

Call for Papers

International Journal on Smart and Sustainable Cities

Special Issue on Science of Complex and Regenerative Cities

For more detail, please refer to
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Synopsis and Subject Coverage:

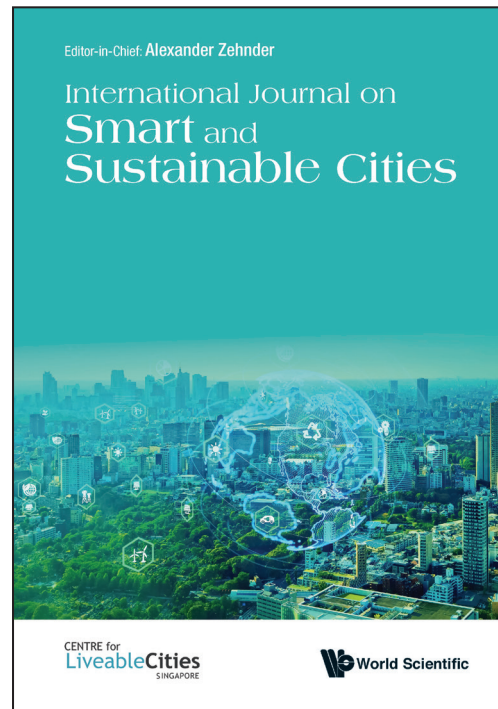
Developments, processes, interactions and life in cities today are increasingly volatile, uncertain, complex, and ambiguous (VUCA). Changes, expansions and evolutions in cities are increasingly intertwined with various urban elements and infrastructures, people who interact with them, and challenges posed by climate change, global trade disruptions, emerging technological innovations and more. The emerging interactions, relationships and flows that occur across multiple scales also increase the unpredictability of the trajectory of interventions, hence in turn leads to unintended consequences. An integrated systems approach that applies complexity science thinking and scientific methods to cities is therefore needed to examine the interdependencies of urban systems and scales, to make urban planning more successful for an adaptive, liveable, and sustainable future.

As cities evolve and grow, present-day demands require a paradigm shift in urban design and planning to satisfy the ever-changing and increasingly demanding lifestyles in a dynamic multi-stakeholder environment. It is no longer sufficient for cities to repair damaged ecosystems and compensate for their losses. Instead, cities need to shift towards adopting an integrative, cross-cutting multi-domain approach to achieve net-positivity in both environmental and social terms by creating a highly innovative urban space that adapts to the complex and dynamic challenges of the future. This requires building self-sustaining, regenerative cities that can improve both human and planetary health. Longstanding research on the use of science, technology and innovation for sustainable cities can now be taken a step further to develop a holistic understanding of the ecosystem dynamics of the human urban interaction.

This special issue aims to feature applied research on complexity science for adaptive and sustainable cities, and the science of regenerative cities. It aims to bring together academic researchers from around the world to share their scientific knowledge, novel research methodologies and insights on current and emerging urban challenges.

Papers may deal with, but not limited to, the following:

- Complexity science or Regenerative science applications to sustainable and adaptive city planning and design
- Use of complexity science methods to understand city patterns and/or system interactions
- Use of complexity science methods to pinpoint levers to optimize city solutions or alleviate city challenges
- Artificial intelligence, analytics, and data platforms for integrated urban planning



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- Application of progressive governance, digital humanities, multi-stakeholder co-created solutioning to address city challenges
- Science, frameworks, or innovations that enable physical, economic, and social regeneration of urban spaces and communities
- Net-positive, integrative, and self-sustaining development in cities, including on aspects of energy, urban greenery, mobility, planning, architecture, real estate, financing, governance, resource circularity, amongst many others

Manuscript Submission Information

This special issue is accepting submission. To submit a manuscript, please register and submit your paper online at: <https://www.editorialmanager.com/ijssc/default2.aspx?pg=login.asp&username=>

When making your submission, please choose the Special Issue entitled "Science of Complex and Regenerative Cities". A guide for authors and other relevant information for submission of manuscripts are available on the Author Guidelines page (<https://www.worldscientific.com/page/ijssc/submission-guidelines>). Submitted manuscripts should not have been published previously nor be under consideration for publication elsewhere.

Submissions will undergo the same strict double-blind peer-review process that is generally applied for the journal. Accepted papers will be published online continuously in the journal (as soon as accepted).