Valentin H Klaus

List of Publications by Year
in descending order

59 papers	3,862 citations	186265 28 h-index	138484 58 g-index
67 all docs	67 docs citations	67 times ranked	5463 citing authors

#	Article	IF	Citations
1	Land use intensification alters ecosystem multifunctionality via loss of biodiversity and changes to functional composition. Ecology Letters, 2015, 18, 834-843.	6.4	578
2	Biodiversity at multiple trophic levels is needed for ecosystem multifunctionality. Nature, 2016, 536, 456-459.	27.8	526
3	A quantitative index of land-use intensity in grasslands: Integrating mowing, grazing and fertilization. Basic and Applied Ecology, 2012, 13, 207-220.	2.7	325
4	Interannual variation in land-use intensity enhances grassland multidiversity. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 308-313.	7.1	243
5	Direct and productivityâ€mediated indirect effects of fertilization, mowing and grazing on grassland species richness. Journal of Ecology, 2012, 100, 1391-1399.	4.0	212
6	Land-use intensity alters networks between biodiversity, ecosystem functions, and services. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 28140-28149.	7.1	164
7	Land use imperils plant and animal community stability through changes in asynchrony rather than diversity. Nature Communications, 2016, 7, 10697.	12.8	125
8	Locally rare species influence grassland ecosystem multifunctionality. Philosophical Transactions of the Royal Society B: Biological Sciences, 2016, 371, 20150269.	4.0	117
9	The results of biodiversityâ€“ecosystem functioning experiments are realistic. Nature Ecology and Evolution, 2020, 4, 1485-1494.	7.8	93
10	Urban Grassland Restoration: A Neglected Opportunity for Biodiversity Conservation. Restoration Ecology, 2013, 21, 665-669.	2.9	85
11	Contrasting responses of above- and belowground diversity to multiple components of land-use intensity. Nature Communications, 2021, 12, 3918.	12.8	81
12	Grassland management intensification weakens the associations among the diversities of multiple plant and animal taxa. Ecology, 2015, 96, 1492-1501.	3.2	75
13	Permanent grasslands in Europe: Land use change and intensification decrease their multifunctionality. Agriculture, Ecosystems and Environment, 2022, 330, 107891.	5.3	72
14	A conceptual framework for urban ecological restoration and rehabilitation. Basic and Applied Ecology, 2021, 52, 82-94.	2.7	65
15	Plant functional trait shifts explain concurrent changes in the structure and function of grassland soil microbial communities. Journal of Ecology, 2019, 107, 2197-2210.	4.0	57
16	Evidence from the real world: ¹⁵N natural abundances reveal enhanced nitrogen use at high plant diversity in Central European grasslands. Journal of Ecology, 2014, 102, 456-465.	4.0	55
17	Public attitudes toward biodiversityâ€friendly greenspace management in Europe. Conservation Letters, 2020, 13, e12718.	5.7	50
18	NIRS meets Ellenberg's indicator values: Prediction of moisture and nitrogen values of agricultural grassland vegetation by means of near-infrared spectral characteristics. Ecological Indicators, 2012, 14, 82-86.	6.3	49

#	Article	IF	Citations
19	Nutrient concentrations and fibre contents of plant community biomass reflect species richness patterns along a broad range of land-use intensities among agricultural grasslands. Perspectives in Plant Ecology, Evolution and Systematics, 2011, 13, 287-295.	2.7	48
20	Will I stay or will I go? Plant speciesâ€specific response and tolerance to high landâ€use intensity in temperate grassland ecosystems. Journal of Vegetation Science, 2019, 30, 674-686.	2.2	45
21	Towards the development of general rules describing landscape heterogeneityâ€"multifunctionality relationships. Journal of Applied Ecology, 2019, 56, 168-179.	4.0	42
22	Does organic grassland farming benefit plant and arthropod diversity at the expense of yield and soil fertility?. Agriculture, Ecosystems and Environment, 2013, 177, 1-9.	5.3	40
23	Above- and belowground biodiversity jointly tighten the P cycle in agricultural grasslands. Nature Communications, 2021, 12, 4431.	12.8	40
24	Patterns and potentials of plant species richness in highâ€and lowâ€maintenance urban grasslands. Applied Vegetation Science, 2017, 20, 18-27.	1.9	39
25	Plant diversity moderates drought stress in grasslands: Implications from a large real-world study on 13C natural abundances. Science of the Total Environment, 2016, 566-567, 215-222.	8.0	35
26	Land use intensity, rather than plant species richness, affects the leaching risk of multiple nutrients from permanent grasslands. Global Change Biology, 2018, 24, 2828-2840.	9.5	35
27	Reducing Sample Quantity and Maintaining High Prediction Quality of Grassland Biomass Properties with near Infrared Reflectance Spectroscopy. Journal of Near Infrared Spectroscopy, 2011, 19, 495-505.	1.5	32
28	Contribution of the soil seed bank to the restoration of temperate grasslands by mechanical sward disturbance. Restoration Ecology, 2018, 26, S114.	2.9	32
29	Eleven yearsâ€™ data of grassland management in Germany. Biodiversity Data Journal, 2019, 7, e36387.	0.8	32
30	Decomposition disentangled: A test of the multiple mechanisms by which nitrogen enrichment alters litter decomposition. Functional Ecology, 2020, 34, 1485-1496.	3.6	30
31	Changes in plant-herbivore network structure and robustness along land-use intensity gradients in grasslands and forests. Science Advances, 2021, 7, .	10.3	27
32	Impact of Land-Use Intensity and Productivity on Bryophyte Diversity in Agricultural Grasslands. PLoS ONE, 2012, 7, e51520.	2.5	25
33	Temporal and small-scale spatial variation in grassland productivity, biomass quality, and nutrient limitation. Plant Ecology, 2016, 217, 843-856.	1.6	25
34	Effects of mowing, grazing and fertilization on soil seed banks in temperate grasslands in Central Europe. Agriculture, Ecosystems and Environment, 2018, 256, 211-217.	5.3	25
35	Acceptance of near-natural greenspace management relates to ecological and socio-cultural assigned values among European urbanites. Basic and Applied Ecology, 2021, 50, 119-131.	2.7	25
36	Connectivity of public urban grasslands: implications for grassland conservation and restoration in cities. Urban Ecosystems, 2017, 20, 511-519.	2.4	22

#	Article	IF	Citations
37	Nutrient stoichiometry and land use rather than species richness determine plant functional diversity. Ecology and Evolution, 2018, 8, 601-616.	1.9	22
38	Recovery of ecosystem functions after experimental disturbance in 73 grasslands differing in landâ€use intensity, plant species richness and community composition. Journal of Ecology, 2019, 107, 2635-2649.	4.0	20
39	Drought boosts risk of nitrate leaching from grassland fertilisation. Science of the Total Environment, 2020, 726, 137877.	8.0	20
40	Sedimentation-induced eutrophication in large river floodplains â€" An obstacle to restoration?. Biological Conservation, 2011, 144, 451-458.	4.1	19
41	Do biodiversity-ecosystem functioning experiments inform stakeholders how to simultaneously conserve biodiversity and increase ecosystem service provisioning in grasslands?. Biological Conservation, 2020, 245, 108552.	4.1	19
42	Restoration of plant diversity in permanent grassland by seeding: Assessing the limiting factors along landâ€use gradients. Journal of Applied Ecology, 2021, 58, 1681-1692.	4.0	19
43	Influence of experimental soil disturbances on the diversity of plants in agricultural grasslands. Journal of Plant Ecology, 2014, 7, 509-517.	2.3	18
44	Hemiparasite-density effects on grassland plant diversity, composition and biomass. Perspectives in Plant Ecology, Evolution and Systematics, 2018, 32, 22-29.	2.7	17
45	A guide to assess and value ecosystem services of grasslands. Ecosystem Services, 2021, 52, 101376.	5.4	17
46	The Evolution of Ecological Diversity in Acidobacteria. Frontiers in Microbiology, 2022, 13, 715637.	3.5	15
47	The role of soil chemical properties, land use and plant diversity for microbial phosphorus in forest and grassland soils. Journal of Plant Nutrition and Soil Science, 2018, 181, 185-197.	1.9	13
48	Organic vs. Conventional Grassland Management: Do 15N and 13C Isotopic Signatures of Hay and Soil Samples Differ?. PLoS ONE, 2013, 8, e78134.	2.5	12
49	And the winner is â€¦. ! A test of simple predictors of plant species richness in agricultural grasslands. Ecological Indicators, 2018, 87, 296-301.	6.3	12
50	The costs of diversity: higher prices for more diverse grassland seed mixtures. Environmental Research Letters, 2021, 16, 094011.	5.2	10
51	Present and historical landscape structure shapes current species richness in Central European grasslands. Landscape Ecology, 2022, 37, 745-762.	4.2	9
52	Enriching plant diversity in grasslands by large-scale experimental sward disturbance and seed addition along gradients of land-use intensity. Journal of Plant Ecology, 0, , rtw062.	2.3	8
53	Cropping systems alter hydraulic traits of barley but not pea grown in mixture. Plant, Cell and Environment, 2021, 44, 2912-2924.	5.7	8
54	Does plant diversity affect the water balance of established grassland systems?. Ecohydrology, 2018, 11, e1945.	2.4	7

#	Article	IF	Citations
55	Direct and plant community mediated effects of management intensity on annual nutrient leaching risk in temperate grasslands. Nutrient Cycling in Agroecosystems, 2022, 123, 83-104.	2.2	6
56	Soil conditions drive belowâ€ground trait space in temperate agricultural grasslands. Journal of Ecology, 2022, 110, 1189-1200.	4.0	5
57	Enzyme kinetics inform about mechanistic changes in tea litter decomposition across gradients in land-use intensity in Central German grasslands. Science of the Total Environment, 2022, 836, 155748.	8.0	4
58	Water uptake patterns of pea and barley responded to drought but not to cropping systems. Biogeosciences, 2022, 19, 1853-1869.	3.3	2
59	Severe drought rather than cropping system determines litter decomposition in arable systems. Agriculture, Ecosystems and Environment, 2022, 338, 108078.	5.3	1