Gabriel GutiÃ©rrez-Alonso

List of Publications by Year
in descending order

106 papers	5,723 citations	76326 40 h-index	79698 73 g-index
109 all docs	109 docs citations	109 times ranked	2733 citing authors

#	Article	IF	Citations
1	Evolution of the Rheic Ocean. Gondwana Research, 2010, 17, 194-222.	6.0	540
2	Origin of the Rheic Ocean: Rifting along a Neoproterozoic suture?. Geology, 2006, 34, 325.	4.4	304
3	Diachronous Variscan tectonothermal activity in the NW Iberian Massif: Evidence from 40Ar/39Ar dating of regional fabrics. Tectonophysics, 1997, 277, 307-337.	2.2	256
4	A brief history of the Rheic Ocean. Geoscience Frontiers, 2012, 3, 125-135.	8.4	225
5	The importance of along-margin terrane transport in northern Gondwana: insights from detrital zircon parentage in Neoproterozoic rocks from Iberia and Brittany. Earth and Planetary Science Letters, 2002, 204, 75-88.	4.4	188
6	Neoproterozoic-early Palaeozoic tectonostratigraphy and palaeogeography of the peri-Gondwanan terranes: Amazonian v. West African connections. Geological Society Special Publication, 2008, 297, 345-383.	1.3	178
7	New ideas on the Proterozoic-Early Palaeozoic evolution of NW Iberia: insights from Uâ€“Pb detrital zircon ages. Precambrian Research, 2000, 102, 185-206.	2.7	170
8	Variscan collisional magmatism and deformation in NW Iberia: constraints from Uâ€“Pb geochronology of granitoids. Journal of the Geological Society, 2000, 157, 565-576.	2.1	157
9	Self-subduction of the Pangaean globalÂplate. Nature Geoscience, 2008, 1, 549-553.	12.9	145
10	Diachronous postâ€orogenic magmatism within a developing orocline in Iberia, European Variscides. Tectonics, 2011, 30, .	2.8	143
11	Lithospheric delamination in the core of Pangea: Sm-Nd insights from the Iberian mantle. Geology, 2011, 39, 155-158.	4.4	130
12	Kinematic constraints on buckling a lithospheric-scale orocline along the northern margin of Gondwana: A geologic synthesis. Tectonophysics, 2013, 582, 25-49.	2.2	127
13	Terrane accretion and dispersal in the northern Gondwana margin. An Early Paleozoic analogue of a long-lived active margin. Tectonophysics, 2003, 365, 221-232.	2.2	121
14	Influence of mechanical stratigraphy and kinematics on fault scaling relations. Journal of Structural Geology, 1997, 19, 171-183.	2.3	119
15	Gondwanan basement terranes of the Variscanâ€“Appalachian orogen: Baltican, Saharan and West African hafnium isotopic fingerprints in Avalonia, Iberia and the Armorican Terranes. Tectonophysics, 2016, 681, 278-304.	2.2	117
16	Oroclines: Thick and thin. Bulletin of the Geological Society of America, 2013, 125, 643-663.	3.3	113
17	The Ediacaranâ€“Early Cambrian detrital zircon record of NW Iberia: possible sources and paleogeographic constraints. International Journal of Earth Sciences, 2014, 103, 1335-1357.	1.8	106
18	New time constraints on lithospheric-scale oroclinal bending of the Ibero-Armorican Arc: a palaeomagnetic study of earliest Permian rocks from Iberia. Journal of the Geological Society, 2010, 167, 127-143.	2.1	90

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19	Provenance variability along the Early Ordovician north Gondwana margin: Paleogeographic and tectonic implications of U-Pb detrital zircon ages from the Armorican Quartzite of the Iberian Variscan belt. Bulletin of the Geological Society of America, 2014, 126, 702-719.	3.3	89
20	Thrust emplacement of the Hispaniola peridotite belt: Orogenic expression of the mid-Cretaceous Caribbean arc polarity reversal?. Geology, 1996, 24, 1143.	4.4	87
21	Provenance analysis of the Paleozoic sequences of the northern Gondwana margin in NW Iberia: Passive margin to Variscan collision and orocline development. Gondwana Research, 2013, 23, 1089-1103.	6.0	87
22	Oroclines of the Variscan orogen of Iberia: Paleocurrent analysis and paleogeographic implications. Earth and Planetary Science Letters, 2012, 329-330, 60-70.	4.4	86
23	The missing Rheic Ocean magmatic arcs: Provenance analysis of Late Paleozoic sedimentary clastic rocks of SW Iberia. Gondwana Research, 2012, 22, 882-891.	6.0	85
24	Dating of lithospheric buckling: 40Ar/39Ar ages of syn-orocline strikeâ€“slip shear zones in northwestern Iberia. Tectonophysics, 2015, 643, 44-54.	2.2	85
25	Orocline timing through joint analysis: Insights from the Ibero-Armorican Arc. Tectonophysics, 2011, 507, 31-46.	2.2	77
26	Buckling an orogen: The Cantabrian Orocline. GSA Today, 2012, , 4-9.	2.0	77
27	Probing crustal and mantle lithosphere origin through Ordovician volcanic rocks along the Iberian passive margin of Gondwana. Tectonophysics, 2008, 461, 166-180.	2.2	76
28	Assembly of the Armorica Microplate: A Strikeâ€Slip Terrane Delivery? Evidence from Uâ€Pb Ages of Detrital Zircons. Journal of Geology, 2002, 110, 619-626.	1.4	70
29	Advances in U-Pb geochronology using a frequency quintupled Nd:YAG based laser ablation system (? =) Tj ETQq1 1 0.784314 rgBT /Ov	3.0	70
30	Geochronology and geochemistry of the Pola de Allande granitoids (northern Spain): their bearing on the Cadomian-Avalonian evolution of northwest Iberia. Canadian Journal of Earth Sciences, 1998, 35, 1439-1453.	1.3	59
31	3D Digital Surveying and Modelling of Cave Geometry: Application to Paleolithic Rock Art. Sensors, 2009, 9, 1108-1127.	3.8	54
32	Analogue modeling of lithospheric-scale orocline buckling: Constraints on the evolution of the Iberian-Armorican Arc. Bulletin of the Geological Society of America, 2012, 124, 1293-1309.	3.3	51
33	Birth and demise of the Rheic Ocean magmatic arc(s): Combined Uâ€“Pb and Hf isotope analyses in detrital zircon from SW Iberia siliciclastic strata. Lithos, 2017, 278-281, 383-399.	1.4	51
34	Reconciling competing models for the tectono-stratigraphic zonation of the Variscan orogen in Western Europe. Tectonophysics, 2016, 681, 209-219.	2.2	47
35	White-mica 'crystallinity', finite strain and cleavage development across a large Variscan structure, NW Spain. Journal of the Geological Society, 1996, 153, 287-299.	2.1	46
36	Orocline triggered lithospheric delamination. , 2004, , 121-130.		45

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37	Iberian late-Variscan granitoids: Some considerations on crustal sources and the significance of â€œmantle extraction agesâ€. Lithos, 2011, 123, 121-132.	1.4	45
38	Using airborne LiDAR sensing technology and aerial orthoimages to unravel roman water supply systems and gold works in NW Spain (Eria valley, LeÃ³n). Journal of Archaeological Science, 2015, 53, 356-373.	2.4	45
39	Crustal sources in Lower Palaeozoic rocks from NW Iberia: insights from laser ablation Uâ€“Pb ages of detrital zircons. Journal of the Geological Society, 1999, 156, 1065-1068.	2.1	44
40	Arc-related Ediacaran magmatism along the northern margin of Gondwana: Geochronology and isotopic geochemistry from northern Iberia. Gondwana Research, 2015, 27, 216-227.	6.0	44
41	Rifting along the northern Gondwana margin and the evolution of the Rheic Ocean: A Devonian age for the El Castillo volcanic rocks (Salamanca, Central Iberian Zone). Tectonophysics, 2008, 461, 157-165.	2.2	43
42	Improving archaeological prospection using localized UAVs assisted photogrammetry: An example from the Roman Gold District of the Eria River Valley (NW Spain). Journal of Archaeological Science: Reports, 2016, 5, 509-520.	0.5	41
43	Strain partitioning in the footwall of the Somiedo Nappe: structural evolution of the Narcea Tectonic Window, NW Spain. Journal of Structural Geology, 1996, 18, 1217-1229.	2.3	40
44	Amazonian Mesoproterozoic basement in the core of the Ibero-Armorican Arc: 40Ar/39Ar detrital mica ages complement the zircon's tale. Geology, 2005, 33, 637.	4.4	40
45	Conical folding in the core of an orocline. A geometric analysis from the Cantabrian Arc (Variscan) Tj ETQq1 1 0.784314 rgBT /Overloc	2.3	39
46	Structures and mechanisms associated with development of a fold in the Cantabrian Zone thrust belt, NW Spain. Journal of Structural Geology, 1999, 21, 653-670.	2.3	34
47	The structure and the phyllosilicates (chemistry, crystallinity and texture) of Talas Ala-Tau (Tien Shan,) Tj ETQq1 1 0.784314 rgBT /Ove 103-127.	2.2	33
48	Paleomagnetism of the Central Iberian curve's putative hinge: Too many oroclines in the Iberian Variscides. Gondwana Research, 2016, 39, 96-113.	6.0	33
49	Granite emplacement in orogenic compressional conditions: the La Albercaâ€“BÃ©jar granitic area (Spanish Central System, Variscan Iberian Belt). Journal of Structural Geology, 1999, 21, 1419-1440.	2.3	31
50	Was there a super-eruption on the Gondwanan coast 477 Ma ago?. Tectonophysics, 2016, 681, 85-94.	2.2	30
51	Tectonic evolution of NW Iberia during the Paleozoic inferred from the geochemical record of detrital rocks in the Cantabrian Zone. Lithos, 2013, 182-183, 211-228.	1.4	29
52	Exhuming a cold case: The early granodiorites of the northwest Iberian Variscan beltâ€”A Visean magmatic flare-up?. Lithosphere, 2018, 10, 194-216.	1.4	28
53	Transfer of displacement from multiple slip zones to a major detachment in an extensional regime: Example from the Dead Sea rift, Israel. Bulletin of the Geological Society of America, 1997, 109, 1021-1035.	3.3	27
54	The North American Cordillera and West European Variscides: Contrasting interpretations of similar mountain systems. Gondwana Research, 2010, 17, 516-525.	6.0	27

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55	Formation of chocolate-tablet boudins in a foreland fold and thrust belt: A case study from the external Variscides (Almograve, Portugal). Journal of Structural Geology, 2011, 33, 1639-1649.	2.3	27
56	Significance of detrital zircons in Siluro-Devonian rocks from Iberia. Journal of the Geological Society, 2015, 172, 309-322.	2.1	27
57	New kinematic constraints on the Cantabrian orocline: A paleomagnetic study from the PeÃ±alba and Truchas synclines, NW Spain. Tectonophysics, 2016, 681, 195-208.	2.2	27
58	The origin of tablet boudinage: Results from experiments using powerâ€“law rock analogs. Tectonophysics, 2011, 510, 327-336.	2.2	26
59	Illitic substitution in micas of very low-grade metamorphic clastic rocks. European Journal of Mineralogy, 2006, 18, 59-69.	1.3	23
60	U-Pb depositional age for the upper Barrios Formation (Armorican Quartzite facies) in the Cantabrian zone of Iberia: Implications for stratigraphic correlation and paleogeography. , 2007, , .		23
61	The origin of the Variscan upper allochthons in the Ortegal Complex, northwestern Iberia: Smâ€“Nd isotopic constraints on the closure of the Rheic Ocean. Canadian Journal of Earth Sciences, 2008, 45, 651-668.	1.3	23
62	Rheic Ocean mafic complexes: overview and synthesis. Geological Society Special Publication, 2009, 327, 343-369.	1.3	21
63	Isotope (Uâ€“Pb, Smâ€“Nd, Rbâ€“Sr) geochronology of alkaline basic plutons of the Kuznetsk Alatau. Russian Geology and Geophysics, 2014, 55, 1264-1277.	0.7	21
64	Crustal melting and recycling: geochronology and sources of Variscan syn-kinematic anatectic granitoids of the Tormes Dome (Central Iberian Zone). A Uâ€“Pb LA-ICP-MS study. International Journal of Earth Sciences, 2018, 107, 985-1004.	1.8	21
65	Factors affecting finite strain estimation in low-grade, low-strain clastic rocks. Journal of Structural Geology, 2009, 31, 1586-1596.	2.3	20
66	Early Jurassic magmatism on the northern margin of CAMP: Derivation from a Proterozoic sub-continental lithospheric mantle. Lithos, 2011, 123, 158-164.	1.4	20
67	High-pressure greenschist to blueschist facies transition in the MaimÃ³n Formation (Dominican) Tj ETQq1 1 0.784314 rgBT /Overlock 10 266-267, 309-331.	1.4	19
68	Supercontinent reconstruction from recognition of leading continental edges. Geology, 2009, 37, 595-598.	4.4	18
69	Investigating the kinematics of local thrust sheet rotation in the limb of an orocline: a paleomagnetic and structural analysis of the Esla tectonic unit, Cantabrianâ€“Asturian Arc, NW Iberia. International Journal of Earth Sciences, 2013, 102, 43-60.	1.8	17
70	Evidence for multi-cycle sedimentation and provenance constraints from detrital zircon Uâ€“Pb ages: Triassic strata of the Lusitanian basin (western Iberia). Tectonophysics, 2016, 681, 318-331.	2.2	16
71	LA-ICP-MS U-Pb dating of Carboniferous ash layers in the Cantabrian Zone (N Spain): stratigraphic implications. Journal of the Geological Society, 2017, 174, 836-849.	2.1	16
72	U/Pb age of a large dacitic block locked in an Early Carboniferous synorogenic mÃ©lange in the Parautochthon of NW Iberia: New insights on the structure/sedimentation Variscan interplay. Tectonophysics, 2016, 681, 159-169.	2.2	15

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73	Paleomagnetism in Extremadura (Central Iberian zone, Spain) Paleozoic rocks: extensive remagnetizations and further constraints on the extent of the Cantabrian orocline. Journal of Iberian Geology, 2017, 43, 583-600.	1.3	15
74	New Perspectives for UAV-Based Modelling the Roman Gold Mining Infrastructure in NW Spain. Minerals (Basel, Switzerland), 2018, 8, 518.	2.0	15
75	3D digital documentation and image enhancement integration into schematic rock art analysis and preservation: The Castrocontrigo Neolithic rock art (NW Spain). Journal of Cultural Heritage, 2017, 26, 160-166.	3.3	14
76	Diagenesis to metamorphism transition in an episutural basin: the late Paleozoic St. Maryâ€™s Basin, Nova Scotia, Canada. Canadian Journal of Earth Sciences, 2010, 47, 121-135.	1.3	13
77	Orocline formation at the core of Pangea: A structural study of the Cantabrian orocline, NW Iberian Massif. Lithosphere, 0, , L461.1.	1.4	13
78	Geometry of inverted faults and related folds in the Monterey formation: implications for the structural evolution of the southern Santa Maria basin, California. Journal of Structural Geology, 1997, 19, 1303-1321.	2.3	12
79	Shaping of intraplate mountain patterns: The Cantabrian orocline legacy in Alpine Iberia. Lithosphere, 2019, 11, 708-721.	1.4	12
80	The enigmatic curvature of Central Iberia and its puzzling kinematics. Solid Earth, 2020, 11, 1247-1273.	2.8	12
81	The Alejico Carboniferous Forest: a 3D-Terrestrial and UAV-Assisted Photogrammetric Model for Geologic Heritage Preservation. Geoheritage, 2017, 9, 163-173.	2.8	11
82	Late/Post Variscan Orocline Formation and Widespread Magmatism. Regional Geology Reviews, 2019, , 527-542.	1.2	11
83	Fluid-driven low-grade metamorphism in polydeformed rocks of Avalonia (Arisaig Group, Nova Scotia,) Tj ETQq1 1 0.784314 rgBT /Ove	1.2	9
84	Gold-bearing Plio-Quaternary deposits: Insights from airborne LiDAR technology into the landscape evolution during the early Roman mining works in north-west Spain. Journal of Archaeological Science: Reports, 2019, 24, 843-855.	0.5	9
85	Mathematica code for least-squares cone fitting and equal-area stereonet representation. Computers and Geosciences, 2013, 54, 203-210.	4.2	8
86	Variscan intracrustal recycling by melting of Carboniferous arc-like igneous protoliths (Ã‰vora) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 22	3.3	8
87	Uâ€“Pb detrital zircon ages from the Paleozoic Marbella Conglomerate of the Malaguide Complex (Betic) Tj ETQq1 1 0.784314 rgBT /Ov	1.4	7
88	Detrital zircon ages and provenance of a Cambrian succession in the Sierra Albarrana Domain (SW) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50	1.4	6
89	Interference folding and orocline implications: A structural study of the Ponga Unit, Cantabrian orocline, northern Spain. Lithosphere, 2016, 8, 757-768.	1.4	5
90	Multiple intrusion stages and mantle sources of the Paleozoic Kuznetsk Alatau alkaline province, Southern Siberia: geochemistry and Permian Uâ€“Pb, Smâ€“Nd ages in the Goryachegorsk ijolite-foyaite intrusion. International Geology Review, 2021, 63, 2215-2231.	2.1	5

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91	Neoproterozoicâ€“paleozoic detrital sources in the Variscan foreland of northern Iberia: primary v. recycled sediments. Geological Society Special Publication, 2020, , SP503-2020-21.	1.3	5
92	A tectonic carpet of Variscan flysch at the base of a rootless accretionary prism in northwestern Iberia: Uâ€“Pb zircon age constrains from sediments and volcanic olistoliths. Solid Earth, 2021, 12, 835-867.	2.8	5
93	Tectonic Plates Come Apart at the Seams. American Scientist, 2008, 96, 129.	0.1	5
94	The unique Cambro-Ordovician silicic large igneous province of NW Gondwana: Catastrophic melting of a thinned crust. Gondwana Research, 2022, 106, 164-173.	6.0	5
95	Superposition of shear zones during orogenic development: an example from the NW Variscan Belt (Viana do Castelo, NW Portugal). Journal of Structural Geology, 2006, 28, 1327-1337.	2.3	4
96	A virtual tour of the Ibero-Armorican orocline. Journal of the Virtual Explorer, 0, 43, .	0.0	3
97	Variscan Metamorphism. Regional Geology Reviews, 2019, , 431-495.	1.2	2
98	Petrologic and thermobarometric study of the RiÃ¡s schists (NW Iberian Massif). Boletin Geologico Y Minero, 2019, 130, 445-464.	0.1	2
99	Out-of-Sequence Normal Faults Resulting in Local Contractional Geometry: An Example from the Arava Valley, Southern Israel. International Geology Review, 1999, 41, 967-980.	2.1	1
100	Petrofabric and geochemical features of ultramafic rocks on the example of restite metamorphites of the Kuznetsk Alatau (Western Siberia), olivine cumulates of the Yoko-Dovyren layered massif (Northern Cisbaikalia) and their analogues from ultrabasic xenoliths of the Canary Islands (Spain). Vestnik of Saint Petersburg University Earth Sciences, 2021, 66, .	0.4	1
101	LiDAR Datasets Applied to Roman Gold Mining Studies in NW Iberia. Response to Paper: Roman Gold Mining at â€œLas MiÃ©dolasâ€•(NW Spain): Lidar and Photo Interpretation in the Analysis of â€œPeinesâ€• Geoheritage, 2022, 14, 1.	2.8	1
102	Episodic melting and magmatic recycling along 50 Ma in the Variscan belt linked to the orogenic evolution in NW Iberia. IOP Conference Series: Earth and Environmental Science, 2017, 110, 012008.	0.3	0
103	Thermodynamic modelling of metamorphic processes: state of the art in pseudosection approach. IOP Conference Series: Earth and Environmental Science, 2017, 110, 012014.	0.3	0
104	An extensive K-bentonite as an indicator of a super-eruption in northern Iberia 477 My ago. IOP Conference Series: Earth and Environmental Science, 2019, 319, 012007.	0.3	0
105	Contrasting metamorphic gradients: Barrovian-type vs. high-pressure metamorphism. An example on the northern margin of Gondwana (NW Iberia). IOP Conference Series: Earth and Environmental Science, 2019, 319, 012015.	0.3	0
106	The Significance of Changes of Source Areas During Carboniferous Turbiditic Deposition (Southwestern Iberia). Springer Geology, 2014, , 741-745.	0.3	0