

# Jacobus P Le Roux

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/7263676/publications.pdf>

Version: 2024-02-01

116  
papers

1,996  
citations

218381

26  
h-index

315357

38  
g-index

119  
all docs

119  
docs citations

119  
times ranked

1817  
citing authors

#	ARTICLE	IF	CITATIONS
1	Neoproterozoic to Early Cambrian Crustal Evolution of the Pan-African Saldania Belt, South Africa. <i>Precambrian Research</i> , 1999, 97, 303-323.	1.2	101
2	Sediment transport patterns determined from grain size parameters: Overview and state of the art. <i>Sedimentary Geology</i> , 2007, 202, 473-488.	1.0	91
3	An alternative approach to the identification of net sediment transport paths based on grain-size trends. <i>Sedimentary Geology</i> , 1994, 94, 97-107.	1.0	74
4	Repeated mass strandings of Miocene marine mammals from Atacama Region of Chile point to sudden death at sea. <i>Proceedings of the Royal Society B: Biological Sciences</i> , 2014, 281, 20133316.	1.2	63
5	Grains in motion: A review. <i>Sedimentary Geology</i> , 2005, 178, 285-313.	1.0	62
6	Hydraulic behavior of tsunami backflows: insights from their modern and ancient deposits. <i>Environmental Geology</i> , 2005, 49, 65-75.	1.2	58
7	A review of Tertiary climate changes in southern South America and the Antarctic Peninsula. Part 2: continental conditions. <i>Sedimentary Geology</i> , 2012, 247-248, 21-38.	1.0	54
8	Analysis of sediment transport paths using grain-size parameters. <i>Computers and Geosciences</i> , 2002, 28, 717-721.	2.0	51
9	Unraveling the Peruvian Phase of the Central Andes: stratigraphy, sedimentology and geochronology of the Salar de Atacama Basin (22°30'–23°S), northern Chile. <i>Basin Research</i> , 2016, 28, 365-392.	1.3	50
10	Rapid and major coastal subsidence during the late Miocene in south-central Chile. <i>Journal of South American Earth Sciences</i> , 2008, 25, 157-175.	0.6	49
11	A Pliocene mega-tsunami deposit and associated features in the Ranquil Formation, southern Chile. <i>Sedimentary Geology</i> , 2008, 203, 164-180.	1.0	43
12	Sedimentological processes in a scarp-controlled rocky shoreline to upper continental slope environment, as revealed by unusual sedimentary features in the Neogene Coquimbo Formation, north-central Chile. <i>Sedimentary Geology</i> , 2004, 165, 67-92.	1.0	40
13	Bay sedimentation as controlled by regional crustal behaviour, local tectonics and eustatic sea-level changes: Coquimbo Formation (Miocene–Pliocene), Bay of Tongoy, central Chile. <i>Sedimentary Geology</i> , 2006, 184, 133-153.	1.0	40
14	Neogene-Quaternary coastal and offshore sedimentation in north central Chile: Record of sea-level changes and implications for Andean tectonism. <i>Journal of South American Earth Sciences</i> , 2005, 19, 83-98.	0.6	39
15	Settling velocity of spheres: a new approach. <i>Sedimentary Geology</i> , 1992, 81, 11-16.	1.0	38
16	An extension of the Airy theory for linear waves into shallow water. <i>Coastal Engineering</i> , 2008, 55, 295-301.	1.7	38
17	Sedimentology of the Chillán alluvial fan at Lima, Peru, as related to Plio-Pleistocene sea-level changes, glacial cycles and tectonics. <i>Journal of South American Earth Sciences</i> , 2000, 13, 499-510.	0.6	37
18	A review of Tertiary climate changes in southern South America and the Antarctic Peninsula. Part 1: Oceanic conditions. <i>Sedimentary Geology</i> , 2012, 247-248, 1-20.	1.0	35

#	ARTICLE	IF	CITATIONS
19	Net sediment transport patterns inferred from grain-size trends, based upon definition of "transport vectors" comment. <i>Sedimentary Geology</i> , 1994, 90, 153-156.	1.0	34
20	Paleomagnetism and tectonics of the South Shetland Islands and the northern Antarctic Peninsula. <i>Earth and Planetary Science Letters</i> , 2011, 302, 299-313.	1.8	34
21	Can Dispersive Pressure Cause Inverse Grading in Grain Flows?: Discussion. <i>Journal of Sedimentary Research</i> , 2003, 73, 333-334.	0.8	32
22	A simple method to determine breaker height and depth for different deepwater wave height/length ratios and sea floor slopes. <i>Coastal Engineering</i> , 2007, 54, 271-277.	1.7	32
23	Determining the Channel Sinuosity of Ancient Fluvial Systems from Paleocurrent Data. <i>Journal of Sedimentary Research</i> , 1992, Vol. 62, .	0.8	31
24	Manganese nodules in the Miocene Bah�a Inglesa Formation, north-central Chile: Petrography, geochemistry, genesis and palaeoceanographic significance. <i>Sedimentary Geology</i> , 2009, 217, 128-139.	1.0	31
25	Sedimentologic development of a Late Oligocene "Miocene forearc embayment, Valdivia Basin Complex, southern Chile. <i>Sedimentary Geology</i> , 2000, 130, 27-44.	1.0	30
26	Nuevo esquema estratigr�fico para los dep�sitos marinos mio-pliocenos del �rea de Navidad (33�00'-34�30'S), Chile central. <i>Andean Geology</i> , 2006, 33, .	0.5	29
27	Tectonic events reflected by palaeocurrents, zircon geochronology, and palaeobotany in the Sierra Baguales of Chilean Patagonia. <i>Tectonophysics</i> , 2017, 695, 76-99.	0.9	25
28	Neoselachians and Chimaeriformes (Chondrichthyes) from the latest Cretaceous "Paleogene of Sierra Baguales, southernmost Chile. <i>Chronostratigraphic, paleobiogeographic and paleoenvironmental implications. Journal of South American Earth Sciences</i> , 2013, 48, 13-30.	0.6	24
29	Settling velocity of ellipsoidal grains as related to shape entropy. <i>Sedimentary Geology</i> , 1996, 101, 15-20.	1.0	23
30	Palaeoredox conditions and sequence stratigraphy of the Cretaceous storm-dominated, mixed siliciclastic-carbonate ramp in the Eastern Cordillera Basin (Colombia): Evidence from sedimentary geochemical proxies and facies analysis. <i>Sedimentary Geology</i> , 2018, 372, 1-24.	1.0	23
31	Paleoclimatic significance of lacustrine microbialites: A stable isotope case study of two lakes at Torres del Paine, southern Chile. <i>Palaeogeography, Palaeoclimatology, Palaeoecology</i> , 2010, 297, 70-82.	1.0	22
32	A Late Eocene age proposal for the Loreto Formation (Brunswick Peninsula, southernmost Chile), based on fossil cartilaginous fishes, paleobotany and radiometric evidence. <i>Andean Geology</i> , 2012, 39, .	0.2	22
33	Aeolian erosion and sand transport over the Mejillones Pampa in the coastal Atacama Desert of northern Chile. <i>Geomorphology</i> , 2010, 120, 312-325.	1.1	21
34	Shape Entropy and Settling Velocity of Natural Grains. <i>Journal of Sedimentary Research</i> , 2002, 72, 363-366.	0.8	20
35	A Hydrodynamic Classification of Grain Shapes. <i>Journal of Sedimentary Research</i> , 2004, 74, 135-143.	0.8	19
36	Pliocene lahar deposits in the Coastal Cordillera of central Chile: Implications for uplift, avalanche deposits, and porphyry copper systems in the Main Andean Cordillera. <i>Journal of South American Earth Sciences</i> , 2006, 20, 369-381.	0.6	19

#	ARTICLE	IF	CITATIONS
37	Genesis of stratiform U <sup>i</sup> -Mo deposits in the Karoo Basin of South Africa. <i>Ore Geology Reviews</i> , 1993, 7, 485-509.	1.1	18
38	Entrainment threshold of natural grains in liquids determined empirically from dimensionless settling velocities and other measures of grain size. <i>Sedimentary Geology</i> , 1998, 119, 17-23.	1.0	17
39	Determining the Neogene behavior of the Nazca plate by geohistory analysis. <i>Geology</i> , 2005, 33, 165.	2.0	17
40	Geotectonic evolution of the Bransfield Basin, Antarctic Peninsula: insights from analogue models. <i>Antarctic Science</i> , 2008, 20, 185-196.	0.5	17
41	Lithostratigraphy and depositional environment of the Permian Nowra Sandstone in the southwestern Sydney Basin, Australia. <i>Australian Journal of Earth Sciences</i> , 1994, 41, 191-203.	0.4	16
42	A spreadsheet template for determining sediment transport vectors from grain-size parameters. <i>Computers and Geosciences</i> , 1994, 20, 433-440.	2.0	16
43	Late Cretaceous alkaline saline lake complexes of the Kalahari Group in northern Botswana. <i>Journal of African Earth Sciences</i> , 1995, 20, 7-15.	0.9	15
44	Paralic parasequences associated with Eocene sea-level oscillations in an active margin setting: Trihuco Formation of the Arauco Basin, Chile. <i>Sedimentary Geology</i> , 1997, 110, 257-276.	1.0	15
45	A simple method to predict the threshold of particle transport under oscillatory waves. <i>Sedimentary Geology</i> , 2001, 143, 59-70.	1.0	15
46	An integrated law of the wall for hydrodynamically transitional flow over plane beds. <i>Sedimentary Geology</i> , 2004, 163, 311-321.	1.0	15
47	Oroclinal bending of the Juan Fernandez Ridge suggested by geohistory analysis of the Baha Inglesa Formation, north-central Chile. <i>Sedimentary Geology</i> , 2016, 333, 32-49.	1.0	15
48	The analysis of termite hills to locate uranium mineralization in the Karoo Basin of South Africa. <i>Journal of Geochemical Exploration</i> , 1991, 41, 341-347.	1.5	14
49	Comparison of Sphericity Indices as Related to the Hydraulic Equivalence of Settling Grains. <i>Journal of Sedimentary Research</i> , 1997, Vol. 67, .	0.8	14
50	Seasonal sediment transport pathways in Lirquen Harbor, Chile, as inferred from grain-size trends. <i>Investigaciones Marinas</i> , 2002, 30, 3.	0.1	13
51	Application of the Hofmann shape entropy to determine the settling velocity of irregular, semi-ellipsoidal grains. <i>Sedimentary Geology</i> , 2002, 149, 237-243.	1.0	13
52	Wave friction factor as related to the Shields parameter for steady currents. <i>Sedimentary Geology</i> , 2003, 155, 37-43.	1.0	13
53	A function to determine wavelength from deep into shallow water based on the length of the cnoidal wave at breaking. <i>Coastal Engineering</i> , 2007, 54, 770-774.	1.7	13
54	Stratigraphy, sedimentology, and geothermal reservoir potential of the volcanoclastic Cura-Mallan succession at Lonquimay, Chile. <i>Journal of South American Earth Sciences</i> , 2017, 77, 1-20.	0.6	13

#	ARTICLE	IF	CITATIONS
55	Tectonic controls on the Maastrichtian-Danian transgression in the Magallanes-Austral foreland basin (Chile): Implications for the growth of the Southern Patagonian Andes. <i>Sedimentary Geology</i> , 2020, 403, 105645.	1.0	13
56	Characteristics of developing waves as a function of atmospheric conditions, water properties, fetch and duration. <i>Coastal Engineering</i> , 2009, 56, 479-483.	1.7	12
57	Preservation of beach ridges due to pedogenic calcrete development in the Tongoy palaeobay, North-Central Chile. <i>Geomorphology</i> , 2011, 132, 234-248.	1.1	12
58	Development of a Pleistocene calcrete over a sequence of marine terraces at Tongoy (north-central Chile). <i>Journal of Coastal Research</i> , 2011, 27, 101-111.	2.2	11
59	Paleocurrent analysis using Lotus 1-2-3. <i>Computers and Geosciences</i> , 1991, 17, 1465-1468.	2.0	10
60	Heartbeat of a mountain: diagnosing the age of depositional events in the Karoo (Gondwana) Basin from the pulse of the Cape Orogen. <i>Geologische Rundschau: Zeitschrift Fur Allgemeine Geologie</i> , 1995, 84, 626-635.	1.3	10
61	Relationship between aerodynamic entrainment threshold and hydrodynamic settling velocity of particles. <i>Sedimentary Geology</i> , 1997, 109, 199-205.	1.0	10
62	Evolution of the Great Tehuelche Paleolake in the Torres del Paine National Park of Chilean Patagonia during the Last Glacial Maximum and Holocene. <i>Andean Geology</i> , 2012, 39, .	0.2	10
63	An Excel, VBA programme for the analysis of current velocity profiles. <i>Computers and Geosciences</i> , 2004, 30, 867-879.	2.0	9
64	Depositional environment of <i>Stelloglyphus llicoensis</i> isp. nov.: a new radial trace fossil from the Neogene Ranquil Formation, south-central Chile. <i>Andean Geology</i> , 2008, 35, .	0.5	9
65	An Excel program for computing the dynamic properties of particles in Newtonian fluids. <i>Computers and Geosciences</i> , 1997, 23, 671-675.	2.0	8
66	Sediment entrainment under fully developed waves as a function of water depth, boundary layer thickness, bottom slope and roughness. <i>Sedimentary Geology</i> , 2010, 223, 143-149.	1.0	8
67	Biostratigraphic evidence for dramatic Holocene uplift of Robinson Crusoe Island, Juan Fernández Ridge, SE Pacific Ocean. <i>Biogeosciences</i> , 2015, 12, 1993-2001.	1.3	8
68	Sedimentary processes on a Gilbert-type delta in Lake Llanquihue, southern Chile. <i>Andean Geology</i> , 2005, 32, .	0.5	8
69	Evidence for an Early-Middle Miocene age of the Navidad Formation (central Chile): Paleontological, paleoclimatic and tectonic implications. <i>Andean Geology</i> , 2013, 40, .	0.2	8
70	A rapid method to determine the critical shear stress for sphere entrainment under unidirectional fluid flow. <i>Sedimentary Geology</i> , 1991, 75, 1-3.	1.0	7
71	Monoclines and palaeochannels: evidence for syntectonic sedimentation in the Beaufort Group of the Karoo basin, South Africa. <i>Journal of African Earth Sciences</i> , 1994, 18, 219-226.	0.9	7
72	Profiles of fully developed (Airy) waves in different water depths. <i>Coastal Engineering</i> , 2008, 55, 701-703.	1.7	7

#	ARTICLE	IF	CITATIONS
73	Stratigraphic Implications of Latest Middle Miocene to Earliest Late Miocene Diatoms in the Navidad Formation at Lo Abarca, Central Chile (33° 30'S). <i>Ameghiniana</i> , 2010, 47, 527-533.	0.3	7
74	Factors controlling alpine glaciations in the Sierra Baguales Mountain Range of southern Patagonia (50° S), inferred from the morphometric analysis of glacial cirques. <i>Andean Geology</i> , 2018, 45, 357.	0.2	7
75	The Angular Deviation of Paleocurrent Directions as Applied to the Calculation of Channel Sinuosities. <i>Journal of Sedimentary Research</i> , 1994, Vol. 64A, .	0.8	6
76	Estimation of Channel Sinuosity from Paleocurrent Data: A Method Using Fractal Geometry: Discussion. <i>Journal of Sedimentary Research</i> , 2001, 71, 1029-1030.	0.8	6
77	WAVECALC: an Excel-VBA spreadsheet to model the characteristics of fully developed waves and their influence on bottom sediments in different water depths. <i>Geo-Marine Letters</i> , 2010, 30, 549-560.	0.5	6
78	Fall velocity of multi-shaped clasts. <i>Journal of Volcanology and Geothermal Research</i> , 2014, 289, 130-139.	0.8	6
79	Persistence of topographic features as a result of non-tectonic processes. <i>Sedimentary Geology</i> , 1994, 89, 33-42.	1.0	5
80	Spreadsheet procedure for modified first-order embedded markov analysis of cyclicity in sediments. <i>Computers and Geosciences</i> , 1994, 20, 17-22.	2.0	5
81	Heartbeat of a mountain: diagnosing the age of depositional events in the Karoo (Gondwana) Basin from the pulse of the Cape Orogen. <i>Geologische Rundschau: Zeitschrift Fur Allgemeine Geologie</i> , 1995, 84, 626.	1.3	5
82	Depositos burdigalios de la Formación Santa Cruz en Sierra Baguales, Cuenca Austral (Magallanes): Edad, ambiente de deposición y vertebrados fósiles. <i>Andean Geology</i> , 2013, 40, .	0.2	5
83	Aerodynamic and Geometric Diameter of Airborne Particles: Discussion. <i>Journal of Sedimentary Research</i> , 2002, 72, 441-442.	0.8	4
84	Comments on "Turbulent boundary layer shear flows as an approximation of base surges at Campi Flegrei (Southern Italy), by Dellino et al. (2004)" <i>Journal of Volcanology and Geothermal Research</i> , 2005, 141, 331-332.	0.8	4
85	A unified criterion for initiation of sediment motion and inception of sheet flow under water waves " discussion. <i>Sedimentology</i> , 2007, 54, 1447-1448.	1.6	4
86	Estacionalidad de la erosión y el transporte eólico de partículas en el desierto costero de Atacama, Chile (23°S). <i>Andean Geology</i> , 2009, 36, .	0.2	4
87	A spreadsheet model for integrating stratigraphic and lithofacies maps. <i>Computers and Geosciences</i> , 1991, 17, 1469-1472.	2.0	3
88	Palaeogeographic reconstruction of sandstones using weighted mean grain-size maps, with examples from the Karoo Basin (South Africa) and the Sydney Basin (Australia). <i>Sedimentary Geology</i> , 1992, 81, 173-180.	1.0	3
89	Behavior of spherical grains in fluids: a convenient spreadsheet template for engineers and sedimentologists. <i>Computers and Geosciences</i> , 1992, 18, 1255-1257.	2.0	3
90	A strategy for uranium exploration in the Permo-Triassic Beaufort Group of the main Karoo basin, South Africa. <i>Journal of African Earth Sciences</i> , 1994, 18, 245-253.	0.9	3

#	ARTICLE	IF	CITATIONS
91	Determination of Drag Coefficients in Measuring Particle Diameters: Discussion. Journal of Sedimentary Research, 2005, 75, 520-521.	0.8	3
92	Structure and depositional processes of a gravelly tsunami deposit in a shallow marine setting: Lower Cretaceous Miyako Group, Japan—discussion. Sedimentary Geology, 2007, 201, 485-487.	1.0	3
93	A simple method to determine breaker height and depth for different wave height/length ratios and sea floor slopes — Reply to discussion by M.C. Haller and P.C. Catalan. Coastal Engineering, 2008, 55, 185-188.	1.7	3
94	First record of Elasmosaurid Plesiosaurs (Sauropterygia: Plesiosauria) in upper levels of the Dorotea Formation, Late Cretaceous (Maastrichtian), Puerto Natales, Chilean Patagonia. Andean Geology, 2009, 36, .	0.2	3
95	Wave friction factor rediscovered. Geo-Marine Letters, 2012, 32, 29-37.	0.5	3
96	Impacts, Tillites, and the Breakup of Gondwanaland: A Second Discussion. Journal of Geology, 1994, 102, 483-485.	0.7	3
97	Depositos estuarinos en la Formacion Rio Baguales (Chattiano-Aquitaniense), Provincia de Magallanes, Chile.. Andean Geology, 2010, 37, .	0.2	3
98	A comparison of velocity profiles in unidirectional currents and the wave boundary layer: Implications for sediment entrainment. Sedimentary Geology, 2010, 232, 84-90.	1.0	2
99	An Oligocene microthermal forest dominated by Nothofagus in Sierra Baguales, Chilean Patagonia: Response to global cooling and tectonic events. Palaeogeography, Palaeoclimatology, Palaeoecology, 2019, 528, 1-13.	1.0	2
100	Estacionalidad de la erosion y el transporte eolico de particulas en el desierto costero de Atacama, Chile (23°S).. Andean Geology, 2009, 36, .	0.2	2
101	The use of trend surfaces in palaeoenvironmental reconstructions. Palaeogeography, Palaeoclimatology, Palaeoecology, 1994, 111, 185-190.	1.0	1
102	Palaeogeographic reconstruction using composite maps, with case studies from three continents. Palaeogeography, Palaeoclimatology, Palaeoecology, 1997, 131, 51-63.	1.0	1
103	Estimating palaeowind strength from beach deposits - Discussion. Sedimentology, 2004, 51, 669-670.	1.6	1
104	Le Roux, J.P., 2001. A simple method to predict the threshold of particle transport under oscillatory waves. Sedimentary Geology 143 (2001): 59–70—Reply to discussion. Sedimentary Geology, 2004, 163, 319-322.	1.0	1
105	A function to determine wavelength from deep into shallow water based on the length of the cnoidal wave at breaking—Reply to discussion by T.S. Hedges. Coastal Engineering, 2009, 56, 96-97.	1.7	1
106	The Permo-Triassic Uranium Deposits of Gondwanaland. Geophysical Monograph Series, 0, , 139-146.	0.1	1
107	Reply to Comment of Encinas et al. (2014) on: “Evidence for an Early-Middle Miocene age of the Navidad Formation (central Chile): Paleontological, climatic and tectonic implications” of Gutiérrez et al. (2013, Andean Geology 40 (1): 66-78).. Andean Geology, 2014, 41, .	0.2	1
108	Entrainment threshold of sand- to granule-sized sediments under waves. Sedimentary Geology, 2015, 322, 63-66.	1.0	1

#	ARTICLE	IF	CITATIONS
109	Relict glacial landscape in the Sierra Baguales Mountain Range (50°-51° S): evidence of glaciation dynamics and types in the eastern foothills of the southern Patagonian Andes. <i>Journal of Mountain Science</i> , 2017, 14, 282-295.	0.8	1
110	Reply to Comment of Finger et al. (2013) on: "Evidence for an Early-Middle Miocene age of the Navidad Formation (central Chile): Paleontological, paleoclimatic and tectonic implications" of Gutiérrez et al. (2013, <i>Andean Geology</i> 40 (1): 66-78). <i>Andean Geology</i> , 2013, 40, .	0.2	1
111	Mesozoic sedimentation on an isolated platform at the eastern entrance to the Strait of Magellan, Tierra del Fuego (Chile). <i>Andean Geology</i> , 2003, 30, .	0.5	1
112	Retort to response by Haller and Catalán. <i>Coastal Engineering</i> , 2008, 55, 823-824.	1.7	0
113	Discussion of "Comparison of Settling-Velocity-based Formulas for Threshold of Sediment Motion" by N.-S. Cheng. <i>Journal of Hydraulic Engineering</i> , 2009, 135, 626-628.	0.7	0
114	Formula for predicting bedload transport rate in oscillatory sheet flows. <i>Coastal Engineering</i> , 2009, 56, 377-379.	1.7	0
115	Analysis of Interfering Fully Developed, Colinear Deepwater Waves. <i>International Journal of Oceanography</i> , 2012, 2012, 1-8.	0.2	0
116	Un análisis crítico de las evidencias presentadas para reinterpretar la mega-brecha de Hornitos como un depósito de flujo de masa generado por el colapso de un acantilado.. <i>Andean Geology</i> , 2015, 42, .	0.2	0