



New Additions of Books May 2015

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Generalities

17708 Microprocessor architecture, programming, and applications with the 8085
Gaonkar, Ramesh.
Penram International Publishing (India) Pvt. Ltd., 2013
004.165/GAO

Social Sciences

GB742 Cultural heritage of India. Vol. I: the early phases: prehistoric, Vedic and Upanisadic,
Jaina, and Buddhist
Radhakrishnan, Sarvepalli_Ed.
Ramakrishna Mission Institute of Culture, 2009
306/RAD

GB743 Cultural heritage of India. Vol. II: Itihasas, Puranas, dharma and other sastras
Radhakrishnan, Sarvepalli_Ed.
Ramakrishna Mission Institute of Culture, 2009
306/RAD

GB744 Cultural heritage of India. Vol. III: the philosophies
Bhattacharyya, Haridas_Ed.
Ramakrishna Mission Institute of Culture, 2013
306/BHA

GB745 Cultural heritage of India. Vol. IV: the religions.
Bhattacharyya, Haridas.
Ramakrishna Mission Institute of Culture, 2013
306/BHA

GB746 Cultural heritage of India. Vol. V: languages and literatures
Chatterji, Suniti Kumar.
Ramakrishna Mission Institute of Culture, 2009
306/CHA

GB747 Cultural heritage of India. Vol. VI: science and technology
Ray, Priyadarajan_Ed.
Ramakrishna Mission Institute of Culture, 2013
306/RAY

GB748 Cultural heritage of India. Vol. VII: the arts
Vatsyayan, Kapila_Ed.
Ramakrishna Mission Institute of Culture, 2013
306/VAT

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GB749 Cultural heritage of India. Vol. VIII: the making of modern India (1765-1947)
Bhattacharyya, Sukumar_Ed.
Ramakrishna Mission Institute of Culture, 2013
306/RAD

Natural Sciences

GB738 History of science in India: Vol. VIII: biochemistry biophysics and molecular biology.
Mandal, Nitai Chandra.
Ramakrishna Mission Institute of Culture
509.54/MAN

Mathematics

GB739 Introduction to automata theory, language and computation
Hopcroft, John E.
Pearson, 2008
511.35/HOP

GB751 Groups rings and fields
Wallace, D.A.R.
Springer India, 1998
512.02/WAL

GB753 Course in number theory and cryptography
Koblitz, Neal.
Springer India, 1994
512.7/KOB

GB750 Introduction to algebraic topology
Rotman, Joseph J.
Springer India, 1988
514.2/ROT

GB737 Basic algebraic topology
Shastri, Anant R.
CRC Press, 2014
514.2/SHA

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- GB736 Basic topology
Armstrong, M. A.
Springer India, 1983
514/ARM
- GB754 Essential topology
Crossley, Martin D.
Springer India Pvt. Ltd., 2005
514/CRO
- GB741 Calculus and analytic geometry
Thomas, George B. Jr.
Narosa Publishing House, 1984
515.15/THO
- 17710 Maximum principle
Pucci, Patrizia.
Birkhauser, 2007
515.3533/PUC
- 17718 Exploring mathematics: investigations with functions
Johnson, Craig M.
Jones & Bartlett Learning, 2015
515.7/JOH
- 17711 Primer of nonlinear analysis
Ambrosetti, Antonio.
Cambridge University Press, 1993
515.7248/AMB
- GB752 Rational points on elliptic curves
Silverman, Joseph H.
Springer India, 1992
516.352/SIL

Physics

- 17679 Quantum and semi-classical percolation and breakdown in disordered solids
Sen, Asok K. _Ed.
Springer
530.13/SEN

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- 17714 Supergravity
Freedman, Daniel Z.
Cambridge University Press, 2012
530.1423/FRE
- 17680 Many-body boson systems: half a century later
Verbeure, Andre F.
Springer-Verlag, 2011
530.143/MAR
- 17681 Many-body problems and quantum field theory: an introduction
Martin, P.A.
Springer, 2004
530.143/MAR
- 17687 Confined photon systems: fundamentals and applications : lectures from
the summer school held in Cargese, Corsica, 3-15 A
Benisty, Henri_Ed.
Springer-Verlag
537.5/BEN
- 17686 Nanoelectrodynamics: electrons and electromagnetic fields in
nanometer-scale structure Hitoshi Nejo.
Springer-Verlag, 2003
537.6/NEJ
- 17683 Semiconductor optics
Klingshirn, Claus F.
Springer-Verlag, 2012
537.6226/KLI

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17685 Semiconductor optics and transport phenomena
Schafer, W.
Springer, 2002
537.6226/SCH

17684 Electronic states and optical transitions in semiconductor heterostructures
Vasko, Fedor T.
Springer, 1999
537.6226/VAS

GB740 Introduction to high energy physics
Perkins, Donald H.
Cambridge University Press, 2000
539.72/PER

Chemistry and allied Sciences

17705 Multi-scale quantum models for biocatalysis : modern techniques and applications
York, Darrin M. _Ed.
Springer, 2010
541.220113/YOR

17704 Organic spectroscopy
Kemp, William.
Palgrave, 1991
543.5/KEM

Life Sciences

GB733 Biodiversity and development in Western Ghats
Nair, Mohan.
Mohan Nair, 2015
578.7954/NAI

17715 Tropical trees as living systems: the proceedings of the fourth Cabot symposium held at Harvard Forest, Petersham, Massachusetts, on April 26-30, 1976
Tomlinson, P. B. _Ed.
Cambridge University Press
582.1609093/TOM

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17677 Honeybees of Asia
Hepburn, , Randall_Ed.
Springer-Verlag, 2011
595.799095/HEP

Medical Sciences and Medicine

17716 Exercise physiology: theory and application to fitness and performance
Powers, Scott K.
McGraw-Hill Higher , 2012
612.044/POW

17717 Exercise physiology laboratory manual
Beam, William C.
McGraw-Hill, 2014
612.76/BEA

GB756 Clear body, clear mind: the effective purification program
Hubbard, Ron L.
New Era Publications, 2013
616.86/HUB

Engineering & Allied Operations

GB734 Science and engineering of materials.
Askeland, Donald R.
Brooks/Cole, 2003
620.11/ASK

17678 Classical, semi-classical and quantum noise
Cohen, Leon_Ed.
Springer, 2012
621.38224/COH

Chemical Engineering

GB735 Introduction to ceramics.
Kingery, W.D.
John Wiley & Sons, 1976
666/KIN

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Literature

- 17723 History of literary criticism and theory: from Plato to the present
Habib, M.A.R.
Wiley Blackwell, 2008
801.9509/HAB
- 17720 Norton anthology of English literature Vol. A: the middle ages
Greenblatt, Stephen_Ed.
W.W. Norton and Company, 2012
820.8/GRE
- 17721 Norton anthology of English literature Vol. B: the Sixteenth century/the early Seventeenth century
Greenblatt, Stephen_Ed.
W.W. Norton and Company
820.8/GRE
- 17722 Norton anthology of English literature Vol. C: the restoration and the eighteenth century.
Greenblatt, Stephen_Ed.
W.W. Norton and Company, 2012
820.8/GRE
- 17719 Norton anthology of poetry
Ferguson, Margaret_Ed.
W. W. Norton and Company, 2005
821.008/FER

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Ph.D Thesis

- TH1 Environmental effects on the dynamics of coupled nonlinear systems
Student: Resmi, V
Supervisor: Dr. G Ambika
- TH2 Synthesis and utilization of naturally occurring functionalized gamma amino acids in the design of hybrid peptide foldamers
Student: Bandyopadhyay, Anupam
Supervisor: Dr. Hosahudya N. Gopi
- TH3 Nuclear spins as quantum testbeds: singlet states, quantum correlations, and delayed-choice experiments
Student: Roy, Soumya Singha
Supervisor: Dr. T.S. Mahesh
- TH4 Comparative study of SATB family proteins
Student: Singh, Sunita
Supervisor: Dr. Sanjeev Galande
- TH5 Supramolecular assemblies of pie conjugated phenylenevinylenes in solid state
Student: Goel, Mahima
Supervisor: Dr. M Jayakannan
- TH6 Role of SATB1 in T cell development and differentiation
Student: Gottimukkala, K.P.
Supervisor: Dr. Sanjeev Galande
- TH7 Hox genes and evolution of arthropod body plan: A comparative analysis of direct targets of Ultrabithorax in *Drosophila melanogaster* and *Apis mellifera*
Student: Prasad, Naveen
Supervisor: Prof. L. S. Shashidhara
- TH8 Gamma-C- Substituted multifunctional peptide nucleic acids: Design, synthesis and bioevaluation
Student: Jain, Deepak.R.
Supervisor: Prof. Krishna N. Ganesh
- TH9 Design, synthesis and conformational analysis of hybrid gamma-peptide foldamers comprised of pro teinogenic sidechains and their utilization in the design of novel biomaterials
Student: Jadhav, Sandip.V.
Supervisor: Dr. Hosahudya N. Gopi
- TH10 Novel synthesis approaches to Aza-heterocycles, Oxo-alpha-amino acids and (E)-alpha, beta unsaturated carboxylic acids/esters
Student: Mohite, Amar.R.
Supervisor: Dr. Ramkrishna G. Bhat

- TH11 Chemistry on unnatural amino acid peptide building blocks and bioinspired peptide synthesis
Student: Mali, Sachitanand. M.
Supervisor: Dr. Hosahudya N. Gopi
- TH12 Total synthesis of 1-deoxy-6,7,8a-epi-castanospermine, (+)-epiquin amide, (+)-CP-99,994 and orthogonal N-deacetylation and N-cbzdeprotection
Student: Sultane, Prakash. R.
Supervisor: Dr. Ramkrishna G.Bhat
- TH13 Photo-physical properties of single semiconductor nanostructures using fluorescence correlation spectroscopy
Student: Murthy, A.V.R.
Supervisor: Dr. Shivprasad Patil
- TH14 Synthesis and functional studies of transition metal complexes derived from amido and imido P(V) ligands
Student: Gupta, Arvind Kumar
Supervisor: Dr. R. Bhoomi Shankar
- TH15 Stereoselective glycosidations and application to the mycobacterial arabinogalactan by gold (III) Catalysis
Student: Thadke, Shivaji Ashokrao
Supervisor: Dr. Srinivas Hotha
- TH16 Atomistic investigation of polymer electrolyte membrane nanostructure and dynamics of molecular transport in fuel cells
Student: Sunda, Anurag. P.
Supervisor: Dr. Arun Venkatnathan
- TH17 Electrical and optical investigations of the condensed matter physics of junction diodes under charge carrier injection
Student: Bansal, Kanika
Supervisor: Dr. Shouvik Datta
- TH18 Electronic structure characterization of molecular interactions in Clathrate Hydrates
Student: Ramya, K.R.
Supervisor: Dr. Arun Venkatnathan
- TH19 Excited state dynamics and photophysics in bulk, confined and bio-mimetic systems
Student: Sengupta, Abhigyan
Supervisor: Dr. Partha Hazra
- TH20 Coronal mass ejections from the sun - propagation and near earth effects
Student: Arun Babu, K.P.
Supervisor: Dr. Prasad Subramanian

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- TH21 Synthesis of semiconductor quantum dots, study of their optical properties and their application in sensitized solar cells
Student: Patil, Padmashri
Supervisor: Dr. Shouvik Datta
- TH22 Environment-sensitive base-modified fluorescent ribonucleoside analogue probes: Synthesis, incorporation and applications
Student: Pawar, Maroti. G.
Supervisor: Dr. Seergazhi G. Srivatsan
- TH23 Synthesis and evaluation of organic sources of reactive sulfur species
Student: Malwal, Satish.R.
Supervisor: Dr. Harinath Chakrapani
- TH24 Synthesis and evaluation of small molecule based reactive oxygen species (ROS) generations
Student: Dharmaraja, A.
Supervisor: Dr. Harinath Chakrapani
- TH25 Probing non-covalent interactions in biomolecules and materials: A gas phase laser spectroscopy study of N-heterocyclic aromatic complexes
Student: Kumar, Sumit
Supervisor: Dr. Alope Das
- TH26 SUMOylation in the Drosophila Innate immune response: Proteomics to immune signaling
Student: Handu, Mithila
Supervisor: Dr. Girish. S. Ratnaparkhi
- TH27 Role of fluid dynamics in nanofabrication: Growth mechanism and optical properties of ligand free CdS nanotubes made using alumina nano-reactor
Student: Varghese, Arthur
Supervisor: Dr. Shouvik Datta
- TH28 Design, synthesis and functional studies of biomolecule based coordination polymers
Student: Joarder, Biplab
Supervisor: Dr. Sujit K. Ghosh
- TH29 Synthesis, characterization and redox properties of antiaromatic expanded isophlorins
Student: Yadagiri, Gopalakrishna T
Supervisor: Dr. V.G. Anand
- TH30 Design and synthesis of metal organic frameworks for selective sensing applications
Student: Nagarkar, Sanjog. S.
Supervisor: Dr. Sujit K. Ghosh

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TH31 Design and synthesis of fluorescent probes for selective detection of thiols
Student: Kand, Dnyaneshwar.S.
Supervisor: Dr. Pinaki Talukdar

TH32 A Evolution and development of insect wings: A comparative analysis of the genome wide targets of the HOX protein Ultrabithorax in Bombyx mori, Apis Mellifers and Drosophila melanogaster
Student: Shreeharsha T T
Supervisor: Prof. L.S. Shashidhara

TH33 Drosophila models of motor neuron disease
Student: Senthilkumar, D.
Supervisor: Dr. Girish Ratnaparkhi

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