

PAOLO TAROLLI



Full Professor at 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, tarolli.paolo@gmail.com

ORCID: <http://orcid.org/0000-0003-0043-5226>

SCOPUS author ID: 57212777181

Google Scholar: <https://scholar.google.com/citations?user=Ryfb3D8AAAAJ&hl=en>

web-page: <http://www.tesaf.unipd.it/en/paolo-tarolli>

Author of more than 160 papers indexed in Scopus (75% published with first or last name author) published or in press in international peer reviewed journals, proceedings, and books with the following publication metrics (29 June 2023): **Google Scholar (h-index 53, total citations 9041)**, **SCOPUS (h-index 45, total citations 6597)**; average **9.1 papers/yr** and **343 citations/yr**, in the last 5 years 2018-2022 **16 papers/yr** and **796 citations/yr**. He is also author of 11 papers in national magazines, 2 chapters in Encyclopaedia, 18 papers/chapters in books, 25 papers in conference proceedings, and more than 200 presentations (14 invited talks) at national/international meetings (63 orals, 20 virtual online, and 115 posters). He edited three books.

Ranked in the list of **100,000 top world's most cited scientists: rank no. 87715** for career in all disciplines (**top 0.56%** in the category *geological & geomatics engineering*); **rank no. 20872** in all disciplines for single year 2021 (**top 0.3%** in the category *geological & geomatics engineering* excluding self-citations), source Elsevier BV & Stanford University)

PUBLICATIONS

*corresponding author

Peer-reviewed Journals

2023

1. **Tarolli***, P., Wang, W., Pijl, A., Cucchiaro, S., & Straffelini, E. (2023). Heroic viticulture: Environmental and socioeconomic challenges of unique heritage landscapes. *iScience*. doi:10.1016/j.isci.2023.107125.
2. **Tarolli***, P., Zhao, W. (2023). Drought in agriculture: Preservation, adaptation, migration. *The Innovation Geoscience*, 1(1), 100002, ISSN 2959-8753, doi:10.59717/j.xinn-geo.2023.100002.
3. Wang, W., Straffelini, E., **Tarolli***, P. (2023). Steep-slope viticulture: The effectiveness of micro-water storage in improving the resilience to weather extremes. *Agricultural Water Management*, 286, 108398, ISSN: 0378-3774, doi: 10.1016/j.agwat.2023.108398.
4. Das*, S., Sangode S.J., Kandekar, A.M., Meshram D.C., **Tarolli, P.** (2023). Interrelation between factors controlling sediment yield in the largest catchment of Peninsular India. *Journal of Hydrology*, 622, part B, 129680, ISSN: 0022-1694, doi:10.1016/j.jhydrol.2023.129680.
5. Zeybek*, M., Taşkaya, S., Elkhachy, I., **Tarolli, P.** (2023). Improving the Spatial Accuracy of UAV Platforms Using Direct Georeferencing Methods: An Application for Steep Slopes. *Remote Sensing* 15, 2700, ISSN: 2072-4292, doi: 10.3390/rs15102700.
6. Straffelini*, E., **Tarolli, P.** (2023). Climate change-induced aridity is affecting agriculture in Northeast Italy. *Agricultural Systems*, 208, 103647, ISSN: 0308-521X, doi:10.1016/j.agsy.2023.103647.
7. Straffelini*, E., ..., **Tarolli, P.** (2023). Viticulture in Argentina under extreme weather scenarios: Actual challenges, future perspectives. *Geography and Sustainability*, 4, 161–169, ISSN: 2096-7438, doi: 10.1016/j.geosus.2023.03.003.

8. **Tarolli***, P., Luo, J., Straffelini, E., Liou, Y.-A., Nguyen, K.-A., Laurenti, R., Masin, R., D'Agostino, V. (2023) Saltwater intrusion and climate change impact on coastal agriculture. *PLOS Water*, 2(4), e0000121, ISSN: 2767-3219, doi:10.1371/journal.pwat.0000121.
9. Luo*, J., Zheng, Z., Li, T., He, S., **Tarolli, P.** (2023). Impact of tillage-induced microtopography on hydrological-sediment connectivity and its hydrodynamic understanding. *Catena*, 228, 107168, ISSN: 0341-8162, doi:10.1016/j.catena.2023.107168.
10. Zhao*, P., Fallu, D.J., Pears, B.R., ... **Tarolli, P.**, ... Six, J., Brown, A.G., van Masemael, B., Van Oost, K. (2023). Quantifying soil properties relevant to soil organic carbon biogeochemical cycles by infrared spectroscopy: The importance of compositional data analysis. *Soil and Tillage Research*, 231, 105718, ISSN: 0167-1987, doi: 10.1016/j.still.2023.105718.
11. Cao*, W., Liu, J., Ceola, S., Mao, G., Macklin, M.G., Montanari, A., Pijl, C., Yao, Y., S., **Tarolli, P.** (2023). Landform-driven human reliance on rivers in imperial China. *Journal of Hydrology*, 620, 129353, ISSN: 0022-1694, doi: 10.1016/j.jhydrol.2023.129353.
12. **Tarolli, P.**, Lucas-Borja, M.E., Yu, G., Xu*, X. (2023). New sciences & technologies in soil conservation and eco-sustainability. *International Soil and Water Conservation Research*, 11, 412–414, ISSN: 2095-6339, doi:10.1016/j.iswcr.2023.01.007.
13. Brown*, A.G., ... **Tarolli, P.**, ... Waddington, C. (2023). Early to Middle Bronze Age agricultural terraces in north-east England: morphology, dating and cultural implications. *Antiquity*, 97, 348–366, ISSN: 0003-598X, doi: 10.15184/aqy.2023.1.
14. Chen, L., Sofia G., Qiu, J., Wang, J., **Tarolli***, P. (2023). Grassland ecosystems resilience to drought: The role of surface water ponds. *Land Degradation and Development*, 34, 1960–1972, ISSN: 1085-3278, doi:10.1002/ldr.4581.

2022

15. Straffelini*, E., **Tarolli, P.** (2022). Viticulture and Cultural Landscapes: remote sensing and Earth surface processes modelling to promote sustainable agricultural practices. *IEEE Workshop on Metrology for Agriculture and Forestry (MetroAgriFor)*, 292-297, doi: 10.1109/MetroAgriFor55389.2022.9964716.
16. Wang, W., Straffelini, E., Pijl, A., **Tarolli***, P. (2022). Sustainable water resource management in steep-slope agriculture. *Geography and Sustainability*, 3, 214–219, ISSN: 2096-7438, doi: 10.1016/j.geosus.2022.07.001.
17. Mauri*, L., Cucchiario, S., Grigolato, S., Dalla Fontana, G., **Tarolli, P.** (2022). Evaluating the interaction between snowmelt runoff and road in the occurrence of hillslope instabilities affecting a landslide-prone mountain basin: A multi-modeling approach. *Journal of Hydrology*, 612, 128200, ISSN: 0022-1694, doi: 10.1016/j.jhydrol.2022.128200.
18. Wei, F., Jinsong, C., Xiaoli, L., **Tarolli, P.**, Jin*, W (2022). Multitemporal impervious surface estimation via an optimized stable/change pixel detection approach. *GIScience and Remote Sensing*, 59, 1406 - 1425, ISSN: 1548-1603, doi:10.1080/15481603.2022.2118430.
19. Wang, W., Pijl, A., **Tarolli***, P. (2022). Future climate-zone shifts are threatening steep-slope agriculture. *Nature Food*, 3, 193–196, ISSN: 2662-1355, doi:10.1038/s43016-021-00454-y. ***media impact***
20. Straffelini*, E., Pijl, A., Otto, S., Marchesini, E., Pitacco, A., **Tarolli, P.** (2022). A high-resolution physical modelling approach to assess runoff and soil erosion in vineyards under different soil managements. *Soil and Tillage Research*, 222, 105418, ISSN: 0167-1987, doi:10.1016/j.still.2022.105418.
21. Luo, J., Wang, N., Zheng*, Z., Tingxuan, L., He, S., **Tarolli, P.** (2022). Tillage-induced microtopography alters time-dependent intrinsic correlation of runoff and sediment yield. *Soil and Tillage Research*, 221, 105423, ISSN: 0167-1987, doi:10.1016/j.still.2022.105423.
22. Cucchiario*, S., Carretta, L., Nasta, P., Cazorzi, F., Masin, R., Romano, N., **Tarolli, P.** (2022). Multi-temporal geomorphometric analysis to assess soil erosion under different tillage practices: A methodological case study. *Journal of Agricultural Engineering*, 53, 1279, ISSN: 1974-7071, doi:10.4081/jae.2022.1279.
23. Mauri*, L., Straffelini, E., **Tarolli, P.** (2022). Multi-temporal modeling of road-induced overland flow alterations in terraced landscape characterized by shallow landslides. *International Soil and Water Conservation Research*, 10, 240–253, ISSN: 2095-6339, doi:10.1016/j.iswcr.2021.07.004. ***outstanding paper award by WASWAC***
24. Pijl, A., Wang, W., Straffelini, E., **Tarolli***, P. (2022). Soil and water conservation in terraced and non-terraced cultivations: an extensive comparison of 50 vineyards. *Land Degradation & Development*, 33, 596–610, ISSN: 1085-3278, doi:10.1002/ldr.4170.
25. Silvestri*, S., Capra, V., Cucchiario, S., Pivato, M., **Tarolli, P.** (2022). Tides, Topography, and Seagrass Cover Controls on the Spatial Distribution of *Pinna nobilis* on a Coastal Lagoon Tidal Flat. *Journal of*

Geophysical Research: Biogeosciences, 127, e2021JG006667, ISSN: 2169-8953, doi:10.1029/2021JG006667.

2021

26. Rizzi*, J., Tarquis, A. M., Gobin, A., Semenov, M., Zhao, W., **Tarolli, P.** (2021). Preface: Remote sensing, modelling-based hazard and risk assessment, and management of agro-forested ecosystems. *Natural Hazards and Earth System Sciences*, 21, 3873–3877, ISSN: 1561-8633, doi:10.5194/nhess-21-3873-2021. ([Special Issue Editorial](#))
27. Zhao*, P., Fallu, D. J., Cucchiario, S., **Tarolli, P.**, Waddington, C., Cockcroft, D., Snape, L., Lang, A., Doetterl, S., Brown, A. G., Van Oost, K. (2021). Soil organic carbon stabilization mechanisms and temperature sensitivity in old terraced soils. *Biogeosciences*, 18, 6301–6312, ISSN: 1726-4170, doi:10.5194/bg-18-6301-2021.
28. Mărgărint, M. C., Niculiță*, M., Roder, G., **Tarolli, P.** (2021). Risk perception of local stakeholders on natural hazards: implications for theory and practice, *Nat. Hazards Earth Syst. Sci.*, doi:10.5194/nhess-2021-37.
29. Cucchiario*, S., Paliaga, G., Fallu, D.J., Pears, B., Walsh, K., Zhao, P., Van Oost, K., Snape, L., Lang, A., Brown, T., **Tarolli, P.** (2021). Volume estimation of soil stored in agricultural terrace systems: A geomorphometric approach. *Catena*, 207, 105687, doi:10.1016/j.catena.2021.105687.
30. Cucchiario*, S., Straffelini, E., Chang, K.J., **Tarolli, P.** (2021). Mapping vegetation-induced obstruction in agricultural ditches. *Agricultural Water Management*, 256, 107083, doi:10.1016/j.agwat.2021.107083.
31. Straffelini, E., Cucchiario, S., **Tarolli*, P.** (2021). Mapping potential surface ponding in agriculture using UAV-SfM. *Earth Surf Process Landforms*, 46, 1926–1940, doi:10.1002/esp.5135.
32. Zhang, Q., Wu, Z., **Tarolli*, P.** (2021). Investigating the Role of Green Infrastructure on Urban WaterLogging: Evidence from Metropolitan Coastal Cities. *Remote Sensing*, 13(12), 2341, doi: 10.3390/rs13122341.
33. Wang, J., Chen, J., Wen*, Y., Fan, W., Liu, Q., **Tarolli P.** (2021). Monitoring the coastal wetlands dynamics in Northeast Italy from 1984 to 2016. *Ecological Indicators*, 107906, doi:10.1016/j.ecolind.2021.107906.
34. Qiu, J., Cao, B., Park, E., Yang*, X., Zhang, W., **Tarolli, P.**, 2021. Flood Monitoring in Rural Areas of the Pearl River Basin (China) Using Sentinel-1 SAR. *Remote Sensing* 13, 1384, doi:10.3390/rs13071384.
35. Ghirardelli, A., **Tarolli*, P.**, Rajasekaran, M.K., Mudhatkal, A., Macklin, M.G., Masin, R. (2021). Organic contaminants in Ganga basin: from the Green Revolution to the emerging concerns of modern India. *iScience*, 24, 102122, 10.1016/j.isci.2021.102122. ([Invited Review Article](#))
36. Brown*, T., Fallu, D., Walsh, K., Cucchiario, S., **Tarolli, P.**, Zhao, P., Pears, B., van Oost, K., Snape, L., Lang, A., Albert, R.-M., G. Alsos, I.G., Waddington, C. (2021). Ending the Cinderella Status of Terraces and Lynchets in Europe: The Geomorphology of Agricultural Terraces and Implications for Ecosystem Services and Climate Adaptation. *Geomorphology*, 379, 107579, doi:10.1016/j.geomorph.2020.107579. ([Invited Review Article](#))
37. Pijl*, A., Quarella, E., Vogel, T.A., D'Agostino, V., **Tarolli, P.** (2021). Remote sensing vs. field-based monitoring of agricultural terrace degradation. *International Soil and Water Conservation Research*, 9, 1–10, doi:10.1016/j.iswcr.2020.09.001.
38. **Tarolli*, P.**, Pijl, A., Cucchiario, S., Wei, W. (2021). Slope instabilities in steep cultivation systems: process classification and opportunities from remote sensing. *Land Degradation & Development*, 32, 1368–1388, doi:10.1002/ldr.3798.
39. Mauri*, L., Straffelini, E., Cucchiario, S., **Tarolli, P.** (2021). UAV-SfM 4D mapping of landslides activated in a steep terraced agricultural area. *Journal of Agricultural Engineering*, volume LII:1130, doi:10.4081/jae.2021.1130.
40. Zhang, Q., Wu, Z., Guo, G., Zhang, H., **Tarolli*, P.** (2021). Explicit the urban waterlogging spatial variation and its driving factors: The stepwise cluster analysis model and hierarchical partitioning analysis approach. *Science of The Total Environment*, 763, 143041, doi:10.1016/j.scitotenv.2020.143041.
41. Wu*, J., Li, M., Zhang, X., Fiedler, S., Gao, Q., Zhou, Y., Cao, W., Hassan, W., Mărgărint, M.C., **Tarolli, P.**, Tietjen, B. (2021). Disentangling climatic and anthropogenic contributions to nonlinear dynamics of alpine grassland productivity on the Qinghai-Tibetan Plateau. *Journal of Environmental Management*, 281, 111875, doi:10.1016/j.jenvman.2020.111875.
42. Carretta, L., **Tarolli*, P.**, Cardinali, A., Nasta, P., Romano, N., Masin, R. (2021). Evaluation of runoff and soil erosion under conventional tillage and no-till management: A case study in northeast Italy. *Catena*, 104972, doi:10.1016/j.catena.2020.104972.

2020

43. Brown*, T., Walsh, K., Fallu, D., Cucchiario, S., **Tarolli, P.** (2021). European agricultural terraces and lynchets: from archaeological theory to heritage management. *World Archaeology*, 52(4), 566–588, doi:10.1080/00438243.2021.1891963.
44. Taylor*, F.E., **Tarolli, P.**, Malamud, B.D. (2020). Preface: Landslide–transport network interactions. *Nat. Hazards Earth Syst. Sci.*, 20, 2585–2590, doi:10.5194/nhess-20-2585-2020.
45. Gao*, X., Roder, G., Jiao, Y., Ding, Y., Liu, Z., **Tarolli, P.** (2020). Farmers' landslide risk perceptions and willingness for restoration and conservation of world heritage site of Honghe Hani Rice Terraces, China. *Landslides*, 17, 1915–1924, doi:10.1007/s10346-020-01389-4.
46. Zhang, Q., Wu, Z., Zhang, H., Dalla Fontana, G., **Tarolli*, P.** (2020). Identifying dominant factors of waterlogging events in metropolitan coastal cities: The case study of Guangzhou, China. *Journal of Environmental Management*, 271, 110951, doi:10.1016/j.jenvman.2020.110951.
47. Cucchiario*, S., Fallu, D.J., Zhang, H., Walsh, K., Van Oost, K., Brown, A.G., **Tarolli, P.** (2020). Multiplatform-SfM and TLS Data Fusion for Monitoring Agricultural Terraces in Complex Topographic and Landcover Conditions. *Remote Sensing*, 12, 1946, doi:10.3390/rs12121946.
48. Pijj*, A., Reuter, L.H.E., Quarella, E., Vogel, T.A., **Tarolli, P.** (2020). GIS-based soil erosion modelling under various steep-slope vineyard practices. *Catena*, 193, 104604, doi:10.1016/j.catena.2020.104604.
49. **Tarolli*, P.**, Straffelini, E. (2020). Agriculture in Hilly and Mountainous Landscapes: Threats, Monitoring and Sustainable Management. *Geography and Sustainability*, 1, 70–76. doi:10.1016/j.geosus.2020.03.003. [\(Perspective\)](#)
50. Wang, X., Wang, L., Chen*, J., Zhang, S., **Tarolli, P.** (2020). Assessment of the External Costs of Life Cycle of Coal: The Case Study of Southwestern China. *Energies*, 13, 4002, doi:10.3390/en13154002.
51. Mauri*, L., Masin, R., **Tarolli, P.** (2020). Wildlife impact on cultivated lands: A multi-temporal spatial analysis. *Agricultural Systems*, 184, 102890, doi:10.1016/j.agsy.2020.102890.
52. Chen, D., Wei*, W., Daryanto, S., **Tarolli, P.** (2020). Does terracing enhance soil organic carbon sequestration? A national-scale data analysis in China. *Science of the Total Environment*, 721, 137751, doi: 10.1016/j.scitotenv.2020.137751.
53. Cao*, W., Sofia, G., **Tarolli, P.** (2020). Geomorphometric characterization of natural and anthropogenic land cover. *Progress in Earth and Planetary Science*, 7, 2, doi:10.1186/s40645-019-0314-x.
54. Borsato*, E., Rosa, L., Marinello, F., **Tarolli, P.**, D'Odorico, P (2020). Weak and Strong Sustainability of Irrigation: A framework for irrigation practices under limited water availability. *Front. Sustain. Food Syst.*, 4, 17, doi:10.3389/fsufs.2020.00017.
55. Xiangzhou*, X., Yulei, M., Wenjun, Y., Hongwu, Z., **Tarolli, P.**, Yunzhong, J., Qiao, Y. (2020). Qualifying mass failures on loess gully sidewalls using laboratory experimentation. *Catena*, 187, 104252, doi:10.1016/j.catena.2019.104252.
56. Borsato*, E., Zucchinelli, M., D'Ammaro, D., Giubilato, E., Zabeo, A., Criscione, P., Pizzol, L., Cohen, Y., **Tarolli, P.**, Lamastra, L., Marinello, F. (2020). Use of Multiple Indicators to compare Sustainability Performance of Organic vs Conventional Vineyard Management. *Science of the Total Environment*, 711, 135081, doi: 10.1016/j.scitotenv.2019.135081.
57. Pijj*, A., Bailly J.S., Feurer, D., El Maaoui M.A., Boussema M.R., **Tarolli, P.** (2020). TERRA: Terrain Extraction from elevation Rasters through Repetitive Anisotropic filtering. *International Journal of Applied Earth Observation and Geoinformation*, 84, 101977, doi: 10.1016/j.jag.2019.101977.
58. Zhao*, W., Ding, J., Wang, Y., Jia, L., Cao, W., **Tarolli, P.** (2020). Ecological water conveyance drives human-water system evolution in the Heihe watershed, China. *Environmental Research*, 182, 109009, doi: 10.1016/j.envres.2019.109009.

2019

59. Mauri, L., Sallustio, L., **Tarolli*, P.** (2019). The geomorphologic forcing of wild boars. *Earth Surface Processes and Landforms*, 44, 2085–2094, doi:10.1002/esp.4623. ***media impact***
60. Du*, J., Watts, J.D., Lu, H., Jiang, L., **Tarolli, P.** (2019). Editorial for Special Issue: “Remote Sensing of Environmental Changes in Cold Regions”. *Remote Sensing*, 11, 2165, doi:10.3390/rs11182165 [\(Special Issue Editorial\)](#)
61. Du, J., Watts, J.D., Jiang*, L., Lu, H., Cheng, X., Duguay, C., Farina, M., Qiu, Y., Kim, Y., Kimball, J.S., **Tarolli, P.** (2019). Remote Sensing of Environmental Changes in Cold Regions: Methods, Achievements and Challenges. *Remote Sensing*, 11, 1952, doi:10.3390/rs11161952 [\(Review Article\)](#)
62. Xiang*, J., Li, S., Xiao, K., Chen, J., Sofia, G., **Tarolli, P.** (2019). Quantitative Analysis of Anthropogenic Morphologies Based on Multi-Temporal High-Resolution Topography. *Remote Sensing*, 11, 1493, doi: 10.3390/rs11121493.
63. Torresani*, L., Wu, J., Masin, R., Penasa, M., **Tarolli, P.** (2019). Estimating soil degradation in montane grasslands of North-eastern Italian Alps (Italy). *Heliyon*, 5(6), e01825, doi:10.1016/j.heliyon.2019.e01825.

64. Wu*, J., Song, M., Ma, W., Zhang, X., Shen, Z., **Tarolli, P.**, Wurst, S., Shi, P., Ratzmann, G., Feng, Y., Li, M., Wang, X., Tietjen, B. (2019). Plant and soil's $\delta^{15}\text{N}$ are regulated by climate, soil nutrients, and species diversity in alpine grasslands on the northern Tibetan Plateau. *Agriculture, Ecosystems and Environment*, 281, 111 – 123, doi:10.1016/j.agee.2019.05.011.
65. Yang*, X., Lu, X., Ran, L., **Tarolli, P.** (2019). Geomorphometric Assessment of the Impacts of Dam Construction on River Disconnectivity and Flow Regulation in the Yangtze Basin. *Sustainability*, 11, 3427, doi:10.3390/su11123427.
66. Pawluszek*, K., Marczak, S., Borkowski, A., **Tarolli, P.** (2019). Multi-Aspect Analysis of Object-Oriented Landslide Detection Based on an Extended Set of LiDAR-Derived Terrain Features. *ISPRS International Journal of Geo-Information*. 8(8), 321, doi:10.3390/ijgi8080321
67. Yang*, X., Lu, X., Park, E., **Tarolli, P.** (2019). Impacts of Climate Change on Lake Fluctuations in the Hindu Kush-Himalaya-Tibetan Plateau. *Remote Sensing*, 11, 1082, doi:10.3390/rs11091082.
68. Roder*, G., Hudson, P., **Tarolli, P.** (2019). Flood risk perceptions and the willingness to pay for flood insurance in the Veneto region of Italy. *International Journal of Disaster Risk Reduction*, 37, 101172, doi: 10.1016/j.ijdr.2019.101172. ***media impact***
69. Pijl*, A., Tosoni, M., Roder, G., Sofia, G., **Tarolli, P.** (2019). Design of Terrace Drainage Networks Using UAV-Based High-Resolution Topographic Data. *Water*, 11, 814, doi:10.3390/w11040814.
70. **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.
71. **Tarolli*, P.**, Cao, W., Sofia, G., Evans, D., Ellis, EC. (2019). From features to fingerprints: a general diagnostic framework for anthropogenic geomorphology. *Progress in Physical Geography*, 43, 95–128, doi: 10.1177/0309133318825284.
72. Sofia*, G., Ragazzi, F., Giandon, P., Dalla Fontana, G., **Tarolli, P.** (2019). On the linkage between runoff generation, land drainage, soil properties, and temporal patterns of precipitation in agricultural floodplains. *Advances in Water Resources*, 124, 120–138, doi:10.1016/j.advwatres.2018.12.003
73. Borsato*, E., Giubilato, E., Zabeo, A., Lamastra, L., Criscione, P., **Tarolli, P.**, Marinello, F., Pizzol, L. (2019). Comparison of Water-focused Life Cycle Assessment and Water Footprint Assessment: The case of an Italian wine. *Science of the Total Environment*, 666, 1220–1231, doi:10.1016/j.scitotenv.2019.02.331.
74. Pijl*, A., Barneveld, P., Mauri, L., Borsato, E., Grigolato, S., **Tarolli, P.** (2019). Estimating the impact of mechanization on soil loss in vineyards terraced landscapes. *Cuadernos de Investigación Geográfica*, 45, 287–308, doi: 10.18172/cig.3774.
75. Li, M., Wu*, J., Song, C., He, Y., Niu, B., Fu, G., **Tarolli, P.**, Tietjen, B., Zhang, X. (2019). Temporal Variability of Precipitation and Biomass of Alpine Grasslands on the Northern Tibetan Plateau. *Remote Sensing*, 11, 360, doi:10.3390/rs11030360.
76. 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**
77. **Tarolli*, P.** (2018). Agricultural Terraces Special Issue Preface. *Land Degradation and Development*, 29, 3544–3548, doi:10.1002/ldr.3129. **(Special Issue Editorial)**
78. 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.
79. 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/nzg.12186.
80. Pijl*, 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.
81. Giordan*, D., Hayakawa, Y., Nex, F., **Tarolli, P.** (2018). Preface: The use of remotely piloted aircraft systems (RPAS) in monitoring applications and management of natural hazards. *Natural Hazards and Earth System Sciences*, 18, 3085–3087, doi:10.5194/nhess-18-3085-2018. **(Special Issue Editorial)**
82. Giordan*, D., Hayakawa, Y., Nex, F., Remondino, F., **Tarolli, P.** (2018). Review article: The use of remotely piloted aircraft systems (RPAS) for natural hazards monitoring and management. *Natural Hazards and Earth System Sciences*, 18, 1079–1096, doi:10.5194/nhess-18-1079-2018. **(Review Article)**
83. 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.
84. 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.
85. 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.
 86. Borsato*, E., Galindo, A., **Tarolli*, P.**, Sartori, L., Marinello, F. (2018). Evaluation of the Grey Water Footprint Comparing the Indirect Effects of Different Agricultural Practices. *Sustainability*, 10, doi:10.3390/su10113992
 87. 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.
 88. 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.
 89. Cvetkovic*, V.M., Roder, R., Öcal, A., **Tarolli, P.**, Dragicevic, S. (2018). The Role of Gender in Preparedness and Response Behaviors towards Flood Risk in Serbia. *International Journal of Environmental Research and Public Health*, 15, 2761, doi:10.3390/ijerph15122761.
- 2017
90. 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.
 91. 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.
 92. 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.
 93. **Tarolli*, P.**, Sofia, G., Ellis, E. (2017), Mapping the topographic fingerprints of humanity across Earth. *Eos*, 98, doi:10.1029/2017EO069637.
 94. 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](#))
 95. 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.
 96. 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. ***media impact***
 97. 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. ***media impact***
 98. Sofia*, G., **Tarolli, P.** (2017). Hydrological response of 30yr of agriculture’s surface water management. *Land*, 6(1), 3, doi:10.3390/land6010003.
 99. Prosdocimi*, 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.
 100. Ferrato*, C., De Marco, J., **Tarolli, P.**, Cavalli, M. (2017). An updated sediment source areas inventory in the Rio Cordon catchment (Dolomites). *Rendiconti Online Società Geologica Italiana*, 42, 10-13, doi:10.3301/ROL.2017.02.
- 2016
101. **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](#))
 102. 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.
 103. 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.
104. Prosdocimi*, M., **Tarolli, P.**, Cerdà, A. (2016). Mulching practice for reducing soil water erosion: A review, *Earth-Science Reviews*, 161, 191-203. ([Review Article](#))
105. 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.
106. 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](#))
107. Sofia*, G., Mariniello, F., **Tarolli, P.** (2016). 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.
108. **Tarolli*, P.**, Sofia, G. (2016). Human topographic signatures and derived geomorphic processes across landscapes, *Geomorphology*, 255, 140-161, ISSN: 0169-555X, doi:10.1016/j.geomorph.2015.12.007. ([Invited Review Article](#))
109. 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.
110. Prosdocimi*, M., Jordán, A., **Tarolli, P.**, Keesstra, S., Novara, A., Cerdà, A. (2016). The immediate effectiveness of barley straw mulch in reducing soil erodibility and surface runoff generation in Mediterranean vineyards, *Science of the Total Environment*, 547, 323-330, ISSN: 0048-9697, doi:10.1016/j.scitotenv.2015.12.076.
111. Sofia*, G., **Tarolli, P.** (2016). Automatic characterization of road networks under forest cover: Advances in the analysis of roads and geomorphic process interaction. *Rendiconti Online Società Geologica Italiana*, 39, 23-26, doi: 10.3301/ROL.2016.38.
112. Cavalli*, M., **Tarolli, P.**, Dalla Fontana, G., Marchi, L. (2016). Multi-temporal analysis of sediment source areas and sediment connectivity in the Rio Cordon catchment (Dolomites). *Rendiconti Online Società Geologica Italiana*, 39, 27-30, doi:10.3301/ROL.2016.39.
- 2015
113. Sofia*, G., **Tarolli, P.**, Cazorzi, F., Dalla Fontana, G. (2015). Downstream hydraulic geometry relationships: gathering reference reach-scale width values from LiDAR, *Geomorphology*, 250, 236-248, ISSN: 0169-555X, doi:10.1016/j.geomorph.2015.09.002.
114. Prosdocimi, M., Sofia, G., Dalla Fontana, G., **Tarolli*, P.** (2015). Bank erosion in agricultural drainage networks: New challenges from structure-from-motion photogrammetry for post-event analysis, *Earth Surface Processes and Landforms*, 40, 1891-1906, ISSN: 1096-9837, doi:10.1002/esp.3767.
115. Chen, J., Li, K., Chang, K.-J., Sofia, G., **Tarolli*, P.** (2015). Open-pit mining geomorphic feature characterization, *International Journal of Applied Earth Observation and Geoinformation*, 42, 76-86, ISSN: 0303-2434, doi:10.1016/j.jag.2015.05.001.
116. Mutzner*, R., Weijs, S.V., **Tarolli, P.**, Calaf, M., Oldroyd, H.J., Parlange, M.B. (2015). Controls on the diurnal streamflow cycles in a small alpine headwater catchment, *Water Resources Research*, 51, 3403-3418, ISSN: 1096-9837, doi:10.1002/2014WR016581.
117. Tseng, C.-M., Lin, C.W., Dalla Fontana, G., **Tarolli*, P.** (2015). The topographic signature of a Major Typhoon, *Earth Surface Processes and Landforms*, 40, 1129-1136, ISSN: 1096-9837, doi:10.1002/esp.3708.
118. **Tarolli*, P.**, Sofia, G., Calligaro, S., Prosdocimi, M., Preti, F., Dalla Fontana, G. (2015). Vineyards in terraced landscapes: new opportunities from lidar data, *Land Degradation & Development*, 26, 92-102, ISSN: 1099-145X, doi:10.1002/ldr.2311.
119. Pappalardo*, S.E., Prosdocimi, M., **Tarolli, P.**, Borin, M. (2015). Assessment of energy potential from wetland plants along the minor channel network on an agricultural floodplain, *Environmental Science and Pollution Research*, 22(4), 2479-2490, ISSN: 0944-1344, doi:10.1007/s11356-014-3105-3.
- 2014
120. Li*, K., Chen, J., **Tarolli, P.**, Sofia, G., Feng, Z., Li, J. (2014). Geomorphometric multi-scale analysis for the automatic detection of linear structures on the lunar surface, *Earth Science Frontiers*, 21(6), 212-222, ISSN: 1005-2321, doi:10.13745/j.esf.2014.06.021. (in chinese)
121. Sofia*, G., Mariniello, F., **Tarolli, P.** (2014). A new landscape metric for the identification of terraced sites: the Slope Local Length of Auto-Correlation (SLLAC), *ISPRS Journal of Photogrammetry and Remote Sensing*, 96, 123-133, ISSN: 0924-2716, doi:10.1016/j.isprsjprs.2014.06.018.

122. **Tarolli***, P., Vanacker, V., Middelkoop, H., Brown, T. (2014). Landscape in the Anthropocene: state of the art and future directions, *Anthropocene*, 6, 1-2, ISSN: 2213-3054, doi:10.1016/j.ancene.2014.11.003. ([Special Issue Editorial](#))
123. **Tarolli***, P., Preti, F., Romano, N. (2014). Terraced landscapes: from an old best practice to a potential hazard for soil degradation due to land abandonment, *Anthropocene*, 6, 10-25, ISSN: 2213-3054, doi:10.1016/j.ancene.2014.03.002. ([Review Article](#)) ***most cited publication award by Elsevier***
124. Sofia*, G., Prosdocimi, M., Dalla Fontana, G., **Tarolli, P.** (2014). Modification of artificial drainage networks during the past half-century: Evidence and effects in a reclamation area in the Veneto floodplain (Italy), *Anthropocene*, 6, 48-62, ISSN: 2213-3054, doi:10.1016/j.ancene.2014.06.005.
125. Passalacqua*, P., Hillier, J.H., **Tarolli, P.** (2014). Innovative analysis and use of high resolution DTMs for understanding Earth-surface processes, *Earth Surface Processes and Landforms*, 39, 1400-1403, ISSN: 1096-9837, doi:10.1002/esp.3616. ([Special Issue Editorial](#))
126. **Tarolli***, P. (2014). High-resolution topography for understanding Earth surface processes: opportunities and challenges. *Geomorphology*, 216, 295-312, ISSN: 0169-555X, doi:10.1016/j.geomorph.2014.03.008. ([Invited Review Article](#))
127. Penna, D., Borga, M., Aronica, G.T., Brigandì, G., **Tarolli***, P. (2014). The influence of grid resolution on the prediction of natural and road-related shallow landslides, *Hydrology and Earth System Sciences*, 18, 2127-2139, ISSN: 1027-5606, doi:10.5194/hess-18-2127-2014.
128. Ali*, G., Birkel, C., Tetzlaff, D., Soulsby, C., McDonnell, J.J., **Tarolli, P.** (2014). A comparison of wetness indices for the prediction of observed connected saturated areas under contrasting conditions, *Earth Surface Processes and Landforms*, 39, 399-413, ISSN: 1096-9837, doi:10.1002/esp.3506.
129. Sofia, G., Dalla Fontana, G., **Tarolli***, P. (2014). High-resolution topography and anthropogenic feature extraction: testing geomorphometric parameters in floodplains, *Hydrological Processes*, 28, 2046-2061, ISSN: 0885-6087, doi:10.1002/hyp.9727.

2013

130. Mutzner*, R., Bertuzzo, E., **Tarolli, P.**, Weijs, S.V., Ceola, S., Tomasic, N., Rodriguez-Iturbe, I., Parlange, M.B., Rinaldo, A. (2013). Geomorphic signatures on Brutsaert base flow recession analysis, *Water Resources Research*, 49(9), 5462-5472, ISSN: 1096-9837, doi:10.1002/wrcr.20417.
131. Sofia, G., Pirotti, F., **Tarolli***, P. (2013). Variations in multiscale curvature distribution and signatures of LiDAR DTMs errors, *Earth Surface Processes and Landforms*, 38(10), 1116-1134, ISSN: 1096-9837, doi:10.1002/esp.3363.
132. **Tarolli***, P., Cavalli, M. (2013). Introduction to the special issue: "high resolution topography, quantitative analysis and geomorphological mapping", *European Journal of Remote Sensing*, 46, 60-64, ISSN: 2279-7254, doi:10.5721/EuJRS20134604. ([Special Issue Editorial](#))
133. **Tarolli***, P., Calligaro, S., Cazorzi, F., Dalla Fontana, G. (2013). Recognition of surface flow processes influenced by roads and trails in mountain areas using high-resolution topography, *European Journal of Remote Sensing*, 46, 176-197, ISSN: 2279-7254, doi:10.5721/EuJRS20134610.
134. Carturan*, L., Baldassi, G., Bondesan, A., Calligaro, S., Carton, A., Cazorzi, F., Dalla Fontana, G., Francese, R., Guarnieri, A., Milan, N., Moro, D., **Tarolli, P.** (2013). Current behavior and dynamics of the lowermost Italian glacier (Montasio Occidentale, Julian Alps), *Geografiska Annaler: Series A, Physical Geography*, 95, 79-96, ISSN: 1468-0459, doi: 10.1111/geoa.12002.
135. Lin, C.W., Tseng, C.-M., Tseng, Y.-H., Fei, L.-Y., Hsieh, Y.-C., **Tarolli***, P. (2013). Recognition of large scale deep-seated landslides in forest areas of Taiwan using high resolution topography, *Journal of Asian Earth Sciences*, 62, 389-400, ISSN: 1367-9120, doi:10.1016/j.jseaes.2012.10.022.
136. Cazorzi*, F., Dalla Fontana, G., De Luca, A., Sofia, G., **Tarolli, P.** (2013). Drainage network detection and assessment of network storage capacity in agrarian landscape. *Hydrological Processes*, 27(4), 541-553, ISSN: 0885-6087, doi:10.1002/hyp.9224.
137. Prosdocimi, M., Sofia, G., Dalla Fontana, G., **Tarolli, P.** (2013). Land use change in the Veneto floodplain and consequences on minor network drainage system, *Journal of Agricultural Engineering*, 44 (s2), 448-452, eISSN 2239-6268, doi:10.4081/jae.2013.s2.e90.
138. Preti, F., **Tarolli, P.**, Dani, A., Calligaro, S., Prosdocimi, M. (2013). LiDAR derived high resolution topography: the next challenge for the analysis of terraces stability and vineyard soil erosion, *Journal of Agricultural Engineering*, 44 (s2), 85-89, eISSN 2239-6268, doi:10.4081/jae.2013.s2.e16.

2012

139. Lanni*, C., Borga, M., Rigon, R., and **Tarolli, P.** (2012). Modelling shallow landslide susceptibility by means of a subsurface flow path connectivity index and estimates of soil depth spatial distribution, *Hydrol. Earth Syst. Sci.*, 16, 3959-3971, ISSN: 1027-5606, doi:10.5194/hess-16-1-2012.

140. **Tarolli***, P., Borga, M., Morin, E., Delrieu G. (2012). Analysis of flash flood regimes in the North-Western and South-Eastern Mediterranean regions, *Nat. Hazards Earth Syst. Sci.*, 12, 1255-1265, ISSN: 1561-8633, doi:10.5194/nhess-12-1-2012.
141. **Tarolli***, P., Sofia, G., Dalla Fontana, G. (2012). Geomorphic features extraction from high-resolution topography: landslide crowns and bank erosion, *Natural Hazards*, 61, 65-83, ISSN: 0921-030X, doi:10.1007/s11069-010-9695-2.
142. Pirotti*, F., Grigolato, S., Lingua, E., Sitzia, T., **Tarolli, P.** (2012). Laser Scanner Applications in Forest and Environmental Sciences, *Italian Journal of Remote Sensing*, 44(1), 109-123, doi:10.5721/ItJRS 20124419, ISSN: 1129-8596. ([Review Article](#))

2011

143. **Tarolli***, P., Borga, M., Chang, K.T., Chiang, S.H. (2011). Modeling shallow landsliding susceptibility by incorporating heavy rainfall statistical properties, *Geomorphology*, 133, 199-211, ISSN: 0169-555X, doi:10.1016/j.geomorph.2011.02.033.
144. Sofia*, G., **Tarolli, P.**, Cazorzi, F., Dalla Fontana, G. (2011). An objective approach for feature extraction: distribution analysis and statistical descriptors for scale choice and channel network identification, *Hydrol. Earth Syst. Sci.*, 15, 1387-1402, ISSN: 1027-5606, doi:10.5194/hess-15-1387-2011.
145. Orlandini*, S., **Tarolli, P.**, Moretti, G., Dalla Fontana, G. (2011). On the prediction of channel heads in a complex alpine terrain using gridded elevation data, *Water Resources Research*, 47, W02538, ISSN: 0043-1397, doi:10.1029/2010WR009648.
146. Cavalli*, M., **Tarolli, P.** (2011). Application of LiDAR technology for rivers analysis, *Italian Journal of Engineering Geology and Environment*, Special Issue 1, 33-44, ISSN 1825-6635, doi:10.4408/IJEGE.2011-01.S-03. ([Review Article](#))

2010

147. Passalacqua*, P., **Tarolli, P.**, Fofoula-Georgiou, E. (2010). Testing space-scale methodologies for automatic geomorphic feature extraction from lidar in a complex mountainous landscape, *Water Resources Research*, 46, W11535, ISSN: 0043-1397, doi:10.1029/2009WR008812.
148. Pirotti*, F., **Tarolli, P.** (2010). Suitability of LiDAR point density and derived landform curvature maps for channel network extraction, *Hydrological Processes*, 24, 1187-1197, ISSN: 0885-6087, doi:10.1002/hyp.7582.

2009

149. **Tarolli***, P., Arrowsmith, J R., Vivoni, E.R. (2009). Understanding earth surface processes from remotely sensed digital terrain models, *Geomorphology*, 113, 1-3, ISSN: 0169-555X, doi:10.1016/j.geomorph.2009.07.005. ([Special Issue Editorial](#))
150. **Tarolli***, P., Dalla Fontana, G. (2009). Hillslope-to-valley transition morphology: new opportunities from high resolution DTMs, *Geomorphology*, 113, 47-56, ISSN: 0169-555X, doi:10.1016/j.geomorph.2009.02.006.
151. Vianello*, A., Cavalli, M., **Tarolli, P.** (2009). LiDAR-derived slopes for headwater channel network analysis, *Catena*, 76, 97-106, ISSN: 0341-8162, doi:10.1016/j.catena.2008.09.012.

2008

152. Cavalli*, M., **Tarolli, P.**, Marchi, L., Dalla Fontana, G. (2008). The effectiveness of airborne LiDAR data in the recognition of channel bed morphology, *Catena*, 73, 249-260, ISSN: 0341-8162, doi:10.1016/j.catena.2007.11.001.
153. **Tarolli***, P., Borga, M., Dalla Fontana, G. (2008). Analysing the influence of upslope bedrock outcrops on shallow landsliding, *Geomorphology*, 93, 186-200, ISSN: 0169-555X, doi:10.1016/j.geomorph.2007.02.017.

2006

154. **Tarolli***, P., and Tarboton, D.G. (2006). A New Method for Determination of Most Likely Landslide Initiation Points and the Evaluation of Digital Terrain Model Scale in Terrain Stability Mapping, *Hydrol. Earth Syst. Sci.*, 10, 663-677, ISSN: 1027-5606, doi:10.5194/hess-10-663-2006.

Movie review in peer-reviewed Journals

1. **Tarolli, P.** (2017). Movie Review: Review of Anthropocene the movie. *Anthropocene*, ISSN: 2213-3054, doi: 10.1016/j.ancene.2017.10.001.

Book review in peer-reviewed Journals

1. **Tarolli, P.** (2015). Holocene book review: Digital Terrain Analysis in Soil Science and Geology. *Holocene*, 25, 1048–1049, ISSN: 0959-6836, doi:10.1177/0959683615572731.
2. **Tarolli, P.** (2013). Book Review: The Role of Ecosystems in Disaster Risk Reduction. *Nat. Hazards Earth Syst. Sci.*, 13, 2553–2554, ISSN: 1561-8633, doi:10.5194/nhess-13-2553-2013.
3. **Tarolli, P.** (2013). Book Review: Natural Hazards in the Asia–Pacific Region: Recent Advances and Emerging Concepts. *Nat. Hazards Earth Syst. Sci.*, 13, 2551–2552, ISSN: 1561-8633, doi:10.5194/nhess-13-2551-2013.

Non-peer reviewed Journals (national magazines)

1. Mauri, L., Masin, R., **Tarolli, P.**, (2021). Fauna selvatica e danni in agricoltura: un'analisi spaziale multi-temporale nella provincia di Treviso. *L'Informatore Agrario*, ISSN:0020-0689.
2. **Tarolli, P.**, Pijl, A. (2018). Droni e sistemi di drenaggio per mitigare il rischio dissesto. *Il Corriere Vinicolo*, 32, 14, ISSN:1827-5419.
3. **Tarolli, P.** (2018). Nuove tecnologie per il rilievo topografico del territorio. *Il Corriere Vinicolo*, 17, 21, ISSN:1827-5419.
4. **Tarolli, P.**, Pijl, A. (2018). A rischio dissesto? *Il Corriere Vinicolo*, 10, 10–11, ISSN:1827-5419.
5. **Tarolli, P.** (2018). Gestione dei vigneti in aree a forte pendenza: criticità idrogeologiche, monitoraggio e prospettive future. *Il Corriere Vinicolo*, 3, 10–11, ISSN:1827-5419.
6. Borsato, E., Marinello, F., **Tarolli, P.** (2018). L'impronta idrica che premia produttore e consumatore. *L'Informatore Agrario*, 18, 48–50, ISSN:0020-0689.
7. **Tarolli, P.**, Mauri, L. (2018). Monitorare i danni da cinghiale con geolocalizzazione GPS. *L'Informatore Agrario*, 15, 38–40, ISSN:0020-0689.
8. **Tarolli, P.**, Tosoni, M. (2018). Impiego di droni per conservare i terrazzamenti. *L'Informatore Agrario*, 10, 70–72, ISSN:0020-0689.
9. Borsato, E., Marinello, F., **Tarolli, P.** (2018). Per ridurre l'impronta idrica serve una gestione sostenibile. *L'Informatore Agrario*, 8, 52–54, ISSN:0020-0689.
10. **Tarolli, P.**, Sofia, G., Masin, R. (2017). Quantificare i danni da nutria con lo smartphone. *L'Informatore Agrario*, 7, 68–69, ISSN:0020-0689.
11. **Tarolli, P.** (2009). Identificazione della rete idrografica, *Sherwood*, 15 (7), 43-47, ISSN: 1590-7805.

Edited Book

1. **Tarolli, P.**, Mudd, S. (2020). *Remote Sensing of Geomorphology*, Elsevier, ISBN 9780444641779.
2. Du, J., Watts, J.D., Lu, H., Jiang, L., **Tarolli, P.** (2019). *Remote Sensing of Environmental Changes in Cold Regions*, Remote Sensing, MDPI, ISBN 978-3-03921-571-3
3. Varotto, M., Bonardi, L., **Tarolli, P.** (2019). *World Terraced Landscapes: History, Environment, Quality of Life, Environmental History*, Springer, ISBN 978-3-319-96815-5.

Encyclopaedia chapter

1. **Tarolli, P.**, Sofia, G., Cao, W. (2018). The geomorphology of the human age. *Encyclopedia of the Anthropocene*, 35–43. Della Sala and Goldstein (Eds.), Elsevier, ISBN 9780128135761, doi: 10.1016/B978-0-12-809665-9.10501-4. ([Invited Article](#))
2. **Tarolli, P.**, Cavalli, M. (2013). Geographic information systems (Gis) and natural hazards. *Encyclopedia of Earth Sciences Series*, 378–385. P. Bobrowsky (Ed.), Springer, ISSN 13884360, doi:10.1007/978-1-4020-4399-4_152.

Book chapters

1. **Tarolli***, P., Pijl, A., Cucchiario, S. (2021). Landslides in Steep-Slope Agricultural Landscapes. In: Guzzetti F., Mihalić Arbanas S., Reichenbach P., Sassa K., Bobrowsky P.T., Takara K. (eds) *Understanding and Reducing Landslide Disaster Risk*. WLF 2020. ICL Contribution to Landslide Disaster Risk Reduction. Springer, Cham. https://doi.org/10.1007/978-3-030-60227-7_46.
2. **Tarolli***, P., Mudd, S.M. (2020). Introduction to remote sensing of geomorphology. *Developments in Earth Surface Processes*, 23, xiii–xv, doi: 10.1016/B978-0-444-64177-9.09992-6.
3. **Tarolli***, P., Sofia, G. (2020). Potential responses to sediment dynamics in terraced agricultural landscapes: high-resolution topography to support rural development planning. *Developments in Earth Surface Processes*, 23, 255–269, doi:10.1016/B978-0-444-64177-9.00009-6.

4. Niculiță*, M., Mărgărint, M.C., **Tarolli, P.** (2020). Using UAV and LIDAR data for gully geomorphic changes monitoring. *Developments in Earth Surface Processes*, 23, 271–315, doi:10.1016/B978-0-444-64177-9.00010-2.
5. Cucchiario*, S., Fallu, D.J., Zhao, P., Waddington, C., Cockcroft, D., **Tarolli, P.**, Brown, A.G. (2020). SfM photogrammetry for GeoArchaeology. *Developments in Earth Surface Processes*, 23, 183–205, doi: 10.1016/B978-0-444-64177-9.00006-0.
6. Varotto, M., Bonardi, L., **Tarolli, P.** (2019). Chapter 1 – Introduction. In: *World Terraced Landscapes: History, Environment, Quality of Life, Environmental History*, 9. M. Varotto et al. (eds.), Springer, doi:10.1007/978-3-319-96815-5_1.
7. **Tarolli, P.**, Rizzo, D., Brancucci, D. (2019). Chapter 12 – Terraced Landscapes: Land Abandonment, Soil Degradation, and Suitable Management. In: *World Terraced Landscapes: History, Environment, Quality of Life, Environmental History*, 9. M. Varotto et al. (eds.), Springer, doi: 10.1007/978-3-319-96815-5_12.
8. Pijl*, A., Bettella, F., D'Agostino, V., **Tarolli, P.** (2019). Integrazione tra topografia ad alta risoluzione, indici morfologici e modellazione idrologico-idraulica per la localizzazione di fenomeni erosivi in sistemi terrazzati. *Quaderni di Idronomia Montana*. vol. 36, p. 105–112, Edibios, ISBN: 978-88-97181-68-2.
9. Tseng, C.-M., Chang, K.-J., **Tarolli, P.** (2017). The Sediment Production and Transportation in a Mountainous Reservoir Watershed, Southern Taiwan. In M. Mikoš et al. (eds.), *Advancing Culture of Living with Landslides*, 291–299, doi:10.1007/978-3-319-53483-1_34.
10. Sartori, L., Marinello, F., Pezzuolo, A., **Tarolli, P.** (2017). Lavorazioni variabili del terreno e semina a dose variabile. In: *Agricoltura di precisione - Metodi e tecnologie per migliorare l'efficienza e la sostenibilità dei sistemi culturali*, p. 229–247, ISBN: 978-88-506-5510-6.
11. Destro, E., Marchi, L., Amponsah, W., **Tarolli, P.**, Crema, S., Zoccatelli, D., Marra, F., Borga, M. (2016). Analisi idrologica della piena improvvisa del 2 agosto 2014 in un piccolo bacino delle Prealpi venete. In: AA.VV. Attualità delle sistemazioni idraulico-forestali. *Quaderni di Idronomia Montana*, vol. 34, p. 307–316, Cosenza: Nuova Editoriale Bios, ISBN: 978-88-97181-48-4.
12. Di Stefano, C., Ferro, V., Sofia, G., **Tarolli, P.**, (2016). Similitudine morfologica tra canali di diversa dimensione: dai rill ai tratti alluvionali. In: AA.VV. Attualità delle sistemazioni idraulico-forestali. *Quaderni di Idronomia Montana*, vol. 34, p. 255–264, Cosenza: Nuova Editoriale Bios, ISBN: 978-88-97181-48-4.
13. **Tarolli, P.**, Sofia, G., Prosdocimi, M., Dalla Fontana, G. (2015). Relative Path Impact Index (RPII): un indicatore morfometrico per quantificare l'effetto delle strutture antropiche sul deflusso superficiale. In: AA.VV. Dissesto Idrogeologico e processi erosivi in ambiente collinare e montano. *Quaderni di Idronomia Montana*, vol. 32, p. 173–182, Cosenza: EdiBios, ISBN: 978-88-97181-35-4.
14. Sofia, G., **Tarolli, P.**, Cazorzi, F., Dalla Fontana, G. (2012). Impiego dei DTM ad alta risoluzione per la misura automatica di larghezze al bankfull. In: AA.VV. Previsione e mitigazione dei fenomeni di dissesto idrogeologico in Italia. *Quaderni di Idronomia Montana*, vol. 30, p. 397–405, Cosenza: EdiBios, ISBN: 978-88-97181-19-4.
15. **Tarolli P.**, Dalla Fontana, G. (2008). Potenzialità della tecnologia LiDAR per l'analisi e l'interpretazione delle caratteristiche del sistema alveo-versante in area alpina. In: AA.VV. Ricerca ed innovazione nell'idraulica agraria e nelle sistemazioni idraulico-forestali, p. 89–91, Cosenza: Nuova Editoriale Bios, ISBN: 88-6093-035-9.
16. **Tarolli, P.**, Borga, M., Cesare, B., Zanon, F., Tollardo, M., Maccon, P.P. (2006). Innesco di frane superficiali durante eventi di precipitazione brevi ed intensi in zone alpine. In: AA.VV. Le sistemazioni idraulico-forestali per la difesa del territorio. *Quaderni di Idronomia Montana*, vol. 26, p. 95–112, Cosenza: Nuova Editoriale Bios, ISBN: 88-6093-009-X.
17. **Tarolli, P.** (2006). Modellazione dei processi di franamento superficiale. In: AA.VV. F.R.A.N.E., Foreste: Recupero Ambientale Naturalistico Ecologico. Linee-guida per la mitigazione del rischio idrogeologico, p. 85-94, FAGAGNA (UD): Graphis, ISBN: 88-902490-0-5.
18. Dalla Fontana, G., Borga, M., and **Tarolli, P.** (2005). Modellazione dei processi di instabilità superficiale. In: AA.VV.. La prevenzione del rischio idrogeologico nei piccoli bacini montani della regione: esperienze e conoscenze acquisite con il progetto CATCHRISK, p. 95-112, FELETTO UMBERTO (UD): Graphic Linea.

Proceedings

1. Masiero, A., Sofia, G., **Tarolli, P.** (2020). Quick 3D with UAV and tof camera for geomorphometric assessment. *Int. Arch. Photogramm. Remote Sens. Spatial Inf. Sci.*, XLIII-B1-2020, 259–264, doi:10.5194/isprs-archives-XLIII-B1-2020-259-2020.
2. Pijl, A., Tosoni, M., Roder, G., Sofia, G., **Tarolli, P.** (2018). Use of Unmanned Aerial Vehicle (UAV) data for the maintenance of terraced landscapes – a case study in Valcamonica (BS, Italy) [paper 165]. XXXVI Convegno Nazionale di Idraulica e Costruzioni Idrauliche. ISBN 9788894379907

3. 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. *Proceedings of the sixth international congress on mountain and steep slope viticulture*, ISBN 978-88-902330-5-0.
4. **Tarolli, P.** (2017). The geomorphology of humanity. *Proceedings of the Romanian Geomorphology Symposium*, 1, doi:10.15551/prgs.2017.106
5. Pawłuszek, 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
6. Pradhan A.M.S., Kang H.-S., Lee J.-S., **Tarolli, P.**, Kim Y.-T. (2015). Shallow landslide hazard modeling by incorporating heavy rainfall statistics and quasi-dynamic wetness index: a case study from Korean mountain. *15th Asian Regional Conference On Soil Mechanics And Geotechnical Engineering, ARC 2015: New Innovations And Sustainability*, 1012-1016, doi:10.3208/jgssp.KOR-01.
7. Chirico, G.B., Borga, M., **Tarolli, P.**, Rigon, R., Preti F. (2013). Role of Vegetation on Slope Stability under Transient Unsaturated Conditions. *Procedia Environmental Sciences*, 19, 932-941, ISSN: 1878-0296, doi:10.1016/j.proenv.2013.06.103.
8. Coppa, U., Guarnieri, A., Pirotti, F., **Tarolli, P.**, Vettore, A. (2013). Comparing data acquisition methodologies for DTM production. *Int. Arch. Photogramm. Remote Sens. Spatial Inf. Sci.*, XL-5/W3, 59–62, doi:10.5194/isprsarchives-XL-5-W3-59-2013.
9. Calligaro, S., Sofia, G., Prosdociami, M., Dalla Fontana, G., **Tarolli, P.** (2013). Terrestrial laser scanner data to support coastal erosion analysis: the Conero case study. *Int. Arch. Photogramm. Remote Sens. Spatial Inf. Sci.*, XL-5/W3, 125–129, doi:10.5194/isprsarchives-XL-5-W3-125-2013, 2013.
10. **Tarolli, P.**, Righetto, A. (2012). Analisi della relazione area-pendenza: alcuni casi di studio nella Provincia Autonoma di Bolzano. XXXIII Italian Conference of Hydraulics and Hydraulic Constructions, p. 174, Cosenza: EdiBios, ISBN: 978-88-97181-18-7.
11. Sofia, G., **Tarolli, P.**, Cazorzi, F., De Luca, A., Dalla Fontana, G. (2012). Il reticolo di drenaggio minore: caratterizzazione a larga scala di densità di drenaggio e capacità di invaso. XXXIII Italian Conference of Hydraulics and Hydraulic Constructions, p. 160, Cosenza: EdiBios, ISBN: 978-88-97181-18-7.
12. **Tarolli, P.**, Aronica, G.T., Penna, D., Borga, M., Brigandi, G. (2012). Valutazione della suscettibilità al franamento diffuso per il bacino di Giampileri (Sicilia). XXXIII Italian Conference of Hydraulics and Hydraulic Constructions, p. 177, Cosenza: EdiBios, ISBN: 978-88-97181-18-7.
13. Carturan, L., Calligaro, S., Guarnieri, A., Milan, N., Francese, R., Moro, D., Baldassi, G., Carton, A., Bondesan, A., **Tarolli, P.**, Cazorzi, F., Vettore, A., Dalla Fontana, G. (2011). Recent geophysical, geomorphological and geodetic surveys of Montasio Occidentale Glacier (Julian Alps, Italy). *Epitome*, 4, 105-106, ISSN: 1972-1552, doi: 10.1474/Epitome.04.0389.Geoitalia2011.
14. 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. *Epitome*, 4, ISSN: 1972-1552, doi: 10.1474/Epitome.04.0925.Geoitalia2011.
15. Cazorzi, F., Dalla Fontana, G., De Luca, A., Sofia, G., **Tarolli, P.** (2011). Individuazione e caratterizzazione del reticolo idrografico minore in ambiente agrario. In: AA.VV.. *Gestione e controllo dei sistemi agrari e forestali - Memorie*. Belgirate, Associazione Italiana di Ingegneria Agraria, ISBN: 9788890627330.
16. **Tarolli, P.**, Calligaro, S., Cazorzi, F., Dalla Fontana, G. (2011). L'alterazione dei deflussi idrici superficiali da parte dei segmenti viari e dei sentieri: l'efficacia della topografia ad alta risoluzione. In: AA.VV.. *Gestione e controllo dei sistemi agrari e forestali - Memorie*. Belgirate, Associazione Italiana di Ingegneria Agraria, ISBN: 9788890627330.
17. Pirotti, F., Grigolato, S., Lingua, E., Sitzia, T., **Tarolli, P.** (2010). Applicazioni laser scanner per l'ambiente forestale. *Atti 14° Conferenza Nazionale ASITA 2010*, 1485-1490, ISBN 978-88-903132-5-7.
18. **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.
19. **Tarolli, P.**, Dalla Fontana, G., Moretti, G., Orlandini, S. (2010). On predicting channel initiation from gridded elevation data. XXXII Italian Conference of Hydraulics and Hydraulic Constructions, p. 302, ISBN: 978-88-903895-2-8.
20. 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.
21. **Tarolli, P.**, Dalla Fontana, G., (2009). Testing new methodologies for landslide features extraction from high resolution topography. *Epitome*, 3, 55-56, ISSN: 1972-1552, 10.1474/Epitome.03.0204. Geoitalia2009.
22. Cavalli, M., **Tarolli, P.** (2009). Airborne LiDAR as a new tool for fluvial geomorphology. *Epitome*, 3, 156-57, ISSN: 1972-1552, 10.1474/Epitome.03.0578.Geoitalia2009.

23. **Tarolli, P.**, Dalla Fontana, G., Moretti, G., Orlandini, S., (2009). Cell Size Dependence of Threshold Conditions for the Delineation of Drainage Networks from Gridded Elevation Data. In: Geomorphometry 2009, Edited by R. Purves, S. Gruber, R. Straumann and T. Hengl, p. 208-217. University of Zurich, Zurich.
24. Tarolli, P., and Dalla Fontana, G. (2007). 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.
25. 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

Oral

1. **Tarolli P.** (2021). Earth, Agriculture, and Society: towards sustainable development in the Anthropocene, *International Forum on Land Degradation, Soil Conservation and Sustainable Development 2021 (LASOSU2021)*, online, [Dalian] *Invited talk*
2. Mauri L., Straffelini E., Cucchiario S., **Tarolli P.** UAV-SfM 4D mapping of landslides activated in a steep terraced agricultural area. *International Forum on Land Degradation, Soil Conservation and Sustainable Development 2021 (LASOSU2021)*, online, [Dalian]
3. Mauri L., Straffelini E., **Tarolli P.** Multi-temporal modeling of road-induced overland flow alterations in a terraced landscape characterized by shallow landslides. *International Forum on Land Degradation, Soil Conservation and Sustainable Development 2021 (LASOSU2021)*, online, [Dalian]
4. Cucchiario S., Fallu D.J., Zhang H., Walsh K., Van Oost K., Brown A.G., **Tarolli P.** (2021). Data fusion for monitoring agricultural terraces in complex topographic and landcover conditions. *International Forum on Land Degradation, Soil Conservation and Sustainable Development 2021 (LASOSU2021)*, online, [Dalian]
5. Cucchiario S., Paliaga G., Fallu D.J., Pears B., Walsh K., Zhao P., Van Oost K., Snape L., Lang A., Brown A.G., **Tarolli P.** (2021). New quantitative geomorphometric approach to estimate soil volumes stored in agricultural terraces. *International Forum on Land Degradation, Soil Conservation and Sustainable Development 2021 (LASOSU2021)*, online, [Dalian]
6. Cucchiario S., Paliaga G., Fallu D.J., Pears B., Walsh K., Zhao P., Van Oost K., Snape L., Lang A., Brown A.G., **Tarolli P.** (2021). Characterizing agricultural terraces - new quantitative geomorphometric approaches to estimate soil volumes stored. *27th Annual Meeting of the European Association of Archaeologists (EAA 2021)*, online, [Kiel]
7. Straffelini E., Pijl A., **Tarolli P.** Remote sensing and field-based approach in understanding soil erosion mitigation through grass cover in steep vineyards. *International Forum on Land Degradation, Soil Conservation and Sustainable Development 2021 (LASOSU2021)*, online, [Dalian]
8. Straffelini E., Cucchiario S., **Tarolli P.** Surface water ponding in lowland agriculture: a rapid mapping approach using UAV-SfM. *International Forum on Land Degradation, Soil Conservation and Sustainable Development 2021 (LASOSU2021)*, online, [Dalian]
9. Pijl A., **Tarolli P.**, Straffelini E., Wang W. Massive evaluation of soil and water conservation in 50 Italian steep-slope vineyards by a systematic remote sensing-based approach. *International Forum on Land Degradation, Soil Conservation and Sustainable Development 2021 (LASOSU2021)*, online, [Dalian]
10. Pijl A., Quarella E., Vogel T.A., D'Agostino V., **Tarolli P.** Understanding the challenge of terrace failure from an aerial vs. a field perspective. *International Forum on Land Degradation, Soil Conservation and Sustainable Development 2021 (LASOSU2021)*, online, [Dalian]
11. Wang, W., Pijl, A., **Tarolli, P.** Future climate change could pose steep-slope agriculture at risk. *International Forum on Land Degradation, Soil Conservation and Sustainable Development 2021 (LASOSU2021)*, online, [Dalian]
12. Mauri L., Straffelini E., Cucchiario S., **Tarolli P.** UAV-SfM 4D mapping of landslides activated in a steep terraced agricultural area. *AgEng2021, New Challenges for Agricultural Engineering towards a Digital World*, online, [Evora, Portugal]

13. Straffelini E., Pijl A., Turco F., **Tarolli P.** Preliminary exploration of potential ponding impact on crop vigour using remote sensing techniques. *IEEE international workshop on metrology for agriculture and forestry*, online, [Trento-Bolzano, Italy]
14. **Tarolli P.** (2021). The Geomorphology of Life, *EGU General Assembly 2021*, online, EGU21-3561, <https://doi.org/10.5194/egusphere-egu21-3561>. *Invited talk*
15. **Tarolli P.** (2021). Advanced remote sensing techniques for monitoring anthropogenic landscapes, *EGU General Assembly 2021*, online, EGU21-3574, <https://doi.org/10.5194/egusphere-egu21-3574>. *Invited talk*
16. **Tarolli P.** (2019). High resolution geomorphologic characterization of conservation agriculture. *General Assembly 2019 of the Soil Science Society of China*. [Dalian]. *Invited talk*
17. Pijl A., Quarella E., Reuter L., Vogel T., **Tarolli P.** (2019). UAV-based erosion mapping and modelling for the preservation of terraced cultural landscapes in northern Italy. *Geophysical Research Abstracts*, 21, EGU2019-10794, eISSN: 1607-7962, [Wien]
18. Margarit M.C., Niculita M., **Tarolli P.** (2019). Using UAV and LIDAR data for gullies erosion monitoring. *Geophysical Research Abstracts*, 21, EGU2019-8461, eISSN: 1607-7962, [Wien]
19. Borsato E., Marinello F., Rosa L., **Tarolli P.**, D'Odorico P. (2019). Sustainability assessment of agriculture water use under water scarcity limitation and climate change adaptation. *Geophysical Research Abstracts*, 21, EGU2019-1293, eISSN: 1607-7962, [Wien]
20. **Tarolli, P.** (2018). Observing and understanding the impact of socio-economic change on Earth and human health. *Water and Plantetary Health: A Catchment Systems Approach symposium* - University of Lincoln, Lincoln (UK). *Invited talk*
21. 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]
22. 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]
23. Pijl, A., Tosoni, M., Roder, G., Sofia, G., **Tarolli, P.** (2018). Use of Unmanned Aerial Vehicle (UAV) data for the maintenance of terraced landscapes – a case study in Valcamonica (BS, Italy) [paper 165]. XXXVI Convegno Nazionale di Idraulica e Costruzioni Idrauliche. [Ancona]
24. 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]
25. **Tarolli, P.** (2017). The geomorphology of humanity. *The 33rd Romanian Symposium of Geomorphology*, Iasi (Romania). *Invited talk - Keynote talk*
26. 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]
27. **Tarolli, P.**, Breda, F., Sofia, G., Masin, R., (2017). Drainage channels under pressure from invasive animal species: investigation on the regional and local impact of Coypu (*Myocastor coypus*) damages. *National Conference of the Italian Association of Agricultural Engineering (AIIA)*. [Bari]
28. Sofia, G., Cao, W, **Tarolli, P.** (2017). Towards understanding links between rural landuse changes and local hydrological response. *National Conference of the Italian Association of Agricultural Engineering (AIIA)*. [Bari]
29. Rainato, R., Picco., 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]
30. **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*
31. 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]
32. 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]
33. 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]
34. **Tarolli, P.** (2016) Hillslope Processes in Anthropogenic Landscapes. *AAG Annual Meeting 2016*, San Francisco (USA). *Invited talk*
35. **Tarolli, P.** (2015) High-resolution topography for understanding Earth surface processes: Opportunities and challenges. *ISPRS Geospatial Week 2015*, Montpellier (FR). *Invited talk - Keynote talk*

36. **Tarolli, P.** (2015) Geomorphology & Anthropocene. *RGS-IBG Annual International Conference 2015*, Exeter (UK). [Invited talk](#)
37. Sofia, G., **Tarolli, P.** (2015) Geomorphology of anthropogenic landscapes. *Geophysical Research Abstracts*, 17, EGU2015-3372, eISSN: 1607-7962. [Wien]
38. 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]
39. **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]
40. 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]
41. 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]
42. 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]
43. **Tarolli, P.**, Sofia, G., Mariniello, F. (2013). The topographic signature of man. *BSG2013 Annual Conference*, Royal Holloway, University of London. [London]
44. 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]
45. 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]
46. 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]
47. 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]
48. **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](#)
49. 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]
50. **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]
51. 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. *Geoitalia 2011 (VIII Italian Forum of Earth Sciences)*. [Torino]
52. **Tarolli, P.**, Passalacqua, P. (2011). The statistical signature of Earth-Surface Processes. *Geophysical Research Abstracts*, 13, EGU2011-5594, eISSN: 1607-7962. [Wien]
53. 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]
54. **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]
55. 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]
56. **Tarolli, P.**, Dalla Fontana, G. (2009). Testing new methodologies for landslide features extraction from high resolution topography. *Geoitalia 2009 (VII Italian Forum of Earth Sciences)*. [Rimini]

57. Cavalli, M., **Tarolli, P.** (2009). Airborne LiDAR as a new tool for fluvial geomorphology. *Geoitalia 2009* (VII Italian Forum of Earth Sciences). [Rimini]
58. **Tarolli, P.**, Dalla Fontana, G., Moretti, G., Orlandini, S. (2009). Cell Size Dependence of Threshold Conditions for the Delineation of Drainage Networks from Gridded Elevation Data. *Geomorphometry 2009*, University of Zurich. [Zurich]
59. Borga, M., **Tarolli, P.** (2009). Hydrometeorological analysis of a major debris flow in the Central Italian Alps. *Geophysical Research Abstracts*, 11, EGU2009-8725, eISSN: 1607-7962. [Wien]
60. Cavalli, M., **Tarolli, P.**, Marchi, L., Dalla Fontana, G. (2007). The effectiveness of airborne LiDAR data in the recognition of channel bed morphology. *Eos Trans. AGU* 88(52): Fall Meet. Suppl., Abstract H52E-07. [San Francisco]
61. 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]
62. **Tarolli, P.**, and Dalla Fontana, G. (2007). Analysis of the headwater basins' morphology by high resolution LiDAR-derived DEM. 5th International Symposium on Mobile Mapping Technology. [Padova]
63. **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]

Virtual online

1. Cucchiario S., Paliaga G., Fallu D.J., Pears B.R., Walsh K., Zhao P., Van Oost K., Snape L., Lang A., Brown A.G., **Tarolli, P.** (2021). A geomorphometric approach to estimate soil volumes stored in agricultural terrace systems, EGU General Assembly 2021, online, 19–30 Apr 2021, EGU21-1772, <https://doi.org/10.5194/egusphere-egu21-1772>.
2. Straffelini E., Otto S., Pijl A., Marchesini E., Gottardi S., Tormen N., Pitacco A., Tezza L., **Tarolli P.** (2021). The role of inter-row grass cover in steep viticulture: understanding soil erosion combining in-field observation and remote sensing, EGU General Assembly 2021, online, 19–30 Apr 2021, EGU21-2158, <https://doi.org/10.5194/egusphere-egu21-2158>.
3. Pijl A., Straffelini E., Wang W., **Tarolli P.** (2021). A grand comparison of soil & water conservation in 50 vineyards under 5 different terracing systems, EGU General Assembly 2021, online, 19–30 Apr 2021, EGU21-2272, <https://doi.org/10.5194/egusphere-egu21-2272>.
4. Wang W., Pijl A., **Tarolli P.** (2021). Steep-slope cultivated landscapes: towards climate-resilient water resources management, EGU General Assembly 2021, online, 19–30 Apr 2021, EGU21-2358, <https://doi.org/10.5194/egusphere-egu21-2358>.
5. Mauri L., Straffelini E., Cucchiario S., **Tarolli P.** (2021). RPAS-SfM 4D mapping of shallow landslides activated in a steep terraced vineyard, EGU General Assembly 2021, online, 19–30 Apr 2021, EGU21-2368, <https://doi.org/10.5194/egusphere-egu21-2368>.
6. Gao L., Xu X., Zhao Y., **Tarolli P.** (2021). Assessment of avalanche hazards using remote sensing in the lower Yellow River, China, EGU General Assembly 2021, online, 19–30 Apr 2021, EGU21-1000, <https://doi.org/10.5194/egusphere-egu21-1000>.
7. Junliang Q., Cao B., **Tarolli P.**, Zhang W., Yang X. (2021). Flood monitoring using Sentinel-1 SAR images in Pearl River basin, EGU General Assembly 2021, online, 19–30 Apr 2021, EGU21-2415, <https://doi.org/10.5194/egusphere-egu21-2415>.
8. Zhang Q., Wu Z., **Tarolli P.** (2021). The mitigation effect of urban green infrastructure (UGI) on urban waterlogging, EGU General Assembly 2021, online, 19–30 Apr 2021, EGU21-2514, <https://doi.org/10.5194/egusphere-egu21-2514>.
9. Zhao P., J. Fallu D., Cucchiario S., **Tarolli P.**, Waddington C., Cockcroft D., Snape L., Lang A., Doetterl S., G. Brown A., Van Oost K. (2021). SOC stabilization mechanisms and temperature sensitivity in old terraced soils, EGU General Assembly 2021, online, 19–30 Apr 2021, EGU21-9099, <https://doi.org/10.5194/egusphere-egu21-9099>.
10. Mauri L., Straffelini E., **Tarolli P.** (2021). Modelling of overland flows in a terraced vineyard affected by road-induced shallow landslides, EGU General Assembly 2021, online, 19–30 Apr 2021, EGU21-4955, <https://doi.org/10.5194/egusphere-egu21-4955>.
11. Junliang Q., Xiankun Y., **Tarolli P.** (2020). Spatiotemporal trends in flood hazards using MODIS time-series images in the Pearl River Basin (China). EGU2020-2939, EGU General Assembly 2020, <https://doi.org/10.5194/egusphere-egu2020-2939>.
12. Chen X., Cucchiario S., Bernard M., Mauri L., Chen J., **Tarolli P.**, Gregoretti C. (2020). Analyzing topographic changes through LiDAR and SfM techniques: assessing the deposition-erosion patterns and

- estimation of debris-flow volume in the eastern Italian Alps. EGU2020-3516, EGU General Assembly 2020, <https://doi.org/10.5194/egusphere-egu2020-3516>.
13. Cucchiario S., Fallu D. J., Zhang H., Walsh K., Van Oost K., Brown A. G., **Tarolli P.** (2020). Terrestrial-Aerial-SfM and TLS data fusion for agricultural terrace surveys in complex topographic and land cover conditions. EGU2020-3459, EGU General Assembly 2020, <https://doi.org/10.5194/egusphere-egu2020-3459>.
 14. Fallu D., Brown T., Walsh K., Cucchiario S., **Tarolli P.**, Zhao P., van Oost K., Snape L., Lang A., Albert R.-M., Alsos I., Waddington C. (2020). Ending the Cinderella Status of Terraces and Lynchets in Europe. EGU2020-7116, EGU General Assembly 2020, <https://doi.org/10.5194/egusphere-egu2020-7116>.
 15. Margarint M. C., Niculita M., Ciotina M. C., Vaculisteanu G., Linu-Stoilov V., **Tarolli P.** (2020). Using RPAS derived images and LiDAR DEM's for the assessment of geomorphic changes in a cultural heritage site affected by recent landslides. EGU2020-7780, EGU General Assembly 2020, <https://doi.org/10.5194/egusphere-egu2020-7780>.
 16. Pijl A., Quarella E., Vogel T. A., D'Agostino V., **Tarolli P.** (2020). Looking high and low: comparing a UAV-based and a ground-based methodology for the detection of vineyard terrace failures. EGU2020-3048, EGU General Assembly 2020, <https://doi.org/10.5194/egusphere-egu2020-3048>.
 17. Straffelini E., Chen X., Cucchiario S., Michieli S., Chen J., **Tarolli P.** (2020). Estimation of potential surface ponding in agriculture using UAV-SfM. EGU2020-4655, EGU General Assembly 2020, <https://doi.org/10.5194/egusphere-egu2020-4655>.
 18. **Tarolli P.**, Straffelini E., Mattiello C. M., Lorenzoni A. (2020). SOiLUTION SYSTEM: innovative solutions for soil erosion risk mitigation and better management of vineyards in hills and mountain landscapes. EGU2020-3689, EGU General Assembly 2020, <https://doi.org/10.5194/egusphere-egu2020-3689>.
 19. Wu Z., Zhang Q., Chen Y., **Tarolli P.** (2020). Characterizing the urban waterlogging variation in highly urbanized coastal cities: A watershed-based stepwise cluster analysis model approach. EGU2020-3847, EGU General Assembly 2020, <https://doi.org/10.5194/egusphere-egu2020-3847>.
 20. Zhang Q., Wu Z., Zhang H., Dalla Fontana G., **Tarolli P.** (2020). Characterizing the dominant conditioning factors of urban waterlogging in highly urbanized coastal cities. EGU2020-3682, EGU General Assembly 2020, <https://doi.org/10.5194/egusphere-egu2020-3682>.

Poster

1. Paliaga G., Faccini F., Luino F., Turconi L., **Tarolli P.** (2019). Geo-hydrological risk mitigation in a terraced landscape: LiDAR data analysis in the Portofino natural park, Italy. *Geophysical Research Abstracts*, 21, EGU2019-18777, eISSN: 1607-7962, [Wien]
2. Pawluszek K., Marczak S., Borkowski A., **Tarolli P.** (2019). Landslide detection using object oriented approach and LiDAR-derived DEM. *Geophysical Research Abstracts*, 21, EGU2019-1040, eISSN: 1607-7962, [Wien]
3. Verdonen M., **Tarolli P.**, Korpelainen P., Kolari T., Tahvanainen T., Kumpula T. (2019). Application of UAS in the analysis of the spatial distribution of active layer thickness in Palsa mounds. *Geophysical Research Abstracts*, 21, EGU2019-13158-1, eISSN: 1607-7962, [Wien]
4. Mauri L., Sallustio L., **Tarolli P.** (2019). Wild boars as geomorphologic agent: a conceptual framework. *Geophysical Research Abstracts*, 21, EGU2019-11023-2, eISSN: 1607-7962, [Wien]
5. Gao X., Roder G., Jiao Y., Ding Y., Liu Z., **Tarolli P.** (2019). Farmers' landslide risk perceptions, willingness for restoration and conservation on Laohuzui Terraces of the world heritage of Honghe Hani Rice Terraces (China). *Geophysical Research Abstracts*, 21, EGU2019-10999, eISSN: 1607-7962, [Wien]
6. **Tarolli P.**, Mauri, L., Sallustio, L. (2019). A diagnostic framework for mapping and quantifying the geomorphic impact of wild boars. *Mid-term National Conference of the Italian Association of Agricultural Engineering (AIIA)*. [Matera]
7. **Tarolli P.**, Pijl, A., Vogel, T. (2018). Opportunities from Unmanned Aircraft Systems for the hydrogeological hazard assessment in steep-slope agricultural landscapes. Abstract NH23D-0870 presented at 2018 Fall Meeting, AGU, Washington DC, 10-14 Dec. [Washington]
8. Niculita, M., Mărgărint, M., Necula, N., **Tarolli, P.** (2018). Anthropoc induced gullies on old anthropic lake beds in Romania. Abstract GC41F-1510 presented at 2018 Fall Meeting, AGU, Washington DC, 10-14 Dec. [Washington]
9. Paliaga, G., Luino, F., Faccini, F., Turconi, L., **Tarolli, P.** (2018). Man-made Terraces: From Ancient Anthropoc Landscape Modification to Value at Risk. The Example of 5 Terre and Portofino, Italy. Abstract GC41F-1516 presented at 2018 Fall Meeting, AGU, Washington DC, 10-14 Dec. [Washington]
10. Cao, W., Ellis, E.C., Zhao, W., **Tarolli, P.** (2018). A Global Assessment of Anthropogenic Geomorphology. Abstract GC41F-1508 presented at 2018 Fall Meeting, AGU, Washington DC, 10-14 Dec. [Washington]

11. Carretta, L., **Tarolli, P.**, Cardinali, A., Nasta, P., Romano, N, Masin, R. (2018). Effect of No-Till and Tillage Management on Runoff and Soil Erosion: a Case Study in Northeast Italy. Abstract GC51G-0863 presented at 2018 Fall Meeting, AGU, Washington DC, 10-14 Dec. [Washington]
12. **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]
13. 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].
14. 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].
15. 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].
16. 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].
17. 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].
18. 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](#)
19. 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](#)
20. 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](#)
21. 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](#)
22. 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](#)
23. 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](#)
24. 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](#)
25. 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](#)
26. **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](#)
27. **Tarolli, P.**, Cecchin, M., Prosdociami, M., Masin, R. (2017). Geomorphological characterization of conservation agriculture. *Geophysical Research Abstract*, 19, EGU2017-13201, eISSN: 1607-7962, [Wien]. [PICO](#)
28. 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](#)
29. 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].
30. 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].

31. 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].
32. 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](#)
33. 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](#)
34. 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](#)
35. 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]
36. 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]
37. 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].
38. 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](#)
39. 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](#)
40. Cvetković, V.M., Roder, G., **Tarolli, P.**, Öcal, 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](#)
41. 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].
42. **Tarolli, P.**, and Sofia, G. (2016). Anthropogenic features and hillslope processes interaction. *Geophysical Research Abstracts*, 18, EGU2016- 12102. eISSN: 1607-7962. [Wien]
43. Roder, G., and **Tarolli, P.** (2016). Natural disasters and gender dynamics. *Geophysical Research Abstracts*, 18, EGU2016- 12255. eISSN: 1607-7962. [Wien]
44. 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](#)
45. Pappalardo, S.E., Ferrarese, F., **Tarolli, P.**, and Varotto, M. (2016). Implementing automatic LiDAR and supervised mapping methodologies to quantify agricultural terraced landforms at landscape scale: the case of Veneto Region. *Geophysical Research Abstracts*, 18, EGU2016-14755-1, eISSN: 1607-7962. [Wien] [PICO](#)
46. Cerdà, A., Burguet, M., Keesstra, S., Prosdocimi, M., Di Prima, S., Brevik, E., Novara, A., Jordan, A., and **Tarolli, P.** (2016). The impact of agriculture terraces on soil organic matter, aggregate stability, water repellency and bulk density. A study in abandoned and active farms in the Sierra de Enguera, Eastern Spain. *Geophysical Research Abstracts*, 18, EGU2016-18104, eISSN: 1607-7962. [Wien] [PICO](#)
47. 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]
48. 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]

49. **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]
50. 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]
51. 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]
52. 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](#)
53. 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](#)
54. Preti, F., Caruso, M., Dani, A., Cassiani, G., Romano, N., **Tarolli P.** (2015) Agricultural terraces monitoring and modeling: a field survey in Chianti region, Firenze, Italy – Second part. *Geophysical Research Abstracts*, 17, EGU2015-7653, eISSN: 1607-7962. [Wien]
55. Giostrella, P., Ferrarese, F., Faccini, F., Brandolini, P., Lazzeri, R., Melillo, M., Mozzi, P., Varotto, M., **Tarolli, P.**, Guzzetti, F. (2015) Maintenance and recovery of agricultural terraces to reduce geo-hydrological hazards: the Santa Giulia in Centauro (Liguria, Italy) and Valstagna (Veneto, Italy) case studies. *Geophysical Research Abstracts*, 17, EGU2015-9547, eISSN: 1607-7962. [Wien]
56. Bailly, J.S., Sofia, G., Chehata, N., **Tarolli, P.**, Levavasseur, F. Farmland terrace slope detection from Pleiades digital elevation models. *Geophysical Research Abstracts*, 17, EGU2015-10021, eISSN: 1607-7962. [Wien]
57. Romano, N., De Falco, M., Speranza, G., **Tarolli, P.** (2015) A functional-oriented assessment of environmental criticality due to anthropic actions along the hillslopes of the Somma-Vesuvio volcano (Naples, Italy). *Geophysical Research Abstracts*, 17, EGU2015-4063, eISSN: 1607-7962. [Wien]
58. Feng, Z., Chen, J., Li, K., **Tarolli, P.** (2015) Multi-temporal and multi-platforms remote sensing data for the analysis of open-pit mining earth surface dynamics. *Geophysical Research Abstracts*, 17, EGU2015-4583, eISSN: 1607-7962. [Wien]
59. Giostrella, P., Faccini, F., Maggi, R., Mondini, A.C., **Tarolli, P.**, Guzzetti F. (2015) Human-induced landscape changes and geo-hydrological risk: the Rupinaro catchment, Liguria, Italy. *Geophysical Research Abstracts*, 17, EGU2015-9269, eISSN: 1607-7962. [Wien]
60. Mutzner, R., Weijs, S.V., **Tarolli, P.**, Calaf, M., Oldroyd, H.J., Parlange, M.B., (2014). Controls on diurnal streamflow cycles in a high altitude catchment in the Swiss Alps. Abstract C41A-0325 presented at 2014 Fall Meeting, AGU, San Francisco, Calif., 15-19 Dec. [San Francisco]
61. Prosdocimi, M., Sofia, G., Preti, F., Dalla Fontana, G., **Tarolli, P.** (2014). Relative Path Impact Index (RPII): a morphometric approach to quantify the effect of anthropogenic features on surface flow processes in agricultural landscapes. Abstract EP53A-3590 presented at 2014 Fall Meeting, AGU, San Francisco, Calif., 15-19 Dec. [San Francisco]
62. Sofia, G., Prosdocimi, M., Dalla Fontana, G., **Tarolli, P.** (2014). Recent Changes in Floodplain Urban Development and in Intense Rainfall Patterns: Evidence and Effects for the Reclamation Network in North-Eastern Italy. Abstract H51H-0713 presented at 2014 Fall Meeting, AGU, San Francisco, Calif., 15-19 Dec. [San Francisco]
63. Piermattei, L., Carturan, L., De Blasi, F., **Tarolli, P.**, Dalla Fontana, G., Vettore, A., (2014). Monitoring Glacial and Periglacial Environments in the Ortles-Cevedale (Eastern Italian Alps) Using the SfM-Mvs Approach. Abstract C31A-0269 presented at 2014 Fall Meeting, AGU, San Francisco, Calif., 15-19 Dec. [San Francisco]
64. **Tarolli, P.** (2014). Natural vs. Human forcing: the new challenge for the Earth science community in the Anthropocene. *Geophysical Research Abstracts*, 16, EGU2014-6850, eISSN: 1607-7962. [Wien] [PICO](#)
65. Li, K., Chen, J., Sofia, G., **Tarolli, P.** (2014) Geomorphometric multi-scale analysis for the recognition of Moon surface features using multi-resolution DTMs. *Geophysical Research Abstracts*, 16, EGU2014-6687, eISSN: 1607-7962. [Wien] [PICO](#)
66. **Tarolli, P.**, Sofia, G., Calligaro, S., Prosdocimi, M., Preti, F., Dalla Fontana, G. (2014). Erosion in vineyards and LiDAR: new opportunities for anthropogenic terraced landscapes. *Geophysical Research Abstracts*, 16, EGU2014-5939, eISSN: 1607-7962. [Wien]
67. Chen, J., **Tarolli, P.**, Li, K., Yang, X. (2014). Using multi-temporal remote sensing for mining area monitoring and management: the Yunnan Province case study (China). *Geophysical Research Abstracts*, 16, EGU2014-6587, eISSN: 1607-7962. [Wien]

68. Chirico, G.B., Borga, M., **Tarolli, P.**, Rigon, R., Preti, F. (2014) Stability of vegetated slopes in unsaturated conditions: a numerical study. *Geophysical Research Abstracts*, 16, EGU2014-12815, eISSN: 1607-7962. [Wien]
69. Carturan, C., Baldassi, G.A., Calligaro, S., Carton, A., Cazorzi, F., Dalla Fontana, G., Moro, D., **Tarolli, P.** (2013). Response of Montasio Occidentale glacier (Eastern Italian Alps) to the warm summer 2012, investigated by terrestrial laser scanner. *Geophysical Research Abstracts*, 15, EGU2013-4367, eISSN: 1607-7962. [Wien] [PICO](#)
70. Savio, F., Prosdocimi, M., **Tarolli, P.**, Rulli, C. (2013). Analysis of vegetation distribution in relation to surface morphology. *Geophysical Research Abstracts*, 15, EGU2013-9677, eISSN: 1607-7962. [Wien] [PICO](#)
71. Tseng, C.-M., Lin, C.-W., Dalla Fontana, G., **Tarolli, P.** (2013). Variation of Slope-Area Relationship Caused by a Catastrophic Landslide. *Geophysical Research Abstracts*, 15, EGU2013-3157, eISSN: 1607-7962. [Wien] [PICO](#)
72. Mutzner, R., **Tarolli, P.**, Parlange, M.B., Rinaldo, A. (2013). Accurate drainage network extraction and monitoring in a high-mountain catchment. *Geophysical Research Abstracts*, 15, EGU2013-8991, eISSN: 1607-7962. [Wien] [PICO](#)
73. Calligaro, S., Sofia, G., Guarnieri, A., **Tarolli, P.** (2013). LIDAR data to support coastal erosion analysis: the Conero study case. *Geophysical Research Abstracts*, 15, EGU2013-5393, eISSN: 1607-7962. [Wien] [PICO](#)
74. **Tarolli, P.**, Preti, F., Romano, N. (2013). Terraced landscape: from an old best practice to a rising land abandoned-related soil erosion risk. *Geophysical Research Abstracts*, 15, EGU2013-3355, eISSN: 1607-7962. [Wien]
75. **Tarolli, P.**, Marra, F., Penna, D., Nikolopoulos, E.I. (2013). Extreme rainfall and debris flows from an orographic thunderstorm in the Eastern Italian Alps. *Geophysical Research Abstracts*, 15, EGU2013-10961, eISSN: 1607-7962. [Wien]
76. **Tarolli, P.**, Righetto, A. (2012). Regional scale analysis of the topographic signatures of landslide/debris flow dominated processes. *Geophysical Research Abstracts*, 14, EGU2012-9865, eISSN: 1607-7962. [Wien]
77. Lin, C.-W., **Tarolli, P.**, Tseng, C.-M., Tseng, Y.-H. (2012). Recognition of large scale deep-seated landslides in vegetated areas of Taiwan. *Geophysical Research Abstracts*, 14, EGU2012-3422, eISSN: 1607-7962. [Wien]
78. Tseng, C.-M., **Tarolli, P.**, Lin, C.-W., (2012). Variations of Geomorphic Signatures after a Major Typhoon. *Geophysical Research Abstracts*, 14, EGU2012-5000-2, eISSN: 1607-7962. [Wien]
79. S. Calligaro, S., **Tarolli, P.**, Mancini, M., Righetto, A., Capraro, D., Mei, G., Spinazzè, A. (2012). Terrestrial Laser Scanner survey of a small headwater basin in the Dolomites. *Geophysical Research Abstracts*, 14, EGU2012-5035-2, eISSN: 1607-7962. [Wien]
80. Aronica, G.T., **Tarolli, P.**, Penna, D., Borga, M. (2012). Shallow landslides and debris flows triggering and rainfall thresholds using a quasi-dynamic wetness index: a case study in Sicily. *Geophysical Research Abstracts*, 13, EGU2012-12230, eISSN: 1607-7962. [Wien]
81. Carturan, L., Calligaro, S., Cazorzi, F., Baldassi, G., Moro, D., Carton, A., Dalla Fontana, G., Guarnieri, A., Milan, N., **Tarolli, P.** (2012). Mass balance and surface dynamics of Montasio Occidentale glacier (Eastern Italian Alps) investigated by Terrestrial Laser Scanner. *Geophysical Research Abstracts*, 14, EGU2012-7660, eISSN: 1607-7962. [Wien]
82. Sofia, G., **Tarolli, P.**, Dalla Fontana, G. (2012). LiDAR DTMs and anthropogenic feature extraction: testing the feasibility of geomorphometric parameters in floodplains". *Geophysical Research Abstracts*, 14, EGU2012-4114-2, eISSN: 1607-7962. [Wien]
83. **Tarolli, P.**, Righetto, A. (2012). Regional scale analysis of the topographic signatures of landslide/debris flow dominated processes. *Geophysical Research Abstracts*, 14, EGU2012-9865, eISSN: 1607-7962. [Wien]
84. **Tarolli, P.**, Righetto, A. (2012). Analisi della relazione area-pendenza: alcuni casi di studio nella Provincia Autonoma di Bolzano. XXXIII Italian Conference of Hydraulics and Hydraulic Constructions. [Brescia] [Best poster award](#)
85. Sofia, G., **Tarolli, P.**, Cazorzi, F., De Luca, A., Dalla Fontana, G. (2012). Il reticolo di drenaggio minore: caratterizzazione a larga scala di densità di drenaggio e capacità di invaso. XXXIII Italian Conference of Hydraulics and Hydraulic Constructions. Brescia [Italy]
86. **Tarolli, P.**, Aronica, G.T., Penna, D., Borga, M., Brigandì, G. (2012). Valutazione della suscettibilità al franamento diffuso per il bacino di Giampileri (Sicilia). XXXIII Italian Conference of Hydraulics and Hydraulic Constructions. [Brescia]

87. **Tarolli, P.**, Calligaro, S., Cazorzi, F., Dalla Fontana, G. (2011). L'alterazione dei deflussi idrici superficiali da parte dei segmenti viari e dei sentieri: l'efficacia della topografia ad alta risoluzione. *Mid-term National Conference of the Italian Association of Agricultural Engineering (AIIA)*. [Belgirate]
88. Cazorzi F., Dalla Fontana, G., De Luca, A., **Sofia, G.**, Tarolli, P., (2011). Individuazione e caratterizzazione del reticolo idrografico minore in ambiente agrario. Gestione e controllo dei sistemi agrari e forestali. *Mid-term National Conference of the Italian Association of Agricultural Engineering (AIIA)*. [Belgirate]
89. **Tarolli, P.**, Nikolopoulos, E.I., Anagnostou, E.N., Vivoni, E.R., Papadopoulos, A. (2011). The effect of high resolution topography information on complex terrain flash-flood response modeling. *Geophysical Research Abstracts*, 13, EGU2011-12234, eISSN: 1607-7962. [Wien]
90. Aronica, G.T., **Tarolli, P.**, Penna, D., Borga, M. (2011). Analysis of shallow landsliding triggered by extreme precipitation: the October 1, 2009 event in Giampilieri (Sicily). *Geophysical Research Abstracts*, 13, EGU2011-4293, eISSN: 1607-7962. [Wien]
91. Dalla Fontana, G., Calligaro, S., Cazorzi, F., **Tarolli, P.** (2011). Automatic recognition of road and pathway induced slope instabilities by high resolution topography. *Geophysical Research Abstracts*, 13, EGU2011-9718, eISSN: 1607-7962. [Wien]
92. Guarnieri, A., Milan, N., Vettore, A., **Tarolli, P.** (2011). A prototype of landslide observatory in the eastern Italian alps. *Geophysical Research Abstracts*, 13, EGU2011-12173, eISSN: 1607-7962. [Wien]
93. Carturan, L., Calligaro, S., Guarnieri, A., Milan, N., **Tarolli, P.**, Moro, D., Baldassi, G., Cazorzi, F., Vettore, A., Dalla Fontana, G. (2011). Terrestrial Laser Scanner survey of two small glacial formations in the Eastern Italian Alps. *Geophysical Research Abstracts*, 13, EGU2011-6204, eISSN: 1607-7962. [Wien]
94. Cazorzi, F., **Tarolli, P.**, Sofia, G., De Luca, A., Dalla Fontana, G. (2011). Surface water storage in alluvial and urbanized plains: the effectiveness of high resolution topography. *Geophysical Research Abstracts*, 13, EGU2011-3804, eISSN: 1607-7962. [Wien]
95. Dalla Fontana, G., **Tarolli, P.**, Passalacqua, P. (2010). Recognition of topographic signature of Earth-surface processes in high altitude regions. Abstract EP51D-0575 presented at 2010 Fall Meeting, AGU, San Francisco, Calif., 13-17 Dec. [San Francisco]
96. **Tarolli, P.**, Nikolopoulos, E.I., Anagnostou, E.N., Borga, M., Vivoni, E.R., Papadopoulos, A. (2010). The effect of high resolution topography information on complex terrain flash-flood response modeling. Abstract H41F-1151 presented at 2010 Fall Meeting, AGU, San Francisco, Calif., 13-17 Dec. [San Francisco]
97. Aronica, G., **Tarolli, P.**, Penna, D., Borga, M. (2010). Analysis of shallow landsliding and debris flows triggered by extreme precipitation: the October 1, 2009 event in Giampilieri (Sicily). *Plinius Conference Abstracts*, 12, 12-99. Corfu [Greece]
98. **Tarolli, P.**, Zocatelli, D., Penna, D., Borga, M. (2010). Spatial moments of catchment rainfall and their use to quantify the influence of spatial rainfall variability on runoff response. *Geophysical Research Abstracts*, 12, EGU2010-14173, eISSN: 1607-7962. [Wien]
99. Gobbi, A., Settin, T., Rossa, A., **Tarolli, P.** (2010). Regional frequency analysis of extreme precipitation in north-eastern Italy and the September 26, 2007 flash flood. *Geophysical Research Abstracts*, 12, EGU2010-10671, eISSN: 1607-7962. [Wien]
100. Orlandini, S., Moretti, G., **Tarolli, P.**, Dalla Fontana, G. (2010). Identification and prediction of channel heads from gridded elevation data. *Geophysical Research Abstracts*, 12, EGU2010-7131, eISSN: 1607-7962. [Wien]
101. **Tarolli, P.**, Pirotti, F. (2010). Estrazione semi-automatica del reticolo idrografico da dati LiDAR: un nuovo approccio metodologico. *XXXII Convegno Nazionale di Idraulica e Costruzioni Idrauliche*. Palermo [Italy] [Best poster award](#)
102. **Tarolli, P.**, Dalla Fontana, G., Moretti, G., Orlandini, S. (2010). On predicting channel initiation from gridded elevation data. *XXXII Convegno Nazionale di Idraulica e Costruzioni Idrauliche*. [Palermo]
103. **Tarolli, P.**, Sofia, G., Dalla Fontana, G. (2009). Semi-automatic methodologies for landslide features extraction: new opportunities but also challenges from high resolution topography. *Eos* 90(52): Fall Meet. Suppl., Abstract NH41C-1263. [San Francisco]
104. Orlandini, S., Moretti, G., **Tarolli, P.**, Dalla Fontana, G. (2009). Identification of surface flow paths, slopes, and channel networks from gridded elevation data. *Eos* 90(52): Fall Meet. Suppl., Abstract H33B-0873. [San Francisco].
105. Passalacqua, P., **Tarolli, P.**, Fofoula-Georgiou, E. (2009). Space-scale methodologies for geomorphic feature extraction from LiDAR: An assessment. *Eos* 90(52): Fall Meet. Suppl., Abstract EP31A-0584. [San Francisco]
106. **Tarolli, P.**, Passalacqua, P., Fofoula-Georgiou, E., Dietrich, W.E. (2008). Testing the next generation of algorithms for geomorphic feature extraction from LiDAR: a case study in the Rio Cordon Basin, Italy. *Eos Trans. AGU* 89(53): Fall Meet. Suppl., Abstract H51D-0840. [San Francisco]

107. Petroselli, A., Santini, M., Nardi, F., **Tarolli, P.**, Grimaldi, S. (2008). Evaluating topographic and hydrologic attribute sensitivity to upscaled resolution DEMs from LiDAR data. *Eos Trans. AGU* 89(53): Fall Meet. Suppl., Abstract H11H-0865. [San Francisco]
108. **Tarolli, P.**, Zanon, F., Macconi, P. (2008). Hydrometeorological analysis of a major debris flow in the Central Italian Alps. *Geophysical Research Abstracts*, 10, EGU2008-A-05132, eISSN: 1607-7962. [Wien]
109. Vianello, A., Cavalli, M., **Tarolli, P.**, D'Agostino, V. (2008). LiDAR and field surveys for channel morphology analysis. *Geophysical Research Abstracts*, 10, EGU2008-A-07313, eISSN: 1607-7962. [Wien]
110. **Tarolli, P.** (2007). Green Alder Pattern in Relation to Slope-Area Scaling Regimes of a Headwater Basin in the Eastern Italian Alps. *Eos Trans. AGU* 88(52): Fall Meet. Suppl., Abstract H51H-0877. [San Francisco]
111. Vianello, A., Cavalli, M., **Tarolli, P.** (2007). Geomorphic Channel Network Analysis of a Headwater Basin in the Italian Alps. *Eos Trans. AGU* 88(52): Fall Meet. Suppl., Abstract H51E-0789. [San Francisco]
112. **Tarolli, P.**, Istanbuluoglu, E., and Dalla Fontana, G. (2006). Linking the topography signature of LiDAR-derived vegetation types and geomorphic processes as preliminary steps in integrating landscape evolution with vegetation dynamics. *Eos Trans. AGU* 87(52): Fall Meet. Suppl., Abstract H13A-1349. [San Francisco]
113. Dalla Fontana, G., **Tarolli, P.** (2006). The accuracy and limits of high-resolution LiDAR-derived DEM for the analysis of topographic surface and some related physical processes. *Eos Trans. AGU* 87(52): Fall Meet. Suppl., Abstract H53B-0628. [San Francisco]
114. **Tarolli, P.**, and Tarboton, D.G. (2005). A New Method for Determination of Most Likely Initiation Points and the Evaluation of Digital Terrain Model Scale in Terrain Stability Mapping. *Eos Trans. AGU* 86(52): Fall Meet. Suppl., Abstract H51C-0377. [San Francisco]
115. D'Agostino, V., **Tarolli, P.** (2004). Morphological units and their pattern in the mount Everest Region, Nepal. 32nd International Geological Congress, Abstract T11.12 (251). Florence [Italy]

Paolo Tarolli

