Douglas Burbank

List of Publications by Year
in descending order

126 papers	17,021 citations	19657 61 h-index	15266 126 g-index
127 all docs	127 docs citations	127 times ranked	14259 citing authors

#	Article	IF	Citations
1	Alongâ€Strike and Downdip Segmentation of the Pamir Frontal Thrust and Its Association With the 1985 M_w 6.9 Wuqia Earthquake. Journal of Geophysical Research: Solid Earth, 2019, 124, 9890-9919.	3.4	18
2	Controls on the lateral channelâ€migration rate of braided channel systems in coarse nonâ€cohesive sediment. Earth Surface Processes and Landforms, 2019, 44, 2823-2836.	2.5	31
3	Coarse- versus fine-grain quartz OSL and cosmogenic 10 Be dating of deformed fluvial terraces on the northeast Pamir margin, northwest China. Quaternary Geochronology, 2018, 46, 1-15.	1.4	31
4	Dating growth strata and basin fill by combining 26Al/10Be burial dating and magnetostratigraphy: Constraining active deformation in the Pamirâ€“Tian Shan convergence zone, NW China. Lithosphere, 2018, 10, 806-828.	1.4	22
5	Active Bendingâ€Moment Faulting: Geomorphic Expression, Controlling Conditions, Accommodation of Fold Deformation. Tectonics, 2018, 37, 2278-2306.	2.8	23
6	Controls on intermontane basin filling, isolation and incision on the margin of the Puna Plateau, <scp>NW</scp> Argentina (~23Â°S). Basin Research, 2017, 29, 131-155.	2.7	26
7	An automated knickzone selection algorithm (KZâ€Picker) to analyze transient landscapes: Calibration and validation. Journal of Geophysical Research F: Earth Surface, 2017, 122, 1236-1261.	2.8	60
8	Temporal changes in rock uplift rates of folds in the foreland of the Tian Shan and the Pamir from geodetic and geologic data. Geophysical Research Letters, 2017, 44, 10,977.	4.0	25
9	Mio-Pliocene aridity in the south-central Andes associated with Southern Hemisphere cold periods. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 6474-6479.	7.1	39
10	Active Flexuralâ€Slip Faulting: Controls Exerted by Stratigraphy, Geometry, and Fold Kinematics. Journal of Geophysical Research: Solid Earth, 2017, 122, 8538-8565.	3.4	18
11	Quaternary tectonic evolution of the Pamirâ€Tian Shan convergence zone, Northwest China. Tectonics, 2017, 36, 2748-2776.	2.8	43
12	Variations of Lateral Bedrock Erosion Rates Control Planation of Uplifting Folds in the Foreland of the Tian Shan, NW China. Journal of Geophysical Research F: Earth Surface, 2017, 122, 2431-2467.	2.8	22
13	Fluvial bevelling of topography controlled by lateral channel mobility and uplift rate. Nature Geoscience, 2016, 9, 706-710.	12.9	62
14	U-Pb ages of detrital and volcanic zircons of the Toro Negro Formation, northwestern Argentina: Age, provenance and sedimentation rates. Journal of South American Earth Sciences, 2016, 70, 237-250.	1.4	29
15	Hingeâ€migrated foldâ€scarp model based on an analysis of bed geometry: A study from the Mingyaole anticline, southern foreland of Chinese Tian Shan. Journal of Geophysical Research: Solid Earth, 2015, 120, 6592-6613.	3.4	28
16	Late Miocene northward propagation of the northeast Pamir thrust system, northwest China. Tectonics, 2015, 34, 510-534.	2.8	77
17	Active flexuralâ€slip faulting: A study from the Pamirâ€Tian Shan convergent zone, NW China. Journal of Geophysical Research: Solid Earth, 2015, 120, 4359-4378.	3.4	15
18	Relationship of channel steepness to channel incision rate from a tilted and progressively exposed unconformity surface. Journal of Geophysical Research F: Earth Surface, 2014, 119, 366-384.	2.8	7

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19	Dominance of tectonics over climate in Himalayan denudation. Geology, 2014, 42, 243-246.	4.4	161
20	Constraints on the late Quaternary glacial history of the Inylchek and Sary-Dzaz valleys from in situ cosmogenic 10Be and 26Al, eastern Kyrgyz Tian Shan. Quaternary Science Reviews, 2014, 101, 77-90.	3.0	33
21	Plioceneâ€Pleistocene initiation, style, and sequencing of deformation in the central Tien Shan. Tectonics, 2014, 33, 464-484.	2.8	21
22	The growth of northeastern Tibet and its relevance to largeâ€scale continental geodynamics: A review of recent studies. Tectonics, 2013, 32, 1358-1370.	2.8	350
23	Frequencyâ€dependent landscape response to climatic forcing. Geophysical Research Letters, 2013, 40, 859-863.	4.0	61
24	Tectonic Geomorphology, Second Edition. Environmental and Engineering Geoscience, 2013, 19, 198-200.	0.9	8
25	Quantification of threeâ€dimensional folding using fluvial terraces: A case study from the Mushi anticline, northern margin of the Chinese Pamir. Journal of Geophysical Research: Solid Earth, 2013, 118, 4628-4647.	3.4	45
26	Cenozoic shortening budget for the northeastern edge of the Tibetan Plateau: Is lower crustal flow necessary?. Tectonics, 2012, 31, .	2.8	86
27	Modern climate and erosion in the Himalaya. Comptes Rendus - Geoscience, 2012, 344, 610-626.	1.2	64
28	Equivalency of geologic and geodetic rates in contractional orogens: New insights from the Pamir Frontal Thrust. Geophysical Research Letters, 2012, 39, .	4.0	61
29	Kinematic implications of consequent channels on growing folds. Journal of Geophysical Research, 2011, 116, .	3.3	8
30	Rates and timing of verticalâ€axis block rotations across the central Sierra Nevadaâ€Walker Lane transition in the Bodie Hills, California/Nevada. Tectonics, 2011, 30, .	2.8	14
31	Topographic control of asynchronous glacial advances: A case study from Annapurna, Nepal. Geophysical Research Letters, 2011, 38, n/a-n/a.	4.0	38
32	Quantifying bedrock-fracture patterns within the shallow subsurface: Implications for rock mass strength, bedrock landslides, and erodibility. Journal of Geophysical Research, 2011, 116, .	3.3	71
33	Basin width control of faulting in the Naryn Basin, southâ€central Kyrgyzstan. Tectonics, 2011, 30, .	2.8	23
34	Spatiotemporal patterns of fault slip rates across the Central Sierra Nevada frontal fault zone. Earth and Planetary Science Letters, 2011, 301, 457-468.	4.4	32
35	Chronology of glaciations in the Sierra Nevada, California, from 10Be surface exposure dating. Quaternary Science Reviews, 2011, 30, 646-661.	3.0	63
36	Middle Miocene reorganization of deformation along the northeastern Tibetan Plateau. Geology, 2011, 39, 359-362.	4.4	218

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37	Late Cenozoic structural and stratigraphic evolution of the northern Chinese Tian Shan foreland. Basin Research, 2010, 22, 249-269.	2.7	76
38	Three-dimensional GPR imaging of the Benmore anticline and step-over of the Ostler Fault, South Island, New Zealand. Geophysical Journal International, 2010, 180, 465-474.	2.4	23
39	Evaluating hillslope diffusion and terrace riser degradation in New Zealand and Idaho. Journal of Geophysical Research, 2010, 115, .	3.3	14
40	Along-strike growth of the Ostler fault, New Zealand: Consequences for drainage deflection above active thrusts. Tectonics, 2010, 29, n/a-n/a.	2.8	38
41	Geomorphic and climatic controls on chemical weathering in the High Himalayas of Nepal. Geomorphology, 2010, 122, 205-210.	2.6	36
42	Bedrock fracturing, threshold hillslopes, and limits to the magnitude of bedrock landslides. Earth and Planetary Science Letters, 2010, 297, 577-586.	4.4	112
43	Alluvial sequence in the north piedmont of the Chinese Tian Shan over the past 550kyr and its relationship to climate change. Palaeogeography, Palaeoclimatology, Palaeoecology, 2010, 285, 343-353.	2.3	65
44	Spatial variations in chemical weathering and CO2 consumption in Nepalese High Himalayan catchments during the monsoon season. Geochimica Et Cosmochimica Acta, 2009, 73, 3148-3170.	3.9	55
45	Numerical study of degradation of fluvial hanging valleys due to climate change. Journal of Geophysical Research, 2009, 114, .	3.3	18
46	Temporal constraints and pulsed Late Cenozoic deformation during the structural disruption of the active Kashi foreland, northwest China. Tectonics, 2008, 27, .	2.8	100
47	Anomalous cosmogenic 3He production and elevation scaling in the high Himalaya. Earth and Planetary Science Letters, 2008, 265, 287-301.	4.4	28
48	Modern erosion rates in the High Himalayas of Nepal. Earth and Planetary Science Letters, 2008, 267, 482-494.	4.4	159
49	Signatures of mountain building: Detrital zircon U/Pb ages from northeastern Tibet. Geology, 2007, 35, 239.	4.4	169
50	Plio-Quaternary exhumation history of the central Nepalese Himalaya: 2. Thermokinematic and thermochronometer age prediction model. Tectonics, 2007, 26, n/a-n/a.	2.8	93
51	Slip rate gradients along the eastern Kunlun fault. Tectonics, 2007, 26, n/a-n/a.	2.8	249
52	The Shuttle Radar Topography Mission. Reviews of Geophysics, 2007, 45, .	23.0	5,113
53	Geomorphic constraints on listric thrust faulting: Implications for active deformation in the Mackenzie Basin, South Island, New Zealand. Journal of Geophysical Research, 2007, 112, .	3.3	109
54	Quantification of growth and lateral propagation of the Kashi anticline, southwest Chinese Tian Shan. Journal of Geophysical Research, 2007, 112, .	3.3	69

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55	Transient landscape evolution of basementâ€cored uplifts: Example of the Kyrgyz Range, Tian Shan. Journal of Geophysical Research, 2007, 112, .	3.3	40
56	Bedrock channel geometry along an orographic rainfall gradient in the upper Marsyandi River valley in central Nepal. Journal of Geophysical Research, 2007, 112, .	3.3	57
57	Channel width response to differential uplift. Journal of Geophysical Research, 2007, 112, .	3.3	90
58	Plio-Quaternary exhumation history of the central Nepalese Himalaya: 1. Apatite and zircon fission track and apatite [U-Th]/He analyses. Tectonics, 2007, 26, n/a-n/a.	2.8	95
59	Chronology and tectonic controls of Late Tertiary deposition in the southwestern Tian Shan foreland, NW China. Basin Research, 2007, 19, 599-632.	2.7	141
60	Bedload-to-suspended load ratio and rapid bedrock incision from Himalayan Landslide-dam lake record. Quaternary Research, 2007, 68, 111-120.	1.7	86
61	Thermal and kinematic modeling of bedrock and detrital cooling ages in the central Himalaya. Journal of Geophysical Research, 2006, 111, .	3.3	22
62	Temporal variations in slip rate of the White Mountain Fault Zone, Eastern California. Earth and Planetary Science Letters, 2006, 248, 168-185.	4.4	54
63	Construction of detrital mineral populations: insights from mixing of U-Pb zircon ages in Himalayan rivers. Basin Research, 2005, 17, 463-485.	2.7	107
64	Cracking the Himalaya. Nature, 2005, 434, 963-964.	27.8	22
65	Thrust-fault growth and segment linkage in the active Ostler fault zone, New Zealand. Journal of Structural Geology, 2005, 27, 1528-1546.	2.3	144
66	Alpine landscape evolution dominated by cirque retreat. Geology, 2005, 33, 933.	4.4	94
67	Uâ€“Pb zircon ages as a sediment mixing tracer in the Nepal Himalaya. Earth and Planetary Science Letters, 2005, 235, 244-260.	4.4	114
68	Effects of bedrock landslides on cosmogenically determined erosion rates. Earth and Planetary Science Letters, 2005, 237, 480-498.	4.4	242
69	Climatic controls on hillslope angle and relief in the Himalayas. Geology, 2004, 32, 629.	4.4	81
70	Tectonic and lithologic controls on bedrock channel profiles and processes in coastal California. Journal of Geophysical Research, 2004, 109, .	3.3	359
71	Landscape disequilibrium on 1000â€“10,000 year scales Marsyandi River, Nepal, central Himalaya. Geomorphology, 2004, 58, 223-241.	2.6	125
72	Rainfall thresholds for landsliding in the Himalayas of Nepal. Geomorphology, 2004, 63, 131-143.	2.6	209

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73	Modelling detrital cooling-age populations: insights from two Himalayan catchments. Basin Research, 2003, 15, 305-320.	2.7	80
74	Decoupling of erosion and precipitation in the Himalayas. Nature, 2003, 426, 652-655.	27.8	497
75	A 900 k.y. record of strath terrace formation during glacial-interglacial transitions in northwest China. Geology, 2003, 31, 957.	4.4	191
76	River response to an active fold-and-thrust belt in a convergent margin setting, North Island, New Zealand. Geomorphology, 2003, 49, 125-152.	2.6	74
77	Rates of erosion and their implications for exhumation. Mineralogical Magazine, 2002, 66, 25-52.	1.4	158
78	Impulsive alluviation during early Holocene strengthened monsoons, central Nepal Himalaya. Geology, 2002, 30, 911.	4.4	128
79	Dynamic fluvial systems and gravel progradation in the Himalayan foreland. Bulletin of the Geological Society of America, 2000, 112, 394-412.	3.3	111
80	A study of the 1999 monsoon rainfall in a mountainous region in central Nepal using TRMM products and rain gauge observations. Geophysical Research Letters, 2000, 27, 3683-3686.	4.0	214
81	Depositional and structural evolution of a foreland basin margin in a magnetostratigraphic framework: the eastern Swiss Molasse Basin. International Journal of Earth Sciences, 1999, 88, 253-275.	1.8	82
82	Quantified vertical motions and tectonic evolution of the SE Pyrenean foreland basin. Geological Society Special Publication, 1998, 134, 107-134.	1.3	57
83	Magnetostratigraphic constraints on relationships between evolution of the central Swiss Molasse basin and Alpine orogenic events. Bulletin of the Geological Society of America, 1997, 109, 225-241.	3.3	68
84	Growth of the South Pyrenean orogenic wedge. Tectonics, 1997, 16, 239-258.	2.8	64
85	Climatic Limits on Landscape Development in the Northwestern Himalaya. Science, 1997, 276, 571-574.	12.6	371
86	Sedimentary sequences, seismofacies and evolution of depositional systems of the Oligo/Miocene Lower Freshwater Molasse Group, Switzerland. Basin Research, 1997, 9, 1-26.	2.7	22
87	Unfolding: An inverse approach to fold kinematics. Geology, 1996, 24, 175.	4.4	67
88	Late Cretaceous ophiolite obduction and Paleocene India-Asia collision in the westernmost Himalaya. Geodinamica Acta, 1996, 9, 114-144.	2.2	79
89	Ten-million-year history of a thrust sheet. Bulletin of the Geological Society of America, 1996, 108, 1608-1625.	3.3	70
90	Interactions of growing folds and coeval depositional systems. Basin Research, 1996, 8, 199-223.	2.7	213

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91	Bedrock incision, rock uplift and threshold hillslopes in the northwestern Himalayas. Nature, 1996, 379, 505-510.	27.8	986
92	Organic carbon exhumation and global warming during the early Himalayan collision. Geology, 1995, 23, 387.	4.4	44
93	Rift basins and supradetachment basins: intracontinental extensional endâ€members. Basin Research, 1995, 7, 109-127.	2.7	173
94	Stratigraphic evidence for an early collision between northwest India and Asia. Nature, 1995, 373, 55-58.	27.8	459
95	Middle-late Miocene (>10 Ma) formation of the Main Boundary thrust in the western Himalaya. Geology, 1995, 23, 423.	4.4	254
96	Magnetostratigraphic Chronology of Cretaceous-to-Eocene Thrust Belt Evolution, Central Utah, USA. Journal of Geology, 1994, 102, 181-196.	1.4	24
97	Reduced Himalayan sediment production 8 Myr ago despite an intensified monsoon. Nature, 1993, 364, 48-50.	27.8	154
98	Uplift and thermal history of the Teton Range (northwestern Wyoming) defined by apatite fission-track dating. Earth and Planetary Science Letters, 1993, 118, 295-309.	4.4	31
99	Braided stream and flood-plain deposition in a rapidly aggrading basin: the Escanilla formation, Spanish Pyrenees. Geological Society Special Publication, 1993, 75, 177-194.	1.3	51
100	Pluton pinning of an active Miocene detachment fault system, eastern Mojave Desert, California. Geology, 1993, 21, 627.	4.4	35
101	The chronology of the Eocene tectonic and stratigraphic development of the eastern Pyrenean foreland basin, northeast Spain. Bulletin of the Geological Society of America, 1992, 104, 1101-1120.	3.3	108
102	Coeval hindward- and forward-imbricating thrusting in the south-central Pyrenees, Spain: Timing and rates of shortening and deposition. Bulletin of the Geological Society of America, 1992, 104, 3-17.	3.3	110
103	Miocene biostratigraphy and biochronology of the Dove Spring Formation, Mojave Desert, California, and characterization of the Clarendonian mammal age (late Miocene) in California. Bulletin of the Geological Society of America, 1992, 104, 644-658.	3.3	36
104	Causes of recent Himalayan uplift deduced from deposited patterns in the Ganges basin. Nature, 1992, 357, 680-683.	27.8	251
105	Characteristic size of relief. Nature, 1992, 359, 483-484.	27.8	23
106	Rapid, long-term rates of denudation. Geology, 1991, 19, 1169.	4.4	44
107	Late quaternary snowline reconstructions for the southern and central Sierra Nevada, California and a reassessment of the â€œRecess Peak Glaciationâ€• Quaternary Research, 1991, 36, 294-306.	1.7	32
108	Relative dating of Quaternary moraines, Rongbuk valley, Mount Everest, Tibet: Implications for an ice sheet on the Tibetan Plateau. Quaternary Research, 1991, 36, 1-18.	1.7	67

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109	Models of aggradation versus progradation in the Himalayan Foreland. Geologische Rundschau: Zeitschrift Fur Allgemeine Geologie, 1991, 80, 623-638.	1.3	41
110	The magnetochronology of Barstovian mammals in southwestern Montana and implications for the initiation of Neogene crustal extension in the northern Rocky Mountains. Bulletin of the Geological Society of America, 1990, 102, 1093-1104.	3.3	23
111	Comment and Reply on "Development of the Himalayan frontal thrust zone: Salt Range, Pakistan". Geology, 1989, 17, 378.	4.4	2
112	Lacustrine Sedimentation in a Semiarid Alpine Setting: An Example from Ladakh, Northwestern Himalaya. Quaternary Research, 1989, 31, 332-350.	1.7	66
113	Comment and Reply on "Thrusting and gravel progradation in foreland basins: A test of post-thrusting gravel dispersal". Geology, 1989, 17, 959.	4.4	5
114	Thrusting and gravel progradation in foreland basins: A test of post-thrusting gravel dispersal. Geology, 1988, 16, 1143.	4.4	92
115	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. Bulletin of the Geological Society of America, 1988, 100, 12-28.	3.3	55
116	Temporally constrained tectonic rotations derived from magnetostratigiraphic data: Implications for the initiation of the Garlock fault, California. Geology, 1987, 15, 1172.	4.4	37
117	Age and palaeoclimatic significance of the loess of Lanzhou, north China. Nature, 1985, 316, 429-431.	27.8	119
118	The magnetostratigraphy, fission-track dating, and stratigraphic evolution of the Peshawar intermontane basin, northern Pakistan. Bulletin of the Geological Society of America, 1985, 96, 539.	3.3	50
119	Bedrock Control on Glacial Limits: Examples from the Ladakh and Zanskar Ranges, North-Western Himalaya, India. Journal of Glaciology, 1985, 31, 143-149.	2.2	11
120	Sequential late Cenozoic structural disruption of the northern Himalayan foredeep. Nature, 1984, 311, 114-118.	27.8	89
121	The late cenozoic chronologic and stratigraphic development of the Kashmir intermontane basin, Northwestern Himalaya. Palaeogeography, Palaeoclimatology, Palaeoecology, 1983, 43, 205-235.	2.3	139
122	The chronology of intermontane-basin development in the northwestern Himalaya and the evolution of the Northwest Syntaxis. Earth and Planetary Science Letters, 1983, 64, 77-92.	4.4	87
123	Correlations of Climate, Mass Balances, and Glacial Fluctuations at Mount Rainer, Washington, U.S.A., Since 1850. Arctic and Alpine Research, 1982, 14, 137.	1.3	28
124	Intermontane-basin development in the past 4 Myr in the north-west Himalaya. Nature, 1982, 298, 432-436.	27.8	143
125	A Chronology of Late Holocene Glacier Fluctuations on Mount Rainier, Washington. Arctic and Alpine Research, 1981, 13, 369.	1.3	56
126	Single-Crystal Dating and the Detrital Record of Orogenesis. , 0, , 253-281.		8