Robert J Scholes

List of Publications by Year
in descending order

89 papers	23,111 citations	31976 53 h-index	56724 83 g-index
95 all docs	95 docs citations	95 times ranked	28149 citing authors

#	Article	IF	Citations
1	Greenhouse gas observation network design for Africa. Tellus, Series B: Chemical and Physical Meteorology, 2022, 72, 1824486.	1.6	8
2	Test for Covid-19 seasonality and the risk of second waves. One Health, 2021, 12, 100202.	3.4	37
3	Opportunities for an African greenhouse gas observation system. Regional Environmental Change, 2021, 21, 1.	2.9	8
4	The role of climate, foliar stoichiometry and plant diversity on ecosystem carbon balance. Global Change Biology, 2020, 26, 7067-7078.	9.5	13
5	Winter Is Coming: A Southern Hemisphere Perspective of the Environmental Drivers of SARS-CoV-2 and the Potential Seasonality of COVID-19. International Journal of Environmental Research and Public Health, 2020, 17, 5634.	2.6	82
6	The climate impact of land use change in the miombo region of south central Africa. Journal of Integrative Environmental Sciences, 2020, 17, 187-203.	2.5	3
7	The Future of Semi-Arid Regions: A Weak Fabric Unravels. Climate, 2020, 8, 43.	2.8	39
8	Principles for knowledge co-production in sustainability research. Nature Sustainability, 2020, 3, 182-190.	23.7	697
9	The IPBES Global Assessment: Pathways to Action. Trends in Ecology and Evolution, 2020, 35, 407-414.	8.7	77
10	An atmospheric inversion over the city of Cape Town: sensitivity analyses. Atmospheric Chemistry and Physics, 2019, 19, 7789-7816.	4.9	7
11	Development of a Climate Forcing Observation System for Africa: Data-Related Considerations. Data Science Journal, 2019, 18, 42.	1.3	4
12	Estimates of CO₂ fluxes over the city of Cape Town, South Africa, through Bayesian inverse modelling. Atmospheric Chemistry and Physics, 2018, 18, 4765-4801.	4.9	22
13	Towards a feasible and representative pan-African research infrastructure network for GHG observations. Environmental Research Letters, 2018, 13, 085003.	5.2	20
14	Differing Responses to Rainfall Suggest More Than One Functional Type of Grassland in South Africa. Remote Sensing, 2018, 10, 2055.	4.0	6
15	Relationships Between Ecosystem Services: Comparing Methods for Assessing Tradeoffs and Synergies. Ecological Economics, 2018, 150, 96-106.	5.7	122
16	Comparison of the genetic algorithm and incremental optimisation routines for a Bayesian inverse modelling based network design. Inverse Problems, 2018, 34, 055006.	2.0	6
17	Ecosystem Services. , 2017, , 39-78.		19
18	IPCC reasons for concern regarding climate change risks. Nature Climate Change, 2017, 7, 28-37.	18.8	266

#	Article	IF	Citations
19	Essential Variables help to focus Sustainable Development Goals monitoring. Current Opinion in Environmental Sustainability, 2017, 26-27, 97-105.	6.3	126
20	Taking the Mumbo Out of the Jumbo: Progress Towards a Robust Basis for Ecological Scaling. Ecosystems, 2017, 20, 4-13.	3.4	27
21	Climate change and ecosystem services. Wiley Interdisciplinary Reviews: Climate Change, 2016, 7, 537-550.	8.1	50
22	Observation and integrated Earth-system science: A roadmap for 2016â€“2025. Advances in Space Research, 2016, 57, 2037-2103.	2.6	35
23	Evidence for facultative deciduousness in <scp>C</scp>olophospermum mopane in semiâ€arid <scp>A</scp>frican savannas. Austral Ecology, 2016, 41, 87-96.	1.5	15
24	Big-picture ecology for a small planet. Koedoe, 2015, 57, .	0.9	0
25	Spatial and temporal disaggregation of anthropogenic CO2 emissions from the City of Cape Town. South African Journal of Science, 2015, 111, 8.	0.7	2
26	Biogeochemical cycles and biodiversity as key drivers of ecosystem services provided by soils. Soil, 2015, 1, 665-685.	4.9	249
27	The IPBES Conceptual Framework â€” connecting nature and people. Current Opinion in Environmental Sustainability, 2015, 14, 1-16.	6.3	1,658
28	A full greenhouse gases budget of Africa: synthesis, uncertainties, and vulnerabilities. Biogeosciences, 2014, 11, 381-407.	3.3	162
29	Assessing non-CO2 climate-forcing emissions and mitigation in sub-Saharan Africa. Current Opinion in Environmental Sustainability, 2014, 9-10, 65-72.	6.3	25
30	Approaches to defining a planetary boundary for biodiversity. Global Environmental Change, 2014, 28, 289-297.	7.8	236
31	Interacting Regional-Scale Regime Shifts for Biodiversity and Ecosystem Services. BioScience, 2014, 64, 665-679.	4.9	41
32	Multi-scale and cross-scale assessments of socialâ€ecological systems and their ecosystem services. Current Opinion in Environmental Sustainability, 2013, 5, 16-25.	6.3	196
33	Dust Unto Dust. Science, 2013, 342, 565-566.	12.6	36
34	Evaluation of MODIS gross primary productivity for Africa using eddy covariance data. Remote Sensing of Environment, 2013, 131, 275-286.	11.0	125
35	Essential Biodiversity Variables. Science, 2013, 339, 277-278.	12.6	1,150
36	South African Food Security and Climate Change: Agriculture Futures. Economics, 2013, 7, .	0.6	7

#	Article	IF	Citations
37	Generating 275-m Resolution Land Surface Products From the Multi-Angle Imaging SpectroRadiometer Data. IEEE Transactions on Geoscience and Remote Sensing, 2012, 50, 3980-3990.	6.3	14
38	Greenness in semi-arid areas across the globe 1981â€“2007 â€” an Earth Observing Satellite based analysis of trends and drivers. Remote Sensing of Environment, 2012, 121, 144-158.	11.0	596
39	What Next for Agriculture After Durban?. Science, 2012, 335, 289-290.	12.6	133
40	Building a global observing system for biodiversity. Current Opinion in Environmental Sustainability, 2012, 4, 139-146.	6.3	125
41	Program on ecosystem change and society: an international research strategy for integrated socialâ€“ecological systems. Current Opinion in Environmental Sustainability, 2012, 4, 134-138.	6.3	89
42	Biodiversity and ecosystem services science for a sustainable planet: the DIVERSITAS vision for 2012â€“20. Current Opinion in Environmental Sustainability, 2012, 4, 101-105.	6.3	62
43	Limits to detectability of land degradation by trend analysis of vegetation index data. Remote Sensing of Environment, 2012, 125, 10-22.	11.0	253
44	A framework for deriving and triggering thresholds for management intervention in uncertain, varying and time-lagged systems. Koedoe, 2011, 53, .	0.9	17
45	The charcoal trap: Miombo forests and the energy needs of people. Carbon Balance and Management, 2011, 6, 5.	3.2	38
46	Scientific concepts for an integrated analysis of desertification. Land Degradation and Development, 2011, 22, 166-183.	3.9	122
47	Exploring the potential of MODIS EVI for modeling gross primary production across African ecosystems. Remote Sensing of Environment, 2011, 115, 1081-1089.	11.0	113
48	A method for calculating the variance and confidence intervals for tree biomass estimates obtained from allometric equations. South African Journal of Science, 2011, 107, .	0.7	36
49	Functional Convergence in Ecosystem Carbon Exchange in Adjacent Savanna Vegetation Types of the Kruger National Park, South Africa. , 2010, , 77-95.		2
50	Biodiversity targets after 2010. Current Opinion in Environmental Sustainability, 2010, 2, 3-8.	6.3	124
51	Treeâ€“grass co-existence in savanna: Interactions of rain and fire. Journal of Theoretical Biology, 2010, 267, 235-242.	1.7	103
52	Climate and the interâ€annual variability of fire in southern Africa: a metaâ€analysis using longâ€term field data and satelliteâ€derived burnt area data. Global Ecology and Biogeography, 2010, 19, 794-809.	5.8	116
53	Southern African fire regimes as revealed by remote sensing. International Journal of Wildland Fire, 2010, 19, 861.	2.4	188
54	Scenarios for Global Biodiversity in the 21st Century. Science, 2010, 330, 1496-1501.	12.6	1,570

#	Article	IF	Citations
55	Complexity in water and carbon dioxide fluxes following rain pulses in an African savanna. Oecologia, 2009, 161, 469-480.	2.0	89
56	Estimating carbon in savanna ecosystems: rational distribution of effort. Mitigation and Adaptation Strategies for Global Change, 2009, 14, 579-604.	2.1	6
57	What limits fire? An examination of drivers of burnt area in Southern Africa. Global Change Biology, 2009, 15, 613-630.	9.5	590
58	Biodiversity, climate change, and ecosystem services. Current Opinion in Environmental Sustainability, 2009, 1, 46-54.	6.3	337
59	Climate and desertification: looking at an old problem through new lenses. Frontiers in Ecology and the Environment, 2009, 7, 421-428.	4.0	93
60	Science for managing ecosystem services: Beyond the Millennium Ecosystem Assessment. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 1305-1312.	7.1	1,736
61	Using MISR full spatial resolution level 1B2 data to characterize the savannah environment around the Skukuza CSIR research site. , 2009, , .		0
62	A Conceptual Framework for Assessing the Benefits of a Global Earth Observation System of Systems. IEEE Systems Journal, 2008, 2, 338-348.	4.6	35
63	Longâ€term sunspot forcing of savanna structure inferred from carbon and oxygen isotopes. Geophysical Research Letters, 2008, 35, .	4.0	5
64	Designing protected areas to conserve riverine biodiversity: Lessons from a hypothetical redesign of the Kruger National Park. Biological Conservation, 2008, 141, 100-117.	4.1	93
65	Measuring uncertainty in estimates of biodiversity loss: The example of biodiversity intactness variance. Biological Conservation, 2008, 141, 1091-1094.	4.1	15
66	Scenarios of biodiversity loss in southern Africa in the 21st century. Global Environmental Change, 2008, 18, 296-309.	7.8	90
67	Climate change and desertification: Where do we stand, where should we go?. Global and Planetary Change, 2008, 64, 105-110.	3.5	34
68	Toward a Global Biodiversity Observing System. Science, 2008, 321, 1044-1045.	12.6	234
69	Africa and the global carbon cycle. Carbon Balance and Management, 2007, 2, 3.	3.2	144
70	Policy and technological constraints to implementation of greenhouse gas mitigation options in agriculture. Agriculture, Ecosystems and Environment, 2007, 118, 6-28.	5.3	459
71	Leaf green-up in a semi-arid African savanna â€“separating tree and grass responses to environmental cues. Journal of Vegetation Science, 2007, 18, 583.	2.2	128
72	Diversity without representation. Nature, 2006, 442, 245-246.	27.8	139

#	Article	IF	Citations
73	Nature: the many benefits of ecosystem services. Nature, 2006, 443, 749-749.	27.8	69
74	ECOLOGY: Enhanced: Millennium Ecosystem Assessment: Research Needs. Science, 2006, 314, 257-258.	12.6	442
75	A biodiversity intactness index. Nature, 2005, 434, 45-49.	27.8	400
76	Determinants of woody cover in African savannas. Nature, 2005, 438, 846-849.	27.8	1,543
77	A Synthesis of Information on Rapid Land-cover Change for the Period 1981â€“2000. BioScience, 2005, 55, 115.	4.9	367
78	Canopy structure in savannas along a moisture gradient on Kalahari sands. Global Change Biology, 2004, 10, 292-302.	9.5	61
79	Conundrums in mixed woody-herbaceous plant systems. Journal of Biogeography, 2003, 30, 1763-1777.	3.0	308
80	Africa burning: A thematic analysis of the Southern African Regional Science Initiative (SAFARI 2000). Journal of Geophysical Research, 2003, 108, n/a-n/a.	3.3	204
81	Influence of timing and spatial extent of savanna fires in southern Africa on atmospheric emissions. Journal of Arid Environments, 2003, 54, 395-404.	2.4	59
82	Recent patterns and mechanisms of carbon exchange by terrestrial ecosystems. Nature, 2001, 414, 169-172.	27.8	1,162
83	CLIMATE CHANGE: Storing Carbon on Land. Science, 2001, 294, 1012-1013.	12.6	102
84	The Global Carbon Cycle: A Test of Our Knowledge of Earth as a System. Science, 2000, 290, 291-296.	12.6	1,601
85	Downward flux of water through roots (i.e. inverse hydraulic lift) in dry Kalahari sands. Oecologia, 1998, 115, 460-462.	2.0	142
86	TREE-GRASS INTERACTIONS IN SAVANNAS. Annual Review of Ecology, Evolution, and Systematics, 1997, 28, 517-544.	6.7	2,023
87	Preface. Environmental Monitoring and Assessment, 1995, 38-38, vii-vii.	2.7	0
88	Observations and modeling of biomass and soil organic matter dynamics for the grassland biome worldwide. Global Biogeochemical Cycles, 1993, 7, 785-809.	4.9	1,101
89	Key impacts of climate engineering on biodiversity and ecosystems, with priorities for future research. Journal of Integrative Environmental Sciences, 0, , 1-26.	2.5	11