

Kuppalapalle Vajravelu

List of Publications by Year in descending order

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98
papers

1,454
citations

393982

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414034

32
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100
all docs

100
docs citations

100
times ranked

819
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|--|-----|-----------|
| 1 | Thermophoresis and Brownian motion effects on magneto-convective heat transfer of viscoelastic nanofluid over a stretching sheet with nonlinear thermal radiation. International Journal of Ambient Energy, 2022, 43, 413-424. | 1.4 | 5 |
| 2 | Examination of Chemical Reaction on Three Dimensional Mixed Convective Magnetohydrodynamic Jeffrey Nanofluid Over a Stretching Sheet. Journal of Nanofluids, 2022, 11, 113-124. | 1.4 | 5 |
| 3 | An effective method for solving singular boundary value problems with some relevant physical applications. Computational and Applied Mathematics, 2022, 41, 1. | 1.0 | 5 |
| 4 | MHD Carreau nanoliquid flow over a nonlinear stretching surface. Heat Transfer, 2022, 51, 5262-5287. | 1.7 | 4 |
| 5 | Comparative heat transfer analysis of $\text{Cu}-\text{Al}_2\text{O}_3-\text{C}_2\text{H}_6\text{O}_2$ and $\text{Cu}-\text{Al}_2\text{O}_3-\text{H}_2\text{O}$ electroconductive nanofluids in a saturated porous square cavity with Joule dissipation and heat source/sink effects. Physics of Fluids, 2022, 34, . | 1.6 | 11 |
| 6 | Entropy Generation of Electrothermal Nanofluid Flow Between Two Permeable Walls Under Injection Process. Journal of Nanofluids, 2022, 11, 714-727. | 1.4 | 1 |
| 7 | Stability analysis of multiple solutions in case of a stretched nanofluid flow obeying Corcione's correlation: An extended Darcy model. ZAMM Zeitschrift Fur Angewandte Mathematik Und Mechanik, 2021, 101, e202000172. | 0.9 | 8 |
| 8 | Simple closed-form expressions for the effective properties of multilaminated flexoelectric composites. Journal of Engineering Mathematics, 2021, 127, 1. | 0.6 | 8 |
| 9 | Melting Heat Transfer of MHD Micropolar Fluid Flow Past An Exponentially Stretching Sheet with Slip and Thermal Radiation. International Journal of Applied and Computational Mathematics, 2021, 7, 1. | 0.9 | 13 |
| 10 | Unsteady MHD flow of a Williamson nanofluid on a permeable stretching surface with radiation and chemical reaction effects. European Physical Journal: Special Topics, 2021, 230, 1355-1370. | 1.2 | 27 |
| 11 | A Method of Directly Defining the inverse Mapping for a nonlinear partial differential equation and for systems of nonlinear partial differential equations. Computational and Applied Mathematics, 2021, 40, 1. | 1.0 | 6 |
| 12 | MHD 3-dimensional nanofluid flow induced by a power-law stretching sheet with thermal radiation, heat and mass fluxes. Applied Mathematics and Nonlinear Sciences, 2021, 6, 361-380. | 0.9 | 4 |
| 13 | Multi-population analysis of the Cuban SARS-CoV-2 epidemic transmission before and during the vaccination process. Physics of Fluids, 2021, 33, 107107. | 1.6 | 1 |
| 14 | Electro-kinetically modulated peristaltic mechanism of Jeffrey liquid through a micro-channel with variable viscosity. Thermal Science, 2021, 25, 271-277. | 0.5 | 6 |
| 15 | Impact of heat and mass transfer on the peristaltic mechanism of Jeffery fluid in a non-uniform porous channel with variable viscosity and thermal conductivity. Journal of Thermal Analysis and Calorimetry, 2020, 139, 1213-1228. | 2.0 | 37 |
| 16 | Peristaltic flow of non-Newtonian fluid through an inclined compliant nonlinear tube: application to chyme transport in the gastrointestinal tract. European Physical Journal Plus, 2020, 135, 1. | 1.2 | 22 |
| 17 | MHD Flow of a UCM Nanofluid in a Permeable Channel: Buongiorno's Model. International Journal of Applied and Computational Mathematics, 2020, 6, 1. | 0.9 | 1 |
| 18 | Formulation of a maximum principle satisfying a numerical scheme for traffic flow models. SN Partial Differential Equations and Applications, 2020, 1, 1. | 0.3 | 0 |

| # | ARTICLE | IF | CITATIONS |
|----|--|-----|-----------|
| 19 | Stability analysis of a mixed convection flow over a moving plate with non-uniform thickness. <i>Archive of Applied Mechanics</i> , 2020, 90, 1497-1507. | 1.2 | 5 |
| 20 | A Method of Directly Defining the inverse Mapping for a HIV infection of CD4+ T-cells model. <i>Applied Mathematics and Nonlinear Sciences</i> , 2020, . | 0.9 | 4 |
| 21 | Asymptotic Homogenization Applied to Flexoelectric Rods. <i>Materials</i> , 2019, 12, 232. | 1.3 | 8 |
| 22 | Effect of heat and mass transfer on the peristaltic flow of a Jeffrey nanofluid in a tapered flexible channel in the presence of aligned magnetic field. <i>European Physical Journal: Special Topics</i> , 2019, 228, 2713-2728. | 1.2 | 38 |
| 23 | A method of directly defining the inverse mapping for solutions of coupled systems of nonlinear differential equations. <i>Numerical Algorithms</i> , 2018, 77, 1199-1211. | 1.1 | 10 |
| 24 | Influence of Compliant Walls and Heat Transfer on the Peristaltic Transport of a Rabinowitsch Fluid in an Inclined Channel. <i>Zeitschrift Fur Naturforschung - Section A Journal of Physical Sciences</i> , 2018, 73, 833-843. | 0.7 | 13 |
| 25 | Hall current, Newtonian heating and second-order slip effects on convective magneto-micropolar fluid flow over a sheet. <i>International Journal of Modern Physics C</i> , 2018, 29, 1850090. | 0.8 | 7 |
| 26 | On the Method of Inverse Mapping for Solutions of Coupled Systems of Nonlinear Differential Equations Arising in Nanofluid Flow, Heat and Mass Transfer. <i>Applied Mathematics and Nonlinear Sciences</i> , 2018, 3, 1-14. | 0.9 | 62 |
| 27 | Galerkin-Chebyshev Pseudo Spectral Method and a Split Step New Approach for a Class of Two dimensional Semi-linear Parabolic Equations of Second Order. <i>Applied Mathematics and Nonlinear Sciences</i> , 2018, 3, 255-264. | 0.9 | 16 |
| 28 | Wall Properties and Slip Consequences on Peristaltic Transport of a Casson Liquid in a Flexible Channel with Heat Transfer. <i>Applied Mathematics and Nonlinear Sciences</i> , 2018, 3, 277-290. | 0.9 | 19 |
| 29 | Effects of second-order slip and drag reduction in boundary layer flows. <i>Applied Mathematics and Nonlinear Sciences</i> , 2018, 3, 291-302. | 0.9 | 12 |
| 30 | Axisymmetric Flow Over a Vertical Slender Cylinder in the Presence of Chemically Reactive Species. <i>International Journal of Applied and Computational Mathematics</i> , 2017, 3, 663-678. | 0.9 | 2 |
| 31 | Mixed Convective Flow of a Casson Fluid over a Vertical Stretching Sheet. <i>International Journal of Applied and Computational Mathematics</i> , 2017, 3, 1619-1638. | 0.9 | 14 |
| 32 | Influence of Non-linear Thermal Radiation on MHD Double-Diffusive Convection Heat and Mass Transfer of a Non-Newtonian Fluid in a Porous Medium. <i>International Journal of Applied and Computational Mathematics</i> , 2017, 3, 3105-3129. | 0.9 | 2 |
| 33 | MHD Flow and Heat Transfer Over a Slender Elastic Permeable Sheet in a Rotating Fluid with Hall Current. <i>International Journal of Applied and Computational Mathematics</i> , 2017, 3, 3175-3200. | 0.9 | 5 |
| 34 | Mixed Convective Boundary Layer MHD Flow Along a Vertical Elastic Sheet. <i>International Journal of Applied and Computational Mathematics</i> , 2017, 3, 2501-2518. | 0.9 | 2 |
| 35 | Combined Effects of Nonlinear Thermal Radiation and Internal Heat Generation/Absorption on Heat and Mass Transfer in a Thin Liquid Film on a Permeable Unsteady Stretching Surface with Convective Boundary Condition. <i>International Journal of Applied and Computational Mathematics</i> , 2017, 3, 2151-2169. | 0.9 | 5 |
| 36 | MHD mixed convection heat transfer over a non-linear slender elastic sheet with variable fluid properties. <i>Applied Mathematics and Nonlinear Sciences</i> , 2017, 2, 351-366. | 0.9 | 17 |

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|----|---|-----|-----------|
| 37 | Optimal Homotopy Asymptotic Solutions for Nonlinear Ordinary Differential Equations Arising in Flow and Heat Transfer due to Nonlinear Stretching Sheet. <i>Heat Transfer - Asian Research</i> , 2016, 45, 15-29. | 2.8 | 6 |
| 38 | Hall effect on MHD flow and heat transfer over a stretching sheet with variable thickness. <i>International Journal for Computational Methods in Engineering Science and Mechanics</i> , 2016, 17, 288-297. | 1.4 | 22 |
| 39 | The effect of heat transfer on the nonlinear peristaltic transport of a Jeffrey fluid through a finite vertical porous channel. <i>International Journal of Biomathematics</i> , 2016, 09, 1650023. | 1.5 | 10 |
| 40 | Heat Transfer in an Upper Convected Maxwell Fluid with Fluid Particle Suspension. <i>Advances in Applied Mathematics and Mechanics</i> , 2015, 7, 369-386. | 0.7 | 5 |
| 41 | The effects of slip condition and multiple stenoses on micropolar fluid flow through a channel of non-uniform cross-section. <i>International Journal of Biomathematics</i> , 2015, 08, 1550055. | 1.5 | 0 |
| 42 | Self-similar solutions for the nonlinear dispersion of a chemical pollutant into a river flow. <i>Journal of Mathematical Chemistry</i> , 2015, 53, 1523-1536. | 0.7 | 3 |
| 43 | Analytical construction of peaked solutions for the nonlinear evolution of an electromagnetic pulse propagating through a plasma. <i>Quaestiones Mathematicae</i> , 2015, 38, 725-748. | 0.2 | 0 |
| 44 | Peristaltic Transport of a Herschel-Bulkley Fluid in an Elastic Tube. <i>Heat Transfer - Asian Research</i> , 2015, 44, 585-598. | 2.8 | 15 |
| 45 | Peristaltic transport of a conducting Jeffrey fluid in an inclined asymmetric channel. <i>International Journal of Biomathematics</i> , 2014, 07, 1450064. | 1.5 | 13 |
| 46 | On the choice of auxiliary linear operator in the optimal homotopy analysis of the Cahn-Hilliard initial value problem. <i>Numerical Algorithms</i> , 2014, 66, 269-298. | 1.1 | 15 |
| 47 | Optimal analytic method for the nonlinear Hasegawa-Mima equation. <i>European Physical Journal Plus</i> , 2014, 129, 1. | 1.2 | 6 |
| 48 | MHD flow and heat transfer over a stretching surface with variable thermal conductivity and partial slip. <i>Meccanica</i> , 2013, 48, 1451-1464. | 1.2 | 19 |
| 49 | Effects of variable fluid properties on the thin film flow of Ostwald-de Waele fluid over a stretching surface. <i>Journal of Hydrodynamics</i> , 2013, 25, 10-19. | 1.3 | 19 |
| 50 | Existence results for coupled nonlinear systems approximating the rotating MHD flow over a rotating sphere near the equator. <i>Zeitschrift Fur Angewandte Mathematik Und Physik</i> , 2013, 64, 83-100. | 0.7 | 1 |
| 51 | Diffusion of chemically reactive species in Casson fluid flow over an unsteady permeable stretching surface. <i>Journal of Hydrodynamics</i> , 2013, 25, 591-598. | 1.3 | 44 |
| 52 | The effect of variable viscosity on the flow and heat transfer of a viscous Ag-water and Cu-water nanofluids. <i>Journal of Hydrodynamics</i> , 2013, 25, 1-9. | 1.3 | 61 |
| 53 | Radiation effects on mixed convection about a cone embedded in a porous medium filled with a nanofluid. <i>Meccanica</i> , 2013, 48, 275-285. | 1.2 | 131 |
| 54 | Convective transport of nanoparticles in multi-layer fluid flow. <i>Applied Mathematics and Mechanics (English Edition)</i> , 2013, 34, 177-188. | 1.9 | 23 |

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|----|--|-----|-----------|
| 55 | Casson Fluid Flow and Heat Transfer at an Exponentially Stretching Permeable Surface. Journal of Applied Mechanics, Transactions ASME, 2013, 80, . | 1.1 | 39 |
| 56 | Dual Solutions for the Magnetohydrodynamic Stagnation-Point Flow of a Power-Law Fluid Over a Shrinking Sheet. Journal of Applied Mechanics, Transactions ASME, 2012, 79, . | 1.1 | 6 |
| 57 | Axisymmetric Stagnation Flow of a Micropolar Nanofluid in a Moving Cylinder. Mathematical Problems in Engineering, 2012, 2012, 1-18. | 0.6 | 24 |
| 58 | Stability analysis of the dual solutions for stagnation-point flow over a non-linearly stretching surface. Meccanica, 2012, 47, 1623-1632. | 1.2 | 24 |
| 59 | EFFECTS OF HALL CURRENT AND CHEMICAL REACTION ON OSCILLATORY MIXED CONVECTION-RADIATION OF A MICROPOLAR FLUID IN A ROTATING SYSTEM. Chemical Engineering Communications, 2012, 199, 943-965. | 1.5 | 13 |
| 60 | Natural convection heat transfer of a viscous fluid in a vertical porous channel. Journal of Engineering Mathematics, 2012, 74, 61-71. | 0.6 | 5 |
| 61 | MHD flow and heat transfer of a UCM fluid over a stretching surface with variable thermophysical properties. Meccanica, 2012, 47, 1425-1439. | 1.2 | 29 |
| 62 | Convective heat transfer in the vertical channel flow of a clear fluid adjacent to a nanofluid layer: a two-fluid model. Heat and Mass Transfer, 2012, 48, 1247-1255. | 1.2 | 16 |
| 63 | MHD flow and mass transfer of chemically reactive upper convected Maxwell fluid past porous surface. Applied Mathematics and Mechanics (English Edition), 2012, 33, 899-910. | 1.9 | 30 |
| 64 | Radiation Effects on Mixed Convection over a Wedge Embedded in a Porous Medium Filled with a Nanofluid. Transport in Porous Media, 2012, 91, 261-279. | 1.2 | 105 |
| 65 | Hydromagnetic stagnation point flow of a viscous fluid over a stretching or shrinking sheet. Meccanica, 2012, 47, 31-50. | 1.2 | 37 |
| 66 | Exact formula for the spreading width of jet flow velocity under the assumption of a radial adjusting coefficient. Archive of Applied Mechanics, 2012, 82, 137-139. | 1.2 | 0 |
| 67 | On thin film flow of a third-grade fluid down an inclined plane. Archive of Applied Mechanics, 2012, 82, 261-266. | 1.2 | 6 |
| 68 | Peristaltic flow of a Sisko fluid in an endoscope: analytical and numerical solutions. International Journal of Computer Mathematics, 2011, 88, 1013-1023. | 1.0 | 16 |
| 69 | Analytical solutions for the unsteady MHD rotating flow over a rotating sphere near the equator. Open Physics, 2011, 9, . | 0.8 | 7 |
| 70 | Convection heat transfer in a Maxwell fluid at a non-isothermal surface. Open Physics, 2011, 9, . | 0.8 | 4 |
| 71 | Nonlinear dispersion of a pollutant ejected into a channel flow. Open Physics, 2011, 9, . | 0.8 | 2 |
| 72 | Mathematical model for a Herschel-Bulkley fluid flow in an elastic tube. Open Physics, 2011, 9, . | 0.8 | 17 |

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|----|--|-----|-----------|
| 73 | Free Convection Boundary Layer Flow Past a Vertical Surface in a Porous Medium with Temperature-Dependent Properties. <i>Transport in Porous Media</i> , 2011, 90, 977-992. | 1.2 | 14 |
| 74 | Stability analysis of fluid flow over a nonlinearly stretching sheet. <i>Archive of Applied Mechanics</i> , 2011, 81, 1087-1091. | 1.2 | 12 |
| 75 | Non-Darcian flow and heat transfer along a permeable vertical surface with nonlinear density temperature variation. <i>Acta Mechanica</i> , 2011, 220, 139-154. | 1.1 | 21 |
| 76 | Self-similar solutions to Lin-Reissner-Tsien equation. <i>Applied Mathematics and Mechanics (English)</i> Tj ETQq0 0 0 rgBT/Overlock 10 Tf 50 | 1.9 | 3 |
| 77 | Nonlinear hydro-magnetic convection at a permeable cylinder in a porous medium. <i>Heat and Mass Transfer</i> , 2011, 47, 1323-1329. | 1.2 | 4 |
| 78 | Comment on "Series solution of hydromagnetic flow and heat transfer with hall effect in a second grade fluid over a stretching sheet". <i>Open Physics</i> , 2010, 8, . | 0.8 | 0 |
| 79 | A note on flow geometries and the similarity solutions of the boundary layer equations for a nonlinearly stretching sheet. <i>Archive of Applied Mechanics</i> , 2010, 80, 1329-1332. | 1.2 | 24 |
| 80 | Existence and uniqueness results for a nonlinear differential equation arising in stagnation point flow in a porous medium. <i>Acta Mechanica</i> , 2010, 210, 215-220. | 1.1 | 6 |
| 81 | Similarity solutions of the boundary layer equations for a nonlinearly stretching sheet. <i>Mathematical Methods in the Applied Sciences</i> , 2010, 33, 601-606. | 1.2 | 32 |
| 82 | Effects of Heat Transfer on the Stagnation Flow of a Third-Order Fluid over a Shrinking Sheet. <i>Zeitschrift Fur Naturforschung - Section A Journal of Physical Sciences</i> , 2010, 65, 969-994. | 0.7 | 16 |
| 83 | UNSTEADY BOUNDARY LAYERS: CONVECTIVE HEAT TRANSFER OVER A VERTICAL FLAT PLATE. <i>ANZIAM Journal</i> , 2009, 50, 541-549. | 0.3 | 3 |
| 84 | Series solutions of stagnation slip flow and heat transfer by the homotopy analysis method. <i>Science in China Series G: Physics, Mechanics and Astronomy</i> , 2009, 52, 893-899. | 0.2 | 6 |
| 85 | Analytic solution for axisymmetric flow over a nonlinearly stretching sheet. <i>Archive of Applied Mechanics</i> , 2008, 78, 127-134. | 1.2 | 30 |
| 86 | Cubic and Quartic Convergence for First-Order Periodic Boundary-Value Problems. <i>Journal of Optimization Theory and Applications</i> , 1998, 99, 465-480. | 0.8 | 0 |
| 87 | Extension of the Method of Quasilinearization and Rapid Convergence. <i>Journal of Optimization Theory and Applications</i> , 1998, 96, 667-682. | 0.8 | 16 |
| 88 | A Singular Perturbation Solution of a Hydromagnetic Flow. <i>ZAMM Zeitschrift Fur Angewandte Mathematik Und Mechanik</i> , 1988, 68, 255-256. | 0.9 | 1 |
| 89 | An Exact Periodic Solution of a Hydromagnetic Flow in a Horizontal Channel. <i>Journal of Applied Mechanics, Transactions ASME</i> , 1988, 55, 981-983. | 1.1 | 10 |
| 90 | Boundary-Layer Flow and Heat Transfer over a Continuous, Porous, Surface Moving in an Oscillating Free Stream " I. <i>ZAMM Zeitschrift Fur Angewandte Mathematik Und Mechanik</i> , 1987, 67, 342-344. | 0.9 | 3 |

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| 91 | Boundary-Layer Flow and Heat Transfer over a Continuous, Porous Surface Moving in an Oscillating Free Stream. ZAMM Zeitschrift Fur Angewandte Mathematik Und Mechanik, 1987, 67, 520-523. | 0.9 | 1 |
| 92 | Bingham Fluid Flow through a Circular Pipe with Permeable Wall. ZAMM Zeitschrift Fur Angewandte Mathematik Und Mechanik, 1987, 67, 568-569. | 0.9 | 4 |
| 93 | Effects of Variable Fluid-Property and Internal Heat Generation on Flat-Plate Thermometer. ZAMM Zeitschrift Fur Angewandte Mathematik Und Mechanik, 1986, 66, 187-190. | 0.9 | 0 |
| 94 | Boundary-Layer Behavior on a Continuous Porous Flat Surface Moving in a Parallel Free Stream. ZAMM Zeitschrift Fur Angewandte Mathematik Und Mechanik, 1986, 66, 555-558. | 0.9 | 4 |
| 95 | Nonlinear study of convective heat transfer and fluid flows induced by travelling thermal waves. Acta Mechanica, 1986, 59, 233-249. | 1.1 | 3 |
| 96 | Hydromagnetic flow and heat transfer over a continuous, moving, porous, flat surface. Acta Mechanica, 1986, 64, 179-185. | 1.1 | 45 |
| 97 | Significance of radiative magnetohydrodynamic flow of suspended PEG based ZrO_2 and MgO_2 within a conical gap. Waves in Random and Complex Media, 0, , 1-19. | 1.6 | 11 |
| 98 | Hybrid nanofluid flow close to a stagnation point past a porous shrinking sheet. Waves in Random and Complex Media, 0, , 1-17. | 1.6 | 6 |