

Sample list of peer-reviewed publications from MURCS research

Journal Papers

Gatto, E; Ippolito F; Rispoli G; **Carlo, O.S**; Santiago, JL; Aarrevaara E; Emmanuel R; Buccolieri R; 2021. Analysis of urban greening scenarios for improving outdoor thermal comfort in neighbourhoods of Lecce (Southern Italy), *Climate*, 9(7), 116, <https://doi.org/10.3390/cli9070116>

Simath, S; Emmanuel, R. 2022. Urban thermal comfort trends in Sri Lanka: the increasing overheating problem and its potential mitigation, *INTERNATIONAL JOURNAL OF BIOMETEOROLOGY*, **66**, 9, pp. 1865-1876, <http://dx.doi.org/10.1007/s00484-022-02328-9>

Stepani, HMN; Emmanuel, R. 2022. How Much Green Is Really Cool? Target Setting for Thermal Comfort Enhancement in a Warm, Humid City (Jakarta, Indonesia), *ATMOSPHERE*, **13**, 2, 184, <http://dx.doi.org/10.3390/atmos13020184>

Ratnayake, C., Perera, N. & Emmanuel, R. 2022. Street Tree Planting Patterns to Modify the Sky View Factor for Outdoor Thermal Comfort Enhancement, *FARU Journal*, 9(7), <https://faruj.sjoi.info/articles/167/files/submission/proof/167-1-1854-1-10-20221227.pdf>

Ananyeva, O; Emmanuel, R. 2023. Street trees and Urban Heat Island in Glasgow: Mitigation through the 'Avenues Programme,' *URBAN FORESTRY & URBAN GREENING*, **86**, 128041, <http://dx.doi.org/10.1016/j.ufug.2023.128041>

Emmanuel, R; **Jalal, M**; **Ogunfuyi, S**; Maharoo, N; **Zala, M**; Perera, N; **Ratnayake, R**. 2023. Urban Heat Risk: Protocols for Mapping and Implications for Colombo, Sri Lanka, *ATMOSPHERE*, **14**, 2, 343, <http://dx.doi.org/10.3390/atmos14020343>

Berlitz, F; Benschop, E; Mickovski, SB; Gonzalez-Ollauri, A. 2024. Testing the hydrological performance of live pole drains (LPD) for mitigation of slope instability, *ECOLOGICAL ENGINEERING*, **208**, 107360, <http://dx.doi.org/10.1016/j.ecoleng.2024.107360>

Simath, S.; Emmanuel, R.; Aarrevaara, E. 2024. Sustainable urban heat risk resilience: Lessons on opportunities and barriers to action from Colombo, Sri Lanka, *SUSTAINABILITY*, **16**, 9488. <https://doi.org/10.3390/su16219488>

Soto, C; Thomson, CS; Nchor, JU. 2024. Realizing the potential for circularity in Glasgow through the socio-spatial dimension of urban systems, *BUILDING RESEARCH AND INFORMATION*, **52**, 8, pp. 957-983, <http://dx.doi.org/10.1080/09613218.2024.2375334>

Rios, EEB; Thomson, CS. 2024. Developing Climate Change Adaptation Plans for the Health Sector at the Subnational Level, *SUSTAINABILITY*, **16**, 3, 1090, <http://dx.doi.org/10.3390/su16031090>

Picone, N; Esposito, A; Emmanuel, R; Buccolieri, R. 2024. Potential Impacts of Green Infrastructure on NO_x and PM₁₀ in Different Local Climate Zones of Brindisi, Italy, *SUSTAINABILITY*, **16**, 1, 229, <http://dx.doi.org/10.3390/su16010229>

Ratnayake, C. & Emmanuel, R. 2024. Street Tree Designs for Particulate Matter Reduction in Glasgow: A Supportive Approach for Urban Planning, <https://doi.org/10.20944/preprints202404.1898.v1>, 2024

Negi A, Emmanuel R, Aarrevaara, E. 2025. Planning for a warmer future: heat risk assessment and mitigation in Lahti, Finland, *ATMOSPHERE*, **16**, 146. <https://doi.org/10.3390/atmos16020146>

Bala, R.S. et al. 2025. A Portable Non-Motorized Smart IoT Weather Station Platform for Urban Thermal Comfort Studies, *Future Internet*, 17(5), 222. <https://doi.org/10.3390/fi17050222>

Giancola, E., Manapragada, N.V.S.K., **Amin, S.**, Turrini, M., Natanian, J. & Naboni, E., 2025. Thermo-chromic Coating's Impact on Building Energy Efficiency via a Ladybug Tools Radiative Heat Modeller, *Sustainability in Energy and Buildings (SEB 2024)*, https://doi.org/10.1007/978-981-96-5069-9_22, 2025

Keya, A.K., Emmanuel, R. et al., 2025. Urban morphology-energy consumption nexus: A multi-criteria weather vulnerability analysis model for city planning, *Cleaner and Responsible Consumption*, 19, <https://doi.org/10.1016/j.clrc.2025.100366>

Fontana, M.S., Duenas, J., Emmanuel, R. Lopez Moreno, H. & Giancola, E., 2026. Analyzing Madrid's Microclimate: Exploring the Interaction Between Outdoor Thermal Comfort, Energy Efficiency Strategies, and Urban Form, *Construction, Energy, Environment and Sustainability, ICCEES 2025*, https://doi.org/10.1007/978-981-95-1818-0_7

Conference Proceedings

Keya, A.K., Maksheeva, A. & Popal, A., 2020. Environmental education in Oki Islands Geopark, Lahti Science Week 2020

Arshad, M., Thomson, C. & Boyle, F., 2023. Developing a visual decision support system for sustainable redevelopment of social housing, ARCOM Conference 2023,

Picone N., et al., 2023. Metodología SIG para el cálculo de zonas climáticas locales, XVII CONFIBSG,

Bala R.S. et al., 2025. A Contribution to Microclimatic Zone Classification (MCZ), ICUC 12,

Fontana, M.S. et al. 2025. Analyzing Madrid's Microclimate: Exploring the Interaction Between Outdoor Thermal Comfort, Energy Efficiency Strategies, and Urban Form, International Conference on Construction, Energy, Environment and Sustainability, 2025

Modjrian, N. et al. 2025. Heat stress prediction in Glasgow: Integration of historical data with Machine Learning models, ICUC 12,

Jalal, M. & Emmanuel, R., 2025. Assessing the Role of Landuse Landcover Transition Factors to Mitigate Heat Risk: A Study on Urban Area of Dhaka North City, ICUC 12,

Berlitz et al. 2025. Eco-hydrological characterisation of nature-based solutions (NbS) for urban heat island (UHI) effect regulation: assessing the long-term thermal performance of live pole drains (LPDs), ICUC 12,

Berlitz et al. 2025. Eco-hydrological characterisation of live pole drains (LPDs) for slope drainage and stability, EGU 2025,

Thesis Proceedings

MUrCS Proceedings 2020, <https://urn.fi/URN:ISBN:978-951-827-354-0>

MUrCS Proceedings 2021, <https://urn.fi/URN:ISBN:978-951-827-400-4>

MUrCS Proceedings 2022, <https://urn.fi/URN:ISBN:978-951-827-424-0>

MUrCS Proceedings 2023, <https://urn.fi/URN:ISBN:978-951-827-475-2>

MUrCS Proceedings, 2024, <https://urn.fi/URN:ISBN:978-951-827-497-4>