

Tematică de doctorat / PhD Research Themes – Ioja Ioan Cristian

Perioada 2026-2029

I. Tematică în limba română

1. Soluții bazate pe natură în contexte urbane diferite (Nature-Based Solutions – NBS):

- Analiza aplicării NBS în orașe cu morfologie urbană distinctă;
- Evaluarea beneficiilor ecologice, sociale și economice;
- Modele de adaptare climatică prin NBS.

2. Proiecții ale Legii Restaurării Naturii în orașele europene:

- Interpretarea cerințelor legislației europene și potențialul de integrare urbană;
- Scenarii de restaurare urbană și impactul lor asupra infrastructurii verzi;
- Analiza gradului de pregătire a orașelor europene pentru implementare.

3. Terenurile virane ca resursa urbană: modele de valorizare și regenerare

- Clasificarea terenurilor virane și identificarea utilităților posibile;
- Reutilizarea lor în scopuri ecologice, sociale sau economice;
- Rolul terenurilor virane în tranziția către orașe reziliente.

II. Themes in English

1. Nature-Based Solutions in Different Urban Backgrounds:

- Comparative assessment of NBS implementation across varied urban morphologies;
- Evaluation of ecological, social and economic benefits;
- Climate adaptation through NBS-driven planning.

2. Projections of the Nature Restoration Law in European Cities:

- Interpretation of EU requirements and integration potential;
- Urban restoration scenarios and impacts on green infrastructure;
- Readiness assessment of European cities for implementation.

3. Urban Vacant Land – Potential for Upgrading and Valorisation:

- Typology and mapping of vacant land;
- Reuse opportunities for ecological, social or economic purposes;
- The role of vacant spaces in resilient urban transitions.

Bibliografie / Bibliography

1. Andersson, E., Langemeyer, J., Borgström, S., McPhearson, T., Haase, D., Kronenberg, J., Barton, D.N., Davis, M., Naumann, S., Röschel, L., Baró, F., 2019. Enabling Green and Blue Infrastructure to Improve Contributions to Human Well-Being and Equity in Urban Systems. *Bioscience* 69, 566-574.
2. Artmann M., Kohler M., Meinel G., Gan J., Ioja I.C. (2019), [How smart growth and green infrastructure can mutually support each other — A conceptual framework for compact and green cities](#). *Ecological Indicators* 96: 10-22.
3. Badiu D.L., Ioja C.I., Pătroescu M., Breuste J., Artmann M., Niță M.R., Grădinaru S.R., Hossu C.A., Onose D.A. (2016), [Is urban green space per capita a valuable target to achieve cities' sustainability goals? Romania as a case study](#), *Ecological Indicators*, 70, 53-66
4. Breuste J., Artmann M., Ioja I.C., Qureshi S. (eds.), (2019) [Making Green Cities – Concepts, Challenges and Practice](#), Springer Press, Berlin
5. Breuste, J., Pauleit, S., Haase, D., Sauerwein, M., 2021. *Urban Ecosystems. Function, Management and Development*. Springer, Berlin.
6. European Commission (2023). *Nature Restoration Law – Proposal and Impact Assessment*.
7. Grădinaru S.R., Ioja I.C., Vanau G.O., Onose D.A. (2020) [Multi-dimensionality of land transformations: from definition to perspectives on land abandonment](#), *Carpathian Journal of Earth and Environmental Sciences* 15, 167 – 177.
8. Haase, D., Dushkova, D., 2025. Small spaces, big impact: Kindergartens as critical nodes in climate-resilient urban green infrastructure. *Urban Forestry & Urban Greening* 113, 129094.
9. Hossu C.A., Artmann M., Saito T., van Lierop M., Ioja C.I., Pauleit S. (2024) [Understanding residents' engagement for the protection of urban green spaces by enriching the value-belief-norm theory with relational values—A case study of Munich \(Germany\)](#). *People and Nature*: 1-18.
10. Hossu C.A., Ioja I.C., Onose D.A., Niță M.R., Popa A.M., Talabă O., Inostroza L. (2019), [Ecosystem services appreciation of urban lakes in Romania. Synergies and trade-offs between multiple users](#), *Ecosystem Services*, 37, 100937
11. Ioja I.C., Niță M.R., Hossu C.A., Onose D.A., Badiu D.L., Cheval S., Popa A.M., Mitincu C.G. (2020) [Soluții verzi pentru orașele din România](#), Ed. Ars Docendi, București
12. McPhearson, T., Cook, E.M., Berbes-Blazquez, M., Cheng, C.W., Grimm, N.B., Anderson, E., Barbosa, O., Chandler, D.G., Chang, H.J., Chester, M.V., Childers, D.L., Elser, S.R., Frantzeskaki, N., Grabowski, Z., Groffman, P., Hale, R.L., Iwaniec, D.M., Kabisch, N., Kennedy, C., Markolf, S.A., Matsler, A.M., McPhillips, L.E., Miller, T.R., Munoz-Erickson, T.A., Rosi, E., Troxler, T.G., 2022. A social-

- ecological-technological systems framework for urban ecosystem services. *One Earth* 5, 505-518.
13. Niță M.R. (2016), *Infrastructuri verzi – o abordare geografică ([Green infrastructures – a geographical approach](#))*, Ed. Etnologică, București
 14. Niță M.R., Onose D.A., Gavrilidis A.A., Badiu D.L., Năstase I.I. (2017), *Infrastructuri verzi pentru o planificare urbană durabilă*, Ed. Ars Docendi, București
 15. Pauleit, S., Ambrose-Oji, B., Andersson, E., Anton, B., Buijs, A., Haase, D., Elands, B., Hansen, R., Kowarik, I., Kronenberg, J., Mattijssen, T., Stahl Olafsson, A., Rall, E., van der Jagt, A.P.N., Konijnendijk van den Bosch, C., 2019. Advancing urban green infrastructure in Europe: Outcomes and reflections from the GREEN SURGE project. *Urban Forestry & Urban Greening* 40, 4-16.
 16. Pickett, S.T.A., Cadenasso, M.L., Childers, D.L., McDonnell, M.J., Zhou, W., 2016. Evolution and future of urban ecological science: ecology in, of, and for the city. *Ecosystem Health and Sustainability* 2, e01229.
 17. Pickett, S.T.A., Cadenasso, M.L., Grove, J.M., Boone, C.G., Groffman, P.M., Irwin, E., Kaushal, S.S., Marshall, V., McGrath, B.P., Nilon, C.H., Pouyat, R.V., Szlavecz, K., Troy, A., Warren, P., 2011. Urban ecological systems: Scientific foundations and a decade of progress. *Journal of Environmental Management* 92, 331-362.
 18. Raymond C.M., Frantzeskaki N., Kabisch N., Berry P., Breil M., Nita M.R., Geneletti D., Calfapietra C. (2017), [A framework for assessing and implementing the co-benefits of nature-based solutions in urban areas](#). *Environmental Science & Policy* 77: 15-24.