# Stefania Bonafoni

List of Publications by Year
in descending order

| 85 papers | 2,323 citations | 257101<br>24 h-index | 223531<br>46 g-index |
|---|---|---|---|
| 87 all docs | 87 docs citations | 87 times ranked | 2005 citing authors |

| # | Article | IF | Citations |
|---|---------|----|-----------|
| 1 | Satellite Remote Sensing of Surface Urban Heat Islands: Progress, Challenges, and Perspectives. Remote Sensing, 2019, 11, 48. | 1.8 | 464 |
| 2 | Land Surface Temperature Retrieval from Landsat 5, 7, and 8 over Rural Areas: Assessment of Different Retrieval Algorithms and Emissivity Models and Toolbox Implementation. Remote Sensing, 2020, 12, 294. | 1.8 | 215 |
| 3 | Remote sensing of the urban heat island effect in a highly populated urban agglomeration area in East China. Science of the Total Environment, 2018, 628-629, 415-429. | 3.9 | 158 |
| 4 | Spatial and temporal trends of the surface and air heat island over Milan using MODIS data. Remote Sensing of Environment, 2014, 150, 163-171. | 4.6 | 146 |
| 5 | Satellite and Ground-Based Sensors for the Urban Heat Island Analysis in the City of Rome. Remote Sensing, 2010, 2, 1400-1415. | 1.8 | 93 |
| 6 | Satellite air temperature estimation for monitoring the canopy layer heat island of Milan. Remote Sensing of Environment, 2012, 127, 130-138. | 4.6 | 85 |
| 7 | Downscaling of Landsat and MODIS Land Surface Temperature Over the Heterogeneous Urban Area of Milan. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2016, 9, 2019-2027. | 2.3 | 78 |
| 8 | Urban Heat Island Analysis over the Land Use Zoning Plan of Bangkok by Means of Landsat 8 Imagery. Remote Sensing, 2018, 10, 440. | 1.8 | 67 |
| 9 | Sustainable strategies for smart cities: Analysis of the town development effect on surface urban heat island through remote sensing methodologies. Sustainable Cities and Society, 2017, 29, 211-218. | 5.1 | 63 |
| 10 | The Impact of the Land Cover Dynamics on Surface Urban Heat Island Variations in Semi-Arid Cities: A Case Study in Ahmedabad City, India, Using Multi-Sensor/Source Data. Sensors, 2019, 19, 3701. | 2.1 | 58 |
| 11 | Downscaling Landsat Land Surface Temperature over the urban area of Florence. European Journal of Remote Sensing, 2016, 49, 553-569. | 1.7 | 46 |
| 12 | Land Surface Temperature and Urban Density: Multiyear Modeling and Relationship Analysis Using MODIS and Landsat Data. Remote Sensing, 2018, 10, 1471. | 1.8 | 44 |
| 13 | Analysis and improvements of cloud models for propagation studies. Radio Science, 2009, 44, . | 0.8 | 41 |
| 14 | Radio occultation and ground-based GNSS products for observing, understanding and predicting extreme events: A review. Atmospheric Research, 2019, 230, 104624. | 1.8 | 41 |
| 15 | Atmospheric water vapor retrieval by means of both a GPS network and a microwave radiometer during an experimental campaign in Cagliari, Italy, in 1999. IEEE Transactions on Geoscience and Remote Sensing, 2001, 39, 2436-2443. | 2.7 | 36 |
| 16 | Sensitivity Analysis and Validation of Daytime and Nighttime Land Surface Temperature Retrievals from Landsat 8 Using Different Algorithms and Emissivity Models. Remote Sensing, 2020, 12, 2776. | 1.8 | 36 |
| 17 | Mapping the atmospheric water vapor by integrating microwave radiometer and GPS measurements. IEEE Transactions on Geoscience and Remote Sensing, 2004, 42, 1657-1665. | 2.7 | 32 |
| 18 | Spaceborne detection of roof and impervious surface albedo: Potentialities and comparison with airborne thermography measurements. Solar Energy, 2015, 113, 281-294. | 2.9 | 32 |

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|---|---------|----|-----------|
| 19 | A Low-Cost Microwave Radiometer for the Detection of Fire in Forest Environments. IEEE Transactions on Geoscience and Remote Sensing, 2008, 46, 2632-2643. | 2.7 | 30 |
| 20 | Comparison of MM5 integrated water vapor with microwave radiometer, GPS, and radiosonde measurements. IEEE Transactions on Geoscience and Remote Sensing, 2005, 43, 1050-1058. | 2.7 | 28 |
| 21 | Albedo Retrieval From Sentinel-2 by New Narrow-to-Broadband Conversion Coefficients. IEEE Geoscience and Remote Sensing Letters, 2020, 17, 1618-1622. | 1.4 | 28 |
| 22 | Noncontact Measurement of River Surface Velocity and Discharge Estimation With a Low-Cost Doppler Radar Sensor. IEEE Transactions on Geoscience and Remote Sensing, 2020, 58, 5195-5207. | 2.7 | 27 |
| 23 | On the accuracy of integrated water vapor observations and the potential for mitigating electromagnetic path delay error in InSAR. Atmospheric Measurement Techniques, 2012, 5, 1015-1030. | 1.2 | 26 |
| 24 | Albedo Retrieval From Multispectral Landsat 8 Observation in Urban Environment: Algorithm Validation by in situ Measurements. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2017, 10, 4504-4511. | 2.3 | 26 |
| 25 | The usefulness of the Global Navigation Satellite Systems (GNSS) in the analysis of precipitation events. Atmospheric Research, 2016, 167, 15-23. | 1.8 | 25 |
| 26 | Satellite Images and Gaussian Parameterization for an Extensive Analysis of Urban Heat Islands in Thailand. Remote Sensing, 2018, 10, 665. | 1.8 | 24 |
| 27 | Assessment of water vapor retrievals from a GPS receiver network. GPS Solutions, 2013, 17, 475-484. | 2.2 | 22 |
| 28 | Satellite-Based Retrieval of Precipitable Water Vapor Over Land by Using a Neural Network Approach. IEEE Transactions on Geoscience and Remote Sensing, 2011, 49, 3236-3248. | 2.7 | 20 |
| 29 | Spatiotemporal Analysis of MODIS NDVI in the Semif-Arid Region of Kurdistan (Iran). Remote Sensing, 2019, 11, 1723. | 1.8 | 19 |
| 30 | Comparison of fractal dimension oscillations and trends of rainfall data from Pastaza Province, Ecuador and Veneto, Italy. Atmospheric Research, 2009, 93, 673-679. | 1.8 | 18 |
| 31 | Fire Detection by Microwave Radiometric Sensors: Modeling a Scenario in the Presence of Obstacles. IEEE Transactions on Geoscience and Remote Sensing, 2010, 48, 314-324. | 2.7 | 18 |
| 32 | A Stable Gaussian Fitting Procedure for the Parameterization of Remote Sensed Thermal Images. Algorithms, 2015, 8, 82-91. | 1.2 | 18 |
| 33 | MICROWAVE RADIOMETRY IMAGING FOR FOREST FIRE DETECTION: A SIMULATION STUDY. Progress in Electromagnetics Research, 2011, 112, 77-92. | 1.6 | 17 |
| 34 | Feeding the World With Microwaves: How Remote and Wireless Sensing Can Help Precision Agriculture. IEEE Microwave Magazine, 2019, 20, 72-86. | 0.7 | 17 |
| 35 | Downscaling of Land Surface Temperature Using Airborne High-Resolution Data: A Case Study on Aprilia, Italy. IEEE Geoscience and Remote Sensing Letters, 2017, 14, 107-111. | 1.4 | 15 |
| 36 | Neural Networks for Arctic Atmosphere Sounding From Radio Occultation Data. IEEE Transactions on Geoscience and Remote Sensing, 2011, 49, 4846-4855. | 2.7 | 12 |

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| 37 | Microwave Radiometers for Fire Detection in Trains: Theory and Feasibility Study. Sensors, 2016, 16, 906. | 2.1 | 12 |
| 38 | A 24-GHz Front-End Integrated on a Multilayer Cellulose-Based Substrate for Doppler Radar Sensors. Sensors, 2017, 17, 2090. | 2.1 | 12 |
| 39 | A Response of Snow Cover to the Climate in the Northwest Himalaya (NWH) Using Satellite Products. Remote Sensing, 2021, 13, 655. | 1.8 | 12 |
| 40 | Spectral index utility for summer urban heating analysis. Journal of Applied Remote Sensing, 2015, 9, 096030. | 0.6 | 11 |
| 41 | Remote Sensing Techniques for Urban Heating Analysis: A Case Study of Sustainable Construction at District Level. Sustainability, 2017, 9, 1308. | 1.6 | 10 |
| 42 | Development of a Low-Cost Microwave Radiometer for the Early Detection of Fire in Forest Environments. , 2006, , . |  | 9 |
| 43 | Reducing Scaling Effect on Downscaled Land Surface Temperature Maps in Heterogenous Urban Environments. Remote Sensing, 2021, 13, 5044. | 1.8 | 9 |
| 44 | Comparison of Different Neural Network Approaches for the Tropospheric Profiling over the Inter-tropical lands Using GPS Radio Occultation Data. Algorithms, 2009, 2, 31-45. | 1.2 | 8 |
| 45 | Albedo and surface temperature relation in urban areas: Analysis with different sensors. , 2017, , . |  | 8 |
| 46 | Performance Evaluation of Long NDVI Timeseries from AVHRR, MODIS and Landsat Sensors over Landslide-Prone Locations in Qinghai-Tibetan Plateau. Remote Sensing, 2021, 13, 3172. | 1.8 | 8 |
| 47 | Retrieving atmospheric temperature profiles by microwave radiometry using a priori information on atmospheric spatial-temporal evolution. IEEE Transactions on Geoscience and Remote Sensing, 2001, 39, 1896-1905. | 2.7 | 7 |
| 48 | Atmospheric water vapor effects on spaceborne interferometric SAR imaging: Comparison with ground-based measurements and meteorological model simulations at different scales. , 2009, , . |  | 7 |
| 49 | Modeling and Sensing the Vertical Structure of the Atmospheric Path Delay by Microwave Radiometry to Correct SAR Interferograms. IEEE Transactions on Geoscience and Remote Sensing, 2014, 52, 1324-1335. | 2.7 | 6 |
| 50 | Atmospheric Profiling in the Inter-Tropical Ocean Area Based on Neural Network Approach Using GPS Radio Occultations. The Open Atmospheric Science Journal, 2010, 4, 202-209. | 0.5 | 6 |
| 51 | Inter-Wall Fire Detection by Low-Cost Microwave Radiometric Sensors. , 2008, , . |  | 5 |
| 52 | Comparison between surface and canopy layer urban heat island using MODIS data. , 2015, , . |  | 5 |
| 53 | A Novel Sensor Based on a Single-Pixel Microwave Radiometer for Warm Object Counting: Concept Validation and IoT Perspectives. Sensors, 2017, 17, 1388. | 2.1 | 5 |
| 54 | Assimilation of Satellite-Derived Soil Moisture and Brightness Temperature in Land Surface Models: A Review. Remote Sensing, 2022, 14, 770. | 1.8 | 5 |

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| 55 | Neural-network retrieval of integrated precipitable water vapor over land from satellite microwave radiometer. , 2010, , . | | 4 |
| 56 | GNSS Signals: A Powerful Source for Atmosphere and Earth's Surface Monitoring. , 0, , . | | 4 |
| 57 | An Efficient Gain Estimation in the Calibration of Noise-Adding Total Power Radiometers for Radiometric Resolution Improvement. IEEE Transactions on Geoscience and Remote Sensing, 2018, 56, 5289-5298. | 2.7 | 4 |
| 58 | K/Ka-Band Very High Data-Rate Receivers: A Viable Solution for Future Moon Exploration Missions. Electronics (Switzerland), 2019, 8, 349. | 1.8 | 4 |
| 59 | Analysis and Improvement of Cloud Models for Brightness Temperature Simulations. , 0, , . | | 3 |
| 60 | Fire detection by low-cost microwave radiometric sensors. , 2008, , . | | 3 |
| 61 | Synergic use of EO, NWP and ground based measurements for the mitigation of vapour artefacts in SAR interferometry. , 2011, , . | | 3 |
| 62 | Validation of near infrared satellite based algorithms to retrieve atmospheric water vapour content over land. European Journal of Remote Sensing, 2009, , 37-44. | 0.2 | 3 |
| 63 | Monitoring atmospheric water vapour using GPS measurements during precipitation events. , 0, , . | | 2 |
| 64 | Validation of MERIS water vapour in the central Italy by concurrent measurements of microwave radiometers and GPS receivers. , 0, , . | | 2 |
| 65 | Cloud liquid models for propagation studies: Evaluation and refinements. , 2006, , . | | 2 |
| 66 | Neural network for the satellite retrieval of precipitable water vapor over land. , 2010, , . | | 2 |
| 67 | On the possibility of sensing an early stage fire in moving vehicles by microwave radiometry. Journal of Electromagnetic Waves and Applications, 2015, 29, 1875-1886. | 1.0 | 2 |
| 68 | Optimization of the biomechanical design of plate-loaded strength training machines: The free-weight lifting experience. Proceedings of the Institution of Mechanical Engineers, Part P: Journal of Sports Engineering and Technology, 2017, 231, 14-20. | 0.4 | 2 |
| 69 | Tropospheric dry delay for microwaves using a model based on surface measurements on a global scale. IET Microwaves, Antennas and Propagation, 2018, 12, 9-14. | 0.7 | 2 |
| 70 | Experimental campaign for the assessment of atmospheric water vapour retrieval by means of a GPS network. , 0, , . | | 1 |
| 71 | Mapping of precipitable water vapour by integrating measurements of ground-based GPS receivers and satellite-based microwave radiometers. , 0, , . | | 1 |
| 72 | Cloud Model Studies for the Simulation of Brightness Temperatures. , 2006, , . | | 1 |

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| 73 | Development of a neural network for precipitable water vapor retrieval over ocean and land. , 2008, , . | | 1 |
| 74 | Downscaling of the land surface temperature over urban area using Landsat data. , 2015, , . | | 1 |
| 75 | Comments on the published article: â€œCapability of Sentinel-2 data for estimating maximum evapotranspiration and irrigation requirements for tomato crop in central Italyâ€•by S. Vanino et al., Remote Sensing of Environment, 215(2018), 452-470. Remote Sensing of Environment, 2020, 237, 111523. | 4.6 | 1 |
| 76 | Estimation of tropospheric profiles using COSMIC GPS radio occultation data with neural networks. European Journal of Remote Sensing, 2009, , 23-38. | 0.2 | 1 |
| 77 | Monitoring of atmospheric water around precipitation events using a scanning ground-based microwave radiometer. , 0, , . | | 0 |
| 78 | The role of a priori information in designing retrieval algorithms for microwave radiometric profiling of the atmosphere. , 0, , . | | 0 |
| 79 | Passive calibration of the backscattering coefficient of the ENVISAT RA-2: evaluation of radiative models for sea and land. , 0, , . | | 0 |
| 80 | Integration of digital elevation data scanning 3D and interferometric SAR systems. , 0, , . | | 0 |
| 81 | Neural networks for tropospheric profiling from GPS-LEO radio occultation. , 2007, , . | | 0 |
| 82 | Assessment of precipitable water vapour by use of a local GPS network and microwave ground-based radiometer. , 2001, , . | | 0 |
| 83 | Analysis of aerosol optical depth retrieved by MODIS and MERIS and comparison with photometer data. European Journal of Remote Sensing, 2009, , 5-10. | 0.2 | 0 |
| 84 | Fractal Rhythms and Trends of Rainfall Data from Pastaza Province, Ecuador and Veneto, Italy. , 2019, , 241-244. | | 0 |
| 85 | Correcting Scaling Effect in Downscaling Surface Temperature at High Resolutions With a Multiple Regional Correction Approach. IEEE Geoscience and Remote Sensing Letters, 2022, 19, 1-5. | 1.4 | 0 |