

# Txomin Hermosilla

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/5002757/publications.pdf>

Version: 2024-02-01

95  
papers

5,268  
citations

101384

36  
h-index

88477

70  
g-index

95  
all docs

95  
docs citations

95  
times ranked

4812  
citing authors

#	ARTICLE	IF	CITATIONS
1	Current status of Landsat program, science, and applications. <i>Remote Sensing of Environment</i> , 2019, 225, 127-147.	4.6	586
2	Pixel-Based Image Compositing for Large-Area Dense Time Series Applications and Science. <i>Canadian Journal of Remote Sensing</i> , 2014, 40, 192-212.	1.1	302
3	Land cover 2.0. <i>International Journal of Remote Sensing</i> , 2018, 39, 4254-4284.	1.3	261
4	A nationwide annual characterization of 25 years of forest disturbance and recovery for Canada using Landsat time series. <i>Remote Sensing of Environment</i> , 2017, 194, 303-321.	4.6	250
5	An integrated Landsat time series protocol for change detection and generation of annual gap-free surface reflectance composites. <i>Remote Sensing of Environment</i> , 2015, 158, 220-234.	4.6	243
6	Regional detection, characterization, and attribution of annual forest change from 1984 to 2012 using Landsat-derived time-series metrics. <i>Remote Sensing of Environment</i> , 2015, 170, 121-132.	4.6	226
7	Mass data processing of time series Landsat imagery: pixels to data products for forest monitoring. <i>International Journal of Digital Earth</i> , 2016, 9, 1035-1054.	1.6	175
8	Large-area mapping of Canadian boreal forest cover, height, biomass and other structural attributes using Landsat composites and lidar plots. <i>Remote Sensing of Environment</i> , 2018, 209, 90-106.	4.6	171
9	Disturbance-Informed Annual Land Cover Classification Maps of Canada's Forested Ecosystems for a 29-Year Landsat Time Series. <i>Canadian Journal of Remote Sensing</i> , 2018, 44, 67-87.	1.1	146
10	Modelling lidar-derived estimates of forest attributes over space and time: A review of approaches and future trends. <i>Remote Sensing of Environment</i> , 2021, 260, 112477.	4.6	123
11	Forest recovery trends derived from Landsat time series for North American boreal forests. <i>International Journal of Remote Sensing</i> , 2016, 37, 138-149.	1.3	113
12	Integrating Landsat pixel composites and change metrics with lidar plots to predictively map forest structure and aboveground biomass in Saskatchewan, Canada. <i>Remote Sensing of Environment</i> , 2016, 176, 188-201.	4.6	105
13	Three decades of forest structural dynamics over Canada's forested ecosystems using Landsat time-series and lidar plots. <i>Remote Sensing of Environment</i> , 2018, 216, 697-714.	4.6	99
14	Analysis of the Influence of Plot Size and LiDAR Density on Forest Structure Attribute Estimates. <i>Forests</i> , 2014, 5, 936-951.	0.9	92
15	Evaluation of Automatic Building Detection Approaches Combining High Resolution Images and LiDAR Data. <i>Remote Sensing</i> , 2011, 3, 1188-1210.	1.8	88
16	Definition of a comprehensive set of texture semivariogram features and their evaluation for object-oriented image classification. <i>Computers and Geosciences</i> , 2010, 36, 231-240.	2.0	85
17	Analyzing spatial and temporal variability in short-term rates of post-fire vegetation return from Landsat time series. <i>Remote Sensing of Environment</i> , 2018, 205, 32-45.	4.6	81
18	Using street based metrics to characterize urban typologies. <i>Computers, Environment and Urban Systems</i> , 2014, 44, 68-79.	3.3	75

#	ARTICLE	IF	CITATIONS
19	Estimation of forest structure and canopy fuel parameters from small-footprint full-waveform LiDAR data. <i>International Journal of Wildland Fire</i> , 2014, 23, 224.	1.0	73
20	Using Small-Footprint Discrete and Full-Waveform Airborne LiDAR Metrics to Estimate Total Biomass and Biomass Components in Subtropical Forests. <i>Remote Sensing</i> , 2014, 6, 7110-7135.	1.8	71
21	Non-linear fourth-order image interpolation for subpixel edge detection and localization. <i>Image and Vision Computing</i> , 2008, 26, 1240-1248.	2.7	65
22	Large Area Mapping of Annual Land Cover Dynamics Using Multitemporal Change Detection and Classification of Landsat Time Series Data. <i>Canadian Journal of Remote Sensing</i> , 2015, 41, 293-314.	1.1	65
23	Particulate Matter Emitted from Poultry and Pig Houses: Source Identification and Quantification. <i>Transactions of the ASABE</i> , 2011, 54, 629-642.	1.1	64
24	A feature extraction software tool for agricultural object-based image analysis. <i>Computers and Electronics in Agriculture</i> , 2011, 76, 284-296.	3.7	63
25	Assessing the status of forest regeneration using digital aerial photogrammetry and unmanned aerial systems. <i>International Journal of Remote Sensing</i> , 2018, 39, 5246-5264.	1.3	62
26	Assessing contextual descriptive features for plot-based classification of urban areas. <i>Landscape and Urban Planning</i> , 2012, 106, 124-137.	3.4	61
27	Land cover classification in an era of big and open data: Optimizing localized implementation and training data selection to improve mapping outcomes. <i>Remote Sensing of Environment</i> , 2022, 268, 112780.	4.6	61
28	Description and validation of a new set of object-based temporal geostatistical features for land-use/land-cover change detection. <i>ISPRS Journal of Photogrammetry and Remote Sensing</i> , 2016, 121, 77-91.	4.9	60
29	Confirmation of post-harvest spectral recovery from Landsat time series using measures of forest cover and height derived from airborne laser scanning data. <i>Remote Sensing of Environment</i> , 2018, 216, 262-275.	4.6	60
30	A thirty year, fine-scale, characterization of area burned in Canadian forests shows evidence of regionally increasing trends in the last decade. <i>PLoS ONE</i> , 2018, 13, e0197218.	1.1	58
31	Analysis of the factors affecting LiDAR DTM accuracy in a steep shrub area. <i>International Journal of Digital Earth</i> , 2011, 4, 521-538.	1.6	53
32	Effects of pre-processing methods on Landsat OLI-8 land cover classification using OBIA and random forests classifier. <i>International Journal of Applied Earth Observation and Geoinformation</i> , 2018, 73, 170-178.	1.4	51
33	Estimating urban vegetation fraction across 25 cities in pan-Pacific using Landsat time series data. <i>ISPRS Journal of Photogrammetry and Remote Sensing</i> , 2017, 126, 11-23.	4.9	44
34	Impact of time on interpretations of forest fragmentation: Three-decades of fragmentation dynamics over Canada. <i>Remote Sensing of Environment</i> , 2019, 222, 65-77.	4.6	43
35	Change in forest condition: Characterizing non-stand replacing disturbances using time series satellite imagery. <i>Forest Ecology and Management</i> , 2020, 474, 118370.	1.4	43
36	A National Assessment of Wetland Status and Trends for Canada's Forested Ecosystems Using 33 Years of Earth Observation Satellite Data. <i>Remote Sensing</i> , 2018, 10, 1623.	1.8	42

#	ARTICLE	IF	CITATIONS
37	Estimation of biomass and volume of shrub vegetation using LiDAR and spectral data in a Mediterranean environment. <i>Biomass and Bioenergy</i> , 2012, 46, 710-721.	2.9	39
38	Mapping, validating, and interpreting spatio-temporal trends in post-disturbance forest recovery. <i>Remote Sensing of Environment</i> , 2022, 271, 112904.	4.6	37
39	Prevalence of multiple forest disturbances and impact on vegetation regrowth from interannual Landsat time series (1985–2015). <i>Remote Sensing of Environment</i> , 2019, 233, 111403.	4.6	35
40	Effect of topographic correction on forest change detection using spectral trend analysis of Landsat pixel-based composites. <i>International Journal of Applied Earth Observation and Geoinformation</i> , 2016, 44, 186-194.	1.4	34
41	Remote sensing for the Spanish forests in the 21st century: a review of advances, needs, and opportunities. <i>Forest Systems</i> , 2019, 28, eR001.	0.1	34
42	Multi-sensor change detection for within-year capture and labelling of forest disturbance. <i>Remote Sensing of Environment</i> , 2022, 268, 112741.	4.6	34
43	Updating stand-level forest inventories using airborne laser scanning and Landsat time series data. <i>International Journal of Applied Earth Observation and Geoinformation</i> , 2018, 66, 174-183.	1.4	33
44	Updating Landsat time series of surface-reflectance composites and forest change products with new observations. <i>International Journal of Applied Earth Observation and Geoinformation</i> , 2017, 63, 104-111.	1.4	32
45	Automated extraction of tree and plot-based parameters in citrus orchards from aerial images. <i>Computers and Electronics in Agriculture</i> , 2013, 90, 24-34.	3.7	31
46	Remote sensing and object-based techniques for mapping fine-scale industrial disturbances. <i>International Journal of Applied Earth Observation and Geoinformation</i> , 2015, 34, 51-57.	1.4	31
47	Using semivariogram indices to analyse heterogeneity in spatial patterns in remotely sensed images. <i>Computers and Geosciences</i> , 2013, 50, 115-127.	2.0	30
48	Monitoring anthropogenic disturbance trends in an industrialized boreal forest with Landsat time series. <i>Remote Sensing Letters</i> , 2014, 5, 783-792.	0.6	30
49	Evidence of vegetation greening at alpine treeline ecotones: three decades of Landsat spectral trends informed by lidar-derived vertical structure. <i>Environmental Research Letters</i> , 2018, 13, 084022.	2.2	30
50	Vegetation Phenology Driving Error Variation in Digital Aerial Photogrammetrically Derived Terrain Models. <i>Remote Sensing</i> , 2018, 10, 1554.	1.8	29
51	Deriving pseudo-vertical waveforms from small-footprint full-waveform LiDAR data. <i>Remote Sensing Letters</i> , 2014, 5, 332-341.	0.6	28
52	Assessing variability in post-fire forest structure along gradients of productivity in the Canadian boreal using multi-source remote sensing. <i>Journal of Biogeography</i> , 2017, 44, 1294-1305.	1.4	28
53	Biomass status and dynamics over Canada's forests: Disentangling disturbed area from associated aboveground biomass consequences. <i>Environmental Research Letters</i> , 2020, 15, 094093.	2.2	28
54	Digital aerial photogrammetry for assessing cumulative spruce budworm defoliation and enhancing forest inventories at a landscape-level. <i>ISPRS Journal of Photogrammetry and Remote Sensing</i> , 2018, 142, 1-11.	4.9	26

#	ARTICLE	IF	CITATIONS
55	Socio-geographic analysis of the causes of the 2006â€™s wildfires in Galicia (Spain). <i>Forest Systems</i> , 2013, 22, 497.	0.1	24
56	Optimizing Landsat time series length for regional mapping of lidar-derived forest structure. <i>Remote Sensing of Environment</i> , 2020, 239, 111645.	4.6	23
57	Evaluating ICESat-2 for monitoring, modeling, and update of large area forest canopy height products. <i>Remote Sensing of Environment</i> , 2022, 271, 112919.	4.6	22
58	Barrenâ€™ground caribou ( <i>Rangifer tarandus groenlandicus</i> ) behaviour after recent fire events; integrating caribou telemetry data with Landsat fire detection techniques. <i>Global Change Biology</i> , 2017, 23, 1036-1047.	4.2	21
59	Regional assessment of pan-Pacific urban environments over 25 years using annual gap free Landsat data. <i>International Journal of Applied Earth Observation and Geoinformation</i> , 2016, 50, 198-210.	1.4	19
60	Linking stand architecture with canopy reflectance to estimate vertical patterns of light-use efficiency. <i>Remote Sensing of Environment</i> , 2017, 194, 322-330.	4.6	19
61	Classification of annual non-stand replacing boreal forest change in Canada using Landsat time series: a case study in northern Ontario. <i>Remote Sensing Letters</i> , 2017, 8, 29-37.	0.6	19
62	Differentiation of Alternate Harvesting Practices Using Annual Time Series of Landsat Data. <i>Forests</i> , 2017, 8, 15.	0.9	19
63	The urban greenness score: A satellite-based metric for multi-decadal characterization of urban land dynamics. <i>International Journal of Applied Earth Observation and Geoinformation</i> , 2020, 93, 102210.	1.4	18
64	Spatially-Explicit Prediction of Wildfire Burn Probability Using Remotely-Sensed and Ancillary Data. <i>Canadian Journal of Remote Sensing</i> , 2020, 46, 313-329.	1.1	16
65	Assessing spectral measures of post-harvest forest recovery with field plot data. <i>International Journal of Applied Earth Observation and Geoinformation</i> , 2019, 80, 102-114.	1.4	15
66	Discriminating treed and non-treed wetlands in boreal ecosystems using time series Sentinel-1 data. <i>International Journal of Applied Earth Observation and Geoinformation</i> , 2020, 85, 102007.	1.4	15
67	Satellite-based time series land cover and change information to map forest area consistent with national and international reporting requirements. <i>Forestry</i> , 2020, 93, 331-343.	1.2	15
68	Mapping dynamic peri-urban land use transitions across Canada using Landsat time series: Spatial and temporal trends and associations with socio-demographic factors. <i>Computers, Environment and Urban Systems</i> , 2021, 88, 101653.	3.3	15
69	Augmenting Landsat time series with Harmonized Landsat Sentinel-2 data products: Assessment of spectral correspondence. <i>Science of Remote Sensing</i> , 2021, 4, 100031.	2.2	15
70	Changing northern vegetation conditions are influencing barren ground caribou ( <i>Rangifer</i> ) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 142	1.4	14
71	Grizzly bear selection of recently harvested forests is dependent on forest recovery rate and landscape composition. <i>Forest Ecology and Management</i> , 2019, 449, 117459.	1.4	13
72	Land cover harmonization using Latent Dirichlet Allocation. <i>International Journal of Geographical Information Science</i> , 2021, 35, 348-374.	2.2	13

#	ARTICLE	IF	CITATIONS
73	Integrated fire severityâ€“land cover mapping using very-high-spatial-resolution aerial imagery and point clouds. <i>International Journal of Wildland Fire</i> , 2019, 28, 840.	1.0	13
74	Biophysical controls of increased tundra productivity in the western Canadian Arctic. <i>Remote Sensing of Environment</i> , 2021, 258, 112358.	4.6	12
75	Estimating changes in lichen mat volume through time and related effects on barren ground caribou ( <i>Rangifer tarandus groenlandicus</i> ) movement. <i>PLoS ONE</i> , 2017, 12, e0172669.	1.1	12
76	Monitoring pigmentâ€“driven vegetation changes in a lowâ€“Arctic tundra ecosystem using digital cameras. <i>Ecosphere</i> , 2018, 9, e02123.	1.0	11
77	Characterizing spatial-temporal patterns of landscape disturbance and recovery in western Alberta, Canada using a functional data analysis approach and remotely sensed data. <i>Ecological Informatics</i> , 2017, 39, 140-150.	2.3	10
78	Update and spatial extension of strategic forest inventories using time series remote sensing and modeling. <i>International Journal of Applied Earth Observation and Geoinformation</i> , 2020, 84, 101956.	1.4	10
79	An open science and open data approach for the statistically robust estimation of forest disturbance areas. <i>International Journal of Applied Earth Observation and Geoinformation</i> , 2022, 106, 102663.	1.4	9
80	Using annual Landsat imagery to identify harvesting over a range of intensities for non-industrial family forests. <i>Landscape and Urban Planning</i> , 2019, 188, 143-150.	3.4	7
81	Uncovering regional variability in disturbance trends between parks and greater park ecosystems across Canada (1985â€“2015). <i>Scientific Reports</i> , 2019, 9, 1323.	1.6	7
82	Historical Land Use as a Feature for Image Classification. <i>Photogrammetric Engineering and Remote Sensing</i> , 2011, 77, 377-387.	0.3	5
83	Change Detection in Peri-urban Areas Based on Contextual Classification. <i>Photogrammetrie, Fernerkundung, Geoinformation</i> , 2012, 2012, 359-370.	1.2	5
84	Spatial determination of traffic CO emissions within street canyons using inverse modelling. <i>Atmospheric Pollution Research</i> , 2019, 10, 1140-1147.	1.8	5
85	Assessing representation of remote sensing derived forest structure and land cover across a network of protected areas. <i>Ecological Applications</i> , 2022, 32, e2603.	1.8	4
86	Analysis of parcel-based image classification methods for monitoring the activities of the Land Bank of Galicia (Spain). <i>Applied Geomatics</i> , 2012, 4, 245-255.	1.2	3
87	A methodology to select particle morpho-chemical characteristics to use in source apportionment of particulate matter from livestock houses. <i>Computers and Electronics in Agriculture</i> , 2012, 81, 14-23.	3.7	3
88	Biophysical Determinants of Shifting Tundra Vegetation Productivity in the Beaufort Delta Region of Canada. <i>Ecosystems</i> , 2022, 25, 1435-1454.	1.6	3
89	Source identification and quantification of particulate matter emitted from livestock houses. , 2010, , .		1
90	Estimation of forest structural variables using small-footprint full-waveform LiDAR in a subtropical forest, China. , 2014, , .		1

#	ARTICLE	IF	CITATIONS
91	Chronicing urbanization and vegetation changes using annual gap free Landsat composites from 1984 to 2012. , 2017, , .		1
92	A space-time data cube: Multi-temporal forest structure maps from landsat and lidar. , 2017, , .		1
93	EFFICIENCY OF CONTEXT-BASED ATTRIBUTES FOR LAND-USE CLASSIFICATION OF URBAN ENVIRONMENTS. International Archives of the Photogrammetry, Remote Sensing and Spatial Information Sciences - ISPRS Archives, 0, XXXVIII-4/W19, 105-110.	0.2	1
94	Selection of Particle Characteristics to Distinguish Amongst Potential Sources of Particulate Matter in Poultry and Pigs. , 2011, , .		0
95	COMBINATION OF TERRASAR-X AND OPTICAL IMAGERY FOR LU/LC MAPPING USING AN OBJECT-BASED APPROACH. International Archives of the Photogrammetry, Remote Sensing and Spatial Information Sciences - ISPRS Archives, 0, XXXVIII-4/W19, 259-264.	0.2	0