Tiago OsÃ³rio Ferreira

List of Publications by Year
in descending order

118 papers	3,287 citations	159358 30 h-index	182168 51 g-index
119 all docs	119 docs citations	119 times ranked	3003 citing authors

#	Article	IF	Citations
1	The Samarco mine tailing disaster: A possible time-bomb for heavy metals contamination?. Science of the Total Environment, 2018, 637-638, 498-506.	3.9	191
2	Geochemistry of iron and manganese in soils and sediments of a mangrove system, Island of Pai Matos (Cananeia â€" SP, Brazil). Geoderma, 2009, 148, 318-335.	2.3	150
3	Total ecosystem carbon stocks of mangroves across broad global environmental and physical gradients. Ecological Monographs, 2020, 90, e01405.	2.4	139
4	Seabird colonies as important global drivers in the nitrogen and phosphorus cycles. Nature Communications, 2018, 9, 246.	5.8	135
5	Effects of bioturbation by root and crab activity on iron and sulfur biogeochemistry in mangrove substrate. Geoderma, 2007, 142, 36-46.	2.3	134
6	The Brazilian Soil Spectral Library (BSSL): A general view, application and challenges. Geoderma, 2019, 354, 113793.	2.3	100
7	Shrimp ponds lead to massive loss of soil carbon and greenhouse gas emissions in northeastern Brazilian mangroves. Ecology and Evolution, 2018, 8, 5530-5540.	0.8	92
8	Spatial patterns of soil attributes and components in a mangrove system in Southeast Brazil (SÃ£o) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 5	1.5	84
9	Manganese: The overlooked contaminant in the world largest mine tailings dam collapse. Environment International, 2021, 146, 106284.	4.8	81
10	The effect of nutrient-rich effluents from shrimp farming on mangrove soil carbon storage and geochemistry under semi-arid climate conditions in northern Brazil. Geoderma, 2014, 213, 551-559.	2.3	74
11	Spatial variation in pore water geochemistry in a mangrove system (Pai Matos island, Cananeia-Brazil). Applied Geochemistry, 2006, 21, 2171-2186.	1.4	72
12	Carbon and nitrogen in degraded Brazilian semi-arid soils undergoing desertification. Agriculture, Ecosystems and Environment, 2012, 148, 11-21.	2.5	69
13	Iron and sulfur geochemistry in semi-arid mangrove soils (CearÃ¡, Brazil) in relation to seasonal changes and shrimp farming effluents. Environmental Monitoring and Assessment, 2013, 185, 7393-7407.	1.3	66
14	Redox Processes in Mangrove Soils under Rhizophora mangle in Relation to Different Environmental Conditions. Soil Science Society of America Journal, 2007, 71, 484-491.	1.2	63
15	Edaphic factors controlling summer (rainy season) greenhouse gas emissions (CO2 and CH4) from semiarid mangrove soils (NE-Brazil). Science of the Total Environment, 2016, 542, 685-693.	3.9	63
16	Carbon stocks of mangroves and salt marshes of the Amazon region, Brazil. Biology Letters, 2018, 14, 20180208.	1.0	62
17	Phosphorus enriched effluents increase eutrophication risks for mangrove systems in northeastern Brazil. Marine Pollution Bulletin, 2019, 142, 58-63.	2.3	61
18	Are mangrove forest substrates sediments or soils? A case study in southeastern Brazil. Catena, 2007, 70, 79-91.	2.2	58

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19	Ecological Risks of Metal and Metalloid Contamination in the Rio Doce Estuary. Integrated Environmental Assessment and Management, 2020, 16, 655-660.	1.6	54
20	Selective geochemistry of iron in mangrove soils in a semiarid tropical climate: effects of the burrowing activity of the crabs Ucides cordatus and Uca maracoani. Geo-Marine Letters, 2012, 32, 289-300.	0.5	52
21	Evaluation of methods for quantifying organic carbon in mangrove soils from semi-arid region. Journal of Soils and Sediments, 2015, 15, 282-291.	1.5	52
22	Chronic trace metals effects of mine tailings on estuarine assemblages revealed by environmental DNA. PeerJ, 2019, 7, e8042.	0.9	48
23	Phosphorus in seagull colonies and the effect on the habitats. The case of yellow-legged gulls (Larus) Tj ETQq1 1 0.784314 rgBT /Over Environment, 2015, 532, 383-397.	3.9	45
24	Contamination and oxidative stress biomarkers in estuarine fish following a mine tailing disaster. PeerJ, 2020, 8, e10266.	0.9	45
25	Phosphorus geochemistry in a Brazilian semiarid mangrove soil affected by shrimp farm effluents. Environmental Monitoring and Assessment, 2014, 186, 5749-5762.	1.3	44
26	Arsenic in rice agrosystems (water, soil and rice plants) in Guayas and Los RÃos provinces, Ecuador. Science of the Total Environment, 2016, 573, 778-787.	3.9	42
27	The mangrove reactor: Fast clay transformation and potassium sink. Applied Clay Science, 2017, 140, 50-58.	2.6	38
28	Copper release from waste rocks in an abandoned mine (NE, Brazil) and its impacts on ecosystem environmental quality. Chemosphere, 2021, 262, 127843.	4.2	37
29	Trace metal pyritization variability in response to mangrove soil aerobic and anaerobic oxidation processes. Marine Pollution Bulletin, 2014, 79, 365-370.	2.3	35
30	The role of bioturbation by Ucides cordatus crab in the fractionation and bioavailability of trace metals in tropical semiarid mangroves. Marine Pollution Bulletin, 2016, 111, 194-202.	2.3	35
31	Hidden contribution of shrimp farming effluents to greenhouse gas emissions from mangrove soils. Estuarine, Coastal and Shelf Science, 2019, 221, 8-14.	0.9	32
32	Soil quality assessment of constructed Technosols: Towards the validation of a promising strategy for land reclamation, waste management and the recovery of soil functions. Journal of Environmental Management, 2020, 276, 111344.	3.8	32
33	From sinks to sources: The role of Fe oxyhydroxide transformations on phosphorus dynamics in estuarine soils. Journal of Environmental Management, 2021, 278, 111575.	3.8	30
34	High fragility of the soil organic C pools in mangrove forests. Marine Pollution Bulletin, 2017, 119, 460-464.	2.3	28
35	Soil genesis on hypersaline tidal flats (apicum ecosystem) in a tropical semi-arid estuary (CearÃ¡,) Tj ETQq1 1 0.784314 rgBT /Overloc	0.6	26
36	Mineralogia e fÃsico-quÃmica dos solos de mangue do rio Iriri no canal de Bertioga (Santos, SP). Revista Brasileira De Ciencia Do Solo, 2004, 28, 233-243.	0.5	26

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37	Hypersaline tidal flats (apicum ecosystems): the weak link in the tropical wetlands chain. Environmental Reviews, 2014, 22, 99-109.	2.1	25
38	Geochemical speciation and dynamic of copper in tropical semi-arid soils exposed to metal-bearing mine wastes. Science of the Total Environment, 2014, 500-501, 91-102.	3.9	25
39	Copper accumulation and changes in soil physicalâ€“chemical properties promoted by native plants in â€‹â€‹an abandoned mine site in northeastern Brazil: Implications for restoration of mine sites. Ecological Engineering, 2015, 82, 103-111.	1.6	25
40	Changes in soil pore network in response to twenty-three years of irrigation in a tropical semiarid pasture from northeast Brazil. Soil and Tillage Research, 2014, 137, 23-32.	2.6	24
41	Weathering rates and carbon storage along a climosequence of soils developed from contrasting granites in northeast Brazil. Geoderma, 2016, 284, 1-12.	2.3	24
42	Weathering and clay formation in semi-arid calcareous soils from Northeastern Brazil. Catena, 2018, 162, 325-332.	2.2	24
43	The potential of a Technosol and tropical native trees for reclamation of copper-polluted soils. Chemosphere, 2019, 220, 892-899.	4.2	24
44	Trace metal/metalloid concentrations in waste rock, soils and spontaneous plants in the surroundings of an abandoned mine in semi-arid NE-Brazil. Environmental Earth Sciences, 2015, 74, 5427-5441.	1.3	21
45	Ecosystem carbon losses following a climate-induced mangrove mortality in Brazil. Journal of Environmental Management, 2021, 297, 113381.	3.8	21
46	Are acid volatile sulfides (AVS) important trace metals sinks in semi-arid mangroves?. Marine Pollution Bulletin, 2018, 126, 318-322.	2.3	20
47	Nitrogen mineralization and eutrophication risks in mangroves receiving shrimp farming effluents. Environmental Science and Pollution Research, 2020, 27, 34941-34950.	2.7	20
48	Land use impacts on benthic bioturbation potential and carbon burial in Brazilian mangrove ecosystems. Limnology and Oceanography, 2020, 65, 2366-2376.	1.6	20
49	Screening of native tropical trees for phytoremediation in copper-polluted soils. International Journal of Phytoremediation, 2018, 20, 1456-1463.	1.7	19
50	Trace elements in biomaterials and soils from a Yellow-legged gull (Larus michahellis) colony in the Atlantic Islands of Galicia National Park (NW Spain). Marine Pollution Bulletin, 2018, 133, 144-149.	2.3	19
51	Parent rockâ€“pedogenesis relationship: How the weathering of metamorphic rocks influences the genesis of Planosols and Luvisols under a semiarid climate in NE Brazil. Geoderma, 2021, 385, 114878.	2.3	19
52	Role of Fe dynamic in release of metals at Rio Doce estuary: Unfolding of a mining disaster. Marine Pollution Bulletin, 2021, 166, 112267.	2.3	19
53	Archaeal diversity and the extent of iron and manganese pyritization in sediments from a tropical mangrove creek (Cardoso Island, Brazil). Estuarine, Coastal and Shelf Science, 2014, 146, 1-13.	0.9	18
54	Revealing Tropical Technosols as an Alternative for Mine Reclamation and Waste Management. Minerals (Basel, Switzerland), 2020, 10, 110.	0.8	18

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55	Long-term contamination of the Rio Doce estuary as a result of Brazilâ€™s largest environmental disaster. Perspectives in Ecology and Conservation, 2021, 19, 417-428.	1.0	18
56	EvoluÃ§Ã£o quaternÃ¡ria, distribuiÃ§Ã£o de partÃculas nos solos e ambientes de sedimentaÃ§Ã£o em manguezais do estado de SÃ£o Paulo. Revista Brasileira De Ciencia Do Solo, 2007, 31, 753-769.	0.5	17
57	Genesis of cohesive soil horizons from north-east Brazil: role of argilluviation and sorting of sand. Soil Research, 2015, 53, 43.	0.6	17
58	Fast pedogenesis of tropical Technosols developed from dolomitic limestone mine spoils (SE-Brazil). Geoderma, 2020, 374, 114439.	2.3	17
59	Crab Bioturbation and Seasonality Control Nitrous Oxide Emissions in Semiarid Mangrove Forests (CearÃ¡, Brazil). Applied Sciences (Switzerland), 2020, 10, 2215.	1.3	17
60	Biogeochemical Cycles: Global Approaches and Perspectives. , 2017, , 163-209.		16
61	Litho-climatic characteristics and its control over mangrove soil geochemistry: A macro-scale approach. Science of the Total Environment, 2022, 811, 152152.	3.9	16
62	Comparison of the quantitative determination of soil organic carbon in coastal wetlands containing reduced forms of Fe and S. Geo-Marine Letters, 2016, 36, 223-233.	0.5	15
63	The importance of blue carbon soil stocks in tropical semiarid mangroves: a case study in Northeastern Brazil. Environmental Earth Sciences, 2019, 78, 1.	1.3	15
64	Effects of slope orientation on pedogenesis of altimontane soils from the Brazilian semi-arid region (BaturitÃ© massif, CearÃ¡). Environmental Earth Sciences, 2015, 73, 3731-3743.	1.3	14
65	Variabilidade espacial dos atributos quÃmicos do solo, associada ao microrrelevo. Revista Brasileira De Engenharia Agricola E Ambiental, 2014, 18, 141-149.	0.4	13
66	Copper Biogeochemistry in Response to Rhizosphere Soil Processes Under Four Native Plant Species Growing Spontaneously in an Abandoned Mine Site in NE Brazil. Water, Air, and Soil Pollution, 2016, 227, 1.	1.1	13
67	Geographical variations in arsenic contents in rice plants from Latin America and the Iberian Peninsula in relation to soil conditions. Environmental Geochemistry and Health, 2020, 42, 3351-3372.	1.8	13
68	Sand as a relevant fraction in geochemical studies in intertidal environments. Environmental Monitoring and Assessment, 2013, 185, 7945-7959.	1.3	12
69	Mineralogy and genesis of Planosols under a semi-arid climate, Borborema Plateau, NE Brazil. Catena, 2020, 184, 104260.	2.2	12
70	Consequences of terminating mangroveâ€™s protection in Brazil. Marine Policy, 2021, 125, 104389.	1.5	12
71	ContribuiÃ§Ã£o de material amorfo na gÃªnese de horizontes coesos em Argissolos dos Tabuleiros Costeiros do CearÃ¡. Revista Ciencia Agronomica, 2012, 43, 623-632.	0.1	12
72	Mine tailings in a redox-active environment: Iron geochemistry and potential environmental consequences. Science of the Total Environment, 2022, 807, 151050.	3.9	12

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73	Short-term Fe reduction and metal dynamics in estuarine soils impacted by Fe-rich mine tailings. Applied Geochemistry, 2022, 136, 105134.	1.4	12
74	High heterogeneity in soil composition and quality in different mangrove forests of Venezuela. Environmental Monitoring and Assessment, 2017, 189, 511.	1.3	11
75	Benthic bioturbation: A canary in the mine for the retention and release of metals from estuarine sediments. Marine Pollution Bulletin, 2021, 172, 112912.	2.3	11
76	And details for landâ€use carbon footprints arise from quantitative and replicated studies. Frontiers in Ecology and the Environment, 2018, 16, 12-13.	1.9	10
77	Occurrence and pedogenesis of acid sulfate soils in northeastern Brazil. Catena, 2021, 196, 104937.	2.2	10
78	Mangrove Forests in Ecuador: A Two-Decade Analysis. Forests, 2022, 13, 656.	0.9	10
79	Microrrelevo e a distribuiÃ§Ã£o de fraÃ§Ãµes granulomÃ©tricas em Cambissolos de origem calcÃ¡ria. Revista Ciencia Agronomica, 2013, 44, 676-684.	0.1	9
80	Are hypersaline tidal flat soils potential silicon sinks in coastal wetlands?. Geoderma, 2019, 337, 215-224.	2.3	9
81	Applying the Soil Management Assessment Framework (SMAF) to Assess Mangrove Soil Quality. Sustainability, 2022, 14, 3085.	1.6	9
82	Soil genesis and iron nodules in a karst environment of the Apodi Plateau. Revista Ciencia Agronomica, 2014, 45, 683-695.	0.1	8
83	Pyrite as a proxy for the identification of former coastal lagoons in semiarid NE Brazil. Geo-Marine Letters, 2015, 35, 355-366.	0.5	8
84	Soil Organic Matter Responses to Mangrove Restoration: A Replanting Experience in Northeast Brazil. International Journal of Environmental Research and Public Health, 2021, 18, 8981.	1.2	8
85	Iron hazard in an impacted estuary: Contrasting controls of plants and implications to phytoremediation. Journal of Hazardous Materials, 2022, 428, 128216.	6.5	8
86	Geospatial modeling and ecological and human health risk assessments of heavy metals in contaminated mangrove soils. Marine Pollution Bulletin, 2022, 177, 113489.	2.3	8
87	Profundidade e atributos fÃsicos do solo e seus impactos nas raÃzes de bananeiras. Revista Brasileira De Fruticultura, 2013, 35, 536-545.	0.2	7
88	Iron biogeochemistry in Holocene palaeo and actual salt marshes in coastal areas of the Pampean Plain, Argentina. Environmental Earth Sciences, 2016, 75, 1.	1.3	6
89	Diffuse Reflectance Spectroscopy (Visâ€Nirâ€Swir) as a Promising Tool for Blue Carbon Quantification in Mangrove Soils: A Case of Study in Tropical Semiarid Climatic Conditions. Soil Science Society of America Journal, 2017, 81, 1661-1667.	1.2	6
90	Role of Redox Processes in the Pedogenesis of Hypersaline Tidal Flat Soils on the Brazilian Coast. Soil Science Society of America Journal, 2018, 82, 1217-1230.	1.2	6

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91	Windsock behavior: climatic control on iron biogeochemistry in tropical mangroves. Biogeochemistry, 2021, 156, 437-452.	1.7	6
92	Changes in soil iron biogeochemistry in response to mangrove dieback. Biogeochemistry, 2022, 158, 357-372.	1.7	6
93	Do agrosystems change soil carbon and nutrient stocks in a semiarid environment?. Journal of Arid Environments, 2022, 201, 104747.	1.2	6
94	Pedological Studies of Subaqueous Soils as a Contribution to the Protection of Seagrass Meadows in Brazil. Revista Brasileira De Ciencia Do Solo, 2018, 42, .	0.5	5
95	Long-term effects of irrigated agriculture on Luvisol pedogenesis in semi-arid region, northeastern Brazil. Catena, 2021, 206, 105529.	2.2	5
96	Profundidade do solo e micro-relevo em bananais irrigados: impactos na nutriÃ§Ã£o mineral e potencial produtivo. Revista Ciencia Agronomica, 2011, 42, 567-578.	0.1	5
97	Screening for natural manganese scavengers: Divergent phytoremediation potentials of wetland plants. Journal of Cleaner Production, 2022, 365, 132811.	4.6	5
98	Gypsum Amendment Induced Rapid Pyritization in Fe-Rich Mine Tailings from Doce River Estuary after the FundÃ£o Dam Collapse. Minerals (Basel, Switzerland), 2021, 11, 201.	0.8	4
99	Soil profile, relief features and their relation to structure and distribution of Brazilian Atlantic rain forest trees. Scientia Agricola, 2012, 69, 61-69.	0.6	4
100	Bedload sediment and nutrient losses in agro-ecosystems of the Brazilian semiarid region. Nutrient Cycling in Agroecosystems, 2013, 96, 203-213.	1.1	3
101	Etnopedologia: uma abordagem das etnociÃªncias sobre as relaÃ§Ãµes entre as sociedades e os solos. Ciencia Rural, 2013, 43, 854-860.	0.3	3
102	Population biology of the crab Goniopsis cruentata: variation in body size, sexual maturity, and population density. Animal Biology, 2014, 64, 383-394.	0.6	3
103	Geochemical signatures and weathering rates in soils derived from different granites in contrasting climatic locations. Acta Scientiarum - Agronomy, 2018, 41, 39708.	0.6	3
104	Does food partitioning vary in leaf-eating crabs in response to source quality?. Marine Environmental Research, 2019, 144, 72-83.	1.1	3
105	How Do Plants and Climatic Conditions Control Soil Properties in Hypersaline Tidal Flats?. Applied Sciences (Switzerland), 2020, 10, 7624.	1.3	3
106	Soil eutrophication in seabird colonies affects cell wall composition: Implications for the conservation of rare plant species. Marine Pollution Bulletin, 2021, 168, 112469.	2.3	3
107	Evaluation of soil structure using participatory methods in the semiarid region of Brazil. Revista Ciencia Agronomica, 2013, 44, 411-418.	0.1	3
108	The rhizosphere of tropical grasses as driver of soil weathering in embryonic Technosols (SE-Brazil). Catena, 2022, 208, 105764.	2.2	3

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109	Soybean expansion impacts on soil organic matter in the eastern region of the MaranhÃ£o State (Northeastern Brazil). Soil Use and Management, 2022, 38, 1203-1216.	2.6	3
110	Changes in organic carbon and microbiology community structure due to long-term irrigated agriculture on Luvisols in the Brazilian semi-arid region. Catena, 2022, 212, 106058.	2.2	3
111	Degraded mangroves as sources of trace elements to aquatic environments. Marine Pollution Bulletin, 2022, 181, 113834.	2.3	3
112	Risk assessment and copper geochemistry of an orchard irrigated with mine water: a case study in the semiarid region of Brazil. Environmental Geochemistry and Health, 2019, 41, 603-615.	1.8	2
113	Cu Dynamics in the Rhizosphere of Native Tropical Species: Assessing the Potential for Phytostabilization in Mining-Impacted Soils. Minerals (Basel, Switzerland), 2022, 12, 130.	0.8	2
114	A COOCORRÃŠNCIA DE PLANTAS NA CAATINGA PODE SER EXPLICADA PELO PROCESSO DE FACILITAÃ‡ÃƒO? ESTUDO DE CASO COM DUAS ESPÃ‰CIES DE FABACEAE. Ciencia Florestal, 2018, 28, 1514.	0.1	1
115	Recovery of Soil Processes in Replanted Mangroves: Implications for Soil Functions. Forests, 2022, 13, 422.	0.9	1
116	Pedogenetic processes operating at different intensities inferred by geophysical sensors and machine learning algorithms. Catena, 2022, 216, 106370.	2.2	1
117	Assessment of Soil Moisture by Family Farmers Under Multi-Cropping Systems in a Semiarid Region. Agroecology and Sustainable Food Systems, 2015, 39, 747-761.	1.0	0
118	Teor de nutrientes e viabilidade da bananicultura em Cambissolos com diferentes profundidades. Bragantia, 2016, 75, 335-343.	1.3	0