Christian J Sanders

List of Publications by Citations

125 papers	3,222 citations	31 h-index	53 g-index
136 ext. papers	4,023 ext. citations	4.6 avg, IF	5.58 L-index

#	Paper	IF	Citations
125	Global patterns in mangrove soil carbon stocks and losses. *Nature Climate Change*, **2017**, 7, 523-528	21.4	276
124	Organic carbon burial rates in mangrove sediments: Strengthening the global budget. *Global Biogeochemical Cycles*, **2012**, 26,	5.9	227
123	A global map of mangrove forest soil carbon at 30 m spatial resolution. *Environmental Research Letters*, **2018**, 13, 055002	6.2	139
122	Spatial and temporal variability of carbon dioxide and methane fluxes over semi-diurnal and spring–neap–spring timescales in a mangrove creek. *Geochimica Et Cosmochimica Acta*, **2015**, 150, 211-225	5.5	122
121	Organic carbon burial in a mangrove forest, margin and intertidal mud flat. *Estuarine, Coastal and Shelf Science*, **2010**, 90, 168-172	2.9	110
120	Are global mangrove carbon stocks driven by rainfall?. *Journal of Geophysical Research G: Biogeosciences*, **2016**, 121, 2600-2609	3.7	106
119	Sediment accretion and organic carbon burial relative to sea-level rise and storm events in two mangrove forests in Everglades National Park. *Catena*, **2013**, 104, 58-66	5.8	102
118	Elevated rates of organic carbon, nitrogen, and phosphorus accumulation in a highly impacted mangrove wetland. *Geophysical Research Letters*, **2014**, 41, 2475-2480	4.9	88
117	Mangrove mortality in a changing climate: An overview. *Estuarine, Coastal and Shelf Science*, **2018**, 215, 241-249	2.9	79
116	Groundwater discharge into an estuary using spatially distributed radon time series and radium isotopes. *Journal of Hydrology*, **2015**, 528, 703-719	6	78
115	Australian vegetated coastal ecosystems as global hotspots for climate change mitigation. *Nature Communications*, **2019**, 10, 4313	17.4	75
114	Beyond burial: lateral exchange is a significant atmospheric carbon sink in mangrove forests. *Biology Letters*, **2018**, 14,	3.6	70
113	Temporal variability of carbon and nutrient burial, sediment accretion, and mass accumulation over the past century in a carbonate platform mangrove forest of the Florida Everglades. *Journal of Geophysical Research G: Biogeosciences*, **2014**, 119, 2032-2048	3.7	69
112	Carbon outwelling and outgassing vs. burial in an estuarine tidal creek surrounded by mangrove and saltmarsh wetlands. *Limnology and Oceanography*, **2019**, 64, 996-1013	4.8	62
111	Mercury flux to estuarine sediments, derived from Pb-210 and Cs-137 geochronologies (Guaratuba Bay, Brazil). *Marine Pollution Bulletin*, **2006**, 52, 1085-9	6.7	61
110	Role of carbonate burial in Blue Carbon budgets. *Nature Communications*, **2019**, 10, 1106	17.4	57
109	Examining (239+240)Pu, (210)Pb and historical events to determine carbon, nitrogen and phosphorus burial in mangrove sediments of Moreton Bay, Australia. *Journal of Environmental Radioactivity*, **2016**, 151 Pt 3, 623-9	2.4	48

108	Elevated concentrations of dissolved Ba, Fe and Mn in a mangrove subterranean estuary: Consequence of sea level rise?. *Continental Shelf Research*, **2012**, 43, 86-94	2.4	47
107	Changes in organic carbon accumulation driven by mangrove expansion and deforestation in a New Zealand estuary. *Estuarine, Coastal and Shelf Science*, **2017**, 192, 108-116	2.9	43
106	Avoiding timescale bias in assessments of coastal wetland vertical change. *Limnology and Oceanography*, **2018**, 63, S477-S495	4.8	43
105	Organic matter content and particle size modifications in mangrove sediments as responses to sea level rise. *Marine Environmental Research*, **2012**, 77, 150-5	3.3	43
104	Eutrophication history of Guanabara Bay (SE Brazil) recorded by phosphorus flux to sediments from a degraded mangrove area. *Marine Pollution Bulletin*, **2009**, 58, 1750-4	6.7	42
103	Blue carbon oxidation revealed by radiogenic and stable isotopes in a mangrove system. *Geophysical Research Letters*, **2017**, 44, 4889-4896	4.9	41
102	Mangrove forest sedimentation and its reference to sea level rise, Cananeia, Brazil. *Environmental Earth Sciences*, **2010**, 60, 1291-1301	2.9	41
101	Recent Sediment Accumulation in a Mangrove Forest and Its Relevance to Local Sea-Level Rise (Ilha Grande, Brazil). *Journal of Coastal Research*, **2008**, 242, 533-536	0.6	36
100	The contribution of denitrification and burial to the nitrogen budgets of three geomorphically distinct Australian estuaries: Importance of seagrass habitats. *Limnology and Oceanography*, **2016**, 61, 1144-1156	4.8	36
99	High porewater exchange in a mangrove-dominated estuary revealed from short-lived radium isotopes. *Journal of Hydrology*, **2017**, 553, 188-198	6	34
98	Dissolved iron exports from an estuary surrounded by coastal wetlands: Can small estuaries be a significant source of Fe to the ocean?. *Marine Chemistry*, **2015**, 176, 75-82	3.7	33
97	Partitioning the relative contributions of organic matter and mineral sediment to accretion rates in carbonate platform mangrove soils. *Marine Geology*, **2017**, 390, 170-180	3.3	33
96	Radium-derived porewater exchange and dissolved N and P fluxes in mangroves. *Geochimica Et Cosmochimica Acta*, **2017**, 200, 295-309	5.5	32
95	Global blue carbon accumulation in tidal wetlands increases with climate change. *National Science Review*, **2021**, 8, nwaa296	10.8	31
94	Factors influencing organic carbon accumulation in mangrove ecosystems. *Biology Letters*, **2018**, 14,	3.6	31
93	Mangrove outwelling is a significant source of oceanic exchangeable organic carbon. *Limnology and Oceanography Letters*, **2017**, 2, 1-8	7.9	30
92	Carbon outwelling across the shelf following a massive mangrove dieback in Australia: Insights from radium isotopes. *Geochimica Et Cosmochimica Acta*, **2019**, 253, 142-158	5.5	28
91	Significant nitrate attenuation in a mangrove-fringed estuary during a flood-chase experiment. *Environmental Pollution*, **2019**, 253, 1000-1008	9.3	27

90	Organic carbon accumulation in Brazilian mangal sediments. *Journal of South American Earth Sciences*, **2010**, 30, 189-192	2	27
89	Manganese and iron release from mangrove porewaters: A significant component of oceanic budgets?. *Marine Chemistry*, **2016**, 184, 43-52	3.7	27
88	Mercury dilution by autochthonous organic matter in a fertilized mangrove wetland. *Environmental Pollution*, **2016**, 213, 30-35	9.3	26
87	Mangrove sediments reveal records of development during the previous century (Coffs Creek estuary, Australia). *Marine Pollution Bulletin*, **2017**, 122, 441-445	6.7	26
86	Tidal wetland resilience to sea level rise increases their carbon sequestration capacity in United States. *Nature Communications*, **2019**, 10, 5434	17.4	26
85	Seagrass, mangrove and saltmarsh sedimentary carbon stocks in an urban estuary; Coffs Harbour, Australia. *Regional Studies in Marine Science*, **2016**, 8, 1-6	1.5	24
84	Recent organic carbon accumulation (~100 years) along the Cabo Frio, Brazil upwelling region. *Continental Shelf Research*, **2014**, 75, 68-75	2.4	24
83	Intertidal mangrove mudflat 240+239Pu signatures, confirming a 210Pb geochronology on the southeastern coast of Brazil. *Journal of Radioanalytical and Nuclear Chemistry*, **2010**, 283, 593-596	1.5	23
82	Carbon outwelling and emissions from two contrasting mangrove creeks during the monsoon storm season in Palau, Micronesia. *Estuarine, Coastal and Shelf Science*, **2019**, 218, 340-348	2.9	22
81	Lead-210 and Beryllium-7 fallout rates on the southeastern coast of Brazil. *Journal of Environmental Radioactivity*, **2011**, 102, 1122-5	2.4	20
80	Carbon accumulation in Amazonian floodplain lakes: A significant component of Amazon budgets?. *Limnology and Oceanography Letters*, **2017**, 2, 29-35	7.9	19
79	Rare Earth Element and Radionuclide Distribution in Surface Sediments Along an Estuarine System Affected by Fertilizer Industry Contamination. *Water, Air, and Soil Pollution*, **2013**, 224, 1	2.6	19
78	Carbon accumulation and storage capacity in mangrove sediments three decades after deforestation within a eutrophic bay. *Marine Pollution Bulletin*, **2018**, 126, 275-280	6.7	19
77	Pyritization of trace metals in mangrove sediments. *Environmental Earth Sciences*, **2012**, 67, 1757-1762	2.9	18
76	Carbon and nutrient accumulation in tropical mangrove creeks, Amazon region. *Marine Geology*, **2020**, 429, 106317	3.3	18
75	Nutrient and Trace Metal Fluxes into Estuarine Sediments Linked to Historical and Expanding Agricultural Activity (Hearnes Lake, Australia). *Estuaries and Coasts*, **2019**, 42, 944-957	2.8	16
74	Increasing Rates of Carbon Burial in Southwest Florida Coastal Wetlands. *Journal of Geophysical Research G: Biogeosciences*, **2020**, 125, e2019JG005349	3.7	15
73	Mercury deposition during the previous century in an upwelling region; Cabo Frio, Brazil. *Marine Pollution Bulletin*, **2013**, 76, 389-93	6.7	15

72	Origin of rare earth element anomalies in mangrove sediments, Sepetiba Bay, SE Brazil: used as geochemical tracers of sediment sources. *Environmental Earth Sciences*, **2011**, 64, 1257-1267	2.9	15
71	Submarine groundwater discharge and associated nutrient and carbon inputs into Sydney Harbour (Australia). *Journal of Hydrology*, **2020**, 580, 124262	6	15
70	Arsenic fractionation in estuarine sediments: Does coastal eutrophication influence As behavior?. *Marine Pollution Bulletin*, **2015**, 96, 496-501	6.7	14
69	Shrimp farming influence on carbon and nutrient accumulation within Peruvian mangroves sediments. *Estuarine, Coastal and Shelf Science*, **2020**, 243, 106879	2.9	14
68	Coastal carbon cycle changes following mangrove loss. *Limnology and Oceanography*, **2020**, 65, 2642-2656	4.8	13
67	Coupled anthropogenic anomalies of radionuclides and major elements in estuarine sediments. *Journal of Environmental Radioactivity*, **2008**, 99, 1329-34	2.4	13
66	Hydrological controls on the biogeochemical dynamics in a Peruvian mangrove forest. *Hydrobiologia*, **2017**, 803, 69-86	2.4	11
65	Synthesis of magnesite at low temperature. *Carbonates and Evaporites*, **2011**, 26, 213-215	1.3	11
64	Land use impacts on benthic bioturbation potential and carbon burial in Brazilian mangrove ecosystems. *Limnology and Oceanography*, **2020**, 65, 2366-2376	4.8	11
63	A historical evaluation of anthropogenic impact in coastal ecosystems by geochemical signatures. *Journal of the Brazilian Chemical Society*, **2011**, 22, 120-125	1.5	10
62	Contrasting mercury and manganese deposition in a mangrove-dominated estuary (Guaratuba Bay, Brazil). *Geo-Marine Letters*, **2008**, 28, 239-244	1.9	10
61	Large variability in organic carbon and CaCO3 burial in seagrass meadows: a case study from three Australian estuaries. *Marine Ecology - Progress Series*, **2019**, 616, 211-218	2.6	10
60	Elevated dissolved heavy metal discharge following rainfall downstream of intensive horticulture. *Applied Geochemistry*, **2020**, 113, 104490	3.5	10
59	The mangrove CO2 pump: Tidally driven pore-water exchange. *Limnology and Oceanography*, **2021**, 66, 1563-1577	4.8	10
58	Carbon and nutrient accumulation in mangrove sediments affected by multiple environmental changes. *Journal of Soils and Sediments*, **2020**, 20, 2504-2509	3.4	9
57	Forest migration and carbon sources to Iranian mangrove soils. *Journal of Arid Environments*, **2018**, 157, 57-65	2.5	9
56	Radium mass balance and submarine groundwater discharge in Sepetiba Bay, Rio de Janeiro State, Brazil. *Journal of South American Earth Sciences*, **2012**, 39, 44-51	2	9
55	Reconstructing extreme climatic and geochemical conditions during the largest natural mangrove dieback on record. *Biogeosciences*, **2020**, 17, 4707-4726	4.6	9

54	Auto-HPGe, an autosampler for gamma-ray spectroscopy using high-purity germanium (HPGe) detectors and heavy shields. *HardwareX*, **2018**, 4, e00040	2.7	9
53	Significant Organic Carbon Accumulation in Two Coastal Acid Sulfate Soil Wetlands. *Geophysical Research Letters*, **2019**, 46, 3245-3251	4.9	8
52	Hydrologic fragmentation-induced eutrophication in Dove Sound, Upper Florida Keys, USA. *Environmental Earth Sciences*, **2014**, 71, 4387-4395	2.9	8
51	Spatial Variability of Organic Carbon, CaCO3 and Nutrient Burial Rates Spanning a Mangrove Productivity Gradient in the Coastal Everglades. *Ecosystems*, **2019**, 22, 844-858	3.9	8
50	Contrasting Radium-Derived Groundwater Exchange and Nutrient Lateral Fluxes in a Natural Mangrove Versus an Artificial Canal. *Estuaries and Coasts*, **2021**, 44, 123-136	2.8	8
49	Tidally driven sulfidic conditions in Peruvian mangrove sediments. *Geo-Marine Letters*, **2018**, 38, 457-465	1.9	8
48	Bacterial-derived nutrient and carbon source-sink behaviors in a sandy beach subterranean estuary. *Marine Pollution Bulletin*, **2020**, 160, 111570	6.7	7
47	Radium isotope ((223)Ra, (224)Ra, (226)Ra and (228)Ra) distribution near Brazil's largest port, Paranagu□Bay, Brazil. *Marine Pollution Bulletin*, **2016**, 111, 443-448	6.7	7
46	Distribution of trace metals in stream sediments along the Trans-Amazonian Federal Highway, Par□ State, Brazil. *Journal of South American Earth Sciences*, **2014**, 54, 182-195	2	7
45	Recent 137Cs deposition in sediments of Admiralty Bay, Antarctica. *Journal of Environmental Radioactivity*, **2010**, 101, 421-4	2.4	7
44	Influence of Anthropogenic Activities on Trace Metal Accumulation in Brazilian Mangrove Sediments. *Revista Virtual De Quimica*, **2017**, 9, 2017-2031	1.3	7
43	Historic carbon burial spike in an Amazon floodplain lake linked to riparian deforestation near Santar□n, Brazil. *Biogeosciences*, **2018**, 15, 447-455	4.6	7
42	Habitat rehabilitation in the Detroit River Area of Concern. *Aquatic Ecosystem Health and Management*, **2018**, 21, 458-469	1.4	6
41	Radon-traced pore-water as a potential source of CO2 and CH4 to receding black and clear water environments in the Amazon Basin. *Limnology and Oceanography Letters*, **2018**, 3, 375-383	7.9	6
40	Geochemical background indicators within a tropical estuarine system influenced by a port-industrial complex. *Marine Pollution Bulletin*, **2020**, 161, 111794	6.7	5
39	Large aquatic nitrous oxide emissions downstream of intensive horticulture driven by rain events. *Journal of Hydrology*, **2021**, 596, 126066	6	5
38	Mangrove carbon and nutrient accumulation shifts driven by rapid development in a tropical estuarine system, northeast Brazil. *Marine Pollution Bulletin*, **2021**, 166, 112219	6.7	5
37	Factors Determining Seagrass Blue Carbon Across Bioregions and Geomorphologies. *Global Biogeochemical Cycles*, **2021**, 35, e2021GB006935	5.9	5

36	Land use and episodic rainfall as drivers of nitrogen exports in subtropical rivers: Insights from □N-NO, □O-NO and Rn. *Science of the Total Environment*, **2021**, 758, 143669	10.2	5
35	Analysis of Po, Bi, and Pb in atmospheric and oceanic samples by simultaneously auto-plating Po and Bi onto a nickel disc. *Journal of Environmental Radioactivity*, **2020**, 220-221, 106301	2.4	4
34	Anthropogenic source assessment of 226Ra and 210Pb in a sediment core from the Cubatão River estuary (SE Brazil). *Journal of Radioanalytical and Nuclear Chemistry*, **2011**, 287, 729-732	1.5	4
33	INFLUENCE OF RIVER WATER DIVERSION ON HYDROGEOCHEMISTRY AND REE DISTRIBUTION, RIO DE JANEIRO, BRAZIL. *Carpathian Journal of Earth and Environmental Sciences*, **2018**, 13, 453-464	2.1	4
32	Anthropogenic and environmental influences on nutrient accumulation in mangrove sediments. *Marine Pollution Bulletin*, **2021**, 165, 112174	6.7	4
31	Ecosystem carbon losses following a climate-induced mangrove mortality in Brazil. *Journal of Environmental Management*, **2021**, 297, 113381	7.9	4
30	Does Regional Development Influence Sedimentary Blue Carbon Stocks? A Case Study From Three Australian Estuaries. *Frontiers in Marine Science*, **2019**, 5,	4.5	3
29	Alkalinity Production Coupled to Pyrite Formation Represents an Unaccounted Blue Carbon Sink. *Global Biogeochemical Cycles*, **2021**, 35, e2020GB006785	5.9	3
28	Mapping short-lived radium isotopes in estuarine residential canals (Gold Coast, Australia). *Journal of Radioanalytical and Nuclear Chemistry*, **2017**, 313, 409-418	1.5	2
27	Radionuclide Enrichment Near Coal Processing in Southern Brazil. *Radiochemistry*, **2018**, 60, 215-220	0.9	2
26	Uranium export from a sandy beach subterranean estuary in Australia. *Estuarine, Coastal and Shelf Science*, **2017**, 198, 204-212	2.9	2
25	240+239Pu depositional signatures as a viable geochronological tool in the Amazon Basin. *Geochronometria*, **2017**, 44, 142-149	1	2
24	Groundwater Carbon Exports Exceed Sediment Carbon Burial in a Salt Marsh. *Estuaries and Coasts*,1	2.8	2
23	Hypersaline tidal flats as important □lue carbon□systems: a case study from three ecosystems. *Biogeosciences*, **2021**, 18, 2527-2538	4.6	2
22	Cryptic night-time trace metal and metalloid contamination in an intensively cultivated coastal catchment. *Environmental Pollution*, **2021**, 276, 116685	9.3	2
21	Electrochemical characterization of mangrove sediments: A proposal of new proxies for organic matter oxidation. *Applied Geochemistry*, **2019**, 101, 42-49	3.5	2
20	Species-specific spatial and temporal variations of foliar nitrogen and phosphorus in mangrove plants. *Marine Ecology - Progress Series*,	2.6	2
19	Anthropogenic nitrate attenuation versus nitrous oxide release from a woodchip bioreactor.. *Environmental Pollution*, **2022**, 300, 118814	9.3	1

18	Seasonal changes in metal and nutrient fluxes across the sediment-water interface in tropical mangrove creeks in the Amazon region. *Applied Geochemistry*, **2022**, 138, 105217	3.5	1
17	Major element concentrations in Mangrove Pore Water, Sepetiba Bay, Brazil. *Brazilian Journal of Oceanography*, **2012**, 60, 33-39	1.8	1
16	Organic carbon accumulation in oligotrophic coastal lakes in southern Brazil during the last century. *Journal of Paleolimnology*, **2021**, 66, 71-82	2.1	1
15	Local geomorphological gradients affect sedimentary organic carbon storage: A Blue Carbon case study from sub-tropical Australia. *Regional Studies in Marine Science*, **2021**, 45, 101840	1.5	1
14	Submarine groundwater discharge revealed by 224Ra and 223Ra in Coffs Harbour, Australia. *Journal of Radioanalytical and Nuclear Chemistry*, **2019**, 319, 1193-1199	1.5	1
13	Assessing pesticide, trace metal, and arsenic contamination in soils and dam sediments in a rapidly expanding horticultural area in Australia. *Environmental Geochemistry and Health*, **2021**, 43, 3189-3211	4.7	1
12	Natural attenuation of large anthropogenic nitrate loads in a subtropical stream revealed by δ15N and δ18O. *Journal of Hydrology*, **2021**, 598, 126077	6	1
11	Submarine Groundwater Discharge Releases CO2 to a Coral Reef. *ACS ES&T Water*, **2021**, 1, 1756-1764		1
10	Carbon and Nitrogen Contents Driven by Organic Matter Source within Pichavaram Wetland Sediments. *Journal of Marine Science and Engineering*, **2022**, 10, 53	2.4	0
9	Organic matter processing through an estuarine system: Evidence from stable isotopes (δ13C and δ15N) and molecular (lignin phenols) signatures. *Estuarine, Coastal and Shelf Science*, **2022**, 265, 107707	2.9	0
8	Assessment of the temporal retention of mercury and nutrient records within the mangrove sediments of a highly impacted estuary.. *Environmental Research*, **2021**, 206, 112569	7.9	0
7	Could the wild population of Large Yellow Croaker Larimichthys crocea (Richardson) in China be restored? A case study in Guanjingyang, Fujian, China. *Aquatic Living Resources*, **2020**, 33, 24	1.5	0
6	Increasing carbon, nutrient and trace metal accumulation driven by development in a mangrove estuary in south Asia.. *Science of the Total Environment*, **2022**, 154900	10.2	0
5	Pesticide occurrence in an agriculturally intensive and ecologically important coastal aquatic system in Australia. *Marine Pollution Bulletin*, **2022**, 180, 113675	6.7	0
4	Nitrous oxide hot moments and cold spots in a subtropical estuary: Floods and mangroves. *Estuarine, Coastal and Shelf Science*, **2021**, 264, 107656	2.9	
3	Reply to Comment by R. Parkinson on Increasing Rates of Carbon Burial in Southwest Florida Coastal Wetlands by J. Breithaupt et al.. *Journal of Geophysical Research G: Biogeosciences*, **2021**, 126, e2021JG006245	3.7	
2	Reconstructing the history of environmental impact in a tropical mangrove ecosystem: A case study from the Suape port-industrial complex, Brazil. *Regional Studies in Marine Science*, **2021**, 44, 101747	1.5	
1	Organic Matter Redox State Driven by Specific Sources in Mangrove Sediments: A Case Study from Peruvian Ecosystems. *Journal of Marine Science and Engineering*, **2021**, 9, 1438	2.4	