Tao Luo

List of Publications by Year
in descending order

38	799	430874	501196
papers	citations	18 h-index	28 g-index

41	41	41	619
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Well-Posedness for the Motion of Physical Vacuum of the Three-dimensional Compressible Euler Equations with or without Self-Gravitation. Archive for Rational Mechanics and Analysis, 2014, 213, 763-831.	2.4	65
2	Global Existence of Smooth Solutions and Convergence to Barenblatt Solutions for the Physical Vacuum Free Boundary Problem of Compressible Euler Equations with Damping. Communications on Pure and Applied Mathematics, 2016, 69, 1354-1396.	3.1	63
3	Existence and Non-linear Stability of Rotating Star Solutions of the Compressible Eulerâ€“Poisson Equations. Archive for Rational Mechanics and Analysis, 2009, 191, 447-496.	2.4	57
4	Understanding processes that control dust spatial distributions with global climate models and satellite observations. Atmospheric Chemistry and Physics, 2020, 20, 13835-13855.	4.9	47
5	Stability of Transonic Shock Solutions for One-Dimensional Eulerâ€“Poisson Equations. Archive for Rational Mechanics and Analysis, 2011, 202, 787-827.	2.4	42
6	Rotating Fluids with Self-Gravitation in Bounded Domains. Archive for Rational Mechanics and Analysis, 2004, 173, 345-377.	2.4	39
7	A Priori Estimates for Free Boundary Problem of Incompressible Inviscid Magnetohydrodynamic Flows. Archive for Rational Mechanics and Analysis, 2014, 212, 805-847.	2.4	39
8	On nonlinear asymptotic stability of the Laneâ€“Emden solutions for the viscous gaseous star problem. Advances in Mathematics, 2016, 291, 90-182.	1.1	38
9	Global dust distribution from improved thin dust layer detection using Aâ€train satellite lidar observations. Geophysical Research Letters, 2015, 42, 620-628.	4.0	37
10	Nonlinear Stability of Shock Fronts for a Relaxation System in Several Space Dimensions. Journal of Differential Equations, 1997, 139, 365-408.	2.2	35
11	Nonlinear Dynamical Stability of Newtonian Rotating and Non-rotating White Dwarfs and Rotating Supermassive Stars. Communications in Mathematical Physics, 2008, 284, 425-457.	2.2	33
12	Ice particle production in mid-level stratiform mixed-phase clouds observed with collocated A-Train measurements. Atmospheric Chemistry and Physics, 2018, 18, 4317-4327.	4.9	31
13	Aerosol impacts on cloud thermodynamic phase change over East Asia observed with CALIPSO and CloudSat measurements. Journal of Geophysical Research D: Atmospheres, 2015, 120, 1490-1501.	3.3	28
14	Modeling Dust in East Asia by CESM and Sources of Biases. Journal of Geophysical Research D: Atmospheres, 2019, 124, 8043-8064.	3.3	23
15	Ice Concentration Retrieval in Stratiform Mixed-Phase Clouds Using Cloud Radar Reflectivity Measurements and 1D Ice Growth Model Simulations. Journals of the Atmospheric Sciences, 2014, 71, 3613-3635.	1.7	22
16	Global BV Solutions of Compressible Euler Equations with Spherical Symmetry and Damping. Journal of Differential Equations, 1998, 146, 203-225.	2.2	20
17	Marine boundary layer structure as observed by A-train satellites. Atmospheric Chemistry and Physics, 2016, 16, 5891-5903.	4.9	20
18	Global BV Solutions to a p-System with Relaxation. Journal of Differential Equations, 2000, 162, 174-198.	2.2	18

#	Article	IF	Citations
19	Existence of Magnetic Compressible Fluid Stars. Archive for Rational Mechanics and Analysis, 2015, 215, 611-631.	2.4	18
20	Liquidâ€“Ice Mass Partition in Tropical Maritime Convective Clouds. Journals of the Atmospheric Sciences, 2016, 73, 4959-4978.	1.7	17
21	Retrieval of Cloud Condensation Nuclei Number Concentration Profiles From Lidar Extinction and Backscatter Data. Journal of Geophysical Research D: Atmospheres, 2018, 123, 6082-6098.	3.3	16
22	The occurrence of ice production in slightly supercooled Arctic stratiform clouds as observed by groundâ€based remote sensors at the ARM NSA site. Journal of Geophysical Research D: Atmospheres, 2017, 122, 2867-2877.	3.3	14
23	Vertically resolved separation of dust and other aerosol types by a new lidar depolarization method. Optics Express, 2015, 23, 14095.	3.4	13
24	Upper troposphere dust belt formation processes vary seasonally and spatially in the Northern Hemisphere. Communications Earth & Environment, 2022, 3, .	6.8	12
25	On factors controlling marine boundary layer aerosol optical depth. Journal of Geophysical Research D: Atmospheres, 2014, 119, 3321-3334.	3.3	9
26	Global Distribution and Variations of NO Infrared Radiative Flux and Its Responses to Solar Activity and Geomagnetic Activity in the Thermosphere. Journal of Geophysical Research: Space Physics, 2017, 122, 12,534.	2.4	8
27	A reliable model for estimating the turbulence intensity and integrated astroclimatic parameters from sounding data. Monthly Notices of the Royal Astronomical Society, 2021, 503, 5692-5703.	4.4	8
28	In situ measurements and neural network analysis of the profiles of optical turbulence over the Tibetan Plateau. Monthly Notices of the Royal Astronomical Society, 2021, 506, 3430-3438.	4.4	7
29	Global structure and asymptotic behavior of weak solutions to flood wave equations. Journal of Differential Equations, 2004, 207, 117-160.	2.2	4
30	Retrieving the Polar Mixedâ€Phase Cloud Liquid Water Path by Combining CALIOP and IIR Measurements. Journal of Geophysical Research D: Atmospheres, 2018, 123, 1755-1770.	3.3	4
31	New Global View of Above-Cloud Absorbing Aerosol Distribution Based on CALIPSO Measurements. Remote Sensing, 2019, 11, 2396.	4.0	4
32	Existence of periodic solutions of nonlinear systems with nonlinear boundary conditions. Acta Mathematica Sinica, English Series, 1995, 11, 439-445.	0.6	2
33	Quantifying the Hygroscopic Growth of Marine Boundary Layer Aerosols by Satellite-Based and Buoy Observations. Journals of the Atmospheric Sciences, 2015, 72, 1063-1074.	1.7	2
34	Characteristics of the vertical structure of the atmospheric turbulence in the Tibetan Plateau. Science China Earth Sciences, 0, , .	5.2	2
35	Advances in coastal ocean boundary layer detection technology and equipment in China. Journal of Environmental Sciences, 2022, , .	6.1	1
36	Aerosol property variations over global oceans as observed by the A-train satellites. , 2013, , .		0

#	Article	IF	Citations
37	Reply to Comments by Jia Yue on â€œGlobal Distribution and Variations of NO Infrared Radiative Flux and Its Responses to Solar Activity and Geomagnetic Activity in the Thermosphereâ€• Journal of Geophysical Research: Space Physics, 2018, 123, 10,419.	2.4	0
38	Evaluation of High Cloud Product of ECMWF Over South China Sea Using CALIOP. Earth and Space Science, 2022, 9, .	2.6	0