

Список наукових праць
Д.т.н. професора
ГРНАТЮКА Сергія Олександровича

1. S. Gnatyuk, Critical Aviation Information Systems Cybersecurity, Meeting Security Challenges Through Data Analytics and Decision Support, NATO Science for Peace and Security Series, D: Information and Communication Security. IOS Press Ebooks, Vol.47, №3, pp. 308-316, 2016.
2. Yu. Danik, R. Hryshchuk, S. Gnatyuk, Synergistic effects of information and cybernetic interaction in civil aviation, Aviation, Vol. 20, №3, pp. 137-144, 2016.
3. A. Tikhomirov, N. Kinash, S. Gnatyuk, A. Trufanov, O. Berestneva et al, Network Society: Aggregate Topological Models, Communications in Computer and Information Science, Verlag: Springer International Publ, Vol. 487, pp. 415-421, 2014.
4. Korchenko O., Vasiliu Y., Gnatyuk S. Modern quantum technologies of information security against cyber-terrorist attacks, Aviation, Vol. 14, №3, pp. 58-69, 2010.
5. Mazin Al Hadidi, Jamil S. Al-Azzeh, R. Odarchenko, S. Gnatyuk, A. Abakumova, Adaptive Regulation of Radiated Power Radio Transmitting Devices in Modern Cellular Network Depending on Climatic Conditions, Contemporary Engineering Sciences, Vol. 9, № 10, pp. 473-485, 2016.
6. Mazin Al Hadidi, J. Samih Al-Azzeh, O. Tkalich, R. Odarchenko, S. Gnatyuk, Yu. Khokhlochova. ZigBee, Bluetooth and Wi-Fi Complex Wireless Networks Performance Increasing, International Journal on Communications Antenna and Propagation, Vol. 7, № 1, pp. 48-56, 2017.
7. O. Solomentsev, M. Zaliskyi, R. Odarchenko, S. Gnatyuk, Research of energy characteristics of QAM modulation techniques for modern broadband radio systems, Proceedings of the 2016 IEEE International Conference on Electronics and Information Technology (EIT), Odesa, Ukraine, May 23-27, 2016, pp. 14-20.
8. R. Odarchenko, S. Gnatyuk, T. Zhmurko, O. Tkalich, Improved Method of Routing in UAV Network, Proceedings of the 2015 IEEE 3rd International Conference on Actual Problems of Unmanned Aerial Vehicles Developments (APUAVD), Kyiv, Ukraine, October 13-15, Vol. 1, 2015, pp. 294-297.
9. S. Gnatyuk, M. Kovtun, V. Kovtun, A. Okhrimenko, Development of a search method of birationally equivalent binary Edwards curves for binary Weierstrass curves from DSTU 4145-2002, Proceedings of 2nd Intern. Scientific-Practical Conf. on the Problems of Infocommunications. Science and Technology (PIC S&T 2015), Kharkiv, Ukraine, October 13-15, 2015, pp. 5-8.
10. S. Gnatyuk, T. Zhmurko, P. Falat, Efficiency Increasing Method for Quantum Secure Direct Communication Protocols, Proceedings of the 2015 IEEE 8th International Conference on Intelligent Data Acquisition and Advanced Computing Systems: Technology and Applications (IDAACS'2015), Warsaw, Poland, September 24-26, Vol. 1, 2015, pp. 468-472.
11. I. Parkhomey, S. Gnatyuk, R. Odarchenko, T. Zhmurko et al, Method For UAV Trajectory Parameters Estimation Using Additional Radar Data, Proceedings of the 2016 4th International Conference on Methods and Systems of Navigation and Motion Control, Kyiv, Ukraine, October 18-20, 2016, pp. 39-42.
12. S. Gnatyuk, A. Okhrimenko, M. Kovtun, T. Gancarczyk, V. Karpinskyi, Method of Algorithm Building for Modular Reducing by Irreducible Polynomial, Proceedings of the 16th International Conference on Control, Automation and Systems, Oct. 16-19, Gyeongju, Korea, 2016, pp. 1476-1479.
13. Al-Azzeh J.S., Al Hadidi M., Odarchenko R., Gnatyuk S., Shevchuk Z., Hu Z. Analysis of self-similar traffic models in computer networks, International Review on Modelling and Simulations, № 10(5), pp. 328-336, 2017.
14. Odarchenko R., Abakumova A., Polihenko O., Gnatyuk S. Traffic offload improved method for 4G/5G mobile network operator, Proceedings of 14th International Conference on Advanced Trends in Radioelectronics, Telecommunications and Computer Engineering (TCSET-2018), pp. 1051-1054, 2018.
15. Hu Z., Gnatyuk S., Kovtun M., Seilova N. Method of searching birationally equivalent Edwards

- curves over binary fields, *Advances in Intelligent Systems and Computing*, Vol. 754, pp. 309-319, 2019.
16. S. Gnatyuk, V. Kinzeryavyy, M. Iavich, D. Prysiashnyi, Kh. Yubuzova, High-Performance Reliable Block Encryption Algorithms Secured against Linear and Differential Cryptanalytic Attacks, *CEUR Workshop Proceedings*, Vol. 2104, pp. 657-668, 2018.
 17. S. Gnatyuk, V. Sydorenko, M. Aleksander, Unified data model for defining state critical information infrastructure in civil aviation, *Proceedings of the 2018 IEEE 9th International Conference on Dependable Systems, Services and Technologies (DESSERT)*, Kyiv, Ukraine, May 24-27, 2018, pp. 37-42.
 18. R. Odarchenko, V. Gnatyuk, S. Gnatyuk, A. Abakumova, Security Key Indicators Assessment for Modern Cellular Networks, *Proceedings of the 2018 IEEE First International Conference on System Analysis & Intelligent Computing (SAIC)*, Kyiv, Ukraine, October 8-12, 2018, pp. 1-7.
 19. Z. Hassan, R. Odarchenko, S. Gnatyuk, A. Zaman, M. Shah, Detection of Distributed Denial of Service Attacks Using Snort Rules in Cloud Computing & Remote Control Systems, *Proceedings of the 2018 IEEE 5th International Conference on Methods and Systems of Navigation and Motion Control*, October 16-18, 2018. Kyiv, Ukraine, pp. 283-288.
 20. M. Iavich, S. Gnatyuk, E. Jintcharadze, Yu. Polishchuk, R. Odarchenko, Hybrid Encryption Model of AES and ElGamal Cryptosystems for Flight Control Systems, *Proceedings of the 2018 IEEE 5th International Conference on Methods and Systems of Navigation and Motion Control*, October 16-18, 2018, Kyiv, Ukraine, pp. 229-233.
 21. M. Zaliskyi, R. Odarchenko, S. Gnatyuk, Yu. Petrova. A. Chaplits, Method of traffic monitoring for DDoS attacks detection in e-health systems and networks, *CEUR Workshop Proceedings*, Vol. 2255, pp. 193-204, 2018.
 22. Tynymbayev S., Gnatyuk S.A., Aitkhozhayeva Y.Z., Berdibayev R.S., Namazbayev T.A. Modular reduction based on the divider by blocking negative remainders, *News of the National Academy of Sciences of the Republic of Kazakhstan, Series of Geology and Technical Sciences*, №2 (434), pp. 238-248, 2019.
 23. Kalimoldayev M., Tynymbayev S., Gnatyuk S., Ibraimov M., Magzom M. The device for multiplying polynomials modulo an irreducible polynomial, *News of the National Academy of Sciences of the Republic of Kazakhstan, Series of Geology and Technical Sciences*, №2 (434), pp. 199-205, 2019.
 24. Gnatyuk S., Akhmetova J., Sydorenko V., Polishchuk Yu., Petryk V. Quantitative Evaluation Method for Mass Media Manipulative Influence on Public Opinion, *CEUR Workshop Proceedings*, Vol. 2362, pp. 71-83, 2019.
 25. A. Peleschyshyn, T. Klynina, S. Gnatyuk, Legal Mechanism of Counteracting Information Aggression in Social Networks: from Theory to Practice, *CEUR Workshop Proceedings*, 2019, Vol. 2392, pp. 111-121.
 26. S. Gnatyuk, M. Aleksander, P. Vorona, Yu. Polishchuk, J. Akhmetova, Network-centric Approach to Destructive Manipulative Influence Evaluation in Social Media, *CEUR Workshop Proceedings*, Vol. 2392, pp. 273-285, 2019.
 27. Zh. Hu, S. Gnatyuk, T. Okhrimenko (Zhmurko), V. Kinzeryavyy, M. Iavich, Kh. Yubuzova, High-Speed Privacy Amplification Method for Deterministic Quantum Cryptography Protocols Using Pairs of Entangled Qutrits, *CEUR Workshop Proceedings*, Vol. 2393, pp. 810-821, 2019.
 28. Kalimoldayev M., Tynymbayev S., Gnatyuk S., Khokhlov S., Magzom M., Kozhagulov Y. Matrix multiplier of polynomials modulo analysis starting with the lower order digits of the multiplier, *News of the National Academy of Sciences of the Republic of Kazakhstan, Series of Geology and Technical Sciences*, №4 (436), pp. 181-187, 2019.
 29. Iavich M., Gagnidze A., Iashvili G., Gnatyuk S., Vialkova V. Lattice based Merkle, *CEUR Workshop Proceedings*, Vol. 2470, pp. 13-16, 2019.
 30. M. Iavich, S. Gnatyuk, E. Jintcharadze, Y. Polishchuk, A. Fesenko and A. Abisheva, Comparison and

- Hybrid Implementation of Blowfish, Twofish and RSA Cryptosystems, Proceedings of 2019 IEEE 2nd Ukraine Conference on Electrical and Computer Engineering (UKRCON), Lviv, Ukraine, 2019, pp. 970-974.
31. S. Tynymbayev, E. Aitkhozhayeva, R. Berdibayev, S. Gnatyuk, T. Okhrimenko and T. Namazbayev, Development of Modular Reduction Based on the Divider by Blocking Negative Remainders for Critical Cryptographic Applications, Proceedings of 2019 IEEE 2nd Ukraine Conference on Electrical and Computer Engineering (UKRCON), Lviv, Ukraine, 2019, pp. 809-812.
 32. Qoussini A.E., Daradkeh Y.I., Al Tabib S.M., Gnatyuk S., Okhrimenko T., Kinzeryavyy V. Improved model of quantum deterministic protocol implementation in channel with noise, Proceedings of the 2019 10th IEEE International Conference on Intelligent Data Acquisition and Advanced Computing Systems: Technology and Applications (IDAACS 2019), 2019, pp. 572-578.
 33. Gnatyuk S., Multilevel Unified Data Model for Critical Aviation Information Systems Cybersecurity, Proceedings of 2019 IEEE 5th International Conference Actual Problems of Unmanned Aerial Vehicles Developments (APUAVD 2019), pp. 242-247.
 34. Gnatyuk S., Polishchuk Yu., Sydorenko V., Sotnichenko Yu. Determining the level of importance for critical information infrastructure objects, Proceedings of 2019 IEEE International Scientific-Practical Conference: Problems of Infocommunications Science and Technology, PIC S and T 2019, Kyiv, Ukraine, October 8-11, 2019, pp. 829-834.
 35. Gnatyuk S., Okhrimenko T., Iavich M., Berdibayev R. Intruder control mode simulation of deterministic quantum cryptography protocol for depolarized quantum channel, Proceedings of 2019 IEEE International Scientific-Practical Conference: Problems of Infocommunications Science and Technology, PIC S and T 2019, Kyiv, Ukraine, October 8-11, 2019, pp. 825-828.
 36. Gnatyuk S., Barchenko N., Azarenko O., Tolbatov A., Obodiak V., Tolbatov V. Ergonomic support for decision-making management of the chief information security officer, CEUR Workshop Proceedings, Vol. 2588, pp. 459-471, 2019.
 37. Kovtun O., Khaidari N., Harmash T., Melnyk N., Gnatyuk S. Communication in civil aviation: Linguistic analysis for educational purposes, CEUR Workshop Proceedings, Vol. 2588, pp. 483-495, 2019.
 38. Gnatyuk S., Kinzeryavyy V., Kyrychenko K., Yubuzova Kh., Aleksander M., Odarchenko R. Secure Hash Function Constructing for Future Communication Systems and Networks, Advances in Intelligent Systems and Computing, Vol. 902, pp. 561-569, 2020.
 39. Gnatyuk S., Kinzeryavyy V., Stepanenko I., Gorbatyuk Ya., Gizun A., Kotelianets V. Code Obfuscation Technique for Enhancing Software Protection Against Reverse Engineering, Advances in Intelligent Systems and Computing, Vol. 902, pp. 571-580, 2020.
 40. Gnatyuk S., Kinzeryavyy V., Sapozhnik T., Sopilko I., Seilova N., Hrytsak A. Modern Method and Software Tool for Guaranteed Data Deletion in Advanced Big Data Systems, Advances in Intelligent Systems and Computing, Vol. 902, pp. 581-590, 2020.
 41. Gnatyuk S., Akhmetov B., Kozlovskiy V., Kinzeryavyy V., Aleksander M., Prysiashnyi D. New Secure Block Cipher for Critical Applications: Design, Implementation, Speed and Security Analysis, Advances in Intelligent Systems and Computing, Vol. 1126, pp. 93-104, 2020.
 42. Gnatyuk S., Sydorenko V., Polozhentsev A., Fesenko A., Akatayev N., Zhilkishbayeva G., Method of cybersecurity level determining for the critical information infrastructure of the state, CEUR Workshop Proceedings, Vol. 2616, pp. 332-341, 2020.
 43. Hu Z., Gnatyuk S., Okhrimenko T., Tynymbayev S., Iavich M. High-speed and secure PRNG for cryptographic applications, International Journal of Computer Network and Information Security, Volume 12, Issue 3, pp. 1-10, 2020.
 44. Gnatyuk S., Okhrimenko T., Azarenko O., Fesenko A., Berdibayev R. Experimental Study of Secure PRNG for Q-trits Quantum Cryptography Protocols, Proceedings of the 2020 IEEE 11th International

- Conference on Dependable Systems, Services and Technologies (DESSERT 2020), Kyiv, Ukraine, May 14, 2020, pp. 183-188.
45. Iavich M., Gnatyuk S., Arakelian A., Iashvili G., Polishchuk Y., Prysiazhnyy D., Improved Post-quantum Merkle Algorithm Based on Threads, *Advances in Intelligent Systems and Computing*, Vol. 1247 AISC, pp. 454-464, 2021.
46. Kalimoldayev M., Tynymbayev S., Gnatyuk S., Ibraimov M., Magzom M. The device for multiplying polynomials modulo with analysis of two least significant bits of the multiplier per step, *News of the National Academy of Sciences of the Republic of Kazakhstan, Series of Geology and Technical Sciences*, №3 (441), pp. 102-109, 2020.
47. B. Akhmetov, S. Gnatyuk, V. Kinzeryavyy, Kh.Yubuzova, Studies on practical cryptographic security analysis for block ciphers with random substitutions, *International Journal of Computing*, Vol. 19, Issue 2, pp. 298-308, 2020.
48. Gnatyuk S., Pysarchuk O., Gizun A., Dudnik A., Griga V., Domkiv T. Bifurcation prediction method for the emergence and development dynamics of information conflicts in cybernetic space, *CEUR Workshop Proceedings*, Vol. 2654, pp. 692-709, 2020.
49. Tynymbayev S., Berdibayev R., Omar T., Gnatyuk S., Namazbayev T., Adilbekkyzy S. Devices for modular multiplication of numbers with analysis of two least significant bits of the multiplier, *CEUR Workshop Proceedings*, Vol. 2654, pp. 762-772, 2020.
50. Gnatyuk S., Sydorenko V., Goncharenko I., Sotnichenko Y., Seilova N., Basshykyzy D. Experimental identification of the critical information infrastructure objects in aviation, *CEUR Workshop Proceedings*, Vol. 2654, pp. 798-809, 2020.
51. Gnatyuk S., Kalchenko V., Barchenko N., Tolbatov A., Obodiak V., Tolbatov V., Tatarinov V. System for monitoring the connection of USB devices for cybersecurity auditing, *CEUR Workshop Proceedings*, Vol. 2654, pp. 773-785, 2020.
52. Iashvili G., Iavich M., Gagnidze A., Gnatyuk S. Increasing usability of TLS certificate generation process using secure design, *CEUR Workshop Proceedings*, Vol. 2698, pp. 35-41, 2020.
53. Gnatyuk, S., Kinzeryavyy V., Iavich M., Odarchenko R., Berdibayev R., Burmak Yu. Studies on cryptographic security and speed analysis of new advanced block cipher, *CEUR Workshop Proceedings*, Vol. 2711, pp. 202-213, 2020.
54. Gnatyuk S., Iavich M., Kinzeryavyy V., Okhrimenko T., Burmak Y., Goncharenko I. Improved secure stream cipher for cloud computing, *CEUR Workshop Proceedings*, Vol. 2732, pp. 183-197, 2020.
55. Sydorenko V., Gnatyuk S., Fesenko A., Yevchenko Y., Tolbatov A., Sotnichenko Y. Experimental FMECA-based assessing of the critical information infrastructure importance in aviation, *CEUR Workshop Proceedings*, Vol. 2732, pp. 136-156, 2020.
56. Hu Z., Odarchenko R., Gnatyuk S., Zaliskyi M., Chaplits A., Bondar S., Borovik V. Statistical techniques for detecting cyberattacks on computer networks based on an analysis of abnormal traffic behavior, *International Journal of Computer Network and Information Security*, Volume 12, Issue 6, pp. 1-13, 2020.
57. Gnatyuk S., Sydorenko V., Polihenko O., Sotnichenko Y., Nechyporuk O. Studies on the disasters criticality assessment in aviation information infrastructure, *CEUR Workshop Proceedings*, 2020, Vol. 2805, pp. 282-296.
58. Berdibayev R., Gnatyuk S., Yevchenko Yu., Kishchenko V. A concept of the architecture and creation for SIEM system in critical infrastructure, *Studies in Systems, Decision and Control*, Vol. 346, 2021, pp. 221-242.
59. Iavich M., Gnatyuk S., Odarchenko R., Bocu R., Simonov S. The Novel System of Attacks Detection in 5G, *Lecture Notes in Networks and Systems*, 2021, Vol. 226, pp. 580-591.
60. Lukova-Chuiko N., Fesenko A., Papirna H., Gnatyuk S. Threat hunting as a method of protection against cyber threats, *CEUR Workshop Proceedings*, Vol. 2833, pp. 103-113, 2021.

61. Labadze G., Iavich M., Iashvili G., Gagnidze A., Gnatyuk S. Post-quantum digital signature scheme with BB84 protocol, CEUR Workshop Proceedings, Vol. 2915, pp. 35-44, 2021.
62. Iashvili G., Avkurova Z., Iavich M., Bauyrzhan M., Gagnidze A., Gnatyuk S. Content-Based Machine Learning Approach for Hardware Vulnerabilities Identification System, Lecture Notes on Data Engineering and Communications Technologies, Vol. 83, pp. 117-126, 2021.
63. Hu Z., Gnatyuk S., Akhmetov B., Simakhin V., Ospanova D., Akatayev N. Method for Cyber Threats Detection and Identification in Modern Cloud Services, Lecture Notes on Data Engineering and Communications Technologies, Vol. 83, pp. 326-346, 2021.
64. Iavich M., Kuchukhidze T., Gnatyuk S., Fesenko A. Novel certification method for quantum random number generators, International Journal of Computer Network and Information Security, Volume 13, Issue 3, pp. 28-38, 2021.
65. Gnatyuk S., Berdibayev R., Avkurova Z., Verkhovets O., Bauyrzhan M. Studies on cloud-based cyber incidents detection and identification in critical infrastructure, CEUR Workshop Proceedings, 2021, Vol. 2923, pp. 68-80.
66. Bocu R., Iavich M., Gnatyuk S., Ospanova D., Sotnichenko Y. Secure e-health system for the integrated management of personal health data collected by IoT devices, CEUR Workshop Proceedings, 2021, Vol. 2923, pp. 164-174.
67. Olszewski S., Demchenko V., Zaets E., Lytvynenko V., Lurie I., Boskin O., Gnatyuk S. Streaming Algorithm to the Decomposition of a Polyatomic Molecules Mass Spectra on the Polychlorinated Biphenyls Molecule Example, Lecture Notes on Data Engineering and Communications Technologies, Vol. 77, pp. 39-53, 2022.
68. Gnatyuk S., Sydorenko V., Polozhentsev A., Sotnichenko Y. Experimental Cybersecurity Level Determination in the Civil Aviation Critical Infrastructure, Proceedings of 2020 IEEE International Scientific-Practical Conference: Problems of Infocommunications Science and Technology, PIC S and T 2020, Kyiv, Ukraine, October 6-9, 2020, pp. 757-764.
69. Iavich M., Bocu R., Iashvili G., Gnatyuk S. Novel Method of Hardware Security Problems Identification, Proceedings of 2020 IEEE International Scientific-Practical Conference: Problems of Infocommunications Science and Technology, PIC S and T 2020, Kyiv, Ukraine, October 6-9, 2020, pp. 427-431.
70. Iavich M., Iashvili G., Gnatyuk S., Tolbatov A., Mirtskhulava L. Efficient and Secure Digital Signature Scheme for Post Quantum Epoch, Communications in Computer and Information Science, Vol. 1486, pp. 185-193, 2021.
71. Gnatyuk S., Berdibayev R., Smirnova T., Avkurova Z., Iavich M. Cloud-Based Cyber Incidents Response System and Software Tools, Communications in Computer and Information Science, Vol. 1486, pp. 169-184, 2021.
72. Butenko O., Horelyk S., Krasovska I., Gnatyuk S. Determining perturbing factor of changes in the ecological state of monitored objects, CEUR Workshop Proceedings, 2021, Vol. 3021, pp. 43-52.
73. Lebid O., Gorban I., Korolova A., Gnatyuk S. Study of the effectiveness of barrier-type submerged breakwaters for coastal protection, CEUR Workshop Proceedings, 2021, Vol. 3021, pp. 144-160.
74. Gnatyuk S., Ospanova D., Lytvynenko V., Amirgaliyeva Z., Shohiyon N. Studies on the Computational Model of PRNG for Data Privacy Risk Mitigation in 5G Networks, CEUR Workshop Proceedings, 2021, 3101, pp. 51-64.
75. Iavich M., Akhalaia G., Gnatyuk S. Method of Improving the Security of 5G Network Architecture Concept for Energy and other Sectors of the Critical Infrastructure, Studies in Systems, Decision and Control, Vol. 399, 2022, pp. 237-246.
76. Iashvili G., Iavich M., Gnatyuk S., Odarchenko R., Simonov S. Simulated Test Laboratory for 5G Test Patterns, Proceedings of the 11th IEEE International Conference on Intelligent Data Acquisition and Advanced Computing Systems: Technology and Applications, IDAACS 2021, 2021, Vol. 1, pp. 521-526.

77. Iashvili G., Iavich M., Bocu R., Odarchenko R., Gnatyuk S. Intrusion Detection System for 5G with a Focus on DOS/DDOS Attacks, Proceedings of the 11th IEEE International Conference on Intelligent Data Acquisition and Advanced Computing Systems: Technology and Applications, IDAACS 2021, 2021, Vol. 2, pp. 861-864.
78. Avkurova Z., Gnatyuk S., Abduraimova B., Fedushko S., Syerov Y., Trach O. Models for early web-attacks detection and intruders identification based on fuzzy logic, Procedia Computer Science, 2021, Vol. 198, pp. 694-699.
79. Iavich M., Kuchukhidze T., Iashvili G., Gnatyuk S. Hybrid quantum random number generator for cryptographic algorithms, Radioelectronic and Computer Systems, 2021, Issue 4, pp. 103-118.
80. Tynymbayev S., Ibraimov M., Namazbayev T., Gnatyuk S. Development of pipelined polynomial multiplier modulo irreducible polynomials for cryptosystems, Eastern-European Journal of Enterprise Technologies, 2022, Vol. 1, Issue 4-115, pp. 37-43.
81. Akhalaia G., Iavich M., Gnatyuk S. Location-Based Threats for User Equipment in 5G Network, Lecture Notes on Data Engineering and Communications Technologies, 2022, Vol. 134, pp. 117-130.
82. Gnatyuk S., Okhrimenko T., Fesenko A., Dorozhynskiy S. Studies on the Quality Assessment of PRNG for Q-Trits Quantum Cryptography Protocols, Proceedings of 2021 IEEE International Scientific-Practical Conference: Problems of Infocommunications Science and Technology, PIC S and T 2021, Kyiv, Ukraine, October 5-7, 2021, pp. 603-606.
83. Gnatyuk S., Hu Z., Sydorenko V., Aleksander M., Polishchuk Yu., Yubuzova Kh. Critical aviation information systems: Identification and protection, Cases on Modern Computer Systems in Aviation, 2019, pp. 423-448.
84. Gnatyuk S., Yudin O., Sydorenko V., Smirnova T., Polozhentsev A., The Model for Calculating the Quantitative Criteria for Assessing the Security Level of Information and Telecommunication Systems, CEUR Workshop Proceedings, 2022, vol. 3156, pp. 390-399.
85. Gnatyuk S., Yudin O., Sydorenko V., Pozhentsev A., Brzhanov R. Method of Forming the Functional Security Profile for the Sectoral Information and Telecommunication Systems, CEUR Workshop Proceedings, 2022, vol. 3179, pp. 272-283.
86. Gnatyuk S., Berdibayev R., Fesenko A., Kyryliuk O., Bessalov A. Modern SIEM Analysis and Critical Requirements Definition in the Context of Information Warfare, CEUR Workshop Proceedings, 2021, vol. 3188, pp. 149-166.
87. Gnatyuk S., Berdibayev R., Azarov I., Baisholan N., Lozova I. Modern Types of Databases for SIEM System Development, CEUR Workshop Proceedings, 2021, vol. 3187, pp. 127-138.
88. Proskurin D., Gnatyuk S., Bauyrzhan M. Distributive Training Can Improve Neural Network Performance based on RL-CNN Architecture, CEUR Workshop Proceedings, 2021, vol. 3187, pp. 48-57.
89. Gnatyuk S., Hu Z., Sydorenko V., Aleksander M., Polishchuk Yu., Yubuzova Kh. Critical aviation information systems: Identification and protection, Research Anthology on Reliability and Safety in Aviation Systems, Spacecraft, and Air, 2021, pp. 341-366.
90. Al Azzeh J. S., Mesleh A., Hu Z., Odarchenko R., Gnatyuk S., Abakumova A., Evaluation Method for SDN Network Effectiveness in Next Generation Cellular Networks, International Journal of Communication Networks and Information Security, 2018, Vol. 10, Issue 3, pp. 472-479.
91. Barchenko N., Tolbatov V., Lavryk T., Obodiak V., Shelehov I., Tolbatov A., Gnatyuk S., Tolbatova O. Mathematical Model for Adaptive Technology in E-learning Systems, International Journal of Modern Education and Computer Science, 2022, Vol. 14, Issue 4, pp. 1-15.
92. Avkurova Z., Gnatyuk S., Abduraimova B. Structural and Analytical Models for Early APT-Attacks Detection in Critical Infrastructure, Communications in Computer and Information Science, 2022, Vol. 1635, pp. 455-468.
93. Baimuratov O., Gnatyuk S., Salykbayeva T. Mobile Application for Healthy Maternal Behavior to Reduce Fetal Mortality, Communications in Computer and Information Science, 2022, Vol. 1635, pp.

469-479.

94. Mukasheva A., Rakhmetulayeva S., Astaubayeva G., Gnatyuk S. Developing a system for diagnosing diabetes mellitus using BIGDATA, Eastern-European Journal of Enterprise Technologies, 2022, Vol. 5, Issue 2-119, pp. 75-85.