

**TEEMU MAKKONEN****CURRICULUM VITAE (SHORT)****CONTACT DETAILS**

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24.3.2026

**CURRENT POSITION**

12/2019– **Professor**  
 Karelian Institute, University of Eastern Finland

**WORKING EXPERIENCE**

08/2018–11/2019 **Research Director**  
 Karelian Institute, University of Eastern Finland

10/2016–07/2018 **Postdoctoral Research Fellow**  
 Institute for Advanced Social Research, University of Tampere

10/2014–09/2016 **Research Fellow – Marie Curie Fellowship**  
 School of Hospitality and Tourism Management, University of Surrey

01/2014–09/2014 **Assistant Professor**  
 Department of Border Region Studies, University of Southern Denmark

01/2013–12/2013 **Postdoctoral Researcher**  
 Pan-European Institute, Turku School of Economics at the University of Turku

09/2012–12/2012 **University Teacher** (part-time)  
 Pan-European Institute, Turku School of Economics at the University of Turku

07/2009–12/2012 **PhD Student**  
 Department of Geosciences and Geography, University of Helsinki

06/2008–06/2009 **Researcher**  
 Centre for Maritime Studies, University of Turku

**EDUCATION AND VISITING POSTS**

2020–2021 **Visiting Professor**  
 Faculty of Earth Sciences and Spatial Management, Nicolaus Copernicus University in Toruń

2019 **Title of Docent**  
 Faculty of Social Sciences and Business Studies, University of Eastern Finland
 

- Field: Cross-border economic development

2015 **Title of Docent**  
 Faculty of Science, University of Helsinki
 

- Field: Economic geography

2012 **PhD**  
 Faculty of Science, University of Helsinki
 

- Main subject: Economic geography

2008 **MSc**  
 Faculty of Mathematics and Natural Sciences, University of Turku
 

- Main subject: Human geography
- Secondary subjects: Contemporary history, Economics, and Statistics

**MEMBERSHIP IN EDITORIAL BOARDS AND COMMITTEES (SELECTED)**

- 2026– **Committee member**  
International Geographical Union’s commission (C24.34) “Marginalization, Globalization and Regional and Local Responses”
- 2026– **Member of the Faculty Council**  
Faculty of Social Sciences and Business Studies, University of Eastern Finland
- 2024– **Committee member**  
International Geographical Union’s commission (C24.16) “Geography of Digital Society and Connected World”
- 2020– **Committee member**  
Karelian Executive Committee of the Fennoscandian Green Belt
- 2017– **Member of the Editorial Board**  
*Bulletin of Geography. Socio-economic Series*
- 2017– **Member of the Editorial Board**  
*Management*
- 2016– **Member of the Editorial Board**  
*Fennia*
- 2016–2026 **Member of the Editorial Board**  
*International Journal of Knowledge-Based Development*
- 2024–2025 **External expert**  
Transition Strategy for Eastern and Southeast Finland’s Border Regions and Areas, OECD
- 2023 **Expert workshop member**  
Challenges for cohesion: Looking ahead to 2035, European Commission
- 2020–2022 **Member of the Organising Committee**  
Nordic Geographers Meeting 2022
- 2010–2012 **Committee member**  
Geographical Society of Finland

**MAJOR GRANTS**

- 2025 **Co-creating sustainable and competitive pathways in industrial carbon management for Finnish society (CO2CREATION)**  
Strategic Research Council of Finland, 420 000€ (WP Leader)
- 2025 **Regional cities and resilience**  
Ministry of Economic Affairs and Employment of Finland, 18 800€ (WP Leader)
- 2025 **East railway: Traffic forecast and socio-economic impact**  
Itärata Oy, 37 450€ (PI)
- 2024 **Rural economic security and vitality (TOTAL)**  
Ministry of Agriculture and Forestry of Finland, 156 500€ (PI)
- 2022 **Public financial flows to rural and urban areas (RAVIT)**  
Ministry of Agriculture and Forestry of Finland, 242 500€ (PI)
- 2021 **Smart shrinking in the North Karelian rural areas (ALKUVOIMA)**  
Rural Development Fund, 98 000 € (Project team member)

- 2021 **Smart shrinking in Finland (ÄLY)**  
Prime Minister's Office of Finland, 137 000€ (Project team member)
- 2020 **Effects of subsidized collaboration on spatial innovation capacity (COSPIN)**  
Business Finland, 127 500€ (WP Leader)
- 2020 **Adaptive and innovative countryside (SOMA)**  
Ministry of Agriculture and Forestry of Finland, 123 000€ (PI)
- 2019 **Quality of life measurement and methodology (ESPON QoL)**  
ESPON, 112 000€ (Project team member)
- 2014 **Cross-border regional innovation system integration (CRISI)**  
Marie Curie Fellowship, 221 000 € (Applicant)
- 2013 **A framework model on MNE's impact on global development challenges in emerging markets (MNEmerge)**  
FP7, 212 000 € (Deputy WP Leader)

#### SELECTED PUBLICATIONS

- Aldieri, L., S.R. Diriba, L. Esposito, **T. Makkonen** & P.C. Vinci (forthcoming). Innovation and happiness: Panel data evidence from 17 European countries. *Italian Economic Journal*. DOI: 10.1007/s40797-025-00336-3
- Mitze, T. & **T. Makkonen** (forthcoming). Funding innovation, spreading growth? Spatial analysis of the public RDI funding–regional productivity transmission chain. *Economics of Innovation and New Technology*. DOI: 10.1080/10438599.2025.2533188
- Molica, F., F. Cappellano & **T. Makkonen** (forthcoming). Rethinking regional innovation systems in the age of de-globalization. *Tijdschrift voor Economische en Sociale Geografie*. DOI: 10.1111/tesg.70077
- Molica, F., F. Cappellano, **T. Makkonen** & R. Hassink (forthcoming). Embedding the mission-oriented approach in smart specialization strategies: An exploratory assessment. *European Planning Studies*. DOI: 10.1080/09654313.2026.2642390
- Lehtonen, O. & **T. Makkonen** (2026). Itärata, saavutettavuus ja sosioekonominen kehitys itäisessä Suomessa. *SPATIA Raportteja* 2026:1.
- Makkonen, T.** & M. Kattilakoski (2026). The development of entrepreneurship in rural policy over time: Evidence from Finland, 1991–2027. *Journal of Rural Studies* 123: 104026.
- Pyykkönen, S., N. Koski, **T. Makkonen**, T. Hirvonen & J. Kortelainen (2026). Seutukaupunkien uudistumiskyvykkyys: Selvitys uudistumiskyvyn tekijöistä ja mittaamisesta. *Työ- ja elinkeinoministeriön julkaisuja* 2026:1.
- Zheng, Y., Y. Zhang, **T. Makkonen**, M. Li, N. Mou & Y. Liu (2026). Rethinking the community detection for tourist mobility networks: Special structures and their implications for tourism. *Information Technology & Tourism* 28: 12.
- Gretzinger, S., B. Leick & **T. Makkonen** (eds.) (2025). *Sustainability and the Rural Enterprise Economy: Economic, Environmental and Social Transformations*. Routledge, Abingdon.
- Jiang, Y., **T. Makkonen**, N. Mou & L. Han (2025). A multi-layer approach to assess urban innovation districts. *Applied Spatial Analysis and Policy* 18: 84.
- Lehtonen, O. & **T. Makkonen** (2025). Maaseutualueiden väestökehitys ja väestöennusteet. *Maa- ja metsätalousministeriön julkaisuja* 2025:7.

- Lehtonen, O., **T. Makkonen**, H. Vihinen, T. Hirvonen, S. Rautiainen & O. Voutilainen (2025). Mapping rural–urban differences in state expenditures with geospatial methods: Explorative spatial data analysis from Finland. *Journal of Rural Studies* 120: 103881.
- Makkonen, T.** & P. Kahila (2025). From urban policy concept to practice in the periphery: Smart shrinkage in peripheral Finland. In Bański, J. (ed.), *Research Companion to the Periphery and Peripheral Regions*, 228–242. Edward Elgar, Cheltenham.
- Makkonen, T.** & S. Rautiainen (2025). Mapping social enterprises in Finland: Rural-urban differences? In Gretzinger, S., B. Leick, & T. Makkonen (eds.), *Sustainability and the Rural Enterprise Economy: Economic, Environmental and Social Transformations*, 9–23. Routledge, Abingdon.
- Makkonen, T.**, Hirvonen, T., Lehtonen, O., Lemponen, V., Rautiainen, S., Vihinen, H. & Voutilainen, O. (2025). Julkisten rahavirtojen kohdentuminen maaseutu- ja kaupunkialueille. *SPATIA Raportteja* 2025:1.
- Makkonen, T.**, O. Lehtonen, T. Inkinen, H. Vihinen & O. Voutilainen (2025). Socio-economic impacts of different categories of state expenditure in urban and rural regions. *Regional Studies* 59: 2495323.
- Zheng, Y., Z. Liu, Y. Zhang, **T. Makkonen**, Y. Jiang, K. Jiang & Y. Liu (2025). The morphology across tourism destinations: A case study in China. *Journal of Geographical Sciences* 35, 2467–2489.
- Bzhalava, L. & **T. Makkonen** (2024). Regional capabilities to tackle climate change: Setting a research agenda for big data driven tools. In Calabrò, F., L. Madureira, F. Morabito & M. Piñeira Mantiñán (eds.), *Networks, Markets & People. Lecture Notes in Networks and Systems* 1187, 30–37. Springer, Cham.
- Cappellano, F., Molica, F. & **T. Makkonen** (2024). Missions and Cohesion Policy: Is there a match? *Science and Public Policy* 51, 360–374.
- Ghinoi, S., B. Steiner & **T. Makkonen** (2024). The role of proximity in stakeholder networks for Smart Specialisation: A Sparsely Populated Area case study. *Innovation: The European Journal of Social Science Research* 37, 421–441.
- Inkinen, T., M. Heikkonen, **T. Makkonen** & S. Rautiainen (2024). Multilayered spatial categories in tourism marketing and branding. *Journal of Destination Marketing & Management* 31: 100867.
- Makkonen, T.** (2024). Cross-border labour mobility and markets: Issues and insights from b-solutions. *Journal of Advanced Studies on Borders, Cooperation and Development* 2024, 22–37.
- Makkonen, T.** & T. Inkinen (2024). Inclusive smart cities? Technology-driven urban development and disabilities. *Cities* 154: 105334.
- Makkonen, T.** & T. Mitze (2024). The geography of innovation in times of crisis: A comparison of rural and urban RDI patterns during COVID-19. *Geografiska Annaler: Series B, Human Geography* 106, 96–118.
- Makkonen, T.**, N. Vartiainen, D. Rauhut & S. Rautiainen (2024). Local government expenditure and quality of life in Finnish municipalities. *Review of Regional Research* 44, 457–478.
- Makkonen, T.** & A.M. Williams (2024). Cross-border tourism and innovation system failures. *Annals of Tourism Research* 105: 103735.
- Mitze, T & **T. Makkonen** (2024). Resilience of rural businesses in times of crisis: Firm survival during the COVID-19 pandemic in Finland. *International Journal of Entrepreneurship and Innovation* 25, 76–89.

- Mou, N., S. Bian, Y. Wang, L. Zhang, Y. Zheng, **T. Makkonen** & T. Yang (2024). “A bite of China”: A network analysis of foodie tourists in Chongqing, China. *Journal of Geo-information Science* 26, 408–423.
- Zheng, Y., Y. Zhang, N. Mou, **T. Makkonen**, M. Li & Y. Liu (2024). Selection biases in crowdsourced big data applied to tourism research: An interpretive framework. *Tourism Management* 102: 104874.
- Aldieri, L., B. Bruno, **T. Makkonen** & C.P. Vinci (2023). Environmental innovations, geographically mediated knowledge spillovers and economic and environmental performance. *Resources Policy* 81: 103423.
- Cappellano, F., A. Rizzo, **T. Makkonen**, I.G. Anversa & G. Cantafio (2023). Exploring senses of place and belonging in the Finnish, Italian and US craft beer industry: A multiple case study. *Journal of Cultural Geography* 40, 64–90.
- Corrente, S., A. Garcia-Bernabeu, S. Greco & **T. Makkonen** (2023). Robust measurement of innovation performances in Europe with a hierarchy of interacting composite indicators. *Economics of Innovation and New Technology* 32, 305–322.
- Makkonen, T.** (2023). Outshopping abroad: Cross-border shopping tourism and the competitive advantage of borders. In Timothy, D. & A. Gelbman (eds.), *Routledge Handbook of Borders and Tourism*, 269–280. Routledge, Abingdon.
- Makkonen, T.** & T. Inkinen (2023). Benchmarking the vitality of shrinking rural regions in Finland. *Journal of Rural Studies* 97, 334–344.
- Makkonen, T.** & T. Mitze (2023). Geo-political conflicts, sanctions, and international knowledge flows: EU-Russia collaboration during the Ukraine crisis. *World Economy* 46, 2926–2949.
- Makkonen, T.** & T. Mitze (2023). Vive le Tour!? Estimating the place-based benefits of hosting the Tour de France. *Journal of Regional Science* 63, 1131–1161.
- Mitze, T. & **T. Makkonen** (2023). Can large-scale RDI funding stimulate post-crisis recovery growth? Evidence for Finland during COVID-19. *Technological Forecasting and Social Change* 186: 122073.
- Mou, N., J. Wang, Y. Zheng, L. Zhang, **T. Makkonen**, Q. Jiang & T. Yang (2023). Understanding tourists’ travel behavior before, during and after the trip with data from social media platforms. *Transactions in GIS* 27, 1043–1067.
- Mou, N., J. Wang, Y. Zheng, L. Zhang, **T. Makkonen**, T. Yang & J. Niu (2023). Flowers as attractions in urban parks: Evidence from social media. *Urban Forestry & Urban Greening* 82: 127874.
- Aldieri, L., **T. Makkonen** & C.P. Vinci (2022). Do research and development and environmental knowledge spillovers facilitate meeting sustainable development goals for resource efficiency? *Resources Policy* 76: 102603.
- Cappellano, F., **T. Makkonen**, N. Dotti, A. Morisson & A. Rizzo (2022). Where innovation meets directionality: An index to measure regional readiness to deal with societal challenges. *European Planning Studies* 30, 1549–1576.
- Cappellano, F., C. Sohn, **T. Makkonen** & V. Kaisto (2022). Bringing borders back into cross-border regional innovation systems: Functions and dynamics. *Environment and Planning A* 54, 1005–1021.
- Hanell, T., **T. Makkonen** & D. Rauhut (2022). Guest editorial: Geographies of well-being and quality of life. *Social Indicators Research* 164, 1–10.
- Kahila, P., T. Hirvonen, A. Jolkkonen, A. Kurvinen, V. Lemponen, **T. Makkonen**, S. Rautiainen et al. (2022). Mitä on älykäs sopeutuminen? *Valtioneuvoston selvitys- ja tutkimustoiminnan julkaisusarja* 2022:42.

- Leick, B., S. Gretzinger & **T. Makkonen** (eds.) (2022). *The Rural Enterprise Economy*. Routledge, Abingdon.
- Luukkonen, J., M. Weckroth, T. Kempainen, **T. Makkonen** & H. Sirviö (2022). Urbanisation and the shifting conditions of the state as a territorial-political community: A study of the geographies of political efficacy. *Transactions of the Institute of British Geographers* 47, 409–425.
- Makkonen, T.** (2022). Board diversity and firm innovation: A meta-analysis. *European Journal of Innovation Management* 25, 941–960.
- Makkonen, T.**, T. Inkinen & S. Rautiainen (2022). Mapping spatio-temporal variations of shrinkage in Finland. *Fennia – International Journal of Geography* 200, 137–156.
- Makkonen, T.**, A. Jolkkonen, A. Kurvinen & V. Lemponen (2022). Sopeutuvat innovatiiviset maaseudut. *SPATIA Raportteja* 2022:2.
- Makkonen, T.** & T. Mitze (2022). Can research and development (R&D) funding stimulate recovery growth? *Business Finland Policy Brief* 2022: 1.
- Merisalo, T. & **T. Makkonen** (2022). Bourdieusian e-capital perspective enhancing digital capital discussion in the realm of third level digital divide. *Information Technology & People* 35, 231–252.
- Mou, N., Z. Liu, Y. Zheng, **T. Makkonen**, T. Yang & L. Zhang (2022). Cycling in Tibet: An analysis of tourists' spatiotemporal behavior and infrastructure. *Tourism Management* 88: 104418.
- Rodríguez, I., A. Mantecón, A.M. Williams, **T. Makkonen** & Y.R. Kim (2022). Originality: The holy grail of tourism research. *Journal of Travel Research* 61, 1219–1232.
- Saarinen, E. & **T. Makkonen** (2022). Entrepreneurship in rural areas: Locational choices and embeddedness. In Leick, B., S. Gretzinger & T. Makkonen (eds.), *The Rural Enterprise Economy*, 162–177. Routledge, Abingdon.
- Aldieri, L., **T. Makkonen** & C.P. Vinci (2021). Spoils of innovation? Employment effects of R&D and knowledge spillovers in Finland. *Economics of Innovation and New Technology* 30, 356–370.
- Ghinoi, S., B. Steiner, **T. Makkonen** & R. Hassink (2021). Smart specialization strategies in the periphery: A data triangulation approach to governance issues and practices. *Regional Studies* 55, 402–413.
- Korhonen, J., A. Koskivaara, **T. Makkonen**, N. Yakusheva & A. Malkamäki (2021). Resilient cross-border regional innovation systems for sustainability? A systematic review of drivers and constraints. *Innovation: The European Journal of Social Science Research* 34, 202–221.
- Makkonen, T.** & T. Inkinen (2021). Systems of environmental innovation: Sectoral and technological perspectives on ballast water treatment systems. *WMU Journal of Maritime Affairs* 20, 81–98.
- Makkonen, T.** & P. Kahila (2021). Vitality policy as a tool for rural development in peripheral Finland. *Growth and Change* 52, 706–726.
- Sotarauta, M., **T. Makkonen**, S. Moisio & H. Kurikka (2021). Suomen aluekehityksen skenaariot 2040. *Työ- ja elinkeinoministeriön julkaisu* 2021:60.
- Weidenfeld, A., **T. Makkonen** & N. Clifton (2021). From interregional knowledge networks to systems. *Technological Forecasting and Social Change* 171: 120904.
- Zheng, Y., N. Mou, L. Zhang, **T. Makkonen** & T. Yang (2021). Chinese tourists in Nordic countries: An analysis of spatio-temporal behavior using geo-located travel blog data. *Computers, Environment and Urban Systems* 85: 101561.

- Aldieri, L., **T. Makkonen** & C.P. Vinci (2020). Environmental knowledge spillovers and productivity: A patent analysis for large international firms in the energy, water and land resources fields. *Resources Policy* 69: 101877.
- Cappellano, F. & **T. Makkonen** (2020). Cross-border regional innovation ecosystems: The role of non-profit organizations in cross-border cooperation at the US–Mexico border. *GeoJournal* 85, 1515–1528.
- Cappellano, F. & **T. Makkonen** (2020). The proximity puzzle in cross-border regions. *Planning Practice & Research* 35, 283–301
- Hjaltadóttir, R.E., **T. Makkonen** & T. Mitze (2020). Inter-regional innovation cooperation and structural heterogeneity: Does being a rural, or border region, or both, make a difference? *Journal of Rural Studies* 74, 257–270.
- Makkonen, T.**, Gretzinger, S., R.E. Hjaltadóttir, Lorentzen, A. & Shearmur, R. (2020). Guest editorial: Innovation in peripheries and borderlands. *Journal of Rural Studies* 78, 531–533.
- Makkonen, T.** & P. Kahila (2020). Vitality policy as a tool to attract in-migration to rural regions. *Siirtolaisuus – Migration* 46(1), 11–14.
- Makkonen, T.** & B. Leick (2020). Locational challenges and opportunities for SMEs in border regions. *European Planning Studies* 28, 2078–2098.
- Mitze, T. & **T. Makkonen** (2020). When interaction matters: The contingent effects of spatial knowledge spillovers and internal R&I on firm productivity. *Journal of Technology Transfer* 45, 1088–1120.
- Mou, N., R. Yuan, T. Yang, H. Zhang, J. Tang & **T. Makkonen** (2020). Exploring spatio-temporal changes of city inbound tourism flow: The case of Shanghai, China. *Tourism Management*. 76: 103955.
- Mou, N., Y. Zheng, **T. Makkonen**, T. Yang, J. Tang & Y. Song (2020). Tourists' digital footprint: The spatial patterns of tourist flows in Qingdao, China. *Tourism Management* 81: 104151.
- Rho, S., M. Lee & **T. Makkonen** (2020). The role of open innovation platforms in facilitating user-driven innovation in innovation ecosystems. *International Journal of Knowledge-Based Development* 11, 288–304.
- Williams, A.M., I. Rodríguez & **T. Makkonen** (2020). Innovation and smart destinations: Critical insights. *Annals of Tourism Research* 83: 102930.
- Makkonen, T.** & T. Mitze (2019). Deconstructing the education-innovation-development nexus in the EU-28 using panel causality and poolability tests. *Journal of the Knowledge Economy* 10, 516–549.
- Makkonen, T.**, A. Jolkkonen, P. Kahila, V. Lemponen & P. Forsberg (2019). Puhtia Pohjois-Karjalaan: Kuntien elinvoimaselvitys. *SPATIA Raportteja* 2019:1.
- Rodríguez, I., **T. Makkonen** & A.M. Williams (2019). Originality peer review assessment in tourism journals: Critical perspective of key gatekeepers. *Annals of Tourism Research* 77, 1–11.
- Tang, J., A.M. Williams, **T. Makkonen** & J. Jiang (2019). Are different types of inter-firm linkages conducive to different types of tourism innovation? *International Journal of Tourism Research* 21, 901–913.
- Inkinen, T., M. Merisalo & **T. Makkonen** (2018). Variations in the adoption of and willingness to use e-services in three differentiated urban areas. *European Planning Studies* 26, 950–968.
- Makkonen, T.**, T.J. Hokkanen, T. Morozova & M. Suharev (2018). A social network analysis of cooperation in forest, mining and tourism industries in the Finnish–Russian cross-border region: Connectivity, hubs and robustness. *Eurasian Geography and Economics* 59, 685–707.

- Makkonen, T.** & T. Inkinen (2018). Sectoral and technological systems of environmental innovation: The case of marine scrubber systems. *Journal of Cleaner Production* 200, 110–121.
- Makkonen, T.**, M. Merisalo & T. Inkinen (2018). Containers, facilitators, innovators? The role of cities and city employees in innovation activities. *European Urban and Regional Studies* 25, 106–118.
- Makkonen, T.** & A.M. Williams (2018). Developing survey metrics for analysing cross-border proximity. *Geografisk Tidsskrift – Danish Journal of Geography* 118, 114–121.
- Makkonen, T.**, A.M. Williams & A. Habersetzer (2018). Foreign board members and firm innovativeness: An exploratory analysis for setting a research agenda. *Corporate Governance* 18, 1057–1073.
- Makkonen, T.**, A.M. Williams, T. Mitze & A. Weidenfeld (2018). Science and technology cooperation in cross-border regions: A proximity approach with evidence for Northern Europe. *European Planning Studies* 26, 1961–1979.
- Makkonen, T.**, A.M. Williams, A. Weidenfeld & V. Kaisto (2018). Cross-border knowledge transfer and innovation in the European neighbourhood: Tourism cooperation at the Finnish-Russian border. *Tourism Management* 68, 140–151.
- Hjaltadóttir, R.E., **T. Makkonen** & N.K. Sørensen (2017). Cross-border innovation cooperation: Partner selection, national borders and knowledge bases. In Karlsson, C., M. Andersson & L. Bjerke (eds.): *Geographies of Growth: Innovations, Networks and Collaborations*, 330–353. Edward Elgar, Cheltenham.
- Makkonen, T.** (2017). North from here: The collaboration networks of Finnish metal music genre superstars. *Creative Industries Journal* 10, 104–118.
- Makkonen, T.**, A. Weidenfeld & A.M. Williams (2017). Cross-border regional innovation system integration: An analytical framework. *Tijdschrift voor Economische en Sociale Geografie* 108, 805–820.
- Muller, E., A. Zenker, M. Hufnagl, J-A. Héraud, E. Schnabl, **T. Makkonen** & H. Kroll (2017). Smart specialisation strategies and cross-border integration of regional innovation systems: Policy dynamics and challenges for the Upper Rhine. *Environment and Planning C* 35, 684–702.
- Makkonen, T.** (2016). Cross-border shopping and tourism marketing: The case of Southern Jutland, Denmark. *Scandinavian Journal of Hospitality and Tourism* 16, S36–S50.
- Makkonen, T.** (2016). Measuring cross-border regional integration with composite indicators: The Oresund integration index. In Jeremic, V., Z. Radojicic & M. Dobrota (eds.): *Emerging Trends in the Development and Application of Composite Indicators*, 1–19. IGI Global, Hershey.
- Makkonen, T.** & T. Mitze (2016). Scientific collaboration between 'old' and 'new' member states: Did joining the European Union make a difference? *Scientometrics* 106, 1193–1215.
- Makkonen, T.** & S. Repka (2016). The innovation inducement impact of environmental regulations on maritime transport: A literature review. *International Journal of Innovation and Sustainable Development* 10, 69–86.
- Makkonen, T.** & S. Rohde (2016). Cross-border regional innovation systems: Conceptual backgrounds, empirical evidence and policy implications. *European Planning Studies* 24, 1623–1642.
- Makkonen, T.** & A. Weidenfeld (2016). Knowledge-based urban development of cross-border twin cities. *International Journal of Knowledge-Based Development* 7, 389–406.
- Makkonen, T.** & A.M. Williams (2016). Border region studies: The structure of an 'offbeat' field of regional studies. *Regional Studies, Regional Science* 3, 693–705.

- Makkonen, T.** (2015). National innovation system capabilities among leader and follower countries: Widening gaps or global convergence? *Innovation and Development* 5, 113–129.
- Makkonen, T.** (2015). Northern comfort: Geographical scale, locality and the evolution of networks in the Finnish metal music genre. *Area* 47, 334–340.
- Makkonen, T.** (2015). Scientific collaboration in the Danish–German border region of Southern Jutland–Schleswig. *Geografisk Tidsskrift – Danish Journal of Geography* 115, 27–38.
- Makkonen, T. & T. Inkinen** (2015). Geographical and temporal variation of regional development and innovation in Finland. *Fennia – International Journal of Geography* 193, 134–147.
- Yigitcanlar, T., T. Inkinen & **T. Makkonen** (2015). Does size matter? Knowledge-based development of second-order city-regions in Finland. *disP – The Planning Review* 51(3), 62–77.
- Makkonen, T.** (2014). National innovation system dynamics in East Central Europe, the Baltic Countries and Russia. In Zhuplev, A. & K. Liuhto (eds.): *Geo-Regional Competitiveness in Central and Eastern Europe, the Baltic Countries, and Russia*, 32–56. IGI Global, Hershey.
- Makkonen, T.** (2014). Tales from the thousand lakes: Placing the creative network of metal music in Finland. *Environment and Planning A* 46, 1586–1600.
- Makkonen, T. & T. Inkinen** (2014). Innovation quality in knowledge cities: Empirical evidence of innovation award competitions in Finland. *Expert Systems with Applications* 41, 5597–5604.
- Makkonen, T. & T. Inkinen** (2014). Spatial scaling of regional strategic programmes in Finland: A qualitative study of clusters and innovation systems. *Norsk Geografisk Tidsskrift – Norwegian Journal of Geography* 68, 216–227.
- Makkonen, T.** (2013). Government science and technology budgets in times of crises. *Research Policy* 42, 817–822.
- Makkonen, T.** (2013). Huomioita innovaatiotutkimuksesta suomenkielisissä yhteiskuntatieteellisissä sarjajulkaisuissa. *Terra – Geographical Journal* 125, 151–156.
- Makkonen, T. & T.J. Hokkanen** (2013). ICT innovation and local economy: Mobile game as a tourist attraction. *Scandinavian Journal of Hospitality and Tourism* 13, 257–268.
- Makkonen, T. & T. Inkinen** (2013). Innovative capacity, educational attainment and economic development in the European Union: Causal relations and geographical variations. *European Planning Studies* 21, 1958–1976.
- Makkonen, T., T. Inkinen & J. Saarni** (2013). Innovation types in the Finnish maritime cluster. *WMU Journal of Maritime Affairs* 12, 1–15.
- Makkonen, T., M. Salonen & S. Kajander** (2013). Island accessibility challenges: Rural transport in the Finnish archipelago. *European Journal of Transport and Infrastructure Research* 13, 274–290.
- Makkonen, T. & A. Saurama** (2013). Business intelligence and the role of external information in small- and medium-sized enterprises of the Finnish marine industry. *International Journal of Innovation and Regional Development* 5, 266–278.
- Makkonen, T. & R.P. van der Have** (2013). Benchmarking regional innovation performance: Composite measures and direct innovation counts. *Scientometrics* 94, 247–262.
- Merisalo, M., **T. Makkonen** & T. Inkinen (2013). Knowledge-intensive and creative teleworkers' relation to e-capital in the Helsinki Metropolitan Area. *International Journal of Knowledge-Based Development* 4, 204–221.

- Makkonen, T.** (2012). Geography of innovation in Europe and Finland: Empirical studies on innovation indicators and regional development. *Department of Geosciences and Geography A 20. (academic dissertation)*
- Makkonen, T.** (2012). Peripheral university region and knowledge-based development: The case of Joensuu. *International Journal of Knowledge-Based Development 3*, 216–233.
- Makkonen, T. & B. Lin** (2012). Continuing vocational training and innovation in Europe. *International Journal of Innovation and Learning 11*, 325–338.
- Paarlahti, A., **T. Makkonen**, T. Kaivola & J. Taina (2012). Interaktiiviset älytaulut maantieteen opetuksessa. *Terra – Geographical Journal 124*, 265–270.
- Makkonen, T.** (2011). Innovation and regional socio-economic development: Evidence from the Finnish local administrative units. *Bulletin of Geography. Socio-economic Series 15*, 27–42.
- Kalli J., T. Karvonen & **T. Makkonen** (2009). Sulphur content in ships bunker fuel in 2015: A study on the impacts of the new IMO regulations on transportation costs. *Publications of the Ministry of Transport and Communications 2009*: 31.
- Karvonen, T. & **T. Makkonen** (2009). Aluskustannukset 2009. *Merenkululaitoksen julkaisuja 2009*: 3.
- Kajander, S., M. Huovinen, A. Keltaniemi & **T. Makkonen** (2008). Saariston yhteysalusliikenteen mallintaminen. *Turun yliopiston Merenkulkualan koulutus- ja tutkimuskeskuksen julkaisuja B 152*.
- Makkonen, T. & T.J. Hokkanen** (2009). Nature protection and tourism support balanced development in the Green Belt of Fennoscandia. *Transactions of the Karelian Research Centre of Russian Academy of Sciences 2009(2)*, 115–125.
- Makkonen, T.**, A. Saurama & P. Sundberg (2008). Ulkoisen liiketoimintatiedon hallinta ja kehittämistarpeet suomalaisissa pienissä ja keskisuurissa meriteollisuusalan yrityksissä. *Turun yliopiston Merenkulkualan koulutus- ja tutkimuskeskuksen julkaisuja B 160*.
- Hokkanen, T.J., R. Heikkilä, **T. Makkonen**, B. Kashevarov, R. Nykänen & E. Ieshko (2007). The emergence of new approaches in east-west relations: Combining nature protection and local development along the Green Belt of Fennoscandia. In Lähtenmäki, M. (ed.): *The Flexible Frontier: Change and Continuity in Finnish-Russian Relations*, 206–230. Kikumora Publications, Helsinki.
- Makkonen, T.**, R. Helminen & J. Yliskylä-Peuralahti (2007). Saariston Rengastien pyöräilyolosuhteiden kehittämissuunnitelma. *Turun yliopiston Merenkulkualan koulutus- ja tutkimuskeskuksen julkaisuja B 141*.