

NU
£ 50/h

A Journal of

Zeitschrift für Naturforschung A

Physical Sciences

Founded 1946 in the Institutes
of the Max Planck Gesellschaft

Volume 68 Number 6/7
June/July 2013



Verlag der Zeitschrift für Naturforschung, Tübingen

<http://znaturforsch.com>

Original Communications

Numerical Approaches about the Morphological Description Parameters for the Manganese Deposits on the Magnesite Ore Surface

M. BAYIRLI and T. OZBEY 405

On the Analytic Solution for a Steady Magnetohydrodynamic Equation

B. SOLTANALIZADEH, H. R. GHEHSAREH,
A. YILDIRIM, and S. ABBASBANDY 412

Trace for Differential Pencils on a Star-Type Graph

C.-F. YANG 421

Approximate Ro-Vibrational Spectrum of the Modified Rosen-Morse Molecular Potential Using the Nikiforov-Uvarov Method

A. RAJABI and M. HAMZAVI 427

Mixed Convective Magnetohydrodynamic Peristaltic Flow of a Jeffrey Nanofluid with Newtonian Heating

N. S. AKBAR and S. NADEEM 433

Theoretical Investigations of the Knight Shifts and the Hyperfine Structure Constants for the Tetragonal Cu²⁺ Sites in the Bismuth- and Thallium-Based High-T_c Superconductors

M.-Q. KUANG, S.-Y. WU, X.-F. HU and
B.-T. SONG 442

Interaction Behaviours Among Special Solitons in the (2+1)-Dimensional Modified Dispersive Water-Wave System

W.-T. ZHANG, W.-L. CHEN, L.-P. ZHANG,
and C.-Q. DAI 447

Approximate Analytical Solutions of the Perturbed Yukawa Potential with Centrifugal Barrier

A. A. RAJABI and M. HAMZAVI 454

Generation of Broadband Supercontinuum and Isolated Attosecond Pulse in a Chirped Two-Colour Laser Field

G.-T. ZHANG 461

A Note on the Perturbation of Mixed Percolation on the Hierarchical Group

Y. SHANG 475

Application of Mean of Absolute Deviation Method for the Selection of Best Nonlinear Component Based on Video Encryption

A. ANEES, W. A. KHAN, M. A. GONDAL,
and I. HUSSAIN 479

Karpman-Washimi Ponderomotive Magnetization and Radiated Power: Streaming and Resonant Effects

D.-H. KI and Y.-D. JUNG 483