# Brian B Barnes

List of Publications by Year
in descending order



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|---|---|---|---|
| 46 papers | 1,915 citations | 236925 25 h-index | 254184 43 g-index |
| 46 all docs | 46 docs citations | 46 times ranked | 2163 citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | The great Atlantic Sargassum belt. Science, 2019, 365, 83-87. | 12.6 | 353 |
| 2 | Severe 2010 Cold-Water Event Caused Unprecedented Mortality to Corals of the Florida Reef Tract and Reversed Previous Survivorship Patterns. PLoS ONE, 2011, 6, e23047. | 2.5 | 184 |
| 3 | A machine learning approach to estimate surface ocean pCO2 from satellite measurements. Remote Sensing of Environment, 2019, 228, 203-226. | 11.0 | 79 |
| 4 | MODIS-derived spatiotemporal water clarity patterns in optically shallow Florida Keys waters: A new approach to remove bottom contamination. Remote Sensing of Environment, 2013, 134, 377-391. | 11.0 | 64 |
| 5 | Validation of VIIRS and MODIS reflectance data in coastal and oceanic waters: An assessment of methods. Remote Sensing of Environment, 2019, 220, 110-123. | 11.0 | 63 |
| 6 | Assessment of satellite-derived diffuse attenuation coefficients and euphotic depths in south Florida coastal waters. Remote Sensing of Environment, 2013, 131, 38-50. | 11.0 | 62 |
| 7 | An EOF-Based Algorithm to Estimate Chlorophyll a Concentrations in Taihu Lake from MODIS Land-Band Measurements: Implications for Near Real-Time Applications and Forecasting Models. Remote Sensing, 2014, 6, 10694-10715. | 4.0 | 59 |
| 8 | A framework for identifying and characterising coral reef â€œoasesâ€•against a backdrop of degradation. Journal of Applied Ecology, 2018, 55, 2865-2875. | 4.0 | 58 |
| 9 | <em>Sargassum</em> Watch Warns of Incoming Seaweed. Eos, 2016, 97, . | 0.1 | 58 |
| 10 | In search of floating algae and other organisms in global oceans and lakes. Remote Sensing of Environment, 2020, 239, 111659. | 11.0 | 52 |
| 11 | Use of Landsat data to track historical water quality changes in Florida Keys marine environments. Remote Sensing of Environment, 2014, 140, 485-496. | 11.0 | 51 |
| 12 | Extensive coral mortality and critical habitat loss following dredging and their association with remotely-sensed sediment plumes. Marine Pollution Bulletin, 2019, 145, 185-199. | 5.0 | 51 |
| 13 | Improving ocean color data coverage through machine learning. Remote Sensing of Environment, 2019, 222, 286-302. | 11.0 | 50 |
| 14 | Cross-Sensor Continuity of Satellite-Derived Water Clarity in the Gulf of Mexico: Insights Into Temporal Aliasing and Implications for Long-Term Water Clarity Assessment. IEEE Transactions on Geoscience and Remote Sensing, 2015, 53, 1761-1772. | 6.3 | 45 |
| 15 | A Harmful Algal Bloom of Karenia brevis in the Northeastern Gulf of Mexico as Revealed by MODIS and VIIRS: A Comparison. Sensors, 2015, 15, 2873-2887. | 3.8 | 45 |
| 16 | Sediment plumes induced by the Port of Miami dredging: Analysis and interpretation using Landsat and MODIS data. Remote Sensing of Environment, 2015, 170, 328-339. | 11.0 | 41 |
| 17 | Influence of a red band-based water classification approach on chlorophyll algorithms for optically complex estuaries. Remote Sensing of Environment, 2014, 155, 289-302. | 11.0 | 39 |
| 18 | Dependence of satellite ocean color data products on viewing angles: A comparison between SeaWiFS, MODIS, and VIIRS. Remote Sensing of Environment, 2016, 175, 120-129. | 11.0 | 35 |

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|---|---|---|---|
| 19 | Satellite-based virtual buoy system to monitor coastal water quality. Optical Engineering, 2013, 53, 051402. | 1.0 | 34 |
| 20 | Estimation of diffuse attenuation of ultraviolet light in optically shallow Florida Keys waters from MODIS measurements. Remote Sensing of Environment, 2014, 140, 519-532. | 11.0 | 33 |
| 21 | Multi-band spectral matching inversion algorithm to derive water column properties in optically shallow waters: An optimization of parameterization. Remote Sensing of Environment, 2018, 204, 424-438. | 11.0 | 31 |
| 22 | Recovering low quality MODIS-Terra data over highly turbid waters through noise reduction and regional vicarious calibration adjustment: A case study in Taihu Lake. Remote Sensing of Environment, 2017, 197, 72-84. | 11.0 | 30 |
| 23 | Oyster reef community interactions: The effect of resident fauna on oyster (Crassostrea spp.) larval recruitment. Journal of Experimental Marine Biology and Ecology, 2010, 391, 169-177. | 1.5 | 29 |
| 24 | A Hybrid Cloud Detection Algorithm to Improve MODIS Sea Surface Temperature Data Quality and Coverage Over the Eastern Gulf of Mexico. IEEE Transactions on Geoscience and Remote Sensing, 2013, 51, 3273-3285. | 6.3 | 29 |
| 25 | Remote detection of cyanobacteria blooms in an optically shallow subtropical lagoonal estuary using MODIS data. Remote Sensing of Environment, 2019, 231, 111227. | 11.0 | 29 |
| 26 | Prediction of coral bleaching in the Florida Keys using remotely sensed data. Coral Reefs, 2015, 34, 491-503. | 2.2 | 26 |
| 27 | Spectral characteristics of sea snot reflectance observed from satellites: Implications for remote sensing of marine debris. Remote Sensing of Environment, 2022, 269, 112842. | 11.0 | 26 |
| 28 | Developing a Smart Semantic Web With Linked Data and Models for Near-Real-Time Monitoring of Red Tides in the Eastern Gulf of Mexico. IEEE Systems Journal, 2016, 10, 1282-1290. | 4.6 | 24 |
| 29 | On the Interplay Between Ocean Color Data Quality and Data Quantity: Impacts of Quality Control Flags. IEEE Geoscience and Remote Sensing Letters, 2020, 17, 745-749. | 3.1 | 24 |
| 30 | Disturbances drive changes in coral community assemblages and coral calcification capacity. Ecosphere, 2020, 11, e03066. | 2.2 | 23 |
| 31 | Comparison of two atmospheric correction approaches applied to MODIS measurements over North American waters. Remote Sensing of Environment, 2018, 216, 442-455. | 11.0 | 21 |
| 32 | Performance of POLYMER Atmospheric Correction of Ocean Color Imagery in the Presence of Absorbing Aerosols. IEEE Transactions on Geoscience and Remote Sensing, 2019, 57, 6666-6674. | 6.3 | 21 |
| 33 | Vertical migration of Karenia brevis in the northeastern Gulf of Mexico observed from glider measurements. Harmful Algae, 2016, 58, 59-65. | 4.8 | 20 |
| 34 | Cloud and Sunâ€glint statistics derived from GOES and MODIS observations over the Intraâ€Americas Sea for GEOâ€CAPE mission planning. Journal of Geophysical Research D: Atmospheres, 2017, 122, 1725-1745. | 3.3 | 19 |
| 35 | Benthic classification and IOP retrievals in shallow water environments using MERIS imagery. Remote Sensing of Environment, 2020, 249, 112015. | 11.0 | 19 |
| 36 | An Improved High-Resolution SST Climatology to Assess Cold Water Events off Florida. IEEE Geoscience and Remote Sensing Letters, 2011, 8, 769-773. | 3.1 | 17 |

| # | Article | IF | Citations |
|---|---|---|---|
| 37 | Cross-calibration of MODIS and VIIRS long near infrared bands for ocean color science and applications. Remote Sensing of Environment, 2021, 260, 112439. | 11.0 | 15 |
| 38 | VIIRS captures phytoplankton vertical migration in the NE Gulf of Mexico. Harmful Algae, 2017, 66, 40-46. | 4.8 | 14 |
| 39 | The development of a non-linear autoregressive model with exogenous input (NARX) to model climate-water clarity relationships: reconstructing a historical water clarity index for the coastal waters of the southeastern USA. Theoretical and Applied Climatology, 2017, 130, 557-569. | 2.8 | 13 |
| 40 | QWIP: A Quantitative Metric for Quality Control of Aquatic Reflectance Spectral Shape Using the Apparent Visible Wavelength. Frontiers in Remote Sensing, 2022, 3, . | 3.5 | 9 |
| 41 | Monitoring Sargassum Inundation on Beaches and Nearshore Waters Using PlanetScope/Dove Observations. IEEE Geoscience and Remote Sensing Letters, 2022, 19, 1-5. | 3.1 | 5 |
| 42 | Using machine learning to model and predict water clarity in the Great Lakes. Journal of Great Lakes Research, 2020, 46, 1501-1510. | 1.9 | 4 |
| 43 | Estimating estuarine primary production using satellite data and machine learning. International Journal of Applied Earth Observation and Geoinformation, 2022, 110, 102821. | 1.9 | 4 |
| 44 | Linking Weather Patterns, Water Quality And Invasive Mussel Distributions In The Development And Application Of A Water Clarity Index For The Great Lakes. , 2018, , . | | 3 |
| 45 | Sensitivity of Satellite Ocean Color Data to System Vicarious Calibration of the Long Near Infrared Band. IEEE Transactions on Geoscience and Remote Sensing, 2021, 59, 2562-2578. | 6.3 | 3 |
| 46 | Vicarious Calibration of the Long Near Infrared Band: Cross-Sensor Differences in Sensitivity. IEEE Transactions on Geoscience and Remote Sensing, 2022, 60, 1-9. | 6.3 | 1 |