



ECONOMIC IMPORTANCE AND MEDICINAL PROPERTIES OF BUNIMUM L. SPECIES

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Abstract

Preservation of biological diversity in the world, protection of flora and their rational use is one of the global problems. Therefore, special attention is paid to the study of bioecological characteristics of plant species, introduction work, development of protection measures, identification of rare and declining species and their preservation. Bunium species, which are used as essential oil, medicinal, nutritional, medicinal, perfumery and food industry plants, are of particular importance. Special attention is paid to the study of the biomorphological characteristics of essential oil-bearing plants during their ontogenesis and to the identification of their raw materials. In this regard, it is important to determine the composition of species of the Bunium family, justify the factors affecting it, and evaluate the possibility of using prospective species in production sectors. Organization of natural reserves of Bunium species and their plantations in Jizzakh region is considered urgent today. The cumin plant is useful not only in the food industry, but also in folk medicine. For this reason, it has a strong place in medicine as an effective natural remedy. Cumin can be found in many medicines, but it is often recommended to drink it as a tea with nothing else added. The article presents information about the importance of Bunium L. species in the national economy and medicine, as well as medicinal properties.

Keywords: Bunium, cumin, essential oil, flatulence, gastritis, tincture, seed, Central Asia.





Introduction

Cumin is a 40-60 cm perennial herbaceous plant belonging to the Apiaceae family. The stem hangs upright, with shield-like branches starting from the middle. The leaves before the root are long-banded, wide triangular, three-lobed, the lobes are long-banded, feather-cut into star-shaped little ones, the little ones are in turn twice feather-shaped along the length, and are successively arranged on the stem and branches with the help of a band. White, five-lobed flowers are arranged in a complex umbrella inflorescence. The fruit is a linear, double bean. Cumin blooms in June, the fruit ripens in July. Cumin hangs on the southern slopes with soft soil in the mountainous regions of Central Asia.[6]

It is found a lot on the slopes of the mountain ranges of the Western Tianshan and Pamir Aloy ridges at an altitude of 700-2000 meters above sea level, especially on sandy and yellow soils. Cumin grows mainly on the slopes of Western Turkestan, South-Western Hisar and Zarafshan mountains. The yield of cumin largely depends on weather changes, especially rainfall, soil conditions, altitude, i.e., growing in rows, and several other factors. Cumin cultivated at an altitude of 1400 m above sea level is more productive than those found at 700 m. 3-8 kg of cumin seeds can be harvested from each hectare of cumin fields.

Materials and Methods

Among the medicinal plants in our republic are caraway seeds (Apiaceae L.) Family representatives occupy a special place. Within this family, representatives of the Bunium L. family are important, and this family includes 45 to 50 species. Bunium persicum (Boiss.) B. Fedtsch as a plant belonging to the Apiaceae family grows in various regions of Asia such as Central Asia, Iran, Pakistan, Afghanistan and India. [10]

This plant has important medicinal, antimicrobial and antioxidant properties, which indicates its high potential for use in medicine and food industry.

Since ancient times, cumin is one of the favorite spices of the peoples of Central Asia and the East.

K. Makhmudov writes in his book "Uzbek dishes" that cumin can be used in 250 different dishes. In fact, the local people have been using cumin seeds for a long time in preparing their favorite dishes: pilaf, roast, kebab, shavla, gazi, hasip and mastava. Abu Ali ibn Sina used cumin as a medicine in the treatment of diseases of the stomach, intestines, liver and urinary tract. The unique aroma and medicinal properties of cumin seeds depend on the essential oil contained in it. Cumin seeds contain 2.75-3%, leaves contain 12% orange-reddish essential oils. Recently, the number of people





selling cumin seeds in the markets of Uzbekistan has increased a lot. They expose the spices, harm the development and reproduction of the plant. As a result, there are cases of decrease of wheat fields. Therefore, it is necessary to pay special attention to the protection of the valuable cumin plant.[7]

Cumin fruit is used in folk medicine. When the fruits are ripe, the plant is harvested, tied and dried in a threshing machine. Then it is burned, the fruit is blown in the wind and cleaned. Cumin fruit is used as a spice in national dishes. The fruit contains up to 3% essential oil, 13.6% fat, protein and other substances. The essential oil contains carene, simole, terpinolene, carvone, linalool, carvacrol and other terpenoids.

In folk medicine, cumin has been used since ancient times as an appetite suppressant, health improver, wound healer and gastritis. Ibn Sina also used cumin for these purposes. The powder of its fruit is used to relieve abdominal pain, to reduce swelling of the spleen (black liver), and the tincture of its fruit in vinegar is used to stop bleeding from the nose. Roasted fruit is used as a diuretic.[6]

Bunium bersicum is the most fragrant type of cumin, which is used for various purposes and is highly appreciated by our people.

Cumin seeds can be widely used in the food industry for the preparation of meat, fish, tomato and cucumber preserves, as well as for the preparation of gas, hash and sausages. It acts as a natural refrigerant to keep the meat from smelling for a certain period of time. It protects various fruit peels from spoilage. In general, cumin seeds are widely used as a spice in the preparation of various dishes.

antibacterial and antifungal properties. [11]

Essential oil crops stand out among oil crops. The composition of these crops (seeds, fruits, leaves, stems) According to information, cumin can be used in the preparation of 250 types of food.

In folk medicine, cumin seeds are used as diuretics, and wounds are treated with ointments made from its pulp. Abu Ali ibn Sina used cumin instead of medicine in the treatment of diseases of the stomach, intestines, liver, and urinary tract.[8]

There are several pharmacological activities associated with *Bunium L.* species, especially antioxidant contains 5-7% essential oil. The main representatives of this group are: fennel, coriander, black cumin, mint, white cumin.

Plants with essential oil are used in medicine, perfumery and food. Waste is a high-quality feed for livestock.[9]

About the benefits of cumin in folk medicine, our great-grandfather Ibn Sina said: "It has a warming power, drives away wind and disperses it. If you drink it mixed with water, it helps when breathing becomes difficult. Jolinus says it is good for "straight breathing" and cold sores. [1]



Also, cumin has a great benefit in gastric gastritis, jaundice, appetite, insomnia, and increasing people's energy.

Cumin is a useful natural remedy for improving appetite and against colic, gall bladder and liver pain, as well as cough.

Results & Discussion

Medicinal components: cumin contains 3-7% essential oil, 12-22% essential oil, flavonoids known as quercetin and kaempferol, coumarins, umbelliferone, scopoletin and other substances. It also contains 10-23% protein and aromatic substances.

Cumin is a natural herb with the best carminative benefits of all the remedies available. For this reason, it has a strong place in medicine as an effective natural remedy. Cumin can be found in many medicines, but it is often recommended to drink it as a tea with nothing else added.

Modern doctors also give a positive assessment of cumin and emphasize that it is extremely useful to eat cumin in a certain way in cases of excessive fullness, flatulence, mild diseases of the gastrointestinal tract, heart diseases, and digestive disorders in nursing children.

Cumin tea: Pour 1/4 liter of boiling water over 1 full teaspoon of ground cumin and strain after 10 minutes. It is advisable to drink this tea infused with cumin while it is warm. This tea relieves the rest of the digestive tract and bowels. Medicinal tincture 100 ml of boiling water is poured over 1-5 g of ground cumin, it is left to rest for 10-15 minutes. Drink the prepared tincture in 2-3 portions before meals.

In folk medicine, cumin is highly valued as a useful natural remedy for the treatment of stomach ailments, appetite, colic relief, gall bladder and liver diseases, as well as for the treatment of cough. As mentioned above, tea is drunk from it, cumin is chewed on its own or ground cumin is eaten on the tip of a knife.

Since cumin is a sedative and expectorant, in such cases it is given to children in the order prescribed by the doctor. Specialists of folk medicine admit that there is no other tool more useful than cumin tea for painful menstruation in teenage girls. In case of toothache and headache, pressing cumin in a slightly heated bag on the stove to relieve the pain is a common natural remedy among our people.

Allergy. 50 g of cumin is crushed in a coffee grinder, 0.5 l of boiling vegetable oil is poured over it, it is steamed for 10 minutes without boiling. Put it in a glass container and leave it for 1 week in a warm place - in the sun or on a battery. This oil restores skin immunity in the body. 20 drops in the nostrils for adults, 5 drops for children. 1 course of treatment - 3-6 months. At the end of the treatment, the dripped oil is reduced by 1 drop. The oil can also be applied as a mask, compress, or massage.





In pain in the stomach. Cumin is brewed like tea and drunk instead of tea.

In gastritis related to glandular deficiency. Pour 200 ml of boiling water over 15 g of cumin, let it rest for 30-40 minutes, pass it through a cheesecloth. Drink 1 tablespoon 3-4 times a day before meals.

In diseases of the pancreas. 1 cup of boiling water is poured over 1 tablespoon of cumin, left for 2 hours, strained. Drink 70 g 3 times a day before meals.

In constipation. 1 cup of boiling water is poured over 2 tablespoons of cumin, steamed in boiling water for 15 minutes in a kettle-like container, and left to rest for 45 minutes. The infusion is drunk half a glass 2 times a day after meals.

Coughing. 1 cup of boiling water is poured over 1 tablespoon of ground cumin, covered, wrapped and left to cool. Then it is passed through gauze. Drink 2-3 tablespoons up to 6 times a day. For young children, add honey or sugar and drink 1 teaspoon 3-4 times a day.

Meteorism. 1 cup of boiling water is poured over 1 tablespoon of cumin, covered, and left to rest for 1 hour. Drink 2 tablespoons 3 times a day before meals.

In the wind. Pour 1 glass of water over 3 teaspoons of cumin and boil for 15 minutes, let it rest for 40 minutes, pass through a cheesecloth. Prepared tincture is drunk little by little during the day.

To increase breast milk supply in lactating mothers. 0.5 liters of boiling water is poured over 1 tablespoon of ground cumin, boiled for 5 minutes in a closed container, then strained. The decoction is drunk 3 times a day 15 minutes before meals.

When there is a high amount of gastric juice in chronic gastritis. Pour 200 ml of boiling water over 15 g of cumin, let it rest for 30-40 minutes with the lid closed, strain it through a cheesecloth. Drink 1 tablespoon of tincture 3-4 times a day before meals.

Prostate adenoma in men. People with this disease should drink cumin tea regularly - pour 1.5 cups of boiling water over 1 tablespoon of cumin, boil for 5-7 minutes, close the mouth of the container for 10 minutes, wrap it, strain it, strain it and drink it throughout the day.

Circumstances in which cumin cannot be consumed. It is impossible to eat cumin by itself in stomach ulcer, ischemic heart disease, thrombophlebitis, gastritis, heart attack, thrombosis, diabetes.[12]

The use of cumin tea, tinctures and medicinal mixtures has the following beneficial effects on the body:

- high iron content helps to increase the production of enzymes, as well as increase the level of hemoglobin, which is involved in the transport of oxygen to cell structures;
- controls the proper digestion of food and absorption of nutrients, activates the activity of salivary glands;



- increases secretion of bile and enzymes;
- proven anticarcinogenic effect, protects against the appearance of malignant neoplasms in the stomach and liver;
- cleanses the body of toxic compounds and toxins;
- protects against the development of diabetes;
- relieves symptoms of toxicosis in women and increases milk production during lactation;
- improves kidney function;
- restores vision;
- increases brain activity, improves concentration and memorization;
- normalizes psycho-emotional state and sleep;
- when used externally, it increases the regenerative capacity of tissues;
- restores the proper functioning of the respiratory system;

Conclusion

Cumin is a very delicate plant, and it is demanding on natural conditions. It takes at least four years to mature. It reproduces only from its seeds. Harvesting of cumin bushes before ripening, grazing of natural areas by cattle, causes the reduction of plant resources.

For this reason, it is our human duty to preserve natural plant resources and deliver them to the next generation. For this, we need to explain more about the useful and healing properties of plants in classes. Therefore, it is necessary to solve the problems of planting promising species of the Bunium family from seeds, looking for ways to reproduce them and organizing their plantations.

References

1. Ibn Sina, Laws of Tib, Volume 2, 1956. p. 325-326.
2. National report on the state of the environment and use of natural resources in the Republic of Uzbekistan (Retrospective analysis for 1988-2007): - Tashkent, 2008. - 298 p.
3. Kholmatov H.H., Habibov Z.H. Medicinal plants of Uzbekistan - Tashkent, 1976. - 144 p.
4. Kurmikov A.G., Belolipov I.V. Dikorastushchie lekarstvennyye rasteniya Uzbekistana. - Tashkent: Extremum Press, 2012. - 278 p.
5. Kholmatov Kh.Kh., Akhmedov U.A. Pharmacognosy. - Tashkent: Ibn Sino, 1995. - 525 p.





6. Berdiyev E.T., Khakimova M.Kh., Makhmudova G.B. Forest medicinal plants (study guide). - T.: "Sano-standard" publishing house, 2016.-276 pages.
7. Khaidarov Q., Khojimatov Q., Plants of Uzbekistan: Handbook for secondary school biology teachers - 2nd revised and updated edition. - T.: "Teacher" 1992-248 p.
8. Khojimatov Q., Spice plants of Uzbekistan (Responsible editor P.Q. Zakirov). T."Fan" 1982, 48 p.
9. Atabayeva H.N., Khudaikulov J.B. Plant science. -T.: "Science and Technology", 2018, 408 pages.
10. Hassan Hassan zadazar, Hassan Hassan zadazarBorzoo, TaamiBorzoo TaamiMajid AminzareMajid, AminzareS. Daneshamooz. Bunium persicum (Boiss.) B. Fedtsch: An overview on Phytochemistry, Therapeutic uses and its application in the food industry// Journal of Applied Pharmaceutical Science. 8(10):150-158 DOI: 10.7324/JAPS.2018.81019.
11. Mohammadhosseini, M, Frezza, C, Venditti, A and Sarker, SD A systematic review on phytochemistry, ethnobotany and biological activities of the genus Bunium L. Chemistry & Biodiversity 18(11) DOI: 10.1002/cbdv.202100317
12. Halkuzieva Mokhira Asatullaevna. (2022). Ferula Tadshikorum Pimenov Growth And Development In Different Soils. Eurasian Scientific Herald, 4, 29–34. Retrieved from <https://geniusjournals.org/index.php/esh/article/view/418>
13. Halkuzieva MA, Khamraeva DT, Bussmann RW. Bio-morphological properties of Ferula tadshikorum Pimenov and Ferula foetida (Bunge) Regel under plantation conditions. Plant Sci. Today. 2022 Nov. 24 [cited 2022 Dec. 21];. Available from: <https://horizonpublishing.com/journals/index.php/PST/article/view/1863>
14. Halkuzieva M, Raxmonqulov U. The morphology and growth biology of seeds of what save resin Ferula foetida (Bunge) Regel and F. tadshikorum (M. Pimen).Scientific Bulletin of Namangan State University. 2020;2(4):81-85.
15. Khalkuzieva MA, Rahmonqulov U. Protection of plants for years in the plantations of Ferula tadshikorum Pimenov //Bulletin of Gulistan State University. 2020;4:19-25. <https://uzjournals.edu.uz/gulduvestnik/vol2020/iss4/21>
16. Halkuzieva M. The role of agrotechnological measures during the early development of Ferula tadshikorum Pimenov and Ferula foetida (Bunge) Regel. Annals of the Romanian Society for Cell Biology. 2021;3191-98. <https://doi.org/10.37547/tajabe/Volume02Issue07-05>.
17. Halkuzieva Mokhira Asatullaevna, & Rahmonkulov Umardul. (2020). Smola Storage Ferula Tadshikorum M. Pimen Plantations Storage For Years. The



- American Journal of Agriculture and Biomedical Engineering, 2(07), 30–34.
<https://doi.org/10.37547/tajabe/Volume02Issue07-05>.
18. Nematova Mokhinur, Iskandarova Yulduzoy Nizamitdinovna, Shakhnoza Doniyorova, & Mokhira Halkuzieva. (2023). BIOGEOGRAPHY OF THE SPECIES OF THE EREMURUS L. SPECIES INCLUDED IN THE RED BOOK, THE SIGNIFICANCE IN THE NATIONAL ECONOMY AND PROPAGATION METHODS. Spectrum Journal of Innovation, Reforms and Development, 11, 61–78. Retrieved from <https://www.sjird.journalspark.org/index.php/sjird/article/view/515>
 19. <https://xalq-tabobati.uz>
 20. Anarbayevich A. R., Abduvahob o'g'li P. A. BO'LG'USI MUTAXASSISNING SHAXS SIFATIDAGI QOBILIYATINI OSHRISHDA PEDAGOGIK VA AXBOROT TEXNOLOGIYALARINING O'RNI //International Journal of Contemporary Scientific and Technical Research. – 2022. – С. 673-676.
 21. Anarbayevich A. R., Jamshid o'g'li K. I. YOSHLARNING AXBOROT OLISHGA NISBATAN MUNOSABATINI SHAKLLANTIRISH //International Journal of Contemporary Scientific and Technical Research. – 2022. – С. 10-13.
 22. Джураев Р. У. и др. АНАЛИЗ РАБОТЫ И ПОВЫШЕНИЕ ЭФФЕКТИВНОСТИ КОМПРЕССОРНЫХ УСТАНОВОК НА ГЕОЛОГОРАЗВЕДОЧНЫХ РАБОТАХ //INTERNATIONAL SCIENTIFIC REVIEW OF THE PROBLEMS AND PROSPECTS OF MODERN SCIENCE AND EDUCATION. – 2018. – С. 29-31.
 23. Abduraxmanov R., Azizov Q. Maxsus fanlarni o'qitishning asosiy tamoyillari //Zamonaviy innovatsion tadqiqotlarning dolzarb muammolari va rivojlanish tendensiyalari: yechimlar va istiqbollar. – 2022. – Т. 1. – №. 1. – С. 49-51.
 24. Abduraxmanov, R. (2022). Innovatsiya va ta'lim tizimining uzviyligi. Zamonaviy innovatsion tadqiqotlarning dolzarb muammolari va rivojlanish tendensiyalari: yechimlar va istiqbollar, 1(1), 51-53.
 25. Азизов К. Х., Абдурахмонов Р. А. ПУТИ ОБЕСПЕЧЕНИЯ БЕЗОПАСНОСТИ ДОРОЖНОГО ДВИЖЕНИЯ В КРУПНЫХ ГОРОДАХ РЕСПУБЛИКИ УЗБЕКИСТАН //The edition is included into Russian Science Citation Index. – 2015. – С. 70.
 26. Abdurakhmanov R. DETERMINATION OF TRAFFIC CONGESTION AND DELAY OF TRAFFIC FLOW AT CONTROLLED INTERSECTIONS //The American Journal of Engineering and Technology. – 2022. – Т. 4. – №. 10. – С. 4-11.



27. Baxranovna M. R. International System Assessment of Reading Literacy of Primary School Pupils Pirls //International Journal of Culture and Modernity. – 2022. – T. 14. – C. 35-38.
28. Bakhronovna R. M. THE IMPORTANCE OF INTERACTIVE METHODS IN SHAPING STUDENTS'THINKING SKILLS //INTERNATIONAL JOURNAL OF DISCOURSE ON INNOVATION, INTEGRATION AND EDUCATION. – 2020. – T. 1. – C. 37-40.
29. Bakhranovna R. M. Formation of orthography competences of primary school students through programming pedagogical tools //ACADEMICIA: An International Multidisciplinary Research Journal. – 2021. – T. 11. – №. 7. – C. 63-68.
30. Raximqulova M. TA'LIMGA INNOVATSION YONDASHUV–O'QITISH SAMARADORLIGINI OSHIRISH OMILI SIFATIDA //INTEGRATION OF SCIENCE, EDUCATION AND PRACTICE. SCIENTIFIC-METHODICAL JOURNAL. – 2021. – C. 118-121.
31. Baxranovna R. M. BOSHLANG 'ICH TA'LIM MATEMATIKA DARSLARIDA QADRIYATLAR ORQALI O 'QUVCHILARNI MA'NAVYIY TARBIYALASH //INTEGRATION OF SCIENCE, EDUCATION AND PRACTICE. SCIENTIFIC-METHODICAL JOURNAL. – 2022. – T. 3. – №. 2. – C. 130-135.
32. Bakhronovna R. M. Formation Of Ecological Culture Of Primary School Pupils Through Natural Sciences (Example Of 2nd Grade Science Textbook) //Journal of Positive School Psychology. – 2022. – T. 6. – №. 11. – C. 418-422.
33. Baxronovna R. M. Formation of Ecological Consciousness in Primary School Students //Spanish Journal of Innovation and Integrity. – 2022. – C. 129-132.
34. Baxronovna R. M., Jamilovna N. D. The Role of Primary School Teachers in Increasing Efficiency of Lessons //JournalNX. – C. 18-20.
35. Davronov P., Rahimkulova M. Innovative Approach to the Lesson Process in the Training System //International Journal of Innovations in Engineering Research and Technology. – C. 1-3.
36. Pirnazar D., Mahbuba R. Modern Approach to Education Based on Pedagogical Technologies //JournalNX. – C. 53-56.
37. Bakhranovna R. M. Teaching Students to Think Creatively in Primary Education //International Journal of Innovations in Engineering Research and Technology. – C. 1-2.
38. Xolmatova M. I. Umumtalim maktablari ingliz tili darslarida til ko'nikmalarini rivojlantirish //Science and Education. – 2022. – T. 3. – №. 2. – C. 999-1005.





39. Xolmatova M. I., Barotova M. B. INGLIZ VA OZBEK TILLARIDAGI SIFAT KOMPONENTLI IBORALARNING LINGVOKULTUROLOGIK QIYOSIY TAHLILI //Academic research in educational sciences. – 2021. – T. 2. – №. 12. – С. 1391-1397.
40. Ibadullayevna X. M. LINGUISTIC COMPARATIVE ANALYSIS OF QUALITATIVE COMPONENT PHRASES IN ENGLISH AND UZBEK LANGUAGES //Web of Scientist: International Scientific Research Journal. – 2022. – T. 3. – №. 1. – С. 57-63.
41. Bakhromovich S. I. Social and philisophical performance of making youth’s intellectual culture //European science review. – 2018. – №. 7-8. – С. 296-298.
42. Siddikov I. B. Философско-педагогические аспекты развития интеллектуальной культуры студентов //Вестник Ошского государственного университета. – 2019. – №. 3. – С. 38-42.
43. Bakhromovich S. I. Effects of Objective and Subjective Factors to Develop Intellectual Culture of Youth //Canadian Social Science. – 2020. – T. 16. – №. 2. – С. 55-59.
44. Bakhromovich S. I. Analysis Of Modern Approaches To Ensuring The Effectiveness Of Management In Higher Education Institutions //The American Journal of Social Science and Education Innovations. – 2020. – T. 2. – №. 12. – С. 364-369.
45. Bakhromovich S. I. The impact of managerial professional development on the effectiveness of Higher Education institution management //Academica: an international multidisciplinary research journal. – 2020. – T. 10. – №. 12. – С. 1014-1020.
46. BAKHROMOVICH S. I. Views on the role of science in human and society life in islamic teaching //International Journal of Philosophical Studies and Social Sciences. – 2021. – T. 1. – №. 3. – С. 79-86.
47. Bakhromovich S. I. A comparative induction of the epistemological and theological views of medieval Islamic oriental scholars //Berlin Studies Transnational Journal of Science and Humanities. – 2021. – T. 1. – №. 1.7 Philosophical sciences.
48. Ahmadjonovna E. T., Bakhromovich S. I. Pedagogical Analysis Of Culturo-Educational Institutions’ Actions In Youth Education (On The Example Of Museum Activities) //The American Journal of Social Science and Education Innovations. – 2020. – T. 2. – №. 08. – С. 576-582.
49. Сиддиқов И. Б. Государственная политика в отношении молодежи в Узбекистане: национальный опыт и реальная необходимость





- международных инициатив //Условия социально-экономического развития общества: история и современность. – 2019. – С. 38-43.
50. Сиддиков И. Б. Социально-философские аспекты формирования интеллектуальной культуры молодёжи //Theoretical & Applied Science. – 2018. – №. 1. – С. 61-66.
51. Siddikov I., Gulomov A. Philosophical and psychological features of the formation of asertive behavior in the development of cognitive activity //Психологическое здоровье населения как важный фактор обеспечения процветания общества. – 2020. – С. 38-42.
52. Bakhromovich S. I., Lutfillo M. Development of ecological culture in students in the process of education of history of Uzbekistan //European Journal of Humanities and Educational Advancements. – 2021. – Т. 2. – №. 5. – С. 103-107.
53. Bakhromovich S. I. Philosophical comparative studies of the epistemological and theological views of medieval eastern scholars //Turkish Journal of Physiotherapy and Rehabilitation. Turkey. – 2021. – Т. 32. – №. 3. – С. 30338-30355.
54. Siddikov I. B. Modern Models Of Providing Autonomy Of Higher Educational Institutions (Analysis Of Foreign Countries Experience) //CURRENT RESEARCH JOURNAL OF PEDAGOGICS. – 2021. – Т. 2. – №. 05. – С. 25-31.
55. Siddikov I. Epistemological Significance Of Medieval Culture Of Islamic Intellectual Activity //InterConf. – 2021.
56. Bakhromovich S. I. Development trends and transformation processes in academic mobility in higher education in Uzbekistan and the world //Bakhromovich, Siddikov Ilyosjon, and Maxamadaliev Lutfillo." Development of ecological culture in students in the process of education of history of uzbekistan. – 2021.
57. Bakhromovich S. I. The phenomenon of management and leadership personality in the views of oriental scholars //Chief Editor.
58. Siddikov I. Education-the principal value of medieval muslim civilization //InterConf. – 2021.
59. Siddikov I. TRADITIONS OF PHILOSOPHY, FIQH AND PHILOSOPHY IN THE THEOLOGICAL VIEWS OF THE MIDDLE EAST //InterConf. – 2021.
60. Bakhromovich S. I. FACTORS OF INTRODUCTION OF PRINCIPLES OF INSTITUTIONAL AUTONOMY TO THE MANAGEMENT PROCESS OF HIGHER EDUCATIONAL INSTITUTIONS //Berlin Studies Transnational Journal of Science and Humanities. – 2021. – Т. 1. – №. 1.5 Pedagogical sciences.





61. Siddikov I. Gender management issues in modern pedagogy in educational institutions //American Journal of Economics and Business Management. – 2021. – Т. 4. – №. 4. – С. 31-35.
62. Siddiqov I. B. SOCIAL AND PHILISOPHICAL PERFORMANCE OF MAKING YOUTH'S INTELLECTUAL CULTURE //European Science Review. – 2018. – №. 7-8. – С. 296-298.
63. Bakhromovich S. I. SOCIAL AND PHYSICAL PERFORMANCE OF MAKING YOUTH'S INTELLECTUAL CULTURE //July–August. – С. 289.
64. Siddiqov I. DIALECTICAL AND SYNERGETIC FEATURES OF THE DEVELOPMENT OF THEOLOGICAL AND EPISTEMOLOGICAL VIEWS IN MEDIEVAL EASTERN ISLAM. – 2022.
65. Siddiqov I. B. MUTUAL SYNTHESIS OF MEDIEVAL ISLAM GNOSEOLOGY AND THEOLOGY. – 2022.
66. Siddiqov I. АЖДОДЛАР МЕРОСИДА ИЛМ ВА ТАЪЛИМНИ РИВОЖЛАНТИРИШ БОРАСИДАГИ ТЕОЛОГИК ВА ГНОСЕОЛОГИК ҚАРАШЛАР ТАҲЛИЛИ //Science and innovation. – 2022. – Т. 1. – №. С7. – С. 60-68.
67. Шокиров Д. ШАХС ДИНИЙ МУОСАБАТЛАРИ ШАКЛЛАНИШИДА ҲАДИСЛАРНИНГ ИЖТИМОЙ-ПСИХОЛОГИК ТАЪСИРИ //Central Asian Academic Journal of Scientific Research. – 2022. – Т. 2. – №. 6. – С. 332-336.
68. Shokirov D. DINIY E'TIQOD VUJUDGA KELISHIDA IJTIMOIIY-PSIXOLOGIK HOLATLARNING O'RNI //European Journal of Interdisciplinary Research and Development. – 2022. – Т. 10. – С. 166-169.
69. Akramjonovna B. K. et al. Psychological Assessment Of The Factors That Cause Incontinence In Educational Activities In Primary School Students //Journal of Positive School Psychology. – 2022. – Т. 6. – №. 11. – С. 2013-2018.
70. Shokirov D. Manifestation of Socio-Psychological Features of Religious Catharsis //AMERICAN JOURNAL OF SCIENCE AND LEARNING FOR DEVELOPMENT. – 2023. – Т. 2. – №. 1. – С. 40-43.
71. Bahodirovna A. Z. THE IMPORTANCE OF ORGANIZING CHILDREN'S ACTIVITIES IN PREPARATION FOR SCHOOLING //Open Access Repository. – 2022. – Т. 9. – №. 11. – С. 236-240.
72. Shokirov D. EXPERIMENTAL PSYCHOLOGICAL STUDY OF SENSE OF TOLERANCE IN PERSONS //Galaxy International Interdisciplinary Research Journal. – 2022. – Т. 10. – №. 12. – С. 799-802.





73. Dilmurod S. Socio-psychological influence of hadiths on the formation of religious relations of the person //Web of Scientist: International Scientific Research Journal. – 2022. – Т. 3. – №. 6. – С. 1021-1025.
74. Уринбаева Д. РОЛЬ МЕСТОИМЕНЕЙ В ФОЛЬКЛОРНЫХ ТЕКСТАХ //ХАБАРШЫСЫ ВЕСТНИК. – 2009. – С. 34.
75. Уринбаева Д. Б. Сопоставительные количественные исследования узбекских фольклорных текстов //Вестник Тамбовского государственного технического университета. – 2011. – Т. 17. – №. 4. – С. 1157-1164.
76. Уринбаева Д. Б. Лексическая статистика узбекского фольклорного текста //Наука и образование в XXI веке. – 2013. – С. 138-140.
77. Уринбаева Д. Б. Компоненты-символы в узбекском устном народном творчестве //Научный альманах. – 2016. – №. 11-3. – С. 332-335.
78. Уринбаева Д. Б. СОВРЕМЕННЫЙ УРОК И ЯЗЫКОВАЯ ЛАБОРАТОРИЯ //Учитель года 2017. – 2017. – С. 27-32.
79. Уринбаева Д. Б. Статистическо-синергетическое исследование узбекских фольклорных жанров. – 2018.
80. Уринбаева Д., Хужамкулов А. Равишларнинг стилистик имкониятлари //Иностранная филология: язык, литература, образование. – 2018. – Т. 3. – №. 3 (68). – С. 33-36.
81. Urinbayeva U. D. LINGUOSTATIC AND LINGVOSTYLISTIC OF PHONETIC UNITS RESEARCH //INTERNATIONAL JOURNAL OF DISCOURSE ON INNOVATION, INTEGRATION AND EDUCATION. – 2020. – Т. 1. – С. 121-127.
82. Уринбаева Д. Б. ЛИНГВОСТАТИСТИЧЕСКОЕ ИССЛЕДОВАНИЕ МОРФОЛОГИЧЕСКИХ ЕДИНИЦ ТЕКСТОВ УЗБЕКСКОГО УСТНОГО НАРОДНОГО ТВОРЧЕСТВА //Известия. Серия: Филологические науки. – 2020. – Т. 59. – №. 4.
83. Bazarovna U. D., Norjigitovna E. G. Problems in the uzbek internet subculture //ACADEMICIA: An International Multidisciplinary Research Journal. – 2021. – Т. 11. – №. 3. – С. 235-241.
84. Urinbayeva U. D. LINGUOSTATIC AND LINGVOSTYLISTIC OF PHONETIC UNITS RESEARCH //INTERNATIONAL JOURNAL OF DISCOURSE ON INNOVATION, INTEGRATION AND EDUCATION. – 2020. – Т. 1. – С. 121-127.
85. Urinbayeva D. ЛИНГВОСТАТИСТИЧЕСКИЙ АНАЛИЗ КАК ОСНОВА ДЛЯ ЛЕКСИКО-СЕМАНТИЧЕСКИХ, ЛИНГВОСТИЛИСТИЧЕСКИХ И ЛИНГВОПОЭТИЧЕСКИХ ИССЛЕДОВАНИЙ //COMPUTER LINGUISTICS: PROBLEMS, SOLUTIONS, PROSPECTS. – 2021. – Т. 1. – №. 1.



86. Urinbayeva D., Raximova M. PORTFOLIO–O ‘QITUVCHI FAOLIYATINI BAHOLAOVCHI MEZON //INTEGRATION OF SCIENCE, EDUCATION AND PRACTICE. SCIENTIFIC-METHODICAL JOURNAL. – 2021. – С. 369-374.
87. Urinbayeva D. B. FUNKSIONAL SAVODXONLIKNING ASOSI O ‘QISH SAVODXONLIGIDIR //INTEGRATION OF SCIENCE, EDUCATION AND PRACTICE. SCIENTIFIC-METHODICAL JOURNAL. – 2022. – Т. 3. – №. 4. – С. 204-212.
88. Urinbayeva D. КОМПЬЮТЕР ЛИНГВОДИДАКТИКАСИ-ТАЪЛИМ САМАРАДОРЛИГИНИНГ АСОСИ //COMPUTER LINGUISTICS: PROBLEMS, SOLUTIONS, PROSPECTS. – 2022. – Т. 1. – №. 1.
89. Urinbayeva D. Bloom's Taxonomy is a System of Tiered Questions that Systematize the thought Process //Spanish Journal of Innovation and Integrity. – 2022. – С. 36-39.
90. Ismoilov T. et al. THE IMPORTANCE OF OUTDOOR GAMES IN THE UPBRINGING OF A HARMONIOUS YOUNG GENERATION //Scientific Bulletin of Namangan State University. – 2019. – Т. 1. – №. 11. – С. 257-261.
91. Ismoilov T. THE EVENTS THROUGH PHYSICAL ACTIVITIES FOR THE PUPILS OF PRIMARY CLASSES //Scientific Bulletin of Namangan State University. – 2020. – Т. 2. – №. 10. – С. 346-349.
92. Ismoilov T. THE DEVELOPMENT OF PHYSICAL QUALITIES OF THE PUPILS OF PRIMARY FORMS OF SECONDARY SCHOOLS THROUGH MOBILE ACTIVITIES IN THE PROCESS OF STUDY //Scientific Bulletin of Namangan State University. – 2020. – Т. 2. – №. 11. – С. 391-394.
93. Ismoilov T. I., Yuldosheva B. M. MORAL AND SPIRITUAL QUALITIES OF A MAN IN FORMATION PROCESS //Экономика и социум. – 2021. – №. 5-1. – С. 189-191.
94. Islomovich I. T. Academic Profession and University in the Context of the Historical Role of Higher Education //International Journal on Economics, Finance and Sustainable Development. – 2021. – Т. 3. – №. 3. – С. 73-77.
95. Islomovich I. T. The Content And Practical Significance Of The Principles Of Academic Independence In The Management Process Of Higher Education //NVEO-NATURAL VOLATILES & ESSENTIAL OILS Journal| NVEO. – 2021. – С. 4264-4270.
96. Исмоилов Т. И. PROBLEMS AND SOLUTIONS OF PUBLIC ACTIVITY OF UNORGANIZED YOUTH //Scientific Bulletin of Namangan State University. – 2020. – Т. 2. – №. 10. – С. 242-247.





97. Ismoilov T. I. Teacher Department of «Social Disciplines» Namangan Engineering Construction Institute Uzbekistan, Namangan city HUMAN FACTOR IN THE SPIRITUAL DEVELOPMENT PROCESS //Teacher academician lyceum at Tashkent Pediatric Medical Institute Uzbekistan, Tashkent city Artistic performance of the creativity of russian. – 2018. – Т. 42.
98. Islomovich I. T. Academic profession and university in the context of modern institutional reforms //International Journal of Human Computing Studies. – 2021. – Т. 3. – №. 2. – С. 7-10.
99. Ismoilov T. I. Special aspects of formation of youth's life strategy //Scientific Bulletin of Namangan State University. – 2020. – Т. 2. – №. 9. – С. 214-219.
100. Исмоилов Т. И. Задачи формирования идеологического иммунитета в процессе глобализации //Теория и практика современной науки. – 2017. – №. 5. – С. 328-330.
101. Ismoilov T. I. Provision of information-psychological security in open information systems //Теория и практика современной науки. – 2018. – №. 1. – С. 24-26.
102. Ismoilov T. I. Human factor in the spiritual development process //Мировая наука. – 2018. – №. 5. – С. 43-44.
103. Ismoilov T. I. SOCIAL AND LEGAL SOLUTIONS OF INSURANCE MANDATORY RECOMMENDATIONS //Scientific Bulletin of Namangan State University. – 2019. – Т. 1. – №. 3. – С. 152-154.
104. Islamovich I. T. Democracy and youth: formation of democratic values //European science review. – 2019. – №. 5-6. – С. 112-114.
105. Meyliyevna, B. M. (2021). МАКТАБГАЧА YOSHDAGI BOLALAR NUTQINI RIVOJLANTIRISHNING PSIXOLOGIK XUSUSIYATLARI: Berdiyeva Muhabbat Meyliyevna, TerDU Pedagogika instituti. In Научно-практическая конференция.
106. Berdiyeva, M. (2020). INTELLECTUAL DEVELOPMENT IN PRESCHOOL EDUCATION. Theoretical & Applied Science, (11), 59-61.
107. Бердиева, М. М. (2019). ФОРМИРОВАНИЕ ИНТЕЛЛЕКТУАЛЬНОЙ КУЛЬТУРЫ ДОШКОЛЬНИКА. In INTERNATIONAL SCIENTIFIC REVIEW OF THE PROBLEMS AND PROSPECTS OF MODERN SCIENCE AND EDUCATION (pp. 75-76).
108. Бердиева М. М. ПРОЕКТИРОВАНИЕ ПРЕДМЕТНО-ПРОСТРАНСТВЕННОЙ РАЗВИВАЮЩЕЙ СРЕДЫ ДОШКОЛЬНЫХ ОРГАНИЗАЦИЙ //Педагогика и психология в современном мире: теоретические и практические исследования. – 2018. – С. 156-159.





109. Berdiyeva M., Bo'Ranova S. Maktabgacha va boshlang'ich ta'limda nutq o'stirish mashg'ulotlari orqali bolalarning mustaqil fikrlash qobiliyatlarini shakllantirishning samarali usullari //Science and Education. – 2021. – T. 2. – №. 4. – С. 425-429.
110. Meyliyevna B. M. PEDAGOGICAL SUPPORT AND DEVELOPMENT OF THE INTELLECTUAL OPPORTUNITIES OF CHILDREN IN PRESCHOOL EDUCATION //European Journal of Research and Reflection in Educational Sciences Vol. – 2019. – T. 7. – №. 12.
111. Meyliyevna B. M. Tasks for preschool educators //South Asian Journal of Marketing & Management Research. – 2021. – T. 11. – №. 10. – С. 151-155.
112. Meyliyevna B. M. The development of cognitive interests in older preschoolers in the process of getting acquainted with nature //ACADEMICIA: An International Multidisciplinary Research Journal. – 2022. – T. 12. – №. 4. – С. 121-128.
113. Meyliyevna B. M. The quality of preschool education at the present stage //ACADEMICIA: An International Multidisciplinary Research Journal. – 2021. – T. 11. – №. 10. – С. 2267-2271.
114. Шарафутдинова Х. Г., Бердиева М. М. ПРОБЛЕМА ЛИЧНОСТНО-ОРИЕНТИРОВАННОГО ОТНОШЕНИЯ К РЕБЁНКУ В ПРОЦЕССЕ ОБРАЗОВАНИЯ //Гуманитарный трактат. – 2018. – №. 25. – С. 89-91.
115. Berdiyeva M. M. Formation of intellectual culture of a preschooler.
116. TURAKULOVNA M. F., QIZI M. M. M. Competence of the educator in the organization of visual activities //International Journal of Philosophical Studies and Social Sciences. – 2021. – T. 1. – №. 2. – С. 100-103.
117. Мухаммадиева Ф. И. ИСПОЛЬЗОВАНИЕ НОВЫХ ИНФОРМАЦИОННЫХ ТЕХНОЛОГИЙ В ОБРАЗОВАТЕЛЬНОМ ПРОЦЕССЕ //WORLD SCIENCE: PROBLEMS AND INNOVATIONS. – 2018. – С. 170-172.
118. Мухаммадиева Ф. И. ОБУЧАЮЩИЕ ЭЛЕКТРОННЫХ РЕСУРСЫ В МОДЕРНИЗАЦИИ ОБРАЗОВАНИЯ //Юность и знания-гарантия успеха. – 2014. – С. 291-293.
119. Мухаммадиева Ф. И. ГЛАВНЫЕ ТЕХНОЛОГИИ ДЛЯ КВАНТОВОГО КОМПЬЮТЕРА //Современные инструментальные системы, информационные технологии и инновации. – 2014. – С. 123-125.
120. Turakulovna M. F. PEDAGOGICAL BASES OF EDUCATION OF PRESCHOOL CHILDREN //Journal of Ethics and Diversity in International Communication. – 2021. – T. 1. – №. 1. – С. 23-24.



121. Sharipboevna F. G., Kamola T. IMPROVING CROSS-CULTURAL COMMUNICATION //ResearchJet Journal of Analysis and Inventions. – 2021. – T. 2. – №. 05. – C. 359-363.
122. Sharipboyevna F. G. ADABIY TA'LIM DASTURLARIDA MAZMUNNING IFODALANISHI VA UZVIYLIK SHAKLLARINI QO 'LLASH //INTEGRATION OF SCIENCE, EDUCATION AND PRACTICE. SCIENTIFIC-METHODICAL JOURNAL. – 2022. – C. 894-900.
123. Sharipboyevna G. F., Mamadiyarovich V. T. PEDAGOG-XODIMLARNING UZLUKSIZ O 'QISHINI TASHKIL QILISH VA UNING MUHIM JIHLTLARI //INTEGRATION OF SCIENCE, EDUCATION AND PRACTICE. SCIENTIFIC-METHODICAL JOURNAL. – 2021. – C. 37-41.
124. Fayzullayeva G., Shukurova N. O 'QITUVCHI–O 'QUVCHI MUNOSABATLARIDA O 'QITUVCHINING KOMMUNIKATIV KO 'NIKMALARINI RIVOJLANTIRISH //INTEGRATION OF SCIENCE, EDUCATION AND PRACTICE. SCIENTIFIC-METHODICAL JOURNAL. – 2021. – C. 215-217.
125. Sharipboevna F. G. Cognitive Approach to Literature Education: Memory, Thinking and Cognition //JournalNX. – C. 549-551.
126. Boymirzaeva D. D. FEATURES OF PSYCHO-CORRECTIONAL WORK TO REDUCE FRUSTRATION AMONG STUDENTS OF HIGHER EDUCATIONAL INSTITUTIONS //INTERNATIONAL JOURNAL OF RESEARCH IN COMMERCE, IT, ENGINEERING AND SOCIAL SCIENCES ISSN: 2349-7793 Impact Factor: 6.876. – 2022. – T. 16. – №. 2. – C. 19-23.
127. Boymirzaeva D. D. MANIFESTATION FRUSTRATIONS OF UNIVERSITY STUDENTS IN THE PROCESS OF INTERPERSONAL RELATIONS //Ученый XXI века. – 2022. – №. 5-1 (86). – C. 28-30.
128. Dmitrievna B. D. Methodological Approach to Modeling Socio-Psychological Manifestations of Frustration in Students //5. International EMI Entrepreneurship and Social Sciences Congress PROCEEDINGS E-BOOK. – 2020. – C. 328.
129. Kadirov K. B. et al. Relationship between propensity to risky behavior and psychogeometrical types of personality //European Journal of Molecular and Clinical Medicine. – 2020. – T. 7. – №. 1. – C. 3609-3616.
130. Dmitrievna B. D. SOCIO-PSYCHOLOGICAL MODEL OF FRUSTRATION AMONG STUDENTS OF HIGHER EDUCATIONAL INSTITUTIONS //European Journal of Research and Reflection in Educational Sciences Vol. – 2020. – T. 8. – №. 6.





131. Боймирзаева Д. Д. ФАКТОРЫ, ВЛИЯЮЩИЕ НА ВОЗНИКНОВЕНИЕ ЛЖИ У ДЕТЕЙ ДОШКОЛЬНОГО ВОЗРАСТА //Иновационные подходы в современной науке. – 2018. – С. 81-84.
132. Боймирзаева Д. Д. ПСИХОЛОГО-ПЕДАГОГИЧЕСКИЕ ОСНОВЫ ФОРМИРОВАНИЯ УЧЕБНО-ПОЗНАВАТЕЛЬНОГО ИНТЕРЕСА У ШКОЛЬНИКОВ В ВЫБОРЕ ПЕДАГОГИЧЕСКОЙ ПРОФЕССИИ //NovaInfo. Ru. – 2017. – Т. 1. – №. 68. – С. 284-286.
133. Боймирзаева Д. Д. ЛОЖЬ КАК КОМПОНЕНТ МЕЖЛИЧНОСТНОГО ОБЩЕНИЯ //NovaInfo. Ru. – 2016. – Т. 2. – №. 45. – С. 300-303.
134. Боймирзаева Д. Д. ЛЖИВОСТЬ КАК ФОРМА ПОВЕДЕНИЯ, ЗАКЛЮЧАЮЩАЯСЯ В НАМЕРЕННОМ ИСКАЖЕНИИ ДЕЙСТВИТЕЛЬНОСТИ //АКТУАЛЬНЫЕ ВОПРОСЫ РАЗВИТИЯ СОВРЕМЕННОГО ОБЩЕСТВА. – 2014. – С. 140-144.
135. Boymirzayeva D. D. LIE AS A FORM OF DISTORTION OF THE REAL INFORMATION //СОВРЕМЕННЫЕ ПОДХОДЫ К ТРАНСФОРМАЦИИ КОНЦЕПЦИЙ ГОСУДАРСТВЕННОГО РЕГУЛИРОВАНИЯ И УПРАВЛЕНИЯ В СОЦИАЛЬНО-ЭКОНОМИЧЕСКИХ СИСТЕМАХ. – 2014. – С. 12-14.
136. Makhmudjanovna M. N. et al. Relationship Between Propensity To Risky Behavior and Psychogeometrical Types Of Personality //European Journal of Molecular & Clinical Medicine. – Т. 7. – №. 01. – С. 2020.
137. Xalimjanovna A. M. MANIFESTATIONS OF STRESS IN PROFESSIONAL ACTIVITY AND WAYS TO ELIMINATE IT //Galaxy International Interdisciplinary Research Journal. – 2022. – Т. 10. – №. 11. – С. 841-844.
138. Xalimjanovna A. M. Raising a Child and Preparing Him for Social Life in the Works of Our Great Scientists //EUROPEAN JOURNAL OF INNOVATION IN NONFORMAL EDUCATION. – 2022. – Т. 2. – №. 5. – С. 38-41.
139. Xalimjanovna A. M. EDUCATION OF CHILDREN IN THE WORKS OF OUR GREAT SCIENTISTS //American Journal of Interdisciplinary Research and Development. – 2022. – Т. 4. – С. 45-49.
140. Xalimjanovna A. M. THEORETICAL AND METHODOLOGICAL FUNDAMENTALS OF PREPARING CHILDREN FOR SOCIAL LIFE IN DISABLED FAMILIES //EUROPEAN JOURNAL OF MODERN MEDICINE AND PRACTICE. – 2022. – Т. 2. – №. 5. – С. 39-42.
141. Xalimjanovna A. M. PEDAGOGICAL CONDITIONS FOR PREPARING CHILDREN FOR SOCIAL LIFE IN SINGLE-PARENT FAMILIES.



142. Asranbaeva M. H. CHARACTERISTICS OF FORMING MOTIVES OF LABOUR ACTIVITIES IN AN INCOMPLETE FAMILY //Theoretical & Applied Science. – 2020. – №. 1. – С. 121-123.
143. Halimjanovna A. M. REPUTATION AND PERSONAL EXAMPLES OF PARENTS IN SINGLE-PARENT FAMILIES.
144. Asranbaeva M. X. IMPROVING MECHANISMS OF PREPARING CHILDREN FOR SOCIAL LIFE IN DISABLED FAMILIES //Theoretical & Applied Science. – 2020. – №. 12. – С. 125-129.
145. Asranbayeva M. X. NOTOLIQ OILALARDA MAKTABGACHA YOSHDAGI BOLALAR RIVOJLANISHINING OZIGA XOS XUSUSIYATLARI //Scientific Bulletin of Namangan State University. – 2020. – Т. 2. – №. 4. – С. 532-535.
146. Asranbaeva M. H. CHARACTERISTICS OF FORMING MOTIVES OF LABOUR ACTIVITIES IN AN INCOMPLETE FAMILY //Theoretical & Applied Science. – 2020. – №. 1. – С. 121-123.
147. Асранбаева М. МЕТОДЫ И ПРИЁМЫ КОРРЕКЦИОННОЙ РАБОТЫ С ТРЕВОЖНЫМИ ДЕТЬМИ //Проблеми та перспективи розвитку науки на початку третього тисячоліття у країнах Європи та Азії. – 2015. – С. 275.
148. Amrilloevich I. A. Design of individual training of teacher //International journal of discourse on innovation, integration and education. – 2020. – Т. 1. – С. 16-25.
149. Ибрагимов А. А. ЎҚИТУВЧИЛАРНИНГ КАСБИЙ БИЛИМЛАРИНИ РИВОЖЛАНТИРИШДА МУАММОГА АСОСЛАНГАН ЎҚИТИШ ЁНДАШУВИНИНГ ИМКОНИАТЛАРИ: Ибрагимов Аъламжон Амриллоевич, Самарқанд вилояти халқ таълими ходимларини қайта тайёрлаш ва уларнинг малакасини ошириш ҳудудий маркази доценти //Образование и инновационные исследования международный научно-методический журнал. – 2022. – №. 2. – С. 120-125.
150. Amrilloevich I. A. COGNITIVE MOBILITY OF THE TEACHER: APPLICATION IN PEDAGOGICAL PRACTICE, CONTENT, ESSENCE AND STRUCTURE //Berlin Studies Transnational Journal of Science and Humanities. – 2021. – Т. 1. – №. 1.5 Pedagogical sciences.
151. Нарзикулова Ф. Б., Ибрагимов А. А. СОВРЕМЕННОЕ ПОНИМАНИЕ ПРОФЕССИОНАЛЬНОГО ИМИДЖА И ЕГО СТРУКТУРА //Когнитивные исследования в образовании. – 2019. – С. 375-378.
152. Ибрагимов А. А. Ўқитувчилар касбий ривожланишига илмий-методик ҳамроҳлик технологияси //Современное образование (Узбекистан). – 2017. – №. 10. – С. 30-41.



153. Ibragimov A. A. Organizational and Pedagogical Aspects of Multi-Vector Approach to Professional Developing Public Education Personnel //Eastern European Scientific Journal. – 2018. – №. 2.
154. Ибрагимов А. А. ЎҚИТУВЧИНИНГ КОГНИТИВ МОБИЛЛИГИ: ПЕДАГОГИК АМАЛИЁТДА ҚЎЛЛАНИЛИШИ, МАЗМУН, МОҲИЯТ ВА ТУЗИЛМА //Oriental renaissance: Innovative, educational, natural and social sciences. – 2022. – Т. 2. – №. 1. – С. 672-683.
155. Amrilloevich I. A. Problem-Based Learning: Content, Essence, Possibilities //Journal of Positive School Psychology. – 2022. – Т. 6. – №. 10. – С. 2367-2377.
156. Amrilloevich I. A. Cognitive Research in Education: Foreign Experience //Spanish Journal of Innovation and Integrity. – 2022. – С. 1-4.
157. Amrilloevich I. A. COGNITIVE COMPETENT AS A KEY FACTOR IN THE CONTINUOUS PROFESSIONAL DEVELOPMENT OF A TEACHER //湖南大学学报 (自然科学版). – 2022. – Т. 49. – №. 01.
158. Amrilloevich I. A. O‘QITUVCHINING KASB STANDARTINI ISHLAB CHIQISHGA DOIR YONDASHUVLAR TAHLILI //INTEGRATION OF SCIENCE, EDUCATION AND PRACTICE. SCIENTIFIC-METHODICAL JOURNAL. – 2021. – С. 53-59.
159. Ибрагимов А. А. УМУМТАЪЛИМ МАКТАБИ ЎҚИТУВЧИСИНИНГ КАСБ СТАНДАРТИ: АМАЛИЁТГА КИРИТИШ, МУНОСАБАТ ВА ТАҲЛИЛ //Современное образование (Узбекистан). – 2021. – №. 10 (107). – С. 47-56.
160. Amrilloevich I. A., Uktamjonovich K. E. Pedagogical and Psychological Features of Scientific and Methodological Supervision in the Professional Development of Teachers //International Journal on Integrated Education. – 2021. – Т. 4. – №. 10. – С. 150-156.
161. Ибрагимов А. А. ДОРОЖНАЯ КАРТА ПОВЫШЕНИЯ КВАЛИФИКАЦИИ КАК ТЕХНОЛОГИЯ ПРОЕКТИРОВАНИЯ ИНДИВИДУАЛЬНОЙ ОБРАЗОВАТЕЛЬНОЙ ТРАЕКТОРИИ ПЕДАГОГА //Современный менеджмент: проблемы, модели, перспективы. – 2018. – С. 32-33.
162. Ибрагимов А. А. Повышение квалификации педагогических кадров—путь к совершенствованию педагогических знаний //Образование через всю жизнь: непрерывное образование в интересах устойчивого развития. – 2015. – Т. 2. – №. 13. – С. 272-274.
163. Amrilloevich I. A. Advanced training of teachers as a way to improve pedagogical knowledge //Образование через всю жизнь: непрерывное образование в интересах устойчивого развития. – 2015. – Т. 2. – №. 13 (eng). – С. 232-233.



164. Amrilloevich I. A. Stages of Organization of Scientific and Methodological Observation in the Professional Development of the Teacher //International Journal of Innovations in Engineering Research and Technology. – С. 1-3.
165. Ibraimov K. I. et al. PROVISION AND QUALITY ASSESSMENT OF HIGHER EDUCATION.
166. Ахмедова С. М. Морфологическая характеристика развития стенок сердца крысят //Наука и мир. – 2015. – №. 1-2. – С. 85-87.
167. Kh M. O. et al. Especially the development of myocarditis in hypothyroidism in postnatal ontogenesis //Indian Journal of Forensic Medicine & Toxicology. – 2020. – Т. 14. – №. 4. – С. 7737.
168. Миршарапов У. М. и др. Морфофункциональные изменения стенок сердце при воздействии пестицидов //Морфология. – 2018. – Т. 153. – №. 3. – С. 183-184.
169. Ахмедова С. М. Морфология сердца и влияние пестицидов. – 2016.
170. Ахмедова С. и др. Влияние цитомегаловирусной инфекции на беременность //Журнал вестник врача. – 2016. – Т. 1. – №. 1. – С. 68-69.
171. Негмаджанов Б., Ахмедова С. Современные аспекты диагностики цитомегаловирусной инфекции в акушерстве и перинатологии //Журнал вестник врача. – 2015. – Т. 1. – №. 04. – С. 43-46.
172. Ахмедова С. М. Возрастные особенности анатомии сердца крысят в раннем постнатальном онтогенезе //International medical scientific journal. – 2015. – С. 40.
173. Ахмедова С. М. Гистотопография стенок сердца крысы в постнатальном онтогенезе //Врач-аспирант. – 2011. – Т. 46. – №. 3.2. – С. 283-288.
174. Ахмедова С. Изменение миокарда на фоне экспериментального сахарного диабета : дис. – 2022.
175. Ахмедова С. М., Айтжанова А. Е., Сагдуллаева М. К. К МОРФОЛОГИИ ИЗМЕНЕНИЙ ПОЧЕК ПРИ ЭКСПЕРИМЕНТАЛЬНОМ АЛКОГОЛИЗМЕ //Journal of new century innovations. – 2022. – Т. 16. – №. 2. – С. 166-168.
176. Миршаропов У. М., Ахмедова С. М. ВЛИЯНИЕ ГИПОТИРЕОЗНОГО СОСТОЯНИЯ МАТЕРИ НА РАЗВИТИЕ ОРГАНОВ И СИСТЕМ ПЛОДА //E Conference Zone. – 2022. – С. 25-28.
177. Ahmedova S. M., Safarova D. X., Xudoiberdiev B. E. OITS BILAN KASALLANGAN ONALARDAN TUG'ILGAN 7-12 YOSHLARDAGI BOLALARNING ANTROPOMETRIK KO'RSATKICHLARINI O'ZGARISHLARI //Journal of new century innovations. – 2022. – Т. 15. – №. 2. – С. 11-15.



178. Ахмедова С. М., Якубова Ф. ПОКАЗАТЕЛИ ФИЗИЧЕСКОГО РАЗВИТИЯ У СЛЕПЫХ И СЛАБОВИДЯЩИХ ДЕТЕЙ //Conferencea. – 2022. – С. 103-105.
179. Ахмедова С., Нортюева Н., Нортюев А. Morphological changes in the teeth of adolescent children with hypotireosis : дис. – Тошкент тиббиёт академияси, 2022.
180. Каттаходжаева Д., Муминов О. Морфологическое изменения надпочечников на фоне сахарного диабета : дис. – ТГМУ имени абу Али ибн сино, 2022.
181. Каримов Х., Ахмедова С., Тен С. Морфологическая характеристика развития стенок сердца и их изменения при воздействии пестицидов //Журнал вестник врача. – 2011. – Т. 1. – №. 03. – С. 51-54.
182. Садриева Г., Ахмедова С. Неврологические осложнения у детей с глистной инвазией //Журнал вестник врача. – 2013. – Т. 1. – №. 01. – С. 136-141.
183. Akhmedova S. M. MORPHOLOGICAL CHARACTERISTIC OF HEART WALLS DEVELOPMENT OF INFANT RATS //SCIENCE AND WORLD. – 2013. – С. 87.
184. Ахмедова С. М. ВОЛОКНИСТАЯ СТРУКТУРА СОЕДИНИТЕЛЬНОЙ ТКАНИ ОБОЛОЧЕК СЕРДЦА КРЫСЫ //Молодежь и медицинская наука в XXI веке. – 2014. – С. 109-110.
185. Ахмедова С., Хамроева Л. Акушерские и перинатальные аспекты при цитомегаловирусной инфекции в поздние сроки беременности (обзор литературы) //Журнал вестник врача. – 2014. – Т. 1. – №. 03. – С. 60-63.
186. Ахмедова С. М. СТРОЕНИЕ СТенок СЕРДЦА КРЫСЯТ В РАННЕМ ПОСТНАТАЛЬНОМ ОНТОГЕНЕЗЕ //Научная дискуссия: вопросы медицины. – 2015. – №. 5-6. – С. 117-121.
187. Ахмедова С. М., Миршарапов У. М. Гистологическое строение сердце крысят в ранних этапах онтогенеза //Уральский медицинский журнал. – 2015. – №. 3. – С. 115-119.
188. Ахмедова С. М., Миршарапов У. М. СОСУДЫ МИОКАРДА СЕРДЦА КРЫСЯТ ПРИ ВОЗДЕЙСТВИИ КОТОРАНА //Журнал теоретической и клинической медицины. – 2015. – №. 1. – С. 16-20.
189. Ахмедова С., Эрматов Н. Характер морфофункциональных изменений сердца при воздействии пестицидов //Журнал проблемы биологии и медицины. – 2016. – №. 3 (89). – С. 135-137.
190. Ахмедова С. М., Каттаходжаева Д. У., Бокиева Ф. А. УЛЬТРАСТРУКТУРНОЕ СТРОЕНИЯ МИОКАРДА ПРИ ВЛИЯНИИ ПЕСТИЦИДА //Велес. – 2017. – №. 5-1. – С. 43-45.





191. Ахмедова С. М., Хатамов А. И., Худайбергенов Б. Э. МОРФОФУНКЦИОНАЛЬНЫЕ ОСОБЕННОСТИ УЛЬТРАСТРУКТУРНОГО СТРОЕНИЯ МИОКАРДА ПРИ ВЛИЯНИИ ПЕСТИЦИДА //Проблемы и достижения современной науки. – 2017. – №. 1. – С. 11-13.
192. Миршарапов У. М. и др. СОСТОЯНИЕ СОСУДИСТОВ ПРИ ЭКСПЕРИМЕНТАЛЬНОМ САХАРНОМ ДИАБЕТЕ //Актуальные научные исследования в современном мире. – 2017. – №. 5-3. – С. 78-82.
193. Миршарапов У. М. и др. СОСТОЯНИЕ СОСУДОВ ПРИ ЭКСПЕРИМЕНТАЛЬНОМ САХАРНОМ ДИАБЕТЕ //Проблемы и достижения современной науки. – 2017. – №. 1. – С. 13-15.
194. Mirzamuhamedov O. M., Akhmedova S. M. STATE OF THE MYOCARDIUM IN EXPERIMENTAL TOXIC MYOCARDITIS //International Scientific and Practical Conference World science. – ROST, 2017. – Т. 5. – №. 10. – С. 53-55.
195. Рустамова М. М. Методика развития творческого мышления учеников в системе начального образования //Восточно-европейский научный журнал. – 2017. – №. 3-3 (19). – С. 15-18.
196. РУСТАМОВА М. М. ПЕДАГОГИКО-ПСИХОЛОГИЧЕСКИЕ ОСОБЕННОСТИ РАЗВИТИЯ ТВОРЧЕСКОГО МЫШЛЕНИЯ У УЧАЩИХСЯ НАЧАЛЬНЫХ КЛАССОВ //ЕВРАЗИЙСКИЙ СОЮЗ УЧЕНЫХ. СЕРИЯ: ПЕДАГОГИЧЕСКИЕ, ПСИХОЛОГИЧЕСКИЕ И ФИЛОСОФСКИЕ НАУКИ Учредители: ООО" Логика+". – №. 1. – С. 29-33.
197. Рустамова М. М. БОШЛАНҒИЧ СИНФ ЎҚУВЧИЛАРИНИНГ ИЖОДИЙ ТАФАККУРИНИ РИВОЖЛАНТИРИШНИ ТАКОМИЛЛАШТИРИШГА ОИД “МОНТЕССОРИ МЕТОДИКАСИ” НИ ИШЛАБ ЧИҚИШ ВА УНИ АМАЛИЁТГА ЖОРИЙ ЭТИШ //Современное образование (Узбекистан). – 2021. – №. 11 (108). – С. 54-63.
198. Mirkamalovna R. M. Development of creative thinking of younger schoolchildren in lessons of labor training using non-traditional materials //International Journal of Psychosocial Rehabilitation. – 2020. – Т. 24. – №. 6. – С. 578-580.
199. Mirkamalovna R. M. Psycho-Pedagogical Aspects of Development of Creative Thinking of Pupils of Primary School //ANGLISTICUM. Journal of the Association-Institute for English Language and American Studies. – 2016. – Т. 5. – №. 8. – С. 82-85.
200. Рустамова М. М. РОЛЬ УРОКОВ ТРУДА В НАЧАЛЬНЫХ КЛАССАХ В РАЗВИТИЕ ТВОРЧЕСКОГО МЫШЛЕНИЯ УЧЕНИКОВ //Сборники конференций НИЦ Социосфера. – Vedecko vydavatelske centrum Sociosfera-CZ sro, 2016. – №. 9. – С. 131-133.





201. Рустамова М. М. Развитие творческого мышления школьников на уроках по труду в начальных классах // Апробация. – 2015. – №. 12. – С. 126-128.
202. Умарова Г. А. Совершенствование методики преподавания квантовой физики на основе компьютерных технологий в общеобразовательной школе. – 2008.
203. Rakhimov N. R., Umarova G. A., Zakirova K. D. Studying optoelectronic detectors for fatigue parameters control on machine-building metal surfaces // Journal of Physics: Conference Series. – IOP Publishing, 2019. – Т. 1333. – №. 6. – С. 062022.
204. Kasimaxunova A. M., Umarova G. A. THE ROLE OF BROAD IMPLEMENTATION OF MODELING ON THE SUBJECT OF SEMICONDUCTOR IN THE HIGHER EDUCATION INSTITUTIONS // CURRENT RESEARCH JOURNAL OF PEDAGOGICS. – 2022. – Т. 3. – №. 12. – С. 01-08.
205. Umarova G. A. IMPROVING THE METHOD OF EFFECTIVE TEACHING FOR MODELLING AND PERFORMING VIRTUAL LABORATORY WORKS IN PHYSICS // CURRENT RESEARCH JOURNAL OF PEDAGOGICS. – 2022. – Т. 3. – №. 11. – С. 06-18.
206. Умарова Г. А. Разработка методов оптимального обучения моделированию виртуальных лабораторных работ по физике // Science and Education. – 2022. – Т. 3. – №. 4. – С. 1554-1562.
207. Набиев Ш., Умарова Г. Роль физики и основные условия эффективности системы образования в подготовке высококвалифицированных научных и инженерных кадров // Теория и практика современной науки. – 2016. – №. 5. – С. 662-665.
208. Anarxan K. DEVELOPMENT OF METHODS FOR EFFECTIVE LEARNING IN MODELING THE PROPERTIES OF SEMICONDUCTORS FOR RESEARCH WORKS // Scientific Bulletin of NamSU. – 2022.
209. Gulchexra U., Dilmurod J. USING THE STATE-OF THE ART TECHNIQUES OF TEACHING BY CLASSIFICATION REPAIRING AND RECOVERING PROCESS OF SKIN BY BIOPOLYMERS IN MEDICAL AND ENGINEERING EDUCATION // Universum: технические науки. – 2021. – №. 10-5 (91). – С. 43-46.
210. Турдалиев У. М. и др. Микрористаллическая целлюлоза из хлопка сырца Узбекистана // Universum: технические науки. – 2020. – №. 9-2 (78). – С. 75-77.



211. Турдиалиев У. М. и др. Надмолекулярная структура тонко-и средневолокнистых линтов и целлюлоз в Узбекистане //Universum: технические науки. – 2020. – №. 7-3 (76). – С. 53-56.
212. Umarova G. A., Rakhimov N. R. Investigation of Open-Channel Optrons for The Control of Metal Surfaces Qualitative Parameters //Parameters. – 2019. – Т. 9. – №. 1. – С. 6.

