Guaciara M Santos

List of Publications by Year
in descending order

90 papers	3,988 citations	109264 35 h-index	128225 60 g-index
95 all docs	95 docs citations	95 times ranked	4886 citing authors

#	Article	IF	Citations
1	Quantifying archaeal community autotrophy in the mesopelagic ocean using natural radiocarbon. Proceedings of the National Academy of Sciences of the United States of America, 2006, 103, 6442-6447.	3.3	413
2	Ultra small-mass AMS 14C sample preparation and analyses at KCCAMS/UCI Facility. Nuclear Instruments & Methods in Physics Research B, 2007, 259, 293-302.	0.6	225
3	Magnesium Perchlorate as an Alternative Water Trap in AMS Graphite Sample Preparation: A Report On Sample Preparation at Kccams at the University of California, Irvine. Radiocarbon, 2004, 46, 165-173.	0.8	145
4	The Keck Carbon Cycle AMS Laboratory, University of California, Irvine: Initial Operation and a Background Surprise. Radiocarbon, 2004, 46, 41-49.	0.8	122
5	ATMOSPHERIC RADIOCARBON FOR THE PERIOD 1950â€"2019. Radiocarbon, 2022, 64, 723-745.	0.8	117
6	Recent (<4 year old) leaf litter is not a major source of microbial carbon in a temperate forest mineral soil. Soil Biology and Biochemistry, 2010, 42, 1028-1037.	4.2	116
7	Influence of the6,7Libreakup process on the near barrier elastic scattering by heavy nuclei. Physical Review C, 1999, 59, 2103-2107.	1.1	115
8	Redating the onset of burning at Lynch's Crater (North Queensland): implications for human settlement in Australia. Journal of Quaternary Science, 2001, 16, 767-771.	1.1	109
9	Re-anchoring the late Pleistocene tephrochronology of New Zealand based on concordant radiocarbon ages and combined 238U/230Th disequilibrium and (Uâ€"Th)/He zircon ages. Earth and Planetary Science Letters, 2012, 349-350, 240-250.	1.8	108
10	AMS ^{14}C Sample Preparation at the KCCAMS/UCI Facility: Status Report and Performance of Small Samples. Radiocarbon, 2007, 49, 255-269.	0.8	106
11	Analysis of plutonium isotopes in marine samples by radiometric, ICP-MS and AMS techniques. Journal of Radioanalytical and Nuclear Chemistry, 2001, 248, 757-764.	0.7	93
12	Blank Assessment for Ultra-Small Radiocarbon Samples: Chemical Extraction and Separation Versus AMS. Radiocarbon, 2010, 52, 1322-1335.	0.8	92
13	Enhanced El NiÃ±oâ€"Southern Oscillation Variability in Recent Decades. Geophysical Research Letters, 2020, 47, e2019GL083906.	1.5	85
14	Radiocarbon dating from 40 to 60kaBP at Border Cave, South Africa. Quaternary Science Reviews, 2003, 22, 943-947.	1.4	81
15	A new look at old carbon in active margin sediments. Geology, 2009, 37, 239-242.	2.0	78
16	The Keck Carbon Cycle AMS Laboratory, University of California, Irvine: Status Report. Radiocarbon, 2010, 52, 301-309.	0.8	74
17	The Phytolith^{14}C Puzzle: A Tale of Background Determinations and Accuracy Tests. Radiocarbon, 2010, 52, 113-128.	0.8	73
18	Life with MC-SNICS. Part II: Further ion source development at the Keck carbon cycle AMS facility. Nuclear Instruments & Methods in Physics Research B, 2007, 259, 88-93.	0.6	72

#	Article	IF	Citations
19	New highlights of phytolith structure and occluded carbon location: 3-D X-ray microscopy and NanoSIMS results. Biogeosciences, 2015, 12, 863-873.	1.3	71
20	Deep sea corals off Brazil verify a poorly ventilated Southern Pacific Ocean during H2, H1 and the Younger Dryas. Earth and Planetary Science Letters, 2010, 293, 269-276.	1.8	63
21	A revised chronology of the lowest occupation layer of Pedra Furada Rock Shelter, Piauí, Brazil: the Pleistocene peopling of the Americas. Quaternary Science Reviews, 2003, 22, 2303-2310.	1.4	61
22	Ion Source Development at Kccams, University of California, Irvine. Radiocarbon, 2004, 46, 33-39.	0.8	60
23	Buang Merabak: Early Evidence For Human Occupation In The Bismarck Archipelago, Papua New Guinea. Australian Archaeology, 2002, 54, 55-57.	0.3	56
24	Possible source of ancient carbon in phytolith concentrates from harvested grasses. Biogeosciences, 2012, 9, 1873-1884.	1.3	55
25	Matching Dendrochronological Dates with the Southern Hemisphere ^{14}C Bomb Curve to Confirm Annual Tree Rings in *Pseudolmedia rigida* from Bolivia. Radiocarbon, 2015, 57, 1-13.	0.8	54
26	Towards producing pure phytolith concentrates from plants that are suitable for carbon isotopic analysis. Review of Palaeobotany and Palynology, 2013, 197, 179-185.	0.8	53
27	Radiocarbon Dating of Wood Using Different Pretreatment Procedures: Application to the Chronology of Rotoehu Ash, New Zealand. Radiocarbon, 2001, 43, 239-248.	0.8	52
28	Smoke radiocarbon measurements from Indonesian fires provide evidence for burning of millennia-aged peat. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 12419-12424.	3.3	52
29	Radiocarbon Dating of the Human Occupation of Australia Prior to 40 ka BP—Successes and Pitfalls. Radiocarbon, 2001, 43, 1139-1145.	0.8	46
30	Behavioral Variability in ABA Chemical Pretreatment Close to the ^{14}C Age Limit. Radiocarbon, 2013, 55, 534-544.	0.8	45
31	Does Cedrela always form annual rings? Testing ring periodicity across South America using radiocarbon dating. Trees - Structure and Function, 2017, 31, 1999-2009.	0.9	45
32	Simple, Rapid, and Cost Effective: A Screening Method for ^{14}C Analysis of Small Carbonate Samples. Radiocarbon, 2013, 55, 631-640.	0.8	43
33	Evaluation of iron and cobalt powders as catalysts for 14C-AMS target preparation. Nuclear Instruments & Methods in Physics Research B, 2007, 259, 308-315.	0.6	41
34	Annual growth rings in a sample of Paraná pine (Araucaria angustifolia): Toward improving the 14C calibration curve for the Southern Hemisphere. Quaternary Geochronology, 2015, 25, 96-103.	0.6	40
35	Age of riverine carbon suggests rapid export of terrestrial primary production in tropics. Geophysical Research Letters, 2013, 40, 5687-5691.	1.5	38
36	Unambiguous evidence of old soil carbon in grass biosilica particles. Biogeosciences, 2016, 13, 1269-1286.	1.3	33

#	Article	IF	Citations
37	Chronology of the Atmospheric Mercury in Lagoa da Pata Basin, Upper Rio Negro Region of Brazilian Amazon. Radiocarbon, 2001, 43, 801-808.	0.8	32
38	Determining VOCs Reactivity for Ozone Forming Potential in the Megacity of São Paulo. Aerosol and Air Quality Research, 2018, 18, 2460-2474.	0.9	32
39	14C AMS dating of fires in the central Amazon rain forest. Nuclear Instruments & Methods in Physics Research B, 2000, 172, 761-766.	0.6	31
40	HPLC Purification of Higher Plant-Dervied Lignin Phenols for Compound Specific Radiocarbon Analysis. Analytical Chemistry, 2010, 82, 8931-8938.	3.2	31
41	Rapid sample preparation of dissolved inorganic carbon in natural waters using a headspace extraction approach for radiocarbon analysis by accelerator mass spectrometry. Limnology and Oceanography: Methods, 2014, 12, 174-190.	1.0	30
42	Plant growth conditions alter phytolith carbon. Frontiers in Plant Science, 2015, 6, 753.	1.7	30
43	Development of a Robust ^{14}C Chronology for Lynch's Crater (North Queensland,) Tj ETQq1 1 0.784314 rgBT /Overlock	0.8	29
44	Direct uptake of organically derived carbon by grass roots and allocation in leaves and phytoliths: ^{13}C labeling evidence. Biogeosciences, 2016, 13, 1693-1703.	1.3	28
45	Main ozone-forming VOCs in the city of Sao Paulo: observations, modelling and impacts. Air Quality, Atmosphere and Health, 2017, 10, 421-435.	1.5	28
46	Temporal deconvolution of vascular plant-derived fatty acids exported from terrestrial watersheds. Geochimica Et Cosmochimica Acta, 2019, 244, 502-521.	1.6	28
47	Blank Corrections for Ramped Pyrolysis Radiocarbon Dating of Sedimentary and Soil Organic Carbon. Analytical Chemistry, 2014, 86, 12085-12092.	3.2	27
48	Advances in the graphitization protocol at the Radiocarbon Laboratory of the Universidade Federal Fluminense (LAC-UFF) in Brazil. Nuclear Instruments & Methods in Physics Research B, 2015, 361, 402-405.	0.6	27
49	The local marine reservoir effect at Kalba (UAE) between the Neolithic and Bronze Age: An indicator of sea level and climate changes. Quaternary Geochronology, 2017, 42, 105-116.	0.6	26
50	Intercomparison of ^{14}C Analysis of Carbonaceous Aerosols: Exercise 2009. Radiocarbon, 2013, 55, 1496-1509.	0.8	23
51	Understanding Holocene variations in the vegetation of Sao Joao River basin, southeastern coast of Brazil, using phytolith and carbon isotopic analyses. Palaeogeography, Palaeoclimatology, Palaeoecology, 2014, 415, 59-68.	1.0	23
52	Black carbon aerosol dynamics and isotopic composition in Alaska linked with boreal fire emissions and depth of burn in organic soils. Global Biogeochemical Cycles, 2015, 29, 1977-2000.	1.9	23
53	The phytolith carbon sequestration concept: Fact or fiction? A comment on "Occurrence, turnover and carbon sequestration potential of phytoliths in terrestrial ecosystems by Song et al. doi: 10.1016/j.earscirev.2016.04.007" Earth-Science Reviews, 2017, 164, 251-255.	4.0	23
54	Radiocarbon analysis confirms annual periodicity in Cedrela odorata tree rings from the equatorial Amazon. Quaternary Geochronology, 2020, 58, 101079.	0.6	23

#	Article	IF	Citations
55	Palaeodietary inferences based on isotopic data for pre-Hispanic populations of the Central Mountains of Argentina. International Journal of Osteoarchaeology, 2009, 19, 237-249.	0.6	21
56	234U and 230Th determination by FIA-ICP-MS and application to uranium-series disequilibrium in marine samples. Journal of Environmental Radioactivity, 2006, 88, 109-117.	0.9	20
57	Bag of Tricks: A Set of Techniques and other Resources to Help ^{14}C Laboratory Setup, Sample Processing, and Beyond. Radiocarbon, 2017, 59, 785-801.	0.8	19
58	Source signatures from combined isotopic analyses of PM2.5 carbonaceous and nitrogen aerosols at the peri-urban Taehwa Research Forest, South Korea in summer and fall. Science of the Total Environment, 2019, 655, 1505-1514.	3.9	17
59	Radiocarbon bomb-peak signal in tree-rings from the tropical Andes register low latitude atmospheric dynamics in the Southern Hemisphere. Science of the Total Environment, 2021, 774, 145126.	3.9	17
60	A comparison of U/Th and rapid-screen ^{14}C dates from Line Island fossil corals. Geochemistry, Geophysics, Geosystems, 2016, 17, 833-845.	1.0	16
61	Using radiocarbon to constrain black and organic carbon aerosol sources in Salt Lake City. Journal of Geophysical Research D: Atmospheres, 2017, 122, 9843-9857.	1.2	16
62	Improved radiocarbon analyses of modern human hair to determine the year-of-death by cross-flow nanofiltered amino acids: common contaminants, implications for isotopic analysis, and recommendations. Rapid Communications in Mass Spectrometry, 2015, 29, 1765-1773.	0.7	15
63	Nonannual tree rings in a climate-sensitive *Prioria copaifera* chronology in the Atrato River, Colombia. Ecology and Evolution, 2017, 7, 6334-6345.	0.8	14
64	Radiocarbon Dating and Intercomparison of Some Early Historical Radiocarbon Samples. Radiocarbon, 2018, 60, 535-548.	0.8	13
65	Radiocarbon measurements at LAC-UFF: Recent performance. Nuclear Instruments & Methods in Physics Research B, 2015, 361, 341-345.	0.6	12
66	Application of the ECT9 protocol for radiocarbon-based source apportionment of carbonaceous aerosols. Atmospheric Measurement Techniques, 2021, 14, 3481-3500.	1.2	12
67	When the carbon being dated is not what you think it is: Insights from phytolith carbon research. Quaternary Science Reviews, 2018, 197, 162-174.	1.4	11
68	Inter-comparison of elemental and organic carbon mass measurements from three North American national long-term monitoring networks at a co-located site. Atmospheric Measurement Techniques, 2019, 12, 4543-4560.	1.2	11
69	Investigating δ^{13}C and Δ^{14}C within *Mytilus californianus* shells as proxies of upwelling intensity. Geochemistry, Geophysics, Geosystems, 2013, 14, 1856-1865.	1.0	10
70	Annual nature of the growth rings of Araucaria araucana confirmed by radiocarbon analysis. Quaternary Geochronology, 2015, 30, 42-47.	0.6	10
71	Assessment of the regional fossil fuel CO2 distribution through Δ^{14}C patterns in ipê leaves: The case of Rio de Janeiro state, Brazil. City and Environment Interactions, 2019, 1, 100001.	1.8	10
72	Elastic, inelastic scattering and fusion of the 14N +59Co system at energies close to the coulomb barrier. European Physical Journal A, 1998, 1, 143-149.	1.0	9

#	Article	IF	Citations
73	Accuracy and precision of &lt;sup&gt;14&lt;/sup&gt;C-based source apportionment of organic and elemental carbon in aerosols using the Swiss_4S protocol. Atmospheric Measurement Techniques, 2015, 8, 3729-3743.	1.2	9
74	Reassessment of the 13C/12C and 14C/12C isotopic fractionation ratio and its impact on high-precision radiocarbon dating. Geochimica Et Cosmochimica Acta, 2017, 213, 330-345.	1.6	9
75	Growth Assessment of Native Tree Species from the Southwestern Brazilian Amazonia by Post-AD 1950 14C Analysis: Implications for Tropical Dendroclimatology Studies and Atmospheric 14C Reconstructions. Forests, 2021, 12, 1177.	0.9	9
76	Brazilian accelerator mass spectrometry program. Nuclear Instruments & Methods in Physics Research B, 1997, 123, 34-38.	0.6	7
77	Behavioral Variability in ABA Chemical Pretreatment Close to the 14C Age Limit. Radiocarbon, 2013, 55, .	0.8	7
78	From radiocarbon analysis to interpretation: A comment on â€œPhytolith Radiocarbon Dating in Archaeological and Paleoecological Research: A Case Study of Phytoliths from Modern Neotropical Plants and a Review of the Previous Dating Evidenceâ€; Journal of Archaeological Science (2015), doi: 10.1016/j.jas.2015.06.002.â€•by Dolores R. Piperno. Journal of Archaeological Science, 2016, 71, 51-58.	1.2	7
79	Seasonal Cycle of Isotopeâ€Based Source Apportionment of Elemental Carbon in Airborne Particulate Matter and Snow at Alert, Canada. Journal of Geophysical Research D: Atmospheres, 2020, 125, e2020JD033125.	1.2	6
80	Elastic scattering of27Al+27Alat near barrier energies. Physical Review C, 1998, 58, 3445-3450.	1.1	5
81	Current status of the Brazilian AMS program. Nuclear Instruments & Methods in Physics Research B, 2000, 172, 82-86.	0.6	5
82	The Brazilian Bragg curve detector built for AMS studies. Nuclear Instruments & Methods in Physics Research B, 2000, 172, 310-315.	0.6	5
83	Preparation for Radiocarbon Analysis. , 2016, , 279-315.		5
84	Use of 14C-AMS in the study of biological production in coastal upwelling areas. Brazilian Journal of Physics, 2004, 34, 732-736.	0.7	5
85	Dynamic Nuclear Polarization NMR as a new tool to investigate the nature of organic compounds occluded in plant silica particles. Scientific Reports, 2017, 7, 3430.	1.6	4
86	14C Measurements Elucidate Isotopic Differences between Nails and Hair in Modern Humans. Radiocarbon, 2014, 56, 53-65.	0.8	3
87	Simple, Rapid, and Cost Effective: A Screening Method for 14C Analysis of Small Carbonate Samples. Radiocarbon, 2013, 55, .	0.8	3
88	Applications of AMS 14C Measurements in Environmental and Economical Problems. Nuclear Physics A, 2004, 734, E116-E119.	0.6	2
89	Method development for 234U and 230Th determination and application to fossil deep-water coral and authigenic carbonate dating from the Campos Basin - Brazil. Journal of the Brazilian Chemical Society, 2012, 23, 538-545.	0.6	2
90	Misunderstandings Concerning the Significance of AMS Background 14C Measurements. Radiocarbon, 2018, 60, 727-749.	0.8	2