# Xiao Cheng

List of Publications by Year
in descending order



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|---|---|---|---|
| 76 papers | 1,183 citations | 471509 17 h-index | 477307 29 g-index |
| 83 all docs | 83 docs citations | 83 times ranked | 1649 citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Time Series Phase Unwrapping Based on Graph Theory and Compressed Sensing. IEEE Transactions on Geoscience and Remote Sensing, 2022, 60, 1-12. | 6.3 | 15 |
| 2 | Intercomparison of Arctic Sea Ice Backscatter and Ice Type Classification Using Ku-Band and C-Band Scatterometers. IEEE Transactions on Geoscience and Remote Sensing, 2022, 60, 1-18. | 6.3 | 7 |
| 3 | The seasonal cycle and break-up of landfast sea ice along the northwest coast of Kotelny Island, East Siberian Sea. Journal of Glaciology, 2022, 68, 153-165. | 2.2 | 5 |
| 4 | Detection of thermokarst lake drainage events in the northern Alaska permafrost region. Science of the Total Environment, 2022, 807, 150828. | 8.0 | 9 |
| 5 | Concept-driven extraction of the Antarctic marginal sea ice zone from remote sensing image time series. Spatial Statistics, 2022, , 100578. | 1.9 | 1 |
| 6 | Recent Changes in Groundwater and Surface Water in Large Pan-Arctic River Basins. Remote Sensing, 2022, 14, 607. | 4.0 | 7 |
| 7 | Fine-resolution mapping of the circumpolar Arctic Man-made impervious areas (CAMI) using sentinels, OpenStreetMap and ArcticDEM. Big Earth Data, 2022, 6, 196-218. | 4.4 | 6 |
| 8 | Global Snowmelt Onset Reflects Climate Variability: Insights from Spaceborne Radiometer Observations. Journal of Climate, 2022, 35, 2945-2959. | 3.2 | 5 |
| 9 | Structural and Operational Optimization of A Flapping Fin Used as A Self-Propulsor for AUV Propulsion. China Ocean Engineering, 2022, 36, 86-99. | 1.6 | 1 |
| 10 | Australian Coastal Sea Level Trends Over 16Âyr of Reprocessed Jason Altimeter 20â€Hz Data Sets. Journal of Geophysical Research: Oceans, 2022, 127, . | 2.6 | 3 |
| 11 | An Intercomparison of Satellite Derived Arctic Sea Ice Motion Products. Remote Sensing, 2022, 14, 1261. | 4.0 | 11 |
| 12 | Greenland Ice Sheet Daily Surface Melt Flux Observed From Space. Geophysical Research Letters, 2022, 49, . | 4.0 | 9 |
| 13 | Grounding Event of Iceberg D28 and Its Interactions with Seabed Topography. Remote Sensing, 2022, 14, 154. | 4.0 | 2 |
| 14 | Distribution and Evolution of Supraglacial Lakes in Greenland during the 2016â€“2018 Melt Seasons. Remote Sensing, 2022, 14, 55. | 4.0 | 8 |
| 15 | Investigation of Polarimetric Decomposition for Arctic Summer Sea Ice Classification Using Gaofen-3 Fully Polarimetric SAR Data. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2022, 15, 3904-3915. | 4.9 | 6 |
| 16 | Landsat-Based Monitoring of Landscape Dynamics in Arctic Permafrost Region. Journal of Remote Sensing, 2022, 2022, . | 6.7 | 10 |
| 17 | Decadal Changes in Greenland Ice Sheet Firn Aquifers from Radar Scatterometer. Remote Sensing, 2022, 14, 2134. | 4.0 | 2 |
| 18 | On the Synergy of SMAP and AMSR2 for Estimating Snow Depth on Arctic Sea Ice. IEEE Geoscience and Remote Sensing Letters, 2022, 19, 1-5. | 3.1 | 2 |

| # | Article | IF | Citations |
|---|---|---|---|
| 19 | Deep Learning Based Sea Ice Classification with Gaofen-3 Fully Polarimetric SAR Data. Remote Sensing, 2021, 13, 1452. | 4.0 | 30 |
| 20 | Delay in Arctic Sea Ice Freeze-Up Linked to Early Summer Sea Ice Loss: Evidence from Satellite Observations. Remote Sensing, 2021, 13, 2162. | 4.0 | 12 |
| 21 | How Do Weakening of the Stratospheric Polar Vortex in the Southern Hemisphere Affect Regional Antarctic Sea Ice Extent?. Geophysical Research Letters, 2021, 48, e2021GL092582. | 4.0 | 10 |
| 22 | Evaluation of 2-m Air Temperature and Surface Temperature from ERA5 and ERA-I Using Buoy Observations in the Arctic during 2010â€“2020. Remote Sensing, 2021, 13, 2813. | 4.0 | 21 |
| 23 | Fine-Resolution Mapping of Pan-Arctic Lake Ice-Off Phenology Based on Dense Sentinel-2 Time Series Data. Remote Sensing, 2021, 13, 2742. | 4.0 | 4 |
| 24 | Vegetation grows more luxuriantly in Arctic permafrost drained lake basins. Global Change Biology, 2021, 27, 5865-5876. | 9.5 | 13 |
| 25 | Glacier Velocity Changes in the Himalayas in Relation to Ice Mass Balance. Remote Sensing, 2021, 13, 3825. | 4.0 | 14 |
| 26 | A 15-year circum-Antarctic iceberg calving dataset derived from continuous satellite observations. Earth System Science Data, 2021, 13, 4583-4601. | 9.9 | 10 |
| 27 | Fingerprint of COVID-19 in Arctic sea ice changes. Science Bulletin, 2021, 66, 2050-2053. | 9.0 | 3 |
| 28 | Performance evaluation of GEDI and ICESat-2 laser altimeter data for terrain and canopy height retrievals. Remote Sensing of Environment, 2021, 264, 112571. | 11.0 | 133 |
| 29 | Effectively Extracting Iceberg Freeboard Using Bi-Temporal Landsat-8 Panchromatic Image Shadows. Remote Sensing, 2021, 13, 430. | 4.0 | 4 |
| 30 | Assessment of Snow Depth over Arctic Sea Ice in CMIP6 Models Using Satellite Data. Advances in Atmospheric Sciences, 2021, 38, 168-186. | 4.3 | 6 |
| 31 | Improving the observation and prediction capabilities for Arctic marine environment: from the perspective of Arctic Shipping. Acta Oceanologica Sinica, 2021, 40, 1-3. | 1.0 | 1 |
| 32 | Accuracy Evaluation on Geolocation of the Chinese First Polar Microsatellite (Ice Pathfinder) Imagery. Remote Sensing, 2021, 13, 4278. | 4.0 | 9 |
| 33 | Retreating Shorelines as an Emerging Threat to AdÃ©lie Penguins on Inexpressible Island. Remote Sensing, 2021, 13, 4718. | 4.0 | 2 |
| 34 | An Improved Side Scan Sonar Image Processing Framework for Autonomous Underwater Vehicle Navigation. , 2021, , . | | 2 |
| 35 | Quantifying economic impacts of climate change under nine future emission scenarios within CMIP6. Science of the Total Environment, 2020, 703, 134950. | 8.0 | 39 |
| 36 | Ocean contributes to the melting of the Jakobshavn Glacier front. Science China Earth Sciences, 2020, 63, 405-411. | 5.2 | 2 |

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|---|---|---|---|
| 37 | UAV-Based Photogrammetry and LiDAR for the Characterization of Ice Morphology Evolution. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2020, 13, 4188-4199. | 4.9 | 19 |
| 38 | Uniqueness of Lekima compared to tropical cyclones landed in the east coast of China during 1979â€“2019. Acta Oceanologica Sinica, 2020, 39, 121-124. | 1.0 | 6 |
| 39 | Retrieval of Melt Pond Fraction over Arctic Sea Ice during 2000â€“2019 Using an Ensemble-Based Deep Neural Network. Remote Sensing, 2020, 12, 2746. | 4.0 | 10 |
| 40 | Is Enhanced Predictability of the Amundsen Sea Low in Subseasonal to Seasonal Hindcasts Linked to Stratosphereâ€Troposphere Coupling?. Geophysical Research Letters, 2020, 47, e2020GL089700. | 4.0 | 8 |
| 41 | Efficient Location and Extraction of the Iceberg Calved Areas of the Antarctic Ice Shelves. Remote Sensing, 2020, 12, 2658. | 4.0 | 6 |
| 42 | Lagged response of AdÃ©lie penguin (Pygoscelis adeliae) abundance to environmental variability in the Ross Sea, Antarctica. Polar Biology, 2020, 43, 1769-1781. | 1.2 | 6 |
| 43 | MYI Floes Identification Based on the Texture and Shape Feature from Dual-Polarized Sentinel-1 Imagery. Remote Sensing, 2020, 12, 3221. | 4.0 | 15 |
| 44 | Automatic Extraction of Supraglacial Lakes in Southwest Greenland during the 2014â€“2018 Melt Seasons Based on Convolutional Neural Network. Water (Switzerland), 2020, 12, 891. | 2.7 | 11 |
| 45 | Using the Google Earth Engine to estimate a 10Âm resolution monthly inventory of soil fugitive dust emissions in Beijing, China. Science of the Total Environment, 2020, 735, 139174. | 8.0 | 9 |
| 46 | Recent and imminent calving events do little to impair Amery ice shelfâ€™s stability. Acta Oceanologica Sinica, 2020, 39, 168-170. | 1.0 | 8 |
| 47 | A new image mosaic of Greenland using Landsat-8 OLI images. Science Bulletin, 2020, 65, 522-524. | 9.0 | 15 |
| 48 | The spatio-temporal patterns of landfast ice in Antarctica during 2006â€“2011 and 2016â€“2017 using high-resolution SAR imagery. Remote Sensing of Environment, 2020, 242, 111736. | 11.0 | 11 |
| 49 | Remote Sensing of Environmental Changes in Cold Regions: Methods, Achievements and Challenges. Remote Sensing, 2019, 11, 1952. | 4.0 | 34 |
| 50 | Automatically Extracted Antarctic Coastline Using Remotely-Sensed Data: An Update. Remote Sensing, 2019, 11, 1844. | 4.0 | 15 |
| 51 | Resolving Fine-Scale Surface Features on Polar Sea Ice: A First Assessment of UAS Photogrammetry Without Ground Control. Remote Sensing, 2019, 11, 784. | 4.0 | 25 |
| 52 | Supraglacial rivers on the northwest Greenland Ice Sheet, Devon Ice Cap, and Barnes Ice Cap mapped using Sentinel-2 imagery. International Journal of Applied Earth Observation and Geoinformation, 2019, 78, 1-13. | 2.8 | 22 |
| 53 | Retrieval of Snow Depth over Arctic Sea Ice Using a Deep Neural Network. Remote Sensing, 2019, 11, 2864. | 4.0 | 19 |
| 54 | Towards reliable Arctic sea ice prediction using multivariate data assimilation. Science Bulletin, 2019, 64, 63-72. | 9.0 | 27 |

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|---|---|---|---|
| 55 | An Accurate and Automated Method for Identifying and Mapping Exposed Rock Outcrop in Antarctica Using Landsat 8 Images. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2018, 11, 57-67. | 4.9 | 3 |
| 56 | Opportunities and challenges of applications of satellite-derived sun-induced fluorescence at relatively high spatial resolution. Science of the Total Environment, 2018, 619-620, 649-653. | 8.0 | 26 |
| 57 | The potential of sea ice leads as a predictor for summer Arctic sea ice extent. Cryosphere, 2018, 12, 3747-3757. | 3.9 | 20 |
| 58 | Limitations and Challenges of MODIS-Derived Phenological Metrics Across Different Landscapes in Pan-Arctic Regions. Remote Sensing, 2018, 10, 1784. | 4.0 | 16 |
| 59 | A new surface meltwater routing model for use on the Greenland Ice Sheet surface. Cryosphere, 2018, 12, 3791-3811. | 3.9 | 23 |
| 60 | Antarctic Surface Ice Velocity Retrieval from MODIS-Based Mosaic of Antarctica (MOA). Remote Sensing, 2018, 10, 1045. | 4.0 | 12 |
| 61 | Monitoring the tabular icebergs C28A and C28B calved from the Mertz Ice Tongue using radar remote sensing data. Remote Sensing of Environment, 2018, 216, 615-625. | 11.0 | 19 |
| 62 | Seasonal patterns of canopy photosynthesis captured by remotely sensed sun-induced fluorescence and vegetation indexes in mid-to-high latitude forests: A cross-platform comparison. Science of the Total Environment, 2018, 644, 439-451. | 8.0 | 17 |
| 63 | Aerial photography based census of AdÃ©lie Penguin and its application in CH4 and N2O budget estimation in Victoria Land, Antarctic. Scientific Reports, 2017, 7, 12942. | 3.3 | 9 |
| 64 | The effect of seafloor topography in the Southern Ocean on tabular iceberg drifting and grounding. Science China Earth Sciences, 2017, 60, 697-706. | 5.2 | 5 |
| 65 | Satellite-Based Sea Ice Navigation for Prydz Bay, East Antarctica. Remote Sensing, 2017, 9, 518. | 4.0 | 20 |
| 66 | Grounding and calving cycle of Mertz Ice Tongue revealed by shallow Mertz Bank. Cryosphere, 2016, 10, 2043-2056. | 3.9 | 7 |
| 67 | Semi-Automatic Mapping of Tidal Cracks in the Fast Ice Region near Zhongshan Station in East Antarctica Using Landsat-8 OLI Imagery. Remote Sensing, 2016, 8, 242. | 4.0 | 9 |
| 68 | Validation of Remote Sensing Retrieval Products using Data from a Wireless Sensor-Based Online Monitoring in Antarctica. Sensors, 2016, 16, 1938. | 3.8 | 6 |
| 69 | New Advances on Environment Monitoring with Wireless Sensor Network. International Journal of Distributed Sensor Networks, 2016, 12, 2378070. | 2.2 | 2 |
| 70 | Revealing the early ice flow patterns with historical Declassified Intelligence Satellite Photographs back to 1960s. Geophysical Research Letters, 2016, 43, 5758-5767. | 4.0 | 18 |
| 71 | Sea-ice conditions in the AdÃ©lie Depression, Antarctica, during besetment of the icebreaker RVXuelong. Annals of Glaciology, 2015, 56, 160-166. | 1.4 | 7 |
| 72 | Ocean-driven thinning enhances iceberg calving and retreat of Antarctic ice shelves. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 3263-3268. | 7.1 | 182 |

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|---|---|---|---|
| 73 | A Multi-Interface Ice and Snow Remote Monitoring Platform in the Polar Region. IEEE Sensors Journal, 2014, 14, 3738-3744. | 4.7 | 7 |
| 74 | Xuelong Navigation in Fast Ice Near the Zhongshan Station, Antarctica. Marine Technology Society Journal, 2014, 48, 84-91. | 0.4 | 7 |
| 75 | Design and Implementation of a Wireless Sensor Network-Based Remote Water-Level Monitoring System. Sensors, 2011, 11, 1706-1720. | 3.8 | 23 |
| 76 | A Monitoring System for Vegetable Greenhouses based on a Wireless Sensor Network. Sensors, 2010, 10, 8963-8980. | 3.8 | 53 |