Jeff Dozier

List of Publications by Year
in descending order

161 papers	13,573 citations	23500 58 h-index	22764 112 g-index
187 all docs	187 docs citations	187 times ranked	8681 citing authors

#	Article	IF	Citations
1	A generalized split-window algorithm for retrieving land-surface temperature from space. IEEE Transactions on Geoscience and Remote Sensing, 1996, 34, 892-905.	2.7	1,383
2	Spectral signature of alpine snow cover from the landsat thematic mapper. Remote Sensing of Environment, 1989, 28, 9-22.	4.6	814
3	A method for satellite identification of surface temperature fields of subpixel resolution. Remote Sensing of Environment, 1981, 11, 221-229.	4.6	590
4	Recent Third Poleâ€™s Rapid Warming Accompanies Cryospheric Melt and Water Cycle Intensification and Interactions between Monsoon and Environment: Multidisciplinary Approach with Observations, Modeling, and Analysis. Bulletin of the American Meteorological Society, 2019, 100, 423-444.	1.7	590
5	Mountain hydrology of the western United States. Water Resources Research, 2006, 42, .	1.7	521
6	Retrieval of subpixel snow covered area, grain size, and albedo from MODIS. Remote Sensing of Environment, 2009, 113, 868-879.	4.6	446
7	Rapid calculation of terrain parameters for radiation modeling from digital elevation data. IEEE Transactions on Geoscience and Remote Sensing, 1990, 28, 963-969.	2.7	368
8	Retrieval of subpixel snow-covered area and grain size from imaging spectrometer data. Remote Sensing of Environment, 2003, 85, 64-77.	4.6	340
9	Climatic and Hydrologic Changes in the Tien Shan, Central Asia. Journal of Climate, 1997, 10, 1393-1404.	1.2	319
10	A Hyperspectral Method for Remotely Sensing the Grain Size of Snow. Remote Sensing of Environment, 2000, 74, 207-216.	4.6	311
11	Climate and energy exchange at the snow surface in the Alpine Region of the Sierra Nevada: 2. Snow cover energy balance. Water Resources Research, 1992, 28, 3043-3054.	1.7	305
12	Snow accumulation and distribution in an Alpine Watershed. Water Resources Research, 1991, 27, 1541-1552.	1.7	287
13	Assessment of methods for mapping snow cover from MODIS. Advances in Water Resources, 2013, 51, 367-380.	1.7	287
14	MULTISPECTRAL AND HYPERSPECTRAL REMOTE SENSING OF ALPINE SNOW PROPERTIES. Annual Review of Earth and Planetary Sciences, 2004, 32, 465-494.	4.6	266
15	Inroads of remote sensing into hydrologic science during the WRR era. Water Resources Research, 2015, 51, 7309-7342.	1.7	243
16	Automated Mapping of Montane Snow Cover at Subpixel Resolution from the Landsat Thematic Mapper. Water Resources Research, 1996, 32, 115-130.	1.7	219
17	Effect of viewing angle on the infrared brightness temperature of snow. Water Resources Research, 1982, 18, 1424-1434.	1.7	210
18	Estimation of snow water equivalence using SIR-C/X-SAR. I. Inferring snow density and subsurface properties. IEEE Transactions on Geoscience and Remote Sensing, 2000, 38, 2465-2474.	2.7	183

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19	Timeâ€“space continuity of daily maps of fractional snow cover and albedo from MODIS. Advances in Water Resources, 2008, 31, 1515-1526.	1.7	176
20	Interpretation of snow properties from imaging spectrometry. Remote Sensing of Environment, 2009, 113, S25-S37.	4.6	167
21	Snow Reflectance from LANDSAT-4 Thematic Mapper. IEEE Transactions on Geoscience and Remote Sensing, 1984, GE-22, 323-328.	2.7	166
22	The Effect of Grain Size on Spectral Mixture Analysis of Snow-Covered Area from AVIRIS Data. Remote Sensing of Environment, 1998, 65, 320-332.	4.6	166
23	A clearâ€sky spectral solar radiation model for snowâ€covered mountainous terrain. Water Resources Research, 1980, 16, 709-718.	1.7	165
24	Estimating the spatial distribution of snow water equivalent in an alpine basin using binary regression tree models: the impact of digital elevation data and independent variable selection. Hydrological Processes, 2005, 19, 1459-1479.	1.1	163
25	Land-surface temperature measurement from space: physical principles and inverse modeling. IEEE Transactions on Geoscience and Remote Sensing, 1989, 27, 268-278.	2.7	160
26	Estimating the spatial distribution of snow in mountain basins using remote sensing and energy balance modeling. Water Resources Research, 1998, 34, 1275-1285.	1.7	152
27	Estimating the spatial distribution of snow water equivalent in the world's mountains. Wiley Interdisciplinary Reviews: Water, 2016, 3, 461-474.	2.8	152
28	Inferring snow wetness using C-band data from SIR-C's polarimetric synthetic aperture radar. IEEE Transactions on Geoscience and Remote Sensing, 1995, 33, 905-914.	2.7	150
29	Estimating snow grain size using AVIRIS data. Remote Sensing of Environment, 1993, 44, 231-238.	4.6	145
30	Estimation of snow water equivalence using SIR-C/X-SAR. II. Inferring snow depth and particle size. IEEE Transactions on Geoscience and Remote Sensing, 2000, 38, 2475-2488.	2.7	131
31	Effect of grain size and snowpack water equivalence on visible and nearâ€infrared satellite observations of snow. Water Resources Research, 1981, 17, 1213-1221.	1.7	128
32	Snow Mapping and Classification from Landsat Thematic Mapper Data. Annals of Glaciology, 1987, 9, 97-103.	2.8	124
33	Measurements of the hemispherical-directional reflectance of snow at fine spectral and angular resolution. Journal of Geophysical Research, 2004, 109, .	3.3	122
34	Detection and Quantification of Snow Algae with an Airborne Imaging Spectrometer. Applied and Environmental Microbiology, 2001, 67, 5267-5272.	1.4	115
35	A faster solution to the horizon problem. Computers and Geosciences, 1981, 7, 145-151.	2.0	112
36	Snow mapping in alpine regions with synthetic aperture radar. IEEE Transactions on Geoscience and Remote Sensing, 1994, 32, 152-158.	2.7	102

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37	Evaluation of distributed hydrologic impacts of temperature-index and energy-based snow models. Advances in Water Resources, 2013, 56, 77-89.	1.7	101
38	Snow water equivalent in the Sierra Nevada: Blending snow sensor observations with snowmelt model simulations. Water Resources Research, 2013, 49, 5029-5046.	1.7	90
39	Mapping seasonal snow with SIR-C/X-SAR in mountainous areas. Remote Sensing of Environment, 1997, 59, 294-307.	4.6	87
40	A clear-sky longwave radiation model for remote alpine areas. Archiv FÃ¼r Meteorologie Geophysik Und Bioklimatologie Serie B, 1979, 27, 159-187.	0.8	85
41	Climate and energy exchange at the snow surface in the Alpine Region of the Sierra Nevada: 1. Meteorological measurements and monitoring. Water Resources Research, 1992, 28, 3029-3042.	1.7	84
42	High-Elevation Precipitation Patterns: Using Snow Measurements to Assess Daily Gridded Datasets across the Sierra Nevada, California*. Journal of Hydrometeorology, 2015, 16, 1773-1792.	0.7	83
43	Snow water equivalent along elevation gradients in the Merced and Tuolumne River basins of the Sierra Nevada. Water Resources Research, 2011, 47, .	1.7	82
44	Retention and radiative forcing of black carbon in eastern Sierra Nevada snow. Cryosphere, 2013, 7, 365-374.	1.5	81
45	Variation in Rising Limb of Colorado River Snowmelt Runoff Hydrograph Controlled by Dust Radiative Forcing in Snow. Geophysical Research Letters, 2018, 45, 797-808.	1.5	81
46	Spectral snow-reflectance models for grain-size and liquid-water fraction in melting snow for the solar-reflected spectrum. Annals of Glaciology, 2002, 34, 71-73.	2.8	76
47	Measuring the expressed abundance of the three phases of water with an imaging spectrometer over melting snow. Water Resources Research, 2006, 42, .	1.7	76
48	Spatially distributed temperatures at the base of two mountain snowpacks measured with fiber-optic sensors. Journal of Glaciology, 2008, 54, 673-679.	1.1	75
49	Mapping alpine snow using a spectral mixture modeling technique. Annals of Glaciology, 1993, 17, 121-124.	2.8	73
50	Incorporating remotely-sensed snow albedo into a spatially-distributed snowmelt model. Geophysical Research Letters, 2004, 31, .	1.5	71
51	Cloud Masking for Landsat 8 and MODIS Terra Over Snowâ€Covered Terrain: Error Analysis and Spectral Similarity Between Snow and Cloud. Water Resources Research, 2019, 55, 6169-6184.	1.7	70
52	An Approach toward Energy Balance Simulation over Rugged Terrain. Geographical Analysis, 1979, 11, 65-85.	1.9	68
53	Validating reconstruction of snow water equivalent in <scp>C</scp>alifornia's <scp>S</scp>ierra <scp>N</scp>evada using measurements from the <scp>NASA</scp><scp>A</scp>irborne <scp>S</scp>now <scp>O</scp>bservatory. Water Resources Research, 2016, 52, 8437-8460.	1.7	67
54	Mountain hydrology, snow color, and the fourth paradigm. Eos, 2011, 92, 373-374.	0.1	66

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55	Using machine learning for real-time estimates of snow water equivalent in the watersheds of Afghanistan. Cryosphere, 2018, 12, 1579-1594.	1.5	65
56	EFFECTS OF CLIMATE CHANGE ON INLAND WATERS OF THE PACIFIC COASTAL MOUNTAINS AND WESTERN GREAT BASIN OF NORTH AMERICA. Hydrological Processes, 1997, 11, 971-992.	1.1	63
57	Spatial estimates of snow water equivalent from reconstruction. Advances in Water Resources, 2016, 94, 345-363.	1.7	62
58	Topographic distribution of clear-sky radiation over the Konza prairie, Kansas, USA. Water Resources Research, 1990, 26, 679-690.	1.7	61
59	A parameterized multiple-scattering model for microwave emission from dry snow. Remote Sensing of Environment, 2007, 111, 357-366.	4.6	49
60	Automated spectro-goniometer: A spherical robot for the field measurement of the directional reflectance of snow. Review of Scientific Instruments, 2003, 74, 5179-5188.	0.6	48
61	Measurements of snow- and glacier-covered areas with single-polarization SAR. Annals of Glaciology, 1993, 17, 72-76.	2.8	47
62	The effect of anisotropic reflectance on imaging spectroscopy of snow properties. Remote Sensing of Environment, 2004, 89, 409-422.	4.6	45
63	Social science in a water observing system. Water Resources Research, 2009, 45, .	1.7	45
64	Atmospheric corrections to satellite radiometric data over rugged terrain. Remote Sensing of Environment, 1981, 11, 191-205.	4.6	41
65	Topographic distribution of clearâ€sky radiation over the Konza Prairie, Kansas. Water Resources Research, 1990, 26, 679-690.	1.7	41
66	Driving forces of land surface temperature anomalous changes in North America in 2002â€“2018. Scientific Reports, 2020, 10, 6931.	1.6	41
67	Recent research in snow hydrology. Reviews of Geophysics, 1987, 25, 153-161.	9.0	40
68	Spectral emissivity measurements of land-surface materials and related radiative transfer simulations. Advances in Space Research, 1994, 14, 91-94.	1.2	40
69	An Examination of Snow Albedo Estimates From MODIS and Their Impact on Snow Water Equivalent Reconstruction. Water Resources Research, 2019, 55, 7826-7842.	1.7	39
70	Snow Mapping and Classification from Landsat Thematic Mapper Data. Annals of Glaciology, 1987, 9, 97-103.	2.8	39
71	Opportunities to improve hydrologic data. Reviews of Geophysics, 1992, 30, 315-331.	9.0	38
72	Canopy Adjustment and Improved Cloud Detection for Remotely Sensed Snow Cover Mapping. Water Resources Research, 2020, 56, e2019WR024914.	1.7	38

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73	Glacial regime of the highest Tien Shan mountain, Pobeda-Khan Tengry massif. Journal of Glaciology, 1997, 43, 503-512.	1.1	36
74	Characterizing Biases in Mountain Snow Accumulation From Global Data Sets. Water Resources Research, 2019, 55, 9873-9891.	1.7	36
75	Stereological determination of dry-snow parameters for discrete-scatterer microwave modeling. Annals of Glaciology, 1993, 17, 295-299.	2.8	35
76	Observations of snowpack ripening in the Sierra Nevada, California, U.S.A.. Journal of Glaciology, 1999, 45, 409-416.	1.1	34
77	Field and Laboratory Measurements of Snow Liquid Water by Dilution. Water Resources Research, 1985, 21, 1415-1420.	1.7	33
78	Stereological characterization of dry Alpine snow for microwave remote sensing. Advances in Space Research, 1989, 9, 245-251.	1.2	33
79	Impact of Initialized Land Surface Temperature and Snowpack on Subseasonal to Seasonal Prediction Project, Phase I (LS4P-I): organization and experimental design. Geoscientific Model Development, 2021, 14, 4465-4494.	1.3	31
80	Preparation of serial sections in dry snow specimens. Journal of Microscopy, 1986, 142, 111-114.	0.8	30
81	Climate change impacts on groundwater storage in the Central Valley, California. Climatic Change, 2019, 157, 387-406.	1.7	30
82	Can Managed Aquifer Recharge Mitigate the Groundwater Overdraft in California's Central Valley?. Water Resources Research, 2020, 56, e2020WR027244.	1.7	30
83	Snow Property Measurements Correlative to Microwave Emission at 35 GHz. IEEE Transactions on Geoscience and Remote Sensing, 1987, GE-25, 751-757.	2.7	29
84	Mapping alpine snow using a spectral mixture modeling technique. Annals of Glaciology, 1993, 17, 121-124.	2.8	29
85	Snow Property Inversion From Remote Sensing (SPIReS): A Generalized Multispectral Unmixing Approach With Examples From MODIS and Landsat 8 OLI. IEEE Transactions on Geoscience and Remote Sensing, 2021, 59, 7270-7284.	2.7	29
86	Scanning electron microscopy of impurity structures in snow. Cold Regions Science and Technology, 2007, 47, 80-89.	1.6	27
87	Towards predicting temporal changes of the spectral signature of snow in visible and near-infrared wavelengths. Annals of Glaciology, 1993, 17, 143-148.	2.8	26
88	Separating snow and forest temperatures with thermal infrared remote sensing. Remote Sensing of Environment, 2018, 209, 764-779.	4.6	26
89	Hourly mass and snow energy balance measurements from Mammoth Mountain, CA USA, 2011â€“2017. Earth System Science Data, 2018, 10, 549-563.	3.7	22
90	Computational provenance in hydrologic science: a snow mapping example. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2009, 367, 1021-1033.	1.6	21

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91	A field study on failure of storm snow slab avalanches. Cold Regions Science and Technology, 2012, 79-80, 20-28.	1.6	20
92	An examination of the variance minimization tendencies of a supraglacial stream. Journal of Hydrology, 1976, 31, 359-380.	2.3	18
93	Estimation of properties of alpine snow from landsat thematic mapper. Advances in Space Research, 1989, 9, 207-215.	1.2	18
94	Looking Ahead to EOS: The Earth Observing System. Computers in Physics, 1990, 4, 248-259.	0.6	18
95	Measurements of snow- and glacier-covered areas with single-polarization SAR. Annals of Glaciology, 1993, 17, 72-76.	2.8	18
96	Commentary On â€œThe Highest Form of the Geographer's Artâ€• Annals of the American Association of Geographers, 1982, 72, 557-558.	3.0	17
97	Environmental Informatics. Annual Review of Environment and Resources, 2012, 37, 449-472.	5.6	17
98	A <inline-formula> <tex-math notation="LaTeX">$K_{{u}}$ </tex-math> </inline-formula>-Band CMOS FMCW Radar Transceiver for Snowpack Remote Sensing. IEEE Transactions on Microwave Theory and Techniques, 2018, 66, 2480-2494.	2.9	17
99	Remote sensing of Greenland ice sheet using multispectral nearâ€infrared and visible radiances. Journal of Geophysical Research, 2007, 112, .	3.3	16
100	Biases of April 1 snow water equivalent records in the Sierra Nevada and their associations with largeâ€scale climate indices. Geophysical Research Letters, 2014, 41, 5912-5918.	1.5	16
101	Evaluation of VIIRS and MODIS Snow Cover Fraction in High-Mountain Asia Using Landsat 8 OLI. Frontiers in Remote Sensing, 2021, 2, .	1.3	16
102	The Future of Imaging Spectroscopy Prospective Technologies and Applications. , 2006, , .		13
103	CUESâ€”a study site for measuring snowpack energy balance in the Sierra Nevada. Frontiers in Earth Science, 2015, 3, .	0.8	13
104	Classification of surface types using SIR-C/X-SAR, Mount Everest Area, Tibet. Journal of Geophysical Research, 1998, 103, 25823-25837.	3.3	12
105	Heat Transfer in the Environment: Development and Use of Fiber-Optic Distributed Temperature Sensing. , 2011, , .		11
106	Quantifying the Spatial Variability of a Snowstorm Using Differential Airborne Lidar. Water Resources Research, 2020, 56, e2019WR025331.	1.7	11
107	Measurement of Snow Grain Properties. , 1987, , 63-74.		11
108	Development of practical multiband algorithms for estimating land-surface temperature from EOS/MODIS data. Advances in Space Research, 1994, 14, 81-90.	1.2	10

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109	Data management for earth system science. SIGMOD Record, 1997, 26, 27-31.	0.7	10
110	Avalanche crownâ€depth distributions. Geophysical Research Letters, 2008, 35, .	1.5	10
111	Achieving Breakthroughs in Global Hydrologic Science by Unlocking the Power of Multisensor, Multidisciplinary Earth Observations. AGU Advances, 2021, 2, e2021AV000455.	2.3	10
112	Deriving snow liquid water content using C-band polarimetric SAR. , 0, , .		9
113	Estimation of snow water equivalence using SIR-C/X-SAR. , 0, , .		9
114	Winter Climate and Lake Morphology Control Ice Phenology and Underâ€ice Temperature and Oxygen Regimes in Mountain Lakes. Journal of Geophysical Research G: Biogeosciences, 2021, 126, e2021JG006277.	1.3	9
115	Observations of snowpack ripening in the Sierra Nevada, California, U.S.A.. Journal of Glaciology, 1999, 45, 409-416.	1.1	9
116	A Component Decomposition Model for Evaluating Atmospheric Effects in Remote Sensing. Journal of Electromagnetic Waves and Applications, 1987, 1, 323-347.	1.0	7
117	NASA selects first EOS payload. Eos, 1991, 72, 97-97.	0.1	7
118	Modeling and observation of polarimetric SAR response to dry snow. , 0, , .		7
119	Mapping snow cover with repeat pass synthetic aperture radar. , 0, , .		7
120	Characterization and Retrieval of Snow and Urban Land Cover Parameters using Hyperspectral Imaging. Current Science, 2019, 116, 1182.	0.4	7
121	Divergence of apparent and intrinsic snow albedo over a season at a sub-alpine site with implications for remote sensing. Cryosphere, 2022, 16, 1765-1778.	1.5	7
122	<title>Earth Observing System</title>. , 1991, 1491, 117.		6
123	Polarimetric and Multifrequency Sar Signatures of Wet Snow. , 0, , .		6
124	Snow Wetness Measurement by Fluorescent Dye Dilution. Journal of Glaciology, 1984, 30, 362-363.	1.1	5
125	Radar Backscattering Response to Wet Snow. , 0, , .		5
126	Stereological determination of dry-snow parameters for discrete-scatterer microwave modeling. Annals of Glaciology, 1993, 17, 295-299.	2.8	5

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127	Planned EOS observations of the land, ocean and atmosphere. Atmospheric Research, 1994, 31, 329-357.	1.8	5
128	Mechanics of the energy balance in large lowland rivers, and why the bed matters. Geophysical Research Letters, 2017, 44, 8910-8918.	1.5	5
129	Revisiting Topographic Horizons in the Era of Big Data and Parallel Computing. IEEE Geoscience and Remote Sensing Letters, 2022, 19, 1-5.	1.4	5
130	HIRIS â€" Eos instrument with high spectral and spatial resolution. Photogrammetria, 1989, 43, 167-180.	0.2	4
131	The restructured Earth observing system: Instrument recommendations. Eos, 1991, 72, 505-505.	0.1	4
132	Characterization Of Snow Grain Size In The Near-infrared And Microwave Wavelengths. , 0, , .		4
133	Measurement and modeling of the bidirectional reflectance of snow. , 0, , .		4
134	HIRIS - The High Resolution Imaging Spectrometer. Proceedings of SPIE, 1988, 0924, 23.	0.8	3
135	Towards predicting temporal changes of the spectral signature of snow in visible and near-infrared wavelengths. Annals of Glaciology, 1993, 17, 143-148.	2.8	3
136	Sequoia 2000: a next-generation information system for the study of global change. , 0, , .		3
137	CoReH<inf>2</inf>O - Cold Regions Hydrology High-esolution Observatory. , 2009, , .		3
138	Effects of Temperature-Dependent Molecular Absorption Coefficients on the Thermal Infrared Remote Sensing of the Earth Surface. , 0, , .		2
139	Hydrology and hydrochemistry of alpine basins. Eos, 1992, 73, 33-33.	0.1	2
140	In situ and photographic measurements of avalanche crown transects. Cold Regions Science and Technology, 2010, 64, 174-181.	1.6	2
141	Inversion technique for quantitative determination of snow grain size with imaging spectrometry. , 1993, , .		1
142	Active microwave measurements of snow cover progress in polarimetric SAR. , 0, , .		1
143	SIR-C/X-SAR investigations of snow properties in alpine region. , 0, , .		1
144	SIR-C/X-SAR mapping snow in alpine region. , 0, , .		1

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145	Reservoir Operators React to Uncertainty in Snowmelt Runoff Forecasts. Journal of Water Resources Planning and Management - ASCE, 2021, 147, 06021010.	1.3	1
146	Snow Wetness Measurement by Fluorescent Dye Dilution. Journal of Glaciology, 1984, 30, 362-363.	1.1	0
147	Methods evolve for snowmelt runoff analysis. Eos, 1990, 71, 292.	0.1	0
148	Snow Properties Derived From TM And SAR Measurements. , 0, , .		0
149	Estimating snow particle size using TM band-4. , 0, , .		0
150	On-line Access to Weather Satellite Imagery and Image Manipulation Software. Bulletin of the American Meteorological Society, 1995, 76, 923-932.	1.7	0
151	<title>Improving alpine region spectral mixture analysis estimates of snow-covered area</title>. , 1995, , .		0
152	A viewing-angle dependent split-window method for retrieving land-surface temperatures from space. , 0, , .		0
153	The Redwood Project [distributed information system]. , 0, , .		0
154	Estimation of snow surface albedo using Landsat Thematic Mapper. , 0, , .		0
155	<title>Estimating snow cover and grain size from AVIRIS data with spectral mixture analysis and modeled snow spectra</title>. , 1997, , .		0
156	Effects of large structure in wet snow cover on SAR measurements. , 0, , .		0
157	Glacial regime of the highest Tien Shan mountain, Pobeda-Khan Tengry massif. Journal of Glaciology, 1997, 43, 503-512.	1.1	0
158	Lundquist Receives 2008 Cryosphere Young Investigator Award. Eos, 2009, 90, 159-159.	0.1	0
159	Snowpack Accumulation Trends in California. , 1999, , 299-304.		0
160	Bruce Barkstrom (1944â€“2018). Eos, 2019, 100, .	0.1	0
161	Remote Sensing of the Cryosphere. , 0, , 397-408.		0