Deepak K Ray

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/3763429/publications.pdf

Version: 2024-02-01

38 papers	15,995 citations	201385 27 h-index	315357 38 g-index
42 all docs	42 docs citations	42 times ranked	20035 citing authors

#	Article	IF	Citations
1	Solutions for a cultivated planet. Nature, 2011, 478, 337-342.	13.7	5,821
2	Yield Trends Are Insufficient to Double Global Crop Production by 2050. PLoS ONE, 2013, 8, e66428.	1.1	2,328
3	Closing yield gaps through nutrient and water management. Nature, 2012, 490, 254-257.	13.7	2,055
4	Recent patterns of crop yield growth and stagnation. Nature Communications, 2012, 3, 1293.	5.8	1,146
5	Climate variation explains a third of global crop yield variability. Nature Communications, 2015, 6, 5989.	5.8	1,138
6	Leverage points for improving global food security and the environment. Science, 2014, 345, 325-328.	6.0	584
7	Climate change has likely already affected global food production. PLoS ONE, 2019, 14, e0217148.	1.1	470
8	The effects of climate extremes on global agricultural yields. Environmental Research Letters, 2019, 14, 054010.	2.2	382
9	Future warming increases probability of globally synchronized maize production shocks. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 6644-6649.	3.3	301
10	Global gridded crop model evaluation: benchmarking, skills, deficiencies and implications. Geoscientific Model Development, 2017, 10, 1403-1422.	1.3	213
11	The Global Gridded Crop Model Intercomparison: data and modeling protocols for Phase 1 (v1.0). Geoscientific Model Development, 2015, 8, 261-277.	1.3	190
12	Increasing global crop harvest frequency: recent trends and future directions. Environmental Research Letters, 2013, 8, 044041.	2.2	164
13	Climate adaptation by crop migration. Nature Communications, 2020, 11, 1243.	5.8	153
14	Direct human influence on atmospheric CO2 seasonality from increased cropland productivity. Nature, 2014, 515, 398-401.	13.7	118
15	Impact of land use on Costa Rican tropical montane cloud forests: Sensitivity of orographic cloud formation to deforestation in the plains. Journal of Geophysical Research, 2006, 111, .	3.3	103
16	Stronger temperatureâ€“moisture couplings exacerbate the impact of climate warming on global crop yields. Nature Food, 2021, 2, 683-691.	6.2	100
17	A regional scale assessment of land use/land cover and climatic changes on water and energy cycle in the upper Midwest United States. International Journal of Climatology, 2010, 30, 2025-2044.	1.5	99
18	Effects of land use in Southwest Australia: 1. Observations of cumulus cloudiness and energy fluxes. Journal of Geophysical Research, 2003, 108, .	3.3	73

#	Article	IF	Citations
19	Spatial and temporal uncertainty of crop yield aggregations. European Journal of Agronomy, 2017, 88, 10-21.	1.9	63
20	Reviews and syntheses: An empirical spatiotemporal description of the global surfaceâ€“atmosphere carbon fluxes: opportunities and data limitations. Biogeosciences, 2017, 14, 3685-3703.	1.3	58
21	A backcast land use change model to generate past land use maps: application and validation at the Muskegon River watershed of Michigan, USA. Journal of Land Use Science, 2010, 5, 1-29.	1.0	43
22	Global Relationships between Cropland Intensification and Summer Temperature Extremes over the Last 50 Years. Journal of Climate, 2017, 30, 7505-7528.	1.2	43
23	The impact of conflict-driven cropland abandonment on food insecurity in South Sudan revealed using satellite remote sensing. Nature Food, 2021, 2, 990-996.	6.2	39
24	Using Backcast Land-Use Change and Groundwater Travel-Time Models to Generate Land-Use Legacy Maps for Watershed Management. Ecology and Society, 2007, 12, .	1.0	38
25	Dry season clouds and rainfall in northern Central America: Implications for the Mesoamerican Biological Corridor. Global and Planetary Change, 2006, 54, 150-162.	1.6	31
26	Observational estimates of radiative forcing due to land use change in southwest Australia. Journal of Geophysical Research, 2007, 112, .	3.3	31
27	Crop harvests for direct food use insufficient to meet the UNâ€™s food security goal. Nature Food, 2022, 3, 367-374.	6.2	31
28	Coupling land use and groundwater models to map land use legacies: Assessment of model uncertainties relevant to land use planning. Applied Geography, 2012, 34, 356-370.	1.7	30
29	Sensitivity of global major crop yields to climate variables: A non-parametric elasticity analysis. Science of the Total Environment, 2020, 748, 141431.	3.9	25
30	Biogeography of Tropical Montane Cloud Forests. Part I: Remote Sensing of Cloud-Base Heights. Journal of Applied Meteorology and Climatology, 2008, 47, 960-975.	0.6	22
31	The Impact of Future Land Use Scenarios on Runoff Volumes in the Muskegon River Watershed. Environmental Management, 2010, 46, 351-366.	1.2	20
32	Importance of land use versus atmospheric information verified from cloud simulations from a frontier region in Costa Rica. Journal of Geophysical Research, 2009, 114, .	3.3	11
33	Roles of atmospheric and land surface data in dynamic regional downscaling. Journal of Geophysical Research, 2010, 115, .	3.3	11
34	Land use leverage points to reduce GHG emissions in U.S. agricultural supply chains. Environmental Research Letters, 2021, 16, 115002.	2.2	7
35	Cloud cover conditions and stability of the Western Ghats montane wet forests. Journal of Geophysical Research, 2011, 116, .	3.3	5
36	Should Gene Editing Be Used to Develop Crops for Continuous-Living-Cover Agriculture? A Multi-Sector Stakeholder Assessment Using a Cooperative Governance Approach. Frontiers in Bioengineering and Biotechnology, 2022, 10, 843093.	2.0	4

#	Article	IF	Citations
37	Dry season precipitation over the Mesoamerican Biological Corridor is more sensitive to deforestation than to greenhouse gas driven climate change. Climatic Change, 2013, 119, 775-783.	1.7	3
38	Regionalizing crop types to enhance global ecosystem modelling of maize production. Environmental Research Letters, 0, , .	2.2	0