Steven Businger

List of Publications by Year in descending order

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68 papers	5,613 citations	236612 25 h-index	106150 65 g-index
70 all docs	70 docs citations	70 times ranked	3234 citing authors

#	Article	IF	Citations
1	The synoptic climatology of polar low outbreaks. Tellus, Series A: Dynamic Meteorology and Oceanography, 2022, 37, 419.	0.8	46
2	Lagrangian air mass tracking with smart balloons during ACE-2. Tellus, Series B: Chemical and Physical Meteorology, 2022, 52, 321.	0.8	15
3	The Anatomy of a Series of Cloud Bursts that Eclipsed the U.S. Rainfall Record. Monthly Weather Review, 2022, 150, 753-773.	0.5	3
4	The Secrets of the Best Rainbows on Earth. Bulletin of the American Meteorological Society, 2021, 102, E338-E350.	1.7	4
5	Comments on â€œThe Financial Dilemma of Students Pursuing an Atmospheric Science Graduate Degree in the United Statesâ€• Bulletin of the American Meteorological Society, 2021, 102, 323-324.	1.7	1
6	Forecasting seeing for the Maunakea Observatories. Monthly Notices of the Royal Astronomical Society, 2020, 496, 4734-4748.	1.6	20
7	Two Ensemble Approaches for Forecasting Sulfur Dioxide Concentrations from KÄ«lauea Volcano. Weather and Forecasting, 2020, 35, 1923-1937.	0.5	8
8	A Novel Method for Modeling Lowest-Level Vertical Motion. Weather and Forecasting, 2019, 34, 943-957.	0.5	3
9	The Coldest Places in Hawaii: The Ice-Preserving Microclimates of High-Altitude Craters and Caves on Tropical Island Volcanoes. Bulletin of the American Meteorological Society, 2018, 99, 2313-2324.	1.7	8
10	Hurricane with a History: Hawaiian Newspapers Illuminate an 1871 Storm. Bulletin of the American Meteorological Society, 2018, 99, 137-147.	1.7	10
11	Wind power characteristics of Oahu, Hawaii. Renewable Energy, 2018, 128, 324-336.	4.3	24
12	Development of a solar irradiance dataset for Oahu, Hawai'i. Renewable Energy, 2018, 128, 432-443.	4.3	4
13	Observing and Forecasting Vog Dispersion from KÄ«lauea Volcano, Hawaii. Bulletin of the American Meteorological Society, 2015, 96, 1667-1686.	1.7	34
14	The Impact of Hurricane Force Wind Fields on the North Pacific Ocean Environment. Weather and Forecasting, 2015, 30, 742-753.	0.5	3
15	Refining the relationship between lightning and convective rainfall over the ocean. Journal of Geophysical Research D: Atmospheres, 2014, 119, 964-981.	1.2	10
16	Kahua Aâ€˜oâ€”A Learning Foundation: Using Hawaiian Language Newspaper Articles for Earth Science Professional Development. Journal of Geoscience Education, 2014, 62, 217-226.	0.8	9
17	Using a Snow Drift Model to Simulate Eolian Drift and Snowfall on the Summit of Mauna Kea, Hawaii. Arctic, Antarctic, and Alpine Research, 2014, 46, 719-734.	0.4	5
18	On the interaction of Tropical Cyclone Flossie and emissions from Hawaii's Kilauea volcano. Geophysical Research Letters, 2014, 41, 4082-4089.	1.5	3

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19	The utility of atmospheric analyses for the mitigation of artifacts in InSAR. Journal of Geophysical Research: Solid Earth, 2013, 118, 748-758.	1.4	34
20	GPS meteorology: An investigation of oceanâ€based precipitable water estimates. Journal of Geophysical Research, 2012, 117, .	3.3	15
21	Orographic Influences on an Oahu Flood. Monthly Weather Review, 2011, 139, 2198-2217.	0.5	9
22	Using Novel Lightning Data and Advanced Modeling Approaches to Predict Maritime Cyclogenesis. Bulletin of the American Meteorological Society, 2010, 91, 1091-1093.	1.7	2
23	Helical circulations in the typhoon boundary layer. Journal of Geophysical Research, 2010, 115, .	3.3	26
24	The Impact of Lightning Data Assimilation on a Winter Storm Simulation over the North Pacific Ocean. Monthly Weather Review, 2009, 137, 3177-3195.	0.5	51
25	Development of a Long-Range Lightning Detection Network for the Pacific: Construction, Calibration, and Performance*. Journal of Atmospheric and Oceanic Technology, 2009, 26, 145-166.	0.5	47
26	Relationships among Lightning, Precipitation, and Hydrometeor Characteristics over the North Pacific Ocean*. Journal of Applied Meteorology and Climatology, 2009, 48, 833-848.	0.6	68
27	The Morphology of Eyewall Lightning Outbreaks in Two Category 5 Hurricanes*. Monthly Weather Review, 2008, 136, 1706-1726.	0.5	57
28	Mitigating atmospheric noise for InSAR using a high resolution weather model. Geophysical Research Letters, 2006, 33, .	1.5	123
29	Scientific Insights from Four Generations of Lagrangian Smart Balloons in Atmospheric Research*. Bulletin of the American Meteorological Society, 2006, 87, 1539-1554.	1.7	20
30	Subtropical Cyclogenesis over the Central North Pacific*. Weather and Forecasting, 2006, 21, 193-205.	0.5	40
31	The Impact of Satellite-Derived Atmospheric Motion Vectors on Mesoscale Forecasts over Hawaii*. Monthly Weather Review, 2006, 134, 2009-2020.	0.5	22
32	GPS Meteorology: Sliding-Window Analysis*. Journal of Atmospheric and Oceanic Technology, 2005, 22, 687-695.	0.5	23
33	An Observational Case for the Prevalence of Roll Vortices in the Hurricane Boundary Layer*. Journals of the Atmospheric Sciences, 2005, 62, 2662-2673.	0.6	126
34	Cold-air cyclogenesis along the Gulf-Stream front: investigation of diabatic impacts on cyclone development, frontal structure, and track. Meteorology and Atmospheric Physics, 2005, 88, 65-90.	0.9	24
35	Infrasonic observations of open ocean swells in the Pacific: Deciphering the song of the sea. Geophysical Research Letters, 2004, 31, .	1.5	46
36	Dispersion Modelling of the Kilauea Plume. Boundary-Layer Meteorology, 2003, 108, 121-144.	1.2	10

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37	The Kaâ€˜$overline {m u}$ storm (November 2000): Imaging precipitable water using GPS. Journal of Geophysical Research, 2003, 108, .	3.3	23
38	Comparison of precipitable water over Hawaii using AVHRR-based split-window techniques, GPS and radiosondes. International Journal of Remote Sensing, 2002, 23, 2335-2339.	1.3	15
39	A Lightning Prediction Index that Utilizes GPS Integrated Precipitable Water Vapor*. Weather and Forecasting, 2002, 17, 1034-1047.	0.5	61
40	Starcasting. Bulletin of the American Meteorological Society, 2002, 83, 858-871.	1.7	21
41	Synoptic Structure and Evolution of a Kona Low. Weather and Forecasting, 2001, 16, 81-98.	0.5	26
42	Viscous Dissipation of Turbulence Kinetic Energy in Storms*. Journals of the Atmospheric Sciences, 2001, 58, 3793-3796.	0.6	34
43	Extraction of Geopotential Height and Temperature Structure from Profiler and Rawinsonde Winds. Monthly Weather Review, 2001, 129, 1729-1739.	0.5	9
44	Hydrological Aspects of Weather Prediction and Flood Warnings: Report of the Ninth Prospectus Development Team of the U.S. Weather Research Program. Bulletin of the American Meteorological Society, 2000, 81, 2665-2680.	1.7	59
45	El NiÃ±o, water vapor, and the global positioning system. Geophysical Research Letters, 2000, 27, 2697-2700.	1.5	12
46	Weather and Forecasting Challenges in the Pacific Region of the National Weather Service. Weather and Forecasting, 1998, 13, 523-546.	0.5	21
47	A Bow Echo and Severe Weather Associated with a Kona Low in Hawaii. Weather and Forecasting, 1998, 13, 576-591.	0.5	25
48	Nowcasting Convective Activity for Space Shuttle Landings during Easterly Flow Regimes. Weather and Forecasting, 1997, 12, 78-107.	0.5	10
49	Survey of Graduate Degree Procedures in Atmospheric Sciences. Bulletin of the American Meteorological Society, 1997, 78, 265-274.	1.7	0
50	Estimating wet delays using numerical weather analyses and predictions. Radio Science, 1996, 31, 477-487.	0.8	27
51	Nowcasting for Space Shuttle Landings at Kennedy Space Center, Florida. Bulletin of the American Meteorological Society, 1996, 77, 2295-2305.	1.7	6
52	The Promise of GPS in Atmospheric Monitoring. Bulletin of the American Meteorological Society, 1996, 77, 5-18.	1.7	188
53	GPS Sounding of the Atmosphere from Low Earth Orbit: Preliminary Results. Bulletin of the American Meteorological Society, 1996, 77, 19-40.	1.7	489
54	GPS Meteorology: Direct Estimation of the Absolute Value of Precipitable Water. Journal of Applied Meteorology and Climatology, 1996, 35, 830-838.	1.7	369

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55	Winter Weather Forecasting throughout the Eastern United States. Part II: An Operational Perspective of Cyclogenesis. Weather and Forecasting, 1995, 10, 21-41.	0.5	11
56	Winter Weather Forecasting throughout the Eastern United States. Part III: The Effects of Topography and the Variability of Winter Weather in the Carolinas and Virginia. Weather and Forecasting, 1995, 10, 42-60.	0.5	34
57	Cool season cyclogenesis and associated mesoscale weather. Reviews of Geophysics, 1995, 33, 907-915.	9.0	0
58	GPS Meteorology: Mapping Zenith Wet Delays onto Precipitable Water. Journal of Applied Meteorology and Climatology, 1994, 33, 379-386.	1.7	929
59	Improved Retrieval of Integrated Water Vapor from Water Vapor Radiometer Measurements Using Numerical Weather Prediction Models. Journal of Atmospheric and Oceanic Technology, 1994, 11, 1253-1261.	0.5	3
60	Sensing atmospheric water vapor with the global positioning system. Geophysical Research Letters, 1993, 20, 2631-2634.	1.5	283
61	GPS meteorology: Remote sensing of atmospheric water vapor using the global positioning system. Journal of Geophysical Research, 1992, 97, 15787-15801.	3.3	1,779
62	The Development of the Piedmont Front and Associated Outbreak of Severe Weather on 13 March 1986. Monthly Weather Review, 1991, 119, 2224-2251.	0.5	21
63	An Arctic Hurricane over the Bering Sea. Monthly Weather Review, 1991, 119, 2293-2322.	0.5	39
64	Storm Following Climatology Of Precipitation Associated with Winter Cyclones Originating Over the Gulf of Mexico. Weather and Forecasting, 1990, 5, 378-403.	0.5	15
65	Cyclogenesis in Cold Air Masses. Weather and Forecasting, 1989, 4, 133-156.	0.5	128
66	Summary of the Second National Winter Weather Workshop. Weather and Forecasting, 1989, 4, 264-270.	0.5	0
67	Comma Cloud Development and Associated Rapid Cyclogenesis over the Gulf of Alaska: A Case Study Using Aircraft and Operational Data. Monthly Weather Review, 1988, 116, 1103-1123.	0.5	16
68	Mesoscale Structures of Two Comma Cloud Systems over the Pacific Ocean. Monthly Weather Review, 1987, 115, 1908-1928.	0.5	7