

# Feng Zhang

## List of Publications by Year in descending order

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Version: 2024-02-01

65  
papers

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citations

516710

16  
h-index

526287

27  
g-index

67  
all docs

67  
docs citations

67  
times ranked

1029  
citing authors

| #  | ARTICLE   | IF  | CITATIONS |
|----|---|-----|-----------|
| 1  | CloudNet: Ground-Based Cloud Classification With Deep Convolutional Neural Network. <i>Geophysical Research Letters</i> , 2018, 45, 8665-8672.  | 4.0 | 141       |
| 2  | Future Drought in the Dry Lands of Asia Under the 1.5 and 2.0°C Warming Scenarios. <i>Earth's Future</i> , 2020, 8, e2019EF001337.  | 6.3 | 58        |
| 3  | MAX-DOAS measurements of tropospheric NO <sub>2</sub> and HCHO in Nanjing and a comparison to ozone monitoring instrument observations. <i>Atmospheric Chemistry and Physics</i> , 2019, 19, 10051-10071.   | 4.9 | 57        |
| 4  | Community Integrated Earth System Model (CIesm): Description and Evaluation. <i>Journal of Advances in Modeling Earth Systems</i> , 2020, 12, e2019MS002036.  | 3.8 | 44        |
| 5  | Doubling-Adding Method for Delta-Four-Stream Spherical Harmonic Expansion Approximation in Radiative Transfer Parameterization. <i>Journals of the Atmospheric Sciences</i> , 2013, 70, 3084-3101.          | 1.7 | 42        |
| 6  | Analytical Delta-Four-Stream Doubling-Adding Method for Radiative Transfer Parameterizations. <i>Journals of the Atmospheric Sciences</i> , 2013, 70, 794-808.  | 1.7 | 36        |
| 7  | Classification of Ice Crystal Habits Observed From Airborne Cloud Particle Imager by Deep Transfer Learning. <i>Earth and Space Science</i> , 2019, 6, 1877-1886.   | 2.6 | 36        |
| 8  | Analytical Infrared Delta-Four-Stream Adding Method from Invariance Principle. <i>Journals of the Atmospheric Sciences</i> , 2016, 73, 4171-4188.   | 1.7 | 32        |
| 9  | The colors of biomass burning aerosols in the atmosphere. <i>Scientific Reports</i> , 2016, 6, 28267.   | 3.3 | 28        |
| 10 | A New Radiative Transfer Method for Solar Radiation in a Vertically Internally Inhomogeneous Medium. <i>Journals of the Atmospheric Sciences</i> , 2018, 75, 41-55.   | 1.7 | 27        |
| 11 | Classification of Weather Phenomenon From Images by Using Deep Convolutional Neural Network. <i>Earth and Space Science</i> , 2021, 8, e2020EA001604.   | 2.6 | 26        |
| 12 | Variational Iteration Method for Infrared Radiative Transfer in a Scattering Medium. <i>Journals of the Atmospheric Sciences</i> , 2017, 74, 419-430.   | 1.7 | 22        |
| 13 | Long-term trends in Arctic surface temperature and potential causality over the last 100 years. <i>Climate Dynamics</i> , 2020, 55, 1443-1456.  | 3.8 | 21        |
| 14 | Causality of global warming seen from observations: a scale analysis of driving force of the surface air temperature time series in the Northern Hemisphere. <i>Climate Dynamics</i> , 2016, 46, 3197-3204. | 3.8 | 20        |
| 15 | Impact of four-stream radiative transfer algorithm on aerosol direct radiative effect and forcing. <i>International Journal of Climatology</i> , 2015, 35, 4318-4328.                                       | 3.5 | 18        |
| 16 | Ensemble Meteorological Cloud Classification Meets Internet of Dependable and Controllable Things. <i>IEEE Internet of Things Journal</i> , 2021, 8, 3323-3330.   | 8.7 | 17        |
| 17 | Two- and Four-Stream Combination Approximations for Computation of Diffuse Actinic Fluxes. <i>Journals of the Atmospheric Sciences</i> , 2010, 67, 3238-3252.   | 1.7 | 16        |
| 18 | A note on double Henyey-Greenstein phase function. <i>Journal of Quantitative Spectroscopy and Radiative Transfer</i> , 2016, 184, 40-43.   | 2.3 | 16        |

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|----|--|-----|-----------|
| 19 | Determination of direct normal irradiance including circumsolar radiation in climate/NWP models. Quarterly Journal of the Royal Meteorological Society, 2016, 142, 2591-2598.                              | 2.7 | 15        |
| 20 | Radiative transfer in the region with solar and infrared spectra overlap. Journal of Quantitative Spectroscopy and Radiative Transfer, 2018, 219, 366-378.   | 2.3 | 15        |
| 21 | Alternate Mapping Correlated k-Distribution Method for Infrared Radiative Transfer Forward Simulation. Remote Sensing, 2019, 11, 994.  | 4.0 | 14        |
| 22 | Simultaneously simulating the scattering properties of nonspherical aerosol particles with different sizes by the MRTD scattering model. Optics Express, 2017, 25, 17872.                                  | 3.4 | 12        |
| 23 | On the relationship between direct and diffuse radiation. Journal of Quantitative Spectroscopy and Radiative Transfer, 2013, 115, 60-65.   | 2.3 | 11        |
| 24 | Causality of the Drought in the Southwestern United States Based on Observations. Journal of Climate, 2017, 30, 4891-4896.   | 3.2 | 11        |
| 25 | Accounting for Gaussian quadrature in four-stream radiative transfer algorithms. Journal of Quantitative Spectroscopy and Radiative Transfer, 2017, 192, 1-13.   | 2.3 | 11        |
| 26 | Reconstruction of driving forces from nonstationary time series including stationary regions and application to climate change. Physica A: Statistical Mechanics and Its Applications, 2017, 473, 337-343. | 2.6 | 10        |
| 27 | Light scattering computation model for nonspherical aerosol particles based on multi-resolution time-domain scheme: model development and validation. Optics Express, 2017, 25, 1463.                      | 3.4 | 10        |
| 28 | Larger Sensitivity of Arctic Precipitation Phase to Aerosol than Greenhouse Gas Forcing. Geophysical Research Letters, 2020, 47, e2020GL090452.  | 4.0 | 10        |
| 29 | The semi-diurnal cycle of deep convective systems over Eastern China and its surrounding seas in summer based on an automatic tracking algorithm. Climate Dynamics, 2021, 56, 357-379.                     | 3.8 | 10        |
| 30 | Estimating Rainfall with Multi-Resource Data over East Asia Based on Machine Learning. Remote Sensing, 2021, 13, 3332.   | 4.0 | 10        |
| 31 | Connections Between Stratospheric Ozone Concentrations Over the Arctic and Sea Surface Temperatures in the North Pacific. Journal of Geophysical Research D: Atmospheres, 2020, 125, e2019JD031690.        | 3.3 | 9         |
| 32 | Variation of main <sc>rainy season</sc> precipitation in eastern China and relevance to regional warming. International Journal of Climatology, 2021, 41, 1767-1783.                                       | 3.5 | 9         |
| 33 | The impact of various HITRAN molecular spectroscopic databases on infrared radiative transfer simulation. Journal of Quantitative Spectroscopy and Radiative Transfer, 2019, 234, 55-63.                   | 2.3 | 8         |
| 34 | A Novel Ground-Based Cloud Image Segmentation Method by Using Deep Transfer Learning. IEEE Geoscience and Remote Sensing Letters, 2022, 19, 1-5.   | 3.1 | 8         |
| 35 | Multi-layer solar radiative transfer considering the vertical variation of inherent microphysical properties of clouds. Optics Express, 2019, 27, A1569.   | 3.4 | 8         |
| 36 | Efficient radiative transfer model for thermal infrared brightness temperature simulation in cloudy atmospheres. Optics Express, 2020, 28, 25730.  | 3.4 | 8         |

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|----|---|-----|-----------|
| 37 | Possible mechanisms of summer cirrus clouds over the Tibetan Plateau. <i>Atmospheric Chemistry and Physics</i> , 2020, 20, 11799-11808.   | 4.9 | 8         |
| 38 | Cloud Detection and Classification Algorithms for Himawari-8 Imager Measurements Based on Deep Learning. <i>IEEE Transactions on Geoscience and Remote Sensing</i> , 2022, 60, 1-17.  | 6.3 | 8         |
| 39 | The standard perturbation method for infrared radiative transfer in a vertically internally inhomogeneous scattering medium. <i>Journal of Quantitative Spectroscopy and Radiative Transfer</i> , 2018, 213, 149-158.                       | 2.3 | 7         |
| 40 | The Dissipation Structure of Extratropical Cyclones. <i>Journals of the Atmospheric Sciences</i> , 2014, 71, 69-88.   | 1.7 | 6         |
| 41 | Analytical inversion of the absorption spectrum to determine non-spherical particle size distribution. <i>Journal of Quantitative Spectroscopy and Radiative Transfer</i> , 2014, 149, 128-137.   | 2.3 | 6         |
| 42 | Comparisons of $\hat{\Gamma}$ -Two-Stream and $\hat{\Gamma}$ -Four-Stream Radiative Transfer Schemes in RRTMG for Solar Spectra. <i>Scientific Online Letters on the Atmosphere</i> , 2019, 15, 87-93.                                      | 1.4 | 6         |
| 43 | An improved Eddington approximation method for irradiance calculation in a vertical inhomogeneous medium. <i>Journal of Quantitative Spectroscopy and Radiative Transfer</i> , 2019, 226, 40-50.  | 2.3 | 6         |
| 44 | Assessment of two-stream approximations in a climate model. <i>Journal of Quantitative Spectroscopy and Radiative Transfer</i> , 2019, 225, 25-34.  | 2.3 | 6         |
| 45 | Efficient design of the realization scheme of the invariant imbedding (IIM) T-matrix light scattering model for atmospheric nonspherical particles. <i>Journal of Quantitative Spectroscopy and Radiative Transfer</i> , 2020, 251, 106999. | 2.3 | 6         |
| 46 | Accounting for Several Infrared Radiation Processes in Climate Models. <i>Journal of Climate</i> , 2019, 32, 4601-4620.   | 3.2 | 5         |
| 47 | Best Water Vapor Information Layer of Himawari-8-Based Water Vapor Bands over East Asia. <i>Sensors</i> , 2020, 20, 2394.   | 3.8 | 5         |
| 48 | Adding method of delta-four-stream spherical harmonic expansion approximation for infrared radiative transfer parameterization. <i>Infrared Physics and Technology</i> , 2016, 78, 254-262.   | 2.9 | 4         |
| 49 | A new parameterization of canopy radiative transfer for land surface radiation models. <i>Advances in Atmospheric Sciences</i> , 2017, 34, 613-622.   | 4.3 | 4         |
| 50 | A simple parameterization for the height of maximum ozone heating rate. <i>Infrared Physics and Technology</i> , 2017, 87, 104-112.   | 2.9 | 4         |
| 51 | Comparison of Chebyshev and Legendre Polynomial Expansion of Phase Function of Cloud and Aerosol Particles. <i>Advances in Meteorology</i> , 2017, 2017, 1-10.  | 1.6 | 4         |
| 52 | Explicit solutions to the mixing rules with three-component inclusions. <i>Journal of Quantitative Spectroscopy and Radiative Transfer</i> , 2018, 207, 78-82.  | 2.3 | 4         |
| 53 | On the relationship between direct and anisotropic diffuse radiation. <i>Infrared Physics and Technology</i> , 2014, 65, 5-8.   | 2.9 | 3         |
| 54 | High Spatiotemporal Resolution PM2.5 Concentration Estimation with Machine Learning Algorithm: A Case Study for Wildfire in California. <i>Remote Sensing</i> , 2022, 14, 1635.   | 4.0 | 3         |

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|----|---|-----|-----------|
| 55 | Influence of mass of cone spring on oscillatory period. Journal of Sound and Vibration, 2006, 295, 331-341.   | 3.9 | 2         |
| 56 | Double-delta-function adjustment in thermal radiative transfer. Infrared Physics and Technology, 2017, 86, 139-146.   | 2.9 | 2         |
| 57 | On the relationship between direct and diffuse radiation (II) $\hat{\Gamma}$ -2N-stream discrete ordinates method. Infrared Physics and Technology, 2013, 60, 94-97.  | 2.9 | 1         |
| 58 | Development of a Rapid Retrieval Method for Cloud Optical Thickness and Cloud-Top Height Using Himawari-8 Infrared Measurements. Scientific Online Letters on the Atmosphere, 2019, 15, 57-61.  | 1.4 | 1         |
| 59 | Impact of $\hat{\Gamma}$ -Four-Stream Radiative Transfer Scheme on global climate model simulation. Journal of Quantitative Spectroscopy and Radiative Transfer, 2020, 243, 106800.   | 2.3 | 1         |
| 60 | The $\hat{\Gamma}$ -six-stream spherical harmonic expansion adding method for solar radiative transfer. Journal of Quantitative Spectroscopy and Radiative Transfer, 2020, 243, 106818.   | 2.3 | 1         |
| 61 | Vertical Profile of Ozone Derived from Combined MLS and TES Satellite Observations. Remote Sensing, 2022, 14, 1588.   | 4.0 | 1         |
| 62 | A broadband infrared radiative transfer scheme including the effect related to vertically inhomogeneous microphysical properties inside water clouds. Journal of Quantitative Spectroscopy and Radiative Transfer, 2022, 285, 108160. | 2.3 | 1         |
| 63 | Contributions of internal climate variability in driving global and ocean temperature variations using multi-layer perceptron neural network. Advances in Climate Change Research, 2022, 13, 459-472.                                 | 5.1 | 1         |
| 64 | Perturbation Method for Solar/Infrared Radiative Transfer in a Scattering Medium with Vertical Inhomogeneity in Internal Optical Properties. , 0, , .   |     | 0         |
| 65 | Atmospheric Radiative Transfer Parameterizations. , 0, , .  |     | 0         |