Cecile E Gautheron

List of Publications by Year
in descending order

80	2,949	159585 30	168389 53
papers	citations	h-index	g-index

107	107	107	2373
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Effect of alpha-damage annealing on apatite (Uâ€“Th)/He thermochronology. Chemical Geology, 2009, 266, 157-170.	3.3	289
2	Helium signature of the subcontinental lithospheric mantle. Earth and Planetary Science Letters, 2002, 199, 39-47.	4.4	260
3	Accounting for long alpha-particle stopping distances in (Uâ€“Thâ€“Sm)/He geochronology: Refinement of the baseline case. Geochimica Et Cosmochimica Acta, 2011, 75, 7779-7791.	3.9	247
4	He, Ne and Ar composition of the European lithospheric mantle. Chemical Geology, 2005, 217, 97-112.	3.3	124
5	Thermal imprint of rift-related processes in orogens as recorded in the Pyrenees. Earth and Planetary Science Letters, 2014, 408, 296-306.	4.4	110
6	Accounting for long alpha-particle stopping distances in (Uâ€“Thâ€“Sm)/He geochronology: 3D modeling of diffusion, zoning, implantation, and abrasion. Geochimica Et Cosmochimica Acta, 2012, 96, 44-56.	3.9	96
7	Postâ€breakup tectonics in southeast Brazil from thermochronological data and combined inverseâ€forward thermal history modeling. Journal of Geophysical Research, 2012, 117, .	3.3	92
8	A Monte Carlo approach to diffusion applied to noble gas/helium thermochronology. Chemical Geology, 2010, 273, 212-224.	3.3	90
9	Chemical influence on Î±-recoil damage annealing in apatite: Implications for (Uâ€“Th)/He dating. Chemical Geology, 2013, 351, 257-267.	3.3	90
10	Innovations in (Uâ€“Th)/He, Fission Track, and Trapped Charge Thermochronometry with Applications to Earthquakes, Weathering, Surfaceâ€Mantle Connections, and the Growth and Decay of Mountains. Tectonics, 2019, 38, 3705-3739.	2.8	76
11	Impact of apatite chemical composition on (U-Th)/He thermochronometry: An atomistic point of view. Geochimica Et Cosmochimica Acta, 2015, 167, 162-176.	3.9	74
12	Dynamic topography control on Patagonian relief evolution as inferred from low temperature thermochronology. Earth and Planetary Science Letters, 2013, 364, 157-167.	4.4	68
13	Rift-to-collision transition recorded by tectonothermal evolution of the northern Pyrenees. Tectonics, 2016, 35, 907-933.	2.8	63
14	Influence of vacancy damage on He diffusion in apatite, investigated at atomic to mineralogical scales. Geochimica Et Cosmochimica Acta, 2017, 197, 87-103.	3.9	59
15	Timing and rate of exhumation along the Litang fault system, implication for fault reorganization in Southeast Tibet. Tectonics, 2015, 34, 1219-1243.	2.8	58
16	Oligoceneâ€“Miocene burial and exhumation of the Southern Pyrenean foreland quantified by low-temperature thermochronology. Journal of the Geological Society, 2013, 170, 67-77.	2.1	55
17	Late Neogene exhumation and relief development of the Aar and Aiguilles Rouges massifs (Swiss Alps) from lowâ€temperature thermochronology modeling and ⁴He/³He thermochronometry. Journal of Geophysical Research, 2012, 117, .	3.3	54
18	Improving paleohydrological and diagenetic reconstructions in calcite veins and breccia of a sedimentary basin by combining Î”47 temperature, Î´18Owater and U-Pb age. Chemical Geology, 2018, 481, 1-17.	3.3	52

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19	Eocene exhumation of the Tuareg Shield (Sahara Desert, Africa). Geology, 2013, 41, 615-618.	4.4	48
20	(Uâ€“Th)/Ne chronometry. Earth and Planetary Science Letters, 2006, 243, 520-535.	4.4	47
21	Reconstruction of low temperature (<100ÂÂ°C) burial in sedimentary basins: A comparison of geothermometer in the intracontinental Paris Basin. Marine and Petroleum Geology, 2014, 53, 71-87.	3.3	46
22	Helium trapping in apatite damage: Insights from (U-Th-Sm)/He dating of different granitoid lithologies. Chemical Geology, 2017, 470, 116-131.	3.3	41
23	Postrift history of the eastern central Atlantic passive margin: Insights from the Saharan region of South Morocco. Journal of Geophysical Research: Solid Earth, 2015, 120, 4645-4666.	3.4	37
24	Direct dating of thickâ€•and thinâ€•skin thrusts in the Peruvian Subandean zone through apatite (<scp><scp>U</scp></scp>â€“<scp><scp>Th</scp></scp>)/<scp><scp>He</scp></scp> and fission track thermochronometry. Basin Research, 2013, 25, 419-435.	2.7	35
25	Combined dating of goethites and kaolinites from ferruginous duricrusts. Deciphering the Late Neogene erosion history of Central Amazonia. Chemical Geology, 2018, 479, 136-150.	3.3	35
26	Foreland exhumation controlled by crustal thickening in the Western Alps. Geology, 2017, 45, 139-142.	4.4	34
27	Tectonic Control on Rapid Late Mioceneâ€”Quaternary Incision of the Mekong River Knickzone, Southeast Tibetan Plateau. Tectonics, 2020, 39, e2019TC005782.	2.8	34
28	Tectonothermal Evolution of the Cameros Basin: Implications for Tectonics of North Iberia. Tectonics, 2019, 38, 440-469.	2.8	33
29	(Un)Coupled thrust beltâ€•foreland deformation in the northern Patagonian Andes: New insights from the Esquelâ€•Gastre sector (41Â°30â€²â€“43Â°S). Tectonics, 2016, 35, 2636-2656.	2.8	31
30	Reproducibility of Thermal History Reconstruction From Apatite Fissionâ€•Track and (Uâ€•Th)/He Data. Geochemistry, Geophysics, Geosystems, 2018, 19, 2411-2436.	2.5	31
31	Evidence for a mantle component shown by rare gases, C and N isotopes in polycrystalline diamonds from Orapa (Botswana). Earth and Planetary Science Letters, 2005, 240, 559-572.	4.4	30
32	Slab flattening, magmatism, and surface uplift in the Cordillera Occidental (northern Peru). Geology, 2015, 43, 1031-1034.	4.4	26
33	Polyphased Inversions of an Intracontinental Rift: Case Study of the Marrakech High Atlas, Morocco. Tectonics, 2018, 37, 818-841.	2.8	26
34	Rift flank uplift at the Gulf of California: No requirement for asthenospheric upwelling. Geology, 2014, 42, 259-262.	4.4	24
35	Neogene exhumation and relief evolution in the eastern Betics (<scp>SE</scp> Spain): Insights from the Sierra de Gador. Terra Nova, 2017, 29, 91-97.	2.1	23
36	Helium diffusion in pure hematite (Î±-Fe2O3) for thermochronometric applications: A theoretical multi-scale study. Computational and Theoretical Chemistry, 2017, 1099, 21-28.	2.5	23

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37	4He behavior in calcite filling viewed by (Uâ€“Th)/He dating, 4He diffusion and crystallographic studies. Geochimica Et Cosmochimica Acta, 2014, 125, 414-432.	3.9	22
38	A multi-method, multi-scale theoretical study of He and Ne diffusion in zircon. Geochimica Et Cosmochimica Acta, 2020, 268, 348-367.	3.9	22
39	Post-orogenic exhumation in the western Pyrenees: evidence for extension driven by pre-orogenic inheritance. Journal of the Geological Society, 2021, 178, .	2.1	22
40	Constraints on the noble gas composition of the deep mantle by bubble-by-bubble analysis of a volcanic glass sample from Iceland. Chemical Geology, 2015, 417, 173-183.	3.3	20
41	Noble Gases Deliver Cool Dates from Hot Rocks. Elements, 2020, 16, 303-309.	0.5	19
42	Late Paleozoic Ice Age glaciers shaped East Antarctica landscape. Earth and Planetary Science Letters, 2019, 506, 123-133.	4.4	17
43	Extensional reactivation of the Penninic frontal thrust 3â€‰Myr ago as evidenced by Uâ€“Pb dating on calcite in fault zone cataclasite. Solid Earth, 2021, 12, 237-251.	2.8	16
44	Unraveling the exhumation history of high-pressure ophiolites using magnetite (U-Th-Sm)/He thermochronometry. Earth and Planetary Science Letters, 2020, 543, 116359.	4.4	15
45	Technical note: Analytical protocols and performance for apatite and zircon (Uâ€“Th)â€‰âˆ•â€‰He analysis on quadrupole and magnetic sector mass spectrometer systems between 2007 and 2020. Geochronology, 2021, 3, 351-370.	2.5	15
46	Helium isotope systematics in the vicinity of the Azores triple junction: Constraints on the Azores geodynamics. Chemical Geology, 2014, 372, 62-71.	3.3	14
47	Tectonoâ€Stratigraphic and Thermal Evolution of the Western Betic Flysch: Implications for the Geodynamics of South Iberian Margin and Alboran Domain. Tectonics, 2020, 39, e2020TC006093.	2.8	14
48	Constraints on the DUPAL anomaly from helium isotope systematics in the Southwest Indian mid-ocean ridge basalts. Chemical Geology, 2015, 417, 163-172.	3.3	12
49	Mesozoic evolution of NW Africa: implications for the Central Atlantic Ocean dynamics. Journal of the Geological Society, 2017, 174, 817-835.	2.1	12
50	Climate control on Early Cenozoic denudation of the Namibian margin as deduced from new thermochronological constraints. Earth and Planetary Science Letters, 2019, 527, 115779.	4.4	12
51	Computational investigation of interstitial neon diffusion in pure hematite. Computational Materials Science, 2017, 128, 67-74.	3.0	11
52	A Tortonian onset for the Algerian margin inversion: Evidence from lowâ€temperature thermochronology. Terra Nova, 2019, 31, 39-48.	2.1	11
53	Neogene exhumation history of the Bergell massif (southeast Central Alps). Terra Nova, 2013, 25, 110-118.	2.1	10
54	Differential Exhumation of the Eastern Cordillera in the Central Andes: Evidence for Southâ€Verging Backthrusting (Abancay Deflection, Peru). Tectonics, 2021, 40, e2020TC006314.	2.8	9

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55	Neon diffusion in goethite, Î±-FeO(OH): a theoretical multi-scale study. Physics and Chemistry of Minerals, 2020, 47, 1.	0.8	9
56	Reading the climate signals hidden in bauxite. Geochimica Et Cosmochimica Acta, 2022, 323, 40-73.	3.9	9
57	Cenozoic landforms and post-orogenic landscape evolution of the Balkanide orogen: Evidence for alternatives to the tectonic denudation narrative in southern Bulgaria. Geomorphology, 2017, 276, 203-221.	2.6	8
58	Cretaceous and late Cenozoic uplift of a Variscan Massif: The case of the French Massif Central studied through low-temperature thermochronometry. Lithosphere, 2020, 12, 133-149.	1.4	8
59	The role of slab geometry in the exhumation of cordilleran-type orogens and their forelands: Insights from northern Patagonia. Bulletin of the Geological Society of America, 2021, 133, 2535-2548.	3.3	8
60	Pliocene river capture and incision of the northern Altiplano: Machu Picchu, Peru. Journal of the Geological Society, 2021, 178, .	2.1	7
61	(U-Th)/He Dating of Supergene Iron (Oxyhydr-)Oxides of the Nefza-Sejnane District (Tunisia): New Insights into Mineralization and Mammalian Biostratigraphy. Minerals (Basel, Switzerland), 2021, 11, 260.	2.0	7
62	Investigating the Shallow to Mid-Depth (>100â€“300 Â°C) Continental Crust Evolution with (U-Th)/He Thermochronology: A Review. Minerals (Basel, Switzerland), 2022, 12, 563.	2.0	7
63	First timing constraints on the Ecuadorian Coastal Cordillera exhumation: Geodynamic implications. Journal of South American Earth Sciences, 2021, 105, 103007.	1.4	6
64	Zircon (U-Th)/He Closure Temperature Lower Than Apatite Thermochronometric Systems: Reconciliation of a Paradox. Minerals (Basel, Switzerland), 2022, 12, 145.	2.0	6
65	Role of Defects and Radiation Damage on He Diffusion in Magnetite: Implication for (U-Th)/He Thermochronology. Minerals (Basel, Switzerland), 2022, 12, 590.	2.0	6
66	Thermal record of the building of an orogen in the retroâ€foreland basin: Insight from basement and detrital thermochronology in the eastern Pyrenees and the north Pyrenean basin (France). Basin Research, 2021, 33, 2763-2791.	2.7	5
67	Cenozoic weathering of fluvial terraces and emergence of biogeographic boundaries in Central Amazonia. Global and Planetary Change, 2022, 212, 103815.	3.5	5
68	Where are the limits of Mesozoic intracontinental sedimentary basins of southern France?. Marine and Petroleum Geology, 2020, 121, 104589.	3.3	4
69	Topography, structural and exhumation history of the Admiralty Mountains region, northern Victoria Land, Antarctica. Geoscience Frontiers, 2020, 11, 1841-1858.	8.4	4
70	Apatite (U-Th-Sm)/He date dispersion: First insights from machine learning algorithms. Earth and Planetary Science Letters, 2021, 554, 116655.	4.4	4
71	French Guiana margin evolution: From Gondwana breakâ€up to Atlantic opening. Terra Nova, 2021, 33, 415-422.	2.1	4
72	Re-interpretation of the existence of a primitive plume under Australia based on neon isotope fractionation during step heating. Terra Nova, 2003, 15, 36-39.	2.1	3

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73	Tectono-thermal history of the intraplate San Bernardo fold and thrust belt in central Patagonia inferred by low-temperature thermochronology. Journal of South American Earth Sciences, 2021, 109, 103333.	1.4	2
74	Reply to: â€œRecycledâ€•volatiles in mantle derived diamondsâ€”Evidence from nitrogen and noble gas isotopic data. Earth and Planetary Science Letters, 2006, 252, 220-222.	4.4	0
75	Development and calibration of a new method geo-chronometric (U-Th-Sm)/He on magnetite and spinel in ultrabasic rocks. , 2021, , .		0
76	Record of Cenozoic weathering episodes in central Amazon basin. , 2021, , .		0
77	First Apatite (U-Th)/He and apatite fission-track thermochronology dataset from the Abancay Deflection (Eastern Cordillera, Southern Peru).. Data in Brief, 2022, 40, 107748.	1.0	0
78	Exhumation and tectonic unroofing of late Miocene granites in Elba, Italy. , 2021, , .		0
79	Detailed study of a lateritic cover in NE French Guiana: dynamic evolution through time extracted from mineralogy, geochemistry and geochronology. , 2021, , .		0
80	Quaternary ironstones in the Xingu River, eastern Amazonia (Brazil). Quaternary Research, 0, , 1-14.	1.7	0