

# yann Rolland

## List of Publications by Year in descending order

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101  
papers

4,550  
citations

81900

39  
h-index

114465

63  
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103  
all docs

103  
docs citations

103  
times ranked

3114  
citing authors

#	ARTICLE	IF	CITATIONS
1	A slab breakoff model for the Neogene thermal evolution of South Karakorum and South Tibet. <i>Earth and Planetary Science Letters</i> , 2002, 195, 45-58.	4.4	225
2	Rare earth and trace element mobility in mid-crustal shear zones: insights from the Mont Blanc Massif (Western Alps). <i>Earth and Planetary Science Letters</i> , 2003, 214, 203-219.	4.4	143
3	Jurassic back-arc and Cretaceous hot-spot series In the Armenian ophiolites – Implications for the obduction process. <i>Lithos</i> , 2009, 112, 163-187.	1.4	143
4	Jurassic accretionary complex and ophiolite from northeast Turkey: No evidence for the Cimmerian continental ribbon. <i>Geology</i> , 2013, 41, 255-258.	4.4	141
5	The cretaceous Ladakh arc of NW himalaya – slab melting and melt – mantle interaction during fast northward drift of Indian Plate. <i>Chemical Geology</i> , 2002, 182, 139-178.	3.3	132
6	Middle Cretaceous back-arc formation and arc evolution along the Asian margin: the Shyok Suture Zone in northern Ladakh (NW Himalaya). <i>Tectonophysics</i> , 2000, 325, 145-173.	2.2	131
7	Subductions, obduction and collision in the Lesser Caucasus (Armenia, Azerbaijan, Georgia), new insights. <i>Geological Society Special Publication</i> , 2010, 340, 329-352.	1.3	128
8	Evidence for a 75Ma subduction jump during Anatolide – Tauride – Armenian block accretion and a 48Ma Arabia – Eurasia collision in Lesser Caucasus – East Anatolia. <i>Journal of Geodynamics</i> , 2012, 56-57, 76-85.	1.6	118
9	Relationships between tectonics, slope instability and climate change: Cosmic ray exposure dating of active faults, landslides and glacial surfaces in the SW Alps. <i>Geomorphology</i> , 2010, 117, 1-13.	2.6	116
10	Blueschists of the Amassia-Stepanavan Suture Zone (Armenia): linking Tethys subduction history from E-Turkey to W-Iran. <i>International Journal of Earth Sciences</i> , 2009, 98, 533-550.	1.8	109
11	Geology, geochemistry and 40Ar/39Ar dating of Sevan ophiolites (Lesser Caucasus, Armenia): Evidence for Jurassic Back-arc opening and hot spot event between the South Armenian Block and Eurasia. <i>Journal of Asian Earth Sciences</i> , 2009, 34, 135-153.	2.3	104
12	Collision kinematics in the western external Alps. <i>Tectonics</i> , 2014, 33, 1055-1088.	2.8	103
13	Caucasus collisional history: Review of data from East Anatolia to West Iran. <i>Gondwana Research</i> , 2017, 49, 130-146.	6.0	103
14	Late evolution of the southern European Variscan belt: Exhumation of the lower crust in a context of oblique convergence. <i>Comptes Rendus - Geoscience</i> , 2009, 341, 214-223.	1.2	96
15	Dating low-temperature deformation by 40Ar/39Ar on white mica, insights from the Argentera-Mercantour Massif (SW Alps). <i>Lithos</i> , 2011, 125, 521-536.	1.4	91
16	<sup>40</sup> Ar/ <sup>39</sup> Ar dating of Penninic Front tectonic displacement (W Alps) during the Lower Oligocene (31 – 34 Ma). <i>Terra Nova</i> , 2009, 21, 127-136.	2.1	90
17	Prolonged Variscan to Alpine history of an active Eurasian margin (Georgia, Armenia) revealed by 40Ar/39Ar dating. <i>Gondwana Research</i> , 2011, 20, 798-815.	6.0	83
18	Tectono – metamorphic evolution of the Karakorum Metamorphic complex (Dassu – Askole area, NE Tj ETQq0 0 0 rgBT /Overlock 10 T Metamorphic Geology, 2001, 19, 717-737.	3.4	82

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19	Constraining deformation stages in brittle-ductile shear zones from combined field mapping and $^{40}\text{Ar}/^{39}\text{Ar}$ dating: The structural evolution of the Grimsel Pass area (Aar Massif, Swiss Alps). <i>Journal of Structural Geology</i> , 2009, 31, 1377-1394.	2.3	79
20	Jurassic ophiolite formation and emplacement as backstop to a subduction-accretion complex in northeast Turkey, the Refahiye ophiolite, and relation to the Balkan ophiolites. <i>Numerische Mathematik</i> , 2013, 313, 1054-1087.	1.4	73
21	Late Palaeozoic to Mesozoic kinematic history of the Talas-Ferghana strike-slip fault (Kyrgyz West). <i>Tectonophysics</i> , 2013, 67-68, 76-92.	2.3	71
22	Geochronological evidence for continuous exhumation through the ductile-brittle transition along a crustal-scale low-angle normal fault: Simplon Fault Zone, central Alps. <i>Tectonics</i> , 2010, 29, .	2.8	70
23	Quantified sensitivity of small lake sediments to record historic earthquakes: Implications for paleoseismology. <i>Journal of Geophysical Research F: Earth Surface</i> , 2016, 121, 2-16.	2.8	70
24	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
25	Linking the NE Anatolian and Lesser Caucasus ophiolites: evidence for large-scale obduction of oceanic crust and implications for the formation of the Lesser Caucasus-Pontides Arc. <i>Geodinamica Acta</i> , 2013, 26, 311-330.	2.2	64
26	Timing of the last deglaciation revealed by receding glaciers at the Alpine-scale: impact on mountain geomorphology. <i>Quaternary Science Reviews</i> , 2012, 31, 127-142.	3.0	63
27	21,000 Years of Ethiopian African monsoon variability recorded in sediments of the western Nile deep-sea fan. <i>Regional Environmental Change</i> , 2014, 14, 1685-1696.	2.9	60
28	Late Paleozoic evolution of the South Tien Shan: Insights from $\text{P-T}$ estimates and allanite geochronology on retrogressed eclogites (Chatkal range, Kyrgyzstan). <i>Journal of Geodynamics</i> , 2016, 96, 62-80.	1.6	58
29	Evidence for superposed MORB, oceanic plateau and volcanic arc series in the Lesser Caucasus (Stepanavan, Armenia). <i>Comptes Rendus - Geoscience</i> , 2007, 339, 482-492.	1.2	57
30	The Armenian Ophiolite: insights for Jurassic back-arc formation, Lower Cretaceous hot spot magmatism and Upper Cretaceous obduction over the South Armenian Block. <i>Geological Society Special Publication</i> , 2010, 340, 353-382.	1.3	54
31	New structural and petrological data on the Amasia ophiolites (NW Sevan-Akera suture zone, Lesser Caucasus). <i>Tectonophysics</i> , 2013, 547, 135-153.	2.2	54
32	Structural Setting of the Neoproterozoic Terrains in the Commonwealth Bay Area (143-145°E), Terre Adélie Craton, East Antarctica. <i>Gondwana Research</i> , 2005, 8, 1-9.	6.0	53
33	Neogene to Quaternary stress field evolution in Lesser Caucasus and adjacent regions using fault kinematics analysis and volcanic cluster data. <i>Geodinamica Acta</i> , 2005, 18, 401-416.	2.2	48
34	Syn-kinematic emplacement of the Pangong metamorphic and magmatic complex along the Karakorum Fault (N Ladakh). <i>Journal of Asian Earth Sciences</i> , 2009, 34, 10-25.	2.3	48
35	The active fault system of SW Alps. <i>Journal of Geodynamics</i> , 2010, 49, 296-302.	1.6	47
36	Recent tectonic stress evolution in the Lesser Caucasus and adjacent regions. <i>Geological Society Special Publication</i> , 2010, 340, 393-408.	1.3	43

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37	Direct dating of mid-crustal shear zones with synkinematic allanite: new <i>in situ</i> U-Th-Pb geochronological approaches applied to the Mont Blanc massif. <i>Terra Nova</i> , 2014, 26, 29-37.	2.1	43
38	<i>in situ</i> estimation of deformation in low-grade quartzfeldspar-bearing rocks using thermodynamic modelling and <sup>40</sup> Ar/ <sup>39</sup> Ar dating techniques: example of the Plan-de-la-Phasy shear zone unit (Briançonnais Zone, Western Alps). <i>Terra Nova</i> , 2014, 26, 130-138.	2.1	43
39	A review of the plate convergence history of the East Anatolia-Transcaucasus region during the Variscan: Insights from the Georgian basement and its connection to the Eastern Pontides. <i>Journal of Geodynamics</i> , 2016, 96, 131-145.	1.6	39
40	The East Anatolia-Lesser Caucasus ophiolite: An exceptional case of large-scale obduction, synthesis of data and numerical modelling. <i>Geoscience Frontiers</i> , 2020, 11, 83-108.	8.4	39
41	Extension syn-convergence, poinçonnement vertical et unités métamorphiques contrastées en bordure ouest du Grand Paradis (Alpes Franco-Italiennes) Syn-convergence extension, vertical pinching and contrasted metamorphic units on the western edge of the Gran Paradiso massif (French-Italian Alps). <i>Geodinamica Acta</i> , 2000, 13, 133-148.	2.2	38
42	<sup>40</sup> Ar/ <sup>39</sup> Ar dating of synkinematic white mica: insights from fluid-rock reaction in low-grade shear zones (Mont Blanc Massif) and constraints on timing of deformation in the NW external Alps. <i>Geological Society Special Publication</i> , 2008, 299, 293-315.	1.3	38
43	Metamorphic and structural evolution of the Maures-Tanneron massif (SE Variscan chain): evidence of doming along a transpressional margin. <i>Bulletin - Societe Geologique De France</i> , 2009, 180, 217-230.	2.2	37
44	Geochemical variations and element transfer during shear-zone development and related episyenites at middle crust depths: insights from the Mont Blanc granite (French - Italian Alps). <i>Geological Society Special Publication</i> , 2005, 245, 373-396.	1.3	35
45	Superimposed Neoproterozoic and Paleoproterozoic tectonics in the Terre Adélie Craton (East Antarctica). <i>Tectonophysics</i> , 2015, 644-645, 197-219.	2.7	35
46	A paleolatitude reconstruction of the South Armenian Block (Lesser Caucasus) for the Late Cretaceous: Constraints on the Tethyan realm. <i>Tectonophysics</i> , 2015, 644-645, 197-219.	2.2	35
47	Thermal and structural evolution of the external Western Alps: Insights from (U-Th/He) thermochronology and RSCM thermometry in the Aiguilles Rouges/Mont Blanc massifs. <i>Tectonophysics</i> , 2016, 683, 109-123.	2.2	35
48	Stress field evolution in the northwest Himalayan syntaxis, northern Pakistan. <i>Tectonics</i> , 2008, 27, .	2.8	34
49	The Late Neoproterozoic/Early Palaeozoic evolution of the West Congo Belt of NW Angola: geochronological (U-Pb and Ar-Ar) and petrostructural constraints. <i>Terra Nova</i> , 2012, 24, 238-247.	2.1	34
50	Multi-stage metamorphism in the South Armenian Block during the Late Jurassic to Early Cretaceous: Tectonics over south-dipping subduction of Northern branch of Neotethys. <i>Journal of Asian Earth Sciences</i> , 2015, 102, 4-23.	2.3	34
51	Evolution of gravity-driven rock slope failure and associated fracturing: Geological analysis and numerical modelling. <i>Tectonophysics</i> , 2012, 526-529, 157-166.	2.2	30
52	Variscan crustal thickening in the Maures-Tanneron massif (South Variscan belt, France): new <i>in situ</i> monazite U-Th-Pb chemical dating of high-grade rocks. <i>Bulletin - Societe Geologique De France</i> , 2015, 186, 145-169.	2.2	29
53	Style of Alpine tectonic deformation in the Castellane fold-and-thrust belt (SW Alps, France): Insights from balanced cross-sections. <i>Tectonophysics</i> , 2014, 633, 143-155.	2.2	28
54	Stable isotope and Ar/Ar evidence of prolonged multiscale fluid flow during exhumation of orogenic crust: Example from the Mont Blanc and Aar Massifs (NW Alps). <i>Tectonics</i> , 2014, 33, 1681-1709.	2.8	28

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55	Obduction of old oceanic lithosphere due to reheating and plate reorganization: Insights from numerical modelling and the NE Anatolia " Lesser Caucasus case example. <i>Journal of Geodynamics</i> , 2016, 96, 35-49.	1.6	28
56	Obduction triggered by regional heating during plate reorganization. <i>Terra Nova</i> , 2016, 28, 76-82.	2.1	27
57	Extension syn-convergence, poinçonnement vertical et unités métamorphiques contrastées en bordure ouest du Grand Paradis (Alpes Franco-Italiennes). <i>Geodinamica Acta</i> , 2000, 13, 133-148.	2.2	26
58	Sediments of Lake Vens (SW European Alps, France) record large-magnitude earthquake events. <i>Journal of Paleolimnology</i> , 2014, 51, 343-355.	1.6	26
59	Lithospheric transdimensional ambient-noise tomography of W-Europe: implications for crustal-scale geometry of the W-Alps. <i>Geophysical Journal International</i> , 2022, 229, 862-879.	2.4	26
60	New structural data on Late Paleozoic tectonics in the Kyrgyz Tien Shan (Central Asian Orogenic) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 5	6.0	24
61	From seafloor spreading to obduction: Jurassic-Cretaceous evolution of the northern branch of the Neotethys in the Northeastern Anatolian and Lesser Caucasus regions. <i>Geological Society Special Publication</i> , 2017, 428, 41-60.	1.3	23
62	Long-lasting transcurrent tectonics in SW Alps evidenced by Neogene to present-day stress fields. <i>Tectonophysics</i> , 2014, 621, 85-100.	2.2	22
63	From intra-oceanic convergence to post-collisional evolution: the India-Asia convergence in NW Himalaya, from Cretaceous to present. <i>Journal of the Virtual Explorer</i> , 0, 08, .	0.0	22
64	Exhumation controlled by transcurrent tectonics: the Argentera-Mercantour massif (SW Alps). <i>Terra Nova</i> , 2011, 23, 116-126.	2.1	21
65	Late Quaternary incision rates in the Vesubie catchment area (Southern French Alps) from in situ-produced <sup>36</sup> Cl cosmogenic nuclide dating: Tectonic and climatic implications. <i>Journal of Geophysical Research F: Earth Surface</i> , 2014, 119, 1121-1135.	2.8	21
66	Progressive orocline formation in the Eastern Pontides-Lesser Caucasus. <i>Geological Society Special Publication</i> , 2017, 428, 117-143.	1.3	21
67	Presence and geodynamic significance of Cambro-Ordovician series of SE Karakoram (N Pakistan). <i>Geodinamica Acta</i> , 2002, 15, 1-21.	2.2	20
68	Tectonometamorphic evolution of the Atbashi high-P units (Kyrgyz CAOB, Tien Shan): Implications for the closure of the Turkestan Ocean and continental subduction-exhumation of the South Kazakh continental margin. <i>Journal of Metamorphic Geology</i> , 2018, 36, 959-985.	3.4	20
69	Metamorphic zoning and geodynamic evolution of an inverted crustal section (Karakorum margin, N) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 50 5	1.8	19
70	Comment on "Alpine thermal and structural evolution of the highest external crystalline massif: The Mont Blanc" by P. H. Leloup, N. Arnaud, E. R. Sobel, and R. Lacassin. <i>Tectonics</i> , 2007, 26, n/a-n/a.	2.8	18
71	Paraglacial gravitational deformations in the SW Alps: a review of field investigations, <sup>10</sup> Be cosmogenic dating and physical modelling. <i>Geological Society Special Publication</i> , 2011, 351, 11-25.	1.3	18
72	Evidence for pre-Cretaceous history and partial Neogene (19-9Ma) reequilibration in the Karakorum (NW Himalayan Syntaxis) from <sup>40</sup> Ar- <sup>39</sup> Ar amphibole dating. <i>Journal of Asian Earth Sciences</i> , 2006, 27, 371-391.	2.3	17

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73	Deciphering orogenic evolution. <i>Journal of Geodynamics</i> , 2012, 56-57, 1-6.	1.6	17
74	Crustal-scale structure of South Tien Shan: implications for subduction polarity and Cenozoic reactivation. <i>Geological Society Special Publication</i> , 2017, 427, 197-229.	1.3	17
75	Inner gorges incision history: A proxy for deglaciation? Insights from Cosmic Ray Exposure dating ( <sup>10</sup> Be and <sup>36</sup> Cl) of river-polished surfaces (TinÃ© River, SW Alps, France). <i>Earth and Planetary Science Letters</i> , 2017, 457, 271-281.	4.4	17
76	Late Paleozoic Ice Age glaciers shaped East Antarctica landscape. <i>Earth and Planetary Science Letters</i> , 2019, 506, 123-133.	4.4	17
77	PALAEONTOLOGICAL (RADIOLARIAN) LATE JURASSIC AGE CONSTRAINT FOR THE STEPANAVAN OPHIOLITE (LESSER CAUCASUS, ARMENIA). <i>Bulletin of the Geological Society of Greece</i> , 2018, 40, 31.	0.5	17
78	Exhumation of Neogene gneiss domes between oblique crustal boundaries in south Karakorum (northwest Himalaya, Pakistan). , 2004, , .		16
79	Geochemistry of the Eocene magmatic rocks from the Lesser Caucasus area (Armenia): evidence of a subduction geodynamic environment. <i>Geological Society Special Publication</i> , 2017, 428, 73-98.	1.3	16
80	Extensional reactivation of the Penninic frontal thrust 3â€‰%Myr ago as evidenced by Uâ€‰Pb dating on calcite in fault zone cataclasite. <i>Solid Earth</i> , 2021, 12, 237-251.	2.8	16
81	The deep structure and reactivation of the Kyrgyz Tien Shan: Modelling the past to better constrain the present. <i>Tectonophysics</i> , 2018, 746, 530-548.	2.2	15
82	Two-stage fluid flow and element transfers in shear zones during collision burial-exhumation cycle: Insights from the Mont Blanc Crystalline Massif (Western Alps). <i>Journal of Geodynamics</i> , 2016, 101, 88-108.	1.6	14
83	Recent, climate-driven river incision rate fluctuations in the Mercantour crystalline massif, southern French Alps. <i>Quaternary Science Reviews</i> , 2017, 165, 73-87.	3.0	14
84	Permian charnockites in the Pobeda area: Implications for Tarim mantle plume activity and HT metamorphism in the South Tien Shan range. <i>Lithos</i> , 2018, 304-307, 135-154.	1.4	14
85	Deglaciation history at the Alpineâ€‰Mediterranean transition (Argenteraâ€‰Mercantour, SW Alps) from <sup>10</sup> Be dating of moraines and glacially polished bedrock. <i>Earth Surface Processes and Landforms</i> , 2020, 45, 393-410.	2.5	14
86	Impact of rangeâ€‰parallel sediment transport on 2D thermoâ€‰mechanical models of mountain belts: Application to the Kyrgyz Tien Shan. <i>Terra Nova</i> , 2018, 30, 279-288.	2.1	13
87	Pliocene to Quaternary deformation in the Var Basin (Nice, SE France) and its interpretation in terms of â€‰slow-activeâ€‰ faulting. <i>Swiss Journal of Geosciences</i> , 2012, 105, 361-376.	1.2	11
88	Thermochronology of the highest central Asian massifs (Khan Tengri - Pobedi, SE Kyrgyzstan): Evidence for Late Miocene (ca. 8Â‰Ma) reactivation of Permian faults and insights into building the Tian Shan. <i>Journal of Asian Earth Sciences</i> , 2020, 200, 104466.	2.3	9
89	Geometry and sedimentary evolution of the transpressive Roquebrune-Cap Martin basin: implications on the kinematics and timing of the Nice arc deformation during Miocene times, SW Alps. <i>Bulletin - Societe Geologique De France</i> , 2011, 182, 493-506.	2.2	8
90	Presence and geodynamic significance of Cambro-Ordovician series of SE Karakoram (N Pakistan). <i>Geodinamica Acta</i> , 2002, 15, 1-21.	2.2	7

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91	Ediacaran to lower Cambrian basement in eastern George V Land (Antarctica): Evidence from U Pb dating of gneiss xenoliths and implications for the South Australia- East Antarctica connection. <i>Lithos</i> , 2018, 318-319, 219-229.	1.4	7
92	River incision and migration deduced from <sup>36</sup> Cl cosmic-ray exposure durations: The Clue de la Cerise gorge in southern French Alps. <i>Geomorphology</i> , 2019, 330, 81-88.	2.6	7
93	The Pangong granulites of the Karakoram Fault (Western Tibet): vertical extrusion within a lithosphere-scale fault?. <i>Comptes Rendus De L'Académie Des Sciences Earth &amp; Planetary Sciences Série II, Sciences De La Terre Et Des Planètes</i> , 2001, 332, 363-370.	0.2	6
94	Lithological nature of the subduction channel: Insights from the Karabakh suture zone (Lesser Tethyan Himalayas). <i>Journal of Metamorphic Geology</i> , 2019, 37, 105-115.	1.6	5
95	Petrochronology of the Terre Adélie Craton (East Antarctica) evidences a long-lasting Proterozoic (1.7-1.5 Ga) tectono-metamorphic evolution: Insights for the connections with the Gawler Craton and Laurentia. <i>Gondwana Research</i> , 2020, 81, 21-57.	6.0	5
96	Interplay of fluvial incision and rockfalls in shaping periglacial mountain gorges. <i>Geomorphology</i> , 2021, 381, 107665.	2.6	5
97	The cold and hot collisional orogens: Thermal regimes and metallogeny of the Alpine versus Himalayan-Tibetan belts. <i>Ore Geology Reviews</i> , 2022, 141, 104671.	2.7	4
98	Protolith nature and tectonic evolution of Variscan metamorphic rocks from the Allahyarlu complex, NW Iran. <i>Geological Magazine</i> , 2020, 157, 1853-1876.	1.5	3
99	Subgrain <sup>40</sup> Ar/ <sup>39</sup> Ar dating of museum-quality micas reveals intragrain heterogeneity. <i>Chemical Geology</i> , 2021, 573, 120215.	3.3	3
100	Reply to the comments on "Middle Cretaceous back-arc formation and arc evolution along the Asian margin: the Shyok Suture Zone on northern Ladakh (NW Himalaya)" by Weinberg and Dunlap. <i>Tectonophysics</i> , 2001, 340, 269-271.	2.2	2
101	Antarctic erosion history reconstructed by Terre Adélie moraine geochronology. <i>Antarctic Science</i> , 2020, 32, 382-395.	0.9	0