

Timothy Dowling

List of Publications by Year in descending order

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52
papers

2,736
citations

218677
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docs citations

56
times ranked

1835
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|---|------|-----------|
| 1 | Asymmetrical meridional expansion of bright clouds from Saturn's 2010 great white storm. Icarus, 2021, 369, 114650. | 2.5 | 1 |
| 2 | Jupiter-style Jet Stability. Planetary Science Journal, 2020, 1, 6. | 3.6 | 9 |
| 3 | Ertel Potential Vorticity versus Bernoulli Potential on Approximately Neutral Surfaces in the Antarctic Circumpolar Current. Journal of Physical Oceanography, 2020, 50, 2621-2648. | 1.7 | 4 |
| 4 | Berry's lesson for Lamb. Nature Physics, 2019, 15, 734-735. | 16.7 | 0 |
| 5 | Dynamical regimes of giant planet polar vortices. Icarus, 2019, 323, 46-61. | 2.5 | 33 |
| 6 | Ertel potential vorticity versus Bernoulli streamfunction on Mars. Quarterly Journal of the Royal Meteorological Society, 2017, 143, 37-52. | 2.7 | 4 |
| 7 | The libRadtran software package for radiative transfer calculations (version 2.0.1). Geoscientific Model Development, 2016, 9, 1647-1672. | 3.6 | 447 |
| 8 | Ertel potential vorticity versus <sc>B</sc>ernoulli streamfunction in earth's extratropical atmosphere. Journal of Advances in Modeling Earth Systems, 2015, 7, 437-458. | 3.8 | 5 |
| 9 | SATURN'S LONGITUDE: RISE OF THE SECOND BRANCH OF SHEAR-STABILITY THEORY AND FALL OF THE FIRST. International Journal of Modern Physics D, 2014, 23, 1430006. | 2.1 | 14 |
| 10 | 3D Modeling of interactions between Jupiter's ammonia clouds and large anticyclones. Icarus, 2014, 232, 141-156. | 2.5 | 18 |
| 11 | Earth as a Planet. , 2014, , 423-444. | | 3 |
| 12 | Jupiter's Great Red Spot: Fine-scale matches of model vorticity patterns to prevailing cloud patterns. Icarus, 2013, 225, 216-227. | 2.5 | 10 |
| 13 | Earth General Circulation Models. , 2013, , . | | 2 |
| 14 | Using 3D finite volume for the pressure gradient force in atmospheric models. Quarterly Journal of the Royal Meteorological Society, 2012, 138, 2126-2135. | 2.7 | 2 |
| 15 | Emergence of polar-jet polygons from jet instabilities in a Saturn model. Icarus, 2011, 211, 1284-1293. | 2.5 | 19 |
| 16 | New secondary-scattering correction in DISORT with increased efficiency for forward scattering. Journal of Quantitative Spectroscopy and Radiative Transfer, 2011, 112, 2028-2034. | 2.3 | 96 |
| 17 | Jupiter's South South Temperate Zone vortices: Observations and simulations. Icarus, 2010, 206, 747-754. | 2.5 | 3 |
| 18 | Saturn's rotation period from its atmospheric planetary-wave configuration. Nature, 2009, 460, 608-610. | 27.8 | 105 |

| # | ARTICLE | IF | CITATIONS |
|----|--|------|-----------|
| 19 | Addition of water and ammonia cloud microphysics to the EPIC model. <i>Icarus</i> , 2008, 194, 303-326. | 2.5 | 26 |
| 20 | Music of the stratospheres. <i>Nature</i> , 2008, 453, 163-164. | 27.8 | 6 |
| 21 | The Emergence of Multiple Robust Zonal Jets from Freely Evolving, Three-Dimensional Stratified Geostrophic Turbulence with Applications to Jupiter. <i>Journals of the Atmospheric Sciences</i> , 2008, 65, 3947-3962. | 1.7 | 28 |
| 22 | Effects of topography on the spin-up of a Venus atmospheric model. <i>Journal of Geophysical Research</i> , 2007, 112, . | 3.3 | 32 |
| 23 | Earth as a Planet: Atmosphere and Oceans. , 2007, , 169-188. | | 2 |
| 24 | The EPIC atmospheric model with an isentropic/terrain-following hybrid vertical coordinate. <i>Icarus</i> , 2006, 182, 259-273. | 2.5 | 43 |
| 25 | Simulations of high-latitude spots on Jupiter: Constraints on vortex strength and the deep wind. <i>Planetary and Space Science</i> , 2005, 53, 1221-1233. | 1.7 | 8 |
| 26 | Jupiter's 24° N highest speed jet: Vertical structure deduced from nonlinear simulations of a large-amplitude natural disturbance. <i>Icarus</i> , 2005, 176, 272-282. | 2.5 | 27 |
| 27 | EPIC simulations of the merger of Jupiter's White Ovals BE and FA: altitude-dependent behavior. <i>Icarus</i> , 2003, 166, 63-74. | 2.5 | 26 |
| 28 | Coordinated 1996 HST and IRTF Imaging of Neptune and Triton III. Neptune's Atmospheric Circulation and Cloud Structure. <i>Icarus</i> , 2001, 149, 459-488. | 2.5 | 80 |
| 29 | Neptune's Atmospheric Circulation and Cloud Morphology: Changes Revealed by 1998 HST Imaging. <i>Icarus</i> , 2001, 150, 244-260. | 2.5 | 48 |
| 30 | EPIC Simulations of Bright Companions to Neptune's Great Dark Spots. <i>Icarus</i> , 2001, 151, 275-285. | 2.5 | 43 |
| 31 | Nonlinear Simulations of Jupiter's 5-Micron Hot Spots. <i>Science</i> , 2000, 289, 1737-1740. | 12.6 | 127 |
| 32 | Nonlinear simulations of Jupiter's 5-micron hot spots. <i>Science</i> , 2000, 289, 1737-40. | 12.6 | 70 |
| 33 | The Explicit Planetary Isentropic-Coordinate (EPIC) Atmospheric Model. <i>Icarus</i> , 1998, 132, 221-238. | 2.5 | 127 |
| 34 | EPIC Simulations of Time-Dependent, Three-Dimensional Vortices with Application to Neptune's Great Dark Spot. <i>Icarus</i> , 1998, 132, 239-265. | 2.5 | 64 |
| 35 | Jupiter: Atmosphere. , 1997, , 367-371. | | 0 |
| 36 | Jupiter's Tropospheric Thermal Emission. I. Observations and Techniques. <i>Icarus</i> , 1996, 124, 22-31. | 2.5 | 7 |

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|----|--|------|-----------|
| 37 | Jupiter's Tropospheric Thermal Emission. II. Power Spectrum Analysis and Wave Search. Icarus, 1996, 124, 32-44. | 2.5 | 24 |
| 38 | Estimate of Jupiter's Deep Zonal-Wind Profile from Shoemaker-Levy 9 Data and Arnol'd's Second Stability Criterion. Icarus, 1995, 117, 439-442. | 2.5 | 47 |
| 39 | HST imaging of atmospheric phenomena created by the impact of comet Shoemaker-Levy 9. Science, 1995, 267, 1288-1296. | 12.6 | 206 |
| 40 | Collision of comet Shoemaker-Levy 9 with Jupiter observed by the NASA infrared telescope facility. Science, 1995, 267, 1277-1282. | 12.6 | 68 |
| 41 | Dynamics of Jovian Atmospheres. Annual Review of Fluid Mechanics, 1995, 27, 293-334. | 25.0 | 96 |
| 42 | Dynamic response of Jupiter's atmosphere to the impact of comet Shoemaker-Levy 9. Nature, 1994, 368, 525-527. | 27.8 | 25 |
| 43 | Atmospheric gravity waves from the impact of comet Shoemaker-Levy 9 with Jupiter. Geophysical Research Letters, 1994, 21, 1083-1086. | 4.0 | 31 |
| 44 | Successes and failures of shallow-water interpretations of Voyager wind data. Chaos, 1994, 4, 213-225. | 2.5 | 4 |
| 45 | Jupiter's winds and Arnol'd's second stability theorem: Slowly moving waves and neutral stability. Journal of Geophysical Research, 1993, 98, 18847-18855. | 3.3 | 17 |
| 46 | A Relationship between Potential Vorticity and Zonal Wind on Jupiter. Journals of the Atmospheric Sciences, 1993, 50, 14-22. | 1.7 | 35 |
| 47 | Stellar and Jovian Vortices. Annals of the New York Academy of Sciences, 1990, 617, 190-216. | 3.8 | 14 |
| 48 | Jupiter's Great Red Spot as a Shallow Water System. Journals of the Atmospheric Sciences, 1989, 46, 3256-3278. | 1.7 | 143 |
| 49 | Potential Vorticity and Layer Thickness Variations in the Flow around Jupiter's Great Red Spot and White Oval BC. Journals of the Atmospheric Sciences, 1988, 45, 1380-1396. | 1.7 | 79 |
| 50 | Voyager 2 in the Uranian System: Imaging Science Results. Science, 1986, 233, 43-64. | 12.6 | 406 |
| 51 | Oceans. , 0, , . | | 0 |
| 52 | Evolution of Jupiter's critical latitudes: Initial laboratory altimetry results. Journal of Geophysical Research E: Planets, 0, , . | 3.6 | 0 |