Gérard Gruau

List of Publications by Year in descending order

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66343 95266 5,007 68 42 68 citations h-index g-index papers 68 68 68 4705 docs citations times ranked citing authors all docs

#	Article	IF	CITATIONS
1	Conservation practices modify soil phosphorus sorption properties and the composition of dissolved phosphorus losses during runoff. Soil and Tillage Research, 2022, 220, 105353.	5.6	11
2	Spatio-temporal controls of C–N–P dynamics across headwater catchments of a temperate agricultural region from public data analysis. Hydrology and Earth System Sciences, 2021, 25, 2491-2511.	4.9	12
3	The influence of landscape spatial configuration on nitrogen and phosphorus exports in agricultural catchments. Landscape Ecology, 2021, 36, 3383-3399.	4.2	21
4	Agricultural Practices and Hydrologic Conditions Shape the Temporal Pattern of Soil and Stream Water Dissolved Organic Matter. Ecosystems, 2020, 23, 1325-1343.	3.4	10
5	River network alteration of C-N-P dynamics in a mesoscale agricultural catchment. Science of the Total Environment, 2020, 749, 141551.	8.0	21
6	Predicting Nutrient Incontinence in the Anthropocene at Watershed Scales. Frontiers in Environmental Science, 2020, 7, .	3.3	39
7	Evidence of colloids as important phosphorus carriers in natural soil and stream waters in an agricultural catchment. Journal of Environmental Quality, 2020, 49, 921-932.	2.0	20
8	Water Table Dynamics Control Carbon Losses from the Destabilization of Soil Organic Matter in a Small, Lowland Agricultural Catchment. Soil Systems, 2020, 4, 2.	2.6	2
9	Respective roles of Fe-oxyhydroxide dissolution, pH changes and sediment inputs in dissolved phosphorus release from wetland soils under anoxic conditions. Geoderma, 2019, 338, 365-374.	5.1	67
10	Unexpected spatial stability of water chemistry in headwater stream networks. Ecology Letters, 2018, 21, 296-308.	6.4	149
11	AgrHyS: An Observatory of Response Times in Agroâ€Hydro Systems. Vadose Zone Journal, 2018, 17, 1-16.	2.2	19
12	Multidecadal Trajectory of Riverine Nitrogen and Phosphorus Dynamics in Rural Catchments. Water Resources Research, 2018, 54, 5327-5340.	4.2	63
13	Challenges of Reducing Phosphorus Based Water Eutrophication in the Agricultural Landscapes of Northwest Europe. Frontiers in Marine Science, 2018, 5, .	2.5	91
14	Tracing the sources and cycling of phosphorus in river sediments using oxygen isotopes: Methodological adaptations and first results from a case study in France. Water Research, 2017, 111, 346-356.	11.3	51
15	A comparative study on the pore-size and filter type effect on the molecular composition of soil and stream dissolved organic matter. Organic Geochemistry, 2017, 110, 36-44.	1.8	16
16	Release of dissolved phosphorus from riparian wetlands: Evidence for complex interactions among hydroclimate variability, topography and soil properties. Science of the Total Environment, 2017, 598, 421-431.	8.0	73
17	New molecular evidence for surface and sub-surface soil erosion controls on the composition of stream DOM during storm events. Biogeosciences, 2017, 14, 5039-5051.	3.3	15
18	Does As(III) interact with Fe(II), Fe(III) and organic matter through ternary complexes?. Journal of Colloid and Interface Science, 2016, 470, 153-161.	9.4	37

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19	Effect of loading on the nature of the REE–humate complexes as determined by Yb3+ and Sm3+ LIII-edge EXAFS analysis. Chemical Geology, 2015, 396, 218-227.	3.3	8
20	Interactions between natural organic matter, sulfur, arsenic and iron oxides in re-oxidation compounds within riparian wetlands: NanoSIMS and X-ray adsorption spectroscopy evidences. Science of the Total Environment, 2015, 515-516, 118-128.	8.0	43
21	Distinct export dynamics for dissolved and particulate phosphorus reveal independent transport mechanisms in an arable headwater catchment. Hydrological Processes, 2015, 29, 3162-3178.	2.6	66
22	Biogeochemical Factors Affecting Rare Earth Element Distribution in Shallow Wetland Groundwater. Aquatic Geochemistry, 2015, 21, 197-215.	1.3	54
23	Bacteria-mediated reduction of As(V)-doped lepidocrocite in a flooded soil sample. Chemical Geology, 2015, 406, 34-44.	3.3	17
24	Groundwater control of biogeochemical processes causing phosphorus release from riparian wetlands. Water Research, 2015, 84, 307-314.	11.3	82
25	Unravelling the fate of arsenic during re-oxidation of reduced wetland waters: Experimental constraints and environmental consequences. Comptes Rendus - Geoscience, 2015, 347, 304-314.	1.2	7
26	Thiol groups controls on arsenite binding by organic matter: New experimental and modeling evidence. Journal of Colloid and Interface Science, 2015, 460, 310-320.	9.4	34
27	Upper soil horizons control the rare earth element patterns in shallow groundwater. Geoderma, 2015, 239-240, 84-96.	5.1	44
28	Geochemical modeling of Fe(II) binding to humic and fulvic acids. Chemical Geology, 2014, 372, 109-118.	3.3	106
29	Fractal Water Quality Fluctuations Spanning the Periodic Table in an Intensively Farmed Watershed. Environmental Science & Env	10.0	43
30	Organic matter control on the reactivity of Fe(III)-oxyhydroxides and associated As in wetland soils: A kinetic modeling study. Chemical Geology, 2013, 335, 24-35.	3.3	46
31	Effects of Fe competition on REE binding to humic acid: Origin of REE pattern variability in organic waters. Chemical Geology, 2013, 342, 119-127.	3.3	64
32	Hydrologically driven seasonal changes in the sources and production mechanisms of dissolved organic carbon in a small lowland catchment. Water Resources Research, 2013, 49, 5792-5803.	4.2	60
33	Assessment of vanadium distribution in shallow groundwaters. Chemical Geology, 2012, 294-295, 89-102.	3.3	41
34	Aluminium competitive effect on rare earth elements binding to humic acid. Geochimica Et Cosmochimica Acta, 2012, 89, 1-9.	3.9	43
35	Extreme Variability of Steroid Profiles in Cow Feces and Pig Slurries at the Regional Scale: Implications for the Use of Steroids to Specify Fecal Pollution Sources in Waters. Journal of Agricultural and Food Chemistry, 2011, 59, 7294-7302.	5.2	36
36	Rare earth element patterns: A tool for identifying trace metal sources during wetland soil reduction. Chemical Geology, 2011, 284, 127-137.	3.3	102

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37	An improved description of the interactions between rare earth elements and humic acids by modeling: PHREEQC-Model VI coupling. Geochimica Et Cosmochimica Acta, 2011, 75, 5625-5637.	3.9	79
38	Carbon isotopes as tracers of dissolved organic carbon sources and water pathways in headwater catchments. Journal of Hydrology, 2011, 402, 228-238.	5.4	59
39	Development of a combined isotopic and mass-balance approach to determine dissolved organic carbon sources in eutrophic reservoirs. Chemosphere, 2011, 83, 356-366.	8.2	18
40	Colloidal Control on the Distribution of Rare Earth Elements in Shallow Groundwaters. Aquatic Geochemistry, 2010, 16, 31-59.	1.3	81
41	Metal loading effect on rare earth element binding to humic acid: Experimental and modelling evidence. Geochimica Et Cosmochimica Acta, 2010, 74, 1749-1761.	3.9	74
42	Tracing and Quantifying Sources of Fatty Acids and Steroids in Amended Cultivated Soils. Journal of Agricultural and Food Chemistry, 2009, 57, 6950-6956.	5.2	11
43	Environmental impact of As(V)–Fe oxyhydroxide reductive dissolution: An experimental insight. Chemical Geology, 2009, 259, 290-303.	3.3	27
44	Re–Os isotope systematics and HSE abundances of the 3.5ÂGa Schapenburg komatiites, South Africa: Hydrous melting or prolonged survival of primordial heterogeneities in the mantle?. Chemical Geology, 2009, 262, 355-369.	3.3	55
45	Increasing pH drives organic matter solubilization from wetland soils under reducing conditions. Geoderma, 2009, 154, 13-19.	5.1	284
46	Insights into colloid-mediated trace element release at the soil/water interface. Journal of Colloid and Interface Science, 2008, 325, 187-197.	9.4	142
47	Role of water table dynamics on stream nitrate export and concentration in agricultural headwater catchment (France). Journal of Hydrology, 2008, 348, 363-378.	5.4	130
48	A new tool for in situ monitoring of Fe-mobilization in soils. Applied Geochemistry, 2008, 23, 3372-3383.	3.0	20
49	Competitive binding of REE to humic acid and manganese oxide: Impact of reaction kinetics on development of cerium anomaly and REE adsorption. Chemical Geology, 2008, 247, 154-170.	3.3	103
50	New insights into cerium anomalies in organic-rich alkaline waters. Chemical Geology, 2008, 251, 120-127.	3.3	111
51	Organo-colloidal control on major- and trace-element partitioning in shallow groundwaters: Confronting ultrafiltration and modelling. Applied Geochemistry, 2007, 22, 1568-1582.	3.0	51
52	Detection of manure-derived organic compounds in rivers draining agricultural areas of intensive manure spreading. Applied Geochemistry, 2007, 22, 1814-1824.	3.0	45
53	Rare earth elements complexation with humic acid. Chemical Geology, 2007, 243, 128-141.	3.3	209
54	Organic complexation of rare earth elements in natural waters: Evaluating model calculations from ultrafiltration data. Geochimica Et Cosmochimica Acta, 2007, 71, 2718-2735.	3.9	94

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55	Competition between humic acid and carbonates for rare earth elements complexation. Journal of Colloid and Interface Science, 2007, 305, 25-31.	9.4	115
56	Is trace metal release in wetland soils controlled by organic matter mobility or Fe-oxyhydroxides reduction?. Journal of Colloid and Interface Science, 2007, 314, 490-501.	9.4	266
57	Using Sterols to Detect Pig Slurry Contribution to Soil Organic Matter. Water, Air, and Soil Pollution, 2007, 178, 169-178.	2.4	44
58	Adsorption of REE(III)-humate complexes onto MnO2: Experimental evidence for cerium anomaly and lanthanide tetrad effect suppression. Geochimica Et Cosmochimica Acta, 2005, 69, 4825-4835.	3.9	156
59	The oxygen isotope composition of dissolved anthropogenic phosphates: a new tool for eutrophication research?. Water Research, 2005, 39, 232-238.	11.3	56
60	Impact of humate complexation on the adsorption of REE onto Fe oxyhydroxide. Journal of Colloid and Interface Science, 2004, 277, 271-279.	9.4	104
61	Hf isotopic measurements on Barberton komatiites: effects of incomplete sample dissolution and importance for primary and secondary magmatic signatures. Chemical Geology, 2004, 207, 261-275.	3.3	51
62	Controls on the distribution of rare earth elements in shallow groundwaters. Water Research, 2004, 38, 3576-3586.	11.3	114
63	Mechanisms of Nitrate Transfer from Soil to Stream in an Agricultural Watershed of French Brittany. Water, Air, and Soil Pollution, 2002, 133, 161-183.	2.4	81
64	Release of Trace Elements in Wetlands: Role of Seasonal Variability. Water Research, 2001, 35, 943-952.	11.3	140
65	A Compilation of Silicon and Thirty One Trace Elements Measured in the Natural River Water Reference Material SLRS-4 (NRC-CNRC). Geostandards and Geoanalytical Research, 2001, 25, 465-474.	3.1	106
66	The distribution of rare earth elements in groundwaters: assessing the role of source-rock composition, redox changes and colloidal particles. Geochimica Et Cosmochimica Acta, 2000, 64, 4131-4151.	3.9	285
67	The origin of U-shaped rare earth patterns in ophiolite peridotites: assessing the role of secondary alteration and melt/rock reaction. Geochimica Et Cosmochimica Acta, 1998, 62, 3545-3560.	3.9	93
68	The influence of alteration on the trace-element and Nd isotopic compositions of komatiites. Chemical Geology, 1995, 126, 43-64.	3.3	190