## Gert Verstraeten

## List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/5520554/publications.pdf

Version: 2024-02-01

126 papers 9,519 citations

53 h-index 94 g-index

147 all docs

147 docs citations

147 times ranked 6775 citing authors

| #  | Article  | IF  | CITATIONS |
|----|--|-----|-----------|
| 1  | Gully erosion and environmental change: importance and research needs. Catena, 2003, 50, 91-133.   | 2.2 | 1,284     |
| 2  | Predicting soil erosion and sediment yield at regional scales: Where do we stand?. Earth-Science Reviews, 2013, 127, 16-29.  | 4.0 | 348       |
| 3  | The sediment delivery problem revisited. Progress in Physical Geography, 2007, 31, 155-178.  | 1.4 | 343       |
| 4  | Modelling mean annual sediment yield using a distributed approach. Earth Surface Processes and Landforms, 2001, 26, 1221-1236.   | 1.2 | 338       |
| 5  | Prediction of landslide susceptibility using rare events logistic regression: A case-study in the Flemish Ardennes (Belgium). Geomorphology, 2006, 76, 392-410.  | 1.1 | 338       |
| 6  | Estimating trap efficiency of small reservoirs and ponds: methods and implications for the assessment of sediment yield. Progress in Physical Geography, 2000, 24, 219-251.  | 1.4 | 245       |
| 7  | Factors controlling sediment yield from small intensively cultivated catchments in a temperate humid climate. Geomorphology, 2001, 40, 123-144.  | 1.1 | 214       |
| 8  | Sediment yield in Europe: Spatial patterns and scale dependency. Geomorphology, 2011, 130, 142-161.  | 1.1 | 211       |
| 9  | Use of LIDAR-derived images for mapping old landslides under forest. Earth Surface Processes and Landforms, 2007, 32, 754-769.   | 1.2 | 193       |
| 10 | Spatially distributed modelling of soil erosion and sediment yield at regional scales in Spain. Global and Planetary Change, 2008, 60, 393-415.  | 1.6 | 180       |
| 11 | The effectiveness of hillshade maps and expert knowledge in mapping old deep-seated landslides.<br>Geomorphology, 2005, 67, 351-363.   | 1.1 | 159       |
| 12 | Characteristics of the size distribution of recent and historical landslides in a populated hilly region. Earth and Planetary Science Letters, 2007, 256, 588-603.   | 1.8 | 157       |
| 13 | Sediment yield variability in Spain: a quantitative and semiqualitative analysis using reservoir sedimentation rates. Geomorphology, 2003, 50, 327-348.  | 1.1 | 154       |
| 14 | The nature of small-scale flooding, muddy floods and retention pond sedimentation in central Belgium. Geomorphology, 1999, 29, 275-292.  | 1.1 | 148       |
| 15 | Predicting catchment sediment yield in Mediterranean environments: the importance of sediment sources and connectivity in Italian drainage basins. Earth Surface Processes and Landforms, 2006, 31, 1017-1034.             | 1.2 | 144       |
| 16 | Long-term (105 years) variability in rain erosivity as derived from 10-min rainfall depth data for Ukkel (Brussels, Belgium): Implications for assessing soil erosion rates. Journal of Geophysical Research, 2006, 111, . | 3.3 | 140       |
| 17 | Qualitative and quantitative applications of LiDAR imagery in fluvial geomorphology. Earth Surface Processes and Landforms, 2009, 34, 217-231.   | 1.2 | 134       |
| 18 | The application of semi-quantitative methods and reservoir sedimentation rates for the prediction of basin sediment yield in Spain. Journal of Hydrology, 2005, 305, 63-86.  | 2.3 | 130       |

| #  | Article   | IF  | Citations |
|----|---|-----|-----------|
| 19 | Legacy of human-induced C erosion and burial on soil–atmosphere C exchange. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 19492-19497.  | 3.3 | 126       |
| 20 | The impact of land use and climate change on late Holocene and future suspended sediment yield of the Meuse catchment. Geomorphology, 2009, 103, 389-400.   | 1.1 | 125       |
| 21 | Sediment dynamics and the role of flash floods in sediment export from medium-sized catchments: a case study from the semi-arid tropical highlands in northern Ethiopia. Journal of Soils and Sediments, 2010, 10, 611-627. | 1.5 | 120       |
| 22 | Sensitivity of West and Central European river systems to environmental changes during the Holocene: A review. Earth-Science Reviews, 2010, 103, 163-182.   | 4.0 | 119       |
| 23 | ASSESSING THE PERFORMANCE OF A SPATIALLY DISTRIBUTED SOIL EROSION AND SEDIMENT DELIVERY MODEL (WATEM/SEDEM) IN NORTHERN ETHIOPIA. Land Degradation and Development, 2013, 24, 188-204.                                      | 1.8 | 119       |
| 24 | A new model of river dynamics, hydroclimatic change and human settlement in the Nile Valley derived from meta-analysis of the Holocene fluvial archive. Quaternary Science Reviews, 2015, 130, 109-123.                     | 1.4 | 106       |
| 25 | Predicting the spatial patterns of hillslope sediment delivery to river channels in the Murrumbidgee catchment, Australia. Journal of Hydrology, 2007, 334, 440-454.  | 2.3 | 102       |
| 26 | Using sediment deposits in small ponds to quantify sediment yield from small catchments: possibilities and limitations. Earth Surface Processes and Landforms, 2002, 27, 1425-1439.   | 1.2 | 101       |
| 27 | Sediment yield variability in Northern Ethiopia: A quantitative analysis of its controlling factors.<br>Catena, 2008, 75, 65-76.  | 2.2 | 98        |
| 28 | Fingerprinting historical fluvial sediment fluxes. Progress in Physical Geography, 2012, 36, 154-186.   | 1.4 | 98        |
| 29 | Specific sediment yield in Tigray-Northern Ethiopia: Assessment and semi-quantitative modelling. Geomorphology, 2005, 69, 315-331.  | 1.1 | 96        |
| 30 | Changing sediment dynamics due to natural reforestation in the Dragonja catchment, SW Slovenia. Catena, 2009, 78, 60-71.  | 2.2 | 95        |
| 31 | Holocene environmental change and its impact on sediment dynamics in the Eastern Mediterranean.<br>Earth-Science Reviews, 2011, 108, 137-157.   | 4.0 | 95        |
| 32 | Holocene alluvial sediment storage in a small river catchment in the loess area of central Belgium. Geomorphology, 2006, 77, 187-201.   | 1.1 | 90        |
| 33 | The use of riparian vegetated filter strips to reduce river sediment loads: an overestimated control measure?. Hydrological Processes, 2006, 20, 4259-4267.   | 1.1 | 89        |
| 34 | Soil erosion and sediment deposition in the Belgian oess belt during the Holocene: establishing a sediment budget for a small agricultural catchment. Holocene, 2005, 15, 1032-1043.  | 0.9 | 84        |
| 35 | Factors controlling sediment yield at the catchment scale in NW Mediterranean geoecosystems. Journal of Soils and Sediments, 2011, 11, 690-707.   | 1.5 | 82        |
| 36 | Widespread global peatland establishment and persistence over the last 130,000 y. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 4822-4827.                                    | 3.3 | 82        |

| #  | Article   | lF  | CITATIONS |
|----|---|-----|-----------|
| 37 | Variability of dry sediment bulk density between and within retention ponds and its impact on the calculation of sediment yields. Earth Surface Processes and Landforms, 2001, 26, 375-394.                                       | 1.2 | 77        |
| 38 | Soil losses due to harvesting of chicory roots and sugar beet: an underrated geomorphic process?. Catena, 2001, 43, 35-47.  | 2.2 | 76        |
| 39 | Sedimentâ€bound nutrient export from microâ€dam catchments in Northern Ethiopia. Land Degradation and Development, 2008, 19, 136-152.   | 1.8 | 76        |
| 40 | Sediment yield as a desertification risk indicator. Science of the Total Environment, 2011, 409, 1715-1725.   | 3.9 | 76        |
| 41 | Man and environment in the territory of Sagalassos, a classical city in SW Turkey. Quaternary Science Reviews, 1999, 18, 697-709.   | 1.4 | 74        |
| 42 | Alluvial and colluvial sediment storage in the Geul River catchment (The Netherlands) $\hat{a} \in \mathbb{C}$ Combining field and modelling data to construct a Late Holocene sediment budget. Geomorphology, 2008, 95, 487-503. | 1.1 | 73        |
| 43 | Variability in fluvial geomorphic response to anthropogenic disturbance. Geomorphology, 2017, 294, 20-39.   | 1.1 | 72        |
| 44 | Soil loss due to crop harvesting: significance and determining factors. Progress in Physical Geography, 2004, 28, 467-501.  | 1.4 | 70        |
| 45 | Establishing a Holocene sediment budget for the river Dijle. Catena, 2009, 77, 150-163.   | 2.2 | 70        |
| 46 | Modeling the sensitivity of sediment and water runoff dynamics to Holocene climate and land use changes at the catchment scale. Geomorphology, 2011, 126, 18-31.  | 1.1 | 70        |
| 47 | A comparison of measured catchment sediment yields with measured and predicted hillslope erosion rates in Europe. Journal of Soils and Sediments, 2012, 12, 586-602.  | 1.5 | 70        |
| 48 | Carbon burial in soil sediments from Holocene agricultural erosion, Central Europe. Global Biogeochemical Cycles, 2013, 27, 828-835.  | 1.9 | 70        |
| 49 | Characteristics, controlling factors and importance of deep gullies under cropland on loess-derived soils. Geomorphology, 2005, 69, 76-91.  | 1.1 | 67        |
| 50 | A temporarily changing Holocene sediment budget for a loess-covered catchment (central Belgium). Geomorphology, 2009, 108, 24-34.   | 1.1 | 63        |
| 51 | Quantifying human impacts on catchment sediment yield: A continental approach. Global and Planetary Change, 2015, 130, 22-36.   | 1.6 | 62        |
| 52 | Regional scale modelling of hillslope sediment delivery with SRTM elevation data. Geomorphology, 2006, 81, 128-140.   | 1.1 | 60        |
| 53 | Human impact on sediment dynamics — quantification and timing. Catena, 2009, 77, 77-80.   | 2.2 | 58        |
| 54 | Modelling the long-term sediment trap efficiency of small ponds. Hydrological Processes, 2001, 15, 2797-2819.   | 1.1 | 57        |

| #  | Article  | IF  | CITATIONS |
|----|--|-----|-----------|
| 55 | Modelling the impact of land-use change and farm dam construction on hillslope sediment delivery to rivers at the regional scale. Geomorphology, 2008, 98, 199-212.                              | 1.1 | 54        |
| 56 | Holocene demographic fluctuations, climate and erosion in the Mediterranean: A meta data-analysis. Holocene, 2019, 29, 864-885.  | 0.9 | 54        |
| 57 | Evidence of anthropogenic tipping points in fluvial dynamics in Europe. Global and Planetary Change, 2018, 164, 27-38.   | 1.6 | 51        |
| 58 | Moderate seismic activity affects contemporary sediment yields. Progress in Physical Geography, 2014, 38, 145-172.   | 1.4 | 50        |
| 59 | Climate, people, fire and vegetation: new insights into vegetation dynamics in the Eastern Mediterranean since the 1st century AD. Climate of the Past, 2013, 9, 57-87.                          | 1.3 | 48        |
| 60 | Spatial and temporal variability of river flows in the degraded semi-arid tropical mountains of northern Ethiopia. Zeitschrift FÃ $\frac{1}{4}$ r Geomorphologie, 2013, 57, 143-169.             | 0.3 | 47        |
| 61 | Sensitivity of the Eastern Mediterranean geomorphic system towards environmental change during the Late Holocene: a chronological perspective. Journal of Quaternary Science, 2012, 27, 371-382. | 1.1 | 44        |
| 62 | Reconstructing ancient topography through erosion modelling. Geomorphology, 2006, 78, 250-264.   | 1.1 | 43        |
| 63 | Short Communication: Humans and the missing C-sink: erosion and burial of soil carbon through time. Earth Surface Dynamics, 2013, 1, 45-52.  | 1.0 | 43        |
| 64 | Gully Erosion in Europe., 2006,, 515-536.  |     | 41        |
| 65 | Man, vegetation and climate during the Holocene in the territory of Sagalassos, Western Taurus<br>Mountains, SW Turkey. Vegetation History and Archaeobotany, 2012, 21, 249-266.                 | 1.0 | 41        |
| 66 | Integrating science, policy and farmers to reduce soil loss and sediment delivery in Flanders, Belgium. Environmental Science and Policy, 2003, 6, 95-103.                                       | 2.4 | 40        |
| 67 | Changing hillslope and fluvial Holocene sediment dynamics in a Belgian loess catchment. Journal of Quaternary Science, 2011, 26, 44-58.  | 1.1 | 40        |
| 68 | A sediment fingerprinting approach to understand the geomorphic coupling in an eastern Mediterranean mountainous river catchment. Geomorphology, 2013, 197, 64-75.                               | 1.1 | 40        |
| 69 | Reconstruction of late-Holocene slope and dry valley sediment dynamics in a Belgian loess environment. Holocene, 2007, 17, 777-788.  | 0.9 | 39        |
| 70 | Numerically derived evidence for late-Holocene climate change and its impact on human presence in the southwest Taurus Mountains, Turkey. Holocene, 2012, 22, 425-438.                           | 0.9 | 39        |
| 71 | Regional Scale Variability in Sediment and Nutrient Delivery from Small Agricultural Watersheds.<br>Journal of Environmental Quality, 2002, 31, 870-879.   | 1.0 | 37        |
| 72 | Morphology and internal structure of a dormant landslide in a hilly area: The Collinabos landslide (Belgium). Geomorphology, 2007, 89, 258-273.  | 1.1 | 37        |

| #  | Article   | IF  | CITATIONS |
|----|---|-----|-----------|
| 73 | Interannual variation of soil losses due to sugar beet harvesting in West Europe. Agriculture, Ecosystems and Environment, 2005, 107, 317-329.  | 2.5 | 35        |
| 74 | Soil losses due to mechanized potato harvesting. Soil and Tillage Research, 2006, 86, 52-72.  | 2.6 | 35        |
| 75 | Unravelling changing sediment sources in a Mediterranean mountain catchment: a Bayesian fingerprinting approach. Hydrological Processes, 2013, 27, 896-910.   | 1.1 | 34        |
| 76 | Reconstruction and semi-quantification of human impact in the Dijle catchment, central Belgium: a palynological and statistical approach. Quaternary Science Reviews, 2014, 102, 96-110.                        | 1.4 | 34        |
| 77 | Reservoir and Pond Sedimentation in Europe. , 2006, , 757-774.  |     | 31        |
| 78 | Regional Scale Variability in Sediment and Nutrient Delivery from Small Agricultural Watersheds. Journal of Environmental Quality, 2002, 31, 870.   | 1.0 | 30        |
| 79 | RUSLE applied in a GIS framework: Calculating the LS factor and deriving homogeneous patches for estimating soil loss. International Journal of Geographical Information Science, 2005, 19, 809-829.            | 2.2 | 30        |
| 80 | Muddy Floods. , 2006, , 743-755.  |     | 26        |
| 81 | From natural to human-dominated floodplain geoecology – A Holocene perspective for the Dijle catchment, Belgium. Anthropocene, 2014, 8, 46-58.  | 1.6 | 26        |
| 82 | â€~Pisidian' culture? The Classical-Hellenistic site at Düzen Tepe near Sagalassus (southwest Turkey).<br>Anatolian Studies, 2010, 60, 105-128.   | 0.6 | 24        |
| 83 | Effect of ENSO events on sediment production in a large coastal basin in northern Peru. Earth Surface Processes and Landforms, 2011, 36, 1776-1788.   | 1.2 | 24        |
| 84 | Analyzing dune dynamics at the dune-field scale based on multi-temporal analysis of Landsat-TM images. Remote Sensing of Environment, 2012, 119, 105-117.   | 4.6 | 24        |
| 85 | Soil loss due to harvesting of various crop types in contrasting agro-ecological environments. Agriculture, Ecosystems and Environment, 2007, 120, 153-165.   | 2.5 | 23        |
| 86 | The compatibility of erosion data at different temporal scales. Earth and Planetary Science Letters, 2008, 265, 138-152.  | 1.8 | 23        |
| 87 | Fluvial architecture of Belgian river systems in contrasting environments: implications for reconstructing the sedimentation history. Geologie En Mijnbouw/Netherlands Journal of Geosciences, 2011, 90, 31-50. | 0.6 | 23        |
| 88 | Landform transformation and long-term sediment budget for a Chernozem-dominated lowland agricultural catchment. Catena, 2017, 157, 24-34.   | 2.2 | 22        |
| 89 | Sensitivity of floodplain geoecology to human impact: A Holocene perspective for the headwaters of the Dijle catchment, central Belgium. Holocene, 2013, 23, 1403-1414.   | 0.9 | 21        |
| 90 | Non-uniform and diachronous Holocene floodplain evolution: a case study from the Dijle catchment, Belgium. Journal of Quaternary Science, 2014, 29, 351-360.  | 1.1 | 21        |

| #   | Article   | IF  | CITATIONS |
|-----|---|-----|-----------|
| 91  | Geomorphic controls on floodplain sediment and soil organic carbon storage in a Scottish mountain river. Earth Surface Processes and Landforms, 2020, 45, 207-223.  | 1.2 | 19        |
| 92  | Evaluating an integrated approach to catchment management to reduce soil loss and sediment pollution through modelling. Soil Use and Management, 2002, 18, 386-394.   | 2.6 | 18        |
| 93  | Evaluating the impact of watershed management scenarios on changes in sediment delivery to rivers?. Hydrobiologia, 2003, 494, 153-158.  | 1.0 | 17        |
| 94  | Quantification of alluvial sediment storage in contrasting environments: Methodology and error estimation. Catena, 2010, 82, 169-182.   | 2.2 | 17        |
| 95  | Impact of the spatial and thematic resolution of Holocene anthropogenic land-cover scenarios on modeled soil erosion and sediment delivery rates. Holocene, 2014, 24, 67-77.                                | 0.9 | 17        |
| 96  | Soil losses due to potato harvesting at the regional scale in Belgium. Soil Use and Management, 2007, 23, 156-161.  | 2.6 | 16        |
| 97  | Human induced soil erosion and the implications on crop yield in a small mountainous Mediterranean catchment (SW-Turkey). Catena, 2017, 149, 491-504.   | 2.2 | 16        |
| 98  | Factors controlling soil loss during sugar beet harvesting at the field plot scale in Belgium. European Journal of Soil Science, 2007, 58, 1400-1409.   | 1.8 | 15        |
| 99  | DECADAL MODELLING OF RAINFALL EROSIVITY IN BELGIUM. Land Degradation and Development, 2014, 25, 511-519.  | 1.8 | 14        |
| 100 | The Scenic Beauty of Geosites and Its Relation to Their Scientific Value and Geoscience Knowledge of Tourists: A Case Study from Southeastern Spain. Land, 2021, 10, 460.                                   | 1.2 | 14        |
| 101 | The importance of sediment characteristics and trap efficiency in assessing sediment yield using retention ponds. Physics and Chemistry of the Earth, 2001, 26, 83-87.                                      | 0.3 | 11        |
| 102 | Quantification of human–environment interactions in the past. Anthropocene, 2014, 8, 1-5.   | 1.6 | 11        |
| 103 | Spatial and long-term variability of soil loss due to crop harvesting and the importance relative to water erosion: A case study from Belgium. Agriculture, Ecosystems and Environment, 2008, 126, 217-228. | 2.5 | 10        |
| 104 | Simulating event-scale rainfall erosivity across European climatic regions. Catena, 2022, 213, 106157.  | 2.2 | 10        |
| 105 | Holocene floodplain deposition and scale effects in a typical European upland catchment: A case study from the AmblÄ've catchment, Ardennes (Belgium). Holocene, 2013, 23, 1184-1197.                       | 0.9 | 9         |
| 106 | Where Did Djehutihotep Erect His Colossal Statue?. Zeitschrift Fuer Aegyptische Sprache Und Altertumskunde, 2005, 132, 173-190.   | 0.1 | 8         |
| 107 | Government and Agency Response to Soil Erosion Risk in Europe. , 2006, , 805-827.   |     | 8         |
| 108 | Anthropogenic legacy effects control sediment and organic carbon storage in temperate river floodplains. Catena, 2020, 195, 104897.   | 2.2 | 8         |

7

| #   | Article  | IF  | Citations |
|-----|--|-----|-----------|
| 109 | Sand Dune Dynamics Exploiting a Fully Automatic Method Using Satellite SAR Data. Remote Sensing, 2020, 12, 3993.   | 1.8 | 8         |
| 110 | Soil Losses due to Crop Harvesting in Europe. , 2006, , 609-621.   |     | 7         |
| 111 | "Marginal―Landscapes: Human Activity, Vulnerability, and Resilience in the Western Taurus Mountains (Southwest Turkey). Journal of Eastern Mediterranean Archaeology and Heritage Studies, 2019, 7, 432.                                       | 0.1 | 6         |
| 112 | Detecting modern desert to urban transitions from space in the surroundings of the Giza World Heritage site and Greater Cairo. Journal of Cultural Heritage, 2017, 23, 71-78.  | 1.5 | 5         |
| 113 | Modelling long-term blanket peatland development in eastern Scotland. Biogeosciences, 2019, 16, 3977-3996.   | 1.3 | 5         |
| 114 | The potential of REVEALS-based vegetation reconstructions using pollen records from alluvial floodplains. Vegetation History and Archaeobotany, 2022, 31, 525-540.   | 1.0 | 5         |
| 115 | The Giba, Tanqwa and Tsaliet Rivers in the Headwaters of the Tekezze Basin. GeoGuide, 2019, , 215-230.   | 0.2 | 4         |
| 116 | A Spatially Explicit Crop Yield Model to Simulate Agricultural Productivity for Past Societies under Changing Environmental Conditions. Water (Switzerland), 2021, 13, 2023.   | 1.2 | 4         |
| 117 | Short Communication: Humans and the missing C-sink: erosion and burial of soil carbon through time. , 0, , .   |     | 4         |
| 118 | The importance of the Great War compared to long-term developments in restructuring the rural landscape in Flanders (Belgium). Applied Geography, 2019, 111, 102063.   | 1.7 | 3         |
| 119 | Mapping and Quantifying the Human-Environment Interactions in Middle Egypt Using Machine Learning and Satellite Data Fusion Techniques. Remote Sensing, 2020, 12, 584.   | 1.8 | 3         |
| 120 | Changes in floodplain geo-ecology in the Belgian loess belt during the first millennium AD. Geologie En Mijnbouw/Netherlands Journal of Geosciences, 2021, 100, .  | 0.6 | 2         |
| 121 | Combining quantitative field and modelling approaches towards understanding landscape dynamics: an evolution of ideas spanning Jef Vandenberghe's research career. Geologie En Mijnbouw/Netherlands Journal of Geosciences, 2012, 91, 233-244. | 0.6 | 1         |
| 122 | Modelling the Geomorphic Response to Land Use Changes. Lecture Notes in Earth Sciences, 2003, , 73-100.  | 0.5 | 1         |
| 123 | Modelling long-term alluvial-peatland dynamics in temperate river floodplains. Biogeosciences, 2021, 18, 6181-6212.  | 1.3 | 1         |
| 124 | Solving the Off-site Impacts of Soil Erosion by an Integrated Environmental Watershed Management?. , $0, , .$  |     | 0         |
| 125 | The Relation between Archaeology and Geography in Studying Past Human-environment Interactions:. , 2013, , 71-80.  |     | 0         |
| 126 | Multi-Temporal Insar Monitoring of the Aswan High Dam (Egypt). , 2018, , .   |     | 0         |