41st Vietnam National Conference on Theoretical Physics (NCTP-41)

Journal of Physics: Conference Series Volume 865

Nha Trang, Vietnam 1 - 4 August 2016

Editors:

Trinh Xuan Hoang Hoang Anh Tuan Vu Ngoc Tuoc

ISBN: 978-1-5108-4296-0

ISSN: 1742-6588

Printed from e-media with permission by:

Curran Associates, Inc. 57 Morehouse Lane Red Hook, NY 12571



Some format issues inherent in the e-media version may also appear in this print version.

Copyright© (2016) by the Institute of Physics All rights reserved. The material featured in this book is subject to IOP copyright protection, unless otherwise indicated.

Printed by Curran Associates, Inc. (2017)

For permission requests, please contact the Institute of Physics at the address below.

Institute of Physics Dirac House, Temple Back Bristol BS1 6BE UK

Phone: 44 1 17 929 7481 Fax: 44 1 17 920 0979

techtracking@iop.org

Additional copies of this publication are available from:

Curran Associates, Inc. 57 Morehouse Lane Red Hook, NY 12571 USA

Phone: 845-758-0400 Fax: 845-758-2633

Email: curran@proceedings.com Web: www.proceedings.com

Table of contents

Volume 865

41st Vietnam National Conference on Theoretical Physics

1-4 August 2016, Nha Trang, Vietnam

Accepted papers received: 19 June 2017

Published online: 26 June 2017

Preface

011001 OPEN ACCESS 41st Vietnam National Conference on Theoretical Physics

011002 OPEN ACCESS Peer review statement

Papers

012001 OPEN ACCESS On five-dimensional massive (bi-)gravity

Tuan Q Do....1

012002 OPEN ACCESS

Energy spectrum inverse problem of *q*-deformed harmonic oscillator and entanglement of composite bosons

Nguyen Anh Sang, Do Thi Thu Thuy, Nguyen Thi Ha Loan, Nguyen Tri Lan and and Nguyen Ai Viet.....14

012003

OPEN ACCESS

Study of crystallization mechanisms of Fe nanoparticle

P H Kien, G T T Trang and P K Hung.....22

012004

OPEN ACCESS

The main scattering mechanisms in Single-side modulation doped square quantum wells

Tran Thi Hai, Nguyen Thi Dung and Nguyen Manh An....28

012005

OPEN ACCESS

On the Concentration Dependence of Metallic Nano-Particles in Enhanced Forster Resonance Energy Transfer

N M Hoa, T H Nhung, T T Thao, L T Theu and N A Viet.....34

012006

OPEN ACCESS

Some applications using the connection between *q*-deformed harmonic oscillator and symmetric and asymmetric potentials

Ngo Gia Vinh, Man Van Ngu, Nguyen Tri Lan, Luu Thi Kim Thanh, Nguyen Thi Dung and Nguyen Ai Viet.....40

012007

OPEN ACCESS

On the theory of three types of polaritons (phonon, exciton and plasmon polaritons)

Duong Thi Ha, Dinh Thi Thuy, Vo Thi Hoa, Tran Thi Thanh Van and Nguyen Ai Viet.....48

012008

OPEN ACCESS

Higher order non-classicalities in the Kerr-like coupler systems

Nguyen Thi Dung, Nguyen Manh An and Tran Thi Hai.....56

012009 OPEN ACCESS

<u>Influence of phonon confinement on the optically detected magneto-phonon resonance</u> line-width in parabolic quantum wells

Nguyen Dinh Hien, Le Dinh, Vo Thanh Lam and Tran Cong Phong.....65

012010

OPEN ACCESS

<u>Grand-canonical Monte-Carlo simulation of DNA condensation in equilibrium with a salt mixture containing 2:2 salt</u>

Nguyen V Duc and Toan T Nguyen....71

012011

OPEN ACCESS

Microscopic description of average level spacing in even-even nuclei

Le Thi Quynh Huong, Nguyen Quang Hung and and Le Tan Phuc.....77

012012

OPEN ACCESS

A non-extensive thermodynamic theory of ecological systems

Le Van Xuan, Nguyen Khac Ngoc, Nguyen Tri Lan and Nguyen Ai Viet.....83

012013

OPEN ACCESS

On the mass enhancement of black body background fluctuations

Nguyen Van Hoa, Le Van Xuan, Nguyen Tri Lan and Nguyen Ai Viet.....89

012014

OPEN ACCESS

The spatially anisotropic triangular lattice antiferromagnet: Popov-Fedotov method

Pham Thi Thanh Nga, Phan Thu Trang and Nguyen Toan Thang.....94

012015 OPEN ACCESS

Magnetic order of spin S = 1 antiferromagnetic quantum Heisenberg systems on a Bravais lattice: exact local constraint

Pham Thi Thanh Nga and Nguyen Toan Thang.....101