Greg Okin

List of Publications by Year
in descending order

121 papers	7,948 citations	50276 46 h-index	53230 85 g-index
134 all docs	134 docs citations	134 times ranked	8826 citing authors

#	Article	IF	Citations
1	Guiding principles for using satellite-derived maps in rangeland management. Rangelands, 2022, 44, 78-86.	1.9	16
2	Biological invasions and climate change amplify each otherâ€™s effects on dryland degradation. Global Change Biology, 2022, 28, 285-295.	9.5	23
3	Parameterizing an aeolian erosion model for rangelands. Aeolian Research, 2022, 54, 100769.	2.7	13
4	Evaluation of dust production efficiencies in sandy sediments. Earth Surface Processes and Landforms, 2022, 47, 1229-1237.	2.5	1
5	Where and How Often Does Rain Prevent Dust Emission?. Geophysical Research Letters, 2022, 49, .	4.0	4
6	The season for large fires in Southern California is projected to lengthen in a changing climate. Communications Earth & Environment, 2022, 3, .	6.8	31
7	Drone-Based Remote Sensing for Research on Wind Erosion in Drylands: Possible Applications. Remote Sensing, 2021, 13, 283.	4.0	13
8	A global analysis of diurnal variability in dust and dust mixture using CATS observations. Atmospheric Chemistry and Physics, 2021, 21, 1427-1447.	4.9	19
9	Characterizing spatial variability in coastal wetland biomass across multiple scales using UAV and satellite imagery. Remote Sensing in Ecology and Conservation, 2021, 7, 411-429.	4.3	28
10	Connectivity: insights from the U.S. Long Term Ecological Research Network. Ecosphere, 2021, 12, e03432.	2.2	4
11	Germination and early establishment of dryland grasses and shrubs on intact and wind-eroded soils under greenhouse conditions. Plant and Soil, 2021, 465, 245-260.	3.7	6
12	Vegetation Canopy Gap Size and Height: Critical Indicators for Wind Erosion Monitoring and Management. Rangeland Ecology and Management, 2021, 76, 78-83.	2.3	26
13	The EMIT mission information yield for mineral dust radiative forcing. Remote Sensing of Environment, 2021, 258, 112380.	11.0	19
14	UAVâ€derived imagery for vegetation structure estimation in rangelands: validation and application. Ecosphere, 2021, 12, e03830.	2.2	8
15	Modeling the short-term fire effects on vegetation dynamics and surface energy in southern Africa using the improved SSiB4/TRIFFID-Fire model. Geoscientific Model Development, 2021, 14, 7639-7657.	3.6	4
16	Leveraging Google Earth Engine (GEE) and machine learning algorithms to incorporate in situ measurement from different times for rangelands monitoring. Remote Sensing of Environment, 2020, 236, 111521.	11.0	66
17	Ecosystem dynamics and aeolian sediment transport in the southern Kalahari. African Journal of Ecology, 2020, 58, 337-344.	0.9	3
18	Disproving the BodÃ©lÃ© Depression as the Primary Source of Dust Fertilizing the Amazon Rainforest. Geophysical Research Letters, 2020, 47, e2020GL088020.	4.0	21

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19	Mapping Areas of the Southern Ocean Where Productivity Likely Depends on Dustâ€Delivered Iron. Journal of Geophysical Research D: Atmospheres, 2020, 125, e2019JD030926.	3.3	4
20	Impact of water characteristics on the discrimination of benthic cover in and around coral reefs from imaging spectrometer data. Remote Sensing of Environment, 2020, 239, 111631.	11.0	5
21	Deciphering the past to inform the future: preparing for the next (â€œreally bigâ€) extreme event. Frontiers in Ecology and the Environment, 2020, 18, 401-408.	4.0	14
22	Modifying connectivity to promote state change reversal: the importance of geomorphic context and plantâ€“soil feedbacks. Ecology, 2020, 101, e03069.	3.2	21
23	On the effects of wildfires on precipitation in Southern Africa. Climate Dynamics, 2019, 52, 951-967.	3.8	27
24	Characterizing the Role of Wind and Dust in Traffic Accidents in California. GeoHealth, 2019, 3, 328-336.	4.0	36
25	An Assessment of Multiple Drivers Determining Woody Species Composition and Structure: A Case Study from the Kalahari, Botswana. Land, 2019, 8, 122.	2.9	12
26	Assimilating optical satellite remote sensing images and field data to predict surface indicators in the Western U.S.: Assessing error in satellite predictions based on large geographical datasets with the use of machine learning. Remote Sensing of Environment, 2019, 233, 111382.	11.0	37
27	Vegetation Responses to 2012â€“2016 Drought in Northern and Southern California. Geophysical Research Letters, 2019, 46, 3810-3821.	4.0	60
28	Thank You to Our 2018 Peer Reviewers. Reviews of Geophysics, 2019, 57, 4-4.	23.0	0
29	Quantifying Drought Sensitivity of Mediterranean Climate Vegetation to Recent Warming: A Case Study in Southern California. Remote Sensing, 2019, 11, 2902.	4.0	15
30	Desertification and Land Degradation. , 2019, , 573-602.		10
31	Integrating Imaging Spectrometer and Synthetic Aperture Radar Data for Estimating Wetland Vegetation Aboveground Biomass in Coastal Louisiana. Remote Sensing, 2019, 11, 2533.	4.0	20
32	A Mechanism of Land Degradation in Turfâ€Mantled Slopes of the Tibetan Plateau. Geophysical Research Letters, 2018, 45, 4041-4048.	4.0	6
33	Monitoring changes of NDVI in protected areas of southern California. Ecological Indicators, 2018, 88, 485-494.	6.3	59
34	Impact of Agropastoral Management on Wind Erosion in Sahelian Croplands. Land Degradation and Development, 2018, 29, 800-811.	3.9	28
35	Soil organic carbon in savannas decreases with anthropogenic climate change. Geoderma, 2018, 309, 7-16.	5.1	21
36	Appreciation of Peer Reviewers for 2017. Reviews of Geophysics, 2018, 56, 566-566.	23.0	0

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37	An Integrated View of Complex Landscapes: A Big Data-Model Integration Approach to Transdisciplinary Science. BioScience, 2018, 68, 653-669.	4.9	38
38	The Grasslandâ€“Shrubland Regime Shift in the Southwestern United States: Misconceptions and Their Implications for Management. BioScience, 2018, 68, 678-690.	4.9	81
39	The Interactive Role of Wind and Water in Functioning of Drylands: What Does the Future Hold?. BioScience, 2018, 68, 670-677.	4.9	42
40	The Impact of Drought on Native Southern California Vegetation: Remote Sensing Analysis Using <scp>MODIS</scp>â€Derived Time Series. Journal of Geophysical Research G: Biogeosciences, 2018, 123, 1927-1939.	3.0	36
41	A reevaluation of the magnitude and impacts of anthropogenic atmospheric nitrogen inputs on the ocean. Global Biogeochemical Cycles, 2017, 31, 289-305.	4.9	146
42	Abiotic processes are insufficient for fertile island development: A 10â€year artificial shrub experiment in a desert grassland. Geophysical Research Letters, 2017, 44, 2245-2253.	4.0	32
43	Albedo feedbacks to future climate via climate change impacts on dryland biocrusts. Scientific Reports, 2017, 7, 44188.	3.3	84
44	Why and How to Write a Highâ€Impact Review Paper: Lessons From Eight Years of Editorial Board Service to Reviews of Geophysics. Reviews of Geophysics, 2017, 55, 860-863.	23.0	1
45	A Toolkit for Ecosystem Ecologists in the Time of Big Science. Ecosystems, 2017, 20, 259-266.	3.4	13
46	A method to retrieve the spectral complex refractive index and single scattering optical properties of dust deposited in mountain snow. Journal of Glaciology, 2017, 63, 133-147.	2.2	41
47	Observation- and model-based estimates of particulate dry nitrogen deposition to the oceans. Atmospheric Chemistry and Physics, 2017, 17, 8189-8210.	4.9	26
48	Environmental impacts of food consumption by dogs and cats. PLoS ONE, 2017, 12, e0181301.	2.5	82
49	Fireâ€induced albedo change and surface radiative forcing in subâ€Saharan Africa savanna ecosystems: Implications for the energy balance. Journal of Geophysical Research D: Atmospheres, 2017, 122, 6186-6201.	3.3	28
50	Potential of grass invasions in desert shrublands to create novel ecosystem states under variable climate. Ecohydrology, 2016, 9, 1496-1506.	2.4	27
51	Appreciation of peer reviewers for 2015. Reviews of Geophysics, 2016, 54, 277-277.	23.0	0
52	The National Wind Erosion Research Network: Building a standardized long-term data resource for aeolian research, modeling and land management. Aeolian Research, 2016, 22, 23-36.	2.7	58
53	Impact of burned areas on the northern African seasonal climate from the perspective of regional modeling. Climate Dynamics, 2016, 47, 3393-3413.	3.8	19
54	A quantitative description of the interspecies diversity of belowground structure in savanna woody plants. Ecosphere, 2015, 6, 1-15.	2.2	21

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55	Dustâ€rainfall feedback in West African Sahel. Geophysical Research Letters, 2015, 42, 7563-7571.	4.0	12
56	On the prediction of threshold friction velocity of wind erosion using soil reflectance spectroscopy. Aeolian Research, 2015, 19, 129-136.	2.7	9
57	Soil organic C and total N pools in the Kalahari: potential impacts of climate change on C sequestration in savannas. Plant and Soil, 2015, 396, 27-44.	3.7	16
58	Connectivity in dryland landscapes: shifting concepts of spatial interactions. Frontiers in Ecology and the Environment, 2015, 13, 20-27.	4.0	161
59	Desertification, land use, and the transformation of global drylands. Frontiers in Ecology and the Environment, 2015, 13, 28-36.	4.0	234
60	The impact of atmospheric conditions and instrument noise on atmospheric correction and spectral mixture analysis of multispectral imagery. Remote Sensing of Environment, 2015, 164, 130-141.	11.0	24
61	A tribute to Michael R. Raupach for contributions to aeolian fluid dynamics. Aeolian Research, 2015, 19, 37-54.	2.7	27
62	Resilience and recovery potential of duneland vegetation in the southern Kalahari. Ecosphere, 2014, 5, 1-14.	2.2	33
63	The effect of roughness elements on wind erosion: The importance of surface shear stress distribution. Journal of Geophysical Research D: Atmospheres, 2014, 119, 6066-6084.	3.3	43
64	Consistency of wind erosion assessments across land use and land cover types: A critical analysis. Aeolian Research, 2014, 15, 253-260.	2.7	25
65	Relating spatial patterns of fractional land cover to savanna vegetation morphology using multi-scale remote sensing in the Central Kalahari. International Journal of Remote Sensing, 2014, 35, 2082-2104.	2.9	16
66	Comparison of methods for estimation of absolute vegetation and soil fractional cover using MODIS normalized BRDF-adjusted reflectance data. Remote Sensing of Environment, 2013, 130, 266-279.	11.0	63
67	Ecosystem-scale spatial heterogeneity of stable isotopes of soil nitrogen in African savannas. Landscape Ecology, 2013, 28, 685-698.	4.2	24
68	Evaluation of a new model of aeolian transport in the presence of vegetation. Journal of Geophysical Research F: Earth Surface, 2013, 118, 288-306.	2.8	57
69	Soilâ€“Litter Mixing Accelerates Decomposition in a Chihuahuan Desert Grassland. Ecosystems, 2013, 16, 183-195.	3.4	59
70	Estimating total horizontal aeolian flux within shrubâ€invaded groundwaterâ€dependent meadows using empirical and mechanistic models. Journal of Geophysical Research F: Earth Surface, 2013, 118, 1132-1146.	2.8	13
71	Relating variation of dust on snow to bare soil dynamics in the western United States. Environmental Research Letters, 2013, 8, 044054.	5.2	12
72	Potential dust emissions from the southern Kalahari's dunelands. Journal of Geophysical Research F: Earth Surface, 2013, 118, 307-314.	2.8	28

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73	The Southern Kalahari: a potential new dust source in the Southern Hemisphere?. Environmental Research Letters, 2012, 7, 024001.	5.2	60
74	Atmospheric fluxes of organic N and P to the global ocean. Global Biogeochemical Cycles, 2012, 26, .	4.9	179
75	Evaluating Ecohydrological Theories of Woody Root Distribution in the Kalahari. PLoS ONE, 2012, 7, e33996.	2.5	32
76	Aeolian process effects on vegetation communities in an arid grassland ecosystem. Ecology and Evolution, 2012, 2, 809-821.	1.9	37
77	A synthetic review of feedbacks and drivers of shrub encroachment in arid grasslands. Ecohydrology, 2012, 5, 520-530.	2.4	313
78	Understanding the role of ecohydrological feedbacks in ecosystem state change in drylands. Ecohydrology, 2012, 5, 174-183.	2.4	110
79	The interactive nutrient and water effects on vegetation biomass at two <scp>A</scp>frican savannah sites with different mean annual precipitation. African Journal of Ecology, 2012, 50, 446-454.	0.9	12
80	Impacts of atmospheric nutrient deposition on marine productivity: Roles of nitrogen, phosphorus, and iron. Global Biogeochemical Cycles, 2011, 25, n/a-n/a.	4.9	177
81	AEOLIAN PROCESSES AND THE BIOSPHERE. Reviews of Geophysics, 2011, 49, .	23.0	230
82	Dust: Smallâ€scale processes with global consequences. Eos, 2011, 92, 241-242.	0.1	56
83	Berylliumâ€7 in soils and vegetation along an arid precipitation gradient in Owens Valley, California. Geophysical Research Letters, 2011, 38, .	4.0	28
84	Impacts of anthropogenic SO_x, NO_xand NH₃on acidification of coastal waters and shipping lanes. Geophysical Research Letters, 2011, 38, n/a-n/a.	4.0	43
85	Responses of wind erosion to climate-induced vegetation changes on the Colorado Plateau. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 3854-3859.	7.1	242
86	Asynchronous Response of Tropical Forest Leaf Phenology to Seasonal and El NiÃ±o-Driven Drought. PLoS ONE, 2010, 5, e11325.	2.5	25
87	The contribution of brown vegetation to vegetation dynamics. Ecology, 2010, 91, 743-755.	3.2	34
88	The ecology of dust. Frontiers in Ecology and the Environment, 2010, 8, 423-430.	4.0	248
89	A simple method to estimate threshold friction velocity of wind erosion in the field. Geophysical Research Letters, 2010, 37, .	4.0	41
90	Combined Effects of Impervious Surface and Vegetation Cover on Air Temperature Variations in a Rapidly Expanding Desert City. GIScience and Remote Sensing, 2010, 47, 301-320.	5.9	79

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91	Remote Sensing of Nitrogen and Carbon Isotope Compositions in Terrestrial Ecosystems. , 2010, , 51-70.		1
92	Post-Fire Resource Redistribution in Desert Grasslands: A Possible Negative Feedback on Land Degradation. Ecosystems, 2009, 12, 434-444.	3.4	104
93	Sediment deposition and soil nutrient heterogeneity in two desert grassland ecosystems, southern New Mexico. Plant and Soil, 2009, 319, 67-84.	3.7	33
94	Spatial heterogeneity and sources of soil carbon in southern African savannas. Geoderma, 2009, 149, 402-408.	5.1	62
95	Satellite prediction of soil Î´13C distributions in a southern African savanna. Journal of Geochemical Exploration, 2009, 102, 137-141.	3.2	5
96	Do Changes in Connectivity Explain Desertification?. BioScience, 2009, 59, 237-244.	4.9	200
97	Impact of feedbacks on Chihuahuan desert grasslands: Transience and metastability. Journal of Geophysical Research, 2009, 114, .	3.3	58
98	Effects of enhanced wind erosion on surface soil texture and characteristics of windblown sediments. Journal of Geophysical Research, 2009, 114, .	3.3	65
99	Indices for estimating fractional snow cover in the western Tibetan Plateau. Journal of Glaciology, 2009, 55, 737-745.	2.2	29
100	Effects of wind erosion on the spatial heterogeneity of soil nutrients in two desert grassland communities. Biogeochemistry, 2008, 88, 73-88.	3.5	139
101	A new model of wind erosion in the presence of vegetation. Journal of Geophysical Research, 2008, 113, .	3.3	218
102	Global distribution of atmospheric phosphorus sources, concentrations and deposition rates, and anthropogenic impacts. Global Biogeochemical Cycles, 2008, 22, .	4.9	617
103	Predicting and understanding ecosystem responses to climate change at continental scales. Frontiers in Ecology and the Environment, 2008, 6, 273-280.	4.0	48
104	On soil moistureâ€“vegetation feedbacks and their possible effects on the dynamics of dryland ecosystems. Journal of Geophysical Research, 2007, 112, .	3.3	202
105	Hydrologic and aeolian controls on vegetation patterns in arid landscapes. Geophysical Research Letters, 2007, 34, .	4.0	90
106	Relative spectral mixture analysis â€” A multitemporal index of total vegetation cover. Remote Sensing of Environment, 2007, 106, 467-479.	11.0	80
107	Changes in the spatial variation of soil properties following shifting cultivation in a Mexican tropical dry forest. Biogeochemistry, 2007, 84, 99-113.	3.5	26
108	Quantitative effects of vegetation cover on wind erosion and soil nutrient loss in a desert grassland of southern New Mexico, USA. Biogeochemistry, 2007, 85, 317-332.	3.5	294

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109	Dryland Ecosystems. , 2007, , 271-307.		28
110	On the effect of moisture bonding forces in air-dry soils on threshold friction velocity of wind erosion. Sedimentology, 2006, 53, 597-609.	3.1	119
111	Characterization of shrub distribution using high spatial resolution remote sensing: Ecosystem implications for a former Chihuahuan Desert grassland. Remote Sensing of Environment, 2006, 101, 554-566.	11.0	68
112	Modelling Wind Erosion and Dust Emission on Vegetated Surfaces. , 2005, , 137-156.		4
113	Mapping North African landforms using continental scale unmixing of MODIS imagery. Remote Sensing of Environment, 2005, 97, 470-483.	11.0	71
114	Dependence of wind erosion and dust emission on surface heterogeneity: Stochastic modeling. Journal of Geophysical Research, 2005, 110, .	3.3	53
115	Impacts of biomass burning emissions and land use change on Amazonian atmospheric phosphorus cycling and deposition. Global Biogeochemical Cycles, 2005, 19, n/a-n/a.	4.9	142
116	Effect of grain size on remotely sensed spectral reflectance of sandy desert surfaces. Remote Sensing of Environment, 2004, 89, 272-280.	11.0	73
117	Impact of desert dust on the biogeochemistry of phosphorus in terrestrial ecosystems. Global Biogeochemical Cycles, 2004, 18, n/a-n/a.	4.9	362
118	An ENSO predictor of dust emission in the southwestern United States. Geophysical Research Letters, 2002, 29, 46-1-46-3.	4.0	48
119	Degradation of sandy arid shrubland environments: observations, process modelling, and management implications. Journal of Arid Environments, 2001, 47, 123-144.	2.4	160
120	Practical limits on hyperspectral vegetation discrimination in arid and semiarid environments. Remote Sensing of Environment, 2001, 77, 212-225.	11.0	278
121	Desertification in an Arid Shrubland in the Southwestern United States. Geospatial Technology and the Role of Location in Science, 2001, , 53-70.	0.5	6