

Table of Contents

Volume 10 Number 4

April 2022

Existence and Uniqueness of Almost Periodic Solution for a Mathematical Model of Tumor Growth

C. Bu 1013

Accelerated RHSS Iteration Method for Stabilized Saddle-Point Problems

Z. H. Song, P. P. Zhang..... 1019

Morphology and Field Emission of ZnO Nanomaterials at Different Positions

J. Z. Wang, L. J. Wang 1028

A Modified Newton Method Based on the Metric Projector for Solving SOCCVI Problem

H. Liu, J. H. Sun, L. Wang 1036

Shock Fronts in Non-Polar Electro-Conducting Media

M. Grinfeld, P. Grinfeld..... 1055

Computation, Modeling, and Simulation of HIV-AIDS Epidemics with Vaccination

R. R. Ahangar..... 1066

The E_{iso} - L_{iso} Plane for Gamma-Ray Bursts

W. J. Azzam, F. S. Jaber, G. M. Ahmed..... 1083

Tunable Optical Rotation with an M -Type Atomic System Using Vortex Beam

Z. Z. Li 1089

Image Reconstruction of Ghost Imaging Based on Improved Generative Adversarial Networks

X. Chen..... 1098

Polarization-Independent Metamaterial Sensing Based on Electromagnetically Induced Transparency

Y. K. Wang..... 1105

A Projection and Contraction Method for P-Order Cone Constraint Stochastic Variational Inequality Problem

M. D. Zheng, X. H. Xu, J. H. Sun..... 1113

Some Identities Involving the High-Order Cauchy Polynomials

L. W. Liu, Wuyungaowa..... 1126

**Existence and Multiplicity of Positive Solutions for a Singular
Third-Order Three-Point Boundary Value Problem with a Parameter**

X. F. Feng, H. Y. Feng 1146

The Non-Equivalence of Pyramids and Their Pseudo-Cones: Important New Insights

G. Kaupp 1158

**Explicit Algebraic Stress Model for Three-Dimensional Turbulent Buoyant
Flows Derived Using Tensor Representation**

R. M. C. So 1167

**Fission Fragment Decay Heat by Using the Most Recent
Evaluated Nuclear Data Library ENDF/B-VIII**

A. M. Alramady, H. M. Barashed, S. S. Nafee 1182

**Two-Dimensional Topological Superconductors with
Spin-Orbit Coupling and Zeeman Term**

M. L. Lu 1191

Scattering Relations for Two-Dimensional Electromagnetic Waves in Chiral Media

C. E. Athanasiadis, E. S. Athanasiadou, P. Roupa 1200

The Quality Properties of Integral Type Problems for Wave Equations and Applications

V. B. Shakhmurov, R. Shakhmurov 1217

Effectiveness of Various Prevention Measures in a Pandemic

P. Mohazzabi, G. Richardson, G. Richardson 1240

**Event-Triggered Zero-Gradient-Sum Distributed Algorithm for Convex Optimization
with Time-Varying Communication Delays and Switching Directed Topologies**

L. Ye 1247

Development of Beam Optics Code LEADS-v5

J. Q. Lü 1266

Comparing Solutions to the Nonlinear Dissipative Wave Equation

Z. M. Alaofi, T. S. El-Danaf, S. S. Dragomir 1281

**Erratum to “Positive Solutions for a Class of Quasilinear Schrödinger Equations
with Nonlocal Term” [Journal of Applied Mathematics and Physics (2022) 347-359]**

P. Liao, R. Ping, S. X. Chen 1297

**Four New Examples of the Non-Elementary Expo-Elliptic Functions That Are
Giving Solutions to Some Second-Order Nonlinear Autonomous ODEs**

M. Stensland 1304

**Accelerating the Feedback Loop in Scanning Probe Microscopes without
Loss of Height Measurement Accuracy by Using Pixel Forecast Methods**

R. Köhn, B. Braun, K.-F. Braun 1325

A Pest Management Model with Multi-State Dependent Impulse

N. Z. Liu 1335

Twin Prime Distribution Problem

D. Liu 1352

Solving Navier-Stokes with Maclaurin Series

G. Martino 1362

Clifford Algebra and Hypercomplex Number as well as Their Applications in Physics

Y. Q. Gu 1375