

## Full CV



### 1. Personal Information

**Name:** Carlos António Bastos de Morais Guerra

**Nationality:** Portuguese

**Institution:**

German Centre for Integrative Biodiversity Research (iDiv) Halle-Jena-Leipzig  
Martin Luther University Halle-Wittenberg

**E-Mail:** carlos.guerra@idiv.de

**URL:** <http://tiny.cc/CarlosGuerra> (September 2019 - h-index:14 | i10-index:18 | 1027 citations)

**Children:** 1 child (7 years old)

### 2. Professional Experience

#### 2.1. Academic positions

Job title	Institution	From	To
Co-lead of the Global Soil Biodiversity Observation Network	Group on Earth Observations - Biodiversity Observation Network (GEO BON)	2018	Today
Post-Doc Researcher	Institute of Biology, Martin Luther University Halle-Wittenberg / German Centre for Integrative Biodiversity Research (iDiv) Halle-Jena-Leipzig	2016	Today
Scientist	Group on Earth Observations - Biodiversity Observation Network (GEO BON)	2016	2018
Fellow for the ECA Assessment Expert for the TSU on Data and knowledge	Intergovernmental Platform on Biodiversity and Ecosystem Services (IPBES)	2015	2018
PhD Researcher	Institute of Mediterranean Agricultural and Environmental Sciences	2012	2015
Researcher	Sustainability Assessment Unit / Joint Research Center - European Commission	2014	2014
Lead Researcher	GeoLab / Fundação Fernão Magalhães para o Desenvolvimento	2010	2013
Research Fellow	Polytechnic Institute of Viana do Castelo	2006	2008
Research Fellow	Hydrobiology Laboratory of the University of Santiago de Compostela	2006	2006

#### 2.2. Lecturing

Disciplines	Institution	From	To
Seminars in Ecological Theory	Institute of Biology   Leipzig University	2019	2019
Nature conservation (including field work on species and community monitoring)	Institute of Biology   Martin Luther University Halle-Wittenberg	2016	2017
Remote Sensing; Geographic Information Systems I; Geographic Information Systems II; Project Management and GIS Applications; Topography and Cartography; River Basins Management and Planning; Spatial Analysis and Modeling; Spatial Interpolation; Landscape Analysis	Agrarian Superior School   Polytechnic Institute of Viana do Castelo	2008	2013
Topography; GIS; Spatial analysis; Land planning and management	Secondary School of Ponte de Lima	2009	2010

#### 2.3. Private Contracts and Consulting

Job title	Institution	From	To
Scientific Consultant	Polytechnic Institute of Viana do Castelo	2013	2014
Scientific Consultant	Ponte de Lima Municipality	2010	2012
Scientific Consultant	BLB Engenharia	2009	2010
Landscape conservation manager	Ponte de Lima Municipality	2009	2010

### 3. Education

Education	Institution	From	To
PhD in Interdisciplinary Management of Landscape "A spatially explicit framework to assess soil erosion prevention vulnerability: contributions for ecosystem service mapping and management in mediterranean land use systems", PhD Thesis, 158 pp. [ <a href="https://dspace.uevora.pt/rdpc/handle/10174/16432">https://dspace.uevora.pt/rdpc/handle/10174/16432</a> ]	University of Évora & Technical University of Lisbon	2012	2015
Intensive PhD course in European Landscapes in Transition: the Interplay between Local and Global Drivers	IALE Europe		2013
Postgraduate Specialization Course in Remote Sensing and Landscape Analysis	Salzburg University		2010
Postgraduate Course in Environmental and Landscape Integrated Management	Polytechnic Institute of Viana do Castelo-Technology and Management School		2007
Specialization Course in Stochastic Spatial Processes: point processes and geostatistics	Girona University		2007
Graduation in Environmental Engineering and Rural Resources	Polytechnic Institute of Viana do Castelo-Agrarian Superior School	2004	2006
Specialization Course in Functional Ecology	Universidad de Barcelona		2006
Specialization Course in Requalification of Fluvial Ecosystems	Universidade de Santiago de Compostela		2006
Pedagogic course for professional development - CCP: EDF 446010/2007 DN	Formação & Gestão S.A.		2005
Bachelor in Environmental Engineering and Rural Resources	Polytechnic Institute of Viana do Castelo-Agrarian Superior School	2001	2004

### 4. Funding in National and International Projects

Project	Managed budget	Project type	Role
European assessment of soil functions - 2018	-	Internal funding	Co-Lead
iSBio – International Soil Biogeography Consortium	-	Internal funding	Co-Lead
Soil Biodiversity and Ecosystem Function	10.000 €	iDiv Fast Track	Lead
Global Soil Biodiversity and Ecosystem Function Dynamics	160.000 €	iDiv Flexpool	Lead
Global Soil Biodiversity and Ecosystem Function Dynamics	7.500 €	iDiv Fast Track	Lead
ECOPOTENTIAL: improving future ecosystem benefits through earth observations	280.000 €	H2020 EU Project	WP Co-leader
Mapping and Assessment of Ecosystems and their Services	-	JRC EU Project	Collaborator
Land Use Integrated Sustainability Assessment Modelling Platform	-	JRC EU Project	Collaborator
PEGASUS: Public Ecosystem Goods and Services from land management: unlocking the synergies	180.000 €	H2020 EU Project	Task leader
ATILA: Transition pathways: Assessing innovation in farm management strategies	-	FCT National Project	Collaborator
Regional and national analysis of environmental risks	25.000 €	National Project	Team leader
PROTEC GEORISK - Avaliação dos riscos naturais, tecnológicos e mistos na região do Alto Minho	85.000 €	Regional Project	Project leader
EBONE: European Biodiversity Observation Network	-	FP7 EU Project	Collaborator
BIO_SOS: Biodiversity Multi-source Monitoring System: From space to species	-	FP7 EU Project	Task leader
SIMBioN: Sistema de Monitorização da Biodiversidade do Norte de Portugal (winner of the 2011 Sustainable North Award)	60.000 €	Regional Project	WP leader
BIODIV_GNP: Infra-estrutura de dados espaciais sobre recursos genéticos Norte de Portugal-Galiza	120.000 €	POCTEP Iberia Project	WP leader
TRANSNATURA: Elaboração de cartografia de ocupação do solo e habitats para o Parque Nacional Peneda Gerês	-	POCTEP Iberia Project	WP leader

## 5. Peer Reviewed Publications

### On-going work:

1. **Guerra** C.A., Heintz-Buschart A, Sikorski J, Chatzinotas A, Guerrero-Ramírez N, Cesarz S, Beaumelle L, Rillig M, Maestre FT, Delgado-Baquerizo M, Buscot F, Overmann J, Patoine G, Phillips HRP, Winter M, Wubet T, Küsel K, Bardgett R, Cameron EK, Cowan D, Grebenc T, Marín C, Orgiazzi A, Singh BK, Wall DH, Eisenhauer N. Blind spots in global soil biodiversity and ecosystem function research. Nature Communications [in review]
2. **Guerra** C.A., Delgado-Baquerizo M, Duarte E, Marigliano O, Görgen C, Maestre FT, Eisenhauer N. Global projections of the soil microbiome in the Anthropocene. Nature Climate Change [in review]
3. Morán-Ordóñez A, Gil-Tenab A, Cáceres M, Duanea A, **Guerra** C.A., Geijzendorffere I, Fortin MJ, Brotons L. Future impact of climate extremes in the Mediterranean: Soil erosion projections when fire and extreme rainfall meet. Land Degradation and Development. [in review]
4. Delgado-Baquerizo M, **Guerra** CA, Cano-Díaz C, Egidi E, Wang J, Eisenhauer N, Singh BK, Maestre FT, Warming enhances the prevalence of soil-borne pathogens worldwide. Science. [in review]
5. Rosa I, Andy P, Alkemade R, Chaplin-Kramer R, Ferrier S, **Guerra** CA, Hurt G, Him H, Leadley P, Martins I, Popp A, Schippe A, van Vuuren D, Pereira H, Towards a new generation of integrated global scenarios and models of biodiversity and ecosystem services. Global Ecology and Biogeography. [in Review]
6. Rosa I, **Guerra** C.A. Pathways of human development threaten biomes' protection and their remaining natural vegetation. Global Change Biology [in review]
7. **Guerra** C.A., Rosa I.M., Wolf F., Valentini E., Filipponi F., Karger D., Eisenhauer N. Global vulnerability of soil ecosystems to erosion. Land Degradation and Development [in review]
8. Kleemann J, Schröter M, Bagstad KJ, Kuhlicke C, Kastner T, Fridman D, Schulp CJE, Wolff S, Martínez-López J, Koellner T, Arnhold S, Martín-López B, Marques A, Lopez-Hoffman L, Liu J, Kissinger M, **Guerra** CA, Bonn A. Quantifying interregional flows of multiple ecosystem services – a case study for Germany. Global Environmental Change [in review]

### Scientific Papers:

1. Thakur MP, Phillips HRP, Brose U, de Vries F, Lavelle P, Loreau M, Mathieu J, Mulder C, Van der Putten W, Rillig MC, Wardle D, Bach E, Bartz M, Bennett J, Briones MJI, Brown G, Decaëns T, Eisenhauer N, Ferlian O, **Guerra** CA, König-Ries B, Orgiazzi A, Ramirez KS, Russell D, Rutgers M, Wall D, Cameron EK. (accepted) Toward an integrative understanding of soil biodiversity. Biological Reviews.
2. **Guerra** C.A., Pereira H., Rosa I.M.D. (accepted) Change vs Stability: are protected areas particularly pressured by global land cover change? Landscape Ecology
3. Phillips HRP, **Guerra** C.A., Bartz M, Briones M, Brown G, Ferlian O, Gongalsky K, Krebs J, Orgiazzi A, Schwarz B, Bach E, Bennett J, Brose U, Decaëns T, Vries F, König-Ries B, Loreau M, Mathieu J, Mulder C, van der Putten W, Ramirez K, Rillig MC, Russell D, Rutgers M, Thakur M, Wall DH, Wardle D, Data Providers, Cameron E, Eisenhauer N. (accepted) Global distribution of earthworm diversity. Science
4. Leberger R, Rosa I, Wolf F, **Guerra** CA, Pereira H (accepted) Global patterns of forest loss across IUCN categories of protected areas. Biological Conservation.
5. Eisenhauer N, **Guerra** CA. 2019. Global maps of soil-dwelling nematode worms. Nature. DOI: 10.1038/d41586-019-02197-0
6. Koellner T, Bonn A, Arnhold S, Bagstad KJ, Fridman D, **Guerra** C.A., Kastner T, Kissinger M, Kleemann J, Kuhlicke C, Liu J, López-Hoffman L, Marques A, Martín-López B, Schulp CGE, Wolff S, Schröter M. 2019. Guidance for assessing interregional ecosystem service flows. Ecological Indicators (in press)
7. **Guerra** C.A., Pendleton L, Drakou EG, Proença V, Appeltans W, Domingos T, Geller G, Giamberini M, Gill M, Hummel H, Imperio S, McGeoch M, Provenzale A, Serral I, Strith A, Turak E, Vihervaara P, Ziemba A, Pereira HM. 2019. Finding the essential: Improving conservation monitoring across scales. Global Ecology and Conservation 18: e00601. DOI: 10.1016/j.gecco.2019.e00601
8. Cameron E, Martins I, Lavelle P, Mathieu J, Tedersoo L, Bharam M, Gottschall F, **Guerra** C.A., Hines J, Patoine G, Siebert J, Winter M, Cesarz S, Ferlian O, Kreft H, Lovejoy T, Montanarella L, Orgiazzi A, Pereira H, Phillips H, Settele J, Wall D, Eisenhauer N. 2019. Global mismatches in aboveground and belowground biodiversity. Conservation Biology 1–16. DOI: 10.1111/cobi.13311
9. Geijzendorffer IR, Beltrame C, Chazee L, Gaget E, Galewski T, Guelmami A, Perennou C, Popoff N, **Guerra** C.A., Leberger R, Jalbert J, Grillas P, 2019. A more effective Ramsar Convention for the conservation of Mediterranean wetlands. Frontiers in Ecology and Evolution 7, 21

10. Eisenhauer N, Bonn A, A. **Guerra** C.A. 2019. Recognizing the quiet extinction of invertebrates. Nature Communications 10: 50. DOI: 10.1038/s41467-018-07916-1
11. Giling DP, Beaumelle L, Phillips HRP, Cesarz S, Eisenhauer N, Ferlian O, Gottschall F, **Guerra** C.A., Hines J, Sendek A, Siebert J, Thakur MP, Barnes AD. 2019. A niche for ecosystem multifunctionality in global change research. Global Change Biology 1–12. DOI: 10.1111/gcb.14528
12. Cameron EK, Martins IS, Lavelle P, Mathieu J, Tedersoo L, Gottschall F, **Guerra** C.A., Hines J, Patoine G, Siebert J, Winter M, Cesarz S, Delgado-Baquerizo M, Ferlian O, Fierer N, Kreft H, Lovejoy TE, Montanarella L, Orgiazzi A, Pereira HM, Phillips HRP, Settele J, Wall DH, Eisenhauer N, 2018. Global gaps in soil biodiversity data. Nature Ecology & Evolution 6–7. doi:10.1038/s41559-018-0573-8
13. Kim H., Rosa I, Alkemade R, Leadley P, Hurtt G, Popp A, Van Vuuren D, Anthoni P, Arneth A, Baisero D, Caton E, Chaplin-Kramer R, Chini L, de Palma A, di Fulvio F, Di Marco M, Espinoza F, Ferrier S, Fujimori S, Gonzalez R, Gueguen M, **Guerra** C.A., Harfoot M, Harwood T, Hasegawa T, Haverd V, Havlik P, Hellweg S, Hill S, Hirata A, Hoskins A, Janse J, Jetz W, Johnson J, Krause A, Leclere D, Martins I, Matsui T, Merow C, Obersteiner M, Ohashi H, Poulter B, Purvis A, Quesada B, Rondinini C, Schipper A, Sharp R, Takahashi K, Thuiller W, Titeux N, Visconti P, Ware C, Wolf F, Pereira H, 2018. A protocol for an intercomparison of biodiversity and ecosystem services models using harmonized land-use and climate scenarios. Geoscientific Model Development Discussions
14. Filippini, F., Valentini, E., Xuan, A.N., **Guerra**, C.A., Wolf, F., Andrzejak, M., Taramelli, A., 2018. Global MODIS Fraction of Green Vegetation Cover for Monitoring Abrupt and Gradual Vegetation Changes. Remote Sensing 10, 1–20. doi:10.3390/rs10040653
15. Díaz S., Pascual U., Stenseke M., Martín-López B., Watson R., Molnár Z., Hill R, Chan K., Baste I., Brauman K., Polasky S., Church A., Lonsdale M., Larigauderie A., Leadley P., van Oudenhoven A., van der Plaats F., Schröter M, Lavorel S., Aumeeruddy-Thomas Y., Bukvareva E., Davies K., Demissew S., Erpul G., Failler P., **Guerra** C.A., Hewitt C., Keune H., Lindley S., Shirayama Y., 2018. Assessing nature's contributions to people, Science, (359) 6373, DOI: 10.1126/science.aap8826
16. Debolini, M., Elisa, M., Dubeuf, JP., Geijzendorffer, I.R., **Guerra**, C.A., Rojo, M.S., Targetti, S., Napoleone, C., 2018. Land and farming system dynamics and their drivers in the Mediterranean Basin. Land Use Policy
17. Navarro, L.M., Fernández, N., **Guerra**, C.A., Guralnick, R., Kissling, W.D., Londoño, M.C., Turak E., Yahara T., Kissling D., Skidmore A., Kim E., Kim H., Geijzendorffer I., Costello M., Mwampamba T., Martin C., Balvanera P., Vergara S., El Serafy G., Delavaud A., Pinto I., Jetz W., McGeoch M., Nel J., Xu H., Vihervaara P., Pettorelli N., Ferrier S., Geller G., Muller-Karger F., Guralnick R., Nicholson E., Schaepman M., Gill M., Pereira, H.M., 2017. Monitoring biodiversity change through effective global coordination. Current Opinion in Environmental Sustainability.
18. Bingham, H., Doudin, M., Weatherdon, L., Despot-Belmonte, K., Wetzell, F., Groom, Q., Lewis, E., Regan, E., Appeltans, W., Güntsch, A., Mergen, P., Agosti, D., Penev, L., Hoffmann, A., Saarenmaa, H., Geller, G., Kim, K., Kim, H., Archambeau, A.-S., Häuser, C., Schmeller, D., Geijzendorffer, I., García Camacho, A., **Guerra**, C.A., Robertson, T., Runnel, V., Valland, N. & Martin, C., 2017. The Biodiversity Informatics Landscape: Elements, Connections and Opportunities. Res. Ideas Outcomes, 3, e14059. DOI: 10.3897/rio.3.e14059
19. Geijzendorffer I.R., Cohen-Shacham E., Cord A.F., Cramer W., **Guerra** C.A., Martín-López B., 2017. Ecosystem services in global sustainability policies. Environmental Science & Policy, 74, 40–48. DOI: 10.1016/j.envsci.2017.04.017
20. Vicente, J., Alagador, D., **Guerra**, C.A., Alonso, J., Christoph, K., Vaz, A., Fernandes, R., Cabral, J., Araújo, M., Honrado, J., 2016. Effective and cost-efficient monitoring of biological invasions under global change: A model-based framework. Journal of Applied Ecology. DOI: 10.1111/1365-2664.12631
21. Pinto-Correia, T., Guiomar, N., **Guerra**, C.A., Carvalho-Ribeiro, S., 2016. Assessing the ability of rural areas to fulfill multiple societal demands. Land use policy 53: 86–96.
22. **Guerra**, C.A., Maes, J., Geijzendorffer, I., Metzger, M.J., 2016. An assessment of soil erosion prevention by vegetation in Mediterranean Europe: Current trends of ecosystem service provision. Ecological Indicators 60, 213–222. DOI:10.1016/j.ecolind.2015.06.043
23. **Guerra**, C.A., Metzger, M.J., Maes, J., Pinto-Correia, T., 2016. Policy impacts on regulating ecosystem services: looking at the implications of 60 years of landscape change on soil erosion prevention in a Mediterranean silvo-pastoral system. Landscape Ecology DOI:10.1007/s10980-015-0241-1

24. **Guerra**, C.A., Pinto-Correia, T., 2015. Linking farm management and ecosystem service provision: challenges and opportunities for soil erosion prevention in Mediterranean silvo-pastoral systems. Land Use Policy. DOI:10.1016/j.landusepol.2015.10.028
25. Lomba, A., **Guerra**, C.A., Alonso, J., Jongman, R., McCracken, D., 2014. Mapping and monitoring High Nature Value farmlands: challenges in European landscapes. Journal of Environmental Management, 143C, DOI: 10.1016/j.jenvman.2014.04.029
26. **Guerra**, C.A., Pinto-Correia, T., Metzger, M.J., 2014. Mapping soil erosion prevention using an ecosystem service modelling framework for integrated land management and policy. Ecosystems. DOI:10.1007/s10021-014-9766-4
27. Almeida, M., **Guerra**, C.A., Pinto-Correia, T., 2013. Developing methodological approaches to build indicator sets able to measure the effects of policies in rural areas - Case study in Alentejo, South Portugal. Danish Journal of Geography. DOI: 10.1080/00167223.2013.848611
28. **Guerra**, C.A., Metzger, M.J., Honrado, J., Alonso, J., 2013. A spatially explicit methodology for a priori estimation of field survey effort in environmental observation networks. International Journal of Geographical Information Science. DOI:10.1080/13658816.2013.805760
29. Ortega, M., **Guerra**, C.A., Honrado, J.P., Metzger, M.J., Bunce, R.G.H., Jongman, R.H.G., 2013. Surveillance of habitats and plant diversity indicators across a regional gradient. Ecological Indicators, 33, 36-44 pp. DOI: 10.1016/j.ecolind.2012.12.004
30. Bastos, R., Santos, M., Ramos, J., Vicente, J., **Guerra**, C.A., Alonso, J., Honrado, J., Ceia, R., Timóteo, S., Cabral, J., 2012. Testing a novel spatially-explicit dynamic modelling approach in the scope of the laurel forest management for the endangered Azores bullfinch (*Pyrrhula murina*) conservation. Biological Conservation, 147(1), 243-259 pp. DOI: 10.1016/j.biocon.2012.01.009
31. **Guerra**, C.A., Castro, P., Honrado, J., Bunce, B., Jongman, R., Alonso, J., 2010. The Rationale behind the Biodiversity Information System for North Portugal: The Path for a Strategic and Collaborative Biodiversity Information System. Earthzine: fostering Earth observation & global Awareness, IEEE, ICEO, S & Peter Inc.

#### Book Chapters:

1. Vicente, J., Honrado, J., **Guerra**, C.A., Gonçalves, J., Vaz, A., Araújo, M., Alagador, D., Henriques, R., Alonso, J., Marchante, E., Marchante, H., Canning-Clode, J., Rodrigues, A., Capinha, C., Nourisson, C., Bastos, R., Cabral, J., Santos, M., 2017. 3.1. Previsão e avaliação do risco associado às invasões biológicas. *in* Vicente, J., Honrado, J., Queiroz, A., Silva, L., Marchante, E. (Eds.) *Invasões Biológicas em Portugal*.
2. Santos, M., Bastos, R., Vicente, J., Berger, U., Soares Filho, B.S., Rodrigues, H., Alonso, J., **Guerra**, C.A., Martins, J., Honrado, J., Cabral, J.A., 2015. Anticipating Invasions and Managing Impacts: A Review of Recent Spatiotemporal Modelling Approaches, *in* Canning-Clode, J., 2015. *Biological Invasions in Changing Ecosystems: Vectors, Ecological Impacts, Management and Predictions*, De Gruyter Open, Berlin, 488 pp.
3. Costa, F., Marques, A., Arnaud-Fassetta, G., Alonso, J., Martins, I., **Guerra**, C.A., 2013. Methodological deepening for flood-risk analysis in cross-border regions: a case study for the Lima catchment (NW Spain/Portugal) according to the implementation of the European Water Framework Directive. 125-136 pp.. *in* Arnaud-Fassetta, G., Masson, E., & Reynard, E., *European Continental Hydrosystems under Changing Water Policy*, Friedrich Pfeil Verlag, München, 344 pp.
4. Honrado J.P., Alonso J., Lomba A., Gonçalves J., Pinto A.T., Ribeiro S.C., **Guerra** C.A., Almeida R., Alves H.N., 2011. Ecologia, diversidade e dinâmicas recentes dos ecossistemas florestais nas paisagens do Norte de Portugal. *In* Tereso JP, Honrado JP, Pinto AT, Rego FC (Eds.) *Florestas do Norte de Portugal: História, Ecologia e Desafios de Gestão*. *InBio - Rede de Investigação em Biodiversidade e Biologia Evolutiva*. Porto. ISBN: 978-989- 97418-1-2. Pp 118-168.
5. Ribeiro S.C., Azevedo J.C., **Guerra** C.A., Proença V., Santos C.C., Pôças I., Correia T.P., Honrado J.P., 2011. Condição e tendências recentes dos serviços de ecossistema florestal no Norte de Portugal. *In* Tereso JP, Honrado JP, Pinto AT, Rego FC (Eds.) *Florestas do Norte de Portugal: História, Ecologia e Desafios de Gestão*. *InBio - Rede de Investigação em Biodiversidade e Biologia Evolutiva*. Porto. ISBN: 978-989-97418-1-2. Pp 205-247.

#### Scientific Reports:

1. Torres A, **Guerra** C, et al. 2019. EO-driven Essential Variables and general implications. *ECOPOTENTIAL: Improving future ecosystem benefits through earth observations*. 41 pp.

2. **Guerra C**, et al. 2017. EO-driven Essential Variables. *ECOPOTENTIAL: Improving future ecosystem benefits through earth observations*. 66 pp.
3. **Guerra C**, Drakou E, Pereira H, Pendleton L, Marques A, Freyhof J, Provenzale A, Imperio S, Proença V, Domingos T, Ramoelo A, El Serafy G, Ziemba A, Giamberini M, Hummel H. Review of existing Essential Variables (EVs) relevant to PAs studies. 2016. *ECOPOTENTIAL: Improving future ecosystem benefits through earth observations*. 30 pp.
4. Maes, J., Fabrega, N., Zulian, G., Barbosa, A., Vizcaino, P., Ivits, E., Polce, C., Vandecasteele, I., Mari Rivero, I., **Guerra**, C.A., Perpiña Castillo, C., Vallecillo, S., Baranzelli, C., Barranco, R., Batista e Silva, F., Jacobs-Crisoni, C., Trombetti, M., Lavalle, C., 2015. Mapping and Assessment of Ecosystems and their Services: Trends in ecosystems and ecosystem services in the European Union between 2000 and 2010. Ispra. 138pp.
5. Barbosa, A., Lavalle, C., Vandecasteele, I., Viscaino, P., Vallecillo, S., Perpiña, C., Riviera, I.M., **Guerra**, C.A., Baranzelli, C., Jacobs-Crisoni, C., Batista e Silva, F., Zulian, G., Maes, J., 2014. Progress towards 'Green Growth' Europe: An assessment of the efficient use of natural resources in the EU-28 up to 2050. JRC Technical Reports, Joint Research Center - European Commission, 52 pp.
6. Alonso, J., **Guerra**, C., Paredes, C., Santos, S., 2012. Análise de Risco: Protecção Civil e Gestão de Riscosno Alto Minho. CIM Alto Minho, Viana do Castelo, 213 pp.
7. Alonso, J., **Guerra**, C., Paredes, C., Santos, S., 2012. Guia metodológico para a produção de cartografia de susceptibilidade e localização de risco - riscos mistos. CIM Alto Minho, Viana do Castelo, 76 pp.
8. Alonso, J., **Guerra**, C., Paredes, C., Santos, S., 2012. Guia metodológico para a produção de cartografia de susceptibilidade e localização de risco - riscos tecnológicos CIM Alto Minho, Viana do Castelo, 30 pp.
9. Alonso, J., **Guerra**, C., Paredes, C., Santos, S., 2012. Guia metodológico para a produção de cartografia de susceptibilidade e localização de risco - riscos naturais. CIM Alto Minho, Viana do Castelo, 98 pp.
10. Honrado, J., Alonso, J., **Guerra**, C., Castro, P., Martins, L., Pôças, I., Gonçalves, J. & Marcos, B., 2011. The BIO\_SOS metadata geoportal and the external quality of pre-existing datasets. BIO\_SOS Consortium. 123pp.
11. Honrado, J., Alonso, J., **Guerra**, C., Pôças, I., Gonçalves, J. & Marcos, B., 2011. Report on pre-existing in situ and ancillary datasets for sites. BIO\_SOS Consortium. 130pp.

#### Other Publications and Public Communications:

1. **Guerra** C.A., Delgado-Baquerizo M, Duarte E, Marigliano O, Görgen C, Maestre FT, Eisenhauer N. Global projections of the soil microbiome in the Anthropocene. 2019. (speed talk – iDiv Conference)
2. **Guerra** C.A., Wall D. 2019. GEO BON General Assembly. SoilBON: A Global Soil Biodiversity Observation Network. Porto, Portugal
3. **Guerra** C.A., Heintz-Buschart A, Sikorski J, Chatzinotas A, Guerrero-Ramírez N, Cesarz S, Beaumelle L, Rillig M, Maestre FT, Delgado-Baquerizo M, Buscot F, Overmann J, Patoine G, Phillips HRP, Winter M, Wubet T, Küsel K, Bardgett R, Cameron EK, Cowan D, Grebenc T, Marín C, Orgiazzi A, Singh BK, Wall DH, Eisenhauer N. Blind spots in global soil biodiversity and ecosystem function research. 2018. (regular talk – iDiv Conference)
4. **Guerra**, C., 2014. Mapping and modeling regulating services: a case study using soil erosion prevention service. *Encontros da Primavera 2014*, 17 of June, Porto, Portugal
5. **Guerra**, C., Metzger, M. and Pinto-Correia, T., 2014. Policy impacts on ecosystem regulating services: looking at 60 years of agricultural policy implication on the provision of soil erosion prevention service in a Mediterranean extensive silvo-pastoral system. *Jornadas Ciências e Engenharia do Ambiente*, 28 of May, Ponte de Lima, Portugal
6. Lomba A., Alonso J, **Guerra** C, Jongman R, McCracken D and Honrado JP, 2014. Application of HNV farmland indicators across scales in Portugal: data quality, scaling issues and implications for national reporting and monitoring. *Proceedings of the Global Land Project Conference*, Berlin.
7. Alonso, J., & **Guerra**, C., 2013. Solos e Paisagem. Workshop no âmbito do projecto "Valorização e Qualificação Ambiental e Territorial dos Espaços Classificados do Concelho de Matosinhos". Matosinhos, Portugal.
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9. **Guerra**, C., Pinto-Correia, T., Metzger, M., Neiva, A. & Alonso, J., 2013. Avaliação de serviços de ecossistema de conservação do solo associados a processos erosivos. in *Proceedings of the III Encontro da Rede BrasPor*, Ponte de Lima, Portugal.

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## 6. Mentoring

1. Yue Liu – PhD Thesis in Ecosystem Services (University of Beijing - Faculty of Geographical Science) *Biodiversity effects on soil erosion and soil related processes (2018-2022) – co-supervision*
2. Guillaume Patoine – PhD Thesis in Soil Ecology (UL) *A global predictors of soil microbial diversity and biomass (2018-2022) – co-supervision*
3. Roxanne Leberger – PhD Thesis in Conservation Biology (MLU) *A global analysis of impacts and trends for protected areas (2016-2018) – co-supervision*
4. Martin Andrzejak – Master Thesis in Conservation Biology (MLU) *Linking vegetation coverage and fire frequency to precipitation: A study inside the Serengeti-Mara ecosystem (2016-2017) – co-supervision*
5. Bruna Costa – Graduation Thesis in Environmental Engineering (ESA-IPVC) *Modelação dinâmica do risco de erosão hídrica (2011-2012)*



6. Regina Ribeiro - Graduation Thesis in Environmental Engineering (ESA-IPVC)  
*Implementação de um modelo geográfico para a avaliação de pressão humana sobre os ecossistemas (2011-2012)*
7. Alvaro Neiva - Graduation Thesis in Environmental Engineering (ESA-IPVC)  
*Avaliação da susceptibilidade espacial à ocorrência de acidentes rodoviários (2011-2012)*
8. Carla Costa - Graduation Thesis in Environmental Engineering (ESA-IPVC)  
*Avaliação e valorização de serviços de ecossistema na Região Norte de Portugal (2010-2011)*
9. Diana Azevedo - Graduation Thesis in Technological Specialization (ESA-IPVC)  
*Os sistemas de informação geográfica para a gestão dos recursos da DSU do Município de Barcelos (2010-2011)*
10. Aerjen Jouwsma - Tese final de Licenciatura (ERASMUS – The Netherlands)  
*Environmental services and their evaluation: a framework (2010-2010)*
11. Lúcia Lopes - Graduation Thesis in Technological Specialization (ESA-IPVC)  
*Avaliação do aproveitamento escolar em função da distribuição geográfica dos alunos (2009-2010)*
12. Pilar Alonso - Tese final de Licenciatura (ERASMUS - Spain)  
*Avaliação da distribuição geográfica de *Narcissus sp.* no Distrito de Viana do Castelo (2009-2010)*
13. André Alves - Graduation Thesis in Agronomic Engineering (ESA-IPVC)  
*Avaliação de espécies invasoras na PPLBHPA (2009-2010)*
14. Bruno Carvalho - Graduation Thesis in Agronomic Engineering (ESA-IPVC)  
*Modelação do risco de cheias na bacia hidrográfica do rio Estorãos (2007-2008)*
15. Márcia Ferreira - Graduation Thesis in Environmental Engineering (ESA-IPVC)  
*Modelação da qualidade dos recursos hídricos superficiais na zona de vale aluvionar da bacia hidrográfica do rio estorãos (2007-2008)*

## 7. Technical and Leadership Abilities

### Informatics and Software:

Currently I have advanced knowledge and experience in both Microsoft and Macintosh systems, GIS software (e.g. ArcGIS, GRASS and QuantumGIS), Spatial analysis software (e.g. IDRISI, R, FRAGSTATS, Patch Analyst), and environmental modeling and statistics software (e.g. R, SPSS, HEC-RAS, Open Modeller). I have also developed skills in R and Python programming languages.

### Languages:

Language	Reading	Written	Spoken
Portuguese (native speaker)	native	native	native
English	fluent	fluent	fluent
Spanish	fluent	highly proficient	fluent
French	working knowledge	-	-

### Leadership, Team Work & Project Management:

Through my career I have participated in several research initiatives that included project development and team building and implementation. In both cases there was a good working environment with tight schedules and fulfilled objectives. Between 2010 and 2013 I was a team leader and one of the senior researchers at Fundação Fernão Magalhães para o Desenvolvimento. From 2014 to 2016 I was the president of the Portuguese Landscape Ecology Association (Portuguese IALE Chapter). Since my arrival at iDiv I was a representative of Post-Docs in the iDiv Council, co-organized the GEOBON All Hands Scientific Conference (in 2016 and 2018) and the iDiv Conference (in 2017). I also co-Lead the Taproot in Soil Biodiversity and Ecosystem Function as well as the Soil Biodiversity Observation Network.