Charles R Lane

List of Publications by Year
in descending order

70	5,332	101496	106281
papers	citations	36	65
		h-index	g-index

76	76	76	3557
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Noncommutative Field Theory and Lorentz Violation. Physical Review Letters, 2001, 87, 141601.	2.9	764
2	Constraints on Lorentz violation from clock-comparison experiments. Physical Review D, 1999, 60, .	1.6	324
3	Do geographically isolated wetlands influence landscape functions?. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 1978-1986.	3.3	297
4	Limit on Lorentz andCPTViolation of the Neutron Using a Two-Species Noble-Gas Maser. Physical Review Letters, 2000, 85, 5038-5041.	2.9	261
5	One-loop renormalization of Lorentz-violating electrodynamics. Physical Review D, 2002, 65, .	1.6	211
6	CPTand Lorentz Tests with Muons. Physical Review Letters, 2000, 84, 1098-1101.	2.9	206
7	Clock-Comparison Tests of Lorentz andCPTSymmetry in Space. Physical Review Letters, 2002, 88, 090801.	2.9	206
8	Nonrelativistic quantum Hamiltonian for Lorentz violation. Journal of Mathematical Physics, 1999, 40, 6245-6253.	0.5	193
9	Geographically Isolated Wetlands are Important Biogeochemical Reactors on the Landscape. BioScience, 2015, 65, 408-418.	2.2	163
10	Probing Lorentz andCPTviolation with space-based experiments. Physical Review D, 2003, 68, .	1.6	154
11	Decision-Tree, Rule-Based, and Random Forest Classification of High-Resolution Multispectral Imagery for Wetland Mapping and Inventory. Remote Sensing, 2018, 10, 580.	1.8	149
12	Enhancing protection for vulnerable waters. Nature Geoscience, 2017, 10, 809-815.	5.4	141
13	Hydrologic connectivity between geographically isolated wetlands and surface water systems: A review of select modeling methods. Environmental Modelling and Software, 2014, 53, 190-206.	1.9	137
14	Integrating LiDAR data and multi-temporal aerial imagery to map wetland inundation dynamics using Google Earth Engine. Remote Sensing of Environment, 2019, 228, 1-13.	4.6	108
15	FLORISTIC QUALITY INDICES FOR BIOTIC ASSESSMENT OF DEPRESSIONAL MARSH CONDITION IN FLORIDA. , 2004, 14, 784-794.		104
16	Integrating geographically isolated wetlands into land management decisions. Frontiers in Ecology and the Environment, 2017, 15, 319-327.	1.9	92
17	Depressional wetlands affect watershed hydrological, biogeochemical, and ecological functions. Ecological Applications, 2018, 28, 953-966.	1.8	91
18	Geographically Isolated Wetlands: Rethinking a Misnomer. Wetlands, 2015, 35, 423-431.	0.7	87

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19	Hydrological, Physical, and Chemical Functions and Connectivity of Non‐Floodplain Wetlands to Downstream Waters: A Review. Journal of the American Water Resources Association, 2018, 54, 346-371.	1.0	86
20	Satellite remote sensing of isolated wetlands using object-oriented classification of Landsat-7 data. Wetlands, 2009, 29, 931-941.	0.7	84
21	Geographically isolated wetlands and watershed hydrology: A modified model analysis. Journal of Hydrology, 2015, 529, 240-256.	2.3	82
22	Calculating the Ecosystem Service of Water Storage in Isolated Wetlands using LiDAR in North Central Florida, USA. Wetlands, 2010, 30, 967-977.	0.7	80
23	An improved representation of geographically isolated wetlands in a watershed‐scale hydrologic model. Hydrological Processes, 2016, 30, 4168-4184.	1.1	80
24	Relative effects of geographically isolated wetlands on streamflow: a watershed‐scale analysis. Ecohydrology, 2016, 9, 21-38.	1.1	72
25	Delineating wetland catchments and modeling hydrologic connectivity using lidar data and aerial imagery. Hydrology and Earth System Sciences, 2017, 21, 3579-3595.	1.9	70
26	Diatoms as indicators of isolated herbaceous wetland condition in Florida, USA. Ecological Indicators, 2007, 7, 521-540.	2.6	65
27	Improved Wetland Classification Using Eight-Band High Resolution Satellite Imagery and a Hybrid Approach. Remote Sensing, 2014, 6, 12187-12216.	1.8	65
28	Probing Lorentz violation with Doppler-shift experiments. Physical Review D, 2005, 72, .	1.6	58
29	Delineation and Quantification of Wetland Depressions in the Prairie Pothole Region of North Dakota. Wetlands, 2016, 36, 215-227.	0.7	58
30	Physical and Chemical Connectivity of Streams and Riparian Wetlands to Downstream Waters: A Synthesis. Journal of the American Water Resources Association, 2018, 54, 323-345.	1.0	53
31	Identification of Putative Geographically Isolated Wetlands of the Conterminous United States. Journal of the American Water Resources Association, 2016, 52, 705-722.	1.0	47
32	Biota Connect Aquatic Habitats throughout Freshwater Ecosystem Mosaics. Journal of the American Water Resources Association, 2018, 54, 372-399.	1.0	45
33	Non-floodplain Wetlands Affect Watershed Nutrient Dynamics: A Critical Review. Environmental Science & Technology, 2019, 53, 7203-7214.	4.6	45
34	Surface Depression and Wetland Water Storage Improves Major River Basin Hydrologic Predictions. Water Resources Research, 2020, 56, e2019WR026561.	1.7	45
35	Estimating restorable wetland water storage at landscape scales. Hydrological Processes, 2018, 32, 305-313.	1.1	44
36	An Effective Method for Detecting Potential Woodland Vernal Pools Using High-Resolution LiDAR Data and Aerial Imagery. Remote Sensing, 2014, 6, 11444-11467.	1.8	42

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37	Multi-temporal Sub-pixel Landsat ETM+ Classification of Isolated Wetlands in Cuyahoga County, Ohio, USA. Wetlands, 2012, 32, 289-299.	0.7	39
38	Comparing Pixel- and Object-Based Approaches in Effectively Classifying Wetland-Dominated Landscapes. Remote Sensing, 2018, 10, 46.	1.8	38
39	Mapping Isolated Wetlands in a Karst Landscape: GIS and Remote Sensing Methods. GIScience and Remote Sensing, 2009, 46, 187-211.	2.4	34
40	Featured Collection Introduction: Connectivity of Streams and Wetlands to Downstream Waters. Journal of the American Water Resources Association, 2018, 54, 287-297.	1.0	30
41	Watershed Modeling with Remotely Sensed Big Data: MODIS Leaf Area Index Improves Hydrology and Water Quality Predictions. Remote Sensing, 2020, 12, 2148.	1.8	29
42	Modeling Connectivity of Nonâ€floodplain Wetlands: Insights, Approaches, and Recommendations. Journal of the American Water Resources Association, 2019, 55, 559-577.	1.0	26
43	Vegetation based classification trees for rapid assessment of isolated wetland condition. Ecological Indicators, 2005, 5, 189-206.	2.6	25
44	Boosted Regression Tree Models to Explain Watershed Nutrient Concentrations and Biological Condition. Journal of the American Water Resources Association, 2016, 52, 1251-1274.	1.0	23
45	The Significant Surface-Water Connectivity of â€œGeographically Isolated Wetlandsâ€. Wetlands, 2017, 37, 801-806.	0.7	23
46	Vulnerable Waters are Essential to Watershed Resilience. Ecosystems, 2023, 26, 1-28.	1.6	21
47	A Hydrologic Landscapes Perspective on Groundwater Connectivity of Depressional Wetlands. Water (Switzerland), 2020, 12, 50.	1.2	20
48	Characteristic community structure of Floridaâ€™s subtropical wetlands: the Florida wetland condition index for depressional marshes, depressional forested, and flowing water forested wetlands. Wetlands Ecology and Management, 2010, 18, 543-556.	0.7	19
49	Assessment of Isolated Wetland Condition in Florida Using Epiphytic Diatoms at Genus, Species, and Subspecies Taxonomic Resolution. EcoHealth, 2007, 4, 219-230.	0.9	17
50	The potential role of very high-resolution imagery to characterise lake, wetland and stream systems across the Prairie Pothole Region, United States. International Journal of Remote Sensing, 2019, 40, 5768-5798.	1.3	17
51	Wetlands inform how climate extremes influence surface water expansion and contraction. Hydrology and Earth System Sciences, 2018, 22, 1851-1873.	1.9	16
52	Improving global flood and drought predictions: integrating non-floodplain wetlands into watershed hydrologic models. Environmental Research Letters, 2021, 16, 091002.	2.2	15
53	Denitrification Potential in Geographically Isolated Wetlands of North Carolina and Florida, USA. Wetlands, 2015, 35, 459-471.	0.7	14
54	Classification and inventory of freshwater wetlands and aquatic habitats in the Selenga River Delta of Lake Baikal, Russia, using high-resolution satellite imagery. Wetlands Ecology and Management, 2015, 23, 195-214.	0.7	13

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55	Land-Cover Changes to Surface-Water Buffers in the Midwestern USA: 25 Years of Landsat Data Analyses (1993–2017). Remote Sensing, 2020, 12, 754.	1.8	13
56	Wetland restoration yields dynamic nitrate responses across the Upper Mississippi river basin. Environmental Research Communications, 2021, 3, 095002.	0.9	13
57	Relating Noncommutative SO(2,3)⋆ Gravity to the Lorentz-Violating Standard-Model Extension. Symmetry, 2018, 10, 480.	1.1	12
58	Energy-Based Land Use Predictors of Proximal Factors and Benthic Diatom Composition in Florida Freshwater Marshes. Environmental Monitoring and Assessment, 2006, 117, 433-450.	1.3	11
59	Effect of sampling method on diatom composition for use in monitoring and assessing large river condition. River Research and Applications, 2007, 23, 1126-1146.	0.7	11
60	Benthic diatom composition in isolated forested wetlands subject to drying: Implications for monitoring and assessment. Ecological Indicators, 2009, 9, 1121-1128.	2.6	11
61	Spacetime variation of Lorentz-violation coefficients at a nonrelativistic scale. Physical Review D, 2016, 94, .	1.6	10
62	Wetland Flowpaths Mediate Nitrogen and Phosphorus Concentrations across the Upper Mississippi River Basin. Journal of the American Water Resources Association, 2023, 59, 1162-1179.	1.0	9
63	Using Comparisons of Clock Frequencies and Sidereal Variation to Probe Lorentz Violation. Symmetry, 2017, 9, 245.	1.1	4
64	Lorentz Violation at the Level of Undergraduate Classical Mechanics. Symmetry, 2020, 12, 1734.	1.1	4
65	SenseCube—a novel inexpensive wireless multisensor for physics lab experimentations. Physics Education, 2018, 53, 045016.	0.3	2
66	Crossroad Blues: An Intersection of Rivers, Wetlands, and Public Policy. Fisheries, 2011, 36, 337-339.	0.6	1
67	Noncommutative Gravity and the Standard-Model Extension. , 2020, , .		1
68	AN SME ANALYSIS OF DOPPLER-EFFECT EXPERIMENTS. , 2005, , .		0
69	DOPPLER-EFFECT EXPERIMENTS AND LORENTZ VIOLATION. , 2008, , .		0
70	Spacetime Variation of Lorentz-Violation Coefficents at Nonrelativistic Scale. , 2017, , .		0