Sarah E Cornell

List of Publications by Year
in descending order

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87 papers	21,220 citations	101384 36 h-index	76769 74 g-index
103 all docs	103 docs citations	103 times ranked	23895 citing authors

#	Article	IF	Citations
1	Planetary boundaries: Guiding human development on a changing planet. Science, 2015, 347, 1259855.	6.0	7,124
2	Food in the Anthropocene: the EATâ€“Lancet Commission on healthy diets from sustainable food systems. Lancet, The, 2019, 393, 447-492.	6.3	5,421
3	Trajectories of the Earth System in the Anthropocene. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 8252-8259.	3.3	1,832
4	Impacts of Atmospheric Anthropogenic Nitrogen on the Open Ocean. Science, 2008, 320, 893-897.	6.0	964
5	Outside the Safe Operating Space of the Planetary Boundary for Novel Entities. Environmental Science & Technology, 2022, 56, 1510-1521.	4.6	477
6	Bending the curve of terrestrial biodiversity needs an integrated strategy. Nature, 2020, 585, 551-556.	13.7	413
7	Opening up knowledge systems for better responses to global environmental change. Environmental Science and Policy, 2013, 28, 60-70.	2.4	359
8	Aiming higher to bend the curve of biodiversity loss. Nature Sustainability, 2018, 1, 448-451.	11.5	323
9	Atmospheric inputs of dissolved organic nitrogen to the oceans. Nature, 1995, 376, 243-246.	13.7	319
10	Safe and just operating spaces for regional social-ecological systems. Global Environmental Change, 2014, 28, 227-238.	3.6	311
11	Marine plastic pollution as a planetary boundary threat â€“ The drifting piece in the sustainability puzzle. Marine Policy, 2018, 96, 213-220.	1.5	307
12	Approaches to defining a planetary boundary for biodiversity. Global Environmental Change, 2014, 28, 289-297.	3.6	236
13	From Planetary Boundaries to national fair shares of the global safe operating space â€” How can the scales be bridged?. Global Environmental Change, 2016, 40, 60-72.	3.6	213
14	Global and regional analysis of climate and human drivers of wildfire. Science of the Total Environment, 2011, 409, 3472-3481.	3.9	211
15	Organic nitrogen in the atmosphere â€” Where does it come from? A review of sources and methods. Atmospheric Research, 2011, 102, 30-48.	1.8	210
16	Policy coherence to achieve the SDGs: using integrated simulation models to assess effective policies. Sustainability Science, 2017, 12, 921-931.	2.5	187
17	Atmospheric nitrogen deposition: Revisiting the question of the importance of the organic component. Environmental Pollution, 2011, 159, 2214-2222.	3.7	179
18	Anthropocene risk. Nature Sustainability, 2019, 2, 667-673.	11.5	133

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19	The cycling of organic nitrogen through the atmosphere. Philosophical Transactions of the Royal Society B: Biological Sciences, 2013, 368, 20130115.	1.8	119
20	The Water Planetary Boundary: Interrogation and Revision. One Earth, 2020, 2, 223-234.	3.6	98
21	A planetary boundary for green water. Nature Reviews Earth & Environment, 2022, 3, 380-392.	12.2	95
22	Urea in rainwater and atmospheric aerosol. Atmospheric Environment, 1998, 32, 1903-1910.	1.9	87
23	Nitrogen deposition to the eastern Atlantic Ocean. The importance of south-easterly flow. Tellus, Series B: Chemical and Physical Meteorology, 2000, 52, 37-49.	0.8	86
24	Illuminating water cycle modifications and Earth system resilience in the Anthropocene. Water Resources Research, 2020, 56, e2019WR024957.	1.7	86
25	Achieving the 17 Sustainable Development Goals within 9 planetary boundaries. Global Sustainability, 2019, 2, .	1.6	79
26	Towards sustainable flood and coastal management: identifying drivers of, and obstacles to, managed realignment. Land Use Policy, 2005, 22, 129-144.	2.5	77
27	A simulation and optimisation study: Towards a decentralised microgrid, using real world fluctuation data. Energy, 2012, 41, 549-559.	4.5	76
28	Response to Comment on â€œPlanetary boundaries: Guiding human development on a changing planetâ€• Science, 2015, 348, 1217-1217.	6.0	69
29	Integrating the Water Planetary Boundary With Water Management From Local to Global Scales. Earth's Future, 2020, 8, e2019EF001377.	2.4	65
30	Nitrogen deposition to the eastern Atlantic Ocean. The importance of south-easterly flow. Tellus, Series B: Chemical and Physical Meteorology, 2022, 52, 37.	0.8	63
31	Developing an Integrated History and future of People on Earth (IHOPE). Current Opinion in Environmental Sustainability, 2012, 4, 106-114.	3.1	59
32	Earth system data cubes unravel global multivariate dynamics. Earth System Dynamics, 2020, 11, 201-234.	2.7	59
33	Toward an Integrated History to Guide the Future. Ecology and Society, 2011, 16, .	1.0	58
34	Organic Nitrogen in Precipitation: Real Problem or Sampling Artefact?. Scientific World Journal, The, 2001, 1, 230-237.	0.8	56
35	Defining a sustainable development target space for 2030 and 2050. One Earth, 2022, 5, 142-156.	3.6	54
36	Closing the loop: Reconnecting human dynamics to Earth System science. Infrastructure Asset Management, 2017, 4, 151-157.	1.2	48

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37	Water-soluble organic nitrogen in atmospheric aerosol: a comparison of UV and persulfate oxidation methods. Atmospheric Environment, 1999, 33, 833-840.	1.9	45
38	Marine ecosystem models for earth systems applications: The MarQUEST experience. Journal of Marine Systems, 2010, 81, 19-33.	0.9	37
39	Terrestrial nitrogen cycling in Earth system models revisited. New Phytologist, 2016, 210, 1165-1168.	3.5	35
40	Developing a systematic â€œscience of the pastâ€•to create our future. Global Environmental Change, 2010, 20, 426-427.	3.6	32
41	Matching scope, purpose and uses of planetary boundaries science. Environmental Research Letters, 2019, 14, 073005.	2.2	32
42	Horses for courses: analytical tools to explore planetary boundaries. Earth System Dynamics, 2016, 7, 267-279.	2.7	31
43	Governance, polycentricity and the global nitrogen and phosphorus cycles. Environmental Science and Policy, 2018, 79, 54-65.	2.4	31
44	On the System Properties of the Planetary Boundaries. Ecology and Society, 2012, 17, .	1.0	23
45	Valuing ecosystem benefits in a dynamic world. Climate Research, 2010, 45, 261-272.	0.4	23
46	Teaching against the grain: multiâ€disciplinary teamwork effectively delivers a successful undergraduate unit in sustainable development. Environmental Education Research, 2008, 14, 469-481.	1.6	22
47	A laboratory assessment of wetness sensors for leaf, fruit and trunk surfaces. Agricultural and Forest Meteorology, 2000, 102, 263-274.	1.9	19
48	Challenges and opportunities towards improved application of the planetary boundary for land-system change in life cycle assessment of products. Science of the Total Environment, 2019, 696, 133964.	3.9	19
49	Keystone actors do not act alone: A business ecosystem perspective on sustainability in the global clothing industry. PLoS ONE, 2020, 15, e0241453.	1.1	18
50	Carbon dioxide emission scenarios: limitations of the fossil fuel resource. Procedia Environmental Sciences, 2011, 6, 206-215.	1.3	17
51	Towards defining an environmental investment universe within planetary boundaries. Sustainability Science, 2018, 13, 1031-1044.	2.5	17
52	Integrating Sustainability into Learning in Chemistry. Journal of Chemical Education, 2021, 98, 1061-1063.	1.1	17
53	Succeeding at home and abroad: accounting for the international spillovers of citiesâ€™ SDG actions. Npj Urban Sustainability, 2021, 1, .	3.7	17
54	Atmospheric nitrogen deposition: revisiting the question of the invisible organic fraction. Procedia Environmental Sciences, 2011, 6, 96-103.	1.3	16

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55	Climate change impacts and adaptation. , 2012, , 160-201.		15
56	Taxonomies for structuring models for Worldâ€“Earth systems analysis of the Anthropocene: subsystems, their interactions and socialâ€“ecological feedback loops. Earth System Dynamics, 2021, 12, 1115-1137.	2.7	15
57	What do recent advances in quantifying climate and carbon cycle uncertainties mean for climate policy?. Environmental Research Letters, 2008, 3, 044002.	2.2	14
58	The Rise and Rise of Ecosystem Services: Is â€œvalueâ€•the best bridging concept between society and the natural world?. Procedia Environmental Sciences, 2011, 6, 88-95.	1.3	14
59	Failures to disagree are essential for environmental science to effectively influence policy development. Ecology Letters, 2022, , .	3.0	14
60	Potential feedbacks between loss of biosphere integrity and climate change. Global Sustainability, 2019, 2, .	1.6	11
61	Management Education and Earth System Science: Transformation as if Planetary Boundaries Mattered. Business and Society, 2021, 60, 26-56.	4.2	11
62	An innovative approach for improving infrastructure resilience. Proceedings of the Institution of Civil Engineers: Civil Engineering, 2012, 165, 27-32.	0.3	10
63	Analytically tractable climateâ€“carbon cycle feedbacks under 21st century anthropogenic forcing. Earth System Dynamics, 2018, 9, 507-523.	2.7	9
64	Making Resilient Decisions for Sustainable Circularity of Fashion. Circular Economy and Sustainability, 2021, 1, 651-670.	3.3	9
65	Systems Thinking and Sustainability. Chemistry International, 2021, 43, 6-10.	0.3	9
66	Resolving ecological feedbacks on the ocean carbon sink in Earth system models. Earth System Dynamics, 2021, 12, 797-818.	2.7	8
67	Fundamentals of climate change science. , 2012, , 39-71.		7
68	Contested Modelling: a Critical Examination of Expert Modelling in Sustainability. Systems Research and Behavioral Science, 2016, 33, 45-63.	0.9	6
69	A prototype Earth system impact metric that accounts for cross-scale interactions. Environmental Research Letters, 2021, 16, 115005.	2.2	6
70	Earth system models. , 2012, , 129-159.		5
71	Nitrogen Deposition Effects on Ecosystem Services and Interactions with other Pollutants and Climate Change. , 2014, , 493-505.		5
72	Human well-being in the Anthropocene: limits to growth. Global Sustainability, 2021, 4, .	1.6	4

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73	The Earth system feedbacks that matter for contemporary climate. , 0, , 102-128.		3
74	A shared future: chemistry's engagement is essential for resilience of people and planet. Royal Society Open Science, 2022, 9, .	1.1	3
75	Response to Comment on â€œOutside the Safe Operating Space of the Planetary Boundary for Novel Entitiesâ€• Environmental Science & Technology, 2022, 56, 6788-6789.	4.6	3
76	Water quality of the Madang Lagoon, Papua New Guinea: A status report. Marine Pollution Bulletin, 2006, 52, 458-465.	2.3	2
77	The evaluation of Earth System Models: discussion summary. Procedia Environmental Sciences, 2011, 6, 216-221.	1.3	2
78	Editorial: key themes and messages from the Earth System Science 2010 conference. Procedia Environmental Sciences, 2011, 6, 3-14.	1.3	1
79	Societyâ€™s responses and knowledge gaps. , 0, , 245-256.		1
80	Earth System Servicesâ€”A Global Science Perspective on Ecosystem Services. , 2013, , 85-89.		1
81	Integrated Socio-ecological History: Could Looking at the Past Help Direct Societyâ€™s Future?. International Journal of Interdisciplinary Social Sciences, 2010, 5, 139-148.	0.1	1
82	Improved Understanding of the Earth System and Its Implications: Earth System Science 2010: Global Change, Climate and People: Edinburgh, United Kingdom, 10-13 May 2010. Eos, 2010, 91, 397-397.	0.1	0
83	Foreword: About ESS 2010. Procedia Environmental Sciences, 2011, 6, 1-2.	1.3	0
84	Earth system science and society. , 0, , 1-38.		0
85	Amundsen, Helene. 2014.Adapting to Change â€“ Community Resilience in Northern Norwegian Municipalities. Norsk Geografisk Tidsskrift, 2014, 68, 318-319.	0.3	0
86	Delineating the Plate Boundaries: A Review of Integrated Metrics for Healthy and Environmentally Sustainable Diets. , 2020, , 339-350.		0
87	Assessment and Characterisation of the Organic Component of Atmospheric Nitrogen Deposition. , 2014, , 107-116.		0