Laura L Bourgeau-Chavez

List of Publications by Year
in descending order

76 papers	3,043 citations	117571 34 h-index	168321 53 g-index
78 all docs	78 docs citations	78 times ranked	3015 citing authors

#	Article	IF	Citations
1	Vulnerability of high-latitude soil organic carbon in North America to disturbance. Journal of Geophysical Research, 2011, 116, .	3.3	337
2	Effects of seasonal hydrologic patterns in south Florida wetlands on radar backscatter measured from ERS-2 SAR imagery. Remote Sensing of Environment, 2003, 88, 423-441.	4.6	147
3	Analysis of space-borne SAR data for wetland mapping in Virginia riparian ecosystems. International Journal of Remote Sensing, 2001, 22, 3665-3687.	1.3	108
4	Increasing fire and the decline of fire adapted black spruce in the boreal forest. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	3.3	107
5	Sensitivity of ERS-1 and JERS-1 radar data to biomass and stand structure in Alaskan boreal forest. Remote Sensing of Environment, 1995, 54, 247-260.	4.6	103
6	Evaluation of approaches to estimating aboveground biomass in Southern pine forests using SIR-C data. Remote Sensing of Environment, 1997, 59, 223-233.	4.6	100
7	Correlating radar backscatter with components of biomass in loblolly pine forests. IEEE Transactions on Geoscience and Remote Sensing, 1995, 33, 643-659.	2.7	97
8	Big Data for a Big Country: The First Generation of Canadian Wetland Inventory Map at a Spatial Resolution of 10-m Using Sentinel-1 and Sentinel-2 Data on the Google Earth Engine Cloud Computing Platform. Canadian Journal of Remote Sensing, 2020, 46, 15-33.	1.1	84
9	Remote monitoring of regional inundation patterns and hydroperiod in the Greater Everglades using Synthetic Aperture Radar. Wetlands, 2005, 25, 176-191.	0.7	83
10	Estimating release of carbon from 1990 and 1991 forest fires in Alaska. Journal of Geophysical Research, 1995, 100, 2941.	3.3	77
11	Soil moisture limitations on monitoring boreal forest regrowth using spaceborne L-band SAR data. Remote Sensing of Environment, 2011, 115, 227-232.	4.6	76
12	Development of a Bi-National Great Lakes Coastal Wetland and Land Use Map Using Three-Season PALSAR and Landsat Imagery. Remote Sensing, 2015, 7, 8655-8682.	1.8	73
13	Assessing spatial and temporal variations in surface soil moisture in fire-disturbed black spruce forests in Interior Alaska using spaceborne synthetic aperture radar imagery â€" Implications for post-fire tree recruitment. Remote Sensing of Environment, 2007, 108, 42-58.	4.6	70
14	The detection and mapping of Alaskan wildfires using a spaceborne imaging radar system. International Journal of Remote Sensing, 1997, 18, 355-373.	1.3	69
15	Mapping fire scars in global boreal forests using imaging radar data. International Journal of Remote Sensing, 2002, 23, 4211-4234.	1.3	69
16	Validation of Soil Moisture Data Products From the NASA SMAP Mission. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2022, 15, 364-392.	2.3	62
17	Observations of variations in ERS-1 SAR image intensity associated with forest fires in Alaska. IEEE Transactions on Geoscience and Remote Sensing, 1994, 32, 206-210.	2.7	60
18	Effects of soil moisture and water depth on ERS SAR backscatter measurements from an Alaskan wetland complex. Remote Sensing of Environment, 2009, 113, 1868-1873.	4.6	60

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19	Observations on the sensitivity of ERS-1 SAR image intensity to changes in aboveground biomass in young loblolly pine forests. International Journal of Remote Sensing, 1994, 15, 3-16.	1.3	57
20	Remote monitoring of spatial and temporal surface soil moisture in fire disturbed boreal forest ecosystems with ERS SAR imagery. International Journal of Remote Sensing, 2007, 28, 2133-2162.	1.3	57
21	Initial observations on using SAR to monitor wildfire scars in boreal forests. International Journal of Remote Sensing, 1992, 13, 3495-3501.	1.3	54
22	Mapping invasive Phragmites australis in the coastal Great Lakes with ALOS PALSAR satellite imagery for decision support. Journal of Great Lakes Research, 2013, 39, 65-77.	0.8	53
23	Fire in arctic tundra of Alaska: past fire activity, future fire potential, and significance for land management and ecology. International Journal of Wildland Fire, 2015, 24, 1045.	1.0	53
24	Controls on Patterns of Biomass Burning in Alaskan Boreal Forests. Ecological Studies, 2000, , 173-196.	0.4	52
25	Multidate, multisensor remote sensing reveals high density of carbonâ€rich mountain peatlands in the pÃ¡ramo of Ecuador. Global Change Biology, 2017, 23, 5412-5425.	4.2	50
26	Sensitivity of ERS-1 SAR to variations in soil water in fire-disturbed boreal forest ecosystems. International Journal of Remote Sensing, 1996, 17, 3037-3053.	1.3	46
27	The Second Generation Canadian Wetland Inventory Map at 10 Meters Resolution Using Google Earth Engine. Canadian Journal of Remote Sensing, 2020, 46, 360-375.	1.1	46
28	Mapping boreal peatland ecosystem types from multitemporal radar and optical satellite imagery. Canadian Journal of Forest Research, 2017, 47, 545-559.	0.8	45
29	Initial Observations of Radarsat Imagery at Fire-Disturbed Sites in Interior Alaska. Remote Sensing of Environment, 1999, 68, 89-94.	4.6	44
30	Evaluation of ERS SAR data for prediction of fire danger in a Boreal region. International Journal of Wildland Fire, 1999, 9, 183.	1.0	39
31	Spectral detection of near-surface moisture content and water-table position in northern peatland ecosystems. Remote Sensing of Environment, 2014, 152, 536-546.	4.6	39
32	Semi-Automated Surface Water Detection with Synthetic Aperture Radar Data: A Wetland Case Study. Remote Sensing, 2017, 9, 1209.	1.8	38
33	Evaluation of polarimetric Radarsat-2 SAR data for development of soil moisture retrieval algorithms over a chronosequence of black spruce boreal forests. Remote Sensing of Environment, 2013, 132, 71-85.	4.6	36
34	Is Indonesian peatland loss a cautionary tale for Peru? A two-country comparison of the magnitude and causes of tropical peatland degradation. Mitigation and Adaptation Strategies for Global Change, 2019, 24, 591-623.	1.0	35
35	Active layer thickness as a function of soil water content. Environmental Research Letters, 2021, 16, 055028.	2.2	35
36	SMAP Detects Soil Moisture Under Temperate Forest Canopies. Geophysical Research Letters, 2020, 47, e2020GL089697.	1.5	34

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37	Mapping Mountain Peatlands and Wet Meadows Using Multi-Date, Multi-Sensor Remote Sensing in the Cordillera Blanca, Peru. Wetlands, 2019, 39, 1057-1067.	0.7	32
38	A review of carbon monitoring in wet carbon systems using remote sensing. Environmental Research Letters, 2022, 17, 025009.	2.2	29
39	The Third Generation of Pan-Canadian Wetland Map at 10 m Resolution Using Multisource Earth Observation Data on Cloud Computing Platform. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2021, 14, 8789-8803.	2.3	27
40	Use of Remote Sensing in Wildfire Management. , 0, , .		26
41	Distribution of Forest Ecosystems and the Role of Fire in the North American Boreal Region. Ecological Studies, 2000, , 111-131.	0.4	24
42	Monitoring Seasonal Variations in Boreal Ecosystems Using Multi-Temporal Spaceborne SAR Data. Canadian Journal of Remote Sensing, 1995, 21, 96-109.	1.1	19
43	Development of Methods for Detection and Monitoring of Fire Disturbance in the Alaskan Tundra Using a Two-Decade Long Record of Synthetic Aperture Radar Satellite Images. Remote Sensing, 2014, 6, 6347-6364.	1.8	19
44	Assessing the influence of vegetation cover on soil-moisture signatures in fire-disturbed boreal forests in interior Alaska: Modelled results. International Journal of Remote Sensing, 2000, 21, 689-708.	1.3	18
45	Patterns of Ecosystem Structure and Wildfire Carbon Combustion Across Six Ecoregions of the North American Boreal Forest. Frontiers in Forests and Global Change, 2020, 3, .	1.0	18
46	Identification of Woodland Vernal Pools with Seasonal Change PALSAR Data for Habitat Conservation. Remote Sensing, 2016, 8, 490.	1.8	17
47	Influence of Fire on Long-Term Patterns of Forest Succession in Alaskan Boreal Forests. Ecological Studies, 2000, , 214-235.	0.4	16
48	Continuous Wavelet Analysis for Spectroscopic Determination of Subsurface Moisture and Water-Table Height in Northern Peatland Ecosystems. IEEE Transactions on Geoscience and Remote Sensing, 2017, 55, 1526-1536.	2.7	15
49	Bottom-up drivers of future fire regimes in western boreal North America. Environmental Research Letters, 2022, 17, 025006.	2.2	15
50	Assessment of polarimetric SAR data for discrimination between wet versus dry soil moisture conditions. International Journal of Remote Sensing, 2013, 34, 5709-5730.	1.3	14
51	Multi-Source EO for Dynamic Wetland Mapping and Monitoring in the Great Lakes Basin. Remote Sensing, 2021, 13, 599.	1.8	14
52	Development of calibration algorithms for selected water content reflectometry probes for burned and non-burned organic soils of Alaska. International Journal of Wildland Fire, 2010, 19, 961.	1.0	14
53	Improving the prediction of wildfire potential in boreal Alaska with satellite imaging radar. Polar Record, 2007, 43, 321-330.	0.4	13
54	Direct Effects of Fire on the Boreal Forest Carbon Budget. Advances in Global Change Research, 2000, , 51-68.	1.6	12

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55	Remote Sensing of Wildfires. , 2016, , 55-95.		11
56	Mapping Peatlands in Boreal and Tropical Ecoregions. , 2018, , 24-44.		10
57	Mapping Kenyan Grassland Heights Across Large Spatial Scales with Combined Optical and Radar Satellite Imagery. Remote Sensing, 2020, 12, 1086.	1.8	10
58	Use of Radarsat-2 and ALOS-PALSAR SAR images for wetland mapping in New Brunswick. , 2014, , .		8
59	Advances in Amazonian Peatland Discrimination With Multi-Temporal PALSAR Refines Estimates of Peatland Distribution, C Stocks and Deforestation. Frontiers in Earth Science, 2021, 9, .	0.8	8
60	Using Uncrewed Aerial Vehicles for Identifying the Extent of Invasive Phragmites australis in Treatment Areas Enrolled in an Adaptive Management Program. Remote Sensing, 2021, 13, 1895.	1.8	7
61	Using Satellite Data to Monitor Fire-Related Processes in Boreal Forests. Ecological Studies, 2000, , 406-422.	0.4	7
62	Quantifying surface severity of the 2014 and 2015 fires in the Great Slave Lake area of Canada. International Journal of Wildland Fire, 2020, 29, 892.	1.0	7
63	WETLAND MAPPING IN NEW BRUNSWICK, CANADA WITH LANDSAT5-TM, ALOS-PALSAR, AND RADARSAT-2 IMAGERY. ISPRS Annals of the Photogrammetry, Remote Sensing and Spatial Information Sciences, 0, V-3-2020, 301-308.	0.0	7
64	Characteristics of Forest Ecozones in the North American Boreal Region. Ecological Studies, 2000, , 258-273.	0.4	6
65	Exploring Polarimetric Phase of Microwave Backscatter from <i>Typha</i> Wetlands. Canadian Journal of Remote Sensing, 2020, 46, 49-66.	1.1	5
66	Enhancing Great Lakes coastal ecosystems research by initiating engagement between scientists and decision-makers. Journal of Great Lakes Research, 2021, 47, 1235-1240.	0.8	5
67	Machine-Learning Functional Zonation Approach for Characterizing Terrestrialâ€"Aquatic Interfaces: Application to Lake Erie. Remote Sensing, 2022, 14, 3285.	1.8	4
68	Remotely Monitoring Great Lakes Coastal Wetlands with Multi-Sensor, Multi-Temporal SAR and Multi-Spectral Data. , 2008, , .		3
69	Monitoring Fuel Moisture and Improving the Prediction of Wildfire Potential in Boreal Alaska with Satellite C-Band Imaging Radar. , 2008, , .		2
70	<title>Using satellite radar imagery to monitor flood conditions in wetland ecoystems of southern Florida</title>. , 1997, 2959, 139.		1
71	Remote Sensing for Mapping and Modeling of Land-Based Carbon Flux and Storage. , 0, , 95-143.		1
72	Use of Radarsat-2 polarimetric SAR images for fuel moisture mapping in the Kruger National Park, South Africa. , 2014, , .		1

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73	Wildfire. Encyclopedia of Earth Sciences Series, 2013, , 1102-1107.	0.1	1
74	SMAP Validation Experiment 2019â€"2021 (SMAPVEX19-21): Detection of Soil Moisture under Forest Canopy. , 2020, , .		1
75	Improving Peatland Mapping and Monitoring Capability Across Broad Regions Using SAR in Cloud Computing Platforms. , 2021, , .		0
76	Monitoring Boreal Forests by Using Imaging Radars. Ecological Studies, 2000, , 331-346.	0.4	0