

# PAOLO TAROLLI

ASSOCIATE PROFESSOR  
 University of Padova  
 Department of Land, Environment, Agriculture and Forestry  
 viale dell'Università 16, 35020 Legnaro (PD), Italy  
 ph: +39 (049) 8272677 / fax: +39 (049) 8272750  
 skype: paolopaolo525  
 e-mail: [paolo.tarolli@unipd.it](mailto:paolo.tarolli@unipd.it), [tarolli.paolo@gmail.com](mailto:tarolli.paolo@gmail.com)  
 web-page: <http://www.tesaf.unipd.it/en/paolo-tarolli>  
 ORCID: <http://orcid.org/0000-0003-0043-5226>



## SUMMARY

Paolo Tarolli is Associate Professor, chair in *Water Resources Management*, and head of *Earth Surface Processes and Society research group* at University of Padova. He is Visiting Professor at China University of Geosciences (CUGB) and Adjunct at University of Georgia (UGA). He has held Visiting Professor positions at several other universities (e.g. Guangzhou University, National Cheng Kung University, EPFL). He is Chair of the European Geosciences Union NH subdivision *NH6: Remote Sensing & Hazards* and SSS subdivision *SSS12: Material and Methods in Soil Science*.

He is expert in digital terrain analysis, human-Earth interactions, Earth surface processes analysis through high-resolution topography, natural hazards, shallow landslides, geomorphology, hydro-geomorphology, geomorphic features extraction in alpine and floodplain context, anthropogenic feature extraction in anthropogenic landscapes, LiDAR and Structure from Motion applications, and GIS.

Tarolli is Executive Editor of *Natural Hazards and Earth System Sciences* (Copernicus), and Associate Editor of *Remote Sensing* (MDPI), *Land Degradation & Development* (Wiley), and *Journal of Mountain Sciences* (Springer), in addition to editorial board membership of other journals.

He is author, since year of PhD (2006), more than 80 papers (2 invited review articles, 5 special issue editorials) published and in press in international peer reviewed journals with the following publication metrics: Google Scholar (**h-index 32**, total citations 3096), SCOPUS (**h-index 29**, total citations 2325). He gave 20 invited talks (3 keynote talks) in high-ranking international research institutions and foreign Academies (i.e. EPFL, AgroParisTech, Massey University, National Cheng Kung University, China University of Geosciences, Chinese Academy of Sciences), and at international meeting (IGC, AAG, ISPRS, RGS-IBG, AOGS-AGU).

He served as Panel Member of Natural Environment Research Council NERC Newton Fund (UK); reviewer of U.S. National Science Foundation (NSF), International Swiss National Science Foundation (SNSF), Natural Environment Research Council (NERC), Netherlands Organization for Scientific Research (NWO), National Science Centre (NCN) of Poland, Natural Sciences and Engineering Research Council of Canada, FWF Austrian Science Fund, EU Commission research projects.

He is member of the European Geoscience Union, British Society for Geomorphology, American Geophysical Union, Asia Oceania Geosciences Society (AOGS).

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## EDUCATION

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- 2006 **Ph.D.** Environmental watershed management and geomatics, University of Padova, Italy  
 2002 **M.Sc.** Hydro-geological hazard assessment and mitigation, University of Padova, Italy  
 2001 **B.Sc.** Forest and Environmental Sciences, University of Padova, Italy

## POSITIONS

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- 2017 – **Adjunct Professor.** University of Georgia (USA)  
 2017 **Visiting Professor.** Guangzhou University (P.R. China).  
 2015 – **Associate Professor.** Department of Land, Environment, Agriculture and Forestry, University of Padova (Italy)  
 2013 – **Visiting Professor.** China University of Geosciences, Beijing (P.R. China).  
 2011 – 2014 **Assistant Professor.** Department of Land, Environment, Agriculture and Forestry, University of Padova (Italy)  
 2011 – 2013 **Visiting Professor.** Earth Sciences Department, National Cheng Kung University (Taiwan)  
 2011 **Visiting Professor.** School of Architecture, Civil and Environmental Engineering, École Polytechnique Fédérale de Lausanne (EPFL), Switzerland  
 2010 **Visiting Scholar.** Geography Dept., National Taiwan University (Taiwan)  
 2010 **Marie Curie Fellow** (Experienced Researcher). Institute of Inland Waters, Hellenic Centre for Marine Research (Greece)  
 2009 – 2013 **Adjunct Professor.** Marche Polytechnic University (Italy)  
 2008 **Visiting Scholar.** Civil Engineering Dept. and St. Anthony Falls Laboratory, University of Minnesota, USA  
 2006 – 2010 **Research Associate.** Department of Land, Environment, Agriculture and Forestry, University of Padova (Italy)  
 2005 **Visiting Scholar.** EES Dept., New Mexico Tech (USA)  
 2005 **Visiting Scholar.** Civil and Environmental Engineering Dept., Utah State University (USA)  
 2002 – 2006 **Graduate Research Assistant.** Department of Land and Agroforest Environments, University of Padova (Italy)

## EXTERNAL POSITIONS, LEADERSHIP & COMMISSION OF TRUST

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- 2018 – **Head** of Earth Surface Processes and Society research group  
<https://www.linkedin.com/in/earthsurfs/>  
 2018 – **Deputy Chair** sub-division 7 of the Italian Society of Agricultural Engineering  
 2018 **Panel Member NERC:** NERC-Newton Fund (UK)  
 2016 – **Chair** of the European Geosciences Union SSS subdivision SSS12: *Material and Methods in Soil Science*  
 2015 – **Chair** of the European Geosciences Union NH subdivision *NH6: Remote Sensing & Hazards*  
 2015 **Evaluator:** PhD committee evaluation panel, Ecole Polytechnique Fédérale de Lausanne (Switzerland)  
 2014 **Evaluator:** PhD committee evaluation panel, University of Genova (Italy)  
 2014 **Director:** UNIPD-NCKU (Italy-Taiwan) Joint Summer School 2014 “*Natural Hazards in the Italian Alps*”  
 2013 **Director:** EGU Summer School 2013 “*Understanding Earth-Surface Processes in the Alpine Environment from High Resolution Topography*”  
<http://intra.tesaf.unipd.it/cms/summeregu2013/>  
 2013 – **Review panel member:** U.S. National Science Foundation (NSF), Netherlands Organization for Scientific Research (NWO), National Science Centre (NCN) of Poland, Natural Sciences and Engineering Research Council of Canada, Swiss National Science Foundation (SNSF), FWF Austrian Science Fund, EU Commission FP7  
 2011 **Evaluator:** PhD committee evaluation panel, Ecole Nationale Supérieure des Mines de Saint-Etienne, Alès (France).

- 2011 **Evaluator:** Master of Science committee evaluation panel, Ecole Polytechnique Fédérale de Lausanne (Switzerland)

## FELLOWSHIPS

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- 2014 *Visiting Professor* **Appointment Agreement of Distinguished Scholars** at China University of Geosciences in Beijing (P.R. China)
- 2013 *Visiting Professor* **Appointment Agreement of Distinguished Scholars** at National Cheng Kung University (Taiwan)
- 2010 **Marie Curie Fellow** – Excellence Grant for Experienced Researcher at the Hellenic Center for Marine Research (Greece)

## HONORS/AWARDS

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- 2018 **Publons Peer Review Awards** top 1 per cent peer reviewers in *Geosciences* and in *Environment/Ecology*
- 2018 **Outstanding Contribution in Reviewing** for the journal *Science of the Total Environment, Land Use Policy, Geomorphology, Environmental Research, Int. J. Appl. Earth Obs. And Geoinf., Int. J. Disaster Risk Reduction*
- 2017 **Outstanding Editor** *Journal of Mountain Science*
- 2017 **Outstanding Contribution in Reviewing** for the journal *Adv. Wat. Res., J. of Hydrology*
- 2017 **Publons Peer Review Awards** top 1 per cent peer reviewers in *Environmental Science* and in *Earth and Planetary Science*
- 2016 **Outstanding Contribution in Reviewing** for the journal *Catena*
- 2015 **Outstanding Contribution in Reviewing** for the journal *Geomorphology, Earth Science Reviews*
- 2012 **Best Poster Award**, XXXIII Italian Conference of Hydraulics and Hydraulic Constructions
- 2011 **Editors' Citation** for Excellence in Refereeing for WRR given by American Geophysical Union
- 2010 **Outstanding Reviewer** for the *Journal of Hydrologic Engineering*, ASCE
- 2010 **Best Poster Award**, XXXII Italian Conference of Hydraulics and Hydraulic Constructions

## SUPERVISION OF GRADUATE STUDENTS AND POSTDOCTORAL FELLOWS

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### Postdoctoral fellows

Giulia Sofia (2013-2018) at University of Padova.

### PhD students

*Supervised:* Zhang Qifei, (2018-2022), Anton Pijil (2017-2021), Wenfang Cao (2016-2020), Giulia Roder (2015-2019), Massimo Prosdocimi (2014-2017) at University of Padova.

*Co-Supervised:* Kamila Pawluszek (2017-2020) at Wroclaw University of Environmental and Life Sciences; Jie Xiang (2015-2018) at China University of Geosciences in Beijing; Jin Wang (2014-2018) at Chinese Academy of Science; Young-Sing Cheng (2014-2019) at National Cheng Kung University; Ke Li (2013-2015) at China University of Geosciences in Beijing.

### Master's students

Eugenio Straffelini (2018), Edoardo Quarella (2018), Gaetano Imperatore (2018), Luca Mauri (2018), Michele Tosoni (2017), Loris Torresani (2017), Francesca Breda (2017), Elena Feo (2017), Manuel Stefani (2017), Jessica de Marco (2016), Federica Varisco (2016), Davide Todeschini (2016), Marco Cecchin (2016), Giulia Lo Re (2016), Federica Basso (2016), Nicoletta Pradetto Sordo (2016), Gianluca Favaro (2015), Alberto Bollettin (2015), Giulia Roder (2014), Valeria Contessa (2014), Francesca Savio (2013), Massimo Prosdocimi (2013) at University of Padova.

Manuela Mancini (2012) and Francesca Brutti (2012) at Marche Polytechnic University.

## TEACHING ACTIVITIES

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- 2018 – now *Water Resources Management*, University of Georgia & Univ. of Padova (48 hr, 6 CFU)  
 2017 *Earth surface processes analysis using Remote Sensing & GIS*, Guangzhou University, P.R. China (16 hr)
- 2016 *Digital Terrain Analysis of Anthropogenic Landscapes*, European Geoscience Union - EGU General Assembly (1.5 hr)
- 2014 – now *Water Resources Management*, University of Padova (48 hr, 6 CFU)  
 2014 – now *GIS applications in agriculture*, University of Padova (32 hr, 4 CFU)  
 2014 – now *Digital Terrain Analysis*, China University of Geosciences in Beijing, P.R. China (32 hr, 2 credits)
- 2013 *Digital Geomorphology and Statistical Analysis*, China University of Geosciences in Beijing, P.R. China (32 hr, 2 credits)
- 2013 *Digital Terrain Analysis*, National Cheng Kung University, Taiwan (50 hr, 3 credits)
- 2011 – now *Integrated Watershed Management*, Forest Sciences, University of Padova (48 hr, 6 CFU)

## ORGANIZATION OF SCIENTIFIC MEETINGS

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- 2018 Convener & Chairperson: session NH6.1. Application of remote sensing and Earth-observation data in natural hazard and risk studies (EGU General Assembly)
- 2018 Convener & Chairperson: session SSS2.3. Agricultural terraces of the world. Their pedological, geomorphological and hydrological role (EGU General Assembly)
- 2018 Convener & Chairperson: session HS2.2.3 Lowlands: A hydrologic challenge in the global environmental change era (EGU General Assembly)
- 2017 Convener & Chairperson: session HS2.2.3 Lowlands: A hydrologic challenge in the global environmental change era (EGU General Assembly)
- 2017 Convener & Chairperson: session SSS2.16/GM7.7/HS11. Agricultural terraces of the world. Their pedological, geomorphological and hydrological role (co-organized) (EGU General Assembly)
- 2017 Convener & Chairperson: session NH6.1/CR2.7/GI2.8/HS11.29/SM5.7/SSS12.20 Application of remote sensing and Earth-observation data in natural hazard and risk studies (EGU General Assembly)
- 2017 Co-Convener & Chairperson: session NH3.12 Landslide and Landslide Susceptibility Interactions with Transport Lines (EGU General Assembly)
- 2017 Co-Convener & Chairperson: session SSS10.8/BG9.6/HS9.11 Soil Erosion, hydrological processes and biological degradation in worldwide vineyards (EGU General Assembly)
- 2016 Convener & Chairperson: session SSS2.10/GM6.8/HS11.29/NH3.19 *Agricultural terraces of the world. Their pedological, geomorphological and hydrological role* (EGU General Assembly)
- 2015 Convener & Chairperson: session GM4.1 *Human-Landscape interaction in the Anthropocene* (EGU General Assembly)
- 2015 Convener & Chairperson: session SSS2.5/GM6.6/HS12.3 *Agricultural terraces of the world. Their pedological, geomorphological and hydrological role* (EGU General Assembly)
- 2014 Convener & Chairperson: session GM4.1/HS9.12/SSS9.18 *Human-Earth interaction from the Pleistocene to the Anthropocene: state of the science and future direction* (EGU General Assembly)
- 2014 Co-Convener: session GM2.1 *Digital Landscapes: Insights into geomorphological processes from quantitative interrogation and use* (EGU General Assembly)
- 2013 Convener & Chairperson: session GM4.2/SSS6.12 *Landscape in the Anthropocene: state of the art and future directions* (EGU General Assembly)
- 2013 Co-Convener: session GM2.1 *Digital Landscapes: Insights into geomorphological processes from high-resolution topography, quantitative interrogation and geomorphological mapping* (EGU General Assembly)
- 2012 Co-Convener & Chairperson: session GM2.1 *Digital Landscapes: Quantitative Interrogation and Use to Examine Geomorphic Processes* (EGU General Assembly)
- 2011 Co-Convener & Chairperson: session GM2.2/NH10.3/PS10.2 *Digital Landscapes: From Laser Scanning and High-resolution Measurement Technologies to Quantitative*

- 2007 *Interrogation of Geomorphic Processes (EGU General Assembly)*  
 Convener & Chairman: session H43E/H51L/H52E *Remotely Sensed DTMs for Hydrogeomorphic Applications (AGU Fall Meeting)*

## INSTITUTIONAL RESPONSIBILITIES

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- 2017 – 2022 *Scientific Coordinator* of the Memorandum of Understanding between Massey University (NZ), University of Lincoln (UK), and University of Padova.  
 2017 – 2022 *Scientific Coordinator* of the Memorandum of Understanding between China University of Geosciences and University of Padova.  
 2015 – *Member* of Research Quality Evaluation Committee. Dept. of Land, Environment, Agriculture and Forestry, University of Padova.  
 2012 – *Member* of Internationalization Committee. Dept. of Land, Environment, Agriculture and Forestry, University of Padova.

## EDITORIAL POSITIONS

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- 2018 – **Executive Editor:** NHESS (Copernicus)  
 2018 – **Associate Editor:** Land Degradation & Development (Wiley)  
 2017 – **Associate Editor & Advisory Board Member:** Remote Sensing (MDPI)  
 2013 – **Associate Editor:** Journal of Mountain Science (Springer)

**Editorial Board Member:** iScience (Cell Press), Earth Surface Processes and Landforms (Wiley), Anthropocene (Elsevier), Heliyon (Elsevier), Quaternary (MDPI).

## SERVICE ACTIVITY

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- 2006 – **Reviewer** (journals): Remote Sensing, Geomorphology, Water Resources Research, Earth Surface Processes and Landforms, Journal of Hydrology, Journal of Hydrologic Engineering, HESS, Land Degradation and Development, International Journal of GIS, Journal of Mountain Science, Journal of Geophysical Research, Geophysical Research Letters, Advance in Water Resources, Hydrological Processes, NHESS, Catena, Geoderma, Land Use Policy, IEEE GRL, Remote Sensing of Environment, Natural Hazards, Earth Science Review, PloSOne, Climate Change, Science.

## MEMBERSHIP OF SCIENTIFIC SOCIETIES

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- 2012 – Italian Society of Agricultural Engineering  
 2012 – Asian Oceania Geosciences Society  
 2011 – British Society for Geomorphology  
 2006 – European Geosciences Union  
 2005 – American Geophysical Union  
 2005 – 2013 Geological Society of America

## RESEARCH PROJECTS

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- 2018 – 2023 H2020 ERC-ADG TerrACE (PI – WP1)  
 2018 – 2021 Vineyard Terraced landscapes: understanding the Environmental constraints to improve sustainable managements – ViTe (PI)  
 2016 – 2018 HighLandDEM – ENVIMED (PI - WP2)  
 2015 – 2017 Land-use change effect on Earth surface processes in agricultural landscapes (PI)  
 2012 – 2014 Artificial drainage system in agricultural floodplains (PI)



- Peng Cui)
- 2013 *High-resolution topography: the next chapter for the Earth science*. [China University of Geosciences](#), Beijing. (host: Chen Jianping)
- 2012 *Natural and Engineered Landscapes: new challenges from LiDAR for understanding Earth Surface Processes in the Anthropocene*. [National Cheng Kung University](#), Department of Earth Science, Tainan (Taiwan). (host: Ching-Weei Lin)
- 2011 *New opportunity and future challenges from high-resolution topography for the analysis of Earth Surface Processes*. [Central Geological Survey, Taipei](#) (Taiwan). (host: Chao-Tsiung Lin)
- 2011 *New opportunity and future challenges from high-resolution topography for the analysis of Earth Surface Processes*. [National Cheng Kung University](#), Department of Earth Science, Tainan (Taiwan, R.O.C.). (host: Ching-Weei Lin)
- 2011 *New opportunity and future challenges from high-resolution topography for the analysis of Earth Surface Processes*. [AgroParisTech](#), Montpellier, France. (host: Jean-Stephane Bailly)
- 2011 *New opportunities but also challenges from high-resolution topography*. [École Polytechnique Fédérale de Lausanne EPFL](#), Switzerland. (host: Andrea Rinaldo)
- 2010 *High-resolution topography: new opportunities, issues and challenge in the Earth Science*. Institute of Inland Waters, [Hellenic Centre for Marine Research](#), Greece. (host: Emmanouil Anagnostou)
- 2010 *Semi-automatic methods for geomorphic features extraction: new opportunities from high-resolution topography*. [CNR-IRPI](#). Perugia, Italy. (host: Fausto Guzzetti)
- 2008 *High-resolution topography: new opportunities, issues, and future trends*. Civil Engineering Dept. and St. Anthony Falls Laboratory, [University of Minnesota](#), Minneapolis, USA. (host: Efi Foufoula-Georgiou)
- 2005 *Improving methods for mapping terrain stability with high-resolution LIDAR-derived elevation data*. EES Dept., [New Mexico Tech](#), USA. (host: Enrique Vivoni)

## PUBLICATION SUMMARY

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Tarolli is author, since year of PhD (2006), of 78 papers (2 invited review articles, 5 special issue editorials) published and in press in international peer reviewed journals with the following publication metrics: Google Scholar (**h-index 32**, total citations 3096), SCOPUS (**h-index 29**, total citations 2325). He is also author of 1 movie review and 3 book reviews in international peer-reviewed ISI journals, 9 papers in national magazines, 2 chapters in Encyclopaedia, 12 papers in books, 20 papers in conference Proceedings, and 145 presentations (3 invited keynote talks, 4 invited talks) at national/international meetings (41 orals and 104 posters). He edited two books.

## PUBLICATIONS

\*corresponding author

### *Under review or in preparation*

1. **Tarolli, P.**, Cao, W., Sofia, G., Evans, D., Ellis, EC. From Features to Fingerprints: a Framework for Observing and Interpreting Anthropogenic Geomorphology.
2. **Tarolli, P.**, Sofia, G. Potential responses to sediment dynamics in terraced agricultural landscapes: high-resolution topography to support rural development planning.
3. Cao, W., Sofia, G., **Tarolli, P.** Geomorphometric characterization of natural and anthropogenic land cover.
4. Pijl, A., Tosoni, M., Roder, G., Sofia, G., **Tarolli, P.** Vineyard terrace monitoring and drainage design using UAV-based high-resolution topographic data.
5. Pijl, A., Barneveld, P., Mauri, L., Borsato, E., Grigolato, S., **Tarolli, P.** Estimating the impact of mechanization on soil loss in vineyards terraced landscapes.

### *Peer-reviewed Journals*

#### 2019

1. **Tarolli\***, P, Cavalli, M., Masin, R., (2019). High-resolution morphologic characterization of conservation agriculture. *Catena*, 172, 846–856, doi: 10.1016/j.catena.2018.08.026.
2. Viero\*, D.P., Roder, G., Matticchio, B., Defina, A., **Tarolli, P** (2019). Floods, landscape modifications and population dynamics in anthropogenic coastal lowlands: The Polesine (northern Italy) case study. *Science of the Total Environment*, 651, 1435–1450, doi:10.1016/j.scitotenv.2018.09.121.

2018

3. **Tarolli\***, P (2018). Agricultural Terraces Special Issue Preface. *Land Degradation and Development*, 29, 3544–3548, doi:10.1002/ldr.3129.
4. Pawluszek\*, K., Borkowski, A., **Tarolli, P.** (2018). Sensitivity analysis of automatic landslide mapping: numerical experiments towards the best solution. *Landslides*, 15, 1851–1865, doi: 10.1007/s10346-018-0986-0.
5. Lo Re, G., Fuller\*, I.C., Sofia, G., **Tarolli, P.** (2018). High-resolution mapping of Manawatu palaeochannels. *New Zealand Geographer*, 74, 77–91, doi:10.1111/nzsg.12186.
6. Piji\*, A., Brauer, C.C., Sofia, G., Teuling, A.J., **Tarolli, P.** (2018). Hydrologic impacts of changing land use and climate in the Veneto lowlands of Italy. *Anthropocene*, 22, 20–30, doi: 10.1016/j.ancene.2018.04.001.
7. Giordan\*, D., Hayakawa, Y., Nex, F., Remondino, F., **Tarolli, P.** (2018). Review article: The use of remotely piloted aircraft systems (RPASs) for natural hazards monitoring and management. *Natural Hazards and Earth System Sciences*, 18, 1079–1096, doi:10.5194/nhess-18-1079-2018. ([Review Article](#))
8. Xiang, J., Chen\*, J., Sofia, G., Tian, Y., **Tarolli, P.** (2018). Open-pit mine geomorphic changes analysis using multi-temporal UAV survey. *Environmental Earth Sciences*, 77, 220, doi:10.1007/s12665-018-7383-9.
9. Wang, J., Wu\*, Z., Wu, C., Cao, Z., Fan, W., **Tarolli, P.** (2018). Improving impervious surface estimation: an integrated method of classification and regression trees (CART) and linear spectral mixture analysis (LSMA) based on error analysis. *GIScience and Remote Sensing*, 55, 583–603, doi: 10.1080/15481603.2017.1417690.
10. Borsato\*, E., **Tarolli, P.**, Marinello, F. (2018). Sustainable patterns of main agricultural products combining different footprint parameters. *Journal of Cleaner Production*, 179, 357–367, doi:10.1016/j.jclepro.2018.01.044.
11. Preti\*, F., Guastini, E., Penna, D., Dani, A., Cassiani, G., Boaga, J., Deiana, R., Romano, N., Nasta, P., Palladino, M., Errico, A., Giambastiani, Y., Trucchi, P., **Tarolli, P.** (2018). Conceptualization of Water Flow Pathways in Agricultural Terraced Landscapes. *Land Degradation & Development*, 29, 651–662 doi:10.1002/ldr.2764.
12. Rainato\*, R., Picco, L., Cavalli, M., Mao, L., Neverman, A. J., **Tarolli, P.** (2018). Coupling Climate Conditions, Sediment Sources and Sediment Transport in an Alpine Basin. *Land Degradation & Development*, 29, 1154-1166, doi:10.1002/ldr.2813.

2017

13. Wu\*, J., Feng, Y., Zhang, X., Wurst, S., Tietjen, B., **Tarolli, P.**, Song, C. (2017). Grazing exclusion by fencing non-linearly restored the degraded alpine grasslands on the Tibetan Plateau. *Scientific Reports*, 7, 15202, doi:10.1038/srep40527.
14. Roder\*, G., Sofia, G., Zhifeng, W., **Tarolli, P.** (2017). Assessment of social vulnerability to floods in the floodplain of Northern Italy. *Weather, Climate, and Society*, 9, 717–737, doi:10.1175/WCAS-D-16-0090.1.
15. Fan\*, J., Zhang, X., Su, F., Ge, Y., **Tarolli, P.**, Yang, Z., Zeng, C., Zeng, Z. (2017). Geometrical feature analysis and disaster assessment of the Xinmo landslide based on remote sensing data. *Journal of Mountain Science*, 14, 1677–1688, doi:10.1007/s11629-017-4633-3.
16. **Tarolli\***, P., Sofia, G., Ellis, E. (2017), Mapping the topographic fingerprints of humanity across Earth. *Eos*, 98, doi:10.1029/2017EO069637.
17. Brown\*, A.G., Tooth, S., Bullard, J.E., Thomas, D S.G., Chiverrell, R.C., Plater, A.J., Murton, J., Thorndycraft, V.R., **Tarolli, P.**, Rose, J., Wainwright, J., Downs, P., Aalto, R. (2017). The Geomorphology of The Anthropocene: Emergence, Status and Implications. *Earth Surface Processes and Landforms*, 42, 71-90, doi:10.1002/esp.3943. ([State of the Science Article](#))
18. Sofia, G., Di Stefano, C, Ferro, V., **Tarolli, P.** (2017). Morphological similarity of channels: from hillslopes to alpine landscapes. *Land Degradation & Development*, 28, 1717–1728, doi:10.1002/esp.4081.
19. Sofia\*, G., Masin, R, **Tarolli, P.** (2017). Prospects for crowdsourced information on the geomorphic “engineering” by the invasive Coypu (Myocastor coypus). *Earth Surface Processes and Landforms*, 42, 365–377, doi:10.1002/esp.4081.
20. Sofia\*, G., Roder, G., Dalla Fontana, G., **Tarolli, P.** (2017). Flood dynamics in urbanised landscapes: 100 years of climate and humans’ interaction. *Scientific Reports*, 7, 40527, doi:10.1038/srep40527.
21. Sofia\*, G., **Tarolli, P.** (2017). Hydrological response of 30yr of agriculture’s surface water management. *Land*, 6(1), 3, doi:10.3390/land6010003.
22. Ferrato\*, C., De Marco, J., **Tarolli, P.**, Cavalli, C. (2017). An updated sediment source areas inventory in the Rio Cordon catchment (Dolomites). *Rend. Online Soc. Geol. It.*, 42, 10-13, doi:10.3301/ROL.2017.02.
23. Pawluszek\*, K., Borkowski, A., **Tarolli, P.** (2017). Towards the optimal pixel size of DEM for automatic mapping of landslide areas. *Int. Arch. Photogramm. Remote Sens. Spatial Inf. Sci.*, XLII-1/W1, 83-90, doi:10.5194/isprs-archives-XLII-1-W1-83-2017.
24. Prosdociami\*, M., Burguet, M., Di Prima, S., Sofia, G., Terol, E, Rodrigo Comino J., Cerdà, A., **Tarolli, P.** (2017). Rainfall simulation and Structure-from-Motion photogrammetry for the analysis of soil water erosion



in Mediterranean vineyards. *Science of the Total Environment*, 574, 204-215, ISSN: 0048-9697, doi:10.1016/j.scitotenv.2016.09.036.

## 2016

25. Tarolli\*, P. (2016). Humans and the Earth's surface, *Earth Surface Processes and Landforms*, 41, 2301–2304, ISSN: 1096-9837, doi:10.1002/esp.4059 ([Special Issue Editorial](#))
26. Mutzner\*, R., Tarolli, P., Sofia, G., Parlange, M.B., Rinaldo, A. (2016). Spatially heterogeneous drainage densities in a high-altitude alpine catchment and impact on travel time distributions, *Hydrological Processes*, 30, 2138–2152, ISSN: 0885-6087, doi:10.1002/hyp.10783.
27. Sofia\*, G., Bailly, J., Chehata, N., Tarolli, P., Levavesseur, F. (2016). Comparison of Pleiades and LiDAR Digital Elevation Models for terraces detection in farmlands, *IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing*, 9(4), 1567-1576, ISSN:1939-1404, doi:10.1109/JSTARS.2016.2516900.
28. Prosdocimi\*, M., Tarolli, P., Cerdà, A. (2016). Mulching practice for reducing soil water erosion: A review, *Earth-Science Reviews*, 161, 191-203. ([Review Article](#))
29. Piermattei\*, L., Carturan, L., de Blasi, F., Tarolli, P., Dalla Fontana, G., Vettore, A., Pfeifer, N. (2016). Suitability of ground-based SfM–MVS for monitoring glacial and periglacial processes, *Earth Surface Dynamics*, 4, 425-443, ISSN: 2196-6311, doi:10.1016/j.catena.2016.02.010.
30. Prosdocimi\*, M., Cerdà, A., Tarolli, P. (2016). Soil water erosion on Mediterranean vineyards. A review, *Catena*, 141, 1-21, ISSN: 0341-8162, doi:10.1016/j.catena.2016.02.010. ([Review Article](#))
31. Sofia\*, G., Mariniello, F., Tarolli, P. (2015). Metrics for quantifying anthropogenic impacts on geomorphology: road networks, *Earth Surface Processes and Landforms*, 41, 240-255, ISSN: 1096-9837, doi:10.1002/esp.3842.
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33. Roder, G., Ruljigaljig, T., Lin, C.-W., Tarolli\*, P. (2016). Natural hazards knowledge and risk perception of Wujie indigenous community in Taiwan, *Natural Hazards*, 81, 641–662, ISSN: 0921-030X, doi:10.1007/s11069-015-2100-4.
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13. **Tarolli, P.**, Pirotti, F. (2010). Estrazione semi-automatica del reticolo idrografico da dati LiDAR: un nuovo approccio metodologico. XXXII Italian Conference of Hydraulics and Hydraulic Constructions, p. 336, ISBN: 978-88-903895-2-8.
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15. Guarnieri, A., Milan, N., Pirotti, F., **Tarolli, P.** (2009). Integrazione di dati ALS e TLS per la produzione di DTM in zone alpine. Atti 13° Conferenza Nazionale ASITA 2009, 1163-1168, ISBN 978-88-903132-2-6.
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19. Tarolli, P., and Dalla Fontana, G. (2008). Analysis of the headwater basins' morphology by high resolution LiDAR-derived DTM. *International Archives of Photogrammetry, Remote Sensing and Spatial Information Sciences*, 36 (5/C55), 297-306, ISSN: 1682-1777.
20. Borga, M., **Tarolli, P.**, Dalla Fontana, G., Cazorzi, F. (2007). Impact of forest roads on subsurface flowpaths and shallow landsliding. IUGG XXIV General Assembly, HW3007, 4762, ISBN: 978-88-95852-24-4.

## CONFERENCE PRESENTATIONS

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### Oral

1. **Tarolli, P.** (2018). Observing and understanding the impact of socio-economic change on Earth and human health. *Water and Planetary Health: A Catchment Systems Approach symposium* - University of Lincoln, Lincoln (UK). *Invited talk*
2. Pawłuszek, K., Borkowski, A., **Tarolli, P.** (2018). Multi-aspect analysis of automatic landslide mapping using LiDAR data. *Geophysical Research Abstracts*, 20, EGU2018-9698-1, eISSN: 1607-7962. [Wien]
3. Niculita, M., Ciprian Margarint, M., **Tarolli, P.** (2018). Sediment disconnectivity in lowland North-Eastern Romania induced by landforms, climate and humans. *Geophysical Research Abstracts*, 20, EGU2018-5967-1, eISSN: 1607-7962, [Wien]
4. Pijl, A., Tosoni, M., **Tarolli, P.** (2018). Application of Unmanned Aerial Vehicle (UAV) and Structure-from-Motion (SfM) photogrammetry for the monitoring of vineyard terraced landscapes. *Sixth international congress on mountain and steep slope viticulture*. [Tenerife]
5. **Tarolli, P.** (2017). The geomorphology of humanity. *The 33<sup>rd</sup> Romanian Symposium of Geomorphology*, Iasi (Romania). *Invited talk - Keynote talk*
6. Ciprian Margarint, M., Niculita, M., Roder, G., and **Tarolli, P.** (2017) Stakeholder risk perception associated with natural hazards in Iasi County (Romania). *Geophysical Research Abstract*, 19, EGU2017-13302, eISSN: 1607-7962, [Wien]
7. Rainato, R., Picco, M., Cavalli, M., Mao, L., Neverman, A.J. and **Tarolli, P.** (2017) Coupling climate conditions, sediment sources and sediment transport in an alpine basin. *Geophysical Research Abstract*, 19, EGU2017-14112, eISSN: 1607-14112, [Wien]
8. **Tarolli, P.** (2016) Roads and agricultural terraces in the mountain areas of the world: their geomorphological and hydrological role. *The 33rd International Geographical Congress*, Beijing (P.R. China). *Invited talk - Keynote talk*
9. Sofia, G., Masin, R., and **Tarolli, P.** (2016). Smartphone imagery to analyze animal-induced erosion in riverbanks. *Geophysical Research Abstracts*, 18, EGU2016-12291-1. eISSN: 1607-7962. [Wien]

10. Sofia, G., Roder, G., and **Tarolli, P.** (2016). Land-use, climate and floods dynamics in Northeastern Italy (Veneto). *Geophysical Research Abstracts*, 18, EGU2016-6520-1. eISSN: 1607-7962. [Wien]
11. Prosdocimi, M., Pradetto Sordo, N., Burguet, M., Di Prima, S., Terol Esparza, E., **Tarolli, P.**, and Cerdà, A. (2016). Topographic changes detection through Structure-from-Motion in agricultural lands affected by erosion processes. *Geophysical Research Abstracts*, 18, EGU2016-766. eISSN: 1607-7962. [Wien]
12. **Tarolli, P.** (2016) Hillslope Processes in Anthropogenic Landscapes. *AAG Annual Meeting 2016*, San Francisco (USA). *Invited talk*
13. **Tarolli, P.** (2015) High-resolution topography for understanding Earth surface processes: Opportunities and challenges. *ISPRS Geospatial Week 2015*, Montpellier (FR). *Invited talk - Keynote talk*
14. **Tarolli, P.** (2015) Geomorphology & Anthropocene. *RGS-IBG Annual International Conference 2015*, Exeter (UK). *Invited talk*
15. Sofia, G., **Tarolli, P.** (2015) Geomorphology of anthropogenic landscapes. *Geophysical Research Abstracts*, 17, EGU2015-3372, eISSN: 1607-7962. [Wien]
16. Prosdocimi, M., Calligaro, S., Sofia, G., **Tarolli, P.** (2015). Erosion processes by water in agricultural landscapes: a low-cost methodology for post-event analyses. *Geophysical Research Abstracts*, 17, EGU2015-948, eISSN: 1607-7962. [Wien]
17. **Tarolli, P.**, Sofia, G., (2014). The topographic signature of anthropogenic geomorphic processes. Abstract EP43E-07 presented at 2014 Fall Meeting, AGU, San Francisco, Calif., 15-19 Dec. [San Francisco]
18. Sofia, G., Marinello, F., **Tarolli, P.** (2014). Exploring the spatial heterogeneity of terraced landscapes using LiDAR: the Slope Local Length of Auto-Correlation (SLLAC). *Geophysical Research Abstracts*, 16, EGU2014-5790, eISSN: 1607-7962. [Wien]
19. Piermattei, L., Carturan, L., Calligaro, S., Blasone, G., Guarnieri, A., **Tarolli, P.**, Dalla Fontana, G., Vettore, A. (2014). Application of terrestrial photogrammetry for the mass balance calculation on Montasio Occidentale Glacier (Julian Alps, Italy). *Geophysical Research Abstracts*, 16, EGU2014-7015, eISSN: 1607-7962. [Wien]
20. Prosdocimi, M., Sofia, G., Dalla Fontana, G., **Tarolli, P.** (2013). Land use change in the Veneto floodplain and consequences on minor network drainage system. *AIIA 2013 (X Conference of the Italian Society of Agricultural Engineering)*. [Viterbo]
21. **Tarolli, P.**, Sofia, G., Mariniello, F. (2013). The topographic signature of man. *BSG2013 Annual Conference*, Royal Holloway, University of London. [London]
22. Sofia, G., **Tarolli, P.**, Cazorzi, F., Dalla Fontana, G. (2013). Automatic measurement of bankfull widths from high resolution LiDAR DTMs: a new tool to analyze the link between hydraulic and morphological variables. *Geophysical Research Abstracts*, 15, EGU2013-5494, eISSN: 1607-7962. [Wien]
23. Tseng, C.-M., Lin, C.-W., Dalla Fontana, G., **Tarolli, P.** (2013). The topographic signature of a Major Typhoon. *Geophysical Research Abstracts*, 15, EGU2013-3132, eISSN: 1607-7962. [Wien]
24. Prosdocimi, M., Sofia, G., Dalla Fontana, G., **Tarolli, P.** (2013). Land use change in the last century in the Veneto floodplain: effects on network drainage density, water storage, and related consequences on flood risk. *Geophysical Research Abstracts*, 15, EGU2013-4842, eISSN: 1607-7962. [Wien]
25. Rinaldo, A., Mutzner, R., Bertuzzo, E., **Tarolli, P.**, Weijs, S., Ceola, S., Tomasic, N., Rodríguez-Iturbe, I., Parlange, M. (2013). Geomorphic Signatures on Brutsaert Base Flow Recession Analysis. *Geophysical Research Abstracts*, 15, EGU2013-5856, eISSN: 1607-7962. [Wien]
26. **Tarolli, P.** (2012). Opportunities and Challenges from High Resolution Topography for Understanding Earth Surface Processes. Abstract SE101-D5-AM1-Vir3-004 (SE101-A002) presented at AOGS – AGU (WPGM) Joint Assembly 2012. [Singapore] *Invited talk*
27. Sofia, G., Dalla Fontana, G., **Tarolli, P.** (2012). LiDAR and Geomorphic Parameters for Anthropogenic Feature Extraction in Floodplains. Abstract IWG04-D5-AM2-Leo3-003 (IWG04-A007) presented at AOGS – AGU (WPGM) Joint Assembly 2012. [Singapore]
28. **Tarolli, P.**, Sofia, G., Dalla Fontana, G. (2012). Opportunities and challenges from high resolution topography for understanding earth surface processes. *BSG2012 Annual Conference 2012*, University of Nottingham. [Nottingham]
29. Sofia, G., Cazorzi, F., De Luca, A., Dalla Fontana, G., **Tarolli, P.** (2011). Drainage network detection and quantification of water storage capacity within drainage channels in alluvial plains through LiDAR derived DTMs. *Geotitalia 2011* (VIII Italian Forum of Earth Sciences). [Torino]
30. **Tarolli, P.**, Passalacqua, P. (2011). The statistical signature of Earth-Surface Processes. *Geophysical Research Abstracts*, 13, EGU2011-5594, eISSN: 1607-7962. [Wien]
31. Sofia, G., **Tarolli, P.**, Cazorzi, F., Dalla Fontana, G. (2011). Channel network identification from high-resolution DTM: a statistical approach. *Geophysical Research Abstracts*, 13, EGU2011-2980, eISSN: 1607-7962. [Wien]
32. **Tarolli, P.**, Sofia, G., Pirotti, F., Dalla Fontana, G. (2010). Semi-automatic methods for landslide features and channel network extraction in a complex mountainous terrain: new opportunities but also challenges

- from high resolution topography. *Geophysical Research Abstracts*, 12, EGU2010-15176, eISSN: 1607-7962. [Wien]
33. Borga, M., Lagouvardos, K., Llasat, M.C., Mugnai, A., Price, C., **Tarolli, P.** (2010). Integrating lightning information into real-time flash flood forecasting and warning procedures. *Geophysical Research Abstracts*, 12, EGU2010-14035, eISSN: 1607-7962. [Wien]
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  35. Cavalli, M., **Tarolli, P.** (2009). Airborne LiDAR as a new tool for fluvial geomorphology. *Geoitalia 2009* (VII Italian Forum of Earth Sciences). [Rimini]
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  39. Borga, M., **Tarolli, P.**, Dalla Fontana, G., Cazorzi, F. (2007). Impact of forest roads on subsurface flowpaths and shallow landsliding. IUGG XXIV General Assembly, HW3007, 4762, ISBN: 978-88-95852-25-4. [Perugia]
  40. **Tarolli, P.**, and Dalla Fontana, G. (2007). Analysis of the headwater basins' morphology by high resolution LiDAR-derived DTM. 5<sup>th</sup> International Symposium on Mobile Mapping Technology. [Padova]
  41. **Tarolli, P.**, and Dalla Fontana, G. (2006). Evaluation of LiDAR derived DEM resolution to terrain stability hazard mapping. *Geophysical Research Abstracts*, 8, EGU06-A-03503, eISSN: 1607-7962. [Wien]

### Poster

1. **Tarolli, P.**, Pijl, A., & Vogel, T. (2018). UAV-based photogrammetry: opportunities for maintenance and design of vineyard terrace landscapes. *TERENO International Conference 2018* [paper 7207]. [Berlin]
2. Pijl, A., Bettella, F., D'Agostino, V., **Tarolli, P.** (2018). Quantifying soil erosion in terraced landscapes: integration of high-resolution topography, RPII morphological index and hydrological modelling. *Geophysical Research Abstracts*, 20, EGU2018-18235-1, eISSN: 1607-7962, [Wien].
3. Feurer, D., Pijl, A., Bailly, J.S., **Tarolli, P.** (2018). Terrain modelling in vegetated terraced landscapes from SfM and LiDAR point clouds. *Geophysical Research Abstracts*, 20, EGU2018-13924, eISSN: 1607-7962, [Wien].
4. Pijl, A., Tosoni, M., Roder, G., Sofia, G., **Tarolli, P.** (2018). Unmanned Aerial Vehicle (UAV) data for monitoring and maintenance of terraced landscapes – a case study in Lombardy vineyards (Italy). *Geophysical Research Abstracts*, 20, EGU2018-875-1, eISSN: 1607-7962, [Wien].
5. Roder, G., Scolobig, A., **Tarolli, P.** (2018). Public perception of flood risk and insurance for residential losses: evidence from an Italian region. *Geophysical Research Abstracts*, 20, EGU2018-13386, eISSN: 1607-7962, [Wien].
6. Ciprian Margarint, M., Niculita, M., Roder, G., **Tarolli, P.** (2018). Stakeholders' preparedness level in the face of natural hazards in the rural communities of north-eastern Romania. Gully erosion of lowland old anthropic lakes beds. *Geophysical Research Abstracts*, 20, EGU2018-7346, eISSN: 1607-7962, [Wien].
7. Viero, D.P., Roder, G., Matticchio, B., Defina, A., **Tarolli, P.** (2018). Past and current flood risk: human and landscape interactions in the anthropogenic floodplain of Polesine (Italy). Gully erosion of lowland old anthropic lakes beds. *Geophysical Research Abstracts*, 20, EGU2018-13305, eISSN: 1607-7962, [Wien]. [PICO](#)
8. Niculita, M., Ciprian Margarint, M., Necula, N., **Tarolli, P.** (2018). Gully erosion of lowland old anthropic lakes beds. *Geophysical Research Abstracts*, 20, EGU2018-9037, eISSN: 1607-7962, [Wien]. [PICO](#)
9. Imperatore, G., Yang, X., Wu, Z., **Tarolli, P.** (2018). Analysis of land use change in lowlands of Pearl River Delta (Guangdong Province, P.R. China) from 1986 to 2017. *Geophysical Research Abstracts*, 20, EGU2018-19788, eISSN: 1607-7962, [Wien]. [PICO](#)
10. Sofia, G., Gazzin, A., Dalla Fontana, G., **Tarolli, P.** (2018). Human impacts on hydrological change: the relative role of soil type and irrigation networks. *Geophysical Research Abstracts*, 20, EGU2018-637-1, eISSN: 1607-7962, [Wien]. [PICO](#)
11. Cao, W., Sofia, G., Ellis, E.C., **Tarolli, P.** (2018). Geomorphometric characterization of natural and anthropogenic land cover in different landscapes context. *Geophysical Research Abstracts*, 20, EGU2018-1043, eISSN: 1607-7962, [Wien]. [PICO](#)
12. Cao, W., Sofia, G., Evans, D., Ellis, E.C. **Tarolli, P.** (2018). Developing a framework to observe and analyze



- anthropogenic geomorphology across millennia. *Geophysical Research Abstracts*, 20, EGU2018-780-3, eISSN: 1607-7962, [Wien]. [PICO](#)
13. Borsato, E., Sartori, L., **Tarolli, P.**, Marinello, F. (2018). Decrease the Water Footprint using precision agriculture: a comparison between conventional and conservative agriculture. *Geophysical Research Abstracts*, 20, EGU2018-769-3, eISSN: 1607-7962, [Wien]. [PICO](#)
  14. Roder, G., Toffanin, S., **Tarolli, P.** (2018). High-value viticulture in Northern Italy: farmers' perception of soil erosion in the Prosecco DOCG area. *Geophysical Research Abstracts*, 20, EGU2018-707-1, eISSN: 1607-7962, [Wien]. [PICO](#)
  15. **Tarolli, P.**, Fuller, I.C, Basso, F., Cavalli, M., and Sofia, G. (2017). Hydro-geomorphic connectivity and landslide features extraction to identifying potential threats and hazardous areas. *Geophysical Research Abstract*, 19, EGU2017-17143, eISSN: 1607-7962, [Wien]. [PICO](#)
  16. **Tarolli, P.**, Cecchin, M., Prosdocimi, M., Masin, R. (2017). Geomorphological characterization of conservation agriculture. *Geophysical Research Abstract*, 19, EGU2017-13201, eISSN: 1607-7962, [Wien]. [PICO](#)
  17. Xiang, J., Chen, J., Sofia, G., Lai, Z., Huang, H., **Tarolli, P.** (2017). Monitoring of Open-pit mining using geomorphometry and Unmanned Aerial Vehicles (UAVs). *Geophysical Research Abstract*, 19, EGU2017-13593, eISSN: 1607-7962, [Wien]. [PICO](#)
  18. Cheng, Y.S., Yu, T.T., Egozy, R., and **Tarolli, P.** (2017). Pioneer Vegetation Detection by Hyperspectral Images on Temporal Landslides: A case study of Tzengwen catchment upstream, Taiwan. *Geophysical Research Abstract*, 19, EGU2017-16706, eISSN: 1607-7962, [Wien].
  19. Cheng, Y.S., Yu, T.T., and **Tarolli, P.** (2017). Landslide detection using LiDAR data and data mining technology: Ali Mountain Highway case study (Taiwan). *Geophysical Research Abstract*, 19, EGU2017-16499, eISSN: 1607-7962, [Wien].
  20. Chen, J., Xiang, J., Xiem S., Liu, Jing and **Tarolli, P.** (2017). Investigation of Land Subsidence using ALOS PALSAR data: a case study in Mentougou (Beijing, China). *Geophysical Research Abstract*, 19, EGU2017-8866, eISSN: 1607-7962, [Wien].
  21. Niculita, M., Ciprian Margarint, M., **Tarolli, P.** (2017) Historical reservoir construction: potential hotspot of anthropogenic induced sediments in lowland Northeastern Romania. *Geophysical Research Abstract*, 19, EGU2017-1922, eISSN: 1607-7962, [Wien]. [PICO](#)
  22. Sofia, G., Pizzulli, F., and **Tarolli, P.** (2017) Humans reclaimed lands in NorthEastern Italy and artificial drainage networks: effects of ~30 years of Agricultural Surface Water Management. *Geophysical Research Abstract*, 19, EGU2017-7942, eISSN: 1607-7962, [Wien]. [PICO](#)
  23. Pijl, A., Brauer, C., Sofia, G., Teuling, R., and **Tarolli, P.** (2017) Hydrological Assessment of Model Performance and Scenario Analyses of Land Use Change and Climate Change in lowlands of Veneto Region (Italy). *Geophysical Research Abstract*, 19, EGU2017-1464, eISSN: 1607-7962, [Wien]. [PICO](#)
  24. Torresani, L., Prosdocimi, M., Masin, R., Pensa, M and **Tarolli P.** (2017). Estimation of grazing-induced erosion through remote-sensing technologies in the Autonomous Province of Trento, Northern Italy. *Geophysical Research Abstract*, 19, EGU2017-10222, eISSN: 1607-7962, [Wien]
  25. Cerdà, A., Keesstra, S., Pulido, M., Jordán, A., Novara, A., Giménez-Morera, A., Borja, M.E.L., Martínez-Murillo, J.F., Rodrigo-Comino, J., Pereira, P., Nadal-Romero, E., Taguas, T., Úbeda, X., Brevik, E. C., **Tarolli, P.**, Bagarello, V., Parras Alcantara, L., Muñoz-Rojas, M., Oliva, M., and di Prima S. (2017). Soil erosion and degradation in Mediterranean Type Ecosystems. The Soil Erosion and Degradation Research Group (SEDER) approach and findings. *Geophysical Research Abstract*, 19, EGU2017-3799, eISSN: 1607-7962, [Wien]
  26. Jin, W., Cao, W., Wu, Z., **Tarolli, P.**, Peng, J. (2017). Detection and Analysis of Coastline and Landuse Change from 1960 to 2012 in Pearl River Delta, China. *Geophysical Research Abstract*, 19, EGU2017-1430, eISSN: 1607-7962, [Wien].
  27. Brancucci, G., Brancucci, M., Marescotti, E., Poggi, E., Solimano, M., Vegnuti, R., Giostrella, P., and **Tarolli, P.** (2017) Geological characterization of agricultural terraces as a tool for the territorial safeguard and for the valorization of "Terroir". *Geophysical Research Abstract*, 19, EGU2017-9550, eISSN: 1607-7962, [Wien]. [PICO](#)
  28. Borsato, E., Marinello, F., and **Tarolli, P.** (2017). Correlation of water with carbon/energy footprints for effective agricultural and livestock products classification. *Geophysical Research Abstract*, 19, EGU2017-1353, eISSN: 1607-7962, [Wien]. [PICO](#)
  29. Cvetković, V.M., Roder, G., **Tarolli, P.**, Ōcal, A., Ronan, K., Dragičević, S. (2017). Gender disparities in flood risk perception and preparedness: a Serbian case study. *Geophysical Research Abstract*, 19, EGU2017-6720, eISSN: 1607-7962, [Wien]. [PICO](#)
  30. Roder, G., Sofia, G., Zhifeng, W., and **Tarolli, P.** (2017). Social vulnerability in the flood-prone anthropogenic landscape of Northern Italy. *Geophysical Research Abstract*, 19, EGU2017-1262, eISSN: 1607-7962, [Wien].

31. **Tarolli, P.**, and Sofia, G. (2016). Anthropogenic features and hillslope processes interaction. *Geophysical Research Abstracts*, 18, EGU2016- 12102. eISSN: 1607-7962. [Wien]
32. Roder, G., and **Tarolli, P.** (2016). Natural disasters and gender dynamics. *Geophysical Research Abstracts*, 18, EGU2016- 12255. eISSN: 1607-7962. [Wien]
33. Lo Re, G., Fuller, I.C., Sofia, G., Holt, K., Macklin, M.G., and **Tarolli, P.** (2016). High-resolution topography for the analysis of palaeochannels in the Manawatu river (New Zealand). *Geophysical Research Abstracts*, 18, EGU2016-14562, eISSN: 1607-7962. [Wien] [PICO](#)
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36. Chen, J., Xiang, J., **Tarolli, P.**, and Lai, Z. (2016). The Method and Key Technology of Dynamic RS-GIS Environment Monitoring. *Geophysical Research Abstracts*, 18, EGU2016-1926. eISSN: 1607-7962. [Wien]
37. Prosdocimi, M., Jordán, A., **Tarolli, P.**, and Cerdà, A. (2016). The effects of mulching on soil erosion by water. A review based on published data. *Geophysical Research Abstracts*, 18, EGU2016- 13590. eISSN: 1607-7962. [Wien]
38. **Tarolli, P.**, Prosdocimi M., Sofia, G., Dalla Fontana, G. (2015) Smartphones for post-event analysis: a low-cost and easily accessible approach for mapping natural hazards. *Geophysical Research Abstracts*, 17, EGU2015-12550, eISSN: 1607-7962. [Wien]
39. Roder, G., Ruljigaljig, T., Lin, C.W., **Tarolli, P.** (2015). Natural hazards knowledge and risk perception of Wujie indigenous community in Taiwan. *Geophysical Research Abstracts*, 17, EGU2015-6515, eISSN: 1607-7962. [Wien]
40. Prosdocimi, M., Cerdà, A., **Tarolli, P.** (2015) Soil water erosion on Mediterranean vineyards. A review based on published data. *Geophysical Research Abstracts*, 17, EGU2015-4034, eISSN: 1607-7962. [Wien]
41. Chen, J., Li, K., Sofia, G., **Tarolli, P.** (2015) Analysis of open-pit mines using high-resolution topography from UAV. *Geophysical Research Abstracts*, 17, EGU2015-4572, eISSN: 1607-7962. [Wien] [PICO](#)
42. Piermattei, L., Carturan, L., De Blasi, F., **Tarolli, P.**, Dalla Fontana, G., Vettore, A. (2015) Analysis of glacial and periglacial processes using the SfM-MVS approach. *Geophysical Research Abstracts*, 17, EGU2015-5311, eISSN: 1607-7962. [Wien] [PICO](#)
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Paolo Tarolli