Nicolo Colombani

List of Publications by Year
in descending order

116	2,312	201385 27	288905 40
papers	citations	h-index	g-index

118	118	118	2198
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Multivariate statistical analysis to characterize/discriminate between anthropogenic and geogenic trace elements occurrence in the Campania Plain, Southern Italy. Environmental Pollution, 2018, 234, 260-269.	3.7	91
2	Hydrogeochemical study in the Main Ethiopian Rift: new insights to the source and enrichment mechanism of fluoride. Environmental Geology, 2009, 58, 109-118.	1.2	86
3	A modified SINTACS method for groundwater vulnerability and pollution risk assessment in highly anthropized regions based on NO3â^' and SO42â^' concentrations. Science of the Total Environment, 2017, 609, 1512-1523.	3.9	82
4	A novel hybrid method of specific vulnerability to anthropogenic pollution using multivariate statistical and regression analyses. Water Research, 2020, 171, 115386.	5.3	80
5	Impact of Climate Change on Salinization of Coastal Water Resources. Water Resources Management, 2016, 30, 2483-2496.	1.9	78
6	Characterization of the lowland coastal aquifer of Comacchio (Ferrara, Italy): Hydrology, hydrochemistry and evolution of the system. Journal of Hydrology, 2013, 501, 35-44.	2.3	74
7	Ammonium occurrence in a salinized lowland coastal aquifer (Ferrara, Italy). Hydrological Processes, 2013, 27, 3495-3501.	1.1	58
8	Evaluating SWAT model performance, considering different soils data input, to quantify actual and future runoff susceptibility in a highly urbanized basin. Journal of Environmental Management, 2020, 266, 110625.	3.8	52
9	The Issue of Groundwater Salinization in Coastal Areas of the Mediterranean Region: A Review. Water (Switzerland), 2021, 13, 90.	1.2	52
10	The Po river water from the Alps to the Adriatic Sea (Italy): new insights from geochemical and isotopic (Î´18O-Î´D) data. Environmental Science and Pollution Research, 2015, 22, 5184-5203.	2.7	50
11	GALDIT-SUSI a modified method to account for surface water bodies in the assessment of aquifer vulnerability to seawater intrusion. Journal of Environmental Management, 2019, 235, 257-265.	3.8	47
12	Assessment of the Intrinsic Vulnerability of Agricultural Land to Water and Nitrogen Losses via Deterministic Approach and Regression Analysis. Water, Air, and Soil Pollution, 2012, 223, 1605-1614.	1.1	45
13	Batch and column experiments on nutrient leaching in soils amended with Italian natural zeolitites. Catena, 2015, 127, 64-71.	2.2	42
14	Modelling Actual and Future Seawater Intrusion in the Variconi Coastal Wetland (Italy) Due to Climate and Landscape Changes. Water (Switzerland), 2019, 11, 1502.	1.2	42
15	Surface electrical resistivity tomography and hydrogeological characterization to constrain groundwater flow modeling in an agricultural field site near Ferrara (Italy). Environmental Earth Sciences, 2010, 61, 311-322.	1.3	40
16	A Hybrid GIS and AHP Approach for Modelling Actual and Future Forest Fire Risk Under Climate Change Accounting Water Resources Attenuation Role. Sustainability, 2019, 11, 7166.	1.6	40
17	Predicting Salinization Trends in a Lowland Coastal Aquifer: Comacchio (Italy). Water Resources Management, 2015, 29, 603-618.	1.9	39
18	Numerical assessment of effective evapotranspiration from maize plots to estimate groundwater recharge in lowlands. Agricultural Water Management, 2010, 97, 1389-1398.	2.4	38

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19	Linking dissolved organic carbon, acetate and denitrification in agricultural soils. Environmental Earth Sciences, 2013, 68, 939-945.	1.3	37
20	High-resolution global grids of revised Priestleyâ€“Taylor and Hargreavesâ€“Samani coefficients for assessing ASCE-standardized reference crop evapotranspiration and solar radiation. Earth System Science Data, 2017, 9, 615-638.	3.7	36
21	High resolution short-term investigation of soil CO2, N2O, NOx and NH3 emissions after different chabazite zeolite amendments. Applied Soil Ecology, 2017, 119, 138-144.	2.1	33
22	Evaluation of saline tracer performance during electrical conductivity groundwater monitoring. Journal of Contaminant Hydrology, 2011, 123, 157-166.	1.6	32
23	Variation of the hydraulic properties and solute transport mechanisms in a silty-clay soil amended with natural zeolites. Catena, 2014, 123, 195-204.	2.2	31
24	Nitrogen and sulphur cycling in the saline coastal aquifer of Ferrara, Italy. A multi-isotope approach. Applied Geochemistry, 2017, 76, 88-98.	1.4	30
25	Large tank experiment on nitrate fate and transport: the role of permeability distribution. Environmental Earth Sciences, 2011, 63, 903-914.	1.3	29
26	Coastal aquifer response to extreme storm events in Emiliaâ€Romagna, Italy. Hydrological Processes, 2017, 31, 1613-1621.	1.1	29
27	Reactive nitrogen losses via denitrification assessed in saturated agricultural soils. Geoderma, 2019, 337, 91-98.	2.3	29
28	Natural and anthropogenic factors driving groundwater resources salinization for agriculture use in the Campania plains (Southern Italy). Science of the Total Environment, 2021, 758, 144033.	3.9	29
29	Monitoring and Modeling Nitrate Persistence in a Shallow Aquifer. Water, Air, and Soil Pollution, 2011, 217, 83-93.	1.1	27
30	Use of shallow groundwater temperature profiles to infer climate and land use change: interpretation and measurement challenges. Hydrological Processes, 2016, 30, 2512-2524.	1.1	27
31	The Importance of Data Acquisition Techniques in Saltwater Intrusion Monitoring. Water Resources Management, 2012, 26, 2851-2866.	1.9	26
32	Reclamation influence and background geochemistry of neutral saline soils in the Po River Delta Plain (Northern Italy). Environmental Earth Sciences, 2014, 72, 2457-2473.	1.3	26
33	Reactive Modeling of Denitrification in Soils with Natural and Depleted Organic Matter. Water, Air, and Soil Pollution, 2011, 222, 205-215.	1.1	25
34	Contribution of the subsurface drainage system in changing the nitrogen speciation of an agricultural soil located in a complex marsh environment (Ferrara, Italy). Agricultural Water Management, 2013, 119, 144-153.	2.4	25
35	Natural and NH4+-enriched zeolitite amendment effects on nitrate leaching from a reclaimed agricultural soil (Ferrara Province, Italy). Nutrient Cycling in Agroecosystems, 2018, 110, 327-341.	1.1	25
36	Short-Term Response of Soil Microbial Biomass to Different Chabazite Zeolite Amendments. Pedosphere, 2018, 28, 277-287.	2.1	24

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37	Assessment of intrinsic aquifer vulnerability at continental scale through a critical application of the drastic framework: The case of South America. Science of the Total Environment, 2022, 823, 153748.	3.9	24
38	Improved gravitational grain size separation method. Applied Clay Science, 2010, 48, 612-614.	2.6	22
39	Deciphering Interannual Temperature Variations in Springs of the Campania Region (Italy). Water (Switzerland), 2019, 11, 288.	1.2	22
40	Column Elution Experiments on Volcanic Ash: Geochemical Implications for the Main Ethiopian Rift Waters. Water, Air, and Soil Pollution, 2010, 208, 221-233.	1.1	21
41	Chlorate origin and fate in shallow groundwater below agricultural landscapes. Environmental Pollution, 2017, 231, 1453-1462.	3.7	21
42	Soil conditioners effects on hydraulic properties, leaching processes and denitrification on a silty-clay soil. Science of the Total Environment, 2020, 733, 139342.	3.9	20
43	Fate of arsenic, phosphate and ammonium plumes in a coastal aquifer affected by saltwater intrusion. Journal of Contaminant Hydrology, 2015, 179, 116-131.	1.6	19
44	Geochemical evolution and salinization of a coastal aquifer via seepage through peaty lenses. Environmental Earth Sciences, 2016, 75, 1.	1.3	19
45	Soil type and microclimatic conditions as drivers of urea transformation kinetics in maize plots. Catena, 2018, 166, 200-208.	2.2	19
46	Assessing Aquifer Salinization with Multiple Techniques along the Southern Caspian Sea Shore (Iran). Water (Switzerland), 2018, 10, 348.	1.2	19
47	Modelling the fate of styrene in a mixed petroleum hydrocarbon plume. Journal of Contaminant Hydrology, 2009, 105, 38-55.	1.6	18
48	Origin and pattern of salinization in the Holocene aquifer of the southern Po Delta (NE Italy). Journal of Geochemical Exploration, 2017, 175, 130-137.	1.5	18
49	Assessment of the anthropogenic fluoride export in Addis Ababa urban environment (Ethiopia). Journal of Geochemical Exploration, 2018, 190, 390-399.	1.5	18
50	Fertilizers mobilization in alluvial aquifer: laboratory experiments. Environmental Geology, 2009, 56, 1371-1381.	1.2	17
51	Limitation of using heat as a groundwater tracer to define aquifer properties: experiment in a large tank model. Environmental Earth Sciences, 2013, 70, 719-728.	1.3	17
52	Formulation of Indices to Describe Intrinsic Nitrogen Transformation Rates for the Implementation of Best Management Practices in Agricultural Lands. Water, Air, and Soil Pollution, 2013, 224, 1.	1.1	17
53	Inferring the interconnections between surface water bodies, tile-drains and an unconfined aquiferâ€“aquitard system: A case study. Journal of Hydrology, 2016, 537, 86-95.	2.3	16
54	Natural and anthropogenic variations in the Po river waters (northern Italy): insights from a multi-isotope approach. Isotopes in Environmental and Health Studies, 2016, 52, 649-672.	0.5	16

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55	Intense rainfalls trigger nitrite leaching in agricultural soils depleted in organic matter. Science of the Total Environment, 2019, 665, 80-90.	3.9	16
56	Predictive modeling of selected trace elements in groundwater using hybrid algorithms of iterative classifier optimizer. Journal of Contaminant Hydrology, 2021, 242, 103849.	1.6	16
57	Assessing the Effect of Saltwater Intrusion on Petroleum Hydrocarbons Plumes Via Numerical Modelling. Water, Air, and Soil Pollution, 2012, 223, 4417-4427.	1.1	15
58	Estimating groundwater residence time and recharge patterns in a saline coastal aquifer. Hydrological Processes, 2016, 30, 4202-4213.	1.1	15
59	Contrasting biogeochemical processes revealed by stable isotopes of H2O, N, C and S in shallow aquifers underlying agricultural lowlands. Science of the Total Environment, 2019, 691, 1282-1296.	3.9	15
60	Performance of different assessment methods to evaluate contaminant sources and fate in a coastal aquifer. Environmental Science and Pollution Research, 2015, 22, 15536-15548.	2.7	14
61	Trace elements mobility in a saline coastal aquifer of the Po river lowland (Italy). Journal of Geochemical Exploration, 2015, 159, 317-328.	1.5	14
62	Estimated Water Savings in an Agricultural Field Amended With Natural Zeolites. Environmental Processes, 2016, 3, 617-628.	1.7	14
63	Geolithological and anthropogenic controls on the hydrochemistry of the Volturno river (Southern) Tj ETQq1 1 0.784314 rgBT /Overlo	1.1	14
64	Combined use of heat and saline tracer to estimate aquifer properties in a forced gradient test. Journal of Hydrology, 2015, 525, 650-657.	2.3	13
65	Direct measurement of dissolved dinitrogen to refine reactive modelling of denitrification in agricultural soils. Science of the Total Environment, 2019, 647, 134-140.	3.9	13
66	The Importance of Incorporating Denitrification in the Assessment of Groundwater Vulnerability. Applied Sciences (Switzerland), 2020, 10, 2328.	1.3	13
67	Modeling Soil Nitrate Accumulation and Leaching in Conventional and Conservation Agriculture Cropping Systems. Water (Switzerland), 2020, 12, 1571.	1.2	13
68	Actual and Forecasted Vulnerability Assessment to Seawater Intrusion via GALDIT-SUSI in the Volturno River Mouth (Italy). Remote Sensing, 2021, 13, 3632.	1.8	13
69	Redox Dependent Arsenic Occurrence and Partitioning in an Industrial Coastal Aquifer: Evidence from High Spatial Resolution Characterization of Groundwater and Sediments. Water (Switzerland), 2020, 12, 2932.	1.2	12
70	Modelling the Density Contrast Effect on a Chlorinated Hydrocarbon Plume Reaching the Shore Line. Water, Air, and Soil Pollution, 2011, 220, 387-398.	1.1	11
71	Detecting Small-Scale Variability of Trace Elements in a Shallow Aquifer. Water, Air, and Soil Pollution, 2015, 226, 1.	1.1	11
72	Misleading reconstruction of seawater intrusion via integral depth sampling. Journal of Hydrology, 2016, 536, 320-326.	2.3	11

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73	Nutrients and carbon fate in two lowland contrasting soils amended with compost. Catena, 2021, 206, 105493.	2.2	10
74	Abnormal trace element concentrations in a shallow aquifer belonging to saline reclaimed environments, Codigoro (Italy). Rendiconti Lincei, 2016, 27, 95-104.	1.0	9
75	Reactive and Mixing Processes Governing Ammonium and Nitrate Coexistence in a Polluted Coastal Aquifer. Geosciences (Switzerland), 2018, 8, 210.	1.0	9
76	The origin of Uranium in groundwater of the eastern Halkidiki region, northern Greece. Science of the Total Environment, 2022, 812, 152445.	3.9	9
77	Efficiency verification of a horizontal flow barrier via flowmeter tests and multilevel sampling. Hydrological Processes, 2013, 27, 2414-2421.	1.1	8
78	Testing graphene versus classical soil improvers in a sandy calcisol. Catena, 2022, 208, 105754.	2.2	8
79	Modelling groundwater residence time in a subâ€irrigated buffer zone. Ecohydrology, 2014, 7, 1054-1063.	1.1	7
80	Managed aquifer recharge via infiltration ditches in short rotation afforested areas. Ecohydrology, 2016, 9, 167-178.	1.1	7
81	In situ arsenic immobilisation for coastal aquifers using stimulated iron cycling: Lab-based viability assessment. Applied Geochemistry, 2022, 136, 105155.	1.4	7
82	Freshwaterâ€“seawater mixing experiments in sand columns. Journal of Hydrology, 2012, 448-449, 112-118.	2.3	6
83	Groundwater Temperature Trend as a Proxy for Climate Variability. Proceedings (mdpi), 2018, 2, .	0.2	6
84	A green and fast chromatographic method for determining organic compound mobility in soils. Journal of Chromatography A, 2009, 1216, 6802-6809.	1.8	5
85	Reactive modelling of 1,2-DCA and DOC near the shoreline. Journal of Contaminant Hydrology, 2014, 169, 100-111.	1.6	5
86	Waterâ€“Rock Interaction and Lake Hydrochemistry in the Main Ethiopian Rift. World Geomorphological Landscapes, 2015, , 307-321.	0.1	5
87	Impact of climate variability on the salinization of the coastal wetland-aquifer system of the Po Delta, Italy. Journal of Water Supply: Research and Technology - AQUA, 0, , jws2017115.	0.6	5
88	Monitoring and Modelling Interactions between the Montagna dei Fiori Aquifer and the Castellano Stream (Central Apennines, Italy). Water (Switzerland), 2020, 12, 973.	1.2	5
89	Modelling present and future Po river interactions with alluvial aquifers (Low Po River Plain, Italy). Journal of Water and Climate Change, 2014, 5, 457-471.	1.2	4
90	Trend of Heavy Metal Release According to Forecasted Climate Change in the Po Delta. Environmental Processes, 2016, 3, 553-567.	1.7	4

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91	Scenario Modelling of Climate Change's Impact on Salinization of Coastal Water Resources in Reclaimed Lands. Procedia Engineering, 2016, 162, 25-31.	1.2	4
92	A combined methodology to assess the intrinsic vulnerability of aquifers to pollution from agrochemicals. Arabian Journal of Geosciences, 2016, 9, 1.	0.6	4
93	Effect of ebullition and groundwater temperature on estimated dinitrogen excess in contrasting agricultural environments. Science of the Total Environment, 2019, 693, 133638.	3.9	4
94	Quantifying the Impact of Evapotranspiration at the Aquifer Scale via Groundwater Modelling and MODIS Data. Water (Switzerland), 2021, 13, 950.	1.2	4
95	Comparison of Different â€œS-indexâ€•Expressions to Evaluate the State of Physical Soil Properties. Geotechnical and Geological Engineering, 2015, 33, 1055-1066.	0.8	3
96	Monitoring nutrients fate after digestate spreading in a short rotation buffer area. Environmental Science and Pollution Research, 2017, 24, 22816-22826.	2.7	3
97	Modelling the salinization of a coastal lagoon-aquifer system. IOP Conference Series: Earth and Environmental Science, 2017, 82, 012003.	0.2	3
98	Limitations of GALDIT to map seawater intrusion vulnerability in a highly touristic coastal area. IOP Conference Series: Earth and Environmental Science, 2018, 191, 012050.	0.2	3
99	A Stepwise Approach to Assess the Fate of Nitrogen Species in Agricultural Lowlands. , 2013, , 431-460.		3
100	Nitrate and Dissolved Organic Carbon Release in Sandy Soils at Different Liquid/Solid Ratios Amended with Graphene and Classical Soil Improvers. Applied Sciences (Switzerland), 2022, 12, 6220.	1.3	3
101	Groundwater-surface water interaction revealed by meteorological trends and groundwater fluctuations on stream water level. Acque Sotterranee - Italian Journal of Groundwater, 2022, 11, 19-28.	0.2	3
102	Complex Interactions Between Fertilizers and Subsoils Triggering Reactive Nitrogen Speciation in Lowlands. Advances in Science, Technology and Innovation, 2019, , 133-135.	0.2	2
103	Nitrogen Budget of Short Rotation Forests Amended with Digestate in Highly Permeable Soils. Applied Sciences (Switzerland), 2019, 9, 4326.	1.3	2
104	Special Issue â€œSalinization of Water Resources: Ongoing and Future Trendsâ€• Water (Switzerland), 2022, 14, 1806.	1.2	2
105	Formation and dissolution of salt crusts as a rapid way of nitrate mobilization in a tile-drained agricultural field under a temperate climate. Arabian Journal of Geosciences, 2016, 9, 1.	0.6	1
106	Recognition of the anthropogenic contribution to the input of fluoride in urban recharge. Environmental Earth Sciences, 2018, 77, 1.	1.3	1
107	A Special Issue of Geosciences: Groundwater Pollution. Geosciences (Switzerland), 2018, 8, 262.	1.0	1
108	Evaluating SWAT Performance to Quantify the Streamflow Sediment Yield in a Highly Urbanized Basin. Environmental Sciences Proceedings, 2020, 2, 5.	0.3	1

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109	Modelling Shallow Groundwater Evaporation Rates from a Large Tank Experiment. Water Resources Management, 2021, 35, 3339-3354.	1.9	1
110	Preliminary assessment on flood mitigation potential via managed aquifer recharge in the Brenta megafan (Italy). Rendiconti Online Societa Geologica Italiana, 0, 35, 200-203.	0.3	1
111	The influence of disaggregation procedures on soil gravitational separation. Applied Clay Science, 2014, 97-98, 241-245.	2.6	0
112	Lithological Influence and Human Impact On the Hydrochemistry of an Apennine Watershed (Southern) Tj ETQq0 0 0 rgBT /Overlock 10	0.2	0
113	Monitoring and Modeling Digestate Fate and Transport in Infiltrating Afforested Areas Versus Maize/Ray-Grass Rotation Plots. Advances in Science, Technology and Innovation, 2018, , 797-799.	0.2	0
114	Soil Denitrification, the Missing Piece in the Puzzle of Nitrogen Budget in Lowland Agricultural Basins. Ecosystems, 0, , 1.	1.6	0
115	Continuous monitoring of surface-groundwater interactions in a lowland coastal aquifer. Rendiconti Online Societa Geologica Italiana, 2013, , 137-140.	0.3	0
116	Seismic induced variation of hydraulic conductivity distribution in a large tank. Rendiconti Online Societa Geologica Italiana, 0, 35, 78-80.	0.3	0