

Publications: National Technical University “Kharkiv Polytechnic Institute”

SDG11: Sustainable Cities and Communities (2021-2024)

№	Title	Authors	Year	Scopus Source title	Abstract
1.	Socio-Cyber-Physical Systems Security Concept	Yevseiev, S., Milevskiy, S., Bortnik, L., Alexey, V., Bondarenko, K., Pohasii, S.	2022	HORA 2022 - 4th International Congress on Human-Computer Interaction, Optimization and Robotic Applications, Proceedings	https://www.scopus.com/record/display.url?eid=2-s2.0-85133971560&origin=resultlist
2.	Collection and Consolidation of Big Data for Proactive Monitoring of Critical Events at Infrastructure Facilities in an Urban Environment	Finogeev, A., Parygin, D., Schevchenko, S., Finogeev, A., Ather, D.	2021	Communications in Computer and Information Science	https://www.scopus.com/record/display.url?eid=2-s2.0-85115843425&origin=resultlist
3.	Multi criteria analysis of municipal solid waste management and resource recovery in Poland compared to other EU countries	Vambol, V., Kowalczyk-Juško, A., Vambol, S., Khan, N.A., Mazur, A., Goroneskul, M., Kruzhilko, O.	2023	Scientific Reports	https://www.scopus.com/record/display.url?eid=2-s2.0-85179305496&origin=resultlist
4.	PERFORMANCE COMPARISON OF CNNs ON HIGH-RESOLUTION MULTISPECTRAL DATASET APPLIED TO LAND COVER CLASSIFICATION PROBLEM	Yaloveha, V., Podorozhniak, A., Kuchuk, H., Garashchuk, N.	2023	Radioelectronic and Computer Systems	https://www.scopus.com/record/display.url?eid=2-s2.0-85169467268&origin=resultlist
5.	Land-Use/Land Cover Analysis Through Object Based Technique: A Case Study of Shahrah-e-Faisal	Kausar, A., Afzal, A., Saeed, G., Maqsoom, A., Khan, O.I., Afsar, S., Anis, Y., Zehra, S.M., Vambol, V., Vambol, S., Kravchenko, Y.	2023	Ecological Questions	https://www.scopus.com/record/display.url?eid=2-s2.0-85160825153&origin=resultlist

6.	Application of copper and aluminium electrode in electro coagulation process for municipal wastewater treatment: A case study at Karachi	Rafique, L., Adnan, A., Taha, A., Bano, S., Vambol, S., Mushtaq, T., Ilyas, N., Hussain, S., Borysova, L., Kovalov, O.	2023	Ecological Questions	https://www.scopus.com/record/display.url?eid=2-s2.0-85144227807&origin=resultlist
7.	Viable forecasting monthly weather data using time series methods	Soomro, R., Ghauri, S.P., Marri, A.A., Vambol, S., Dung, H.T., Manzoor, N., Bano, S., Shahid, S., Asadullah, Farooq, A., Lutsenko, Y.	2023	Ecological Questions	https://www.scopus.com/record/display.url?eid=2-s2.0-85144166826&origin=resultlist
8.	Space-borne Air Quality Monitoring of Nitrogen dioxide (NO ₂) over Karachi and Lahore using Remote Sensing Tools	Rehmat, R., Rafique, L., Irfan, M., Ahmed, S.R., Lahori, A.H., Muhammadi, A., Taha, M., Vambol, S., Shulga, M.	2023	Proceedings of the Pakistan Academy of Sciences: Part B	https://www.scopus.com/record/display.url?eid=2-s2.0-85175161441&origin=resultlist
9.	Revitalizing Ukrainian Cities: The Role of Public-Private Partnerships in Smart Urban Development	Kruhlov, V., Dvorak, J., Moroz, V., Tereshchenko, D.	2024	Central European Public Administration Review	https://www.scopus.com/record/display.url?eid=2-s2.0-85198469876&origin=resultlist
10.	Mathematical modelling of transients in the electric drive of the turnout of the mono-sleeper type with switched-inductor motor	Buriakovskiy, S.G., Maslii, A.S., Asmolova, L.V., Goncharuk, N.T.	2021	Electrical Engineering and Electromechanics	https://www.scopus.com/record/display.url?eid=2-s2.0-85120816419&origin=resultlist
11.	IMPROVING THE PROCEDURE FOR MODELING LOWFREQUENCY OSCILLATIONS OF THE FREE SURFACE LIQUID IN A TRACTOR TANK	Kozhushko, A., Pelypenko, Y., Kravchenko, S., Danylenko, V.	2023	Eastern-European Journal of Enterprise Technologies	https://www.scopus.com/record/display.url?eid=2-s2.0-85158992680&origin=resultlist

12.	Development of a Sociocyberphysical Systems Cyber Threats Classifier	Yevseiev, S., Murr, P., Milevskyi, S., Korol, O., Melnyk, M.	2023	7th International Symposium on Multidisciplinary Studies and Innovative Technologies, ISMSIT 2023 - Proceedings	https://www.scopus.com/record/display.url?eid=2-s2.0-85179136454&origin=resultlist
13.	DEVELOPMENT OF METHODS FOR EVALUATING THE EFFECTIVENESS OF SMART CITIES UNDER THE CONDITIONS OF DIGITALIZATION OF CITY GOVERNANCE	Dunayev, I., Petrovska, I., Safronova, O., Darovanets, O., Darovanets, K., Mital, O., Nosyriev, O.	2022	Eastern-European Journal of Enterprise Technologies	https://www.scopus.com/record/display.url?eid=2-s2.0-85133788914&origin=resultlist
14.	Evaluating the challenges and impacts of mixed-use neighborhoods on urban planning: an empirical study of a megacity, Karachi, Pakistan	Kausar, A., Zubair, S., Sohail, H., Anwar, M.M., Aziz, A., Vambol, S., Vambol, V., Khan, N.A., Poteriaiko, S., Tyshchenko, V., Murasov, R., Ejaz, F., Khan, O.I.	2024	Discover Sustainability	https://www.scopus.com/record/display.url?eid=2-s2.0-85187127699&origin=resultlist
15.	Compatibility of Recycling Plastic Lubricants	Grigorov, A., Ponomarenko, V., Slepuzhnikov, Y., Bondarenko, O., Artemev, S., Ilinskyi, O., Bryhada, O.	2023	Petroleum and Coal	https://www.scopus.com/record/display.url?eid=2-s2.0-85164576205&origin=resultlist
16.	Assessment of Karachi as an Urban Heat Island Threat through Remote Sensing and GIS Techniques	Lakhan, M.A., Afzal, A., Ahmed, S.R., Lahori, A.H., Irfan, M., Zubair, S., Kausar, A., Bano, S., Vambol, S., Vambol, V., Mishchenko, I.	2023	Proceedings of the Pakistan Academy of Sciences: Part B	https://www.scopus.com/record/display.url?eid=2-s2.0-85174934696&origin=resultlist

17.	Environmental retrieval during COVID-19 lockdown in the megacity Karachi, Pakistan	Ali, N., Kausar, A., Vambol, S., Kozub, P., Kozub, S., Hrynzovskyi, A.	2024	Ecological Questions	https://www.scopus.com/record/display.url?eid=2-s2.0-85190305860&origin=resultlist
18.	Impact of Surrounding Infrastructure on Urban Environment: A Case Study of Karachi Metropolitan	Kausar, A., Afzal, A., Khan, O.I., Maqsoom, A., Saeed, G., Vambol, S., Trush, O., Murasov, R., Mykhailov, V.	2024	Ecological Questions	https://www.scopus.com/record/display.url?eid=2-s2.0-85181894344&origin=resultlist
19.	Geospatial techniques for comparative case study of spatiotemporal changes in New Karachi and North Karachi parks	Arif, H., Kausar, A., Afzal, A., Ahmed, S.R., Afsar, S., Lahori, A.H., Vambol, S., Vambol, V.	2023	Ecological Questions	https://www.scopus.com/record/display.url?eid=2-s2.0-85162029920&origin=resultlist
20.	Degradation of Reinforced Concrete Construction of Bridge Structures: Corrosion Aspect	Nenastina, T.O., Berezna, K.V., Sakhnenko, M.D., Buhaievskyi, S.O.	2024	Materials Science	https://www.scopus.com/record/display.url?eid=2-s2.0-85196103877&origin=resultlist
21.	Development and study of a microprocessor automatic control system for a mono-switch tie type with a linear inductive electric motor and a discrete speed controller.	Buriakovskiy, S.G., Asmolova, L.V., Maslii, A.S., Maslii, A.S., Obruch, I.V.	2022	Electrical Engineering and Electromechanics	https://www.scopus.com/record/display.url?eid=2-s2.0-85137359282&origin=resultlist
22.	Individual Heat Substations Integrated with Heat Pumps for District Heating Systems in Ukraine	Yuzbashyan, A., Polyvianchuk, A., Klemeš, J.J., Kapustenko, P., Klochok, E., Arsenyeva, O.	2021	Chemical Engineering Transactions	https://www.scopus.com/record/display.url?eid=2-s2.0-85122507739&origin=resultlist
23.	INTEGRATION OF IOT WITH CLOUD, FOG, AND EDGE COMPUTING: A REVIEW	Kuchuk, H., Malokhvii, E.	2024	Advanced Information Systems	https://www.scopus.com/record/display.url?eid=2-s2.0-85196402981&origin=resultlist
24.	Analysis of a City's Heat Island Effect on the Micro-Climature Parameters within Cities	Sharma, R., Rahman, K.A., Tyshchenko, V., Illiash, O., Mezentseva, I.	2023	Proceedings of the Pakistan Academy of Sciences: Part A	https://www.scopus.com/record/display.url?eid=2-s2.0-85171990274&origin=resultlist

25.	Creating Digitized Tools for Supporting Multidisciplinary and Multi-Actor Solutions Based on Eco-Humanistic Model	Sergeyeva, T., Bronin, S., Glazar, T., Degleria, V.	2023	SIST 2023 - 2023 IEEE International Conference on Smart Information Systems and Technologies, Proceedings	https://www.scopus.com/record/display.url?eid=2-s2.0-85172012333&origin=resultlist
26.	Requirements for cables as categories of construction products and thermal resistance of power cables	Bezprozvannykh, G.V., Grynyshyna, M.V., Moskvitin, Y.S.	2024	Electrical Engineering and Electromechanics	https://www.scopus.com/record/display.url?eid=2-s2.0-85185323533&origin=resultlist
27.	Increasing the accuracy of measuring the physicochemical parameters of wastewater samples when implementing a new informative method	Sebko, V.V., Zdorenko, V.G., Zashchepkina, N.M., Barylko, S.V.	2023	Journal of Achievements in Materials and Manufacturing Engineering	https://www.scopus.com/record/display.url?eid=2-s2.0-85165129752&origin=resultlist
28.	Environmental risk assessment of the impact of sewer networks on the environment in the context of sustainable urban development	Aleinikova, A., Lebedeva, E., Yemelianova, D., Chernyshenko, O.	2023	AIP Conference Proceedings	https://www.scopus.com/record/display.url?eid=2-s2.0-85180328815&origin=resultlist
29.	Customs Regulations and Risk Management and Town Planning Marketing on the Way to Smart Cities in the Global Economy	Arynova, Z., Ashirbaeva, A., Ustik, T., Larka, L., Chernysh, T., Volkova, O.	2024	Economic Affairs (New Delhi)	https://www.scopus.com/record/display.url?eid=2-s2.0-85191878273&origin=resultlist
30.	Simulation tool for the point placement with maximal coverage	Dashkevych, A., Okhotska, O., Vorontsova, D., Rosokha, S.	2021	2021 IEEE 2nd KhPI Week on Advanced Technology, KhPI Week 2021 - Conference Proceedings	https://www.scopus.com/record/display.url?eid=2-s2.0-85118936466&origin=resultlist
31.	Spatial-Temporal Analysis of Ambient Air Quality in Karachi through Geostatistical Interpolation (IDW) Technique	Idress, M., Nergis, Y., Afzal, A., Ahmed, S.R., Vambol, V., Vambol, S., Butt, J.A., Sharif, M.,	2023	Journal of Environmental Accounting and Management	https://www.scopus.com/record/display.url?eid=2-s2.0-85170688610&origin=resultlist

		Yeremenko, S.			
32.	Modern Applications of High-Resolution Multispectral EuroPlanet Dataset	Yaloveha, V., Orlova, T., Podorozhniak, A., Noskov, V., Kuchuk, H., Gorbulik, V.	2023	2023 IEEE 4th KhPI Week on Advanced Technology, KhPI Week 2023 - Conference Proceedings	https://www.scopus.com/record/display.url?eid=2-s2.0-85179508848&origin=resultlist
33.	The uberization of the economy on the example of the electrical engineering domain and transport	Stepnicka, N., Kostikov, E., Sadowska, B., Sitak, I.	2023	2023 IEEE 4th KhPI Week on Advanced Technology, KhPI Week 2023 - Conference Proceedings	https://www.scopus.com/record/display.url?eid=2-s2.0-85179508116&origin=resultlist
34.	A Computational Model of the Urban Thermal Environment of Kharkiv to Mitigate Urban Heat Island	Rogovyi, A., Avershyn, A., Fatyeyev, O., Panamariova, O., Khovanskyi, S.	2023	Lecture Notes in Networks and Systems	https://www.scopus.com/record/display.url?eid=2-s2.0-85180776793&origin=resultlist
35.	Information Technology Based on Qualitative Methods in Cyber-Physical Systems of Situational Disaster Risk Management	Grebennik, I., Hutsa, O., Petrova, R., Yelchaninov, D., Morozova, A.	2021	IFIP Advances in Information and Communication Technology	https://www.scopus.com/record/display.url?eid=2-s2.0-85113710376&origin=resultlist
36.	Determination of the Soil Parameters of the Outdoor Switchgear in the Dense Urban Development	Koliushko, D.G., Rudenko, S.S., Buriakovskiy, S.G.	2022	2022 IEEE 3rd KhPI Week on Advanced Technology, KhPI Week 2022 - Conference Proceedings	https://www.scopus.com/record/display.url?eid=2-s2.0-85141496009&origin=resultlist