

Thomas Eck

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/2299041/publications.pdf>

Version: 2024-02-01

57
papers

16,290
citations

57631

44
h-index

161609

54
g-index

66
all docs

66
docs citations

66
times ranked

7888
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|---|-----|-----------|
| 1 | The MODIS Aerosol Algorithm, Products, and Validation. <i>Journals of the Atmospheric Sciences</i> , 2005, 62, 947-973. | 0.6 | 2,866 |
| 2 | Wavelength dependence of the optical depth of biomass burning, urban, and desert dust aerosols. <i>Journal of Geophysical Research</i> , 1999, 104, 31333-31349. | 3.3 | 1,737 |
| 3 | An emerging ground-based aerosol climatology: Aerosol optical depth from AERONET. <i>Journal of Geophysical Research</i> , 2001, 106, 12067-12097. | 3.3 | 1,737 |
| 4 | Accuracy assessments of aerosol optical properties retrieved from Aerosol Robotic Network (AERONET) Sun and sky radiance measurements. <i>Journal of Geophysical Research</i> , 2000, 105, 9791-9806. | 3.3 | 1,532 |
| 5 | A review of biomass burning emissions part II: intensive physical properties of biomass burning particles. <i>Atmospheric Chemistry and Physics</i> , 2005, 5, 799-825. | 1.9 | 1,111 |
| 6 | Global evaluation of the Collection 5 MODIS dark-target aerosol products over land. <i>Atmospheric Chemistry and Physics</i> , 2010, 10, 10399-10420. | 1.9 | 1,060 |
| 7 | Spectral discrimination of coarse and fine mode optical depth. <i>Journal of Geophysical Research</i> , 2003, 108, . | 3.3 | 541 |
| 8 | A review of biomass burning emissions part III: intensive optical properties of biomass burning particles. <i>Atmospheric Chemistry and Physics</i> , 2005, 5, 827-849. | 1.9 | 484 |
| 9 | Columnar aerosol optical properties at AERONET sites in central eastern Asia and aerosol transport to the tropical mid-Pacific. <i>Journal of Geophysical Research</i> , 2005, 110, n/a-n/a. | 3.3 | 377 |
| 10 | Climatological aspects of the optical properties of fine/coarse mode aerosol mixtures. <i>Journal of Geophysical Research</i> , 2010, 115, . | 3.3 | 325 |
| 11 | An analysis of AERONET aerosol absorption properties and classifications representative of aerosol source regions. <i>Journal of Geophysical Research</i> , 2012, 117, . | 3.3 | 311 |
| 12 | Classification of aerosol properties derived from AERONET direct sun data. <i>Atmospheric Chemistry and Physics</i> , 2007, 7, 453-458. | 1.9 | 215 |
| 13 | Light absorption by pollution, dust, and biomass burning aerosols: a global model study and evaluation with AERONET measurements. <i>Annales Geophysicae</i> , 2009, 27, 3439-3464. | 0.6 | 214 |
| 14 | Characterization of the optical properties of biomass burning aerosols in Zambia during the 1997 ZIBBEE field campaign. <i>Journal of Geophysical Research</i> , 2001, 106, 3425-3448. | 3.3 | 207 |
| 15 | Bimodal size distribution influences on the variation of Angstrom derivatives in spectral and optical depth space. <i>Journal of Geophysical Research</i> , 2001, 106, 9787-9806. | 3.3 | 205 |
| 16 | Detection of biomass burning smoke from TOMS measurements. <i>Geophysical Research Letters</i> , 1996, 23, 745-748. | 1.5 | 195 |
| 17 | High aerosol optical depth biomass burning events: A comparison of optical properties for different source regions. <i>Geophysical Research Letters</i> , 2003, 30, . | 1.5 | 179 |
| 18 | Aeronet's Version 2.0 quality assurance criteria. , 2006, 6408, 134. | | 179 |

| # | ARTICLE | IF | CITATIONS |
|----|--|-----|-----------|
| 19 | Variability of biomass burning aerosol optical characteristics in southern Africa during the SAFARI 2000 dry season campaign and a comparison of single scattering albedo estimates from radiometric measurements. <i>Journal of Geophysical Research</i> , 2003, 108, n/a-n/a. | 3.3 | 158 |
| 20 | Maritime aerosol network as a component of AERONET – first results and comparison with global aerosol models and satellite retrievals. <i>Atmospheric Measurement Techniques</i> , 2011, 4, 583-597. | 1.2 | 152 |
| 21 | The lognormal distribution as a reference for reporting aerosol optical depth statistics; Empirical tests using multi-year, multi-site AERONET Sunphotometer data. <i>Geophysical Research Letters</i> , 2000, 27, 3333-3336. | 1.5 | 141 |
| 22 | Comparison of Moderate Resolution Imaging Spectroradiometer (MODIS) and Aerosol Robotic Network (AERONET) remote-sensing retrievals of aerosol fine mode fraction over ocean. <i>Journal of Geophysical Research</i> , 2005, 110, . | 3.3 | 123 |
| 23 | Optical properties of boreal region biomass burning aerosols in central Alaska and seasonal variation of aerosol optical depth at an Arctic coastal site. <i>Journal of Geophysical Research</i> , 2009, 114, . | 3.3 | 123 |
| 24 | Spatial and temporal variability of column-integrated aerosol optical properties in the southern Arabian Gulf and United Arab Emirates in summer. <i>Journal of Geophysical Research</i> , 2008, 113, . | 3.3 | 119 |
| 25 | Maritime component in aerosol optical models derived from Aerosol Robotic Network data. <i>Journal of Geophysical Research</i> , 2003, 108, AAC 14-1. | 3.3 | 115 |
| 26 | Satellite estimation of spectral UVB irradiance using TOMS derived total ozone and UV reflectivity. <i>Geophysical Research Letters</i> , 1995, 22, 611-614. | 1.5 | 114 |
| 27 | Dust optical properties over North Africa and Arabian Peninsula derived from the AERONET dataset. <i>Atmospheric Chemistry and Physics</i> , 2011, 11, 10733-10741. | 1.9 | 112 |
| 28 | Validation of AERONET estimates of atmospheric solar fluxes and aerosol radiative forcing by ground-based broadband measurements. <i>Journal of Geophysical Research</i> , 2008, 113, . | 3.3 | 100 |
| 29 | Fog- and cloud-induced aerosol modification observed by the Aerosol Robotic Network (AERONET). <i>Journal of Geophysical Research</i> , 2012, 117, . | 3.3 | 99 |
| 30 | A seasonal trend of single scattering albedo in southern African biomass-burning particles: Implications for satellite products and estimates of emissions for the world's largest biomass-burning source. <i>Journal of Geophysical Research D: Atmospheres</i> , 2013, 118, 6414-6432. | 1.2 | 99 |
| 31 | A critical examination of spatial biases between MODIS and MISR aerosol products – application for potential AERONET deployment. <i>Atmospheric Measurement Techniques</i> , 2011, 4, 2823-2836. | 1.2 | 93 |
| 32 | Effect of dry-season biomass burning on Amazon basin aerosol concentrations and optical properties, 1992-1994. <i>Journal of Geophysical Research</i> , 1996, 101, 19465-19481. | 3.3 | 91 |
| 33 | The albedo of a tropical evergreen forest. <i>Quarterly Journal of the Royal Meteorological Society</i> , 1980, 106, 551-558. | 1.0 | 85 |
| 34 | Characterization of the optical properties of atmospheric aerosols in Amazonia from long-term AERONET monitoring (1993-1995 and 1999-2006). <i>Journal of Geophysical Research</i> , 2008, 113, . | 3.3 | 80 |
| 35 | Relationship between column aerosol optical thickness and in situ ground based dust concentrations over Barbados. <i>Geophysical Research Letters</i> , 2000, 27, 1643-1646. | 1.5 | 77 |
| 36 | Development towards a global operational aerosol consensus: basic climatological characteristics of the International Cooperative for Aerosol Prediction Multi-Model Ensemble (ICAP-MME). <i>Atmospheric Chemistry and Physics</i> , 2015, 15, 335-362. | 1.9 | 76 |

| # | ARTICLE | IF | CITATIONS |
|----|--|-----|-----------|
| 37 | AERONET-based models of smoke-dominated aerosol near source regions and transported over oceans, and implications for satellite retrievals of aerosol optical depth. <i>Atmospheric Chemistry and Physics</i> , 2014, 14, 11493-11523. | 1.9 | 75 |
| 38 | New approach to monitor transboundary particulate pollution over Northeast Asia. <i>Atmospheric Chemistry and Physics</i> , 2014, 14, 659-674. | 1.9 | 66 |
| 39 | A synthesis of single scattering albedo of biomass burning aerosol over southern Africa during SAFARI 2000. <i>Geophysical Research Letters</i> , 2007, 34, . | 1.5 | 64 |
| 40 | Aerosol Radiative Impact on Spectral Solar Flux at the Surface, Derived from Principal-Plane Sky Measurements. <i>Journals of the Atmospheric Sciences</i> , 2002, 59, 635-646. | 0.6 | 60 |
| 41 | Remote sensing of soot carbon α Part 2: Understanding the absorption λ^{-1} exponent. <i>Atmospheric Chemistry and Physics</i> , 2016, 16, 1587-1602. | 1.9 | 60 |
| 42 | Observations of rapid aerosol optical depth enhancements in the vicinity of polluted cumulus clouds. <i>Atmospheric Chemistry and Physics</i> , 2014, 14, 11633-11656. | 1.9 | 58 |
| 43 | Effect of smoke and clouds on the transmissivity of photosynthetically active radiation inside the canopy. <i>Atmospheric Chemistry and Physics</i> , 2006, 6, 1645-1656. | 1.9 | 54 |
| 44 | Latitudinal variation of aerosol properties from Indo-Gangetic Plain to central Himalayan foothills during TIGERZ campaign. <i>Journal of Geophysical Research D: Atmospheres</i> , 2014, 119, 4750-4769. | 1.2 | 52 |
| 45 | Observations of the Interaction and Transport of Fine Mode Aerosols With Cloud and/or Fog in Northeast Asia From Aerosol Robotic Network and Satellite Remote Sensing. <i>Journal of Geophysical Research D: Atmospheres</i> , 2018, 123, 5560-5587. | 1.2 | 49 |
| 46 | AERONET Remotely Sensed Measurements and Retrievals of Biomass Burning Aerosol Optical Properties During the 2015 Indonesian Burning Season. <i>Journal of Geophysical Research D: Atmospheres</i> , 2019, 124, 4722-4740. | 1.2 | 40 |
| 47 | Intercomparison of aerosol single-scattering albedo derived from AERONET surface radiometers and LARGE in situ aircraft profiles during the 2011 DRAGON-MD and DISCOVER-AQ experiments. <i>Journal of Geophysical Research D: Atmospheres</i> , 2014, 119, 7439-7452. | 1.2 | 37 |
| 48 | Influence of observed diurnal cycles of aerosol optical depth on aerosol direct radiative effect. <i>Atmospheric Chemistry and Physics</i> , 2013, 13, 7895-7901. | 1.9 | 32 |
| 49 | Pan-Arctic sunphotometry during the ARCTAS campaign of April 2008. <i>Geophysical Research Letters</i> , 2010, 37, . | 1.5 | 31 |
| 50 | Aerosol optical properties derived from the DRAGON-NE Asia campaign, and implications for a single-channel algorithm to retrieve aerosol optical depth in spring from Meteorological Imager (MI) on-board the Communication, Ocean, and Meteorological Satellite (COMS). <i>Atmospheric Chemistry and Physics</i> , 2016, 16, 1789-1808. | 1.9 | 29 |
| 51 | Robust optical features of fine mode size distributions: Application to the Quebec smoke event of 2002. <i>Journal of Geophysical Research</i> , 2005, 110, . | 3.3 | 28 |
| 52 | Verification and application of the extended spectral deconvolution algorithm (SDA+) methodology to estimate aerosol fine and coarse mode extinction coefficients in the marine boundary layer. <i>Atmospheric Measurement Techniques</i> , 2014, 7, 3399-3412. | 1.2 | 25 |
| 53 | Coarse mode optical information retrievable using ultraviolet to short-wave infrared Sun photometry: Application to United Arab Emirates Unified Aerosol Experiment data. <i>Journal of Geophysical Research</i> , 2008, 113, . | 3.3 | 23 |
| 54 | Observation-Based Study on Aerosol Optical Depth and Particle Size in Partly Cloudy Regions. <i>Journal of Geophysical Research D: Atmospheres</i> , 2017, 122, 10013-10024. | 1.2 | 11 |

| # | ARTICLE | IF | CITATIONS |
|----|--|-----|-----------|
| 55 | A miniature scanning sun photometer for vertical profiles and mobile platforms. Aerosol Science and Technology, 2016, 50, 11-16. | 1.5 | 5 |
| 56 | Climatological aspects of the optical properties of fine/coarse mode aerosol mixtures. , 2010, . | | 1 |
| 57 | Current and Future Perspectives of Aerosol Research at NASA Goddard Space Flight Center. Bulletin of the American Meteorological Society, 2014, 95, ES203-ES207. | 1.7 | 0 |