Philip Lewis

List of Publications by Year
in descending order

92 papers	10,926 citations	53794 45 h-index	71685 76 g-index
97 all docs	97 docs citations	97 times ranked	10636 citing authors

#	Article	IF	Citations
1	First operational BRDF, albedo nadir reflectance products from MODIS. Remote Sensing of Environment, 2002, 83, 135-148.	11.0	2,022
2	The Moderate Resolution Imaging Spectroradiometer (MODIS): land remote sensing for global change research. IEEE Transactions on Geoscience and Remote Sensing, 1998, 36, 1228-1249.	6.3	1,178
3	Fast Automatic Precision Tree Models from Terrestrial Laser Scanner Data. Remote Sensing, 2013, 5, 491-520.	4.0	528
4	Prototyping a global algorithm for systematic fire-affected area mapping using MODIS time series data. Remote Sensing of Environment, 2005, 97, 137-162.	11.0	439
5	Retrieval and global assessment of terrestrial chlorophyll fluorescence from GOSAT space measurements. Remote Sensing of Environment, 2012, 121, 236-251.	11.0	436
6	Multi-temporal MODISâ€“Landsat data fusion for relative radiometric normalization, gap filling, and prediction of Landsat data. Remote Sensing of Environment, 2008, 112, 3112-3130.	11.0	430
7	Hyperspectral remote sensing of foliar nitrogen content. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, E185-92.	7.1	389
8	Burned area mapping using multi-temporal moderate spatial resolution dataâ€”a bi-directional reflectance model-based expectation approach. Remote Sensing of Environment, 2002, 83, 263-286.	11.0	294
9	Quantifying Vegetation Biophysical Variables from Imaging Spectroscopy Data: A Review on Retrieval Methods. Surveys in Geophysics, 2019, 40, 589-629.	4.6	265
10	Geostatistical classification for remote sensing: an introduction. Computers and Geosciences, 2000, 26, 361-371.	4.2	245
11	A general method to normalize Landsat reflectance data to nadir BRDF adjusted reflectance. Remote Sensing of Environment, 2016, 176, 255-271.	11.0	238
12	Can we measure terrestrial photosynthesis from space directly, using spectral reflectance and fluorescence?. Global Change Biology, 2007, 13, 1484-1497.	9.5	224
13	Assessing the coupling between surface albedo derived from MODIS and the fraction of diffuse skylight over spatially-characterized landscapes. Remote Sensing of Environment, 2010, 114, 738-760.	11.0	204
14	Third Radiation Transfer Model Intercomparison (RAMI) exercise: Documenting progress in canopy reflectance models. Journal of Geophysical Research, 2007, 112, .	3.3	193
15	Assimilation of remote sensing into crop growth models: Current status and perspectives. Agricultural and Forest Meteorology, 2019, 276-277, 107609.	4.8	182
16	An assessment of the MODIS collection 5 leaf area index product for a region of mixed coniferous forest. Remote Sensing of Environment, 2011, 115, 767-780.	11.0	173
17	Theoretical noise sensitivity of BRDF and albedo retrieval from the EOS-MODIS and MISR sensors with respect to angular sampling. International Journal of Remote Sensing, 2000, 21, 81-98.	2.9	172
18	The fourth phase of the radiative transfer model intercomparison (RAMI) exercise: Actual canopy scenarios and conformity testing. Remote Sensing of Environment, 2015, 169, 418-437.	11.0	170

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19	3D modelling of forest canopy structure for remote sensing simulations in the optical and microwave domains. Remote Sensing of Environment, 2006, 100, 114-132.	11.0	144
20	Generation of Functioning Nephrons by Implanting Human Pluripotent Stem Cell-Derived Kidney Progenitors. Stem Cell Reports, 2018, 10, 766-779.	4.8	134
21	Canopy spectral invariants for remote sensing and model applications. Remote Sensing of Environment, 2007, 106, 106-122.	11.0	129
22	Spectral invariants and scattering across multiple scales from within-leaf to canopy. Remote Sensing of Environment, 2007, 109, 196-206.	11.0	124
23	Assimilating canopy reflectance data into an ecosystem model with an Ensemble Kalman Filter. Remote Sensing of Environment, 2008, 112, 1347-1364.	11.0	123
24	Monte Carlo ray tracing in optical canopy reflectance modelling. International Journal of Remote Sensing, 2000, 18, 163-196.	1.0	117
25	Simulating the impact of discrete-return lidar system and survey characteristics over young conifer and broadleaf forests. Remote Sensing of Environment, 2010, 114, 1546-1560.	11.0	115
26	Evaluation of regional estimates of winter wheat yield by assimilating three remotely sensed reflectance datasets into the coupled WOFOSTâ€“PROSAIL model. European Journal of Agronomy, 2019, 102, 1-13.	4.1	111
27	Investigation of the Utility of Spectral Vegetation Indices for Determining Information on Coniferous Forests. Remote Sensing of Environment, 1998, 66, 250-272.	11.0	109
28	Food as a circadian time cue â€” evidence from human studies. Nature Reviews Endocrinology, 2020, 16, 213-223.	9.6	104
29	Direct retrieval of canopy gap probability using airborne waveform lidar. Remote Sensing of Environment, 2013, 134, 24-38.	11.0	102
30	The fourth radiation transfer model intercomparison (RAMIâ€IV): Proficiency testing of canopy reflectance models with ISOâ€13528. Journal of Geophysical Research D: Atmospheres, 2013, 118, 6869-6890.	3.3	102
31	Developing a dual-wavelength full-waveform terrestrial laser scanner to characterize forest canopy structure. Agricultural and Forest Meteorology, 2014, 198-199, 7-14.	4.8	100
32	Three-dimensional plant modelling for remote sensing simulation studies using the Botanical Plant Modelling System. Agronomy for Sustainable Development, 1999, 19, 185-210.	0.8	96
33	Realistic Forest Stand Reconstruction from Terrestrial LiDAR for Radiative Transfer Modelling. Remote Sensing, 2018, 10, 933.	4.0	94
34	An Earth Observation Land Data Assimilation System (EO-LDAS). Remote Sensing of Environment, 2012, 120, 219-235.	11.0	87
35	The RAMI On-line Model Checker (ROMC): A web-based benchmarking facility for canopy reflectance models. Remote Sensing of Environment, 2008, 112, 1144-1150.	11.0	85
36	The Global Impact of Clouds on the Production of MODIS Bidirectional Reflectance Model-Based Composites for Terrestrial Monitoring. IEEE Geoscience and Remote Sensing Letters, 2006, 3, 452-456.	3.1	77

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37	Efficient Emulation of Radiative Transfer Codes Using Gaussian Processes and Application to Land Surface Parameter Inferences. Remote Sensing, 2016, 8, 119.	4.0	76
38	Exercise time cues (zeitgebers) for human circadian systems can foster health and improve performance: a systematic review. BMJ Open Sport and Exercise Medicine, 2018, 4, e000443.	2.9	72
39	Strong constraint on modelled global carbon uptake using solar-induced chlorophyll fluorescence data. Scientific Reports, 2018, 8, 1973.	3.3	69
40	Impact of land cover uncertainties on estimates of biospheric carbon fluxes. Global Biogeochemical Cycles, 2008, 22, .	4.9	68
41	On the information content of multiple view angle (MVA) images. International Journal of Remote Sensing, 1997, 18, 1937-1960.	2.9	61
42	Waveform lidar over vegetation: An evaluation of inversion methods for estimating return energy. Remote Sensing of Environment, 2015, 164, 208-224.	11.0	60
43	Variability and bias in active and passive ground-based measurements of effective plant, wood and leaf area index. Agricultural and Forest Meteorology, 2018, 252, 231-240.	4.8	55
44	3D radiative transfer modelling of fire impacts on a two-layer savanna system. Remote Sensing of Environment, 2011, 115, 1866-1881.	11.0	54
45	Measuring forests with dual wavelength lidar: A simulation study over topography. Agricultural and Forest Meteorology, 2012, 161, 123-133.	4.8	50
46	Topographic effects in AVHRR NDVI data. Remote Sensing of Environment, 1995, 54, 223-232.	11.0	47
47	Retrieval of canopy height using moderate-resolution imaging spectroradiometer (MODIS) data. Remote Sensing of Environment, 2011, 115, 1595-1601.	11.0	44
48	Temporal Constraints on Linear BRDF Model Parameters. IEEE Transactions on Geoscience and Remote Sensing, 2010, 48, 2445-2450.	6.3	37
49	Investigating assumptions of crown archetypes for modelling LiDAR returns. Remote Sensing of Environment, 2013, 134, 39-49.	11.0	35
50	Upscaling as ecological information transfer: a simple framework with application to Arctic ecosystem carbon exchange. Landscape Ecology, 2009, 24, 971-986.	4.2	34
51	A New Global fAPAR and LAI Dataset Derived from Optimal Albedo Estimates: Comparison with MODIS Products. Remote Sensing, 2016, 8, 275.	4.0	34
52	Quantifying Surface Reflectivity for Spaceborne Lidar via Two Independent Methods. IEEE Transactions on Geoscience and Remote Sensing, 2009, 47, 3262-3271.	6.3	33
53	A threshold insensitive method for locating the forest canopy top with waveform lidar. Remote Sensing of Environment, 2011, 115, 3286-3297.	11.0	33
54	Comparison of MODIS broadband albedo over an agricultural site with ground measurements and values derived from Earth observation data at a range of spatial scales. International Journal of Remote Sensing, 2004, 25, 5297-5317.	2.9	29

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55	On the potential of CHRIS/PROBA for estimating vegetation canopy properties from space. International Journal of Remote Sensing, 2000, 19, 171-189.	1.0	25
56	Deriving albedo maps for HAPEX-Sahel from ASAS data using kernel-driven BRDF models. Hydrology and Earth System Sciences, 1999, 3, 1-11.	4.9	24
57	Sensitivity of direct canopy gap fraction retrieval from airborne waveform lidar to topography and survey characteristics. Remote Sensing of Environment, 2014, 143, 15-25.	11.0	24
58	Estimating land surface albedo in the HAPEX-Sahel southern super-site: inversion of two BRDF models against multiple angle ASAS images. Journal of Hydrology, 1997, 188-189, 749-778.	5.4	22
59	Estimation of FAPAR over Croplands Using MISR Data and the Earth Observation Land Data Assimilation System (EO-LDAS). Remote Sensing, 2017, 9, 656.	4.0	17
60	A parametric radiative transfer model for sky radiance distribution. Journal of Quantitative Spectroscopy and Radiative Transfer, 1996, 55, 181-189.	2.3	14
61	SARS-CoV-2/COVID-19 and physical distancing: risk for circadian rhythm dysregulation, advice to alleviate it, and natural experiment research opportunities. Chronobiology International, 2020, 37, 1106-1109.	2.0	14
62	Ticking time bomb? High time for chronobiological research. EMBO Reports, 2018, 19, .	4.5	13
63	Reply to Townsend et al.: Decoupling contributions from canopy structure and leaf optics is critical for remote sensing leaf biochemistry. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, E1075.	7.1	12
64	Theoretical uncertainties for global satellite-derived burned area estimates. Biogeosciences, 2019, 16, 3147-3164.	3.3	12
65	COVID-19: Heterogeneous Excess Mortality and â€œBurden of Diseaseâ€•in Germany and Italy and Their States and Regions, Januaryâ€“June 2020. Frontiers in Public Health, 2021, 9, 663259.	2.7	12
66	The ESA globAlbedo project: Algorithm. , 2012, , .		11
67	Rapid characterisation of forest structure from TLS and 3D modelling. , 2013, , .		11
68	Reply to Ollinger et al.: Remote sensing of leaf nitrogen and emergent ecosystem properties. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, E2438.	7.1	11
69	The COVID-19 Pandemic. Circulation, 2020, 142, 309-311.	1.6	11
70	FLuorescence EXplorer (FLEX): an optimised payload to map vegetation photosynthesis from space. , 2006, , .		9
71	COVID-19 and â€œnaturalâ€•experiments arising from physical distancing: a hypothetical case study from chronobiology. Chronobiology International, 2020, 37, 1115-1117.	2.0	8
72	Computing sleep deficiency. Journal of Sleep Research, 2018, 27, e12630.	3.2	7

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73	Decoupling Canopy Structure and Leaf Biochemistry: Testing the Utility of Directional Area Scattering Factor (DASF). Remote Sensing, 2018, 10, 1911.	4.0	7
74	Large-area virtual forests from terrestrial laser scanning data. , 2016, , .		6
75	Hypothesis: Folklore perpetuated expression of moon-associated bipolar disorders in anecdotally exaggerated werewolf guise. Medical Hypotheses, 2019, 122, 129-133.	1.5	6
76	Chronotype and beyond: 17 building blocks to reconcile and explore internal time architecture. Chronobiology International, 2019, 36, 299-303.	2.0	5
77	What if â€¦ the Moon provides zeitgeber signals to humans?. Molecular Psychiatry, 2020, 25, 2646-2647.	7.9	4
78	Towards standard assessments of sleep as an exposure: an initiative for an important research area. Sleep Medicine, 2021, 88, 187-188.	1.6	3
79	Assimilating MODIS reflectance data into an ecosystem model to improve estimates of terrestrial carbon flux: recent progress. , 2007, , .		1
80	Quantifying Surface Reflectivity for Spaceborne Lidar Missions. , 2008, , .		1
81	Probabilistic calibration of a coupled ecosystem and fire model using satellite data. , 2009, , .		1
82	COVID-19: science must not be the boy who cried wolf. Journal of Epidemiology and Community Health, 2020, 74, jech-2020-214448.	3.7	1
83	Assimilating Earth Observation Data into Land Surface Models. , 2008, , .		0
84	Extracting Tree Heights over Topography with Multi-Spectral Spaceborne Waveform Lidar. , 2008, , .		0
85	Using Remote Sensing Data to Quantify Changes in Vegetation over Peatland Areas. , 2008, , .		0
86	Estimating the Spatial Exchange of Carbon through the Assimilation of Earth Observation Derived Products using an Ensemble Kalman Filter. , 2008, , .		0
87	Satellite monitoring of disturbances in Arctic ecosystems. , 2009, , .		0
88	Modelling the impact of wildfire on spectral reflectance. , 2009, , .		0
89	On canopy spectral invariants and hyperspectral ray tracing. , 2010, , .		0
90	Effects of clumping on modelling LiDAR waveforms in forest canopies. , 2012, , .		0

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91	Land Surface Processes Analysis Using Sentinel-3 OLCI and Modis Data. , 2018, , .		0
92	Comment on â€œCOVID-19, the Built Environment, and Healthâ€• Environmental Health Perspectives, 2021, 129, 098001.	6.0	0