

Wei Gao

List of Publications by Year in descending order

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111
papers

2,832
citations

159585

30
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206112

48
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113
all docs

113
docs citations

113
times ranked

3428
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|--|------|-----------|
| 1 | Evaluation of the combined risk of sea level rise, land subsidence, and storm surges on the coastal areas of Shanghai, China. <i>Climatic Change</i> , 2012, 115, 537-558. | 3.6 | 217 |
| 2 | Determining climate effects on US total agricultural productivity. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2017, 114, E2285-E2292. | 7.1 | 139 |
| 3 | Regional Climateâ€“Weather Research and Forecasting Model. <i>Bulletin of the American Meteorological Society</i> , 2012, 93, 1363-1387. | 3.3 | 129 |
| 4 | Senescence and hyperspectral reflectance of cotton leaves exposed to ultraviolet-B radiation and carbon dioxide. <i>Physiologia Plantarum</i> , 2004, 121, 250-257. | 5.2 | 103 |
| 5 | Ultraviolet leaf reflectance of common urban trees and the prediction of reflectance from leaf surface characteristics. <i>Agricultural and Forest Meteorology</i> , 2003, 120, 127-139. | 4.8 | 98 |
| 6 | Development of land surface albedo parameterization based on Moderate Resolution Imaging Spectroradiometer (MODIS) data. <i>Journal of Geophysical Research</i> , 2005, 110, . | 3.3 | 81 |
| 7 | Moisture availability influences the effect of ultravioletâ€“B radiation on leaf litter decomposition. <i>Global Change Biology</i> , 2010, 16, 484-495. | 9.5 | 81 |
| 8 | Interactive Effects of Ultraviolet-B Radiation and Temperature on Cotton Physiology, Growth, Development and Hyperspectral ReflectanceÂ¶. <i>Photochemistry and Photobiology</i> , 2004, 79, 416. | 2.5 | 72 |
| 9 | Photosynthetically-active radiation: sky radiance distributions under clear and overcast conditions. <i>Agricultural and Forest Meteorology</i> , 1996, 82, 267-292. | 4.8 | 68 |
| 10 | Satellite remote sensing of aerosol optical depth: advances, challenges, and perspectives. <i>Critical Reviews in Environmental Science and Technology</i> , 2020, 50, 1640-1725. | 12.8 | 68 |
| 11 | Drought stress has transgenerational effects on soybean seed germination and seedling vigor. <i>PLoS ONE</i> , 2019, 14, e0214977. | 2.5 | 65 |
| 12 | Physiological causes of cotton fruit abscission under conditions of high temperature and enhanced ultraviolet-B radiation. <i>Physiologia Plantarum</i> , 2005, 124, 189-199. | 5.2 | 62 |
| 13 | Effects of Supplementary Ultraviolet-B Irradiance on Maize Yield and Qualities: A Field ExperimentÂ¶. <i>Photochemistry and Photobiology</i> , 2004, 80, 127. | 2.5 | 58 |
| 14 | Leaf and canopy photosynthetic characteristics of cotton (<i>Gossypium hirsutum</i>) under elevated CO2 concentration and UV-B radiation. <i>Journal of Plant Physiology</i> , 2004, 161, 581-590. | 3.5 | 57 |
| 15 | Spatiotemporal trend analysis for fine particulate matter concentrations in China using high-resolution satellite-derived and ground-measured PM2.5 data. <i>Journal of Environmental Management</i> , 2019, 233, 530-542. | 7.8 | 55 |
| 16 | Evaluating Soybean Cultivars for Low- and High-Temperature Tolerance During the Seedling Growth Stage. <i>Agronomy</i> , 2019, 9, 13. | 3.0 | 53 |
| 17 | Interactive effects on CO2, drought, and ultraviolet-B radiation on maize growth and development. <i>Journal of Photochemistry and Photobiology B: Biology</i> , 2016, 160, 198-209. | 3.8 | 52 |
| 18 | Temperature Effects on Cotton Seedling Emergence, Growth, and Development. <i>Agronomy Journal</i> , 2017, 109, 1379-1387. | 1.8 | 52 |

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|----|---|------|-----------|
| 19 | A DInSAR Investigation of the Ground Settlement Time Evolution of Ocean-Reclaimed Lands in Shanghai. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2015, 8, 1763-1781. | 4.9 | 48 |
| 20 | Skin cancer incidence is highly associated with ultraviolet-B radiation history. International Journal of Hygiene and Environmental Health, 2010, 213, 359-368. | 4.3 | 47 |
| 21 | Direct-Sun column ozone retrieval by the ultraviolet multifilter rotating shadow-band radiometer and comparison with those from Brewer and Dobson spectrophotometers. Applied Optics, 2001, 40, 3149. | 2.1 | 46 |
| 22 | Impact of enhanced ultraviolet-B irradiance on cotton growth, development, yield, and qualities under field conditions. Agricultural and Forest Meteorology, 2003, 120, 241-248. | 4.8 | 46 |
| 23 | Physiological assessment of water deficit in soybean using midday leaf water potential and spectral features. Journal of Plant Interactions, 2019, 14, 533-543. | 2.1 | 46 |
| 24 | Cotton responses to ultraviolet-B radiation: experimentation and algorithm development. Agricultural and Forest Meteorology, 2003, 120, 249-265. | 4.8 | 44 |
| 25 | Estimation of Pedestrian Level UV Exposure Under Trees. Photochemistry and Photobiology, 2002, 75, 369. | 2.5 | 41 |
| 26 | A regional climate model downscaling projection of China future climate change. Climate Dynamics, 2013, 41, 1871-1884. | 3.8 | 40 |
| 27 | Generation of long-term InSAR ground displacement time-series through a novel multi-sensor data merging technique: The case study of the Shanghai coastal area. ISPRS Journal of Photogrammetry and Remote Sensing, 2019, 154, 10-27. | 11.1 | 40 |
| 28 | Statistical bias correction for creating coherent total ozone record from OMI and OMPS observations. Remote Sensing of Environment, 2016, 182, 150-168. | 11.0 | 35 |
| 29 | InSAR detection of residual settlement of an ocean reclamation engineering project: a case study of Hong Kong International Airport. Journal of Oceanography, 2011, 67, 415-426. | 1.7 | 34 |
| 30 | Quantifying Corn Growth and Physiological Responses to Ultraviolet-B Radiation for Modeling. Agronomy Journal, 2013, 105, 1367-1377. | 1.8 | 34 |
| 31 | Advancing the prediction accuracy of satellite-based PM2.5 concentration mapping: A perspective of data mining through in situ PM2.5 measurements. Environmental Pollution, 2019, 254, 113047. | 7.5 | 32 |
| 32 | Yield and yield formation of field winter wheat in response to supplemental solar ultraviolet-B radiation. Agricultural and Forest Meteorology, 2003, 120, 279-283. | 4.8 | 31 |
| 33 | Developing functional relationships between temperature and soybean yield and seed quality. Agronomy Journal, 2020, 112, 194-204. | 1.8 | 31 |
| 34 | Individual- and scattered-tree influences on ultraviolet irradiance. Agricultural and Forest Meteorology, 2003, 120, 113-126. | 4.8 | 29 |
| 35 | Interactive effects of carbon dioxide, low temperature, and ultraviolet-B radiation on cotton seedling root and shoot morphology and growth. Frontiers of Earth Science, 2016, 10, 607-620. | 2.1 | 29 |
| 36 | Estimation of winter wheat biomass based on remote sensing data at various spatial and spectral resolutions. Frontiers of Earth Science, 2009, 3, 118-128. | 0.5 | 27 |

| # | ARTICLE | IF | CITATIONS |
|----|---|-----|-----------|
| 37 | The signature of sea surface temperature anomalies on the dynamics of semiarid grassland productivity. <i>Ecosphere</i> , 2017, 8, e02069. | 2.2 | 27 |
| 38 | Low and high-temperature effects on sweetpotato storage root initiation and early transplant establishment. <i>Scientia Horticulturae</i> , 2018, 240, 38-48. | 3.6 | 26 |
| 39 | Assessing precipitation, evapotranspiration, and <scp>NDVI</scp> as controls of U.S. Great Plains plant production. <i>Ecosphere</i> , 2019, 10, e02889. | 2.2 | 26 |
| 40 | The responses of vegetation water content (EWT) and assessment of drought monitoring along a coastal region using remote sensing. <i>GIScience and Remote Sensing</i> , 2014, 51, 1-16. | 5.9 | 25 |
| 41 | Simulation of the effects of photodecay on long-term litter decay using DayCent. <i>Ecosphere</i> , 2016, 7, e01631. | 2.2 | 22 |
| 42 | Seasonal grassland productivity forecast for the U.S. Great Plains using GrassCast. <i>Ecosphere</i> , 2020, 11, e03280. | 2.2 | 22 |
| 43 | A Geometric Ultraviolet-B Radiation Transfer Model Applied to Vegetation Canopies. <i>Agronomy Journal</i> , 2002, 94, 475-482. | 1.8 | 21 |
| 44 | Biologically effective UV-B exposures of an oak-hickory forest understory during leaf-out. <i>Agricultural and Forest Meteorology</i> , 2005, 132, 28-43. | 4.8 | 20 |
| 45 | Effects of Enhanced UV-B Radiation on Plant Chemistry: Nutritional Consequences for a Specialist and Generalist Lagomorph. <i>Journal of Chemical Ecology</i> , 2007, 33, 1025-1039. | 1.8 | 18 |
| 46 | Physical Modeling of U.S. Cotton Yields and Climate Stresses during 1979 to 2005. <i>Agronomy Journal</i> , 2012, 104, 675-683. | 1.8 | 18 |
| 47 | Morpho-Physiological Characterization of Diverse Rice Genotypes for Seedling Stage High- and Low-Temperature Tolerance. <i>Agronomy</i> , 2021, 11, 112. | 3.0 | 17 |
| 48 | A Distributed Cotton Growth Model Developed from GOSSYM and Its Parameter Determination. <i>Agronomy Journal</i> , 2012, 104, 661-674. | 1.8 | 16 |
| 49 | MODIS Consistent Vegetation Parameter Specifications and Their Impacts on Regional Climate Simulations. <i>Journal of Climate</i> , 2014, 27, 8578-8596. | 3.2 | 16 |
| 50 | Global consistency check of AIRS and IASI total CO2 column concentrations using WDCGG ground-based measurements. <i>Frontiers of Earth Science</i> , 2017, 11, 1-10. | 2.1 | 16 |
| 51 | Yield, Physiological Performance, and Phytochemistry of Basil (<i>Ocimum basilicum</i> L.) under Temperature Stress and Elevated CO2 Concentrations. <i>Plants</i> , 2021, 10, 1072. | 3.5 | 15 |
| 52 | Photodegradation accelerates ecosystem N cycling in a simulated California grassland. <i>Ecosphere</i> , 2018, 9, e02370. | 2.2 | 14 |
| 53 | Diagnosing atmospheric stability effects on the modeling accuracy of PM2.5 /AOD relationship in eastern China using radiosonde data. <i>Environmental Pollution</i> , 2019, 251, 380-389. | 7.5 | 14 |
| 54 | Estimating leaf chlorophyll contents by combining multiple spectral indices with an artificial neural network. <i>Earth Science Informatics</i> , 2018, 11, 147-156. | 3.2 | 13 |

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|----|---|-----|-----------|
| 55 | Drought and Elevated CO ₂ Impacts Photosynthesis and Biochemicals of Basil (<i>Ocimum basilicum</i> L.). Stresses, 2021, 1, 223-237. | 4.8 | 13 |
| 56 | The calibration methods for Multi-Filter Rotating Shadowband Radiometer: a review. Frontiers of Earth Science, 2013, 7, 257-270. | 2.1 | 11 |
| 57 | Comparison of Suomi-NPP OMPS total column ozone with Brewer and Dobson spectrophotometers measurements. Frontiers of Earth Science, 2015, 9, 369-380. | 2.1 | 11 |
| 58 | Development of the DayCent-Photo model and integration of variable photosynthetic capacity. Frontiers of Earth Science, 2018, 12, 765-778. | 2.1 | 11 |
| 59 | Multi-source hierarchical data fusion for high-resolution AOD mapping in a forest fire event. International Journal of Applied Earth Observation and Geoinformation, 2021, 102, 102366. | 2.8 | 11 |
| 60 | The spatio-temporal responses of the carbon cycle to climate and land use/land cover changes between 1981–2000 in China. Frontiers of Earth Science, 2013, 7, 92-102. | 2.1 | 10 |
| 61 | Integrating multiple vegetation indices via an artificial neural network model for estimating the leaf chlorophyll content of <i>Spartina alterniflora</i> under interspecies competition. Environmental Monitoring and Assessment, 2017, 189, 596. | 2.7 | 10 |
| 62 | Interactive Impacts of Temperature and Elevated CO ₂ on Basil (<i>Ocimum basilicum</i> L.) Root and Shoot Morphology and Growth. Horticulturae, 2021, 7, 112. | 2.8 | 10 |
| 63 | UV-B effects on the nutritional chemistry of plants and the responses of a mammalian herbivore. Oecologia, 2008, 156, 125-135. | 2.0 | 9 |
| 64 | Current and future impacts of ultraviolet radiation on the terrestrial carbon balance. Frontiers of Earth Science, 2009, 3, 34-41. | 0.5 | 9 |
| 65 | Analysis of air quality variability in Shanghai using AOD and API data in the recent decade. Frontiers of Earth Science, 2013, 7, 159-168. | 2.1 | 9 |
| 66 | Analysis of spatio-temporal variability of aerosol optical depth with empirical orthogonal functions in the Changjiang River Delta, China. Frontiers of Earth Science, 2015, 9, 1-12. | 2.1 | 9 |
| 67 | An intercomparison of multidecadal observational and reanalysis data sets for global total ozone trends and variability analysis. Journal of Geophysical Research D: Atmospheres, 2017, 122, 7119-7139. | 3.3 | 9 |
| 68 | Intercomparison of CALIOP, MODIS, and AERONET aerosol optical depth over China during the past decade. International Journal of Remote Sensing, 2018, 39, 7251-7275. | 2.9 | 9 |
| 69 | Alterations in the leaf lipidome of <i>Brassica carinata</i> under high-temperature stress. BMC Plant Biology, 2021, 21, 404. | 3.6 | 9 |
| 70 | China summer precipitation simulations using an optimal ensemble of cumulus schemes. Frontiers of Earth Science, 2009, 3, 248-257. | 0.5 | 8 |
| 71 | Regional climate model downscaling may improve the prediction of alien plant species distributions. Frontiers of Earth Science, 2014, 8, 457-471. | 2.1 | 8 |
| 72 | Parental Environmental Effects on Seed Quality and Germination Response to Temperature of <i>Andropogon gerardii</i> . Agronomy, 2019, 9, 304. | 3.0 | 8 |

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|----|--|-----|-----------|
| 73 | Ultraviolet-B radiation in a row-crop canopy: an extended 1-D model. <i>Agricultural and Forest Meteorology</i> , 2003, 120, 141-151. | 4.8 | 7 |
| 74 | Projected day/night temperatures specifically limits rubisco activity and electron transport in diverse rice cultivars. <i>Environmental and Experimental Botany</i> , 2019, 159, 191-199. | 4.2 | 7 |
| 75 | Ensemble Learning via Higher Order Singular Value Decomposition for Integrating Data and Classifier Fusion in Water Quality Monitoring. <i>IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing</i> , 2021, 14, 3345-3360. | 4.9 | 7 |
| 76 | Preliminary results of the coupled CWRP-GOSSYM system. , 2005, 5884, 68. | | 6 |
| 77 | A New Cloud Screening Algorithm for Ground-Based Direct-Beam Solar Radiation. <i>Journal of Atmospheric and Oceanic Technology</i> , 2014, 31, 2591-2605. | 1.3 | 6 |
| 78 | Drought and Elevated Carbon Dioxide Impact the Morphophysiological Profile of Basil (<i>Ocimum</i>) Tj ETQq0 0 0 rgBT/Overlock 10 Tf 50 5 | 1.4 | 6 |
| 79 | Detection of Multidecadal Changes in UVB and Total Ozone Concentrations over the Continental US with NASA TOMS Data and USDA Ground-Based Measurements. <i>Remote Sensing</i> , 2010, 2, 262-277. | 4.0 | 5 |
| 80 | Algae (<i>Microcystis</i> and <i>Scenedesmus</i>) absorption spectra and its application on Chlorophyll a retrieval. <i>Frontiers of Earth Science</i> , 2013, 7, 522-530. | 2.1 | 5 |
| 81 | Inclusion of an ultraviolet radiation transfer component in an urban forest effects model for predicting tree influences on potential below-canopy exposure to UVB radiation. , 2003, , | | 4 |
| 82 | Estimation of Pedestrian Level UV Exposure Under Trees. <i>Photochemistry and Photobiology</i> , 2007, 75, 369-376. | 2.5 | 4 |
| 83 | USDA UV-B monitoring system: An application of centralized architecture. <i>Computers and Electronics in Agriculture</i> , 2008, 64, 326-332. | 7.7 | 4 |
| 84 | Estimating Error Covariance and Correlation Region in UV Irradiance Data Fusion by Combining TOMS-OMI and UVMRP Ground Observations. <i>IEEE Transactions on Geoscience and Remote Sensing</i> , 2018, 56, 355-370. | 6.3 | 4 |
| 85 | A novel method for leaf chlorophyll retrieval based on harmonic analysis: a case study on <i>Spartina alterniflora</i> . <i>Earth Science Informatics</i> , 2020, 13, 747-762. | 3.2 | 4 |
| 86 | An Ultraviolet Radiation Monitoring and Research Program for Agriculture. , 2010, , 205-243. | | 4 |
| 87 | Reconstruct missing pixels of Landsat land surface temperature product using a CNN with partial convolution. , 2019, , | | 4 |
| 88 | A Geometric Ultraviolet-B Radiation Transfer Model Applied to Vegetation Canopies. <i>Agronomy Journal</i> , 2002, 94, 475. | 1.8 | 4 |
| 89 | Regional Climate Model Simulations of the 1998 Summer China Flood: Dependence on Initial and Lateral Boundary Conditions. <i>The Open Atmospheric Science Journal</i> , 2011, 5, 96-105. | 0.5 | 4 |
| 90 | <title>Calculating solar ultraviolet radiation by computational models in Nanjing region</title>. , 2002, , | | 3 |

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| 91 | Impact of cloud cover on erythral UV-B exposure under vegetation canopies. , 2004, , . | | 3 |
| 92 | Validation of the TUV module in CWRf using USDA-UVB network observations. , 2006, , . | | 3 |
| 93 | Spatial Statistical Analyses of Global Trends of Ultraviolet B Fluxes in the Continental United States. GIScience and Remote Sensing, 2012, 49, 735-754. | 5.9 | 3 |
| 94 | Comparison of aerosol optical depth of UV-B monitoring and research program (UVMRP), AERONET and MODIS over continental united states. Frontiers of Earth Science, 2013, 7, 129-140. | 2.1 | 3 |
| 95 | <title>Modeling ultraviolet-B radiation in a maize canopy</title>. , 2002, , . | | 2 |
| 96 | Sustainability of vegetation over northwest China:l. Climate response to grassland. , 2003, , . | | 2 |
| 97 | Ultraviolet Radiation and Terrestrial Ecosystems^{â€‹}. Photochemistry and Photobiology, 2004, 79, 379-381. | 2.5 | 2 |
| 98 | Effects of Supplementary Ultravioletâ€‹ Irradiance on Maize Yield and Qualities: A Field Experiment^{Â¶}. Photochemistry and Photobiology, 2004, 80, 127-131. | 2.5 | 2 |
| 99 | Missing Pixel Reconstruction on Landsat 8 Analysis Ready Data Land Surface Temperature Image Patches Using Source-Augmented Partial Convolution. Remote Sensing, 2020, 12, 3143. | 4.0 | 2 |
| 100 | Using deep recurrent neural network for direct beam solar irradiance cloud screening. , 2017, , . | | 2 |
| 101 | Individual and Interactive Temporal Implications of UV-B Radiation and Elevated CO2 on the Morphology of Basil (Ocimum basilicum L.). Horticulturae, 2021, 7, 474. | 2.8 | 2 |
| 102 | Sensitivity studies of high-precision methane column concentration inversion using a line-by-line radiative transfer model. Frontiers of Earth Science, 2013, 7, 439-446. | 2.1 | 1 |
| 103 | Two-stage reference channel calibration for collocated UV and VIS Multi-Filter Rotating Shadowband Radiometers. Proceedings of SPIE, 2015, , . | 0.8 | 1 |
| 104 | In-situ calibration of the water vapor channel for multi-filter rotating shadowband radiometer using collocated GPS, AERONET and meteorology data. , 2016, , . | | 1 |
| 105 | Improving the mean and uncertainty of ultraviolet multi-filter rotating shadowband radiometer in situ calibration factors: utilizing Gaussian process regression with a new method to estimate dynamic input uncertainty. Atmospheric Measurement Techniques, 2019, 12, 935-953. | 3.1 | 1 |
| 106 | Adaptive bias correction of advanced infrared sounding radiance assimilation in a regional model and its impact on typhoon forecast. Journal of Applied Remote Sensing, 2018, 12, 1. | 1.3 | 1 |
| 107 | Individual and Interactive Effects of Multiple Abiotic Stress Treatments on Early-Season Growth and Development of Two Brassica Species. Agriculture (Switzerland), 2022, 12, 453. | 3.1 | 1 |
| 108 | Spectral distribution of UV-B irradiance derived by synthetic model compared with simulation results of TUV and ground measurements. , 2006, 6298, 153. | | 0 |

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|-----|--|----|-----------|
| 109 | Preliminary results of a UV-B effect incorporated GOSSYM model. , 2006, , . | | 0 |
| 110 | Analysis trends of ultraviolet B fluxes in the continental US with USDA and TOMS data. , 2013, , . | | 0 |
| 111 | Land/Atmosphere/Water Interactions. , 2021, , 245-278. | | 0 |