

Ronan Fablet

List of Publications by Year in descending order

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197
papers

3,037
citations

185998

28
h-index

264894

42
g-index

213
all docs

213
docs citations

213
times ranked

3437
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|--|-----|-----------|
| 1 | Brain MRI super-resolution using deep 3D convolutional networks. , 2017, , . | | 140 |
| 2 | Altimetry for the future: Building on 25 years of progress. <i>Advances in Space Research</i> , 2021, 68, 319-363. | 1.2 | 119 |
| 3 | Multiscale brain MRI super-resolution using deep 3D convolutional networks. <i>Computerized Medical Imaging and Graphics</i> , 2019, 77, 101647. | 3.5 | 96 |
| 4 | The Analog Data Assimilation. <i>Monthly Weather Review</i> , 2017, 145, 4093-4107. | 0.5 | 90 |
| 5 | Broad impacts of fine-scale dynamics on seascape structure from zooplankton to seabirds. <i>Nature Communications</i> , 2014, 5, 5239. | 5.8 | 87 |
| 6 | EddyNet: A Deep Neural Network For Pixel-Wise Classification of Oceanic Eddies. , 2018, , . | | 79 |
| 7 | Nonparametric motion characterization using causal probabilistic models for video indexing and retrieval. <i>IEEE Transactions on Image Processing</i> , 2002, 11, 393-407. | 6.0 | 74 |
| 8 | Motion recognition using nonparametric image motion models estimated from temporal and multiscale co-occurrence statistics. <i>IEEE Transactions on Pattern Analysis and Machine Intelligence</i> , 2003, 25, 1619-1624. | 9.7 | 74 |
| 9 | Shedding Light on Fish Otolith Biomineralization Using a Bioenergetic Approach. <i>PLoS ONE</i> , 2011, 6, e27055. | 1.1 | 66 |
| 10 | Automatic Detection and Tracking of Human Motion with a View-Based Representation. <i>Lecture Notes in Computer Science</i> , 2002, , 476-491. | 1.0 | 62 |
| 11 | The impact of metabolism on stable isotope dynamics: a theoretical framework. <i>Philosophical Transactions of the Royal Society B: Biological Sciences</i> , 2010, 365, 3455-3468. | 1.8 | 58 |
| 12 | A Multi-Task Deep Learning Architecture for Maritime Surveillance Using AIS Data Streams. , 2018, , . | | 58 |
| 13 | Hidden Markov Models: The Best Models for Forager Movements?. <i>PLoS ONE</i> , 2013, 8, e71246. | 1.1 | 56 |
| 14 | Defining fishing spatial strategies from VMS data: Insights from the world's largest monospecific fishery. <i>Fisheries Research</i> , 2015, 164, 223-230. | 0.9 | 47 |
| 15 | SegSRGAN: Super-resolution and segmentation using generative adversarial networks – Application to neonatal brain MRI. <i>Computers in Biology and Medicine</i> , 2020, 120, 103755. | 3.9 | 46 |
| 16 | Deep learning for ocean remote sensing: an application of convolutional neural networks for super-resolution on satellite-derived SST data. , 2016, , . | | 44 |
| 17 | Reconstructing individual food and growth histories from biogenic carbonates. <i>Marine Ecology - Progress Series</i> , 2012, 447, 151-164. | 0.9 | 44 |
| 18 | Automated fish age estimation from otolith images using statistical learning. <i>Fisheries Research</i> , 2005, 72, 279-290. | 0.9 | 43 |

| # | ARTICLE | IF | CITATIONS |
|----|--|-----|-----------|
| 19 | Fishing Gear Identification From Vessel-Monitoring-System-Based Fishing Vessel Trajectories. IEEE Journal of Oceanic Engineering, 2018, 43, 689-699. | 2.1 | 42 |
| 20 | Unsupervised Bayesian reconstruction of individual life histories from otolith signatures: case study of Sr:Ca transects of European eel (<i>Anguilla anguilla</i>) otoliths. Canadian Journal of Fisheries and Aquatic Sciences, 2007, 64, 152-165. | 0.7 | 40 |
| 21 | Understanding otolith biomineralization processes: new insights into microscale spatial distribution of organic and mineral fractions from Raman microspectrometry. Analytical and Bioanalytical Chemistry, 2008, 392, 551-560. | 1.9 | 40 |
| 22 | GeoTrackNet: A Maritime Anomaly Detector Using Probabilistic Neural Network Representation of AIS Tracks and Contrario Detection. IEEE Transactions on Intelligent Transportation Systems, 2022, 23, 5655-5667. | 4.7 | 40 |
| 23 | Variational shape matching for shape classification and retrieval. Pattern Recognition Letters, 2010, 31, 1650-1657. | 2.6 | 39 |
| 24 | Coherent heat patterns revealed by unsupervised classification of Argo temperature profiles in the North Atlantic Ocean. Progress in Oceanography, 2017, 151, 275-292. | 1.5 | 39 |
| 25 | Completing fishing monitoring with spaceborne Vessel Detection System (VDS) and Automatic Identification System (AIS) to assess illegal fishing in Indonesia. Marine Pollution Bulletin, 2018, 131, 33-39. | 2.3 | 39 |
| 26 | Motion characterization from temporal cooccurrences of local motion-based measures for video indexing. , 0, , . | | 37 |
| 27 | Colonisation tactics of three temperate catadromous species, eel <i>Anguilla anguilla</i> , mullet <i>Liza ramada</i> and flounder <i>Plathychtys flesus</i> , revealed by Bayesian multielemental otolith microchemistry approach. Ecology of Freshwater Fish, 2011, 20, 42-51. | 0.7 | 37 |
| 28 | Overview of recent progress in fisheries acoustics made by Ifremer with examples from the Bay of Biscay. Aquatic Living Resources, 2009, 22, 433-445. | 0.5 | 36 |
| 29 | Segmentation of Mesoscale Ocean Surface Dynamics Using Satellite SST and SSH Observations. IEEE Transactions on Geoscience and Remote Sensing, 2014, 52, 4227-4235. | 2.7 | 34 |
| 30 | CNN-Based Target Recognition and Identification for Infrared Imaging in Defense Systems. Sensors, 2019, 19, 2040. | 2.1 | 33 |
| 31 | Seabed Segmentation Using Optimized Statistics of Sonar Textures. IEEE Transactions on Geoscience and Remote Sensing, 2009, 47, 1621-1631. | 2.7 | 32 |
| 32 | Ship Identification and Characterization in Sentinel-1 SAR Images with Multi-Task Deep Learning. Remote Sensing, 2019, 11, 2997. | 1.8 | 31 |
| 33 | Learning latent dynamics for partially observed chaotic systems. Chaos, 2020, 30, 103121. | 1.0 | 30 |
| 34 | Variational Region-Based Segmentation Using Multiple Texture Statistics. IEEE Transactions on Image Processing, 2010, 19, 3146-3156. | 6.0 | 29 |
| 35 | Plasticity of European flounder life history patterns discloses alternatives to catadromy. Marine Ecology - Progress Series, 2012, 465, 267-280. | 0.9 | 29 |
| 36 | Convolutional Neural Networks for object recognition on mobile devices: A case study. , 2016, , . | | 28 |

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| 37 | Data-Driven Models for the Spatio-Temporal Interpolation of Satellite-Derived SST Fields. IEEE Transactions on Computational Imaging, 2017, 3, 647-657. | 2.6 | 28 |
| 38 | Bilinear Residual Neural Network for the Identification and Forecasting of Geophysical Dynamics. , 2018, , . | | 28 |
| 39 | New insights into behavioural ecology of European seabass off the West Coast of France: implications at local and population scales. ICES Journal of Marine Science, 2019, 76, 501-515. | 1.2 | 27 |
| 40 | A HMM-based model to geolocate pelagic fish from high-resolution individual temperature and depth histories: European sea bass as a case study. Ecological Modelling, 2016, 321, 10-22. | 1.2 | 26 |
| 41 | Importance and future of individual markers for the ecosystem approach to fisheries. Aquatic Living Resources, 2009, 22, 395-408. | 0.5 | 25 |
| 42 | Physical invariance in neural networks for subgrid-scale scalar flux modeling. Physical Review Fluids, 2021, 6, . | 1.0 | 25 |
| 43 | Assimilative 2-D Lagrangian Transport Model for the Estimation of Oil Leakage Parameters From SAR Images: Application to the Montara Oil Spill. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2016, 9, 4962-4969. | 2.3 | 23 |
| 44 | Learning Variational Data Assimilation Models and Solvers. Journal of Advances in Modeling Earth Systems, 2021, 13, e2021MS002572. | 1.3 | 23 |
| 45 | SST spatial anisotropic covariances from METOP-AVHRR data. Remote Sensing of Environment, 2014, 141, 144-148. | 4.6 | 22 |
| 46 | Neural Network Based Kalman Filters for the Spatio-Temporal Interpolation of Satellite-Derived Sea Surface Temperature. Remote Sensing, 2018, 10, 1864. | 1.8 | 22 |
| 47 | SWOT Spatial Scales in the Western Mediterranean Sea Derived from Pseudo-Observations and an Ad Hoc Filtering. Remote Sensing, 2018, 10, 599. | 1.8 | 22 |
| 48 | Region-Based Image Segmentation Using Texture Statistics And Level-Set Methods. , 0, , . | | 21 |
| 49 | Fusion of textural statistics using a similarity measure: application to texture recognition and segmentation. Pattern Analysis and Applications, 2008, 11, 425-434. | 3.1 | 21 |
| 50 | Residual Networks as Flows of Diffeomorphisms. Journal of Mathematical Imaging and Vision, 2020, 62, 365-375. | 0.8 | 21 |
| 51 | Combining Analog Method and Ensemble Data Assimilation: Application to the Lorenz-63 Chaotic System. , 2015, , 3-12. | | 21 |
| 52 | Intercomparison of Data-Driven and Learning-Based Interpolations of Along-Track Nadir and Wide-Swath SWOT Altimetry Observations. Remote Sensing, 2020, 12, 3806. | 1.8 | 20 |
| 53 | Reconstructing Global Chlorophyll-a Variations Using a Non-linear Statistical Approach. Frontiers in Marine Science, 2020, 7, . | 1.2 | 20 |
| 54 | Multiscale characterization of spatial relationships among oxycline depth, macrozooplankton, and forage fish off Peru using geostatistics, principal coordinates of neighbour matrices (PCNMs), and wavelets. Canadian Journal of Fisheries and Aquatic Sciences, 2012, 69, 740-754. | 0.7 | 19 |

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| 55 | Visual textures as realizations of multivariate log-Gaussian Cox processes. , 2011, , . | | 18 |
| 56 | Data-Driven Interpolation of Sea Level Anomalies Using Analog Data Assimilation. Remote Sensing, 2019, 11, 858. | 1.8 | 18 |
| 57 | Reconstructing individual shape histories of fish otoliths: A new image-based tool for otolith growth analysis and modeling. Fisheries Research, 2009, 96, 148-159. | 0.9 | 17 |
| 58 | Detection of linear trends in multisensor time series in the presence of autocorrelated noise: Application to the chlorophyllâ€”a SeaWiFS and MERIS data sets and extrapolation to the incoming Sentinel 3â€”OLCI mission. Journal of Geophysical Research: Oceans, 2013, 118, 3752-3763. | 1.0 | 17 |
| 59 | MEETC2: Ocean color atmospheric corrections in coastal complex waters using a Bayesian latent class model and potential for the incoming sentinel 3 â€” OLCI mission. Remote Sensing of Environment, 2016, 172, 39-49. | 4.6 | 16 |
| 60 | Ecosystem scenarios shape fishermen spatial behavior. The case of the Peruvian anchovy fishery in the Northern Humboldt Current System. Progress in Oceanography, 2014, 128, 60-73. | 1.5 | 15 |
| 61 | Unsupervised region-based image segmentation using texture statistics and level-set methods. , 2007, , . | | 14 |
| 62 | Shape geodesics for the classification of calcified structures: Beyond Fourier shape descriptors. Fisheries Research, 2009, 98, 8-15. | 0.9 | 14 |
| 63 | Diel vertical migration of European hake <i>Merluccius merluccius</i> and associated temperature histories: insights from a pilot dataâ€”storage tagging (DST) experiment. Journal of Fish Biology, 2012, 81, 728-734. | 0.7 | 14 |
| 64 | Fishing gear recognition from VMS data to identify illegal fishing activities in Indonesia. , 2015, , . | | 14 |
| 65 | Spatial and seasonal patterns of fine-scale to mesoscale upper ocean dynamics in an Eastern Boundary Current System. Progress in Oceanography, 2016, 142, 105-116. | 1.5 | 14 |
| 66 | Coupling spectral analysis and hidden Markov models for the segmentation of behavioural patterns. Movement Ecology, 2017, 5, 20. | 1.3 | 14 |
| 67 | MRF-based moving object detection from MPEG coded video. , 0, , . | | 13 |
| 68 | Rafting behaviour of seabirds as a proxy to describe surface ocean currents in the Balearic Sea. Scientific Reports, 2019, 9, 17775. | 1.6 | 13 |
| 69 | Classifying fish schools and estimating their species proportions in fishery-acoustic surveys. ICES Journal of Marine Science, 2009, 66, 1136-1142. | 1.2 | 12 |
| 70 | How do the organic and mineral fractions drive the opacity of fish otoliths? Insights using Raman microspectrometry. Canadian Journal of Fisheries and Aquatic Sciences, 2013, 70, 711-719. | 0.7 | 12 |
| 71 | Protein Interaction Hotspot Identification Using Sequence-Based Frequency-Derived Features. IEEE Transactions on Biomedical Engineering, 2013, 60, 2993-3002. | 2.5 | 12 |
| 72 | Improving Mesoscale Altimetric Data From a Multitracer Convolutional Processing of Standard Satellite-Derived Products. IEEE Transactions on Geoscience and Remote Sensing, 2018, 56, 2518-2525. | 2.7 | 12 |

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| 73 | Spatio-Temporal Interpolation of Cloudy SST Fields Using Conditional Analog Data Assimilation. <i>Remote Sensing</i> , 2018, 10, 310. | 1.8 | 12 |
| 74 | PDE-NetGen 1.0: from symbolic partial differential equation (PDE) representations of physical processes to trainable neural network representations. <i>Geoscientific Model Development</i> , 2020, 13, 3373-3382. | 1.3 | 12 |
| 75 | Non parametric motion recognition using temporal multiscale Gibbs models. , 0, , . | | 11 |
| 76 | Semi-local extraction of ring structures in images of biological hard tissues: application to the Bayesian interpretation of fish otoliths for age and growth estimation. <i>Canadian Journal of Fisheries and Aquatic Sciences</i> , 2006, 63, 1414-1428. | 0.7 | 11 |
| 77 | Joint Interpolation and Representation Learning for Irregularly Sampled Satellite-Derived Geophysical Fields. <i>Frontiers in Applied Mathematics and Statistics</i> , 2021, 7, . | 0.7 | 11 |
| 78 | Robust statistical registration of 3D ultrasound images using texture information. , 0, , . | | 10 |
| 79 | 2D Image-based reconstruction of shape deformation of biological structures using a level-set representation. <i>Computer Vision and Image Understanding</i> , 2008, 111, 295-306. | 3.0 | 10 |
| 80 | Preparation techniques alter the mineral and organic fractions of fish otoliths: insights using Raman micro-spectrometry. <i>Analytical and Bioanalytical Chemistry</i> , 2013, 405, 4787-4798. | 1.9 | 10 |
| 81 | END-TO-END PHYSICS-INFORMED REPRESENTATION LEARNING FOR SATELLITE OCEAN REMOTE SENSING DATA: APPLICATIONS TO SATELLITE ALTIMETRY AND SEA SURFACE CURRENTS. <i>ISPRS Annals of the Photogrammetry, Remote Sensing and Spatial Information Sciences</i> , 0, V-3-2021, 295-302. | 0.0 | 10 |
| 82 | Motion recognition using spatio-temporal random walks in sequence of 2D motion-related measurements. , 0, , . | | 9 |
| 83 | Statistical learning applied to computer-assisted fish age and growth estimation from otolith images. <i>Fisheries Research</i> , 2006, 81, 219-228. | 0.9 | 9 |
| 84 | Keypoint-Based Analysis of Sonar Images: Application to Seabed Recognition. <i>IEEE Transactions on Geoscience and Remote Sensing</i> , 2012, 50, 1171-1184. | 2.7 | 9 |
| 85 | Multiscale Event-Based Mining in Geophysical Time Series: Characterization and Distribution of Significant Time-Scales in the Sea Surface Temperature Anomalies Relatively to ENSO Periods from 1985 to 2009. <i>IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing</i> , 2014, 7, 3543-3552. | 2.3 | 9 |
| 86 | Learning-Based Emulation of Sea Surface Wind Fields From Numerical Model Outputs and SAR Data. <i>IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing</i> , 2015, 8, 4742-4750. | 2.3 | 9 |
| 87 | Assimilation-Based Learning of Chaotic Dynamical Systems from Noisy and Partial Data. , 2020, , . | | 9 |
| 88 | Detection of Abnormal Vessel Behaviours from AIS data using GeoTrackNet: from the Laboratory to the Ocean. , 2020, , . | | 9 |
| 89 | Preliminary observations of survival and growth of European hake in captivity. <i>Aquaculture Research</i> , 2012, 43, 949-954. | 0.9 | 8 |
| 90 | Sea Surface Temperature Prediction and Reconstruction Using Patch-Level Neural Network Representations. , 2018, , . | | 8 |

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| 91 | Analog Data Assimilation of Along-Track Nadir and Wide-Swath SWOT Altimetry Observations in the Western Mediterranean Sea. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2019, 12, 2530-2540. | 2.3 | 8 |
| 92 | Statistical motion-based object indexing using optic flow field. , 0, , . | | 7 |
| 93 | Automatic morphological detection of otolith nucleus. Pattern Recognition Letters, 2006, 27, 658-666. | 2.6 | 7 |
| 94 | Methodological developments for improved bottom detection with the ME70 multibeam echosounder. ICES Journal of Marine Science, 2009, 66, 1015-1022. | 1.2 | 7 |
| 95 | Spatio-temporal interpolation of sea surface temperature using high resolution remote sensing data. , 2014, , . | | 7 |
| 96 | Multiscale Analysis of Geometric Planar Deformations: Application to Wild Animal Electronic Tracking and Satellite Ocean Observation Data. IEEE Transactions on Geoscience and Remote Sensing, 2014, 52, 3627-3636. | 2.7 | 7 |
| 97 | Missing data super-resolution using non-local and statistical priors. , 2015, , . | | 7 |
| 98 | Joint Interpolation of Multisensor Sea Surface Temperature Fields Using Nonlocal and Statistical Priors. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2016, 9, 2665-2675. | 2.3 | 7 |
| 99 | Recurrent Neural Networks with Stochastic Layers for Acoustic Novelty Detection. , 2019, , . | | 7 |
| 100 | Spatial Statistics of Visual Keypoints for Texture Recognition. Lecture Notes in Computer Science, 2010, , 764-777. | 1.0 | 7 |
| 101 | Spatial Statistics of Objects in 3-D Sonar Images: Application to Fisheries Acoustics. IEEE Geoscience and Remote Sensing Letters, 2012, 9, 56-59. | 1.4 | 6 |
| 102 | Geodesics-Based Image Registration: Applications To Biological And Medical Images Depicting Concentric Ring Patterns. IEEE Transactions on Image Processing, 2013, 22, 4436-4446. | 6.0 | 6 |
| 103 | Characterization of Time-Varying Regimes in Remote Sensing Time Series: Application to the Forecasting of Satellite-Derived Suspended Matter Concentrations. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2015, 8, 406-417. | 2.3 | 6 |
| 104 | Spatio-Temporal Decomposition of Satellite-Derived SST and SSH Fields: Links Between Surface Data and Ocean Interior Dynamics in the Agulhas Region. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2016, 9, 5106-5112. | 2.3 | 6 |
| 105 | Neural Network Approaches to Reconstruct Phytoplankton Time-Series in the Global Ocean. Remote Sensing, 2020, 12, 4156. | 1.8 | 6 |
| 106 | Weakly Supervised Classification of Objects in Images Using Soft Random Forests. Lecture Notes in Computer Science, 2010, , 185-198. | 1.0 | 6 |
| 107 | Weakly supervised learning using proportion-based information: An application to fisheries acoustics. , 2008, , . | | 5 |
| 108 | Variational data assimilation for missing data interpolation in SST images. , 2010, , . | | 5 |

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| 109 | Object recognition using proportion-based prior information: Application to fisheries acoustics. Pattern Recognition Letters, 2011, 32, 153-158. | 2.6 | 5 |
| 110 | Data-driven assimilation of irregularly-sampled image time series. , 2017, , . | | 5 |
| 111 | Simultaneous Super-Resolution and Segmentation Using a Generative Adversarial Network: Application to Neonatal Brain MRI. , 2019, , . | | 5 |
| 112 | Residual Integration Neural Network. , 2019, , . | | 5 |
| 113 | Learning Endmember Dynamics in Multitemporal Hyperspectral Data Using A State-Space Model Formulation. , 2020, , . | | 5 |
| 114 | Joint Calibration and Mapping of Satellite Altimetry Data Using Trainable Variational Models. , 2022, , . | | 5 |
| 115 | Invariant descriptors of sonar textures from spatial statistics of local features. , 2010, , . | | 4 |
| 116 | Bags-of-Features for fish school cluster characterization in pelagic ecosystems: application to the discrimination of juvenile and adult anchovy (<i>Engraulis ringens</i>) clusters off Peru. Canadian Journal of Fisheries and Aquatic Sciences, 2012, 69, 1329-1339. | 0.7 | 4 |
| 117 | Statistical Descriptors of Ocean Regimes From the Geometric Regularity of SST Observations. IEEE Geoscience and Remote Sensing Letters, 2012, 9, 851-855. | 1.4 | 4 |
| 118 | Spatio-temporal segmentation and estimation of ocean surface currents from satellite sea surface temperature fields. , 2013, , . | | 4 |
| 119 | Deep learning techniques applied to super-resolution chemistry transport modeling for operational uses. Environmental Research Communications, 2021, 3, 085001. | 0.9 | 4 |
| 120 | Interpolating Orientation Fields: An Axiomatic Approach. Lecture Notes in Computer Science, 2006, , 241-254. | 1.0 | 4 |
| 121 | Non-Parametric Motion Activity Analysis for Statistical Retrieval with Partial Query. Journal of Mathematical Imaging and Vision, 2001, 14, 257-270. | 0.8 | 3 |
| 122 | Robust time-frequency model estimation in otolith images for fish age and growth analysis. , 0, , . | | 3 |
| 123 | Orientation Interpolation and Applications. , 2006, , . | | 3 |
| 124 | Combining image-level and object-level inference for weakly supervised object recognition. Application to fisheries acoustics. , 2009, , . | | 3 |
| 125 | Shape geodesics for boundary-based object recognition and retrieval. , 2009, , . | | 3 |
| 126 | Random walk models for geometry-driven image super-resolution. , 2013, , . | | 3 |

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|-----|---|-----|-----------|
| 127 | Using archived datasets for missing data interpolation in ocean remote sensing observation series. , 2016, , . | | 3 |
| 128 | Analog Data Assimilation for Along-Track Nadir and Swot Altimetry Data in the Western Mediterranean Sea. , 2018, , . | | 3 |
| 129 | Unsupervised Reconstruction of Sea Surface Currents from AIS Maritime Traffic Data Using Learnable Variational Models. , 2021, , . | | 3 |
| 130 | Unsupervised Reconstruction of Sea Surface Currents from AIS Maritime Traffic Data Using Trainable Variational Models. Remote Sensing, 2021, 13, 3162. | 1.8 | 3 |
| 131 | Data-Driven Interpolation of Sea Surface Suspended Concentrations Derived from Ocean Colour Remote Sensing Data. Remote Sensing, 2021, 13, 3537. | 1.8 | 3 |
| 132 | Statistical Motion-Based Retrieval with Partial Query. Lecture Notes in Computer Science, 2000, , 96-107. | 1.0 | 3 |
| 133 | Using generative adversarial networks (<scp>GAN</scp>) to simulate centralâ€place foraging trajectories. Methods in Ecology and Evolution, 2022, 13, 1275-1287. | 2.2 | 3 |
| 134 | Deep inference of seabird dives from GPS-only records: Performance and generalization properties. PLoS Computational Biology, 2022, 18, e1009890. | 1.5 | 3 |
| 135 | Automatic fish age estimation from otolith images using statistical learning. , 2004, , . | | 2 |
| 136 | Statistical discrimination of seabed textures in sonar images using co-occurrence statistics. , 2005, , . | | 2 |
| 137 | Speckle denoising using a variational multi-wavelet approach. , 2005, , . | | 2 |
| 138 | Variational 1D signal registration and shape geodesics for shape classification: Application to marine biological archives. , 2009, , . | | 2 |
| 139 | Target tracking in the time-frequency domain for a driving aid application. , 2009, , . | | 2 |
| 140 | Weakly supervised learning with decision trees applied to fisheries acoustics.. , 2010, , . | | 2 |
| 141 | Descriptors for sea surface temperature front regularity characterization. , 2010, , . | | 2 |
| 142 | Multi-resolution missing data interpolation in SST image series. , 2011, , . | | 2 |
| 143 | Routine acoustic data as new tools for a 3D vision of the abiotic and biotic components of marine ecosystem and their interactions. , 2013, , . | | 2 |
| 144 | Seabed classification using a steerable multibeam echo sounder. , 2016, , . | | 2 |

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| 145 | Locally-adapted convolution-based super-resolution of irregularly-sampled ocean remote sensing data. , 2017, , . | | 2 |
| 146 | An Approximate Message Passing Approach for DOA Estimation in Phase Noisy Environments. Lecture Notes in Computer Science, 2018, , 385-394. | 1.0 | 2 |
| 147 | Learning Ocean Dynamical Priors from Noisy Data Using Assimilation-Derived Neural Nets. , 2019, , . | | 2 |
| 148 | Generalized Pareto for Pattern-Oriented Random Walk Modelling of Organismsâ€™ Movements. PLoS ONE, 2015, 10, e0132231. | 1.1 | 2 |
| 149 | Faster-RCNN with a compact CNN backbone for target detection in infrared images. , 2020, , . | | 2 |
| 150 | Learning stochastic dynamical systems with neural networks mimicking the Euler-Maruyama scheme. , 2021, , . | | 2 |
| 151 | Extraction and interpretation of ring structures in images of biological hard tissues: application to fish age and growth estimation. , 2005, , . | | 1 |
| 152 | Region-based and incidence angle dependent segmentation of seabed sonar images using a level set approach combined to local texture statistics. , 2006, , . | | 1 |
| 153 | Variational fronts tracking in sea surface temperature images. , 2010, , . | | 1 |
| 154 | Multivariate log-Gaussian Cox models of elementary shapes for recognizing natural scene categories. , 2011, , . | | 1 |
| 155 | Non-parametric Ensemble Kalman methods for the inpainting of noisy dynamic textures. , 2015, , . | | 1 |
| 156 | Texture synthesis guided by a low-resolution image. , 2016, , . | | 1 |
| 157 | Spatio-temporal interpolation of altimeter-derived SSH fields using analog data assimilation: A case-study in the south china sea. , 2017, , . | | 1 |
| 158 | Learning Stochastic Representations of Geophysical Dynamics. , 2019, , . | | 1 |
| 159 | End-to-End Learning of Variational Models and Solvers for the Resolution of Interpolation Problems. , 2021, , . | | 1 |
| 160 | New Descriptors for Image and Video Indexing. Computational Imaging and Vision, 2001, , 213-234. | 0.6 | 1 |
| 161 | End-to-End Kalman Filter for the Reconstruction of Sea Surface Dynamics from Satellite Data. , 2021, , . | | 1 |
| 162 | Data-Driven Spatio-Temporal Interpolation of Sea Surface Sediment Concentration from Satellite-Derived Data: An OSSE Case-Study in the Bay of Biscay. , 2021, , . | | 1 |

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| 163 | End-to-End Learning of Variational Interpolation Schemes for Satellite-Derived SSH Data. , 2021, , . | | 1 |
| 164 | Weakly Supervised Learning: Application to Fish School Recognition. Studies in Computational Intelligence, 2011, , 203-223. | 0.7 | 1 |
| 165 | Filtering Internal Tides from Wide-Swath Altimeter Data Using Convolutional Neural Networks. , 2020, , . | | 1 |
| 166 | Physically Informed Neural Networks for the Simulation and Data-Assimilation of Geophysical Dynamics. , 2020, , . | | 1 |
| 167 | <title>Motion segmentation and cloud tracking on noisy infrared image sequences</title>. , 1998, , . | | 0 |
| 168 | <title>Motion estimation on infrared image sequences</title>. , 1999, , . | | 0 |
| 169 | Automatic morphological detection of otolith nucleus. , 2004, , . | | 0 |
| 170 | Variational multi-wavelet restoration of noisy images. , 2005, , . | | 0 |
| 171 | Variational Level-Set Reconstruction of Accretionary Morphogenesis from Images. , 2006, , . | | 0 |
| 172 | Unsupervised Calibrated Sonar Imaging for Seabed Observation Using Hidden Markov Random Fields. , 0, , . | | 0 |
| 173 | Non-rigid registration of shape sequence images: Applications to biological and medical images. , 2008, , . | | 0 |
| 174 | Automatic fish school classification for acoustic sensing of marine ecosystem. , 2008, , . | | 0 |
| 175 | Fast marching and acoustic descriptors based method for fish proportion interpolation. , 2008, , . | | 0 |
| 176 | Weakly supervised classification with bagging in fisheries acoustics. , 2009, , . | | 0 |
| 177 | Log-gaussian cox processes of visual keypoints for sonar texture recognition. , 2011, , . | | 0 |
| 178 | Multi-resolution data assimilation for missing data interpolation in geophysical sequences. , 2012, , . | | 0 |
| 179 | Spatio-temporal segmentation of mesoscale ocean surface dynamics using satellite data. , 2013, , . | | 0 |
| 180 | Hidden surface dynamical modes and SSH retrievals from a joint analysis of altimetry and microwave SST. , 2014, , . | | 0 |

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| 181 | Ocean surface current retrieval using a non homogeneous Markov-switching multi-regime model. , 2014, , . | | 0 |
| 182 | Statistical emulation of high-resolution SAR wind fields from low-resolution model predictions. , 2014, , . | | 0 |
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