

Douglas L Karlen

List of Publications by Year in descending order

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62
papers

3,678
citations

186265

28
h-index

144013

57
g-index

75
all docs

75
docs citations

75
times ranked

3278
citing authors

#	ARTICLE	IF	CITATIONS
1	The Soil Management Assessment Framework. Soil Science Society of America Journal, 2004, 68, 1945-1962.	2.2	819
2	Soil quality: why and how?. Geoderma, 2003, 114, 145-156.	5.1	410
3	Soil health assessment: Past accomplishments, current activities, and future opportunities. Soil and Tillage Research, 2019, 195, 104365.	5.6	147
4	Bulk density as a soil quality indicator during conversion to no-tillage. Soil and Tillage Research, 2004, 78, 143-149.	5.6	141
5	Biological soil health indicators respond to tillage intensity: A US meta-analysis. Geoderma, 2020, 369, 114335.	5.1	140
6	Soil quality response to long-term tillage and crop rotation practices. Soil and Tillage Research, 2013, 133, 54-64.	5.6	126
7	Soil Degradation: Will Humankind Ever Learn?. Sustainability, 2015, 7, 12490-12501.	3.2	117
8	Soil Quality Indexing Strategies for Evaluating Sugarcane Expansion in Brazil. PLoS ONE, 2016, 11, e0150860.	2.5	110
9	Crop Residue Mass Needed to Maintain Soil Organic Carbon Levels: Can It Be Determined?. Bioenergy Research, 2014, 7, 481-490.	3.9	94
10	REVIEW: Balancing limiting factors & economic drivers for sustainable Midwestern US agricultural residue feedstock supplies. Industrial Biotechnology, 2010, 6, 271-287.	0.8	93
11	Reanalysis Validates Soil Health Indicator Sensitivity and Correlation with Long-term Crop Yields. Soil Science Society of America Journal, 2019, 83, 721-732.	2.2	92
12	Soil Quality Impacts of Current South American Agricultural Practices. Sustainability, 2015, 7, 2213-2242.	3.2	84
13	Monitoring Soil Quality to Assess the Sustainability of Harvesting Corn Stover. Agronomy Journal, 2011, 103, 288-295.	1.8	73
14	A five-year assessment of corn stover harvest in central Iowa, USA. Soil and Tillage Research, 2011, 115-116, 47-55.	5.6	71
15	Multilocation Corn Stover Harvest Effects on Crop Yields and Nutrient Removal. Bioenergy Research, 2014, 7, 528-539.	3.9	67
16	Nutrient Removal as a Function of Corn Stover Cutting Height and Cob Harvest. Bioenergy Research, 2010, 3, 342-352.	3.9	64
17	Tillage Intensity Effects on Soil Structure Indicators—A US Meta-Analysis. Sustainability, 2020, 12, 2071.	3.2	59
18	Topographic metric predictions of soil redistribution and organic carbon in Iowa cropland fields. Catena, 2018, 160, 222-232.	5.0	57

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19	The soil health assessment protocol and evaluation applied to soil organic carbon. Soil Science Society of America Journal, 2021, 85, 1196-1213.	2.2	56
20	A global meta-analysis of soil organic carbon response to corn stover removal. GCB Bioenergy, 2019, 11, 1215-1233.	5.6	47
21	A Soil Quality and Metabolic Activity Assessment after Fifty-Seven Years of Agricultural Management. Soil Science Society of America Journal, 2013, 77, 903-913.	2.2	46
22	A Soil Quality Assessment within the Iowa River South Fork Watershed. Soil Science Society of America Journal, 2011, 75, 2271-2282.	2.2	43
23	Vertical Distribution of Corn Stover Dry Mass Grown at Several US Locations. Bioenergy Research, 2011, 4, 11-21.	3.9	43
24	Modeled Impacts of Cover Crops and Vegetative Barriers on Corn Stover Availability and Soil Quality. Bioenergy Research, 2014, 7, 576-589.	3.9	39
25	Soil Quality Evaluation Using the Soil Management Assessment Framework (SMAF) in Brazilian Oxisols with Contrasting Texture. Revista Brasileira De Ciencia Do Solo, 2017, 41, .	1.3	35
26	Corn Stover Nutrient Removal Estimates for Central Iowa, USA. Sustainability, 2015, 7, 8621-8634.	3.2	34
27	Regenerating Agricultural Landscapes with Perennial Groundcover for Intensive Crop Production. Agronomy, 2019, 9, 458.	3.0	34
28	Crop Residue Considerations for Sustainable Bioenergy Feedstock Supplies. Bioenergy Research, 2014, 7, 465-467.	3.9	33
29	Soil health response to sugarcane straw removal in Brazil. Industrial Crops and Products, 2021, 163, 113315.	5.2	33
30	Anthropogenic and Inherent Effects on Soil Organic Carbon across the U.S. Sustainability, 2020, 12, 5695.	3.2	31
31	Corn root and soil health indicator response to no-till production practices. Agriculture, Ecosystems and Environment, 2019, 285, 106607.	5.3	30
32	Crop residue management and fertilization effects on soil organic matter and associated biological properties. Environmental Science and Pollution Research, 2016, 23, 17581-17591.	5.3	29
33	A framework to evaluate land degradation and restoration responses for improved planning and decision-making. Ecosystems and People, 2020, 16, 1-18.	3.2	28
34	Development of Sustainable Corn Stover Harvest Strategies for Cellulosic Ethanol Production. Bioenergy Research, 2014, 7, 509-516.	3.9	26
35	Crop, Tillage, and Landscape Effects on Near-Surface Soil Quality Indices in Indiana. Soil Science Society of America Journal, 2016, 80, 1638-1652.	2.2	26
36	LLWR Techniques for Quantifying Potential Soil Compaction Consequences of Crop Residue Removal. Bioenergy Research, 2014, 7, 468-480.	3.9	23

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37	Corn stover feedstock trials to support predictive modeling. <i>GCB Bioenergy</i> , 2010, 2, 235-247.	5.6	22
38	Bridging biofuel sustainability indicators and ecosystem services through stakeholder engagement. <i>Biomass and Bioenergy</i> , 2018, 114, 143-156.	5.7	21
39	Corn Stover Harvest, Tillage, and Cover Crop Effects on Soil Health Indicators. <i>Soil Science Society of America Journal</i> , 2018, 82, 910-918.	2.2	21
40	Soil Quality Index Comparisons Using Fort Cobb, Oklahoma, Watershed-Scale Land Management Data. <i>Soil Science Society of America Journal</i> , 2015, 79, 224-238.	2.2	18
41	Soil and Water Conservation: Our History and Future Challenges. <i>Soil Science Society of America Journal</i> , 2014, 78, 1493-1499.	2.2	17
42	Tillage Effects on Soil Quality after Three Years of Irrigation in Northern Spain. <i>Sustainability</i> , 2017, 9, 1476.	3.2	17
43	Influence of Corn Residue Harvest Management on Grain, Stover, and Energy Yields. <i>Bioenergy Research</i> , 2014, 7, 590-597.	3.9	16
44	Distribution of Structural Carbohydrates in Corn Plants Across the Southeastern USA. <i>Bioenergy Research</i> , 2014, 7, 551-558.	3.9	14
45	Soil Organic Carbon and Isotope Composition Response to Topography and Erosion in Iowa. <i>Journal of Geophysical Research G: Biogeosciences</i> , 2018, 123, 3649-3667.	3.0	14
46	Double cropping opportunities for biomass crops in the north central USA. <i>Biofuels</i> , 2013, 4, 605-615.	2.4	12
47	Unraveling Crop Residue Harvest Effects on Soil Organic Carbon. <i>Agronomy Journal</i> , 2019, 111, 93-98.	1.8	11
48	Crop Residue Harvest Economics: An Iowa and North Dakota Case Study. <i>Bioenergy Research</i> , 2014, 7, 568-575.	3.9	9
49	Is Corn Stover Harvest Predictable Using Farm Operation, Technology, and Management Variables?. <i>Agronomy Journal</i> , 2018, 110, 749-757.	1.8	9
50	A SMAF assessment of U.S. tillage and crop management strategies. <i>Environmental and Sustainability Indicators</i> , 2020, 8, 100072.	3.3	9
51	Diagnosing, Ameliorating, and Monitoring Soil Compaction in No-Till Brazilian Soils. , 2019, 2, 1-14.		8
52	How does tillage intensity affect chemical soil health indicators? A United States meta-analysis. , 2020, 3, e20083.		7
53	Land management effects on wet aggregate stability and carbon content. <i>Soil Science Society of America Journal</i> , 2021, 85, 2149-2168.	2.2	6
54	Science-based maize stover removal can be sustainable. <i>Agronomy Journal</i> , 2021, 113, 3178-3192.	1.8	5

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55	Indices for Soil Management Decisions. , 2015, , 39-50.		4
56	Subsoil Potassium in Central Iowa Soils: Status and Future Challenges. , 2018, 1, 1-8.		4
57	Vertical Distribution of Structural Components in Corn Stover. Agriculture (Switzerland), 2014, 4, 274-287.	3.1	3
58	Iowa Crop Variety Yield Testing: A History and Annotated Bibliography. Crop Science, 2017, 57, 1984-1998.	1.8	3
59	Ten-Year Assessment Encourages No-Till for Corn Grain and Stover Harvest. Agricultural and Environmental Letters, 2018, 3, 180034.	1.2	2
60	Decreased land use intensity improves surface soil quality on marginal lands. , 2021, 4, .		2
61	Corn Stover Removal Responses on Soil Test P and K Levels in Coastal Plain Ultisols. Sustainability, 2021, 13, 4401.	3.2	1
62	Soil health assessments: how and why?. Crops & Soils, 2019, 52, 22-57.	0.2	0