

# Micol Mastrocicco

## List of Publications by Year in descending order

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122  
papers

2,493  
citations

186209

28  
h-index

276775

41  
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126  
all docs

126  
docs citations

126  
times ranked

2295  
citing authors

#	ARTICLE	IF	CITATIONS
1	Kimberlite-like Metasomatism and $\text{Cr}^{\text{TM}}$ Garnet Signature <sup>TM</sup> in Spinel-peridotite Xenoliths from Sal, Cape Verde Archipelago: Relics of a Subcontinental Mantle Domain within the Atlantic Oceanic Lithosphere?. <i>Journal of Petrology</i> , 2005, 46, 2465-2493.	1.1	101
2	Multivariate statistical analysis to characterize/discriminate between anthropogenic and geogenic trace elements occurrence in the Campania Plain, Southern Italy. <i>Environmental Pollution</i> , 2018, 234, 260-269.	3.7	91
3	A modified SINTACS method for groundwater vulnerability and pollution risk assessment in highly anthropized regions based on $\text{NO}_3^-$ and $\text{SO}_4^{2-}$ concentrations. <i>Science of the Total Environment</i> , 2017, 609, 1512-1523.	3.9	82
4	A novel hybrid method of specific vulnerability to anthropogenic pollution using multivariate statistical and regression analyses. <i>Water Research</i> , 2020, 171, 115386.	5.3	80
5	Impact of Climate Change on Salinization of Coastal Water Resources. <i>Water Resources Management</i> , 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. <i>Journal of Hydrology</i> , 2013, 501, 35-44.	2.3	74
7	Ammonium occurrence in a salinized lowland coastal aquifer (Ferrara, Italy). <i>Hydrological Processes</i> , 2013, 27, 3495-3501.	1.1	58
8	Enhancing nitrate and strontium concentration prediction in groundwater by using new data mining algorithm. <i>Science of the Total Environment</i> , 2020, 715, 136836.	3.9	58
9	Evaluating SWAT model performance, considering different soils data input, to quantify actual and future runoff susceptibility in a highly urbanized basin. <i>Journal of Environmental Management</i> , 2020, 266, 110625.	3.8	52
10	The Issue of Groundwater Salinization in Coastal Areas of the Mediterranean Region: A Review. <i>Water (Switzerland)</i> , 2021, 13, 90.	1.2	52
11	GALDIT-SUSI a modified method to account for surface water bodies in the assessment of aquifer vulnerability to seawater intrusion. <i>Journal of Environmental Management</i> , 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. <i>Water, Air, and Soil Pollution</i> , 2012, 223, 1605-1614.	1.1	45
13	Nitrogen Budget in a Lowland Coastal Area Within the Po River Basin (Northern Italy): Multiple Evidences of Equilibrium Between Sources and Internal Sinks. <i>Environmental Management</i> , 2013, 52, 567-580.	1.2	43
14	Batch and column experiments on nutrient leaching in soils amended with Italian natural zeolitites. <i>Catena</i> , 2015, 127, 64-71.	2.2	42
15	Modelling Actual and Future Seawater Intrusion in the Variconi Coastal Wetland (Italy) Due to Climate and Landscape Changes. <i>Water (Switzerland)</i> , 2019, 11, 1502.	1.2	42
16	Surface electrical resistivity tomography and hydrogeological characterization to constrain groundwater flow modeling in an agricultural field site near Ferrara (Italy). <i>Environmental Earth Sciences</i> , 2010, 61, 311-322.	1.3	40
17	Predicting Salinization Trends in a Lowland Coastal Aquifer: Comacchio (Italy). <i>Water Resources Management</i> , 2015, 29, 603-618.	1.9	39
18	Numerical assessment of effective evapotranspiration from maize plots to estimate groundwater recharge in lowlands. <i>Agricultural Water Management</i> , 2010, 97, 1389-1398.	2.4	38

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19	Linking dissolved organic carbon, acetate and denitrification in agricultural soils. <i>Environmental Earth Sciences</i> , 2013, 68, 939-945.	1.3	37
20	High-resolution global grids of revised Priestley&#x2013;Taylor and Hargreaves&#x2013;Samani coefficients for assessing ASCE-standardized reference crop evapotranspiration and solar radiation. <i>Earth System Science Data</i> , 2017, 9, 615-638.	3.7	36
21	Energy performance strategies for the large scale introduction of geothermal energy in residential and industrial buildings: The GEO.POWER project. <i>Energy Policy</i> , 2014, 65, 315-322.	4.2	34
22	Modeling groundwater and surface water interaction: An overview of current status and future challenges. <i>Science of the Total Environment</i> , 2022, 846, 157355.	3.9	34
23	High resolution short-term investigation of soil CO <sub>2</sub> , N <sub>2</sub> O, NO <sub>x</sub> and NH <sub>3</sub> emissions after different chabazite zeolite amendments. <i>Applied Soil Ecology</i> , 2017, 119, 138-144.	2.1	33
24	Evaluation of saline tracer performance during electrical conductivity groundwater monitoring. <i>Journal of Contaminant Hydrology</i> , 2011, 123, 157-166.	1.6	32
25	Variation of the hydraulic properties and solute transport mechanisms in a silty-clay soil amended with natural zeolites. <i>Catena</i> , 2014, 123, 195-204.	2.2	31
26	Nitrogen and sulphur cycling in the saline coastal aquifer of Ferrara, Italy. A multi-isotope approach. <i>Applied Geochemistry</i> , 2017, 76, 88-98.	1.4	30
27	Large tank experiment on nitrate fate and transport: the role of permeability distribution. <i>Environmental Earth Sciences</i> , 2011, 63, 903-914.	1.3	29
28	Coastal aquifer response to extreme storm events in Emilia&#x2013;Romagna, Italy. <i>Hydrological Processes</i> , 2017, 31, 1613-1621.	1.1	29
29	Reactive nitrogen losses via denitrification assessed in saturated agricultural soils. <i>Geoderma</i> , 2019, 337, 91-98.	2.3	29
30	Natural and anthropogenic factors driving groundwater resources salinization for agriculture use in the Campania plains (Southern Italy). <i>Science of the Total Environment</i> , 2021, 758, 144033.	3.9	29
31	Monitoring and Modeling Nitrate Persistence in a Shallow Aquifer. <i>Water, Air, and Soil Pollution</i> , 2011, 217, 83-93.	1.1	27
32	Use of shallow groundwater temperature profiles to infer climate and land use change: interpretation and measurement challenges. <i>Hydrological Processes</i> , 2016, 30, 2512-2524.	1.1	27
33	The Importance of Data Acquisition Techniques in Saltwater Intrusion Monitoring. <i>Water Resources Management</i> , 2012, 26, 2851-2866.	1.9	26
34	Reclamation influence and background geochemistry of neutral saline soils in the Po River Delta Plain (Northern Italy). <i>Environmental Earth Sciences</i> , 2014, 72, 2457-2473.	1.3	26
35	Reactive Modeling of Denitrification in Soils with Natural and Depleted Organic Matter. <i>Water, Air, and Soil Pollution</i> , 2011, 222, 205-215.	1.1	25
36	Contribution of the subsurface drainage system in changing the nitrogen speciation of an agricultural soil located in a complex marsh environment (Ferrara, Italy). <i>Agricultural Water Management</i> , 2013, 119, 144-153.	2.4	25

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37	Natural and NH <sub>4</sub> <sup>+</sup> -enriched zeolite amendment effects on nitrate leaching from a reclaimed agricultural soil (Ferrara Province, Italy). <i>Nutrient Cycling in Agroecosystems</i> , 2018, 110, 327-341.	1.1	25
38	Short-Term Response of Soil Microbial Biomass to Different Chabazite Zeolite Amendments. <i>Pedosphere</i> , 2018, 28, 277-287.	2.1	24
39	Assessment of intrinsic aquifer vulnerability at continental scale through a critical application of the drastic framework: The case of South America. <i>Science of the Total Environment</i> , 2022, 823, 153748.	3.9	24
40	Improved gravitational grain size separation method. <i>Applied Clay Science</i> , 2010, 48, 612-614.	2.6	22
41	Deciphering Interannual Temperature Variations in Springs of the Campania Region (Italy). <i>Water (Switzerland)</i> , 2019, 11, 288.	1.2	22
42	Column Elution Experiments on Volcanic Ash: Geochemical Implications for the Main Ethiopian Rift Waters. <i>Water, Air, and Soil Pollution</i> , 2010, 208, 221-233.	1.1	21
43	Chlorate origin and fate in shallow groundwater below agricultural landscapes. <i>Environmental Pollution</i> , 2017, 231, 1453-1462.	3.7	21
44	A common feeding system of the NE and S rifts as revealed by the bilateral 2002/2003 eruptive event at Mt. Etna (Sicily, Italy). <i>Bulletin of Volcanology</i> , 2012, 74, 2415-2433.	1.1	20
45	Ammonium-charged zeolite effects on crop growth and nutrient leaching: greenhouse experiments on maize ( <i>Zea mays</i> ). <i>Catena</i> , 2016, 140, 66-76.	2.2	20
46	Developing a SINTACS-based method to map groundwater multi-pollutant vulnerability using evolutionary algorithms. <i>Environmental Science and Pollution Research</i> , 2021, 28, 7854-7869.	2.7	20
47	Soil conditioners effects on hydraulic properties, leaching processes and denitrification on a silty-clay soil. <i>Science of the Total Environment</i> , 2020, 733, 139342.	3.9	20
48	Fate of arsenic, phosphate and ammonium plumes in a coastal aquifer affected by saltwater intrusion. <i>Journal of Contaminant Hydrology</i> , 2015, 179, 116-131.	1.6	19
49	Geochemical evolution and salinization of a coastal aquifer via seepage through peaty lenses. <i>Environmental Earth Sciences</i> , 2016, 75, 1.	1.3	19
50	Aquifer vulnerability and potential risk assessment: application to an intensely cultivated and densely populated area in Southern Italy. <i>Arabian Journal of Geosciences</i> , 2017, 10, 1.	0.6	19
51	Soil type and microclimatic conditions as drivers of urea transformation kinetics in maize plots. <i>Catena</i> , 2018, 166, 200-208.	2.2	19
52	Assessing Aquifer Salinization with Multiple Techniques along the Southern Caspian Sea Shore (Iran). <i>Water (Switzerland)</i> , 2018, 10, 348.	1.2	19
53	Modelling the fate of styrene in a mixed petroleum hydrocarbon plume. <i>Journal of Contaminant Hydrology</i> , 2009, 105, 38-55.	1.6	18
54	Origin and pattern of salinization in the Holocene aquifer of the southern Po Delta (NE Italy). <i>Journal of Geochemical Exploration</i> , 2017, 175, 130-137.	1.5	18

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55	Assessment of the anthropogenic fluoride export in Addis Ababa urban environment (Ethiopia). <i>Journal of Geochemical Exploration</i> , 2018, 190, 390-399.	1.5	18
56	Protection from natural and anthropogenic sources: a new rating methodology to delineate "Nitrate Vulnerable Zones". <i>Environmental Earth Sciences</i> , 2019, 78, 1.	1.3	18
57	Fertilizers mobilization in alluvial aquifer: laboratory experiments. <i>Environmental Geology</i> , 2009, 56, 1371-1381.	1.2	17
58	Limitation of using heat as a groundwater tracer to define aquifer properties: experiment in a large tank model. <i>Environmental Earth Sciences</i> , 2013, 70, 719-728.	1.3	17
59	Formulation of Indices to Describe Intrinsic Nitrogen Transformation Rates for the Implementation of Best Management Practices in Agricultural Lands. <i>Water, Air, and Soil Pollution</i> , 2013, 224, 1.	1.1	17
60	Inferring the interconnections between surface water bodies, tile-drains and an unconfined aquifer "aquitar" system: A case study. <i>Journal of Hydrology</i> , 2016, 537, 86-95.	2.3	16
61	Intense rainfalls trigger nitrite leaching in agricultural soils depleted in organic matter. <i>Science of the Total Environment</i> , 2019, 665, 80-90.	3.9	16
62	Predictive modeling of selected trace elements in groundwater using hybrid algorithms of iterative classifier optimizer. <i>Journal of Contaminant Hydrology</i> , 2021, 242, 103849.	1.6	16
63	Assessing the Effect of Saltwater Intrusion on Petroleum Hydrocarbons Plumes Via Numerical Modelling. <i>Water, Air, and Soil Pollution</i> , 2012, 223, 4417-4427.	1.1	15
64	Estimating groundwater residence time and recharge patterns in a saline coastal aquifer. <i>Hydrological Processes</i> , 2016, 30, 4202-4213.	1.1	15
65	Contrasting biogeochemical processes revealed by stable isotopes of H <sub>2</sub> O, N, C and S in shallow aquifers underlying agricultural lowlands. <i>Science of the Total Environment</i> , 2019, 691, 1282-1296.	3.9	15
66	Performance of different assessment methods to evaluate contaminant sources and fate in a coastal aquifer. <i>Environmental Science and Pollution Research</i> , 2015, 22, 15536-15548.	2.7	14
67	Trace elements mobility in a saline coastal aquifer of the Po river lowland (Italy). <i>Journal of Geochemical Exploration</i> , 2015, 159, 317-328.	1.5	14
68	Estimated Water Savings in an Agricultural Field Amended With Natural Zeolites. <i>Environmental Processes</i> , 2016, 3, 617-628.	1.7	14
69	Geolithological and anthropogenic controls on the hydrochemistry of the Volturno river (Southern Italy). <i>Journal of Hydrology</i> , 2015, 525, 650-657.	1.1	14
70	Combined use of heat and saline tracer to estimate aquifer properties in a forced gradient test. <i>Journal of Hydrology</i> , 2015, 525, 650-657.	2.3	13
71	Direct measurement of dissolved dinitrogen to refine reactive modelling of denitrification in agricultural soils. <i>Science of the Total Environment</i> , 2019, 647, 134-140.	3.9	13
72	The Importance of Incorporating Denitrification in the Assessment of Groundwater Vulnerability. <i>Applied Sciences (Switzerland)</i> , 2020, 10, 2328.	1.3	13

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73	Modeling Soil Nitrate Accumulation and Leaching in Conventional and Conservation Agriculture Cropping Systems. <i>Water (Switzerland)</i> , 2020, 12, 1571.	1.2	13
74	Actual and Forecasted Vulnerability Assessment to Seawater Intrusion via GALDIT-SUSI in the Volturno River Mouth (Italy). <i>Remote Sensing</i> , 2021, 13, 3632.	1.8	13
75	Redox Dependent Arsenic Occurrence and Partitioning in an Industrial Coastal Aquifer: Evidence from High Spatial Resolution Characterization of Groundwater and Sediments. <i>Water (Switzerland)</i> , 2020, 12, 2932.	1.2	12
76	Modelling the Density Contrast Effect on a Chlorinated Hydrocarbon Plume Reaching the Shore Line. <i>Water, Air, and Soil Pollution</i> , 2011, 220, 387-398.	1.1	11
77	Detecting Small-Scale Variability of Trace Elements in a Shallow Aquifer. <i>Water, Air, and Soil Pollution</i> , 2015, 226, 1.	1.1	11
78	Misleading reconstruction of seawater intrusion via integral depth sampling. <i>Journal of Hydrology</i> , 2016, 536, 320-326.	2.3	11
79	Nutrients and carbon fate in two lowland contrasting soils amended with compost. <i>Catena</i> , 2021, 206, 105493.	2.2	10
80	Abnormal trace element concentrations in a shallow aquifer belonging to saline reclaimed environments, Codigoro (Italy). <i>Rendiconti Lincei</i> , 2016, 27, 95-104.	1.0	9
81	Reactive and Mixing Processes Governing Ammonium and Nitrate Coexistence in a Polluted Coastal Aquifer. <i>Geosciences (Switzerland)</i> , 2018, 8, 210.	1.0	9
82	Denitrification in Intrinsic and Specific Groundwater Vulnerability Assessment: A Review. <i>Applied Sciences (Switzerland)</i> , 2021, 11, 10657.	1.3	9
83	The origin of Uranium in groundwater of the eastern Halkidiki region, northern Greece. <i>Science of the Total Environment</i> , 2022, 812, 152445.	3.9	9
84	Efficiency verification of a horizontal flow barrier via flowmeter tests and multilevel sampling. <i>Hydrological Processes</i> , 2013, 27, 2414-2421.	1.1	8
85	Testing graphene versus classical soil improvers in a sandy calcisol. <i>Catena</i> , 2022, 208, 105754.	2.2	8
86	Modelling groundwater residence time in a sub-irrigated buffer zone. <i>Ecohydrology</i> , 2014, 7, 1054-1063.	1.1	7
87	Managed aquifer recharge via infiltration ditches in short rotation afforested areas. <i>Ecohydrology</i> , 2016, 9, 167-178.	1.1	7
88	Assessment of the intrinsic vulnerability of agricultural land to water and nitrogen losses: case studies in Italy and Greece. <i>Proceedings of the International Association of Hydrological Sciences</i> , 0, 364, 14-19.	1.0	7
89	In situ arsenic immobilisation for coastal aquifers using stimulated iron cycling: Lab-based viability assessment. <i>Applied Geochemistry</i> , 2022, 136, 105155.	1.4	7
90	Freshwater-seawater mixing experiments in sand columns. <i>Journal of Hydrology</i> , 2012, 448-449, 112-118.	2.3	6

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91	Groundwater Temperature Trend as a Proxy for Climate Variability. Proceedings (mdpi), 2018, 2, .	0.2	6
92	A green and fast chromatographic method for determining organic compound mobility in soils. Journal of Chromatography A, 2009, 1216, 6802-6809.	1.8	5
93	Reactive modelling of 1,2-DCA and DOC near the shoreline. Journal of Contaminant Hydrology, 2014, 169, 100-111.	1.6	5
94	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
95	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
96	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
97	Trend of Heavy Metal Release According to Forecasted Climate Change in the Po Delta. Environmental Processes, 2016, 3, 553-567.	1.7	4
98	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
99	A combined methodology to assess the intrinsic vulnerability of aquifers to pollution from agrochemicals. Arabian Journal of Geosciences, 2016, 9, 1.	0.6	4
100	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
101	Comparison of Different "S-index" Expressions to Evaluate the State of Physical Soil Properties. Geotechnical and Geological Engineering, 2015, 33, 1055-1066.	0.8	3
102	Monitoring nutrients fate after digestate spreading in a short rotation buffer area. Environmental Science and Pollution Research, 2017, 24, 22816-22826.	2.7	3
103	Modelling the salinization of a coastal lagoon-aquifer system. IOP Conference Series: Earth and Environmental Science, 2017, 82, 012003.	0.2	3
104	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
105	A Stepwise Approach to Assess the Fate of Nitrogen Species in Agricultural Lowlands. , 2013, , 431-460.		3
106	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
107	Complex Interactions Between Fertilizers and Subsoils Triggering Reactive Nitrogen Speciation in Lowlands. Advances in Science, Technology and Innovation, 2019, , 133-135.	0.2	2
108	Groundwater nitrogen speciation in intensively cultivated lowland areas. , 2011, , 291-298.		2

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109	Formation and dissolution of salt crusts as a rapid way of nitrate mobilization in a tile-drained agricultural field under a temperate climate. <i>Arabian Journal of Geosciences</i> , 2016, 9, 1.	0.6	1
110	Recognition of the anthropogenic contribution to the input of fluoride in urban recharge. <i>Environmental Earth Sciences</i> , 2018, 77, 1.	1.3	1
111	A Special Issue of <i>Geosciences</i> : Groundwater Pollution. <i>Geosciences (Switzerland)</i> , 2018, 8, 262.	1.0	1
112	Soil Quality Characterization of Mediterranean Areas under Desertification Risk for the Implementation of Management Schemes Aimed at Land Degradation Neutrality. <i>Proceedings (mdpi)</i> , 2019, 30, 54.	0.2	1
113	Evaluating SWAT Performance to Quantify the Streamflow Sediment Yield in a Highly Urbanized Basin. <i>Environmental Sciences Proceedings</i> , 2020, 2, 5.	0.3	1
114	Modelling Shallow Groundwater Evaporation Rates from a Large Tank Experiment. <i>Water Resources Management</i> , 2021, 35, 3339-3354.	1.9	1
115	Monitoring heat transfer from a groundwater heat exchanger in a large tank model. , 2011, , 445-451.		1
116	Preliminary assessment on flood mitigation potential via managed aquifer recharge in the Brenta megafan (Italy). <i>Rendiconti Online Societa Geologica Italiana</i> , 0, 35, 200-203.	0.3	1
117	The influence of disaggregation procedures on soil gravitational separation. <i>Applied Clay Science</i> , 2014, 97-98, 241-245.	2.6	0
118	Lithological Influence and Human Impact On the Hydrochemistry of an Apennine Watershed (Southern Tj ETQq0 0,0,rgBT /Oyerlock 10	0.2	0
119	Monitoring and Modeling Digestate Fate and Transport in Infiltrating Afforested Areas Versus Maize/Ray-Grass Rotation Plots. <i>Advances in Science, Technology and Innovation</i> , 2018, , 797-799.	0.2	0
120	Special Issue "Focus on the Salinization Issue in the Mediterranean Area" • <i>Water (Switzerland)</i> , 2021, 13, 681.	1.2	0
121	Soil Denitrification, the Missing Piece in the Puzzle of Nitrogen Budget in Lowland Agricultural Basins. <i>Ecosystems</i> , 0, , 1.	1.6	0
122	Seismic induced variation of hydraulic conductivity distribution in a large tank. <i>Rendiconti Online Societa Geologica Italiana</i> , 0, 35, 78-80.	0.3	0