Anthony John Parsons

List of Publications by Year
in descending order

112 papers	6,019 citations	53751 45 h-index	74108 75 g-index
119 all docs	119 docs citations	119 times ranked	3784 citing authors

#	Article	IF	Citations
1	Plot-scale studies of vegetation, overland flow and erosion interactions: case studies from Arizona and New Mexico. Hydrological Processes, 2000, 14, 2921-2943.	1.1	247
2	Scale relationships in hillslope runoff and erosion. Earth Surface Processes and Landforms, 2006, 31, 1384-1393.	1.2	214
3	Do Changes in Connectivity Explain Desertification?. BioScience, 2009, 59, 237-244.	2.2	200
4	Effects of vegetation change on interrill runoff and erosion, Walnut Gulch, southern Arizona. Geomorphology, 1995, 13, 37-48.	1.1	174
5	Connectivity in dryland landscapes: shifting concepts of spatial interactions. Frontiers in Ecology and the Environment, 2015, 13, 20-27.	1.9	161
6	What can we learn about soil erosion from the use of 137Cs?. Earth-Science Reviews, 2011, 108, 101-113.	4.0	159
7	Relation between infiltration and stone cover on a semiarid hillslope, southern Arizona. Journal of Hydrology, 1991, 122, 49-59.	2.3	158
8	The effect of temporal variations in rainfall on scale dependency in runoff coefficients. Water Resources Research, 2002, 38, 7-1-7-10.	1.7	151
9	Microtopography and soil-surface materials on semi-arid piedmont hillslopes, southern Arizona. Journal of Arid Environments, 1992, 22, 107-115.	1.2	141
10	Nutrient losses in runoff from grassland and shrubland habitats in Southern New Mexico: I. rainfall simulation experiments. Biogeochemistry, 1999, 45, 21-34.	1.7	139
11	Is sediment delivery a fallacy?. Earth Surface Processes and Landforms, 2006, 31, 1325-1328.	1.2	139
12	Effects of intra-storm variations in rainfall intensity on interrill runoff and erosion. Catena, 2006, 67, 68-78.	2.2	138
13	Field measurement of the velocity of overland flow using dye tracing. Earth Surface Processes and Landforms, 1986, 11, 653-657.	1.2	133
14	Resistance to overland flow on semiarid grassland and shrubland hillslopes, Walnut Gulch, southern Arizona. Journal of Hydrology, 1994, 156, 431-446.	2.3	133
15	Resistance to overland flow on desert hillslopes. Journal of Hydrology, 1986, 88, 343-363.	2.3	131
16	Rill hydraulics on a semiarid hillslope, southern Arizona. Earth Surface Processes and Landforms, 1996, 21, 35-47.	1.2	130
17	Development of badlands and gullies in the Sneeuberg, Great Karoo, South Africa. Catena, 2003, 50, 165-184.	2.2	109
18	A conceptual model for determining soil erosion by water. Earth Surface Processes and Landforms, 2004, 29, 1293-1302.	1.2	105

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19	Emergence and erosion: a model for rill initiation and development. Hydrological Processes, 2000, 14, 2173-2205.	1.1	103
20	Responses of interrill runoff and erosion rates to vegetation change in southern Arizona. Geomorphology, 1996, 14, 311-317.	1.1	102
21	Connectivity and complex systems: learning from a multi-disciplinary perspective. Applied Network Science, 2018, 3, 11.	0.8	101
22	Hydrologyâ€"vegetation interactions in areas of discontinuous flow on a semi-arid bajada, Southern New Mexico. Journal of Arid Environments, 2002, 51, 319-338.	1.2	97
23	Hydraulics of interrill overland flow on stone-covered desert surfaces. Catena, 1994, 23, 111-140.	2.2	95
24	A transportâ€distance approach to scaling erosion rates: 1. Background and model development. Earth Surface Processes and Landforms, 2008, 33, 813-826.	1.2	87
25	METHODOLOGY: A SIMPLE RAINFALL SIMULATOR AND TRICKLE SYSTEM FOR HYDRO-GEOMORPHOLOGICAL EXPERIMENTS. Physical Geography, 1986, 7, 344-356.	0.6	84
26	Hydrologic and sediment responses to simulated rainfall on desert hillslopes in southern Arizona. Catena, 1988, 15, 103-117.	2.2	82
27	Resistance to Overland Flow on Desert Pavement and Its Implications for Sediment Transport Modeling. Water Resources Research, 1991, 27, 1827-1836.	1.7	80
28	Size characteristics of sediment in interrill overland flow on a semiarid hillslope, Southern Arizona. Earth Surface Processes and Landforms, 1991, 16, 143-152.	1.2	79
29	Impact of connectivity on the modeling of overland flow within semiarid shrubland environments. Water Resources Research, 2007, 43, .	1.7	77
30	Vegetation controls on smallâ€scale runoff and erosion dynamics in a degrading dryland environment. Hydrological Processes, 2009, 23, 1617-1630.	1.1	75
31	Introduction to special issue on connectivity in water and sediment dynamics. Earth Surface Processes and Landforms, 2015, 40, 1275-1277.	1.2	72
32	A review of the principles of turbidity measurement. Progress in Physical Geography, 2017, 41, 620-642.	1.4	72
33	How useful are catchment sediment budgets?. Progress in Physical Geography, 2012, 36, 60-71.	1.4	71
34	Islands of hydrologically enhanced biotic productivity in natural and managed arid ecosystems. Journal of Arid Environments, 2006, 65, 235-252.	1.2	70
35	Rainsplash and erosion rates in an interrill area on semi-arid grassland, Southern Arizona. Catena, 1994, 22, 215-226.	2.2	64
36	On determining resistance to interrill overland flow. Water Resources Research, 1994, 30, 3515-3521.	1.7	63

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37	Rainfall energy under creosotebush. Journal of Arid Environments, 1999, 43, 111-120.	1.2	62
38	Distributed dynamic modelling of interrill overland flow. Hydrological Processes, 1997, 11, 1833-1859.	1.1	60
39	Determining the mean depth of overland flow in field studies of flow hydraulics. Water Resources Research, 1990, 26, 501-503.	1.7	57
40	Hydraulics of interrill overland flow on a semi-arid hillslope, southern Arizona. Journal of Hydrology, 1990, 117, 255-273.	2.3	56
41	The concept of transport capacity in geomorphology. Reviews of Geophysics, 2015, 53, 1155-1202.	9.0	54
42	Tracing sediment movement in interrill overland flow on a semi-arid grassland hillslope using magnetic susceptibility. Earth Surface Processes and Landforms, 1993, 18, 721-732.	1.2	53
43	How reliable are our methods for estimating soil erosion by water?. Science of the Total Environment, 2019, 676, 215-221.	3.9	52
44	The role of overland flow in sediment and nitrogen budgets of mesquite dunefields, southern New Mexico. Journal of Arid Environments, 2003, 53, 61-71.	1.2	51
45	A simulation study of the role of raindrop erosion in the formation of desert pavements. Earth Surface Processes and Landforms, 1995, 20, 277-291.	1.2	49
46	The effect of spatial variability in overland flow on the downslope pattern of soil loss on a semiarid hillslope, southern Arizona. Catena, 1991, 18, 255-270.	2.2	47
47	Spatial and temporal variation in two rainfall simulators: implications for spatially explicit rainfall simulation experiments. Earth Surface Processes and Landforms, 2000, 25, 709-721.	1.2	45
48	Experimental investigation into the impact of a liquid droplet onto a granular bed using three-dimensional, time-resolved, particle tracking. Physical Review E, 2014, 89, 032201.	0.8	45
49	Sediment-transport competence of rain-impacted interrill overland flow. Earth Surface Processes and Landforms, 1998, 23, 365-375.	1.2	44
50	A transportâ€distance approach to scaling erosion rates: 3. Evaluating scaling characteristics of <scp>Mahleran</scp>. Earth Surface Processes and Landforms, 2008, 33, 1113-1128.	1.2	42
51	Distribution of depth of overland flow on desert hillslopes and its implications for modeling soil erosion. Journal of Hydrology, 1989, 106, 177-184.	2.3	41
52	Title is missing!. Biogeochemistry, 1999, 45, 21-34.	1.7	41
53	Modeling emergent patterns of dynamic desert ecosystems. Ecological Monographs, 2014, 84, 373-410.	2.4	40
54	Geomorphology of Desert Environments. , 2009, , 3-7.		40

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55	Field and computer simulation experiments on the formation of desert pavement. Earth Surface Processes and Landforms, 1999, 24, 1025-1037.	1.2	39
56	The stability of vegetation boundaries and the propagation of desertification in the American Southwest: A modelling approach. Ecological Modelling, 2007, 208, 91-101.	1.2	38
57	A transportâ€distance approach to scaling erosion rates: 2. sensitivity and evaluation of M<scp>ahleran</scp>. Earth Surface Processes and Landforms, 2008, 33, 962-984.	1.2	38
58	Disposition of rainwater under creosotebush. Hydrological Processes, 2003, 17, 2555-2566.	1.1	36
59	On the formation of sand ramps: A case study from the Mojave Desert. Geomorphology, 2012, 161-162, 93-109.	1.1	34
60	Sediment sources and sediment transport by rill flow and interrill flow on a semi-arid piedmont slope, southern Arizona. Catena, 1993, 20, 93-111.	2.2	33
61	Upscaling understanding of nitrogen dynamics associated with overland flow in a semi-arid environment. Biogeochemistry, 2007, 82, 265-278.	1.7	32
62	Stone movement on hillslopes in the Mojave Desert, California: A 16-year record. Earth Surface Processes and Landforms, 1984, 9, 365-370.	1.2	31
63	What is suspended sediment?. Earth Surface Processes and Landforms, 2015, 40, 1417-1420.	1.2	30
64	Hillslope Gradient-Particle Size Relations: Evidence for the Formation of Debris Slopes by Hydraulic Processes in the Mojave Desert. Journal of Geology, 1985, 93, 347-357.	0.7	27
65	Depth distribution of interrill overland flow and the formation of rills. Hydrological Processes, 2006, 20, 1511-1523.	1.1	27
66	Is sediment delivery a fallacy? Reply. Earth Surface Processes and Landforms, 2008, 33, 1630-1631.	1.2	27
67	Streambed scour and fill in low-order dryland channels. Water Resources Research, 2005, 41, .	1.7	25
68	Sediment transfer and storage in dryland headwater streams. Geomorphology, 2007, 88, 152-166.	1.1	24
69	Relation between sediment yield and gradient on debris-covered hillslopes, Walnut Gulch, Arizona. Bulletin of the Geological Society of America, 1991, 103, 1109-1113.	1.6	23
70	Experimental analysis of size and distance of travel of unconstrained particles in interrill flow. Water Resources Research, 1998, 34, 2377-2381.	1.7	23
71	Pediments in Arid Environments. , 2009, , 377-411.		23
72	Uncertainty in modelling the detachment of soil by rainfall. Earth Surface Processes and Landforms, 2000, 25, 723-728.	1.2	22

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73	Geomorphological palaeoenvironments of the Sneeuberg Range, Great Karoo, South Africa. Journal of Quaternary Science, 2003, 18, 801-813.	1.1	22
74	The geomorphic cell: a basis for studying connectivity. Earth Surface Processes and Landforms, 2018, 43, 1155-1159.	1.2	22
75	Gradient-Particle Size Relations on Quartz Monzonite Debris Slopes in the Mojave Desert. Journal of Geology, 1987, 95, 423-432.	0.7	21
76	Transmission losses in rills on dryland hillslopes. Hydrological Processes, 1999, 13, 2897-2905.	1.1	20
77	Spatial variability of soil and nutrient characteristics of semiâ€arid grasslands and shrublands, Jornada Basin, New Mexico. Ecohydrology, 2008, 1, 3-12.	1.1	19
78	Linking runoff and erosion dynamics to nutrient fluxes in a degrading dryland landscape. Journal of Geophysical Research, 2012, 117, .	3.3	18
79	Geomorphology of Desert Environments. , 1994, , 3-12.		17
80	A new approach for simulating the redistribution of soil particles by water erosion: A markerâ€inâ€cell model. Journal of Geophysical Research, 2012, 117, .	3.3	16
81	Threshold relations for the transport of sediment by overland flow on desert hillslopes. Earth Surface Processes and Landforms, 1988, 13, 407-419.	1.2	15
82	A low-cost bench-top research device for turbidity measurement by radially distributed illumination intensity sensing at multiple wavelengths. HardwareX, 2019, 5, e00052.	1.1	14
83	Using sediment travel distance to estimate mediumâ€term erosion rates: a 16â€year record. Earth Surface Processes and Landforms, 2010, 35, 1694-1700.	1.2	13
84	A MINIATURE FLUME FOR SAMPLING INTERRILL OVERLAND FLOW. Physical Geography, 1989, 10, 85-94.	0.6	11
85	Spatial patterns of scour and fill in dryland sand bed streams. Water Resources Research, 2006, 42, .	1.7	11
86	Rock-Mantled Slopes. , 1994, , 173-212.		11
87	Connectivity in hydrology and sediment dynamics. Land Degradation and Development, 2020, 31, 2525-2528.	1.8	9
88	Rock-Mantled Slopes. , 2009, , 233-263.		9
89	Rainfall simulation in geomorphology. Earth Surface Processes and Landforms, 2000, 25, 679-679.	1.2	8
90	Scale relationships in hillslope runoff and erosion Reply. Earth Surface Processes and Landforms, 2008, 33, 1637-1638.	1.2	8

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91	Standing proud: a response to â€˜Soilâ€erosion models: where do we really stand?â€™ by Smith<i>et al</i>.. Earth Surface Processes and Landforms, 2010, 35, 1349-1356.	1.2	8
92	Sensitivity of Sediment-Transport Equations to Errors in Hydraulic Models of Overland Flow. , 1998, , 271-284.		8
93	Whither Geomorphology (re-)revisited. Earth Surface Processes and Landforms, 2006, 31, 1595-1596.	1.2	7
94	Response to Hairsine's and Sander's â€˜Comment on â€œA transportâ€distance based approach to scaling erosionratesâ€ Parts 1, 2 and 3 by Wainwright <i>et al</i>.â€™. Earth Surface Processes and Landforms, 2009, 34, 886-890.	1.2	7
95	Linking Short- and Long-Term Soilâ€"Erosion Modelling. , 2003, , 37-51.		7
96	Two classes of functional connectivity in dynamical processes in networks. Journal of the Royal Society Interface, 2021, 18, 20210486.	1.5	7
97	Application of RFID to Soil-Erosion Research. Applied Sciences (Switzerland), 2018, 8, 2511.	1.3	6
98	A New Conceptual Framework for Understanding and Predicting Erosion by Water from Hillslopes and Catchments. , 0, , .		4
99	The use of RFID in soilâ€erosion research. Earth Surface Processes and Landforms, 2014, 39, 1693-1696.	1.2	4
100	Virtual velocity of sand transport in water. Earth Surface Processes and Landforms, 2018, 43, 755-761.	1.2	4
101	Perspectives and ambitions of interdisciplinary connectivity researchers. Hydrology and Earth System Sciences, 2019, 23, 537-548.	1.9	4
102	Land Degradation in Drylands: An Ecogeomorphological Approach. , 2014, , 1-9.		4
103	Effects of vegetation change on interrill runoff and erosion, Walnut Gulch, southern Arizona. , 1995, , 37-48.		4
104	Abandonment of Agricultural Land, Agricultural Policy and Land Degradation in Mediterranean Europe. , 2014, , 357-366.		3
105	The Study of Land Degradation in Drylands: State of the Art. , 2014, , 13-54.		3
106	Short-Range Ecogeomorphic Processes in Dryland Systems. , 2014, , 85-101.		3
107	Long-Range Ecogeomorphic Processes. , 2014, , 103-139.		3
108	Response to Kinnell's â€˜Comment on â€œA transportâ€distance approach to scaling erosion rates: III. Evaluating scaling characteristics of M<scp>ahleran</scp>â€â€™. Earth Surface Processes and Landforms, 2009, 34, 1320-1321.	1.2	2

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109	Integrating Short- and Long-Range Processes into Models: The Emergence of Pattern. , 2014, , 141-167.		2
110	Perceptions of desert landscape: a case study in southern <scp>N</scp>ew <scp>M</scp>exico. Area, 2013, 45, 459-468.	1.0	1
111	Land Degradation in Drylands: ReÃ«valuating Pattern-Process Interrelationships and the Role of Ecogeomorphology. , 2014, , 367-383.		1
112	A conceptual model for sediment and nutrient fluxes from rural land. International Journal of Biodiversity Science and Management, 2006, 2, 232-234.	0.7	0