

# Douglas Burbank

## List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

124  
papers

13,407  
citations

57  
h-index

115  
g-index

127  
ext. papers

15,056  
ext. citations

8.4  
avg, IF

6.11  
L-index

#	Paper	IF	Citations
124	Along-Strike and Downdip Segmentation of the Pamir Frontal Thrust and Its Association With the 1985 Mw 6.9 Wujia Earthquake. <i>Journal of Geophysical Research: Solid Earth</i> , <b>2019</b> , 124, 9890-9919	3.6	12
123	Controls on the lateral channel-migration rate of braided channel systems in coarse non-cohesive sediment. <i>Earth Surface Processes and Landforms</i> , <b>2019</b> , 44, 2823-2836	3.7	12
122	Coarse- versus fine-grain quartz OSL and cosmogenic <sup>10</sup> Be dating of deformed fluvial terraces on the northeast Pamir margin, northwest China. <i>Quaternary Geochronology</i> , <b>2018</b> , 46, 1-15	2.7	23
121	Dating growth strata and basin fill by combining <sup>26</sup> Al/ <sup>10</sup> Be burial dating and magnetostratigraphy: Constraining active deformation in the Pamir-Tian Shan convergence zone, NW China. <i>Lithosphere</i> , <b>2018</b> , 10, 806-828	2.7	15
120	Active Bending-Moment Faulting: Geomorphic Expression, Controlling Conditions, Accommodation of Fold Deformation. <i>Tectonics</i> , <b>2018</b> , 37, 2278-2306	4.3	14
119	Controls on intermontane basin filling, isolation and incision on the margin of the Puna Plateau, NW Argentina (~23°S). <i>Basin Research</i> , <b>2017</b> , 29, 131-155	3.2	16
118	An automated knickzone selection algorithm (KZ-Picker) to analyze transient landscapes: Calibration and validation. <i>Journal of Geophysical Research F: Earth Surface</i> , <b>2017</b> , 122, 1236-1261	3.8	46
117	Temporal changes in rock uplift rates of folds in the foreland of the Tian Shan and the Pamir from geodetic and geologic data. <i>Geophysical Research Letters</i> , <b>2017</b> , 44, 10,977	4.9	20
116	Mio-Pliocene aridity in the south-central Andes associated with Southern Hemisphere cold periods. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2017</b> , 114, 6474-6479	11.5	27
115	Active Flexural-Slip Faulting: Controls Exerted by Stratigraphy, Geometry, and Fold Kinematics. <i>Journal of Geophysical Research: Solid Earth</i> , <b>2017</b> , 122, 8538-8565	3.6	10
114	Quaternary tectonic evolution of the Pamir-Tian Shan convergence zone, Northwest China. <i>Tectonics</i> , <b>2017</b> , 36, 2748-2776	4.3	35
113	Variations of Lateral Bedrock Erosion Rates Control Planation of Uplifting Folds in the Foreland of the Tian Shan, NW China. <i>Journal of Geophysical Research F: Earth Surface</i> , <b>2017</b> , 122, 2431-2467	3.8	16
112	U-Pb ages of detrital and volcanic zircons of the Toro Negro Formation, northwestern Argentina: Age, provenance and sedimentation rates. <i>Journal of South American Earth Sciences</i> , <b>2016</b> , 70, 237-250	2	16
111	Fluvial bevelling of topography controlled by lateral channel mobility and uplift rate. <i>Nature Geoscience</i> , <b>2016</b> , 9, 706-710	18.3	43
110	Active flexural-slip faulting: A study from the Pamir-Tian Shan convergent zone, NW China. <i>Journal of Geophysical Research: Solid Earth</i> , <b>2015</b> , 120, 4359-4378	3.6	13
109	Hinge-migrated fold-scarp model based on an analysis of bed geometry: A study from the Mingyaole anticline, southern foreland of Chinese Tian Shan. <i>Journal of Geophysical Research: Solid Earth</i> , <b>2015</b> , 120, 6592-6613	3.6	24
108	Late Miocene northward propagation of the northeast Pamir thrust system, northwest China. <i>Tectonics</i> , <b>2015</b> , 34, 510-534	4.3	60

107	Dominance of tectonics over climate in Himalayan denudation. <i>Geology</i> , <b>2014</b> , 42, 243-246	5	120
106	Constraints on the late Quaternary glacial history of the Inylchek and Sary-Dzaz valleys from in situ cosmogenic <sup>10</sup> Be and <sup>26</sup> Al, eastern Kyrgyz Tian Shan. <i>Quaternary Science Reviews</i> , <b>2014</b> , 101, 77-90	3.9	23
105	Pliocene-Pleistocene initiation, style, and sequencing of deformation in the central Tien Shan. <i>Tectonics</i> , <b>2014</b> , 33, 464-484	4.3	11
104	Relationship of channel steepness to channel incision rate from a tilted and progressively exposed unconformity surface. <i>Journal of Geophysical Research F: Earth Surface</i> , <b>2014</b> , 119, 366-384	3.8	4
103	The growth of northeastern Tibet and its relevance to large-scale continental geodynamics: A review of recent studies. <i>Tectonics</i> , <b>2013</b> , 32, 1358-1370	4.3	245
102	Frequency-dependent landscape response to climatic forcing. <i>Geophysical Research Letters</i> , <b>2013</b> , 40, 859-863	4.9	46
101	Tectonic Geomorphology, Second Edition. <i>Environmental and Engineering Geoscience</i> , <b>2013</b> , 19, 198-200	0.7	3
100	Quantification of three-dimensional folding using fluvial terraces: A case study from the Mushi anticline, northern margin of the Chinese Pamir. <i>Journal of Geophysical Research: Solid Earth</i> , <b>2013</b> , 118, 4628-4647	3.6	39
99	Cenozoic shortening budget for the northeastern edge of the Tibetan Plateau: Is lower crustal flow necessary?. <i>Tectonics</i> , <b>2012</b> , 31, n/a-n/a	4.3	69
98	Modern climate and erosion in the Himalaya. <i>Comptes Rendus - Geoscience</i> , <b>2012</b> , 344, 610-626	1.4	52
97	Equivalency of geologic and geodetic rates in contractional orogens: New insights from the Pamir Frontal Thrust. <i>Geophysical Research Letters</i> , <b>2012</b> , 39,	4.9	55
96	Kinematic implications of consequent channels on growing folds. <i>Journal of Geophysical Research</i> , <b>2011</b> , 116,		7
95	Rates and timing of vertical-axis block rotations across the central Sierra Nevada-Walker Lane transition in the Bodie Hills, California/Nevada. <i>Tectonics</i> , <b>2011</b> , 30, n/a-n/a	4.3	13
94	Topographic control of asynchronous glacial advances: A case study from Annapurna, Nepal. <i>Geophysical Research Letters</i> , <b>2011</b> , 38, n/a-n/a	4.9	32
93	Quantifying bedrock-fracture patterns within the shallow subsurface: Implications for rock mass strength, bedrock landslides, and erodibility. <i>Journal of Geophysical Research</i> , <b>2011</b> , 116,		54
92	Basin width control of faulting in the Naryn Basin, south-central Kyrgyzstan. <i>Tectonics</i> , <b>2011</b> , 30, n/a-n/a	4.3	18
91	Spatiotemporal patterns of fault slip rates across the Central Sierra Nevada frontal fault zone. <i>Earth and Planetary Science Letters</i> , <b>2011</b> , 301, 457-468	5.3	25
90	Chronology of glaciations in the Sierra Nevada, California, from <sup>10</sup> Be surface exposure dating. <i>Quaternary Science Reviews</i> , <b>2011</b> , 30, 646-661	3.9	50

89	Middle Miocene reorganization of deformation along the northeastern Tibetan Plateau. <i>Geology</i> , <b>2011</b> , 39, 359-362	5	161
88	Late Cenozoic structural and stratigraphic evolution of the northern Chinese Tian Shan foreland. <i>Basin Research</i> , <b>2010</b> , 22, 249-269	3.2	59
87	Three-dimensional GPR imaging of the Benmore anticline and step-over of the Ostler Fault, South Island, New Zealand. <i>Geophysical Journal International</i> , <b>2010</b> , 180, 465-474	2.6	19
86	Evaluating hillslope diffusion and terrace riser degradation in New Zealand and Idaho. <i>Journal of Geophysical Research</i> , <b>2010</b> , 115,		11
85	Along-strike growth of the Ostler fault, New Zealand: Consequences for drainage deflection above active thrusts. <i>Tectonics</i> , <b>2010</b> , 29, n/a-n/a	4.3	30
84	Geomorphic and climatic controls on chemical weathering in the High Himalayas of Nepal. <i>Geomorphology</i> , <b>2010</b> , 122, 205-210	4.3	30
83	Bedrock fracturing, threshold hillslopes, and limits to the magnitude of bedrock landslides. <i>Earth and Planetary Science Letters</i> , <b>2010</b> , 297, 577-586	5.3	84
82	Alluvial sequence in the north piedmont of the Chinese Tian Shan over the past 550kyr and its relationship to climate change. <i>Palaeogeography, Palaeoclimatology, Palaeoecology</i> , <b>2010</b> , 285, 343-353	2.9	56
81	Spatial variations in chemical weathering and CO <sub>2</sub> consumption in Nepalese High Himalayan catchments during the monsoon season. <i>Geochimica Et Cosmochimica Acta</i> , <b>2009</b> , 73, 3148-3170	5.5	41
80	Numerical study of degradation of fluvial hanging valleys due to climate change. <i>Journal of Geophysical Research</i> , <b>2009</b> , 114,		14
79	Temporal constraints and pulsed Late Cenozoic deformation during the structural disruption of the active Kashi foreland, northwest China. <i>Tectonics</i> , <b>2008</b> , 27, n/a-n/a	4.3	87
78	Anomalous cosmogenic <sup>3</sup> He production and elevation scaling in the high Himalaya. <i>Earth and Planetary Science Letters</i> , <b>2008</b> , 265, 287-301	5.3	25
77	Modern erosion rates in the High Himalayas of Nepal. <i>Earth and Planetary Science Letters</i> , <b>2008</b> , 267, 482-494	5.3	130
76	Slip rate gradients along the eastern Kunlun fault. <i>Tectonics</i> , <b>2007</b> , 26, n/a-n/a	4.3	200
75	The Shuttle Radar Topography Mission. <i>Reviews of Geophysics</i> , <b>2007</b> , 45,	23.1	3672
74	Geomorphic constraints on listric thrust faulting: Implications for active deformation in the Mackenzie Basin, South Island, New Zealand. <i>Journal of Geophysical Research</i> , <b>2007</b> , 112,		85
73	Quantification of growth and lateral propagation of the Kashi anticline, southwest Chinese Tian Shan. <i>Journal of Geophysical Research</i> , <b>2007</b> , 112,		62
72	Transient landscape evolution of basement-cored uplifts: Example of the Kyrgyz Range, Tian Shan. <i>Journal of Geophysical Research</i> , <b>2007</b> , 112,		33

71	Bedrock channel geometry along an orographic rainfall gradient in the upper Marsyandi River valley in central Nepal. <i>Journal of Geophysical Research</i> , <b>2007</b> , 112,		50
70	Channel width response to differential uplift. <i>Journal of Geophysical Research</i> , <b>2007</b> , 112,		79
69	Plio-Quaternary exhumation history of the central Nepalese Himalaya: 1. Apatite and zircon fission track and apatite [U-Th]/He analyses. <i>Tectonics</i> , <b>2007</b> , 26, n/a-n/a	4.3	82
68	Chronology and tectonic controls of Late Tertiary deposition in the southwestern Tian Shan foreland, NW China. <i>Basin Research</i> , <b>2007</b> , 19, 599-632	3.2	126
67	Bedload-to-suspended load ratio and rapid bedrock incision from Himalayan Landslide-dam lake record. <i>Quaternary Research</i> , <b>2007</b> , 68, 111-120	1.9	73
66	Signatures of mountain building: Detrital zircon U/Pb ages from northeastern Tibet. <i>Geology</i> , <b>2007</b> , 35, 239	5	140
65	Plio-Quaternary exhumation history of the central Nepalese Himalaya: 2. Thermokinematic and thermochronometer age prediction model. <i>Tectonics</i> , <b>2007</b> , 26, n/a-n/a	4.3	76
64	Thermal and kinematic modeling of bedrock and detrital cooling ages in the central Himalaya. <i>Journal of Geophysical Research</i> , <b>2006</b> , 111,		19
63	Temporal variations in slip rate of the White Mountain Fault Zone, Eastern California. <i>Earth and Planetary Science Letters</i> , <b>2006</b> , 248, 168-185	5.3	49
62	UPb zircon ages as a sediment mixing tracer in the Nepal Himalaya. <i>Earth and Planetary Science Letters</i> , <b>2005</b> , 235, 244-260	5.3	87
61	Effects of bedrock landslides on cosmogenically determined erosion rates. <i>Earth and Planetary Science Letters</i> , <b>2005</b> , 237, 480-498	5.3	207
60	Construction of detrital mineral populations: insights from mixing of UPb zircon ages in Himalayan rivers. <i>Basin Research</i> , <b>2005</b> , 17, 463-485	3.2	91
59	Thrust-fault growth and segment linkage in the active Ostler fault zone, New Zealand. <i>Journal of Structural Geology</i> , <b>2005</b> , 27, 1528-1546	3	120
58	Alpine landscape evolution dominated by cirque retreat. <i>Geology</i> , <b>2005</b> , 33, 933	5	78
57	Climatic controls on hillslope angle and relief in the Himalayas. <i>Geology</i> , <b>2004</b> , 32, 629	5	70
56	Tectonic and lithologic controls on bedrock channel profiles and processes in coastal California. <i>Journal of Geophysical Research</i> , <b>2004</b> , 109,		299
55	Landscape disequilibrium on 1000-10,000 year scales Marsyandi River, Nepal, central Himalaya. <i>Geomorphology</i> , <b>2004</b> , 58, 223-241	4.3	106
54	Rainfall thresholds for landsliding in the Himalayas of Nepal. <i>Geomorphology</i> , <b>2004</b> , 63, 131-143	4.3	168

53	Modelling detrital cooling-age populations: insights from two Himalayan catchments. <i>Basin Research</i> , <b>2003</b> , 15, 305-320	3.2	69
52	Decoupling of erosion and precipitation in the Himalayas. <i>Nature</i> , <b>2003</b> , 426, 652-5	50.4	429
51	A 900 k.y. record of strath terrace formation during glacial-interglacial transitions in northwest China. <i>Geology</i> , <b>2003</b> , 31, 957	5	159
50	River response to an active fold-and-thrust belt in a convergent margin setting, North Island, New Zealand. <i>Geomorphology</i> , <b>2003</b> , 49, 125-152	4.3	59
49	Rates of erosion and their implications for exhumation. <i>Mineralogical Magazine</i> , <b>2002</b> , 66, 25-52	1.7	131
48	Impulsive alluviation during early Holocene strengthened monsoons, central Nepal Himalaya. <i>Geology</i> , <b>2002</b> , 30, 911	5	108
47	Dynamic fluvial systems and gravel progradation in the Himalayan foreland. <i>Bulletin of the Geological Society of America</i> , <b>2000</b> , 112, 394-412	3.9	87
46	A study of the 1999 monsoon rainfall in a mountainous region in central Nepal using TRMM products and rain gauge observations. <i>Geophysical Research Letters</i> , <b>2000</b> , 27, 3683-3686	4.9	169
45	Depositional and structural evolution of a foreland basin margin in a magnetostratigraphic framework: the eastern Swiss Molasse Basin. <i>International Journal of Earth Sciences</i> , <b>1999</b> , 88, 253-275	2.2	77
44	Quantified vertical motions and tectonic evolution of the SE Pyrenean foreland basin. <i>Geological Society Special Publication</i> , <b>1998</b> , 134, 107-134	1.7	38
43	Magnetostratigraphic constraints on relationships between evolution of the central Swiss Molasse basin and Alpine orogenic events. <i>Bulletin of the Geological Society of America</i> , <b>1997</b> , 109, 225-241	3.9	54
42	Growth of the South Pyrenean orogenic wedge. <i>Tectonics</i> , <b>1997</b> , 16, 239-258	4.3	47
41	Climatic Limits on Landscape Development in the Northwestern Himalaya. <i>Science</i> , <b>1997</b> , 276, 571-4	33.3	310
40	Sedimentary sequences, seismofacies and evolution of depositional systems of the Oligo/Miocene Lower Freshwater Molasse Group, Switzerland. <i>Basin Research</i> , <b>1997</b> , 9, 1-26	3.2	19
39	Unfolding: An inverse approach to fold kinematics. <i>Geology</i> , <b>1996</b> , 24, 175	5	47
38	Late Cretaceous ophiolite obduction and Paleocene India-Asia collision in the westernmost Himalaya. <i>Geodinamica Acta</i> , <b>1996</b> , 9, 114-144	2	62
37	Ten-million-year history of a thrust sheet. <i>Bulletin of the Geological Society of America</i> , <b>1996</b> , 108, 1608-1625	16.25	60
36	Interactions of growing folds and coeval depositional systems. <i>Basin Research</i> , <b>1996</b> , 8, 199-223	3.2	179

35	Bedrock incision, rock uplift and threshold hillslopes in the northwestern Himalayas. <i>Nature</i> , <b>1996</b> , 379, 505-510	50.4	825
34	Stratigraphic evidence for an early collision between northwest India and Asia. <i>Nature</i> , <b>1995</b> , 373, 55-58	50.4	395
33	Middle-late Miocene (>10 Ma) formation of the Main Boundary thrust in the western Himalaya. <i>Geology</i> , <b>1995</b> , 23, 423	5	213
32	Organic carbon exhumation and global warming during the early Himalayan collision. <i>Geology</i> , <b>1995</b> , 23, 387	5	31
31	Rift basins and supradetachment basins: intracontinental extensional end-members. <i>Basin Research</i> , <b>1995</b> , 7, 109-127	3.2	140
30	Magnetostratigraphic Chronology of Cretaceous-to-Eocene Thrust Belt Evolution, Central Utah, USA. <i>Journal of Geology</i> , <b>1994</b> , 102, 181-196	2	22
29	Uplift and thermal history of the Teton Range (northwestern Wyoming) defined by apatite fission-track dating. <i>Earth and Planetary Science Letters</i> , <b>1993</b> , 118, 295-309	5.3	20
28	Braided stream and flood-plain deposition in a rapidly aggrading basin: the Escanilla formation, Spanish Pyrenees. <i>Geological Society Special Publication</i> , <b>1993</b> , 75, 177-194	1.7	28
27	Pluton pinning of an active Miocene detachment fault system, eastern Mojave Desert, California. <i>Geology</i> , <b>1993</b> , 21, 627	5	31
26	Reduced Himalayan sediment production 8 Myr ago despite an intensified monsoon. <i>Nature</i> , <b>1993</b> , 364, 48-50	50.4	141
25	The chronology of the Eocene tectonic and stratigraphic development of the eastern Pyrenean foreland basin, northeast Spain. <i>Bulletin of the Geological Society of America</i> , <b>1992</b> , 104, 1101-1120	3.9	87
24	Coeval hindward- and forward-imbricating thrusting in the south-central Pyrenees, Spain: Timing and rates of shortening and deposition. <i>Bulletin of the Geological Society of America</i> , <b>1992</b> , 104, 3-17	3.9	88
23	Miocene biostratigraphy and biochronology of the Dove Spring Formation, Mojave Desert, California, and characterization of the Clarendonian mammal age (late Miocene) in California. <i>Bulletin of the Geological Society of America</i> , <b>1992</b> , 104, 644-658	3.9	30
22	Causes of recent Himalayan uplift deduced from deposited patterns in the Ganges basin. <i>Nature</i> , <b>1992</b> , 357, 680-683	50.4	219
21	Rapid, long-term rates of denudation. <i>Geology</i> , <b>1991</b> , 19, 1169	5	32
20	Late quaternary snowline reconstructions for the southern and central Sierra Nevada, California and a reassessment of the Recess Peak Glaciation. <i>Quaternary Research</i> , <b>1991</b> , 36, 294-306	1.9	32
19	Relative dating of Quaternary moraines, Rongbuk valley, Mount Everest, Tibet: Implications for an ice sheet on the Tibetan Plateau. <i>Quaternary Research</i> , <b>1991</b> , 36, 1-18	1.9	63
18	Models of aggradation versus progradation in the Himalayan Foreland. <i>Geologische Rundschau: Zeitschrift Fur Allgemeine Geologie</i> , <b>1991</b> , 80, 623-638		34



17	The magnetochronology of Barstovian mammals in southwestern Montana and implications for the initiation of Neogene crustal extension in the northern Rocky Mountains. <i>Bulletin of the Geological Society of America</i> , <b>1990</b> , 102, 1093-1104	3.9	21
16	Comment and Reply on "Development of the Himalayan frontal thrust zone: Salt Range, Pakistan". <i>Geology</i> , <b>1989</b> , 17, 378	5	2
15	Lacustrine Sedimentation in a Semiarid Alpine Setting: An Example from Ladakh, Northwestern Himalaya. <i>Quaternary Research</i> , <b>1989</b> , 31, 332-350	1.9	58
14	Comment and Reply on "Thrusting and gravel progradation in foreland basins: A test of post-thrusting gravel dispersal". <i>Geology</i> , <b>1989</b> , 17, 959	5	3
13	Thrusting and gravel progradation in foreland basins: A test of post-thrusting gravel dispersal. <i>Geology</i> , <b>1988</b> , 16, 1143	5	70
12	The stratigraphic evolution of the El Paso basin, southern California: Implications for the Miocene development of the Garlock fault and uplift of the Sierra Nevada. <i>Bulletin of the Geological Society of America</i> , <b>1988</b> , 100, 12-28	3.9	41
11	Temporally constrained tectonic rotations derived from magnetostratigraphic data: Implications for the initiation of the Garlock fault, California. <i>Geology</i> , <b>1987</b> , 15, 1172	5	32
10	Age and palaeoclimatic significance of the loess of Lanzhou, north China. <i>Nature</i> , <b>1985</b> , 316, 429-431	50.4	105
9	The magnetostratigraphy, fission-track dating, and stratigraphic evolution of the Peshawar intermontane basin, northern Pakistan. <i>Bulletin of the Geological Society of America</i> , <b>1985</b> , 96, 539	3.9	40
8	Bedrock Control on Glacial Limits: Examples from the Ladakh and Zaskar Ranges, North-Western Himalaya, India. <i>Journal of Glaciology</i> , <b>1985</b> , 31, 143-149	3.4	4
7	Sequential late Cenozoic structural disruption of the northern Himalayan foredeep. <i>Nature</i> , <b>1984</b> , 311, 114-118	50.4	80
6	The late cenozoic chronologic and stratigraphic development of the Kashmir intermontane basin, Northwestern Himalaya. <i>Palaeogeography, Palaeoclimatology, Palaeoecology</i> , <b>1983</b> , 43, 205-235	2.9	114
5	The chronology of intermontane-basin development in the northwestern Himalaya and the evolution of the Northwest Syntaxis. <i>Earth and Planetary Science Letters</i> , <b>1983</b> , 64, 77-92	5.3	78
4	Correlations of Climate, Mass Balances, and Glacial Fluctuations at Mount Rainier, Washington, U.S.A., Since 1850. <i>Arctic and Alpine Research</i> , <b>1982</b> , 14, 137		26
3	Intermontane-basin development in the past 4 Myr in the north-west Himalaya. <i>Nature</i> , <b>1982</b> , 298, 432-436	50.4	122
2	A Chronology of Late Holocene Glacier Fluctuations on Mount Rainier, Washington. <i>Arctic and Alpine Research</i> , <b>1981</b> , 13, 369		43
1	Single-Crystal Dating and the Detrital Record of Orogenesis		253-281 3