

# Randell A Stephenson

## List of Publications by Year in descending order

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133  
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citations

81900

39  
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114465

63  
g-index

139  
all docs

139  
docs citations

139  
times ranked

2925  
citing authors

#	ARTICLE	IF	CITATIONS
1	Late Precambrian to Triassic history of the East European Craton: dynamics of sedimentary basin evolution. <i>Tectonophysics</i> , 1996, 268, 23-63.	2.2	330
2	On the origin of the Southern Permian Basin, Central Europe. <i>Marine and Petroleum Geology</i> , 2000, 17, 43-59.	3.3	240
3	Late Vendian–Early Palaeozoic tectonic evolution of the Baltic Basin: regional tectonic implications from subsidence analysis. <i>Tectonophysics</i> , 1999, 314, 219-239.	2.2	163
4	Tectonic evolution of the Mid-Polish Trough: modelling implications and significance for central European geology. <i>Tectonophysics</i> , 1995, 252, 179-195.	2.2	158
5	TOPO-EUROPE: The geoscience of coupled deep Earth-surface processes. <i>Global and Planetary Change</i> , 2007, 58, 1-118.	3.5	137
6	Some examples and mechanical aspects of continental lithospheric folding. <i>Tectonophysics</i> , 1991, 188, 27-37.	2.2	100
7	Arctic lithosphere – A review. <i>Tectonophysics</i> , 2014, 628, 1-25.	2.2	95
8	The Mesozoic-Cenozoic tectonic evolution of the Greater Caucasus. <i>Geological Society Memoir</i> , 2006, 32, 277-289.	1.7	92
9	Dynamics of Mid-Palaeocene North Atlantic rifting linked with European intra-plate deformations. <i>Nature</i> , 2007, 450, 1071-1074.	27.8	92
10	Topography of the crust–mantle boundary beneath the Black Sea Basin. <i>Tectonophysics</i> , 2004, 381, 211-233.	2.2	89
11	Late Cretaceous to Paleocene oroclinal bending in the central Pontides (Turkey). <i>Tectonics</i> , 2010, 29, n/a-n/a.	2.8	86
12	Jurassic arc volcanism on Crimea (Ukraine): Implications for the paleo-subduction zone configuration of the Black Sea region. <i>Lithos</i> , 2010, 119, 412-426.	1.4	82
13	Crustal-scale pop-up structure in cratonic lithosphere: DOBRE deep seismic reflection study of the Donbas fold belt, Ukraine. <i>Geology</i> , 2003, 31, 733.	4.4	78
14	Small-Scale Mantle Convection Produces Stratigraphic Sequences in Sedimentary Basins. <i>Science</i> , 2010, 329, 827-830.	12.6	74
15	“DOBREFraction'99” velocity model of the crust and upper mantle beneath the Donbas Foldbelt (East) Tj ETQg1 1 0.784314 rjB	2.2	72
16	Isostatic response of the lithosphere with in-plane stress: Application to central Australia. <i>Journal of Geophysical Research</i> , 1985, 90, 8581-8588.	3.3	71
17	Flexural interaction and the dynamics of neogene extensional Basin formation in the Alboran-Betic region. <i>Geo-Marine Letters</i> , 1992, 12, 66-75.	1.1	69
18	Erosion-isostatic rebound models for uplift: an application to south-eastern Australia. <i>Geophysical Journal International</i> , 1985, 82, 31-55.	2.4	68

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19	The eastern Black Sea-Caucasus region during the Cretaceous: New evidence to constrain its tectonic evolution. <i>Comptes Rendus - Geoscience</i> , 2016, 348, 23-32.	1.2	67
20	The post-Palaeozoic uplift history of south-eastern Australia. <i>Australian Journal of Earth Sciences</i> , 1986, 33, 253-270.	1.0	64
21	The evolution of the southern margin of Eastern Europe (Eastern European and Scythian platforms) from the Latest Precambrian- Early Palaeozoic to the Early Cretaceous. <i>Geological Society Memoir</i> , 2006, 32, 481-505.	1.7	64
22	The Donbas Foldbelt: its relationships with the uninverted Donets segment of the Dniepr-Donets Basin, Ukraine. <i>Tectonophysics</i> , 1999, 313, 59-83.	2.2	63
23	Baltica in the Cryogenian, 850-630Ma. <i>Precambrian Research</i> , 2008, 160, 46-65.	2.7	63
24	Subsidence analysis and modelling of the Roer Valley Graben (SE Netherlands). <i>Tectonophysics</i> , 1992, 208, 159-171.	2.2	60
25	Structural inheritance in the North Atlantic. <i>Earth-Science Reviews</i> , 2020, 206, 102975.	9.1	60
26	Structural features and evolution of the Dniepr-Donets Basin, Ukraine, from regional seismic reflection profiles. <i>Tectonophysics</i> , 1996, 268, 127-147.	2.2	59
27	Tectonic variation in the Dniepr-Donets Basin from automated modelling of backstripped subsidence curves. <i>Tectonophysics</i> , 1996, 268, 257-280.	2.2	59
28	Lasting mantle scars lead to perennial plate tectonics. <i>Nature Communications</i> , 2016, 7, 11834.	12.8	58
29	Sequence stratigraphy and correlation of late Carboniferous and Permian in the CIS, Europe, Tethyan area, North Africa, Arabia, China, Gondwanaland and the USA. <i>Palaeogeography, Palaeoclimatology, Palaeoecology</i> , 2003, 196, 59-84.	2.3	56
30	Quantitative modelling of basin and rheological evolution of the Iberian Basin (Central Spain): implications for lithospheric dynamics of intraplate extension and inversion. <i>Tectonophysics</i> , 1995, 252, 163-178.	2.2	51
31	Seismic velocity model of the crust and upper mantle along profile PANCAKE across the Carpathians between the Pannonian Basin and the East European Craton. <i>Tectonophysics</i> , 2013, 608, 1049-1072.	2.2	51
32	Flexural models of continental lithosphere based on the long-term erosional decay of topography. <i>Geophysical Journal International</i> , 1984, 77, 385-413.	2.4	49
33	Continental rift development in Precambrian and Phanerozoic Europe: EUROPROBE and the Dnieper-Donets Rift and Polish Trough basins. <i>Sedimentary Geology</i> , 1993, 86, 159-175.	2.1	49
34	Quantifying the mass transfer from mountain ranges to deposition in sedimentary basins: Source to sink studies in the Danube Basin-Black Sea system. <i>Global and Planetary Change</i> , 2013, 103, 1-18.	3.5	49
35	Stresses in the lithosphere and sedimentary basin formation. <i>Tectonophysics</i> , 1993, 226, 1-13.	2.2	47
36	Seismological evidence for a fossil subduction zone in the East Greenland Caledonides. <i>Geology</i> , 2014, 42, 311-314.	4.4	46

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37	Tectonic subsidence modelling of the Polish Basin in the light of new data on crustal structure and magnitude of inversion. <i>Sedimentary Geology</i> , 2003, 156, 59-70.	2.1	45
38	The Black Sea back-arc basin: insights to its origin from geodynamic models of modern analogues. <i>Geological Society Special Publication</i> , 2010, 340, 11-21.	1.3	44
39	The Iceland Microcontinent and a continental Greenland-Iceland-Faroe Ridge. <i>Earth-Science Reviews</i> , 2020, 206, 102926.	9.1	42
40	Crustal structure of the Innuitian region of Arctic Canada and Greenland from gravity modelling: implications for the Palaeogene Eurekan orogen. <i>Geophysical Journal International</i> , 2008, 173, 1039-1063.	2.4	41
41	Using high-resolution aeromagnetic data to recognise and map intra-sedimentary volcanic rocks and geological structures across the Cretaceous middle Benue Trough, Nigeria. <i>Journal of African Earth Sciences</i> , 2014, 99, 625-636.	2.0	40
42	3-D gravity analysis of the Dnieprâ€“Donets Basin and Donbas Foldbelt, Ukraine. <i>Tectonophysics</i> , 1999, 313, 41-58.	2.2	38
43	Crustal structure and tectonics of the southeastern Beaufort Sea continental margin. <i>Tectonics</i> , 1994, 13, 389-400.	2.8	37
44	The formation of the northwestern Dniepr-Donets Basin: 2-D forward and reverse syn-rift and post-rift modelling. <i>Tectonophysics</i> , 1996, 268, 237-255.	2.2	36
45	Role of thermal refraction in localizing intraplate deformation in southeastern Ukraine. <i>Nature Geoscience</i> , 2009, 2, 290-293.	12.9	35
46	Cretaceousâ€“Neogene tectonic evolution of the northern margin of the Black Sea from seismic reflection data and tectonic subsidence analysis. <i>Geological Society Special Publication</i> , 2010, 340, 137-157.	1.3	35
47	Paleostress field reconstruction and revised tectonic history of the Donbas fold and thrust belt (Ukraine and Russia). <i>Tectonics</i> , 2003, 22, n/a-n/a.	2.8	34
48	3-D flexural modelling of the Silurian Baltic Basin. <i>Tectonophysics</i> , 2002, 346, 115-135.	2.2	33
49	Style and timing of salt tectonics in the Dniepr-Donets Basin (Ukraine): implications for triggering and driving mechanisms of salt movement in sedimentary basins. <i>Marine and Petroleum Geology</i> , 2002, 19, 1169-1189.	3.3	33
50	Nonâ€“uniform hyperâ€“extension in advance of seafloor spreading on the vietnam continental margin and the SW South China Sea. <i>Basin Research</i> , 2014, 26, 106-134.	2.7	33
51	Syn-rift evolution of the Pripyat Trough: constraints from structural and stratigraphic modelling. <i>Tectonophysics</i> , 1996, 268, 221-236.	2.2	32
52	Relation between salt diapirism and the tectonic history of the Sverdrup Basin, Arctic Canada. <i>Canadian Journal of Earth Sciences</i> , 1992, 29, 2695-2705.	1.3	31
53	The European lithosphere: an introduction. <i>Geological Society Memoir</i> , 2006, 32, 1-9.	1.7	31
54	New late Paleozoic paleopoles from the Donbas Foldbelt (Ukraine): Implications for the Pangea A vs. B controversy. <i>Earth and Planetary Science Letters</i> , 2010, 297, 18-33.	4.4	31

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55	The Vendian-Early Palaeozoic sedimentary basins of the East European Craton. Geological Society Memoir, 2006, 32, 449-462.	1.7	30
56	Small-scale convection at a continental back-arc to craton transition: Application to the southern Canadian Cordillera. Journal of Geophysical Research, 2012, 117, .	3.3	29
57	The <sup>40</sup> Ar/ <sup>39</sup> Ar dating of magmatic activity in the Donbas Fold Belt and the Scythian Platform (Eastern Tj ETQq1 1 0.784314 rgBT /Ov	2.8	28
58	Structure of the lithosphere below the southern margin of the East European Craton (Ukraine and Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50	2.2	28
59	2.5D seismic velocity modelling in the south-eastern Romanian Carpathians Orogen and its foreland. Tectonophysics, 2005, 410, 273-291.	2.2	28
60	Two-dimensional inverse modeling of sedimentary basin subsidence. Journal of Geophysical Research, 2001, 106, 6657-6671.	3.3	27
61	Structures associated with inversion of the Donbas Foldbelt (Ukraine and Russia). Tectonophysics, 2003, 373, 181-207.	2.2	27
62	Jurassic-Cretaceous low paleolatitudes from the circum-Black Sea region (Crimea and Pontides) due to True Polar Wander. Earth and Planetary Science Letters, 2010, 296, 210-226.	4.4	27
63	Sedimentary basin tectonics from the Black Sea and Caucasus to the Arabian Platform: introduction. Geological Society Special Publication, 2010, 340, 1-10.	1.3	25
64	The evolution of the southern margin of the East European Craton based on seismic and potential field data. Tectonophysics, 2004, 381, 101-118.	2.2	24
65	Near-vertical seismic reflection image using a novel acquisition technique across the Vrancea Zone and Foscani Basin, south-eastern Carpathians (Romania). Tectonophysics, 2005, 410, 293-309.	2.2	24
66	The Southern Oklahoma and Dniepr-Donets aulacogens: A comparative analysis. Memoir of the Geological Society of America, 2007, , 127-143.	0.5	23
67	Crustal structure of the Canadian polar margin: results of the 1985 seismic refraction survey. Canadian Journal of Earth Sciences, 1989, 26, 853-866.	1.3	22
68	Timing and mechanisms controlling evaporite diapirism on Ellef Ringnes Island, Canadian Arctic Archipelago. Basin Research, 2011, 23, 478-498.	2.7	22
69	Geological structure of the northern part of the Eastern Black Sea from regional seismic reflection data including the DOBRE-2 CDP profile. Geological Society Special Publication, 2017, 428, 307-321.	1.3	22
70	Late Cretaceous-Cenozoic basin inversion and palaeostress fields in the North Atlantic-western Alpine-Tethys realm: Implications for intraplate tectonics. Earth-Science Reviews, 2020, 210, 103252.	9.1	22
71	The Donets Basin (Ukraine/Russia): coalification and thermal history. International Journal of Coal Geology, 2002, 49, 33-55.	5.0	20
72	Quantification of the control of sequences by tectonics and eustacy in the Dniepr-Donets Basin and on the Russian Platform during Carboniferous and Permian. Bulletin - Societe Geologique De France, 2003, 174, 93-100.	2.2	19

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73	Gravity and magnetic modelling in the Vrancea Zone, south-eastern Carpathians: Redefinition of the edge of the East European Craton beneath the south-eastern Carpathians. <i>Journal of Geodynamics</i> , 2013, 71, 52-64.	1.6	19
74	Reappraisal of deep seismic reflection Profile VIII across the Pripyat Trough. <i>Tectonophysics</i> , 1996, 268, 99-108.	2.2	18
75	Mechanical stability of the Redbank Thrust Zone, Central Australia: Dynamic and rheological implications. <i>Australian Journal of Earth Sciences</i> , 1997, 44, 215-226.	1.0	18
76	Identifying mantle lithosphere inheritance in controlling intraplate orogenesis. <i>Journal of Geophysical Research: Solid Earth</i> , 2016, 121, 6966-6987.	3.4	18
77	Evolution of the central West Greenland margin and the Nuussuaq Basin: Localised basin uplift along a stable continental margin proposed from thermochronological data. <i>Basin Research</i> , 2018, 30, 1230-1246.	2.7	18
78	Architecture of the south-eastern Carpathians nappes and Focsani Basin (Romania) from 2D ray tracing of densely-spaced refraction data. <i>Tectonophysics</i> , 2009, 476, 512-527.	2.2	17
79	A new geodynamical thermal model of rift evolution, with application to the Dnieper Donets Basin, Ukraine. <i>Tectonophysics</i> , 1999, 313, 29-40.	2.2	16
80	The formation of the south-eastern part of the Dniepr Donets Basin: 2-D forward and reverse modelling taking into account post-rift redeposition of syn-rift salt. <i>Sedimentary Geology</i> , 2003, 156, 11-33.	2.1	16
81	The crustal structure of Ellesmere Island, Arctic Canada teleseismic mapping across a remote intraplate orogenic belt. <i>Geophysical Journal International</i> , 2016, 204, 1579-1600.	2.4	16
82	The role of pre-existing Precambrian structures in the development of Rukwa Rift Basin, southwest Tanzania. <i>Journal of African Earth Sciences</i> , 2019, 150, 607-625.	2.0	16
83	Bouguer gravity anomalies and speculations on the regional crustal structure of the Eurekan Orogen, Arctic Canada. <i>Marine Geology</i> , 1990, 93, 401-420.	2.1	14
84	Intraplate orogenesis within accreted and scarred lithosphere: Example of the Eurekan Orogeny, Ellesmere Island. <i>Tectonophysics</i> , 2015, 664, 202-213.	2.2	14
85	Geological features of the northeastern Canadian Arctic margin revealed from analysis of potential field data. <i>Tectonophysics</i> , 2016, 691, 48-64.	2.2	14
86	Tectonic Evolution of the Eastern Black Sea and Caucasus: an introduction. <i>Geological Society Special Publication</i> , 2017, 428, 1-9.	1.3	14
87	Back-arc rifting initiated with a hot and wet continental lithosphere. <i>Earth and Planetary Science Letters</i> , 2011, 302, 172-184.	4.4	13
88	DOBRE-2 WARR profile: the Earth's upper crust across Crimea between the Azov Massif and the northeastern Black Sea. <i>Geological Society Special Publication</i> , 2017, 428, 199-220.	1.3	13
89	Structure of the crust and upper mantle beneath the Parnaíba Basin, Brazil, from wide-angle reflection refraction data. <i>Geological Society Special Publication</i> , 2018, 472, 67-82.	1.3	13
90	The Canada Basin compared to the southwest South China Sea: Two marginal ocean basins with hyper-extended continent-ocean transitions. <i>Tectonophysics</i> , 2016, 691, 171-184.	2.2	12

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91	Local tomography model of the northeastern Black Sea: intra-plate crustal underthrusting. Geological Society Special Publication, 2017, 428, 221-239.	1.3	12
92	Differential erosion of a Mesozoic rift flank: Establishing the source of topography across Karrat, central West Greenland. Geomorphology, 2019, 334, 138-150.	2.6	12
93	Three-dimensional gravity analysis of the Kiglapait layered intrusion, Labrador. Canadian Journal of Earth Sciences, 1979, 16, 24-37.	1.3	11
94	Evolution of the west Greenland margin: offshore thermostratigraphic data and modelling. Journal of the Geological Society, 2012, 169, 515-530.	2.1	11
95	Regional crustal architecture of Ellesmere Island, Arctic Canada. Geological Society Special Publication, 2018, 460, 19-32.	1.3	11
96	Long-term exhumation of a Palaeoproterozoic orogen and the role of pre-existing heterogeneous thermal crustal properties: a fission-track study of SE Baffin Island. Journal of the Geological Society, 2013, 170, 877-891.	2.1	10
97	Integrated crustal geological cross-section of Ellesmere Island. Geological Society Special Publication, 2018, 460, 7-17.	1.3	10
98	West Gondwana orogenies and Pangaea break-up: thermotectonic effects on the southernmost Mantiqueira Province, Brazil. Journal of the Geological Society, 2019, 176, 1056-1075.	2.1	10
99	Basement morphology of the middle Benue Trough, Nigeria, revealed from analysis of high-resolution aeromagnetic data using grid-based operator methods. Journal of African Earth Sciences, 2020, 162, 103724.	2.0	10
100	Pâ€ˆt modelling of Proterozoic terranes in Lithuania: geodynamic implications for accretion of southwestern Fennoscandia. Gff, 2003, 125, 201-211.	1.2	9
101	Delineating tectonic units beneath the Donbas Fold Belt using scale lengths estimated from DOBRE 2000/2001 deep reflection data. Journal of Geophysical Research, 2009, 114, .	3.3	9
102	A sub-crustal piercing point for North Atlantic reconstructions and tectonic implications. Geology, 2015, , G37245.1.	4.4	9
103	Deformation driven by deep and distant structures: Influence of a mantle lithosphere suture in the Ouachita orogeny, southeastern United States. Geology, 2019, 47, 147-150.	4.4	9
104	Postâ€ˆorogenic evolution of a mountain range: Southâ€ˆeastern Australian Highlands. Geophysical Research Letters, 1985, 12, 801-804.	4.0	8
105	Implications of a visco-elastic model of the lithosphere for calculating yield strength envelopes. Journal of Geodynamics, 2006, 42, 12-27.	1.6	8
106	Change in tectonic force inferred from basin subsidence: Implications for the dynamical aspects of back-arc rifting in the western Mediterranean. Earth and Planetary Science Letters, 2009, 277, 174-183.	4.4	8
107	Potential role of strain hardening in the cessation of rifting at constant tectonic force. Journal of Geodynamics, 2009, 47, 47-62.	1.6	8
108	Basin evolution in the Davis Strait area (West Greenland and conjugate East Baffin/Labrador passive) evolution and petroleum systems. Bullentin of Canadian Petroleum Geology, 2014, 62, 311-329.	0.3	8

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109	Sedimentary geology of the middle Carboniferous of the Donbas region (Dniepr-Donets basin,) Tj ETQq1 1 0.784314.rgBT /Overlock 10	3.3	8
110	IAS: A New Novel Phase-Based Filter for Detection of Unexploded Ordnances. Remote Sensing, 2021, 13, 4345.	4.0	8
111	Neotectonics seismicity in the south-eastern Beaufort Sea polar continental margin of north-western Canada. Journal of Geodynamics, 1998, 27, 175-190.	1.6	7
112	The pre-Permian residual gravity field for the Dutch onshore and adjacent offshore. Global and Planetary Change, 2000, 27, 53-66.	3.5	6
113	Reply to: Thermal history solutions from thermochronology must be governed by geological relationships: A comment on Jess et al. (2019). Geomorphology, 2020, 360, 106971.	2.6	6
114	RomUkrSeis: Seismic model of the crust and upper mantle across the Eastern Carpathians " From the Apuseni Mountains to the Ukrainian Shield. Tectonophysics, 2020, 794, 228620.	2.2	6
115	Thermochronology of South America passive margin between Uruguay and southern Brazil: A lengthy and complex cooling history based on (U <sup>238</sup> Th)/He and fission tracks. Journal of South American Earth Sciences, 2021, 106, 103019.	1.4	6
116	Implications of tectonic subsidence models for crustal structure beneath the Mid-Polish Trough. Studia Geophysica Et Geodaetica, 1995, 39, 289-297.	0.5	5
117	Assumptions and observations in tectonic modelling of rift basins: some implications of thermo-isostasy, stress and rheology for intrabasinal structure. Marine and Petroleum Geology, 1996, 13, 437-445.	3.3	5
118	Modelling of compression and extension of the continental lithosphere: Towards rehabilitation of the necking-level model. Journal of Geodynamics, 2010, 50, 368-380.	1.6	5
119	Scientific network to decipher crustal evolution of the Arctic. Eos, 2011, 92, 361-363.	0.1	5
120	Low-temperature thermochronology of the South Atlantic margin along Uruguay and its relation to tectonic events in West Gondwana. Tectonophysics, 2020, 784, 228439.	2.2	5
121	The Dniepr-Donets Basin. , 2012, , 420-441.		4
122	Characterization of crustal structure by comparing reflectivity patterns of wide-angle and near vertical seismic data from the ParnaÁba Basin, Brazil. Geophysical Journal International, 2019, 218, 1652-1664.	2.4	4
123	Review of the main Black Sea rifting phase in the Cretaceous and implications for the evolution of the Black Sea lithosphere. Journal of Geodynamics, 2022, 149, 101891.	1.6	4
124	Deep controls on intraplate basin inversion. , 2014, , 257-274.		3
125	Exploring the theory of plate tectonics: the role of mantle lithosphere structure. Geological Society Special Publication, 2019, 470, 137-155.	1.3	3
126	Seismic anisotropy of the Canadian High Arctic: Evidence from shear-wave splitting. Tectonophysics, 2020, 789, 228524.	2.2	3



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127	The source of topography across the Cumberland Peninsula, Baffin Island, Arctic Canada: differential exhumation of a North Atlantic rift flank. <i>Journal of the Geological Society</i> , 2019, 176, 1093-1106.	2.1	3
128	Preface: Crustal controls on the internal architecture of sedimentary basins. <i>Tectonophysics</i> , 1993, 228, vii-viii.	2.2	2
129	Aspects of geological knowledge for sustainable development in Africa: Women in African Geoscience. <i>Journal of African Earth Sciences</i> , 2009, 55, v-vii.	2.0	2
130	Pooled subsidence records from numerous wells reveal variations in pre-break-up rifting along the proximal domains of the Iberia–Newfoundland continental margins. <i>Geological Magazine</i> , 2019, 156, 1323-1333.	1.5	2
131	An investigation of how intracratonic rifting is “seeded”: Case study of the Late Devonian Dniepr-Donets Basin rift within the East European Craton. <i>Precambrian Research</i> , 2021, 362, 106305.	2.7	2
132	Vp/Vs ratios in the Parnaíba Basin from joint active-passive seismic analysis – Implications for continental amalgamation and basin formation. <i>Tectonophysics</i> , 2021, 801, 228715.	2.2	1
133	Effect of errors in the acquisition of deep seismic reflection data recorded in mountainous areas. , 2012, , .		0