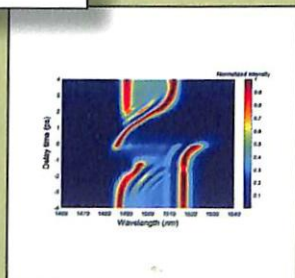
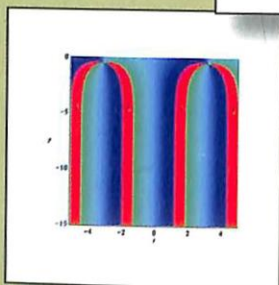
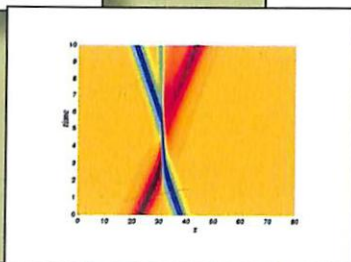
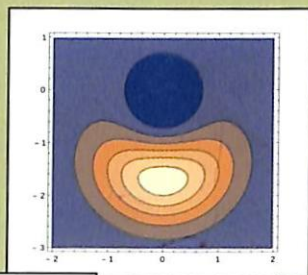
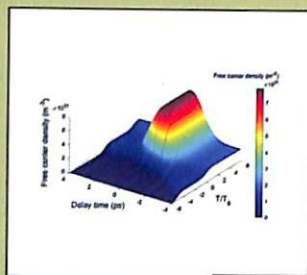
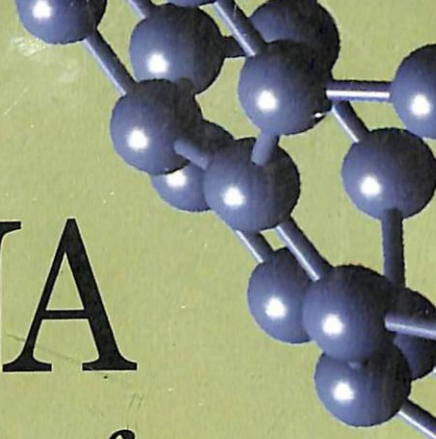


₹50/-

# PRAMANA

— journal of  
physics



Vol. 93, No. 1  
July 2019

Indian Academy  
of Sciences



 Springer



	Article ID
Adaptive synchronisation of complex networks with non-dissipatively coupled and uncertain inner coupling matrix..... <i>Shuguo Wang</i>	1
Analytical evaluation of cesium emission lines using laser-induced breakdown spectroscopy ..... ..... <i>Manjeet Singh and Arnab Sarkar</i>	2
Analytical behaviour of lump solution and interaction phenomenon to the Kadomtsev–Petviashvili-like equation..... <i>Mohammad Shahriari and Jalil Manafian</i>	3
Pfaffians of B-type Kadomtsev–Petviashvili equation and complexitons to a class of nonlinear partial differential equations in (3+1) dimensions..... <i>Li Cheng, Yi Zhang and Wen-Xiu Ma</i>	4
A new efficient technique for solving fractional coupled Navier–Stokes equations using q-homotopy analysis transform method..... <i>Amit Prakash, P Veerasha, D G Prakasha and Manish Goyal</i>	6
Statistical distribution of adsorption of quantum particles ..... <i>S B Khasare and Shashank S Khasare</i>	7
Monte Carlo simulation of charge transport in disordered organic systems using buffer lattice at the boundary ..... <i>S Raj Mohan, Manoranjan P Singh and M P Joshi</i>	8
Density functional theory of influence of methane adsorption on the electronic properties of a PbS cluster..... <i>A Mosahebfard, R Safaiee and M H Sheikhi</i>	9
Application of mathematical methods on the system of dynamical equations for the ion sound and Langmuir waves..... <i>Aly R Seadawy, Dianchen Lu and Mujahid Iqbal</i>	10
Quantum coupling and electrothermal effects on electron transport in high-electron mobility transistors ..... <i>Ling-Feng Mao</i>	11
Coexistence of attractors in integer- and fractional-order three-dimensional autonomous systems with hyperbolic sine nonlinearity: Analysis, circuit design and combination synchronisation..... <i>Sifeu Takougang Kingni, Justin Roger Mboupda Pone, Gaetan Fautso Kuate and Viet-Thanh Pham</i>	12
Comment on “New optical soliton solutions for nonlinear complex fractional Schrödinger equation via new auxiliary equation method and novel (G'/G)-expansion method” ..... ..... <i>Shoukry El-Ganaini and Elsayed M E Zayed</i>	13

(Continued on inside back cover)

Indexed in CURRENT CONTENTS      ISSN 0304-4289  
 Edited and published by Amitabh Joshi  
 for the Indian Academy of Sciences, Bengaluru 560 080  
 Printed at Tholasi Prints India Pvt. Ltd., Bengaluru

Registered with Registrar of Newspapers in India, Vide Regn No. 24935/73  
 Regn. No. KRNA/BGE/337/2018–2020, published on 10/07/2019  
 Licensed to Post without prepayment No. 49  
 Posted at Bengaluru PSO, Mysore Road, Bengaluru 560026 16/07/2019



(Continued from back cover)

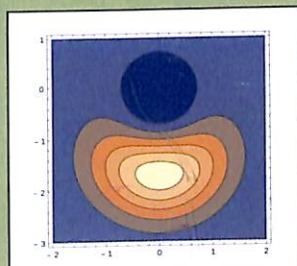
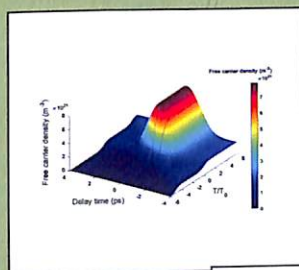
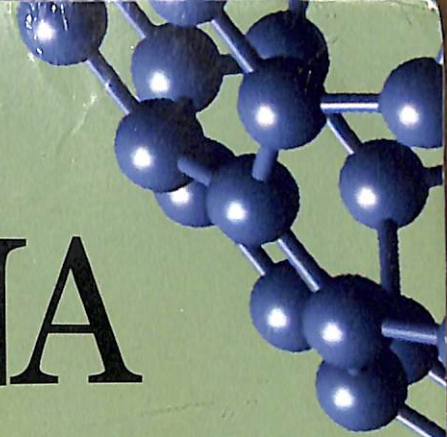
Assessment of the mass attenuation coefficients of granite, basalt, andesite and tuff stones with the Geant4 model of a high-purity germanium detector.....	<i>A Aşkin and M Dal</i>	14
Design of a spiral inflector and transverse beam matching for K130 cyclotron at the Variable Energy Cyclotron Centre .....	<i>A Goswami, Atanu Dutta and Santanu Paul</i>	15
The Weyl equation under an external electromagnetic field in the cosmic string space-time .....	<i>M Hosseini, H Hassanabadi and S Hassanabadi</i>	16
General electrodynamics of non-abelian vector bosons of $SU(2)$ .....	<i>M T Teli</i>	17



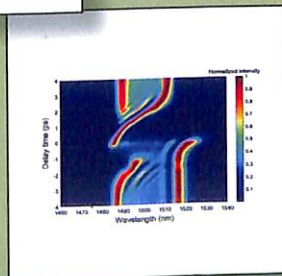
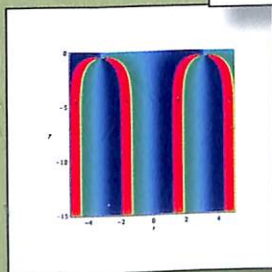
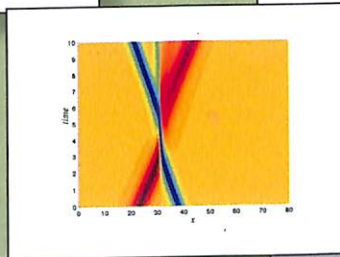
₹50/-

# PRAMANA

journal of  
physics



Vol. 93, No. 2  
August 2019



Indian Academy  
of Sciences



Springer



	Article ID
<i>Ab initio</i> study of the fundamental properties of $Zn_{1-x}TM_xSe$ (TM=Mn, Co and Fe)..... ..... <i>F Soltani, H Baaziz, Z Charifi, F El Haj Hassan and B Hamad</i>	18
Extreme multistable synchronisation in coupled dynamical systems..... ..... <i>Priyanka Chakraborty and Swarup Poria</i>	19
The effect of thermal expansion coefficient on unsteady non-Newtonian supercritical Casson fluid flow past a vertical cylinder..... ..... <i>Ashwini Hiremath, Hussain Basha, Bhaskerreddy Kethireddy, G Janardhana Reddy and N S Venkata Narayanan</i>	20
Symmetry analysis of some nonlinear generalised systems of space-time fractional partial differential equations with time-dependent variable coefficients..... ..... <i>Sachin Kumar and Baljinder Kour</i>	21
Asymptotic iteration method applied to new confining potentials..... ..... <i>A J Sous</i>	22
Modulational instability and dynamics of rational soliton solutions for the coupled Volterra lattice equation associated with $4 \times 4$ Lax pair..... ..... <i>Nan Liu and Xiao-Yong Wen</i>	23
Analysing the stability of a delay differential equation involving two delays..... ..... <i>Sachin Bhalekar</i>	24
Tunnel magnetoresistance in the $B_nN_n$ ( $n = 12, 24$ ) cages..... ..... <i>Yaghoob Mohammadmoradi and Mojtaba Yaghoobi</i>	25
New analytical study of water waves described by coupled fractional variant Boussinesq equation in fluid dynamics..... ..... <i>M S Osman</i>	26
The propagation of waves in thin-film ferroelectric materials..... ..... <i>Abbagari Souleymanou, Khalid K Ali, Hadi Rezazadeh, Mostafa Eslami, Mohammad Mirzazadeh and Alper Korkmaz</i>	27
Numerical simulation of space-fractional Helmholtz equation arising in seismic wave propagation, imaging and inversion..... ..... <i>Amit Prakash, Manish Goyal and Shivangi Gupta</i>	28
Quantum Hamilton–Jacobi route to exceptional Laguerre polynomials and the corresponding rational potentials..... ..... <i>S Sree Ranjani</i>	29
Alcohol sensor based on gold-coated nanoporous anodic alumina membrane..... ..... <i>Saleem Shaik, Anjani Kumar Tiwari and S Anantha Ramakrishna</i>	30
Performance of resistance in the variation on a nano thin film flow influenced by thermal deposition: The Buongiorno model..... ..... <i>E N Maraj, Z Iqbal and Jamila Bibi</i>	31
The synthesis and study of structural, optical and electrical behaviours of tin oxide / polyaniline ( $SnO_2/PANI$ ) nanocomposites..... ..... <i>B Singh and B Das</i>	32

Indexed in CURRENT CONTENTS ISSN 0304-4289

Edited and published by Amitabh Joshi  
for the Indian Academy of Sciences, Bengaluru 560 080  
Printed at Tholasi Prints India Pvt. Ltd., Bengaluru

Registered with Registrar of Newspapers in India, Vide Regn No. 24935/73

Regn. No. KRNA/BGE/337/2018–2020, published on 10/08/2019

Licensed to Post without prepayment No. 49

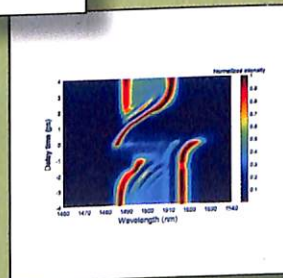
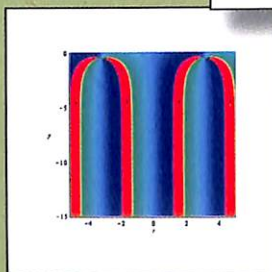
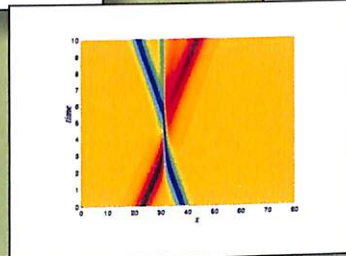
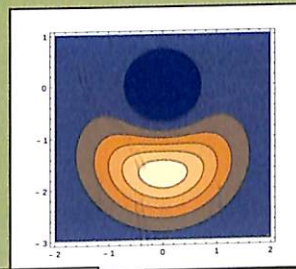
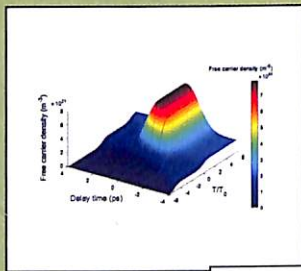
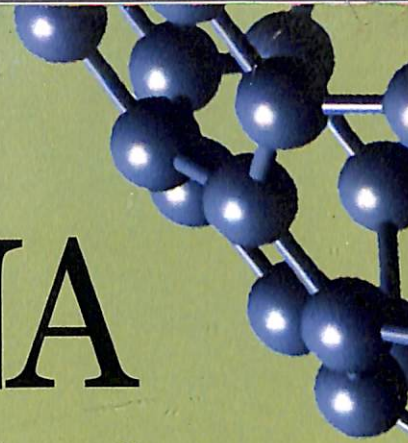
Posted at Bengaluru PSO, Mysore Road, Bengaluru 560026 16/08/2019



₹50/-

# PRAMANA

journal of  
physics



Vol. 93, No. 3  
September 2019

Indian Academy  
of Sciences



 Springer



	Article ID
On physical limitations of mathematical constructions used in mathematical models .....	<i>M Belevich</i> 33
Peristaltic transport of Jeffrey fluid in a rectangular duct through a porous medium under the effect of partial slip: An application to upgrade industrial sieves/filters .....	<i>R Ellahi, F Hussain, F Ishtiaq and A Hussain</i> 34
The electronic and transport properties of Li-doped graphene nanoribbons: An <i>ab-initio</i> approach .....	<i>Satyendra Singh Chauhan, Shobhna Ferwani and Pankaj Srivasatava</i> 35
Uranium(IV) incorporation into inverse spinel magnetite ( $\text{FeFe}_2\text{O}_4$ ): A charge-balanced substitution case analysis .....	<i>Zaihong Wang, Qingyun Chen, Kaimin Shih, Changzhong Liao, Lielin Wang, Hua Xie and Yantao Luo</i> 36
Thermal properties of $^{172}\text{Yb}$ and $^{162}\text{Dy}$ isotopes in the back-shifted Fermi gas model with temperature-dependent pairing energy .....	<i>M R Pahlavani and M Masoumi Dinan</i> 37
Lie symmetries, conservation laws and solitons for the AB system with time-dependent coefficients in nonlinear optics or fluid mechanics .....	<i>Song-Hua Hu, Bo Tian, Xia-Xia Du, Lei Liu and Chen-Rong Zhang</i> 38
Theoretical studies on the fine structure of $\alpha$ decay for even-odd and even-even isotopes of Cm, Cf, Fm and No nuclei .....	<i>G M Carmel Vigila Bai and R Nithya Agnes</i> 39
Numerical treatment of activation energy for the three-dimensional flow of a cross magnetonanoliquid with variable conductivity .....	<i>S Muhammad, G Ali, S I A Shah, M Irfan, W A Khan, M Ali and F Sultan</i> 40
An analytical approach to the metal and metallic oxide properties of Cu-water and $\text{TiO}_2$ -water nanofluids over a moving vertical plate .....	<i>B C Rout and S R Mishra</i> 41
A third-order memristive Wien-bridge circuit and its integrable deformation .....	<i>Birong Xu, Guangyi Wang, Xiaoyuan Wang and Herbert Ho-Ching Iu</i> 42
Multiple vibrational resonance and antiresonance in a coupled anharmonic oscillator under monochromatic excitation .....	<i>M Paul Asir, A Jeevarekha and P Philominathan</i> 43
Soliton solutions of the generalised third-order nonlinear Schrödinger equation by two mathematical methods and their stability .....	<i>Dianchen Lu, Aly R Seadawy, Jun Wang, Muhammad Arshad and Umer Farooq</i> 44

(Continued on inside back cover)

Indexed in CURRENT CONTENTS ISSN 0304-4289

Edited and published by Amitabh Joshi  
for the Indian Academy of Sciences, Bengaluru 560 080  
Printed at Tholasi Prints India Pvt. Ltd., Bengaluru

Registered with Registrar of Newspapers in India, Vide Regn No. 24935/73

Regn. No. KRNA/BGE/337/2018-2020, published on 10/09/2019

Licensed to Post without prepayment No. 49

Posted at Bengaluru PSO, Mysore Road, Bengaluru 560026 16/09/2019



(Continued from back cover)

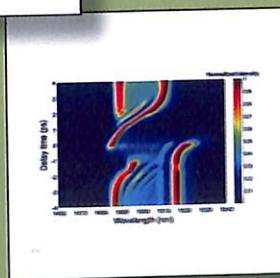
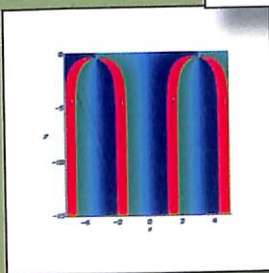
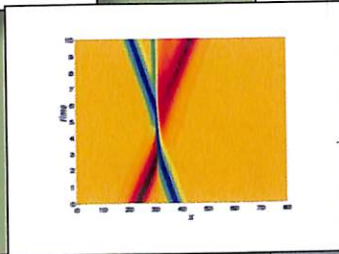
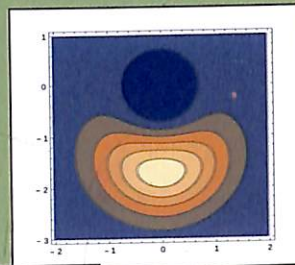
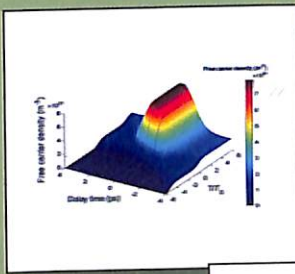
Effect of strain on the structural and electronic properties of transition metal-doped arsenene nanoribbons: An <i>ab-initio</i> approach .....	<i>Satyendra Singh Chauhan, Shobhna Ferwani and Pankaj Srivastava</i>	45
Soliton, Wronskian and Grammian solutions to the generalised (3 + 1)-dimensional Kadomtsev–Petviashvili equation.....	<i>Yue Kai</i>	46
The impact of magnetohydrodynamics and heat transfer on the unsteady flow of Casson fluid in an oscillating cylinder via integral transform: A Caputo–Fabrizio fractional model .....	<i>Farhad Ali, Nabeel Khan, Anees Imtiaz, Ilyas Khan and Nadeem Ahmad Sheikh</i>	47
Excitation performance of $Ba_{0.8}Mg_{0.2}(Zr_{0.1}Ti_{0.8}Ce_{0.1})O_3$ materials in an electrical field .....	<i>Sugato Hajra, Manisha Sahu, Basanta K Panigrahi and R N P Choudhary</i>	48
The synchronisation of two floating memristor-based oscillators and the circuit design.....	<i>Hongmin Deng and Qionghua Wang</i>	49
Effective optical properties of the one-dimensional periodic structure of $TiO_2$ and $SiO_2$ layers with a defect layer of nanocomposite consisting of silver nanoparticle and E7 liquid crystal .....	<i>Pawan Singh, Khem B Thapa, Narinder Kumar, Devendra Singh and Devesh Kumar</i>	50
Influence of material parameters on the performance of niobium-based superconducting radiofrequency cavities .....	<i>Arup Ratan Jana, Abhay Kumar, Vinit Kumar and Sindhunil Barman Roy</i>	51



₹50/-

# PRAMANA


journal of  
physics



Vol. 93, No. 4  
October 2019

Indian Academy  
of Sciences



 Springer



	Article ID
Determination of classical behaviour of the Earth for large quantum numbers using quantum guiding equation..... <i>Ali Soltanmanesh and Afshin Shafiee</i>	52
Enhancement in heat and mass transfer over a permeable sheet with Newtonian heating effects on nanofluid: Multiple solutions using spectral method and stability analysis ..... ..... <i>Irfan Mustafa, Tariq Javed, Abuzar Ghaffari and Hammad Khalil</i>	53
Entropy generation optimisation in the nanofluid flow of a second grade fluid with nonlinear thermal radiation ..... <i>Tasawar Hayat, Mehreen Kanwal, Sumaira Qayyum, M Ijaz Khan and Ahmed Alsaedi</i>	54
Structure, stability and electronic properties of bimetallic atomic chains of Au–Ag and Au–Pt..... ..... <i>Mudra R Dave and A C Sharma</i>	55
Optical preparation and manipulation of ground-state coherent vibrational wavepackets of varying constituents in HD <sup>+</sup> ..... <i>Souvik Chatterjee and S S Bhattacharyya</i>	56
Solitons in conformable time-fractional Wu–Zhang system arising in coastal design..... ..... <i>Gulnur Yel and Haci Mehmet Baskonus</i>	57
Studies on the design and parametric effects of a diode pump alkali (rubidium) laser ..... ..... <i>R Biswal, G K Mishra, S K Agrawal, S K Dixit and S V Nakhe</i>	58
Multiple types of exact solutions and conservation laws of new coupled (2 + 1)-dimensional Zakharov–Kuznetsov system with time-dependent coefficients..... <i>Bikramjeet Kaur and R K Gupta</i>	59
Nuclear multipole excitations in the framework of self-consistent Hartree–Fock random phase approximation for Skyrme forces ..... <i>Ali H Taqi and Ebtihal G Khidher</i>	60
Scattering of neutrons on $\alpha$ -particles in three-dimensional space .... <i>Guohui Zhang and Xuechao Zhang</i>	61
Transportation of activation energy in the Oldroyd-B nanofluid by considering double stratification over a surface with variable thickness ..... ..... <i>M Ijaz Khan, Sumaira Qayyum, Shahid Farooq, T Hayat and A Alsaedi</i>	62
Analysis of energetic intensity of Cern neutrino conversion types using the theory of covariance functions ..... ..... <i>Jonas Skeivalas, Vytautas Turla, Mindaugas Jurevicius and Gintas Viselga</i>	63

(Continued on inside back cover)

Indexed in CURRENT CONTENTS ISSN 0304-4289  
 Edited and published by Amitabh Joshi  
 for the Indian Academy of Sciences, Bengaluru 560 080  
 Printed at Tholasi Prints India Pvt. Ltd., Bengaluru

Registered with Registrar of Newspapers in India, Vide Regn No. 24935/73  
 Regn. No. KRNA/BGE/337/2018–2020, published on 10/10/2019  
 Licensed to Post without prepayment No. 49  
 Posted at Bengaluru PSO, Mysore Road, Bengaluru 560026 16/10/2019  
 Permitted to Post on 18.10.2019



(Continued from back cover)

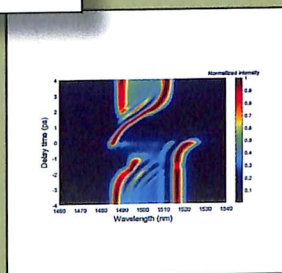
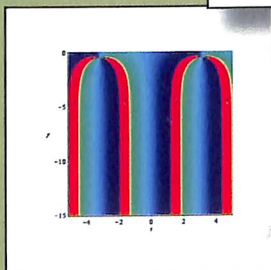
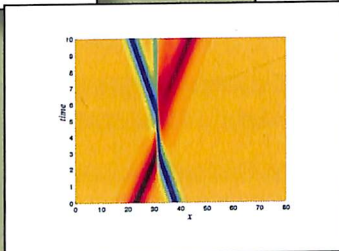
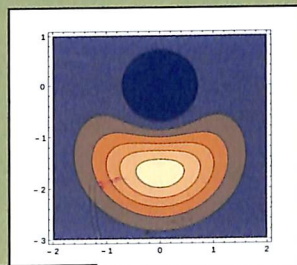
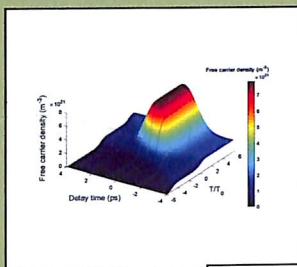
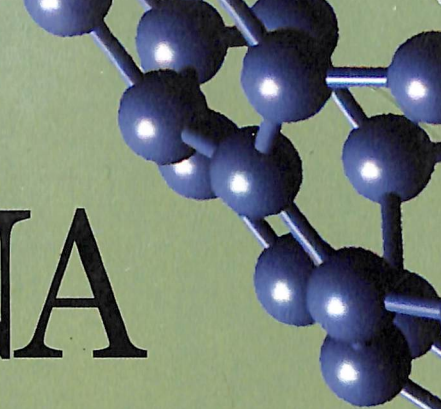
N–N bond cleavage and ring expansion at the surface of exchange and substitutional antisite defective boron nitride nanotubes by boron cluster: A density functional theory study .....	64
..... <i>Maryam Anafcheh, Nasrin Shahbaz and Mansour Zahedi</i>	
Structural, elastic and dynamical properties of $YP_{1-x}As_x$ alloys from first principles calculations .....	65
..... <i>Chaouche Yassine and Souadkia Mourad</i>	
Numerical solution of nonlinear fractional Zakharov–Kuznetsov equation arising in ion-acoustic waves .....	66
..... <i>Amit Prakash and Vijay Verma</i>	



₹50/-

# PRAMANA

journal of  
physics



Vol. 93, No. 5  
November 2019

Indian Academy  
of Sciences



 Springer



	Article ID
Violation of space–time Bell–CHSH inequality beyond the Tsirelson bound and quantum cryptography ..... <i>C S Sudheer Kumar</i>	67
<i>q</i> -Deformed oscillator algebra in fermionic and bosonic limits ..... ..... <i>S Sargolzaeipor, H Hassanabadi, W S Chung and A N Ikot</i>	68
Brief report	
Robustness of coherence for multipartite quantum states ..... ..... <i>Chiranjib Mukhopadhyay, Udit Kamal Sharma and Indranil Chakrabarty</i>	69
A chaotic study on Heisenberg ferromagnetic spin chain using Dzyaloshinski–Moriya interactions ..... <i>B S Gnana Blessy and M M Latha</i>	70
Solitary waves in strongly non-local media with a harmonic potential..... ..... <i>Yun-Zhou Sun, Qin Wu, Min Wang and Jing-Yan Li</i>	71
Analysis with relativistic mean-field density distribution of elastic scattering cross-sections of carbon isotopes ( $^{10-14,16}\text{C}$ ) by various target nuclei ..... <i>M Ayyun</i>	72
Modelling and characterisation of the noise characteristics of the vertical cavity surface-emitting lasers subject to slow light feedback..... ..... <i>Hameeda R Ibrahim, Mohamed S Alghamdi, Ahmed Bakry, Moustafa Ahmed and Fumio Koyama</i>	73
Successive linearisation approach to analyse thermally radiative stagnation point micropolar nanofluid flow with regression model..... <i>B Kumar, G S Seth and R Nandkeolyar</i>	74
An efficient technique for a fractional-order system of equations describing the unsteady flow of a polytropic gas..... <i>P Veerasha, D G Prakasha and Haci Mehmet Baskonus</i>	75
Higher-dimensional fractional time-independent Schrödinger equation via fractional derivative with generalised pseudoharmonic potential..... <i>Tapas Das, Uttam Ghosh, Susmita Sarkar and Shantanu Das</i>	76
The energy fluxes of surface waves propagating along the interface between nonlinear media with different characteristics..... <i>S E Savotchenko</i>	77
Tsallis holographic dark energy in Bianchi-I Universe using hybrid expansion law with <i>k</i> -essence..... ..... <i>Vipin Chandra Dubey, Shikha Srivastava, Umesh Kumar Sharma and Anirudh Pradhan</i>	78

(Continued on inside back cover)

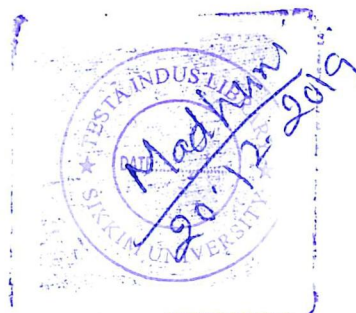
Indexed in CURRENT CONTENTS      ISSN 0304-4289  
Edited and published by Amitabh Joshi  
for the Indian Academy of Sciences, Bengaluru 560 080  
Printed at Tholasi Prints India Pvt. Ltd., Bengaluru

Registered with Registrar of Newspapers in India, Vide Regn No. 24935/73  
Regn. No. KRNA/BGE/337/2018–2020, published on 10/11/2019  
Licensed to Post without prepayment No. 49  
Posted at Bengaluru PSO, Mysore Road, Bengaluru 560026    16/11/2019



(Continued from back cover)

A unified theory of gravity and electromagnetism: Classical and quantum aspects.....	<i>Partha Ghose</i>	79
Stability and chaotic dynamics of forced $\phi^8$ generalised Liénard systems .....	<i>Clément Hodévèwan Miwadinou, Adjimon Vincent Monwanou, Laurent Amoussou Hinvi and Jean Bio Chabi Orou</i>	80
Systematic study of the $\alpha$ decay properties of actinides.....	<i>G R Sridhara, H C Manjunatha, K N Sridhar and H B Ramalingam</i>	81
A novelty to the nonlinear rotating Rayleigh–Taylor instability .....	<i>Yusry O El-Dib, Galal M Moatimid and Amal A Mady</i>	82
Ultrasonic wave propagation in thermoelectric $ZrX_2$ ( $X = S, Se$ ) compounds.....	<i>Shakti Pratap Singh, Gaurav Singh, Alok Kumar Verma, P K Yadawa and R R Yadav</i>	83

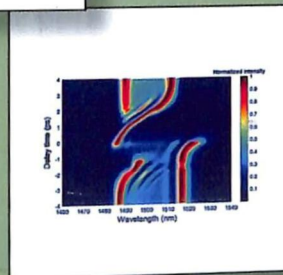
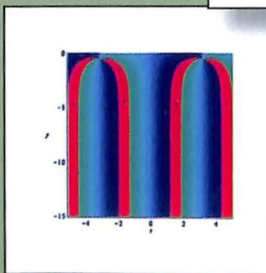
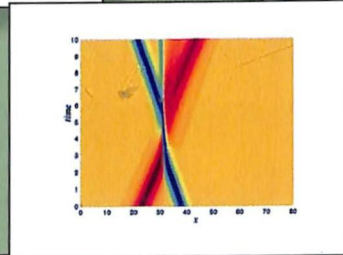
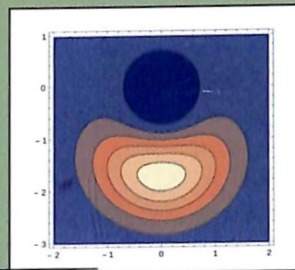
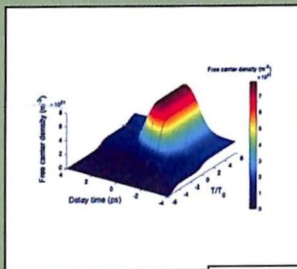




₹50/-

# PRAMANA


journal of  
physics



Vol. 93, No. 6  
December 2019

Indian Academy  
of Sciences



 Springer



	Article ID
Representation of the inverse momentum operator in curved space ..... <i>Jafari Matehkolae Mehdi</i>	84
Commissioning and validation of the injector and electron beam transport systems for the IR-FEL at RRCAT ..... <i>Sona Chandran, Bhaskar Biswas, Shankar Lal, Arvind Kumar, R S Saini, M Khursheed, Saket Kumar Gupta, Pravin Nerpagar, R K Pandit and K K Pant</i>	85
Influence of non-uniform heat source/sink on the three-dimensional magnetohydrodynamic Carreau fluid flow past a stretching surface with modified Fourier's law ..... <i>B Ramadevi, K Anantha Kumar, V Sugunamma and N Sandeep</i>	86
Counterstreaming beams in magnetised Vlasov plasma ..... <i>L Palodhi, F Califano, M E Dieckmann and F Pegoraro</i>	87
Simultaneous influence of thermo-diffusion and diffusion-thermo on non-Newtonian hyperbolic tangent magnetised nanofluid with Hall current through a nonlinear stretching surface ..... <i>M M Bhatti, Majeed A Yousif, S R Mishra and A Shahid</i>	88
Friedmann–Robertson–Walker accelerating Universe with interactive dark energy ..... <i>G K Goswami, Anirudh Pradhan and A Beesham</i>	89
All-optical NAND/NOR logic gates using bistable switching ..... <i>Ali Rahmati and Mohammad Ali Amandadi</i>	90
High polarisation extinction ratio of the TM-pass polariser with silicon carbide/graphene/silicon multilayers ..... <i>Xinyu Wang, Wei Su and Xingyu Liu</i>	91
Cooling of fermionic $^{83}\text{Kr}$ and bosonic $^{84}\text{Kr}$ isotopes in a magneto-optical trap ..... <i>S Singh, V B Tiwari and S R Mishra</i>	92
Some exactly solvable $\mathcal{PT}$ -invariant potentials with real spectra via the (extended) Nikiforov–Uvarov method ..... <i>M Abusini, M Serhan, Mohammad F Al-Jamal, Ahmed Al-Jamel and Eqab M Rabei</i>	93
Multipartite quantum discord and quantum coherence in Heisenberg–Ising bond alternating chain ..... <i>Wajid Joyia</i>	94
Consequences of chemical reaction in temperature-dependent thermal conductivity fluid flow by a rotating disk with variable thickness ..... <i>Maria Imtiaz, Fiza Shahid, Tasawar Hayat and Ahmed Alsaedi</i>	95

(Continued on inside back cover)

Indexed in CURRENT CONTENTS ISSN 0304-4289

Edited and published by Amitabh Joshi  
for the Indian Academy of Sciences, Bengaluru 560 080  
Printed at Tholasi Prints India Pvt. Ltd., Bengaluru

Registered with Registrar of Newspapers in India, Vide Regn No. 24935/73

Regn. No. KRNA/BGE/337/2018–2020, published on 10/12/2019

Licensed to Post without prepayment No. 49

Posted at Bengaluru PSO, Mysore Road, Bengaluru 560026 16/12/2019



(Continued from back cover)

Entropy generation minimisation: Nonlinear mixed convective flow of Sisko nanofluid..... ..... <i>Tasawar Hayat, Faria Masood, Sumaira Qayyum and Ahmed Alsaedi</i>	96
Chemically reactive flow of thixotropic nanofluid with thermal radiation..... ..... <i>Madiha Rashid, Tasawar Hayat, Kiran Rafique and Ahmed Alsaedi</i>	97
Switching from sub- to superluminal light in a Y-type atomic system using wavelength mismatching ..... <i>Kavita Yadav and Ajay Wasan</i>	98
Combined effects of free convection and chemical reaction with heat–mass flux conditions: A semianalytical technique ..... <i>Ram Prakash Sharma and S R Mishra</i>	99
Lie symmetry analysis for the coupled integrable dispersionless equations ..... ..... <i>Yao Zhang and Ben Gao</i>	100
Global stability analysis of axisymmetric boundary layer: Effect of axisymmetric forebody shapes ..... <i>Ramesh Bhoraniya and Vinod Narayanan</i>	101
Vibrational resonance in a higher-order nonlinear damped oscillator with rough potential ..... ..... <i>J A Laoye, T O Roy-Layinde, K A Omoteso, O O Popoola and U E Vincent</i>	102
Study of entropy generation in transient hydromagnetic flow of couple stress fluid due to heat and mass transfer from a radiative vertical cylinder..... ..... <i>G Janardhana Reddy, Mahesh Kumar and H P Rani</i>	103
Retraction Note to: Singular vs. non-singular memorised relaxation for basic relaxation current of the capacitor ..... <i>Shantanu Das</i>	104

