction to the system U, B, V	10	19
Pucinskas, A.	1964	Observations of brightness and continuous spectrum of Z And	10	28
Zdanavicius, K., & Kalytis, R.	1964	Three colour photoelectric observations of Nova Herculis 1963	10	37
Zdanavicius, K., & Straizys, V.	1964	The selection of spectral regions for heterochromatic photometry. II	11	1
Straizys, V.	1964	The selection of spectral regions for heterochromatic photometry. III. Observational test of the system X,Y,Z	11	11
Azusienis, A., & Bartkevicius, A.	1964	Determination of spectral types and magnitudes of the comparison stars for variables RS, TZ, WY, BY Andromedae and SVS 1452	11	31
Azusienis, A., & Juodokas, A.	1964	The relation between magnitudes of the Zeiss Astrotriplet and the system B,V	11	45
Straizys, V.	1964	On the variations of lambda 4430 band intensity ratio to color-excess with galactic longitude	11	48
Zitkevicius, V.	1964	Spectrophotometry of Nova V446 Herculis	11	52
Masnauskas, J.	1964	The catalogue of stellar spectra, magnitudes and colour indices in the milky way region with the center $\alpha_{1950} = 22^h 32^m$, $\delta_{1950} = +58^\circ 00'$	12	1
Jasevicius, V.	1964	Three colour photometry and spectral classification of stars in the region of NGC133, NGC146, and K-14	13	1
Bartkus, R.	1964	The catalogue of 2455 stars in the middle part of Orion association	13	29
Straizys, V., & Zdanavicius, K.	1965	The selection of spectral regions for heterochromatic photometry, IV	14	3
Azusienis, A.	1965	The correlation between magnitudes m_{pq} and B in the case of chromatic aberration	14	24
Zdanavicius, K.	1965	Intensitometer	14	38
Pucinskas, A.	1965	Some remarks on the variable TX CVn	14	45
No author	1965	Chronicle	14	47
Straizys, V.	1965	The selection of spectral regions for heterochromatic photometry. V	15	3
Bartkus, R.	1965	Interstellar absorption in the region of middle part of Orion association	15	28
Zdanavicius, K., & Kakaras, G.	1965	On some effects of photographic spectrophotometry	15	37
Zileviciute, Z., & Straizys, V.	1965	The energy distribution in the spectrum of Gamma Cas	15	49
Juodokas, A.	1965	Two-color photometry of BN Vul	15	59
Azusienis, A., & Straizys, V.	1966	The corrections of response curves and parameters of the U, B, V system. I. Response curves	16	3
Bartkus, R.	1966	On the polarization and reddening of light from Orion association stars	16	24
Zdanavicius, K., Bartkevicius, A., & Kakaras, G.	1966	The energy distribution in the spectra of 24 stars	16	28
Zdanavicius, K.	1966	The spectrum broadening device of 48 cm reflector of the Vilnius Observatory	16	41
Azusienis, A., & Straizys, V.	1966	The corrections of response curves and parameters of the U, B, V system. II. Color-indices	17	3
Slavenas, P., & Bogdanovic, A.	1966	A note on the form of Galactic spirals	17	24

Slavenas, P., & Jasevicius, V.	1966	The reduction of interdependent scales by the method of least squares	17	27
Azusienis, A., & Bartkevicius, A.	1966	Photometry and spectrophotometry of semiregular variables RS and TZ Andromedae	17	32
Azusienis, A., & Straizys, V.	1966	The corrections of response curves and parameters of the U, B, V system. III. Color-excesses and reddening lines	18	3
Bogdanovic, A., & Straizys, V.	1966	The corrections of response curves and parameters of the U, B, V system. IV. On the dependence of slope of the reddening lines from galactic longitude	18	25
Azusienis, A., Straizys, V., & Sudzius, J.	1966	The corrections of response curves and parameters of the U, B, V system. V. The dependence of the slope of reddening lines on spectral class derived from observational data	18	34
Zdanavicius, K., & Nikonov, V. B.	1967	The selection of spectral regions for heterochromatic photometry. VI. Seven-color UPXYZTS photometry of 125 bright stars with interference filters	19	3
Azusienis, A., & Straizys, V.	1967	The corrections of response curves and parameters of the U, B, V system. VI. The ratio of total absorption A_V to color-excess E_{B-V}	19	28
Azusienis, A., & Straizys, V.	1967	The corrections of response curves and parameters of the U, B, V system. VII. Absolutely black bodies in the U, B, V system	19	40
Azusienis, A., & Bartkevicius, A.	1967	The correlation between photovisual and V magnitudes	19	48
Straizys, V., & Kavaliauskaite, G.	1967	The evolutionary deviation of A-F stars in U-B, B-V diagram	20	3
Bartkus, R.	1967	Interstellar absorption in the region of λ Orionis	20	20
Juodokas, A.	1967	Interstellar absorption in the region of association I Gem and open cluster M 35	20	31
Kakaras, G., Straizys, V., Sudzius, J., & Zdanavicius, K.	1968	Photoelectric photometry of stars in the system UPXYZVS with glass filters. I.	22	3
Kakaras, G.	1968	Photometric effects of unresolved binaries in U, B, V system	22	25
Masnauskas, J.	1968	Investigation of interstellar absorption in the Milky Way region in Cepheus	22	40
Bogdanovic, A.	1968	On the beat period of TU Cassiopeiae	22	49
Straizys, V.	1968	The observations of night cloudiness in Vilnius in 1958-1967	22	54
No author	1968	Chronicle	22	60
Kakaras, G., & Straizys, V.	1969	Photometric effects of unresolved binaries in the system UPXYZVS	23	3
Kakaras, G.	1969	The observations of double stars in the system UPXYZVS	23	36
No author	1969	From the Editorial Board	23	45
Bartkus, R.	1969	Motion of a charged interstellar dust particle in ionized gases	24	3
Zitkevicius, V., & Sudzius, J.	1969	Photometry of Nova Delphini 1967 (HR Del) in the system UPXYZVS	24	18
Bartkevicius, A., & Metik, L. P.	1969	Color-indices of Nova Delphini 1967 (HR Del) in the system UPXYZVS	24	26
Sviderskiene, Z., & Straizys, V.	1969	The energy distribution in the spectrum of Gamma Cas in 1967	24	29
Azusienis, A., & Straizys, V.	1969	On the effect of the ultraviolet filter red leak on color-indices U-B	24	33
Bartkus, R.	1969	Dynamic action of radiation from a massive protostar	25	3
Bartkus, R.	1969	Dynamic action of radiation from a massive star	25	23
Kakaras, G.	1969	On the frequency of double stars with different photometric effects	25	39
Zdanavicius, K., Sudzius, J., Sviderskiene, Z., Straizys, V., Burnasov, V., Drazdys, R., Bartkevicius, A., Kakaras, G., Kavaliauskaite, G., & Jasevicius, V.	1969	Photoelectric photometry of stars in the system UPXYZVS with glass filters. II.	26	3

Bartkevicius, A., & Metik, L. P.	1969	Photoelectric photometry of stars in the system UPXYZVS with glass filters. III. Metal-deficient stars.	26	13
Sudzius, J.	1969	Photometry of classical cepheids η Aql, SU Cas and ζ Gem in the system UPXYZVS	26	23
Straizys, V.	1969	The band-width effect in the infrared photometry	26	29
Bogdanovic, A.	1969	Spectral sensitivity of some sorts of ORWO photographic plates	26	36
Jasevicius, V.	1970	A photometric study of stars and interstellar matter in the region of NGC 146 and K-14	27	3
Pucinskas, A.	1970	On some periodicity phenomena in symbiotic stars	27	24
Styro, D. B.	1970	Venus undercloud atmosphere thermal radiation in spectral region 5-40 μ	27	35
No author	1970	The second conference on Vilnius intermediate band photometric system for three-dimensional classification of stars	28	3
Straizys, V.	1970	The intermediate band photometric system for three-dimensional classification of stars	28	6
Zdanavicius, K.	1970	Atmospheric extinction in the system UPXYZVS	28	24
Bartkevicius, A., & Straizys, V.	1970	Subdwarfs and horizontal branch stars in two-index diagrams of the system UPXYZVS	28	33
Sviderskiene, Z., & Straizys, V.	1970	The relations between color-indices and magnitudes of the systems UPXYZVS and UBV	28	55
Sudzius, J., Zdanavicius, K., Sviderskiene, Z., Straizys, V., Bartkevicius, A., Zitkevicius, V., Kavaliauskaite, G., & Kakaras, G.	1970	Photoelectric photometry of stars in the system UPXYZVS with glass filters. IV.	29	3
Straizys, V., Drazdys, R., & Gorklyte, A.	1970	Photoelectric photometry of stars in the system UPXYZVS with glass filters. V. Pleiades.	29	10
Straizys, V., & Zdanavicius, K.	1970	The response curves of the system UPXYZVS	29	15
Straizys, V.	1970	Photometric energy curves in the system UPXYZVS	29	25
Straizys, V.	1970	Be-stars in the system UPXYZVS and the energy distribution in the spectrum of Gamma Cas in 1969-1970	29	33
Bartkus, R.	1970	On the planning of photometric multi-colour observations	29	37
No author	1970	Chronicle	29	49
No author	1970	Errata	29	51
Bartkevicius, A., & Straizys, V.	1970	Identification of subdwarfs in the system UPXYZVS with presence of interstellar reddening	30	3
Bartkevicius, A., & Straizys, V.	1970	Photometric effects of chemical composition in the system UPXYZVS between G8-K3 giants	30	16
Bartkevicius, A., & Straizys, V.	1970	Metallic-line stars in the system UPXYZVS	30	33
Sviderskiene, Z., & Straizys, V.	1971	The calibration of the diagrams of the system UPXYZVS in absolute magnitudes and spectral classes	31	3
Bartkus, R.	1971	The influence of magnetic field on the motion of cosmic dust particles	31	35
Kakaras, G.	1971	The photometric classification of stars by the method of comparison of color-indices	32	3
Kavaliauskaite, G., Straizys, V., & Azusienis, A.	1971	Comparison of observed and computed color-indices of the Vilnius System and the system U, B, V	32	18
Bartkus, R.	1971	Calculation of physical parameters according to the data of multi-colour photometric observations by the method of maximum likelihood	32	34
Bartkus, R.	1971	On the evolution of Strömgren spheres	32	42
Kavaliauskaite, G.	1972	Interstellar absorptions and colour-excesses in the Vilnius Photometric System	33	3
Bogdanovic, A., & Straizys, V.	1972	Photographic photometry of stars in the region of open cluster NGC 6871 in the Vilnius Photometric System. Part I	33	15
Bartkus, R.	1972	The catalogue of stars in the region of λ Orionis	33	28

Pucinskas, A.	1972	CI Cyg as an eclipsing variable	33	50
Zdanavicius, K., Nikonov, V. B., Sudzius, J., Straizys, V., Sviderskiene, Z., Kalytis, R., Jodinskiene, E., Meistas, E., Kavaliauskaite, G., Jasevicius, V., Kakaras, G., Bartkevicius, A., Gorklyte, A., Bartkus, R., Azusienis, A., Sperauskas, J., Kazlauskas, A., & Zitkevicius, V.	1972	Photoelectric photometry of stars in the system UPXYZVTS. VI.	34	3
Zitkevicius, V., & Straizys, V.	1972	Photometric effects of rapid stellar axial rotation	34	30
Zdanavicius, K., Nikonov, V. B., Sudzius, J., Straizys, V., Sviderskiene, Z., Kalytis, R., Jodinskiene, E., Meistas, E., Kavaliauskaite, G., Jasevicius, V., Kakaras, G., Bartkevicius, A., Gorklyte, A., Bartkus, R., Azusienis, A., Sperauskas, J., Kazlauskas, A., & Zitkevicius, V.	1972	Photoelectric photometry of stars in the system UPXYZVTS. VI.	34	35
Straizys, V., & Sviderskiene, Z.	1972	Energy distribution in the stellar spectra of different spectral types and luminosities	35	3
Straizys, V.	1973	The Vilnius Photometric System for three-dimensional classification of stars and determination of interstellar reddening	36	3
Bartkevicius, A., Gorklyte, A., Kavaliauskaite, G., Kazlauskas, A., Kalytis, R., Sviderskiene, Z., Sperauskas, J., Sudzius, J., & Jasevicius, V.	1973	Photoelectric photometry of stars in the system UPXYZVS. VII.	36	17
Bartkevicius, A.	1973	Photometry of three new population II giants in the Vilnius system	36	25
No author	1973	Chronicle	36	33
Alksnis, A., & Bogdanovic, A.	1973	Photographic photometry of stars in the region of open cluster NGC 6871 in the Vilnius Photometric System. Part II	37	3
Bogdanovic, A.	1973	Photographic photometry of stars in the region of open cluster NGC 6871 in the Vilnius Photometric System. Part III. Interstellar absorption	37	35
Zdanavicius, K., & Kalytis, R.	1974	Two-dimensional classification of stars and determination of interstellar absorption in the direction of infrared object NML Cyg	38	3
Kalytis, R., & Zdanavicius, K.	1974	The photon counting instrumentation for photoelectric observations of stars	38	9
Sperauskas, J.	1974	Temperature effects on transmission of filters realizing the Vilnius Photometric System and the system WBVR	38	16
Sperauskas, J., & Kalytis, R.	1974	The temperature dependence of light flux of luminescent light sources	38	23
Bartkus, R.	1974	The statistical changes of velocity parameters of Coulombian material points in close encounters	38	27
Bartkus, R., & Kazlauskas, A.	1974	The influence of near-by transits of charged particles on the Coulombian friction of interstellar dust grains	38	40
Sudzius, J.	1974	A comparison of Whiteoak and Nandy's interstellar reddening laws	39	3
Sudzius, J.	1974	Photoelectric photometry of O-type stars in the Vilnius Photometric System	39	11
Sudzius, J.	1974	The investigation of interstellar reddening laws in Cygnus, Cepheus, Perseus and Monoceros	39	18
Bartkevicius, A., & Sperauskas, I.	1974	Photoelectric photometry of stars with metal deficiency and other peculiar types in the Vilnius System	40	3
Kuriliene, G., & Sudzius, J.	1974	The ratios of colour-excesses in the Vilnius Photometric System and the UBV system and the ratio of total-to-selective absorption in the Vilnius System	40	10

Sviderskiene, Z.	1974	Energy distribution in the stellar spectra of different spectral types and luminosities. II.	40	26
Zdanavicius, K.	1975	On the dependence of atmospheric extinction coefficients on spectral type, luminosity and interstellar reddening in multicolor photometry	41	3
Bartkevicius, A., & Zdanavicius, K.	1975	Calculation of reddening-free parameters Q of the Vilnius Photometric System by the iteration method	41	30
Kakaras, G.	1975	The photometric classification of double stars	41	37
Meistas, E., Zdanavicius, K., Straizys, V., & Gorklyte, A.	1975	Photoelectric photometry of bright stars in the system WBVR	42	3
Straizys, V., & Kuriliene, G.	1975	Absolute calibration of color-indices of three photometric systems	42	16
No author	1975	The 63 cm reflector of the Moletai Astronomical Observatory	42	34
Sudzius, J., & Straizys, V.	1976	The investigation of interstellar absorption in the region of the open cluster IC 4996.	43	3
Sudzius, J.	1976	Effects of the interstellar reddening law variations on the photometric classification of stars	43	13
Bartkevicius, A.	1976	Theoretical color indices, color excess ratios and parameters Q for white dwarfs in the Vilnius Photometric System	43	18
Bartkus, R.	1976	The influence of electrostatic induction upon the effective cross-section of encounters between interstellar dust grains and charged particles	43	39
Bartkus, R.	1976	Statistical invariants and their usage for the determination of stellar parameters	43	49
Kuriliene, G., & Straizys, V.	1977	Intrinsic color indices of supergiants in the system UBVR _I JHKL _{MN} 'NO	44	3
Kuriliene, G.	1977	Intrinsic colour indices in the Vilnius Photometric System	44	15
Kuriliene, G.	1977	Color excess ratios in the uvby system.	44	38
Zdanavicius, K., Meistas, E., Dauksa, S., & Paskevicius, A.	1978	Eight-channel rotational quasi-simultaneous stellar photometer	45	3
Meistas, E., & Zitkevicius, V.	1978	Photoelectric Photometry of Am and Ap Stars in the Vilnius Photometric System	45	13
Straizys, V.	1978	Photoelectric investigations of energy distribution in stellar spectra	45	19
No author	1978	Chronicle	45	32
Bartkus, R., & Kazlauskas, A.	1978	On the motion of charged plasma particles in vicinities of interstellar dust grains	46	3
Bartkus, R.	1978	On the motion of stars in spherical stellar systems	46	14
Bartkus, R.	1978	On the elimination of unlinear interstellar extinction	46	31
Straizys, V., & Kuriliene, G.	1978	Intrinsic color indices of the luminosity III stars in the Vilnius Photometric System	47	3
Straizys, V.	1978	The catalogue of papers containing the results of infrared photometry	47	7
Straizys, V.	1978	The determinations of ratios R in the B, V system	47	26
Ralys, D. A., & Kalytis, R.	1978	Photon counter as a statistical signal transformer	48	3
Kalytis, R., & Ralys, D. A.	1978	Informational criterion for a quality estimation of photoreceivers operating as photon counters	48	18
Kalytis, R., & Juknelis, L.	1978	Amplifier-discriminator and high-voltage power supply for photon counting.	48	32
Zdanavicius, K., Gorklyte, A., Sudzius, J., Jasevicius, V., & Kazlauskas, A.	1978	Photoelectric photometry of the stars in Areas SA 44, 49, 59, 64 92, 110 in the Vilnius Photometric System.	49	3
Sperauskas, J., & Kalytis, R.	1978	The influence of photomultiplier temperature on measurements of color indices in the Vilnius Photometric System	49	13
Samuilis, A.	1978	Spectral sensitivity of some sorts of "Kodak" photographic plates	49	24

Kalytis, R., & Juknelis, L.	1978	Amplifier-discriminator and high voltage power supply for photon counting	49	32
Zitkevicius, V.	1979	The Old Astronomical Observatory of the Vilnius University (on the 225th Anniversary from its foundation)	50	3
Juska, A.	1979	On the history of astronomy in Lithuania	50	15
Horodnicious, H.	1979	The history of Astronomical Observatory of the Vilnius University in 1919-1939	50	20
Straizys, V.	1979	Astronomy in Lithuania after 1944	50	24
Straizys, V., Kalytis, R., & Sudzius, J.	1979	Photoelectric photometry of stars in the vicinity of Nova V 1500 Cyg.	52	3
Kalytis, R., Straizys, V., & Jodinskiene, E.	1979	Nova V 1500 CYG in the Vilnius Photometric System	52	18
Meistas, E., Straizys, V., Janulis, R., & Malyuto, V.	1979	Photometric three-dimensional classification of F-G stars at high galactic latitudes.	52	35
Bartkus, R.	1979	The precessional equilibrium of round stellar systems	54	3
Bartkus, R.	1979	The principle of general correlation in analysis and synthesis of stellar spectral data: an empirical-theoretical model and its building	54	16
Bartkus, R.	1979	An empirical model of O stars in the Vilnius Photometric System	54	36
Bartkevičius, A.	1980	The catalogue of metal-deficient F-M stars. Part 1. The stars classified spectroscopically	51	1
Ralys, D., & Kalytis, R.	1980	Informational criterion for a quality estimation of paralysable photon counters	53	3
Ralys, D.	1980	The gradational criterion for photon counter quality estimation	53	13
Kalytis, R.	1980	The influence of operation conditions on the stability of photomultipliers FEU-79 and FEU-106	53	22
Galdikas, A.	1980	On the convection account in computations of model stellar atmospheres by the method of total linearization	53	33
Zdanavicius, K.	1980	Verification of the dependence of atmospheric extinction coefficients upon spectral types of the stars	55	3
Zdanavicius, K., & Macijauskas, D.	1980	On the atmospheric extinction on the Maidanak Mountain	55	11
Straizys, V., & Bogdanovic, A. O.	1980	The transformations between magnitudes of the photometric systems RGU and VILGEN	55	20
Sviderskiene, Z.	1980	Energy distribution in the stellar spectra of different spectral types and luminosities - Part Three	55	27
Straizys, V., & Jodinskiene, E.	1981	The new calibration of the Vilnius Photometric System in spectral types and absolute magnitudes I	56	3
Straizys, V., & Kuriliene, G.	1981	The estimation of optimality of the Vilnius Photometric System bandpasses, X, Y, and Z for stellar classification	56	25
Straizys, V.	1981	The systematization of late-type giant stars	56	38
Straizys, V.	1981	The Comet Cernis-Petrauskas	56	46
Gurklyte, A., & Straizys, V.	1981	Photoelectric photometry of the open clusters IC 4665, NGC 6633 and NGC 7092 (M39) in the Vilnius Photometric System	57	3
Straizys, V., Kuriliene, G., & Sviderskiene, Z.	1981	Wide-band photometric systems in the red and near infrared	57	9
Bartkevicius, A., & Sviderskiene, Z.	1981	Energy distribution in stellar spectra of different spectral types and luminosities. IV. The metal-deficient stars	57	35
Straizys, V.	1981	The stellar groups (review)	57	62
Sperauskas, J., Bartkevicius, A., & Zdanavicius, K.	1981	Photoelectric photometry of halo population and other peculiar stars in the Vilnius Photometric System.	58	3
Bartkevicius, A., Bartasiute, S., & Zdanavicius, K.	1981	Photoelectric photometry and classification of 19 halo population stars in the Vilnius System.	58	32
Bartasiute, S.	1981	Photoelectric photometry of stars at high galactic latitudes in the Vilnius System.	58	41

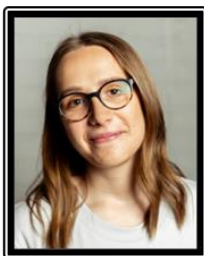
Bartkevicius, A., & Sviderskiene, Z.	1981	Colour excess ratios for metal-deficient, barium, and CH stars	58	54
Pucinskas, A.	1982	Photographic photometry of stars in the region of open cluster IC 4996 in the Vilnius Photometric System	59	3
Straizys, V., Kuriliene, G., & Jodinskiene, E.	1982	The new calibration of the Vilnius Photometric System in spectral types and absolute magnitudes II.	60	3
Straizys, V., Jodinskiene, E., & Kuriliene, G.	1982	The calibration of the Vilnius Photometric System in temperatures and gravities	60	16
Straizys, V., Jodinskiene, E., & Hauck, B.	1982	Classification properties of the Vilnius-Geneva Photometric System. I. Preliminary calibration	60	50
Straizys, V.	1982	Chronicle of astronomy in Lithuania in 1978-1981.	60	67
Pucinskas, A.	1982	Interstellar extinction and space densities of stars in the direction of an open cluster IC 4996 in Cygnus	61	3
Straizys, V., & Bartkevicius, A.	1982	Determination of temperatures, metallicities, and interstellar reddening for G-K giants and subgiants in the Vilnius Photometric System	61	22
Meistas, E.	1982	T Tauri-type stars in the Vilnius Photometric System	61	32
Bobinas, V.	1982	Photomultipliers FEU-79 and FeU-106 in the Earth's magnetic field	61	45
Bogdanovic, A.	1982	The program for arbitrary smoothing of experimental data	61	52
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Ralys, D., & Kalytis, R.	1982	Erratum: "Informational criterion for quality estimate of paralysable photon counters" [Bull. Vilnius Astron. Obs., No. 53, p. 3 - 12 (1980). In Russian].	61	56
Meistas, E.	1983	T Tauri-type stars in the UBV photometric system	62	3
Straizys, V.	1983	On transformation of stellar magnitudes from UBV system to the photographic version of the Vilnius Photometric System	62	11
Kuriliene, G.	1983	Effective wavelengths of the Vilnius Photometric System, the UBV system, and some red-infrared systems	62	26
Straizys, V., & Kuriliene, G.	1983	Investigation of the properties of the Washington Photometric System	62	39
Bartkevicius, A., & Sperauskas, J.	1983	Three-dimensional classification of F-M type halo stars in the Vilnius Photometric System	63	3
Dzervitis, U.	1983	Seven colour photoelectric photometry of bright stars in open cluster IC 4756	63	36
Galdikas, A.	1983	Model atmospheres of DA white dwarfs. I. Calculation method	64	3
Bartkevicius, A., & Sleivyte, J.	1983	CH and metal-deficient barium stars and their color excesses	64	24
Pucinskas, A.	1983	On the structure of dark interstellar clouds in the direction of the open cluster IC 4996	65	3
Pucinskas, A.	1983	Investigation of the open cluster IC 4996	65	17
Meistas, E.	1983	Interstellar extinction law in the Taurus dark clouds	65	42
Samuilis, A., & Stulpiniene, N.	1983	Determination of the effective quantum efficiency of some types of photomultipliers	65	55
Bartkevicius, A.	1984	Metal-deficient giants in the Galactic field. Catalogue and some physical parameters	66	3
Straizys, V.	1984	On the distance of the Scorpio-Centaurus dark cloud	67	3
Janulis, R.	1984	Interstellar reddening in the direction of globular cluster M71. II	67	18
Ralys, D. A.	1984	Stellar magnitude–photon flux relationship in the Vilnius Photometric System	67	28
Cernis, K.	1984	Černis comet (1983 1)	67	43
Bartkevicius, A.	1984	Catalogue of metal deficient F–M stars. Part 1. Stars classified spectroscopically. Supplement 1.	68	3
Bartasiute, S.	1984	Photoelectric photometry of stars near the North Galactic Pole in the Vilnius System. I. Kiev Area 112	68	33

Zdanavicius, K., & Cerniene, E.	1985	New magnitudes and color indices of the Cygnus standard region stars in the Vilnius Photometric System.	69	3
Sleivyte, J.	1985	CH and barium metal-deficient giants in the Vilnius Photometric System. I.	69	9
Bartasiute, S.	1985	Photoelectric photometry of stars in the vicinity of the South Galactic Pole in the Vilnius System	69	24
Straizys, V.	1985	Chronicle of astronomy in Lithuania in 1982-1984	69	33
Tautvaisiene, G.	1985	Metallicity determination of G-K giants from medium dispersion spectra	70	3
Kuriliene, G.	1985	Photometric properties of the superwide-band UJFN system	70	14
Vansevicius, V.	1985	The character of rapid variation of CH Cygni	70	30
Drazdys, R.	1985	Design and basic properties of the Vilnius electronographic camera	70	35
Kalytis, R., Ralys, D. A., & Raliene, F.	1985	The influence of the basic parameters of the photon counter on the measurement quality	71	3
Kalytis, R., Raliene, F., & Stulpiniene, N.	1985	The investigation of the photomultipliers FEU-79 and FEU-106 and their quality estimation	71	19
Galdikas, A.	1985	Model atmospheres of DA white dwarfs. II. Catalogue	72	3
Galdikas, A.	1985	Model atmospheres of DQ white dwarfs. I. Details of computation	73	3
Galdikas, A.	1985	Model atmospheres of DQ white dwarfs. II. Catalogue	73	24
Zdanavicius, K.	1986	UBVRI photometry and effective temperatures of metal-deficient giants	74	3
Bartasiute, S.	1986	Photoelectric photometry of stars near the North Galactic Pole in the Vilnius System. II. Kiev Areas 113 and 119	74	15
Sleivyte, J.	1986	Low temperature carbon stars in the Vilnius Photometric System. II	74	24
Jasevicius, V.	1986	Photometric quantification of stars in the Vilnius System using the method of independent Q parameters	74	40
Bartkevicius, A.	1986	Catalogue of metal-deficient F–M stars. Part I. Stars classified spectroscopically. Supplement 1. (Magnetic Tape)	74	55
Straizys, V., Jodinskiene, E., & Kuriliene, G.	1986	The calibration of the Vilnius Photometric System in temperatures and gravities errata	74	58
Straizys, V., Cernis, K., Vansevicius, V., Janulis, R., Jasevicius, V., Tautvaisiene, G., & Zdanavicius, K.	1986	Photoelectric photometry of metal-deficient giants of spectral types G and K in the Vilnius System	75	3
Janulis, R.	1986	Photoelectric photometry of stars in the Vilnius System in the direction of globular cluster M56	75	8
Kazlauskas, A., & Jasevicius, V.	1986	Photoelectric photometry of stars in the Vilnius System in the region of the open cluster NGC6913 = M29	75	18
Cernis, K.	1986	Photoelectric photometry of stars in the Vilnius System in Kapteyn Areas SA 92, 108, and 112	75	31
Sleivyte, J.	1986	The ratios of color excesses and the R ratios in the UBV and the Vilnius Photometric Systems for carbon and barium stars	75	36
Bogdanovich, A., & Straizys, V.	1986	Photometric effects of unresolved binaries in the Vilnius System	75	45
Bartkevicius, A., Bartkeviciene, V.-D., & Jodinskiene, E.	1987	Identification catalogue of metal-deficient F–M stars classified spectroscopically (magnetic tape).	76	33
Bartkevicius, A., & Tautvaisiene, G.	1987	Three-dimensional classification of 78 metal-deficient giants in the Vilnius Photometric System	76	3
Zitkevicius, V.	1987	Determination of the effective temperatures of peculiar stars in the Vilnius Photometric System	76	8
Straizys, V.	1987	Calibration of the U–B, B–V diagram in spectral classes, absolute magnitudes, temperatures, and gravities	76	17
Paskevicius, A., Zdanavicius, K., & Meistas, E.	1987	Modernization of the eight-channel rotational stellar photometer “Tikutis”	76	24

Cernis, K.	1987	Interstellar extinction in the direction of the Pleiades cluster	76	29
Bartkevicius, A., Bartkeviciene, V. D., & Jodinskiene, E.	1987	Identification catalogue of metal-deficient F-M stars classified spectroscopically (magnetic tape)	76	33
Bartkevicius, A.	1987	The catalogue of high velocity stars by Nancy G Roman (magnetic tape)	76	39
Sperauskas, J.	1987	Horizontal branch stars, blue stragglers, and Lambda Boo type stars in the Vilnius Photometric System.	77	3
Straizys, V., Cernis, K., & Zdanavicius, K.	1987	The halo population G and K subdwarfs in the Vilnius Photometric System.	77	24
Sleivyte, J.	1987	Photoelectric photometry of carbon and barium stars in the Vilnius Seven-color System and their color excesses	77	32
Kurilienė, G., & Straizys, V.	1987	On relation of color indices of the spectrographic and the standard uvby systems.	77	54
Tautvaisiene, G.	1987	Determination of effective temperatures and surface gravities of metal-deficient K-G giants in the Vilnius Photometric System	78	3
Tautvaisiene, G.	1987	Calcium abundances in atmospheres of 43 G and K giants	78	21
Vansevicius, V., Petrauskas, J., & Zabarauskas, R.	1987	Electronographic photometry. I. Determination of the electronographic emulsion characteristic curve from stellar images	78	36
Straizys, V.	1987	Intrinsic color indices of supergiants in the UBVRIJHKL system. II	78	43
Samuilis, A., & Kalytis, R.	1987	A comparison between photon counting and direct current methods for spectrophotometers	79	3
Samuilis, A., & Kalytis, R.	1987	Analysis of statistical errors in photon counting spectrophotometric measurements	79	16
Samuilis, A., Stulpiniene, N., & Kalytis, R.	1987	Stability and linearity of spectrophotometer with large photometric range	79	26
Sperauskas, J.	1987	A new photometric method for determination of color excesses of RR Lyrae type variables	79	36
Sviderskiene, Z.	1988	Energy distribution in the stellar spectra of different spectral types and luminosities. V. Normal stars	80	3
Meistas, E.	1988	Photoelectric photometry of stars in Kapteyn Area SA-6 in the Vilnius Photometric System	81	3
Vansevicius, V., Paskevicius, A., Jukonis, J., Panovas, A., Valcackas, A., Stasiunas, A., & Petrauskas, J.	1988	Automatic Scanning Microphotometer	81	8
Galdikas, A.	1988	A program for computation of synthetic spectra and equivalent widths of spectral lines	81	21
Pyragas, K., & Svirskas, K.	1988	On the stochastic phenomena in the dynamics of test particles in the field of a black hole	81	29
Opanasiuk, Y. A., & Pyragas, K.	1988	Relativistic motion equations and their relation to the equations in metric theories of gravitation	81	35
Bartasiute, S.	1989	Photometric three-dimensional classification of 343 stars in the Vilnius System and interstellar extinction near the South Galactic Pole	82	3
Straizys, V., Meistas, E., Vansevicius, V., & Goldberg, E. P.	1989	Photoelectric photometry of stars in the Vilnius System in the area of the North America and Pelican Nebulae	83	3
Straizys, V., & Meistas, E.	1989	The R-I color indices measured with the S-20 photocathode	83	29
Straizys, V., & Cernis, K.	1989	White dwarfs in the Vilnius Photometric System	83	38
Straizys, V., Cernis, K., Vansevicius, V., & Mesitas, E.	1989	The variable RR Lyrae in the Vilnius Photometric System	83	43
Zdanavicius, K., Meistas, E., & Vansevicius, V.	1989	Photoelectric photometry of stars in the area of the globular cluster M 12	84	3
Cernis, K., Meistas, E., Straizys, V., & Jasevicius, V.	1989	Photoelectric photometry of bright stars in the vicinity of the North Celestial Pole	84	9
Paupers, O., Dzervitis, U., Straizys, V., & Cernis, K.	1989	T Tauri type and Ae/Be stars in the Vilnius Photometric System	84	21

Straizys, V., & Meistas, E.	1989	Photoelectric photometry of bright stars in the vicinity of the North Galactic Pole	84	26
Vansevicius, V., & Petrauskas, J.	1989	Photoelectric photometry of stars in the Vilnius System towards the central part of the open cluster IC 4996	84	40
Vansevicius, V., Drzdys, R., & Vilkaitis, G.	1989	Electronographic photometry. II. Investigation of the emulsion	84	42
Straizys, V.	1989	The chronicle of astronomy in Lithuania in 1985-1988	84	53
Sleivyte, J., & Bartkevicius, A.	1990	Catalogue of CH and metal-deficient barium stars	85	3
Lazauskaite, R., & Tautvaisiene, G.	1990	Photoelectric photometry of 241 stars in the Vilnius System	85	30
Jasevicius, V., Kuriliene, G., Strazdaite, V., Kazlauskas, A., Sleivyte, J., & Cernis, K.	1990	Photoelectric photometry of G-M stars in the Vilnius System	85	50
Sviderskiene, Z.	1992	Energy distribution in the stellar spectra of different spectral types and luminosities. VI. Metal-deficient stars	86	3
Sudzius, J., & Bobinas, V.	1992	Photoelectric photometry of OB stars in the Vilnius System	86	59
No author	1992	Paulius Slavenas (1901-1991) Obituary	86	79

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