Chun-Hsu Su

List of Publications by Year
in descending order

48 papers	1,929 citations	279798 23 h-index	254184 43 g-index
49 all docs	49 docs citations	49 times ranked	2527 citing authors

#	Article	IF	Citations
1	Diamond-based single-photon emitters. Reports on Progress in Physics, 2011, 74, 076501.	20.1	462
2	Inter-comparison of microwave satellite soil moisture retrievals over the Murrumbidgee Basin, southeast Australia. Remote Sensing of Environment, 2013, 134, 1-11.	11.0	112
3	Improving operational flood ensemble prediction by the assimilation of satellite soil moisture: comparison between lumped and semi-distributed schemes. Hydrology and Earth System Sciences, 2015, 19, 1659-1676.	4.9	98
4	Beyond triple collocation: Applications to soil moisture monitoring. Journal of Geophysical Research D: Atmospheres, 2014, 119, 6419-6439.	3.3	97
5	BARRA v1.0: the Bureau of Meteorology Atmospheric high-resolution Regional Reanalysis for Australia. Geoscientific Model Development, 2019, 12, 2049-2068.	3.6	86
6	Estimating error cross‐correlations in soil moisture data sets using extended collocation analysis. Journal of Geophysical Research D: Atmospheres, 2016, 121, 1208-1219.	3.3	80
7	Towards a picosecond transform-limited nitrogen-vacancy based single photon source. Optics Express, 2008, 16, 6240.	3.4	76
8	Rainfall estimation by inverting SMOS soil moisture estimates: A comparison of different methods over Australia. Journal of Geophysical Research D: Atmospheres, 2016, 121, 12,062.	3.3	59
9	Characterization ofKα spectral profiles for vanadium, component redetermination for scandium, titanium, chromium, and manganese, and development of satellite structure forZ=21toZ=25. Physical Review A, 2006, 73, .	2.5	51
10	Dual assimilation of satellite soil moisture to improve streamflow prediction in data‐scarce catchments. Water Resources Research, 2016, 52, 5357-5375.	4.2	49
11	Reconfigurable quantum metamaterials. Optics Express, 2011, 19, 11018.	3.4	45
12	Multi-scale analysis of bias correction of soil moisture. Hydrology and Earth System Sciences, 2015, 19, 17-31.	4.9	44
13	Does AMSR2 produce better soil moisture retrievals than AMSR-E over Australia?. Remote Sensing of Environment, 2017, 188, 95-105.	11.0	44
14	High-speed quantum gates with cavity quantum electrodynamics. Physical Review A, 2008, 78, .	2.5	42
15	Homogenization of Structural Breaks in the Global ESA CCI Soil Moisture Multisatellite Climate Data Record. IEEE Transactions on Geoscience and Remote Sensing, 2021, 59, 2845-2862.	6.3	41
16	SMOS soil moisture retrievals using the land parameter retrieval model: Evaluation over the Murrumbidgee Catchment, southeast Australia. Remote Sensing of Environment, 2015, 163, 70-79.	11.0	40
17	Clarifications on the "Comparison Between SMOS, VUA, ASCAT, and ECMWF Soil Moisture Products Over Four Watersheds in U.S." IEEE Transactions on Geoscience and Remote Sensing, 2014, 52, 1901-1906.	6.3	35
18	Slot-waveguide cavities for optical quantum information applications. Optics Express, 2009, 17, 7295.	3.4	34

#	Article	IF	Citations
19	High-performance diamond-based single-photon sources for quantum communication. Physical Review A, 2009, 80, .	2.5	34
20	Stand-alone error characterisation of microwave satellite soil moisture using a Fourier method. Remote Sensing of Environment, 2014, 154, 115-126.	11.0	32
21	An evaluation of daily precipitation from a regional atmospheric reanalysis over Australia. Hydrology and Earth System Sciences, 2019, 23, 3387-3403.	4.9	31
22	Band structure, phase transitions, and semiconductor analogs in one-dimensional solid light systems. Physical Review A, 2009, 80, .	2.5	28
23	An evaluation and regional error modeling methodology for near-real-time satellite rainfall data over Australia. Journal of Geophysical Research D: Atmospheres, 2015, 120, 10,767-10,783.	3.3	25
24	De€noising of passive and active microwave satellite soil moisture time series. Geophysical Research Letters, 2013, 40, 3624-3630.	4.0	24
25	Towards hydrological model calibration using river level measurements. Journal of Hydrology: Regional Studies, 2017, 10, 95-109.	2.4	24
26	Optimal averaging of soil moisture predictions from ensemble land surface model simulations. Water Resources Research, 2015, 51, 9273-9289.	4.2	23
27	Error decomposition of nine passive and active microwave satellite soil moisture data sets over Australia. Remote Sensing of Environment, 2016, 182, 128-140.	11.0	22
28	Evaluation of post-retrieval de-noising of active and passive microwave satellite soil moisture. Remote Sensing of Environment, 2015, 163, 127-139.	11.0	21
29	Assessment of the impact of spatial heterogeneity on microwave satellite soil moisture periodic error. Remote Sensing of Environment, 2018, 205, 85-99.	11.0	21
30	On the structural limitations of recursive digital filters for base flow estimation. Water Resources Research, 2016, 52, 4745-4764.	4.2	20
31	Homogeneity of a global multisatellite soil moisture climate data record. Geophysical Research Letters, 2016, 43, 11,245.	4.0	18
32	BARRA v1.0: kilometre-scale downscaling of an Australian regional atmospheric reanalysis over four midlatitude domains. Geoscientific Model Development, 2021, 14, 4357-4378.	3.6	18
33	Disaggregation of Low-Resolution L-Band Radiometry Using C-Band Radar Data. IEEE Geoscience and Remote Sensing Letters, 2016, 13, 1425-1429.	3.1	15
34	A synthetic study to evaluate the utility of hydrological signatures for calibrating a base flow separation filter. Water Resources Research, 2016, 52, 6526-6540.	4.2	13
35	Pulse shaping by coupled cavities: Single photons and qudits. Physical Review A, 2009, 80, .	2.5	12
36	The Impact of Quadratic Nonlinear Relations between Soil Moisture Products on Uncertainty Estimates from Triple Collocation Analysis and Two Quadratic Extensions. Journal of Hydrometeorology, 2016, 17, 1725-1743.	1.9	9

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37	Near real time de-noising of satellite-based soil moisture retrievals: An intercomparison among three different techniques. Remote Sensing of Environment, 2017, 198, 17-29.	11.0	9
38	Domain structures in quantum graphity. Physical Review D, 2012, 86, .	4.7	5
39	Transformation optics for cavity array metamaterials. Optics Express, 2013, 21, 5575.	3.4	5
40	Negative refraction of excitations in the Bose-Hubbard model. Physical Review A, 2014, 90, .	2.5	5
41	Ability of an Australian reanalysis dataset to characterise sub-daily precipitation. Hydrology and Earth System Sciences, 2020, 24, 2951-2962.	4.9	5
42	Temporal disaggregation of daily rainfall measurements using regional reanalysis for hydrological applications. Journal of Hydrology, 2022, 610, 127867.	5.4	5
43	Accessing diamond waveguides and future applications. , 2010, , .		3
44	Verification of moist surface variables over northern Australia in a high-resolution reanalysis (BARRA). Journal of Southern Hemisphere Earth Systems Science, 2021, 71, 194.	1.8	3
45	Impurities in diamond: a new revival for quantum optics. , 2010, , .		2
46	Coupling slot-waveguide cavities for large-scale quantum optical devices. Optics Express, 2011, 19, 6354.	3.4	1
47	Cavity enhancement of a Nitrogen-Vacancy-based single photon source. , 2008, , .		0
48	Engineering electromagnetic metamaterials from coupled cavity arrays. , 2011, , .		0