Ernesto Rodrguez

List of Publications by Citations

29 papers	5,427 citations	16 h-index	35 g-index
35 ext. papers	6,474 ext. citations	6.6 avg, IF	4.89 L-index

#	Paper	IF	Citations
29	The Shuttle Radar Topography Mission. *Reviews of Geophysics*, **2007**, 45,	23.1	3672
28	Measuring surface water from space. *Reviews of Geophysics*, **2007**, 45,	23.1	614
27	The Surface Water and Ocean Topography Mission: Observing Terrestrial Surface Water and Oceanic Submesoscale Eddies. *Proceedings of the IEEE*, **2010**, 98, 766-779	14.3	208
26	The physical oceanography of the transport of floating marine debris. *Environmental Research Letters*, **2020**, 15, 023003	6.2	186
25	Estimating reach-averaged discharge for the River Severn from measurements of river water surface elevation and slope. *Journal of Hydrology*, **2014**, 511, 92-104	6	110
24	Toward the Integrated Marine Debris Observing System. *Frontiers in Marine Science*, **2019**, 6,	4.5	91
23	Estimating River Depth From Remote Sensing Swath Interferometry Measurements of River Height, Slope, and Width. *IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing*, **2010**, 3, 20-31	4.7	82
22	Preliminary Characterization of SWOT Hydrology Error Budget and Global Capabilities. *IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing*, **2010**, 3, 6-19	4.7	80
21	Measuring currents, ice drift, and waves from space: the Sea surface KInematics Multiscale monitoring (SKIM) concept. *Ocean Science*, **2018**, 14, 337-354	4	60
20	Estimating Ocean Vector Winds and Currents Using a Ka-Band Pencil-Beam Doppler Scatterometer. *Remote Sensing*, **2018**, 10, 576	5	55
19	Automated River Reach Definition Strategies: Applications for the Surface Water and Ocean Topography Mission. *Water Resources Research*, **2017**, 53, 8164-8186	5.4	40
18	Remotely Sensed Winds and Wind Stresses for Marine Forecasting and Ocean Modeling. *Frontiers in Marine Science*, **2019**, 6,	4.5	37
17	Integrated Observations of Global Surface Winds, Currents, and Waves: Requirements and Challenges for the Next Decade. *Frontiers in Marine Science*, **2019**, 6,	4.5	34
16	The effect of small-wave modulation on the electromagnetic bias. *Journal of Geophysical Research*, **1992**, 97, 2379		28
15	The Winds and Currents Mission Concept. *Frontiers in Marine Science*, **2019**, 6,	4.5	27
14	Impact of Surface Waves on SWOT's Projected Ocean Accuracy. *Remote Sensing*, **2015**, 7, 14509-14529	5	16
13	Soil Moisture and Vegetation Water Content Retrieval Using QuikSCAT Data. *Remote Sensing*, **2018**, 10, 636	5	14

List of Publications

12	Winds and currents mission: Ability to observe mesoscale AIR/SEA coupling **2016**,		14
11	On the Optimal Design of Doppler Scatterometers. *Remote Sensing*, **2018**, 10, 1765	5	13
10	Measuring currents, ice drift, and waves from space: the Sea Surface KInematics Multiscale monitoring (SKIM) concept **2017**,		11
9	Observing Rivers With Varying Spatial Scales. *Water Resources Research*, **2020**, 56, e2019WR026476	5.4	7
8	Near nadir Ka-band sar interferometry: SWOT airborne experiment **2011**,		5
7	Ka-Band Doppler Scatterometry over a Loop Current Eddy. *Remote Sensing*, **2020**, 12, 2388	5	5
6	Mapping Water Surface Elevation and Slope in the Mississippi River Delta Using the AirSWOT Ka-Band Interferometric Synthetic Aperture Radar. *Remote Sensing*, **2019**, 11, 2739	5	5
5	Measuring Winds and Currents with Ka-Band Doppler Scatterometry: An Airborne Implementation and Progress towards a Spaceborne Mission. *Remote Sensing*, **2020**, 12, 1021	5	3
4	S-MODE: The Sub-Mesoscale Ocean Dynamics Experiment **2020**,		3
3	On the Surface Current Measurement Capabilities of Spaceborne Doppler Scatterometry. *Geophysical Research Letters*, **2020**, 47, e2020GL090116	4.9	2
2	Separating Energetic Internal Gravity Waves and Small-Scale Frontal Dynamics. *Geophysical Research Letters*, **2022**, 49,	4.9	2
1	A Ka-Band Wind Geophysical Model Function Using Doppler Scatterometer Measurements from the Air-Sea Interaction Tower Experiment. *Remote Sensing*, **2022**, 14, 2067	5	