

CV

Personal data

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Work:

Principal Investigator, PredAqua PNRR project
Experimental Food Webs Research Group
Institute of Biological Research, Cluj-Napoca, Romania

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Languages

native Hungarian, fluent English and Italian, medium German and basic French

Education

1999 PhD in biology, Eötvös University, Budapest, Hungary
1996 MSc in biology, Eötvös University, Budapest, Hungary

Current position

2024 – 2026 Principal Investigator (PredAqua project) and Group Leader (Experimental Food Webs Research Group), Institute of Biological Research, Babes-Bolyai University, Cluj-Napoca, Romania

Previous positions

2022 – 2024 Researcher, Department of Chemistry, Life Sciences and Environmental Sustainability, University of Parma, Italy
2021 – 2021 Visiting Researcher, Democracy Institute, Central European University, Budapest, Hungary
2013 – 2021 Scientific Adviser, Centre for Ecological Research, Budapest, Hungary (2019-2020 Director, Balaton Limnological Institute, Tihany, Hungary)
2008 – 2013 Principal Investigator, The University of Trento & The Microsoft Research – Center for Computational and Systems Biology, Trento, Italy
2007 – 2008 Associate Professor, Hungarian Natural History Museum, Budapest
2003 – 2006 Assistant Professor, Institute of Ecology and Botany, Vácrátót, Hungary
2002 – 2003 Assist. Prof., Dept. Plant Taxonomy and Ecology, Eötvös University, Budapest
1999 – 2002 Assistant Professor, Department of Genetics, Eötvös University, Budapest

Prizes, fellowships

2024 – 2025 Non-residential Fellow, Corvinus University Institute for Advanced Study, Budapest (10 months)
2019 Prize of the Hungarian Academy of Sciences

2016 – 2017 Fellow, Wissenschaftskolleg zu Berlin Institute for Advanced Study, Berlin, Germany (10 months)
 2013 – 2014 Szentágothai Professor at University of Pannonia, Veszprém, Hungary (1 year)
 2003 – 2008 Branco Weiss Fellow, Society in Science, Zürich, performed at Collegium Budapest Institute for Advanced Study (5 years)
 2002 – 2003 Postdoctoral Fellow, Hungarian Scientific Research Fund (1 year)
 2001 Junior Prize of the Hungarian Academy of Sciences
 2000 – 2003 Bolyai Research Fellow of the Hungarian Academy of Sciences (3 years)
 2000 – 2001 Junior Fellow, Collegium Budapest Institute for Advanced Study, Budapest, Hungary (10 months)

International experience

2025-2026: Visiting Professor, University of Parma, Italy
 2024-2025: Non-Residential Fellow, Corvinus IAS, Budapest, Hungary
 2022: 3 months, Aarhus University, Department of Agroecology, Flakkebjerg (Denmark)
 2016-2017: Fellow, Wissenschaftskolleg zu Berlin IAS, Germany
 2016-: Associated Researcher, Stazione Zoologica Anton Dohrn, Napoli, Italy
 2015-: each year, International Summer School on Ecological Networks, Parma, Italy
 2014, 2016: Summer School on Network Analysis, Universidad de Antofagasta, Chile
 2010-2013: NESCent working group participant (Origin of sociality), Durham, NC, USA
 2005-2007: NCEAS working group participant (Natural security), Santa Barbara, CA, USA
 2003: 2 weeks, ESF InterACT Exchange Grant, CSIC IIM, Vigo, Spain
 2001: 6 weeks, ESF LINKECOL Exchange Grant, CPB, Imperial College, Silwood Park, UK

Selected invited talks

2025: Center for Inner Asian Studies, Indiana University, IN, USA
 2024: Interdisciplinary College course, Günne, Germany
 2024: Vrije Universiteit, Amsterdam
 2023: University of Göttingen, Germany
 2023: MARE workshop, University of Evora, Portugal
 2022: Aarhus University, Department of Biology, Denmark
 2021: Ecological Security Forum, Nanjing Normal University, on ZOOM
 2020: Sao Paulo Tech Week, on ZOOM
 2020: Global Lake Marathon, on ZOOM
 2019: Budapest Water Summit, roundtable discussion
 2019: Associazione Italiana di Oceanologia e Limnologia, invited plenary, Bologna, Italy
 2017: DynaTrait workshop, Hannover, Germany
 2017: Potsdam University, Alex Wacker / Ursula Gaedke lab
 2015: The Genome Analysis Centre, Norwich, UK
 2014: International Summer School on Complex Networks, Bertinoro, Italy
 2013: The 4th Food Web Symposium, Giessen, Germany

2013: European Space Agency, Topical Team meeting on stress, Roma, Italy
2012: Ecological Networks workshop, Student Conference, Bangalore, India
2012: Kavli Royal Society International Scientific Centre, Chicheley Hall, UK
2012, 2013, 2017: Institute of Statistical Sciences, Academia Sinica, Taipei, Taiwan
2011: Scuola Internazionale Superiore di Studi Avanzati (SISSA), Trieste, Italy
2011: Parmenides Foundation, Pullach/München, Germany
2010: US Office for Naval Research Global workshop, Edinburgh, UK
2009: US Office for Naval Research Global workshop, Istanbul, Turkey
2009: IIS World Congress of Sociology, invited plenary, Yerevan, Armenia
2008: Rajiv Gandhi Centre for Biotechnology, Trivandrum, India
2004: Harmful Algal Blooms world conference, invited plenary, Cape Town, South Africa

Teaching (only full courses)

Networks in ecology (2025, University of Cape Town, South Africa), on-line
Networks in ethology and ecology (2022-2026, University of Parma, Italy)
Ecological modelling (2022-2024, University of Parma, Italy)
Limnoecology (2014-2015, University of Pannonia, Veszprém, Hungary)
Landscape ecology (2006, Eötvös University, Budapest; 2006, University of Debrecen, Hungary)
Community ecology (2004-2005, Eötvös University, Budapest)
Genetics (2002-2003, Eötvös University, Budapest)
Biometry (2002, Eötvös University, Budapest)
Organisation of food webs (2001-2008, 2017-2019, Eötvös University, Budapest)
Quantitative genetics (1998-1999, Eötvös University, Budapest)

Conference organization

2025: 5th International Conference on Community Ecology, Budapest, Hungary, co-organizer
2023: 4th International Conference on Community Ecology, Trieste, Italy, co-organizer
2021: 3rd International Conference on Community Ecology, on-line, chair
2017: 1st International Conference on Community Ecology, Budapest, Hungary, chair
2012: 2nd Society for Conservation Biology Asia, Bangalore, India, symposium organizer
2011: 7th European Conference in Ecological Modelling, Riva del Garda, Italy, chair
2009: The Unexpected Link workshop, CEU Center for Network Science, co-organizer

Functions

2026- Chair of the Board of Trustees, MISSZIÓ2050: a Sustainable Strategy for Hungary

- 2026- Scientific Advisor, Tetranomics SE, Köln, Germany
- 2020- Advisory Board member, European Network of Research and Innovation Centres and Hubs in Latin America and the Caribbean
- 2015- Advisory board member, Regional Centre for Information and Scientific Development, Budapest, Hungary
- 2014- Advisory Board member, Japan-EU Partnership in Innovation, Science and Technology

Editorial service

- 2015 - 2019 editor, Scientific Reports
- 2014 - editor, Food Webs
- 2013 - editor, Journal of Complex Networks
- 2012 - 2017 associate editor, Ecological Complexity
- 2007 - editor, Ecology Letters 2007-
- 2007 - editor, Current Conservation
- 2006 - editor, Community Ecology (Editor-in-Chief since 2016)

Panel services panel member and chair, National Science Center, Poland

- 2015 - panel member, European Research Council LS8 StG
- 2014 - 2020 panel member, Lithuanian Research Council
- 2006 -

Regular reviewer for NSF, ESF, Czech Science Foundation, Leverhulme trust, Strasbourg University IAS, Collegium Budapest IAS, Wissenschaftskolleg zu Berlin IAS, FWO, USA-Israel bilateral grants, Humboldt Stiftung, Volkswagen Stiftung, NERC, NRF South Africa, DFG, La Caixa, Romanian Scientific Council, BioDiversa, SRESFG Georgia

Selected media appearances

- 2026 Central European University, Borderless Knowledge
<https://www.youtube.com/watch?v=k4XxW9Ee4AM>
- 2025 Deep Adaptation Club
<https://www.youtube.com/watch?v=K-3ewnILvBY>
- 2024 Forbes Hungary Selfmade list 2024, top 25
<https://forbes.hu/legyel-jobb/25-magyar-selfmade-sikersztori-bagi-laszlo/>
- 2024 Sziget Festival roundtable talk
https://szigetfestival.com/hu/timetable#wZkFilbQwF_artist-2000594
- 2022 Friderikusz podcast
<https://www.youtube.com/watch?v=5VdjXlK6Sy4&t=11s>
- 2022 UNICEF Climate Heroes YouTube
[Klímahősök - Milyen állapotban vannak a vizeink? | UNICEF Magyarország - YouTube](https://www.youtube.com/watch?v=Jve4CEKVcSE&app=desktop)
- 2020 WWF
<https://www.youtube.com/watch?feature=share&v=Jve4CEKVcSE&app=desktop>
- 2013 RAI3 FameLab Italy presentation

2012 Videolecture on a talk given at Kavli Center:

http://videolectures.net/complexnetworks2012_london/

2011 Reports in L'Adige, Il Trentino and RTTR on the 7th ECEM conference

2011 Italian journal Le Scienze, interview on computational ecology (researcher of the month)

2006 Austrian Radio ORF, interview (with Ina Zwerger) on „Society in Science”

Full list of publications:

<https://scholar.google.com/citations?user=4ZWGp24AAAAJ&hl=it>

Books:

Lecca, P., Laurenzi, I. and Jordán, F. 2013. Deterministic versus Stochastic modeling in biochemistry and systems biology. Woodhead Publishing, Philadelphia, USA, pp. 376.

Books (edited):

Jordán F., Scotti M. and Lencioni V. (Eds), 2011. Ecological hierarchy from the genes to the biosphere. Book of Abstracts, 7th European Conference on Ecological Modelling, 30 May - 2 June 2011, Riva del Garda (Trento, Italy). 151 pp.

Jordán, F. and Jørgensen, S.E. (Eds.) 2012. Models of the ecological hierarchy from molecules to the ecosphere. Elsevier, Amsterdam.

Ortiz, M. and Jordán, F. (Eds.) 2021. Marine coastal ecosystems modelling and conservation: Latin American experiences. Springer Verlag.

Book chapters:

Jordán, F. 2001. Ecosystem flow networks and community control. In: Ecosystems and Sustainable Development III., Villacampa, Y., Brebbia, C.A. and Uso, J.L. (Eds.), WIT Press, Southampton, pp. 771-780.

Jordán, F. 2003. Quantifying landscape connectivity: key patches and key corridors. In: Ecosystems and Sustainable Development IV., Tiezzi, E., Brebbia, C.A. and Uso, J.L. (Eds.), WIT Press, Southampton, pp. 883-892.

Jordán, F. 2005. Topological key players in communities: the network perspective. In: Ecosystems and Sustainable Development V., Tiezzi, E., Brebbia, C. A., Jørgensen, S. and Almorza Gomar, D. (eds.), WIT Press, Southampton, pp. 87-96.

Jordán, F. 2005. Topological constraints on the dynamics of wasp-waist ecosystems. In: Velikova, V. and Chipev, N. (Eds.): Large-scale disturbances (regime shifts) and recovery in aquatic ecosystems: challenges for management towards sustainability. UNESCO-Roste/BAS, pp. 58-67.

Jordán, F. 2007. Topology and vulnerability of the London underground system. In: Friemel, T. N. (Ed.), Applications of Social Network Analysis, UVK Verlagsgesellschaft mbH, Konstanz, pp. 153-161.

Kun, Á., Pongor, S., Jordán, F. and Szathmáry, E. 2007. Catalytic propensity of amino acids and the origins of the genetic code and proteins. In: Barbieri, M. (Ed.), Codes of Life, pp. 39-58, Springer Verlag, Berlin.

Jordán, F. 2008. Network analysis: linking parts to the whole in nature and society. In: Sagarin, R. and Taylor, T. (Eds.): Natural Security – a Darwinian Approach to a Dangerous World, University of California Press, Berkeley and Los Angeles, 240-260.

Jordán, F., Baranyi, G. and Ciocchetta, F. 2010. A hierarchy of networks spanning from individual organisms to ecological landscapes. In: Estrada, E., Fox, M., Higham, D.J., Oppo, G.-L. (Eds.), *Network Science: Complexity in Nature and Technology*, pp. 165-184, Springer Verlag, Berlin.

Jordán, F. 2011. Maintaining connectivity: topological considerations on landscape digraphs. In: Liu, J., Hull, V., Morzillo, A.T., Wiens, J.A. (Eds.): *Sources, Sinks, and Sustainability across Landscapes*, Cambridge University Press, Cambridge, pp. 258-272.

Jordán, F., Livi, C.M. and Lecca, P. 2012. Structural and dynamical heterogeneity in ecological networks. In: *Systemic Approaches in Bioinformatics and Computational Systems Biology: Recent Advances*, Lecca, P., Tulpan, D. and Rajaraman, K. (eds.), IGI Global, Hershey, PA, USA, pp. 141-162.

Navia, A.F., Cortes, E., Jordán, F., Cruz-Escalona, V. and Mejia-Falla, P. 2012. Changes to marine food webs caused by fishing. *InTech Publisher*, 417-452.

Jordán, F. and Jörgensen, S.E. 2012. Preface. In: Jordán, F. and Jörgensen, S.E. (Eds.) *Models of the ecological hierarchy from molecules to the ecosphere*. Elsevier, Amsterdam, pp. xi-xii.

Jörgensen, S.V. and Jordán, F. 2012. Introduction. In: Jordán, F. and Jörgensen, S.E. (Eds.) *Models of the ecological hierarchy from molecules to the ecosphere*. Elsevier, Amsterdam, pp. xxiii-xxxi.

Rocchini, D., Balkhenol, N., Delucchi, L., Ghisla, A., Hauffe, H., Imre, A., Jordán, F., Nagendra, H., Neale, D., Ricotta, C., Varotto, C., Vernesi, C., Wegmann, M., Wohlgemuth, T. and Neteler, M. 2012. Spatial algorithms applied to landscape diversity estimate by remote sensing. In: Jordán, F. and Jörgensen, S.E. (Eds.) *Models of the ecological hierarchy from molecules to the ecosphere*. Elsevier, Amsterdam, pp. 391-411.

Ciocchetta, F., Prandi, D., Forlin, M. and Jordán, F. 2012. A network model of the hierarchical organization of supra-individual biosystems. In: Jordán, F. and Jörgensen, S.E. (Eds.) *Models of the ecological hierarchy from molecules to the ecosphere*. Elsevier, Amsterdam, pp. 517-532.

Jörgensen, S.V. and Jordán, F. 2012. Conclusive remarks about hierarchy theory and multi-levels models. In: Jordán, F. and Jörgensen, S.E. (Eds.) *Models of the ecological hierarchy from molecules to the ecosphere*. Elsevier, Amsterdam, pp. 547-548.

Scotti, M., Hartvig, M., Winemiller, K.O., Li, Y., Jauker, F., Jordán, F., Dormann, C.F. 2017. Trait-based and process-oriented modeling in ecological network dynamics. In: *Adaptive Food Webs*. Moore, J.C., de Ruiter, P.C., McCann, K.S. and Wolters, V. (Eds.), Cambridge University Press, pp. 228-256.

Jordán, F., Scotti, M. and Yule, C.M. 2017. Food web simulations: stochastic variability and systems-based conservation. In: *Adaptive Food Webs*. Moore, J.C., de Ruiter, P.C., McCann, K.S. and Wolters, V. (Eds.), Cambridge University Press, pp. 342-351.

Scotti, M. and Jordán, F. 2017. An individual-based simulation model to link population, community and metacommunity dynamics. In: *Adaptive Food Webs*. Moore, J.C., de Ruiter, P.C., McCann, K.S. and Wolters, V. (Eds.), Cambridge University Press, pp. 352-371.

Ortiz, M., Hermosillo-Núñez, B.B. and Jordán, F. 2020. Trophic networks and ecosystem functioning. In: Antarctic Seaweeds. Gómez, I. and Huovinen, P. (Eds.), Springer, Cham, pp. 309-335.

Hermosillo-Núñez, B.B., Ortiz, M., Jordán, F., Endrédi, A. 2021. Macroscopic properties and keystone species complexes in kelp forest ecosystems along the north-central Chilean coast. In: Ortiz, M., Jordán, F. (Eds.) Marine coastal ecosystems modelling and conservation: Latin American experiences. Springer Verlag.

Ortiz, M., Jordán, F. 2021. Modelling aim the conservation of coastal marine ecosystem in Latin America. In: Ortiz, M., Jordán, F. (Eds.) Marine coastal ecosystems modelling and conservation: Latin American experiences. Springer Verlag.

Scientific papers:

Jordán, F. and Molnár, I. 1999. Reliable flows and preferred patterns in food webs. *Evolutionary Ecology Research*, 1:591-609.

Jordán, F., Takács-Sánta, A. and Molnár, I. 1999. A reliability theoretical quest for keystones. *Oikos*, 86:453-462.

Jordán, F. 2000. A reliability-theory approach to corridor design. *Ecological Modelling*, 128:211-220.

Jordán, F. 2000. Is the role of trophic control larger in a stressed ecosystem? *Community Ecology*, 1:139-146.

Jordán, F. 2001. Seasonal changes in the positional importance of components in the trophic flow network of the Chesapeake Bay. *Journal of Marine Systems*, 27:289-300.

Szathmáry, E., Jordán, F. and Pál, Cs. 2001. Can genes explain biological complexity? *Science (Perspective)*, 292:1315-1316.

Jordán, F. 2001. Strong threads and weak chains? - a graph theoretical estimation of the power of indirect effects. *Community Ecology*, 2:17-20.

Jordán, F. 2001. Adding function to structure - comments on Palmarola landscape connectivity. *Community Ecology*, 2:133-135.

Jordán, F. 2001. Trophic fields. *Community Ecology*, 2:181-185.

Jordán, F., Scheuring, I. and Vida, G. 2002. Species positions and extinction dynamics in simple food webs. *Journal of Theoretical Biology*, 215:441-448.

Jordán, F. and Scheuring, I. 2002. Searching for keystones in ecological networks. *Oikos*, 99:607-612.

Jordán, F., Scheuring, I. and Molnár, I. 2003. Persistence and flow reliability in simple food webs. *Ecological Modelling*, 161:117-124.

- Jordán, F., Báldi, A., Orci, K.M., Rácz, I. and Varga, Z. 2003. Characterizing the importance of habitat patches and corridors in maintaining the landscape connectivity of a *Pholidoptera transsylvanica* (Orthoptera) metapopulation. *Landscape Ecology*, 18:83-92.
- Jordán, F., Liu, W.-C. and van Veen, F.J.F. 2003. Quantifying the importance of species and their interactions in a host-parasitoid community. *Community Ecology*, 4:79-88.
- Jordán, F. 2003. Comparability: the key to the applicability of food web research. *Applied Ecology and Environmental Research*, 1:1-18.
- Jordán, F. 2003. On the functional trophic height of whiting. *Ecological Indicators*, 3:223-225.
- Jordán, F. and Scheuring, I. 2004. Network Ecology: topological constraints on ecosystems dynamics. *Physics of Life Reviews*, 1:139-172.
- Jávor, B., Jordán, F. and Török, J. 2005. A comparative sink web analysis of two birds in two habitats: trophic structure, functionality, aggregation and system-level indication. *Community Ecology*, 6:13-22.
- Jordán, F., Liu, W.-C. and Wyatt, T. 2005. Topological constraints on the dynamics of wasp-waist ecosystems. *Journal of Marine Systems*, 57:250-263.
- Jordán, F., Liu, W.-C. and Davis, A.J. 2006. Topological keystone species: measures of positional importance in food webs. *Oikos*, 112:535-546.
- Jordán, F., Scheuring, I., Vasas, V. and Podani, J. 2006. Architectural classes of aquatic food webs based on link distribution. *Community Ecology*, 7:81-90.
- Vasas, V. and Jordán, F. 2006. Topological keystone species in ecological interaction networks: considering link quality and non-trophic effects. *Ecological Modelling*, 196:365-378.
- Jordán, F. and Wyatt, T. 2006. A graph theory examination of the global spreading hypothesis. *African J. Marine Science*, 28:371-374.
- Field, B., Jordán, F. and Osbourne, A. 2006. Tansley Review: First encounters – Deployment of defense-related natural products by plants. *New Phytologist*, 172:193-207.
- Liu, W.-C., Lin, W.H., Davis, A. J., Jordán, F., Yang, H.T. and Hwang, M.J. 2007. A network perspective on the topological importance of enzymes and their phylogenetic conservation. *BMC Bioinformatics*, 8:121.
- Vasas, V., Lancelot, C., Rousseau, V. and Jordán, F. 2007. Eutrophication and overfishing in temperate nearshore pelagic food webs: a network perspective. *Marine Ecology Progress Series*, 336:1-14.
- Jordán, F., Benedek, Zs. and Podani, J. 2007. Quantifying positional importance in food webs: a comparison of centrality indices. *Ecological Modelling*, 205:270-275.
- Benedek, Zs., Jordán, F. and Báldi, A. 2007. Topological keystone species complexes in ecological interaction networks. *Community Ecology*, 8:1-8.

- Scotti, M., Podani, J. and Jordán, F. 2007. Weighting, scale dependence and indirect effects in ecological networks: a comparative study. *Ecological Complexity*, 4:148-159.
- Jordán, F., Magura, T., Tóthmérész, B., Vasas, V. and Ködöböcz, V. 2007. Carabids (*Coleoptera: Carabidae*) in a forest patchwork: a connectivity analysis of the Bereg Plain landscape graph. *Landscape Ecology*, 22: 1527-1539.
- Jordán, F. 2008. Predicting target selection by terrorists: A network analysis of the 2005 London underground attacks. *International Journal for Critical Infrastructures*, 4: 206-214.
- Wey, T., Blumstein, D.T., Shen, W. and Jordán, F. 2008. Social network analysis of animal behaviour: a promising tool for the study of sociality. *Animal Behaviour*, 75: 333-344.
- Jordán, F., Okey, T.A., Bauer, B. and Libralato, S. 2008. Identifying important species: a comparison of structural and functional indices. *Ecological Modelling*, 216: 75-80.
- Chen, H.W., Liu, W.C., Davis, A.J., Jordán, F., Hwang, M.J. and Shao, K.T. 2008. Network position of hosts in food webs and their parasite diversity. *Oikos*, 117: 1847-1855.
- Bhadra, A., Jordán, F., Sumana, A., Deshpande, S. and Gadagkar, R. 2009. A comparative social network analysis of wasp colonies and classrooms: linking network structure to functioning. *Ecological Complexity*, 6: 48-55.
- Jordán, F. 2009. Keystone species in food webs. *Philosophical Transactions of the Royal Society, London, series B*, 364:1733-1741.
- Vasas, V., Magura, T., Jordán, F. and Tóthmérész, B. 2009. Graph theory in action: evaluating planned highway tracks based on connectivity measures of a fragmented forest landscape. *Landscape Ecology*, 24:581-586.
- Jordán, F., Liu, W.-C. and Mike, Á. 2009. Trophic field overlap: a new approach to quantify keystone species. *Ecological Modelling*, 220:2899-2907.
- Jordán, F. and Osváth, Gy. 2009. The sensitivity of food web topology to temporal data aggregation. *Ecological Modelling*, 220:3141-3146.
- Móréh Á., Jordán, F., Szilágyi, A. and Scheuring, I. 2009. Overfishing and regime shifts in minimal food web models. *Community Ecology*, 10:236-243.
- Jordán, F. 2009. Children in time: community organisation in social and ecological systems. *Current Science*, 97:1579-1585.
- Valentini, R. and Jordán, F. 2010. CoSbiLab Graph: the network analysis module of CoSbiLab. *Environmental Modelling and Software*, 25:886-888.
- Scotti, M. and Jordán, F. 2010. Relationships between centrality indices and trophic positions in food webs. *Community Ecology*, 11:59-67.
- Orlóci, L., Podani, J. and Jordán, F. 2010. Community Ecology: ten years are gone. Editorial. *Community Ecology*, 11:1-4.

- Mazza, T., Romanel, A. and Jordán, F. 2010. Estimating the divisibility of complex biological networks by sparseness indices. *Briefings in Bioinformatics*, 3:364-374.
- Nguyen, T.P. and Jordán, F. 2010. A quantitative approach to study indirect effects among disease proteins in the human protein interaction network. *BMC Systems Biology*, 4:103.
- Bauer, B., Jordán, F. and Podani, J. 2010. Node centrality indices in food webs: rank orders versus distributions. *Ecological Complexity*, 7:471-477.
- Liu, W.C., Chen, H.-W., Jordán, F., Lin, W.-H. and Liu, W.-J. 2010. Quantifying the interaction structure and the topological importance of species in food webs: a signed digraph approach. *J. Theor. Biol.*, 267:355-362.
- Benedek, Zs., Nagy, A., Rácz, I.A., Jordán, F., and Varga, Z. 2011. Landscape metrics as indicators: quantifying habitat network changes of a bush-cricket *Pholidoptera transsylvanica* in Hungary. *Ecological Indicators*, 11:930-933.
- Kahramanogullari, O., Lynch, J. and Jordán, F. 2011. CoSBI LIME: a language interface for stochastic dynamical modelling in ecology. *Environmental Modelling and Software*, 26:685-687.
- Baranyi, G., Saura, S., Podani, J. and Jordán, F. 2011. Contribution of habitat patches to network connectivity: redundancy and uniqueness of topological indices. *Ecological Indicators*, 11:1301-1310.
- Livi, C.M., Jordán, F., Lecca, P. and Okey, T.A. 2011. Identifying key species in ecosystems with stochastic sensitivity analysis. *Ecological Modelling*, 222:2542-2551.
- Nguyen, T.P., Liu, W.C. and Jordán, F. 2011. Inferring pleiotropy by network analysis: linked diseases in the human PPI network. *BMC Systems Biology*, 5:179.
- Jordán, F., Scotti, M. and Priami, C. 2011. Process algebra-based models in systems ecology. *Ecological Complexity*, 8:357-363.
- Kahramanoğullari, O., Jordán, F. and Priami, C. 2012. Composability: perspectives in ecological modeling. *Lecture Notes in Computer Science*, 6479:136-148.
- Jordán, F., Gjata, N., Shu Mei and Yule, C.M. 2012. Simulating food web dynamics along a gradient: quantifying human influence. *PLoS ONE* 7(7): e40280.
- Lai, S.M., Liu, W.C., and Jordán, F. 2012. On the centrality and uniqueness of species from the network perspective. *Biology Letters*, 8:570-573.
- Gjata, N., Scotti, M. and Jordán, F. 2012. The strength of simulated indirect interaction modules in a real food web. *Ecological Complexity*, 11:160-164.
- Jordán, F. and Scotti, M. 2012. From C:P ratios to polar meta-ecosystems. Editorial. *Ecological Modelling*, special issue, 245:1-2.
- Vaggi, F., Dodgson, J., Bajpai, A., Chessel, A., Jordán, F., Sato, M., Carazo-Salas, R.E. and Csikász-Nagy, A. 2012. Linkers of cell polarity and cell cycle regulation in the fission yeast protein interaction network. *PLoS Computational Biology*, 8(10): e1002732.

- Jordán, F., Nguyen, T.P. and Liu, W.C. 2012. Studying protein-protein interaction networks: a systems view on disease. *Briefings in Functional Genomics*, els035.
- Scotti, M., Gjata, N., Livi, C.M. and Jordán, F. 2012. Dynamical effects of weak trophic interactions in a stochastic food web simulation. *Community Ecology*, 13:230-237.
- Ortiz, M., Levins, R., Campos, L., Berrios, F., Campos, F., Jordán, F., Hermosillo, B., Gonzalez, J. and Rodriguez, F. 2013. Identifying keystone trophic groups in benthic ecosystems: implications for fisheries management. *Ecological Indicators*, 25:133-140.
- Bhadra, A. and Jordán, F. 2013. Cryptic successors unrevealed even by network analysis: A comparative study of two paper wasp species. *Network Biology*, 3: 54-66.
- Sridhar, H., Jordán, F., Shanker, K. 2013. Species importance and resilience in a heterospecific foraging association network. *Oikos*, 122: 1325-1334.
- Nieto-Navarro, J.T., Zetina-Rejón, M., Arreguín-Sánchez, F., Palacios-Salgado, D.S. and Jordán, F. 2013. Seasonal changes in fish assemblages of soft bottom habitats along the eastern coast of the mouth of the Gulf of California. *Journal of Applied Ichthyology*, 29: 1-7.
- Scotti, M., Ciocchetta, F. and Jordán, F. 2013. Social and landscape effects on food webs: a multi-level network simulation model. *Journal of Complex Networks*, 1: 1-23.
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