# Davidson Martins Moreira

List of Publications by Year
in descending order



| 88 | 1,318 | 393982 19 | 433756 31 |
|---|---|---|---|
| papers | citations | h-index | g-index |

| 92 | 92 | 92 | 556 |
|---|---|---|---|
| all docs | docs citations | times ranked | citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Exposure and dose assessment of school children to air pollutants in a tropical coastal-urban area. Science of the Total Environment, 2022, 803, 149747. | 3.9 | 9 |
| 2 | Network dynamic and stability on European Union. Physica A: Statistical Mechanics and Its Applications, 2022, 587, 126532. | 1.2 | 5 |
| 3 | Wind mapping using the mesoscale WRF model in a tropical region of Brazil. Energy, 2022, 240, 122491. | 4.5 | 8 |
| 4 | Long-range correlations of the wind speed in a northeast region of Brazil. Energy, 2022, 243, 122742. | 4.5 | 4 |
| 5 | An Approach for the Atmospheric Pollutant Dispersion Equation Considering Anomalous Diffusion in Strongly Unstable Conditions. Pure and Applied Geophysics, 2022, 179, 1433-1443. | 0.8 | 1 |
| 6 | Coastal-urban meteorology: A sensitivity study using the WRF-urban model. Urban Climate, 2022, 44, 101185. | 2.4 | 4 |
| 7 | Scaling behavior of wind speed in the coast of Brazil and the South Atlantic Ocean: The crossover phenomenon. Energy, 2021, 217, 119413. | 4.5 | 3 |
| 8 | An investigation on deep learning and wavelet transform to nowcast wind power and wind power ramp: A case study in Brazil and Uruguay. Energy, 2021, 230, 120842. | 4.5 | 28 |
| 9 | Source apportionment modelling of PM2.5 using CMAQ-ISAM over a tropical coastal-urban area. Atmospheric Pollution Research, 2021, 12, 101250. | 1.8 | 13 |
| 10 | Simulation of atmospheric pollutant dispersion considering a bi-flux process and fractional derivatives. Atmospheric Pollution Research, 2020, 11, 57-66. | 1.8 | 5 |
| 11 | Traffic data in air quality modeling: A review of key variables, improvements in results, open problems and challenges in current research. Atmospheric Pollution Research, 2020, 11, 454-468. | 1.8 | 35 |
| 12 | Nowcasting prediction of wind speed using computational intelligence and wavelet in Brazil. International Journal for Computational Methods in Engineering Science and Mechanics, 2020, 21, 343-369. | 1.4 | 9 |
| 13 | Fractional Derivatives in Geophysical Modelling: Approaches Using the Modified Adomian Decomposition Method. Pure and Applied Geophysics, 2020, 177, 4309-4323. | 0.8 | 3 |
| 14 | Influence of land use on the performance of the WRF model in a humid tropical climate. Theoretical and Applied Climatology, 2020, 141, 201-214. | 1.3 | 5 |
| 15 | A Model Using Fractional Derivatives with Vertical Eddy Diffusivity Depending on the Source Distance Applied to the Dispersion of Atmospheric Pollutants. Pure and Applied Geophysics, 2019, 176, 1797-1806. | 0.8 | 7 |
| 16 | New approach to handle gas-particle transformation in air pollution modelling using fractional derivatives. Atmospheric Pollution Research, 2019, 10, 1577-1587. | 1.8 | 8 |
| 17 | Short-term wind speed forecasting in Uruguay using computational intelligence. Heliyon, 2019, 5, e01664. | 1.4 | 29 |
| 18 | Performance evaluation of a photochemical model using different boundary conditions over the urban and industrialized metropolitan area of VitÃ³ria, Brazil. Environmental Science and Pollution Research, 2019, 26, 16125-16144. | 2.7 | 22 |

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|---|---|---|---|
| 19 | Mathematical Model Using Fractional Derivatives Applied to the Dispersion of Pollutants in the Planetary Boundary Layer. Boundary-Layer Meteorology, 2019, 170, 285-304. | 1.2 | 10 |
| 20 | Analysis of long-range correlations of wind speed in different regions of Bahia and the Abrolhos Archipelago, Brazil. Energy, 2019, 167, 680-687. | 4.5 | 13 |
| 21 | Study of the Impact of the Topology of Artificial Neural Networks for the Prediction of Meteorological Data. , 2019, , 201-214. | | 2 |
| 22 | A New Direction in the Atmospheric Pollutant Dispersion inside the Planetary Boundary Layer. Journal of Applied Meteorology and Climatology, 2018, 57, 185-192. | 0.6 | 16 |
| 23 | Simulated Dispersion of the Gas Released by the SpaceX Falcon9 Rocket Explosion. Journal of Spacecraft and Rockets, 2018, 55, 1528-1536. | 1.3 | 6 |
| 24 | WRF-SMOKE-CMAQ modeling system for air quality evaluation in SÃ£o Paulo megacity with a 2008 experimental campaign data. Environmental Science and Pollution Research, 2018, 25, 36555-36569. | 2.7 | 31 |
| 25 | InventÃ¡rio de EmissÃµes com Alta ResoluÃ§Ã£o para a RegiÃ£o da Grande VitÃ³ria Utilizando o Sistema de Modelagem Integrada WRF-SMOKE-CMAQ. Revista Brasileira De Meteorologia, 2018, 33, 521-536. | 0.2 | 6 |
| 26 | Conformable Laplace Transform of Fractional Differential Equations. Axioms, 2018, 7, 55. | 0.9 | 56 |
| 27 | EVALUATION OF THE CHEMICAL TRANSPORT OF AIR POLLUTANTS IN THE METROPOLITAN REGION OF SALVADOR, BRAZIL. , 2018, , . | | 3 |
| 28 | Fractional derivative models for atmospheric dispersion of pollutants. Physica A: Statistical Mechanics and Its Applications, 2017, 477, 9-19. | 1.2 | 48 |
| 29 | Analysis of the interface configuration and flow characteristics in tanks in a multiphase liquidâ€“gas system using numerical simulation. Journal of Turbulence, 2017, 18, 688-716. | 0.5 | 1 |
| 30 | The development of a new model to simulate the dispersion of rocket exhaust clouds. Aerospace Science and Technology, 2017, 69, 298-312. | 2.5 | 4 |
| 31 | Um Estudo Comparativo Entre Coeficientes de DifusÃ£o Verticais na SimulaÃ§Ã£o da DispersÃ£o de Poluentes em uma Camada Limite Convectiva. Revista Brasileira De Meteorologia, 2016, 31, 518-526. | 0.2 | 0 |
| 32 | Solution of the Atmospheric Diffusion Equation with Longitudinal Wind Speed Depending on Source Distance. Revista Brasileira De Meteorologia, 2016, 31, 202-210. | 0.2 | 5 |
| 33 | Evaluation of weather research and forecasting model parameterizations under sea-breeze conditions in a North Sea coastal environment. Journal of Meteorological Research, 2016, 30, 998-1018. | 0.9 | 22 |
| 34 | Study of the Thermal Internal Boundary Layer in Sea Breeze Conditions Using Different Parameterizations: Application of the WRF Model in the Greater VitÃ³ria Region. Revista Brasileira De Meteorologia, 2016, 31, 593-609. | 0.2 | 20 |
| 35 | A Model for Turbulent Diffusion in a Vertically Inhomogeneous Atmospheric Boundary Layer. Revista Virtual De Quimica, 2016, 8, 1220-1233. | 0.1 | 0 |
| 36 | Simulation of Rocket Exhaust Clouds at the Centro de LanÃ§amento de AlcÃ¢ntara Using the WRF-CMAQ Modeling System. Journal of Aerospace Technology and Management, 2014, 6, 119-128. | 0.3 | 4 |

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|---|---|---|---|
| 37 | A contribution to solve the atmospheric diffusion equation with eddy diffusivity depending on source distance. Atmospheric Environment, 2014, 83, 254-259. | 1.9 | 29 |
| 38 | A solution of nonlinear equation for the gravity wave spectra from Adomian decomposition method: a first approach. Revista Brasileira De Meteorologia, 2013, 28, 357-363. | 0.2 | 0 |
| 39 | A model employing integral transform method to simulate pollutant dispersion in atmosphere. Revista Brasileira De Meteorologia, 2013, 28, 373-381. | 0.2 | 0 |
| 40 | A general formulation for pollutant dispersion in the atmosphere. Journal of Engineering Mathematics, 2012, 74, 159-173. | 0.6 | 11 |
| 41 | On the new parameterisation of the eddy diffusivity for radioactive pollutant dispersion. International Journal of Nuclear Energy Science and Technology, 2011, 6, 166. | 0.2 | 1 |
| 42 | On the Time Evolution of the Turbulent Kinetic Energy Spectrum for Decaying Turbulence in the Convective Boundary Layer. Boundary-Layer Meteorology, 2011, 138, 61-75. | 1.2 | 17 |
| 43 | A multilayer model to simulate rocket exhaust clouds. Journal of Aerospace Technology and Management, 2011, 3, 41-52. | 0.3 | 10 |
| 44 | Comparison between analytical models to simulate pollutant dispersion in the atmosphere. International Journal of Environment and Waste Management, 2010, 6, 327. | 0.2 | 9 |
| 45 | Tritium dispersion simulation in the atmosphere by the integral transform technique using micrometeorological parameters generated by large eddy simulation. International Journal of Nuclear Energy Science and Technology, 2010, 5, 11. | 0.2 | 1 |
| 46 | Modelling the photochemical pollution over the metropolitan area of Porto Alegre, Brazil. Atmospheric Environment, 2010, 44, 370-380. | 1.9 | 11 |
| 47 | A multi-layer model for pollutant dispersion with dry deposition to the ground. Atmospheric Environment, 2010, 44, 1859-1865. | 1.9 | 19 |
| 48 | Some characteristics of a plume from a point source based on analytical solution of the two-dimensional advectionâ€“diffusion equation. Atmospheric Environment, 2009, 43, 2221-2227. | 1.9 | 14 |
| 49 | The state-of-art of the GILTT method to simulate pollutant dispersion in the atmosphere. Atmospheric Research, 2009, 92, 1-17. | 1.8 | 79 |
| 50 | A semi-analytical solution for the three-dimensional advectionâ€“diffusion equation considering non-local turbulence closure. Atmospheric Research, 2008, 90, 63-69. | 1.8 | 19 |
| 51 | A Two-Dimensional Solution of the Advectionâ€“Diffusion Equation with Dry Deposition to the Ground. Journal of Applied Meteorology and Climatology, 2008, 47, 2096-2104. | 0.6 | 22 |
| 52 | An analytical solution for the nonlinear energy spectrum equation by the decomposition method. Journal of Physics A: Mathematical and Theoretical, 2008, 41, 425205. | 0.7 | 3 |
| 53 | Meteorologia e poluiÃ§Ã£o atmosfÃ©rica. Ambiente & Sociedade, 2008, 11, 1-13. | 0.5 | 7 |
| 54 | Solutions of the Atmospheric Advectionâ€“Diffusion Equation by the Laplace Transformation. , 2008, , 171-180. | | 0 |

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|---|---|---|---|
| 55 | Poster 22 Two-dimensional steady state advection-diffusion equation: An analytical solution. Developments in Environmental Science, 2007, 6, 802-804. | 0.5 | 0 |
| 56 | Poster 23 The new GIADMT approach to simulate the pollutant dispersion in the planetary boundary layer. Developments in Environmental Science, 2007, 6, 805-807. | 0.5 | 1 |
| 57 | Poster 24 One-dimensional eddy diffusivities for growing turbulence in the convective boundary layer. Developments in Environmental Science, 2007, 6, 808-810. | 0.5 | 0 |
| 58 | Tritium dispersion simulation in the atmosphere from ANGRA I Nuclear Power Plant. International Journal of Nuclear Energy Science and Technology, 2007, 3, 118. | 0.2 | 5 |
| 59 | Poster 26 An air pollution model applying a semi-analytical solution for low wind conditions. Developments in Environmental Science, 2007, , 814-816. | 0.5 | 0 |
| 60 | Derivation of a decorrelation timescale depending on source distance for inhomogeneous turbulence in a convective boundary layer. Physica A: Statistical Mechanics and Its Applications, 2007, 374, 55-65. | 1.2 | 3 |
| 61 | Simulation of pollutant dispersion for low wind conditions in stable and convective planetary boundary layer. Atmospheric Environment, 2007, 41, 5496-5501. | 1.9 | 27 |
| 62 | An analytical solution of the advection-diffusion equation considering non-local turbulence closure. Environmental Fluid Mechanics, 2007, 7, 43-54. | 0.7 | 18 |
| 63 | A new model for the CBL growth based on the turbulent kinetic energy equation. Environmental Fluid Mechanics, 2007, 7, 409-419. | 0.7 | 2 |
| 64 | Comparison between Eulerian and Lagrangian semi-analytical models to simulate the pollutant dispersion in the PBL. Applied Mathematical Modelling, 2007, 31, 120-129. | 2.2 | 11 |
| 65 | Simulation of Pollutant Dispersion in the Atmosphere by the Laplace Transform: The ADMM Approach. Water, Air, and Soil Pollution, 2006, 177, 411-439. | 1.1 | 38 |
| 66 | The GILTT solution of the advectionâ€“diffusion equation for an inhomogeneous and nonstationary PBL. Atmospheric Environment, 2006, 40, 3186-3194. | 1.9 | 44 |
| 67 | Semi-analytical solution of the steady three-dimensional advection-diffusion equation in the planetary boundary layer. Atmospheric Environment, 2006, 40, 5659-5669. | 1.9 | 56 |
| 68 | An iterative Langevin solution for contaminant dispersion simulation using the Gramâ€“Charlier PDF. Environmental Modelling and Software, 2005, 20, 285-289. | 1.9 | 11 |
| 69 | Analytical solution of the Eulerian dispersion equation for nonstationary conditions: development and evaluation. Environmental Modelling and Software, 2005, 20, 1159-1165. | 1.9 | 12 |
| 70 | Analytical solution of the advectionâ€“diffusion equation with nonlocal closure of the turbulent diffusion. Environmental Modelling and Software, 2005, 20, 1347-1351. | 1.9 | 10 |
| 71 | A semi-analytical model for the tritium dispersion simulation in the PBL from the Angra I nuclear power plant. Ecological Modelling, 2005, 189, 413-424. | 1.2 | 10 |
| 72 | On the universality of the dissipation rate functional form and of the autocorrelation function exponential form. Atmospheric Environment, 2005, 39, 1917-1924. | 1.9 | 7 |

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|---|---|---|---|
| 73 | A new analytical approach to simulate the pollutant dispersion in the PBL. Atmospheric Environment, 2005, 39, 2171-2178. | 1.9 | 81 |
| 74 | Semi-analytical model for pollution dispersion in the planetary boundary layer. Atmospheric Environment, 2005, 39, 2673-2681. | 1.9 | 32 |
| 75 | Plume dispersion simulation in low wind conditions in stable and convective boundary layers. Atmospheric Environment, 2005, 39, 3643-3650. | 1.9 | 46 |
| 76 | Near-source atmospheric pollutant dispersion using the new GILTT method. Atmospheric Environment, 2005, 39, 6289-6294. | 1.9 | 63 |
| 77 | Simulation of the Dispersion of Pollutants Using two Approaches for the Case of a Low Source in the Sbl: Evaluation of Turbulence Parameterisations. Water, Air, and Soil Pollution, 2005, 161, 285-297. | 1.1 | 12 |
| 78 | An Alternative Numerical Approach to Solve the Langevin Equation Applied to Air Pollution Dispersion. Water, Air, and Soil Pollution, 2005, 163, 103-118. | 1.1 | 8 |
| 79 | Derivation of eddy diffusivities from an unsteady turbulence spectrum. Atmospheric Environment, 2004, 38, 6121-6124. | 1.9 | 15 |
| 80 | Derivation of an eddy diffusivity depending on source distance under moderately unstable conditions. Revista Brasileira De Geofisica, 2002, 20, 113-121. | 0.2 | 0 |
| 81 | Evaluation of a new eddy diffusivity parameterisation from turbulent Eulerian spectra in different stability conditions. Atmospheric Environment, 2002, 36, 67-76. | 1.9 | 42 |
| 82 | A comparison of two turbulent dispersion parameterisations in the stable boundary layer using Lagrangian and Eulerian models. Revista Brasileira De Geofisica, 2002, 20, 104-112. | 0.2 | 1 |
| 83 | Derivation of an Eddy Diffusivity Depending on Source Distance for Vertically Inhomogeneous Turbulence in a Convective Boundary Layer. Journal of Applied Meteorology and Climatology, 2001, 40, 1233-1240. | 1.7 | 56 |
| 84 | On the Analytical Formulations for Pollutant Dispersion Simulation in the Atmospheric Boundary Layer. , 0, , . | | 0 |
| 85 | Study of the Wind Speed Forecasting Applying Computational Intelligence. , 0, , . | | 4 |
| 86 | Evaluating the Impact of Large Eddy Simulations in Rocket Exhaust Modeling. , 0, , . | | 1 |
| 87 | PREVISÃƒO DA VELOCIDADE DO VENTO A CURTO PRAZO EM REGIÃƒO TROPICAL UTILIZANDO WAVELETS E INTELIGÃŠNCIA ARTIFICIAL. , 0, , . | | 2 |
| 88 | MODELOS MATEMÃ¯TICOS: UM MECANISMO DE GESTÃƒO AMBIENTAL. , 0, , . | | 0 |