

Richard W Allmendinger

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/1896655/publications.pdf>

Version: 2024-02-01

77
papers

8,891
citations

66234

42
h-index

82410

72
g-index

79
all docs

79
docs citations

79
times ranked

4985
citing authors

#	ARTICLE	IF	CITATIONS
1	Andean tectonics related to geometry of subducted Nazca plate. Bulletin of the Geological Society of America, 1983, 94, 341.	1.6	829
2	Kinematic analysis of fault-slip data. Journal of Structural Geology, 1990, 12, 973-986.	1.0	782
3	THE EVOLUTION OF THE ALTIPLANO-PUNA PLATEAU OF THE CENTRAL ANDES. Annual Review of Earth and Planetary Sciences, 1997, 25, 139-174.	4.6	762
4	Spherical projections with OSXStereonet. Computers and Geosciences, 2013, 51, 193-205.	2.0	506
5	Paleozoic terranes of the central Argentine-Chilean Andes. Tectonics, 1986, 5, 855-880.	1.3	443
6	Inverse and forward numerical modeling of trishear fault-propagation folds. Tectonics, 1998, 17, 640-656.	1.3	433
7	Estimates of strain due to brittle faulting: sampling of fault populations. Journal of Structural Geology, 1991, 13, 735-738.	1.0	307
8	Cenozoic and Mesozoic structure of the eastern Basin and Range province, Utah, from COCORP seismic-reflection data. Geology, 1983, 11, 532.	2.0	270
9	Paleogeography and Andean structural geometry, northwest Argentina. Tectonics, 1983, 2, 1-16.	1.3	269
10	Amount of extension on "small" faults: An example from the Viking graben. Geology, 1992, 20, 47.	2.0	231
11	Inversion tectonics and the evolution of the High Atlas Mountains, Morocco, based on a geological-geophysical transect. Tectonics, 1999, 18, 163-184.	1.3	204
12	Late Cenozoic tectonic evolution of the Puna Plateau and adjacent foreland, northwestern Argentine Andes. Journal of South American Earth Sciences, 1994, 7, 179-207.	0.6	190
13	Overview of the COCORP 40°N Transect, western United States: The fabric of an orogenic belt. Bulletin of the Geological Society of America, 1987, 98, 308.	1.6	171
14	Andean reactivation of the Cretaceous Salta rift, northwestern Argentina. Journal of South American Earth Sciences, 1991, 4, 351-372.	0.6	161
15	Strain and rotation rate from GPS in Tibet, Anatolia, and the Altiplano. Tectonics, 2007, 26, n/a-n/a.	1.3	144
16	Tectonic development, southeastern border of the Puna Plateau, northwestern Argentine Andes. Bulletin of the Geological Society of America, 1986, 97, 1070.	1.6	137
17	Velocity field for the trishear model. Journal of Structural Geology, 2000, 22, 1009-1014.	1.0	129
18	Growth stratal records of instantaneous and progressive limb rotation in the Precordillera thrust belt and Bermejo basin, Argentina. Tectonics, 1996, 15, 1065-1083.	1.3	125

#	ARTICLE	IF	CITATIONS
19	SSPX: A program to compute strain from displacement/velocity data. Computers and Geosciences, 2009, 35, 1343-1357.	2.0	124
20	Deep seismic reflection characteristics of the continental crust. Geology, 1987, 15, 304.	2.0	112
21	Late cenozoic deformation in the Central Andes: fault kinematics from the northern Puna, northwestern Argentina and southwestern Bolivia. Journal of South American Earth Sciences, 1994, 7, 209-228.	0.6	111
22	Invited review paper: Neogene to Quaternary tectonics of the coastal Cordillera, northern Chile. Tectonophysics, 2010, 495, 93-110.	0.9	110
23	Development of the Colombian foreland-basin system as a consequence of diachronous exhumation of the northern Andes. Bulletin of the Geological Society of America, 2005, 117, 1272.	1.6	109
24	Controls on architecture of the Late Cretaceous to Cenozoic southern Middle Magdalena Valley Basin, Colombia. Bulletin of the Geological Society of America, 2003, 115, 131-147.	1.6	104
25	Syntectonic Cenozoic sedimentation in the northern middle Magdalena Valley Basin of Colombia and implications for exhumation of the Northern Andes. Bulletin of the Geological Society of America, 2005, 117, 547.	1.6	96
26	Estimation of fault propagation distance from fold shape: Implications for earthquake hazard assessment. Geology, 2000, 28, 1099.	2.0	93
27	Crustal structure of eastern Nevada from COCORP deep seismic reflection data. Bulletin of the Geological Society of America, 1987, 99, 833.	1.6	89
28	Trench-parallel shortening in the Northern Chilean Forearc: Tectonic and climatic implications. Bulletin of the Geological Society of America, 2005, 117, 89.	1.6	84
29	Bending the Bolivian orocline in real time. Geology, 2005, 33, 905.	2.0	73
30	Assessing uncertainties in balanced cross sections. Journal of Structural Geology, 2011, 33, 458-467.	1.0	70
31	Young displacements on the Atacama Fault System, northern Chile from field observations and cosmogenic ²¹ Ne concentrations. Tectonics, 2006, 25, n/a-n/a.	1.3	69
32	Mechanical models of fault propagation folds and comparison to the trishear kinematic model. Journal of Structural Geology, 2003, 25, 1-18.	1.0	68
33	COCORP profiling across the Rocky Mountain Front in southern Wyoming, Part 2: Precambrian basement structure and its influence on Laramide deformation. Bulletin of the Geological Society of America, 1982, 93, 1253.	1.6	63
34	Structural data collection with mobile devices: Accuracy, redundancy, and best practices. Journal of Structural Geology, 2017, 102, 98-112.	1.0	59
35	Finite strain and rotation from fault-slip data. Journal of Structural Geology, 1993, 15, 771-784.	1.0	58
36	The Argentine Precordillera: A foreland thrust belt proximal to the subducted plate. , 2014, 10, 1203-1218.		58

#	ARTICLE	IF	CITATIONS
37	Permanent forearc extension and seismic segmentation: Insights from the 2010 Maule earthquake, Chile. <i>Journal of Geophysical Research: Solid Earth</i> , 2013, 118, 724-739.	1.4	57
38	Extensional tectonics, Cretaceous Andes, northern Chile (27°S). <i>Bulletin of the Geological Society of America</i> , 1993, 105, 1462-1477.	1.6	56
39	Pseudo 3-D modeling of trishear fault-propagation folding. <i>Journal of Structural Geology</i> , 2001, 23, 1883-1899.	1.0	52
40	Mesozoic evolution, hinterland of the Sevier orogenic belt. <i>Geology</i> , 1981, 9, 308.	2.0	47
41	COCORP profiling across the Rocky Mountain Front in southern Wyoming, Part 1: Laramide structure. <i>Bulletin of the Geological Society of America</i> , 1982, 93, 1242.	1.6	47
42	Pervasive cracking of the northern Chilean Coastal Cordillera: New evidence for forearc extension. <i>Geology</i> , 2005, 33, 973.	2.0	45
43	Permanent deformation caused by subduction earthquakes in northern Chile. <i>Nature Geoscience</i> , 2013, 6, 492-496.	5.4	45
44	Upper plate reverse fault reactivation and the unclamping of the megathrust during the 2014 northern Chile earthquake sequence. <i>Geology</i> , 2015, 43, 671-674.	2.0	44
45	Influence of mechanical stratigraphy and initial stress state on the formation of two fault propagation folds. <i>Journal of Structural Geology</i> , 2005, 27, 1954-1972.	1.0	43
46	Surface cracks record long-term seismic segmentation of the Andean margin. <i>Geology</i> , 2009, 37, 23-26.	2.0	42
47	The footwall ramp of the Subandean decollement, northernmost Argentina, from extended correlation of seismic reflection data. <i>Tectonophysics</i> , 2000, 321, 37-55.	0.9	38
48	The Galapagos Rift at 86°W: 1. Regional morphological and structural analysis. <i>Journal of Geophysical Research</i> , 1979, 84, 5379-5389.	3.3	37
49	Late Cretaceous extension in the hinterland of the Sevier thrust belt, northwestern Utah and southern Idaho. <i>Geology</i> , 1990, 18, 929.	2.0	37
50	From decades to epochs: Spanning the gap between geodesy and structural geology of active mountain belts. <i>Journal of Structural Geology</i> , 2009, 31, 1409-1422.	1.0	36
51	Normal and reverse faulting driven by the subduction zone earthquake cycle in the northern Chilean fore arc. <i>Tectonics</i> , 2010, 29, n/a-n/a.	1.3	36
52	Crustal structure of north-central Nevada: Results from COCORP deep seismic profiling. <i>Bulletin of the Geological Society of America</i> , 1987, 98, 330.	1.6	34
53	Phanerozoic tectonics of the basin and range: Colorado plateau transition from COCORP data and geologic data: A review. <i>Geodynamic Series</i> , 1986, , 257-267.	0.1	33
54	Analysis of microstructures in the meade plate of the Idaho-Wyoming foreland thrust belt, U.S.A.. <i>Tectonophysics</i> , 1982, 85, 221-251.	0.9	31

#	ARTICLE	IF	CITATIONS
55	Fold and thrust tectonics of the western United States exclusive of the accreted terranes. , 0 , 583-608.		31
56	Backlimb trishear: a kinematic model for curved folds developed over angular fault bends. Journal of Structural Geology, 2002, 24, 289-295.	1.0	29
57	Tectonic heredity and the layered lower crust in the Basin and Range Province, western United States. Geological Society Special Publication, 1987, 28, 223-246.	0.8	28
58	Crack formation on top of propagating reverse faults of the Chuculay Fault System, northern Chile: Insights from field data and numerical modelling. Journal of Structural Geology, 2008, 30, 791-808.	1.0	27
59	True three-dimensional trishear: A kinematic model for strike-slip and oblique-slip deformation. Bulletin of the Geological Society of America, 2004, 116, 938.	1.6	26
60	Fault spacing in the El Teniente Mine, central Chile: Evidence for nonfractal fault geometry. Journal of Geophysical Research, 1996, 101, 13633-13653.	3.3	23
61	Stratigraphic uncertainty and errors in shortening from balanced sections in the North American Cordillera. Bulletin of the Geological Society of America, 2013, 125, 1569-1579.	1.6	22
62	Mesozoic structure of the Newfoundland Mountains, Utah: Horizontal shortening and subsequent extension in the hinterland of the Sevier belt. Bulletin of the Geological Society of America, 1984, 95, 1280.	1.6	21
63	Constructing forearc architecture over megathrust seismic cycles: Geological snapshots from the Maule earthquake region, Chile. Bulletin of the Geological Society of America, 2015, 127, 464-479.	1.6	20
64	An early history of pure shear in the upper plate of the raft river metamorphic core complex: black pine mountains, southern Idaho. Journal of Structural Geology, 1990, 12, 851-867.	1.0	16
65	Is the Sevier Desert reflection of west-central Utah a normal fault?: Comment and Reply. Geology, 1995, 23, 669.	2.0	14
66	Trishear<sub>w</sub>; A Review of Kinematics, Mechanics, and Applications<sub>w</sub>; , 2011, , .		13
67	Coseismic extension from surface cracks reopened by the 2014 Pisagua, northern Chile, earthquake sequence. Geology, 2016, 44, 387-390.	2.0	12
68	COCORP deep seismic reflection traverses of the U.S. Cordillera. Geophysical Journal International, 1987, 89, 99-104.	1.0	10
69	Jurassic normal and strike-slip faults at Crater Island, northwestern Utah. Bulletin of the Geological Society of America, 1991, 103, 1239-1251.	1.6	8
70	GMDE: Extracting quantitative information from geologic maps. , 2020, 16, 1495-1507.		8
71	Stratigraphic variation and low-angle faulting in the North Hansel Mountains and Samaria Mountain, southern Idaho. Memoir of the Geological Society of America, 1983, , 149-164.	0.5	5
72	Slip distribution of the 2014 <i>M_w</i>=8.1 Pisagua, northern Chile, earthquake sequence estimated from coseismic fore<sub>w</sub>-arc surface cracks. Geophysical Research Letters, 2016, 43, 10,134.	1.5	5

#	ARTICLE	IF	CITATIONS
73	Structural Geometry of Meade Thrust Plate in Northern Blackfoot Mountains, Southeastern Idaho. AAPG Bulletin, 1981, 65, .	0.7	4
74	Comment and Reply on "Mesozoic evolution, hinterland of the Sevier orogenic belt". Geology, 1982, 10, 5.	2.0	3
75	Andean tectonics related to geometry of subducted Nazca plate: Discussion and reply. Bulletin of the Geological Society of America, 1984, 95, 880.	1.6	3
76	Splay fault slip during the Mw 8.8 2010 Maule Chile earthquake: COMMENT. Geology, 2013, 41, e309-e309.	2.0	3
77	Comment and Reply on "Mesozoic evolution, hinterland of the Sevier orogenic belt". Geology, 1982, 10, 443.	2.0	0