Benoit Rivard

List of Publications by Year
in descending order

60 papers	2,310 citations	236833 25 h-index	214721 47 g-index
61 all docs	61 docs citations	61 times ranked	2495 citing authors

#	Article	IF	Citations
1	Intra- and inter-class spectral variability of tropical tree species at La Selva, Costa Rica: Implications for species identification using HYDICE imagery. Remote Sensing of Environment, 2006, 105, 129-141.	4.6	181
2	Variability in leaf optical properties of Mesoamerican trees and the potential for species classification. American Journal of Botany, 2006, 93, 517-530.	0.8	162
3	Iterative Spectral Unmixing for Optimizing Per-Pixel Endmember Sets. IEEE Transactions on Geoscience and Remote Sensing, 2006, 44, 3725-3736.	2.7	156
4	Recent primary production increases in arctic lakes. Geophysical Research Letters, 2005, 32, n/a-n/a.	1.5	146
5	Dynamics in landscape structure and composition for the Chorotega region, Costa Rica from 1960 to 2000. Agriculture, Ecosystems and Environment, 2005, 106, 27-39.	2.5	125
6	Experimental calibration of lake-sediment spectral reflectance to chlorophyll a concentrations: methodology and paleolimnological validation. Journal of Paleolimnology, 2006, 36, 91-100.	0.8	120
7	Differences in leaf traits, leaf internal structure, and spectral reflectance between two communities of lianas and trees: Implications for remote sensing in tropical environments. Remote Sensing of Environment, 2009, 113, 2076-2088.	4.6	110
8	Deriving leaf mass per area (LMA) from foliar reflectance across a variety of plant species using continuous wavelet analysis. ISPRS Journal of Photogrammetry and Remote Sensing, 2014, 87, 28-38.	4.9	101
9	Secondary Forest Detection in a Neotropical Dry Forest Landscape Using Landsat 7 ETM+ and IKONOS Imagery1. Biotropica, 2005, 37, 497-507.	0.8	90
10	Predicting leaf gravimetric water content from foliar reflectance across a range of plant species using continuous wavelet analysis. Journal of Plant Physiology, 2012, 169, 1134-1142.	1.6	86
11	Effects of Season and Successional Stage on Leaf Area Index and Spectral Vegetation Indices in Three Mesoamerican Tropical Dry Forests1. Biotropica, 2005, 37, 486-496.	0.8	80
12	The Successive Projection Algorithm (SPA), an Algorithm with a Spatial Constraint for the Automatic Search of Endmembers in Hyperspectral Data. Sensors, 2008, 8, 1321-1342.	2.1	62
13	Estimation of the Distribution of Tabebuia guayacan (Bignoniaceae) Using High-Resolution Remote Sensing Imagery. Sensors, 2011, 11, 3831-3851.	2.1	62
14	Spectral unmixing of normalized reflectance data for the deconvolution of lichen and rock mixtures. Remote Sensing of Environment, 2005, 95, 57-66.	4.6	61
15	Spectral properties of foliose and crustose lichens based on laboratory experiments. Remote Sensing of Environment, 2002, 82, 389-396.	4.6	56
16	Inferring sedimentary chlorophyll concentrations with reflectance spectroscopy: a novel approach to reconstructing historical changes in the trophic status of mountain lakes. Canadian Journal of Fisheries and Aquatic Sciences, 2005, 62, 1067-1078.	0.7	53
17	Mapping of NiCuâ€"PGE ore hosting ultramafic rocks using airborne and simulated EnMAP hyperspectral imagery, Nunavik, Canada. Remote Sensing of Environment, 2014, 152, 302-317.	4.6	51
18	Patterns of Leaf Biochemical and Structural Properties of Cerrado Life Forms: Implications for Remote Sensing. PLoS ONE, 2015, 10, e0117659.	1.1	44

#	Article	IF	Citations
19	Comparison of lithological mapping results from airborne hyperspectral VNIR-SWIR, LWIR and combined data. International Journal of Applied Earth Observation and Geoinformation, 2018, 64, 340-353.	1.4	40
20	Visible and short-wave infrared reflectance spectroscopy of REE fluorocarbonates. American Mineralogist, 2014, 99, 1335-1346.	0.9	39
21	Species Classification of Tropical Tree Leaf Reflectance and Dependence on Selection of Spectral Bands. , 2008, , 141-159.		36
22	LIDAR remote sensing for secondary Tropical Dry Forest identification. Remote Sensing of Environment, 2012, 121, 132-143.	4.6	33
23	Mapping tropical dry forest succession using multiple criteria spectral mixture analysis. ISPRS Journal of Photogrammetry and Remote Sensing, 2015, 109, 17-29.	4.9	30
24	Delineation of secondary succession mechanisms for tropical dry forests using LiDAR. Remote Sensing of Environment, 2011, 115, 2217-2231.	4.6	28
25	Hyperspectral imaging for the determination of bitumen content in Athabasca oil sands core samples. AAPG Bulletin, 2015, 99, 1245-1259.	0.7	27
26	Discrimination of liana and tree leaves from a Neotropical Dry Forest using visible-near infrared and longwave infrared reflectance spectra. Remote Sensing of Environment, 2018, 219, 135-144.	4.6	26
27	Using hyperspectral imaging to vector towards mineralization at the Canadian Malartic gold deposit, QuÃ©bec, Canada. Ore Geology Reviews, 2019, 111, 102945.	1.1	25
28	Visible and short-wave infrared reflectance spectroscopy of REE phosphate minerals. American Mineralogist, 2016, 101, 2264-2278.	0.9	23
29	Estimating the Mg# and AlVI content of biotite and chlorite from shortwave infrared reflectance spectroscopy: Predictive equations and recommendations for their use. International Journal of Applied Earth Observation and Geoinformation, 2018, 68, 116-126.	1.4	20
30	Precise emissivity of rock samples. Remote Sensing of Environment, 1995, 54, 152-160.	4.6	18
31	Shortwave Infrared Hyperspectral Imaging: A Novel Method For Enhancing the Visibility of Sedimentary And Biogenic Features In Oil-Saturated Core. Journal of Sedimentary Research, 2016, 86, 830-842.	0.8	16
32	Mapping alteration using imagery from the Tiangong-1 hyperspectral spaceborne system: Example for the Jintanzi gold province, China. International Journal of Applied Earth Observation and Geoinformation, 2018, 64, 275-286.	1.4	16
33	Modeling and assessment of wavelength displacements of characteristic absorption features of common rock forming minerals encrusted by lichens. Remote Sensing of Environment, 2017, 199, 78-92.	4.6	15
34	Spatial Sub-Sampling Using Local Endmembers for Adapting OSP and SSEE for Large-Scale Hyperspectral Surveys. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2012, 5, 183-195.	2.3	14
35	Visible and short-wave infrared reflectance spectroscopy of selected REE-bearing silicate minerals. American Mineralogist, 2018, 103, 927-943.	0.9	13
36	Hyperspectral imaging as an aid for facies analysis in massive-appearing sediments: a case study from the middle McMurray Formation. Bullentin of Canadian Petroleum Geology, 2017, 65, 262-278.	0.3	12

#	Article	IF	Citations
37	Predicting the abundance of clays and quartz in oil sands using hyperspectral measurements. International Journal of Applied Earth Observation and Geoinformation, 2017, 59, 1-8.	1.4	11
38	Characterization of Mineralogy in the Highland Valley Porphyry Cu District Using Hyperspectral Imaging, and Potential Applications. Minerals (Basel, Switzerland), 2020, 10, 473.	0.8	11
39	Mapping alteration using imagery from the Tiangong-1 hyperspectral spaceborne system: Example for the Jintanzi gold province, China. International Journal of Applied Earth Observation and Geoinformation, 2017, 59, 31-41.	1.4	9
40	Hyperspectral band selection using the N-dimensional Spectral Solid Angle method for the improved discrimination of spectrally similar targets. International Journal of Applied Earth Observation and Geoinformation, 2019, 79, 35-47.	1.4	9
41	Rare earth element ore grade estimation of mineralized drill core from hyperspectral imaging spectroscopy. , 2014, , .		8
42	Reflectance Spectroscopy and Hyperspectral Imaging of Sapphire-Bearing Marble From the Beluga Occurrence, Baffin Island, Nunavut. Canadian Mineralogist, 2017, 55, 787-797.	0.3	8
43	Shortwave infrared hyperspectral imaging as a novel method to elucidate multi-phase dolomitization, recrystallization, and cementation in carbonate sedimentary rocks. Scientific Reports, 2021, 11, 21732.	1.6	8
44	Prediction of water content and normalized evaporation from oil sands soft tailings surface using hyperspectral observations. Canadian Geotechnical Journal, 2016, 53, 1742-1750.	1.4	7
45	Ore detection and grade estimation in the Sudbury mines using thermal infrared reflectance spectroscopy. Geophysics, 2001, 66, 1691-1698.	1.4	6
46	Differences in Leaf Temperature between Lianas and Trees in the Neotropical Canopy. Forests, 2018, 9, 307.	0.9	6
47	The long-wave infrared (8-12 μm) spectral features of selected rare earth element—Bearing carbonate, phosphate and silicate minerals. International Journal of Applied Earth Observation and Geoinformation, 2019, 76, 77-83.	1.4	6
48	Estimation of methylene blue index in oil sands tailings using hyperspectral data. Canadian Journal of Chemical Engineering, 2017, 95, 92-99.	0.9	5
49	Laboratory reflectance spectra of hydrothermally altered carbonate facies, Pine Point mining camp, NWT, Canada. Geochemistry: Exploration, Environment, Analysis, 2003, 3, 369-379.	0.5	4
50	Quantifying total sulfide content of cores and cut-rock surfaces using thermal infrared reflectance. Geophysics, 2006, 71, M1-M9.	1.4	4
51	Shortwave infrared (1.0–2.5 μm) hyperspectral imaging of the Athabasca West Grand Rapids Formation oil sands. AAPG Bulletin, 2018, 102, 1671-1683.	0.7	4
52	Identification of spectral features in the longwave infrared (LWIR) spectra of leaves for the discrimination of tropical dry forest tree species. International Journal of Applied Earth Observation and Geoinformation, 2021, 97, 102286.	1.4	4
53	Using visible-near-infrared spectroscopy to classify lichens at a Neotropical Dry Forest. Ecological Indicators, 2020, 111, 105999.	2.6	3
54	Monitoring tailings flocculation performance using hyperspectral imagery. Canadian Journal of Chemical Engineering, 2019, 97, 2465-2471.	0.9	2

#	Article	IF	Citations
55	Incorporating band selection in the spatial selection of spectral endmembers. International Journal of Applied Earth Observation and Geoinformation, 2020, 84, 101957.	1.4	2
56	Hyperspectral Characteristics of Oil Sand, Part 1: Prediction of Processability and Froth Quality from Measurements of Ore. Minerals (Basel, Switzerland), 2020, 10, 1138.	0.8	2
57	Spectroscopic determination of leaf water content using continuous wavelet analysis. , 2010, , .		1
58	Mapping Ni-Cu (PGE) bearing ultramafic rocks and associated gossans with airborne and simulated EnMAP satellite hyperspectral imagery, Nunavik, Canada. , 2014, , .		1
59	A novel approach for endmember bundle extraction using spectral space splitting. , 2015, , .		1
60	Hierarchical Band Selection Using the N-Dimensional Solid Spectral Angle Method to Address Inter- and Intra- Class Spectral Variability. , 2018, , .		0