

CONTENTS

S. No.	Title	Pg No.
1.	A [Fe(bpy)3]2+ grafted graphitic carbon nitride hybrid for visible light assisted oxidative coupling of benzylamines under mild reaction conditions Arvind Kumar, Pawan Kumar, Chetan Joshi, Srikanth Ponnada, Abhishek K. Pathak , Asgar Ali, Bojja Sreedhard and Suman L. Jain <i>Green Chem.</i> , 2016, 18, 2514	1
2.	A biofunctionalized quantum dot–nickel oxide nanorod based smart platform for lipid detection Md. Azahar Ali, Saurabh Srivastava, Ved V. Agrawal , Magnus Willander, Renu John and Banshi D. Malhotra <i>J. Mater. Chem. B</i> , 2016, 4, 2706	9
3.	A comparative analysis of chromium doped l-alanine cadmiumchloride monohydrate single crystal using X-ray diffraction, thermal and optical techniques for nonlinear optical applications Anuj Krishna, N. Vijayan, Kanika Thukral, Nahar Singh, K.K. Maurya, G. Bhagavannarayana, S.K. Haldar <i>Optik</i> 127 (2016) 3723–3726	18
4.	A DFT study of the electronic and optical properties of a photovoltaic absorber material Cu ₂ ZnGeS ₄ using GGA and mBJ exchange correlation potentials Nisha Kodan, S. Auluck , B.R. Mehta <i>Journal of Alloys and Compounds</i> 675 (2016) 236e243	22
5.	A Novel Technique for Precise Phase and Frequency Measurement Aishik Acharya, Shuchi Yadav, Poonam Arora, Amitava Sen Gupta <i>URSI Asia-Pacific Radio Science Conference August 21-25, 2016 / Seoul, Korea</i> <i>DOI: 10.1109/URSIAP-RASC.2016.7601137</i>	30
6.	A pilot study on the establishment of national ambient noise monitoring network across the major cities of India N. Garg , A.K. Sinha, V. Gandhi, R.M. Bhardwaj, A.B. Akolkar <i>Applied Acoustics</i> 103 (2016) 20–29	32
7.	A Retrospective Investigation of Different Uncertainty of Measurement Estimation Approaches Harish Kumar , P.K. Arora, Girija Moona , D.P. Singh, Jasveer Singh and Anil Kumar <i>CAD/CAM, Robotics and Factories of the Future, Lecture Notes in Mechanical Engineering</i> , pp 779-784 DOI 10.1007/978-81-322-2740-3_75	42

CONTENTS

8. A retrospective view of noise pollution control policy in India: status, proposed revisions and control measures 48
N. Garg and S. Maji
Current Science, Vol. 111, No. 1, 10 July 2016
9. A Soft Computing Approach for Obesity Assessment 58
Jawed Ahmed, M. Afshar Alam, **Abdul Mobin**, Shahla Tarannum
5th International Conference on Reliability, Infocom Technologies and Optimization (ICRITO) (Trends and Future Directions), Sep. 7-9, 2016,
AIIT, Amity University Uttar Pradesh, Noida, India
DOI: 10.1109/ICRITO.2016.7784946
10. A synergistic combination of atomic scale structural engineering and panoscopic approach in p-type ZrCoSb-based half-Heusler thermoelectric materials for achieving high ZT 62
N. S. Chauhan, A. Bhardwaj, T. D. Senguttuvan, R. P. Pant, R. C. Mallik and D. K. Misra
J. Mater. Chem. C, 2016, 4, 5766
11. A vertically stacked phosphorescent multilayer organic light emitting transistor 75
Ritu Verma, Vandana Yadav, Khushdeep Kaur, Md Bayazeed Alam, Nidhi Singh, C. K. Suman and Ritu Srivastav
RSC Adv., 2016, 6, 90873
12. Activation of Organic Photovoltaic Light Detectors Using Bend Leakage from Optical Fibers 80
Matthew J. Griffith, Matthew S. Willis, **Pankaj Kumar**, John L. Holdsworth, Henco Bezuidenhout, Xiaojing Zhou, Warwick Belcher, and Paul C. Dastoor
ACS Appl. Mater. Interfaces 2016, 8, 7928–7937
13. Adsorptional photocatalytic mineralization of oxytetracycline and ampicillin antibiotics using Bi₂O₃/BiOCl supported on graphene sand composite and chitosan 90
Bhanu Priya, Pankaj Raizada, **Nahar Singh**, Pankaj Thakur, Pardeep Singh
Journal of Colloid and Interface Science 479 (2016) 271–283
14. Aerosol effective density measurement using scanning mobility particle sizer and quartz crystal microbalance with the estimation of involved uncertainty 103
Bighnaraj Sarangi, Shankar G. Aggarwal, Deepak Sinha, and **Prabhat K. Gupta**
Atmos. Meas. Tech., 9, 859–875, 2016
15. Aerosol Optical Properties In The Lower Troposphere During Summer Over New Delhi 120
Radhakrishnan Soman Radha, Bhawan Chandra Arya, Sumith Kumar Misra, Chhemendra Sharma, Arun Kumar, Devesh Kumar Shukla and Jaswanth
EPJ Web of Conferences 119, 23012 (2016)

CONTENTS

16. Alcohol vapor sensing by cadmium-doped zinc oxide thick lms based chemical sensor 123
R. A. Zargar , **M. Arora**, S. Chackrabarti, S. Ahmad, **J. Kumar** and A. K. Hafiz
Modern Physics Letters B Vol. 30, No. 12 (2016) 1650244 (11 pages)
17. An amperometric bienzymatic biosensor for the triglyceride tributyrin using an indium tin oxide electrode coated with electrophoretically deposited chitosan-wrapped nanozirconia 134
Shipra Solanki & Chandra Mouli Pandey & Amrita Soni & Gajjala Sumana & Ashok Manikrao Biradar
Microchim Acta (2016) 183:167–176
18. An insight into the mechanism of charge transfer properties of hybrid organic (MEHPPV): Inorganic (TiO₂) nanocomposites 144
Tanu Mittal, Sangeeta Tiwari, **Aarti Mehta**, and **Shailesh N. Sharma**
AIP Conference Proceedings 1724, 020062 (2016)
19. An Intercomparison of the Upper Critical Fields (H_c2) of Different Superconductors—YBa₂Cu₃O₇, MgB₂, NdFeAsO_{0.8}F_{0.2}, FeSe_{0.5}Te_{0.5} and Nb₂PdS₅ 150
R. Sultana, P. Rani, A. K. Hafiz, Reena Goyal, V. P. S. Awana
J Supercond Nov Magn (2016) 29:1399–1404
20. An optimized ion trap geometry to measure quadrupole shifts of ¹⁷¹Yb+ clocks 156
N Batra, B K Sahoo, and **S De**
Chin. Phys. B Vol. 25, No. 11 (2016) 113703
21. An Organic Dyad Composed of Diathiafulvalene-Functionalized Diketopyrrolopyrrole–Fullerene for Single-Component High-Efficiency Organic Solar Cells 165
K. Narayanaswamy, A. Venkateswararao, P. Nagarjuna, **Swati Bishnoi, Vinay Gupta, Suresh Chand**, and Surya Prakash Singh
Angew. Chem. Int. Ed. 2016, 55, 12334 –12337
22. Antibody conjugated graphene nanocomposites for pathogen detection 169
Chandan Sign, Gajjala Sumana
Journal of Physics: Conference Series 704 (2016) 012014
23. Antibody conjugated metal nanoparticle decorated graphene sheets for a mycotoxin sensor 177
Saurabh Srivastava, Vinod Kumar, Kamal Arora, **Chandan Singh, Md. Azahar Ali, Nitin K. Puri, and Banshi D. Malhotra**
RSC Adv., 2016, 6, 56518

CONTENTS

24. Ascorbic acid-mediated synthesis and characterisation of iron oxide/gold core–shell nanoparticles. 186
Ankur Sood, Varun Arora, **Jyoti Shah, R.K. Kotnala & Tapan K. Jain**
Journal of Experimental Nanoscience, 2016 Vol. 11, No. 5, 370382
25. At room temperature graphene/SnO₂ is better than MWCNT/SnO₂ as NO₂ gas sensor 200
Vibha Srivastava, **Kiran Jain**
Materials Letters 169(2016)28–32
26. Atomic force microscopy studies of homoepitaxial GaN layers grown on GaN template by laser MBE 206
B. S. Choudhary, A. Singh, S. Tanwar, P. K. Tyagi, M. Senthil Kumar, and S. S. Kushvaha
AIP Conference Proceedings 1724, 020120 (2016)
27. Automation of an optical frequency standard experiment 211
N. Batra, A. Roy, C. Samal, S. Majhi, S. Panja and S. De
2nd International Conference on Control, Instrumentation, Energy & Communication
DOI: 10.1109/CIEC.2016.7513823
28. Band gap engineering of CuAl_{1-x}In_xS₂ alloys for photovoltaic applications: 217
a first principles study
S Kumar, Suman Joshi, S K Gupta and **S Auluck**
J. Phys. D: Appl. Phys. 49 (2016) 205103 (6pp)
29. Band gap engineering of ZnO substituted with nitrogen and fluorine, ZnO_{13x}N_{2x}F_x: 223
a hybrid density functional study
S. Kumar, Durgesh Kumar Sharma and **S. Auluck**
RSC Adv., 2016, 6, 99088
30. Barium ferrite and graphite integrated with polyaniline as effective shield against 231
electromagnetic interference
Preeti Gairola, S.P. Gairola, Vijay Kumar, Kuldeep Singh, **S.K. Dhawan**
Synthetic Metals 221 (2016) 326–331
31. Bifunctional Luminomagnetic Rare-Earth Nanorods for High-Contrast Bioimaging 237
Nanoprobes
Bipin Kumar Gupta, Satbir Singh, Pawan Kumar, Yean Lee, Garima Kedawat,
Tharangattu N. Narayanan, Sajna Antony Vithayathil, Liehui Ge, Xiaobo Zhan,
Sarika Gupta, Angel A. Martí, Robert Vajtai, Pulickel M. Ajayan,
Benny Abraham Kaipparettu
Scientific Reports / 6:32401 / DOI: 10.1038/srep32401

CONTENTS

32. Bimetallic Au-Ag Alloy Nanoparticles Improve Energy Harvesting of a TiO₂/CdS Film 249
P. Naresh Kumar, Aparajita Das, Melepurath Deepa, Partha Ghosal, and **Avanish K. Srivastava**
ChemistrySelect 2016, 1, 5320 – 5330
33. Bio-derived hierarchically macro-meso-micro porous carbon anode for lithium/sodium ion batteries 260
Indu Elizabeth, Bhanu Pratap Singh, Sunil Trikha, Sukumaran Gopukumar
Journal of Power Sources 329 (2016) 412e421
34. Broadband enhancement in absorption crosssection of N719 dye using different anisotropic shaped single crystalline silver nanoparticles 270
Tanvi, Aman Mahajan, R. K. Bedi, Subodh Kumar, Vibha Saxena, Ajay Singh,
D. K. Aswal
RSC Adv., 2016, 6, 48064
35. Bulk heterojunction solar cells based on self-assembling disc-shaped liquid crystalline material 278
Manisha Bajpai, Neelam Yadav, Sandeep Kumar, **Ritu Srivastava**, and Ravindra Dhar
Liquid Crystals, 2016 Vol. 43, No. 3, 305–313
36. CD 59 Targeted Ultrasensitive Electrochemical Immunosensor for Fast and Noninvasive Diagnosis of Oral Cancer 287
Meenakshi Choudhary, **Prashant Yadav**, Anu Singh, Satbir Kaur, Jaime Ramirez-Vick, Pranjali Chandra, Kavita Arora, and **Surinder P. Singh**
Electroanalysis 2016, 28, 2565 – 2574
37. Characterization of Bioaerosols and their Relation with OC, EC and Carbonyl VOCs at a Busy Roadside Restaurants-Cluster in New Delhi 297
Smita Agarwal, Papiya Mandal, Dipanjali Majumdar, **Shankar G. Aggarwal**, Anjali Srivastava
Aerosol and Air Quality Research, 16: 3198–3211, 2016
38. Characterization of the Photocatalytic Activity of Bismuth Oxychloride Nanostructures 311
Gagan Kant Tripathi, **I. D. Sharma, Chander Kant, Ravi Ranjan Pandey, K. K. Saini**, and Rajnish Kurchania
Analytical Letters 2016, Vol. 49, No. 9, 1452–1466
39. Charge carrier dynamics and surface plasmon interaction in gold nanorod-blended organic solar cell 326
Aniket Rana, Neeraj Gupta, **Abhiram Lochan, G. D. Sharma, Suresh Chand, Mahesh Kumar, and Rajiv K. Singh**
Journal of Applied Physics 120, 063102 (2016)

CONTENTS

40. Charge transport mechanism of thermally reduced graphene oxide and their fabrication for high performance shield against electromagnetic pollution 338
Ramesh Kumar, S.K. Dhawan, H.K. Singh, Amarjeet Kaur
Materials Chemistry and Physics 180 (2016) 413e421
41. Chemical characterization and source apportionment of aerosol at an urban area of Central Delhi, India 347
Sudhir Kumar Sharma, Ashima Sharma, Mohit Saxena, Nikki Choudhary, Renu Masiwal, Tuhin Kumar Mandal, Chhemendra Sharma
Atmospheric Pollution Research 7 (2016) 110e121
42. Colloidal properties of water dispersible magnetite nanoparticles by photon correlation spectroscopy 359
Srividhya J. Iyengar, Mathew Joy, Titir Maity, Jnananjan Chakraborty,
Ravinder K. Kotnala and Swapankumar Ghosh
RSC Adv., 2016, 6, 14393
43. Comparing the degradation of organic photovoltaic devices under ISOS testing protocols 369
Pankaj Kumar, Chhinder Bilen, Ben Vaughan, Xiaojing Zhou, Paul C. Dastoor, Warwick J .Belcher
Solar Energy Materials & Solar Cells 149(2016)179–186
44. Comparison of ARIMA and ANN approaches in time-series predictions of traffic noise 377
N. Garg, M.K. Sharma, K.S. Parmar, K. Soni, R.K. Singh and S. Maji
Noise Control Engr. J. 64 (4), July-August 2016
45. Conduction and switching mechanism in Nb₂O₅ thin films based resistive switches 387
Sweety Deswal, Ashish Jain, Hitesh Borkar, Ashok Kumar and Ajeet Kumar
EPL, 116 (2016) 17003
46. Conduction phenomenon of Al³⁺ modified lead free (Na_{0.5}Bi_{0.5})_{0.92}Ba_{0.08}TiO₃ 393 electroceramics
Hitesh Borkar, and Ashok Kumar
AIP Conference Proceedings 1731, 110029 (2016); doi: 10.1063/1.4948050
47. Controlled deposition of functionalized silica coated zinc oxide nano-assemblies at the air/water interface for blood cancer detection 397
Chandra Mouli Pandey, Srishti Dewan, Seema Chawla, Birendra Kumar Yadav, Gajjala Sumana, Bansi Dhar Malhotra
Analytica Chimica Acta 937 (2016) 29e38

CONTENTS

48. Correlated non-Gaussian phase fluctuations in LaAlO₃/SrTiO₃ heterointerfaces 407
Gopi Nath Daptary, Shelender Kumar, **Pramod Kumar, Anjana Dogra,**
N. Mohanta, A. Taraphder, and Aveek Bid
Physical Review B 94, 085104 (2016)
49. Correlation of growth temperature with stress, defect states and electronic structure 416
in an epitaxial GaN film grown on c-sapphire via plasma MBE
Shibin Krishna, Neha Aggarwal, Monu Mishra, K. K. Maurya, Sandeep Singh,
Nita Dilawar, Subramaniyam Nagarajan, and **Govind Gupta**
Phys.Chem.Chem.Phys., 2016, 18, 8005
50. Counter Electrode Impact on Quantum Dot Solar Cell Efficiencies 426
P. Naresh Kumar, Ankita Kolay, S. Krishna Kumar, Prabir Patra, Ashish Aphale,
Avanish Kumar Srivastava, and Melepurath Deepa
ACS Appl. Mater. Interfaces 2016, 8, 27688–27700
51. Crossover from magnetostatic to exchange coupling in 439
La0.67Ca0.33MnO₃/YBa₂Cu₃O₇/La0.67Ca0.33MnO₃ heterostructures
Rajni Porwal, Anurag Gupta, and R C Budhani
J. Phys.: Condens. Matter 28 (2016) 506003 (7pp)
52. Crystal structure refinement and magnetic properties of Bi0.8Ba0.2FeO₃ 447
substituted Na0.5Bi0.5TiO₃ ceramics
Kavita Kaswan, Ashish Agarwal, Sujata Sanghi, **R.K. Kotnala**
Journal of Molecular Structure 1108 (2016) 54e59
53. Crystalline perfection and mechanical investigations on vertical Bridgman grown 453
Bismuth telluride (Bi₂Te₃) single crystals for thermoelectric applications
Anuj Krishna, N.Vijayan, Budhendra Singh, **Kanika Thukral, K.K. Maurya**
Materials Science & Engineering A 657(2016)33–37
54. CSIR-NPL establishes facility for efficiency validation of solar cells 458
Sushil Kumar and **D. K. Aswal**
Current Science, Vol. 111, No. 4, 25 August 2016
55. CuInS₂/CdS Quantum Dots and Poly(3,4-ethylenedioxythiophene)/ Carbon-Fabric 461
Based Solar Cells
Ramesh K. Kokal, Melepurath Deepa, Partha Ghosal, **Avanish K. Srivastava**
Electrochimica Acta 219 (2016) 107–120
56. D-A conjugated polymers containing substituted thiophene,1,3,4-oxadiazole and 475
non-conjugation linkers: Synthesis and study of optical and electrochemical
properties
Prashanth Kumar K R, Udayakumar D, Siji Narendran N K, Chandrasekharan K, and
Ritu Srivastava
J. Chem. Sci. Vol. 128, No. 9, September 2016, pp. 1423–1433

CONTENTS

CONTENTS

66. Determining the number of layers in graphene films synthesized by filtered cathodic vacuum arc technique 558
A. K. Kesarwani, O. S. Panwar, S. R. Dhakate, V. N. Singh, R. K. Rakshit, Atul Bisht, and Ashish Kumar
Fuller Nanotub Car N 2016, Vol. 24, No. 11, 725–731
67. Development and metrological characterization of a precision force transducer for static force measurement related applications 565
Harish Kumar, Chitra Sharma, P.K. Arora, Girija Moona, Anil Kumar
Measurement 88 (2016) 77–86
68. Development of high density tungsten based scandate by Spark Plasma Sintering for the application in microwave tube devices 575
Sunil Kumar Pradhan, Jayasankar Kalidoss, Ranjan Barik, **Bathula Sivaiah, Ajay Dhar**, Shubhra Bajpai
Int. Journal of Refractory Metals and Hard Materials 61 (2016) 215–224
69. Development of solution-processed nanowire composites for opto-electronics 585
David S. Ginley, Shruti Aggarwal, **Rajiv Singh**, Tom Gennett, Maikel F. A. M. van Hest, John D. Perkins
MRS Communications (2016), 6, 341–347
70. Dielectric and Raman studies of Ba_{0.06}(Na₁₌₂Bi₁₌₂)_{0.94}TiO₃–NaNbO₃ ceramics 592
Sumit K. Roy, S. Chaudhuri, **R.K. Kotnala, D.K. Singh, B.P. Singh**, S.N. Singh, K.P. Chandra, K. Prasad
Materials Science-Poland, 34(2), 2016, pp. 437-445
71. Dielectric Response of Pure and Doped-GaSe Crystals studied by an Indigenously Developed Broadband THz-TDS System 601
Amit C. Das, S. Bhattacharya, K. C. Mandal, S. Mondal, **M. Jewariya, T. Ozakie, S. N. B. Bhaktha, and P. K. Datta**
Proc. of SPIE Vol. 9894 98941E-1 doi: 10.1117/12.2227357
72. Diffuse-Reflectance Spectroscopy Using a Frequency-Switchable Terahertz Quantum Cascade Laser 607
Alexander Valavanis, Siddhant Chowdhury, Andrew D. Burnett, Adam R. Clarkson, David R. Bacon, **Suraj P. Khanna**, Alexander Giles Davies, Edmund H. Linfield, and Paul Dean
IEEE Transactions On Terahertz Science And Technology, Vol. 6, 2, March 2016
73. Dirty limit scattering behind the decreased anisotropy of doped YBa₂Cu₃O_{7-δ} thin films 614
M Malmivirta, H Palonen, S Inkinen, L D Yao, J Tikkanen, H Huhtinen, **R Jha, V P S Awana**, S van Dijken and P Paturi
J. Phys.: Condens. Matter 28 (2016) 175702 (6pp)

CONTENTS

74. Dithienogermole-based solution-processed molecular solar cells with efficiency over 9% 621
Vinay Gupta, Lai Fan Lai, Ram Datt, Suresh Chand, Alan J. Heeger, Guillermo C. Bazan and Surya Prakash Singh
Chem. Commun., 2016, 52, 8596
75. DNA assembled metal nanoclusters: synthesis to novel applications 625
Alok Pandya, Amitkumar N. Lad, **Surinder Pal Singh** and Rishi Shanker
RSC Adv., 2016, 6, 113095
76. Dynamic mechanical properties of multiwall carbon nanotube reinforced ABS composites and their correlation with entanglement density, adhesion, reinforcement and C factor 645
Jeevan Jyoti, Bhanu Pratap Singh, Abhishek K. Arya and S. R. Dhakate
RSC Adv., 2016, 6, 3997
77. Easy synthesis of organic–inorganic hybrid nanomaterials: study of DC conduction mechanism for light dependent resistors 655
Ishpal Rawal, Ravi Kant Tripathi and O. S. Panwar
RSC Adv., 2016, 6, 31540
78. Effect of ampoule support on the growth of organic benzimidazole single crystals by vertical Bridgman technique for nonlinear optical applications 666
Anuj Krishna, N. Vijayan, Chandan Bagdia, Kanika Thukral, Sonia, D. Haranath, K. K. Maurya and G. Bhagavannarayana
CrystEngComm, 2016, 18, 4844
79. Effect of doping on the electron transport in polyfluorene 673
Manisha Bajpai, Ritu Srivastava, Ravindra Dhar, and R. S. Tiwari
AIP Conference Proceedings 1728, 020669 (2016)
80. Effect of impurity substitution on band structure and mass renormalization of the correlated FeTe0.5Se0.5 superconductor 677
S. Thirupathaiah, J. Fink, P. K. Maheshwari, V. V. Ravi Kishore, Z.-H. Liu, E. D. L. Rienks, B. B'uchner, V. P. S. Awana, and D. D. Sarma
Physical Review B 93, 205143 (2016)
81. Effect of insertion of low leakage polar layer on leakage current and multiferroic properties of BiFeO₃/BaTiO₃ multilayer structure 684
Savita Sharma, Monika Tomar, Ashok Kumar, Nitin K. Puri and Vinay Gupta
RSC Adv., 2016, 6, 59150
82. Effect of lanthanum (La³⁺) doping on the structural and electrical properties of double perovskite Sr₂NiMoO₆ 689
Pravin Kumar, Nitish Kumar Singh, Govind Gupta and Prabhakar Singh
RSC Adv., 2016, 6, 22094

CONTENTS

83. Effect of La-substitution on structural, dielectric and electrical properties of (Bi_{0.5}Pb_{0.5}) (Fe_{0.5}Zr_{0.25}Ti_{0.25})O₃ 698
Niranjan Panda, Samita Pattanayak, R. N. P. Choudhary, **Ashok Kumar**
Appl. Phys. A (2016) 122:823
84. Effect of lead and caesium on the mechanical, vibrational and thermodynamic properties of hexagonal fluorocarbonates: a comparative first principles study 710
E. Narsimha Rao, G. Vaitheswaran, A. H. Reshak, and **S. Auluck**
RSC Adv., 2016, 6, 99885
85. Effect of Organic Residues with Varied Carbon–Nitrogen Ratios on Grain Yield, Soil Health, and Nitrous Oxide Emission from a Rice Agroecosystem 723
Anushree Baruah, Kushal Kumar Baruah, Dipti Gorh, and **Prabhat Kumar Gupta**
Comm Soil Sci Plant Anal 2016, Vol. 47, No. 11, 1417–1429
86. Effect of power on growth of nanocrystalline silicon films deposited by VHF PECVD technique for solar cell applications 736
Sucheta Juneja, Payal Verma, Dmitry A. Savelyev, Svetlana N. Khonina,
S. Sudhakar, and Sushil Kumar
AIP Conference Proceedings 1724, 020016 (2016)
87. Effect of sputter deposited Zn precursor film thickness and annealing time on the properties of Cu₂ZnSnS₄ thin films deposited by sequential reactive sputtering of metal targets 744
Om Pal Singh, Nadarajah Muhunthan, Kuldeep Singh Gour, Rahul Parmar, Manas Dalai, Pawan Kulriya, Sujit Pillai, **V.N.Singh**
Materials Science in Semiconductor Processing 52(2016)38–45
88. Effect of substrate nitridation temperature on the persistent photoconductivity of unintentionally-doped GaN layer grown by PAMBE 752
Nisha Prakash, B. Choursia, **Arun Barvat, Kritika Anand, S. S. Kushvaha, V. N. Singh, Prabir Pal, and Suraj P. Khanna**
AIP Conference Proceedings 1731, 080084 (2016)
89. Effect of Variable Oxidation States of Vanadium on the Structural, Optical, and Dielectric Properties of B₂O₃–Li₂O–ZnO–V₂O₅ Glasses 756
S. K. Arya, S. S. Danewalia, **Manju Arora**, and K. Singh
J. Phys. Chem. B 2016, 120, 12168–12176
90. Effects of semi-organic additives on the solubility, growth, optical, thermal, mechanical, dielectric and NLO behaviors of ADP crystals for optoelectronic applications 765
M. Saravanan, A. Senthil, S. Abraham Rajasekar, **N. Vijayan**
Optik 127 (2016) 1463–1470

CONTENTS

91. Elastic and anelastic relaxation behaviour of perovskite multiferroics I: 773
PbZr0.53Ti0.47O₃ (PZT)–PbFe0.5Nb0.5O₃ (PFN)
J. A. Schiemer, I. Lascu, R. J. Harrison, **A. Kumar**, R. S. Katiyar, D. A. Sanchez,
N. Ortega, C. Salazar Mejia, W. Schnelle, H. Shinohara, A. J. F. Heap,
R. Nagaratnam, S. E. Dutton, J. F. Scott, and M. A. Carpenter
J Mater Sci (2016) 51:10727–10760
92. Electrical transport and mechanical properties of thermoelectric tin selenide 807
Kriti Tyagi, Bhasker Gahtori, Sivaiah Bathula, Niraj Kumar Singh, Swati Bishnoi, S. Auluck, A. K. Srivastava and Ajay Dhar
RSC Adv., 2016, 6, 11562
93. Electrochemical sensing of nitro-aromatic explosive compounds using silver 815
nanoparticles modified electrochips
S. Singh, V. K. Meena, B. Mizaikoff, **S. P. Singh** and C. R. Suri
Anal. Methods, 2016, 8, 7158
94. Electronic excitation induced modifications of optical and morphological properties 827
of PCBM thin films
T. Sharm, R. Singhal, R. Vishnoi, P. Sharma, **A. Patra, S. Chand**, G.B.V.S. Lakshmi,
S.K. Biswas
Nucl Instrum Meth B 379 (2016) 176–180
95. Electronic phase transition and transport properties of Ti₂O₃ 832
Vijeta Singh, J.J. Pulikkotil
Journal of Alloys and Compounds 658 (2016) 430e434
96. Electronic structure of rare-earth doped SrFBiS₂ superconductors from 837
photoemission spectroscopic studies
P. Mishra , H. Lohani , **Rajveer Jha , V.P.S. Awana , B.R. Sekhar**
Physica C: Superconductivity and its applications 525–526 (2016) 89–93
97. Electronic structure study of wide band gap magnetic semiconductor 842
(La0.6Pr0.4)0.65Ca0.35MnO₃ nanocrystals in paramagnetic and ferromagnetic
phases
G. D. Dwivedi, **Amish G. Joshi**, Shiv Kumar, H. Chou, K. S. Yang, D. J. Jhong,
W. L. Chan, A. K. Ghosh, and Sandip Chatterjee
Applied Physics Letters 108, 172402 (2016); doi: 10.1063/1.4947466
98. Electrophoretically deposited multiwalled carbon nanotube based amperometric 848
genosensor for E.coli detection
Hema Bhardwaj, Shipra Solanki and Gajjala Sumana
Journal of Physics: Conference Series 704 (2016) 012007

CONTENTS

99. Enhanced electrochemical performance of polypyrrole coated MoS₂ nanocomposites as electrode material for supercapacitor application 858
Anukul K. Thakur, Ram Bilash Choudhary, Mandira Majumder, **Govind Gupta**, Manjusha V. Shelke
Journal of Electroanalytical Chemistry 782 (2016) 278–287
100. Enhanced magnetic properties in ordered oriented ferrofibres 868
Komal Jain, Saurabh Pathak and R. P. Pant
RSC Adv., 2016, 6, 70943
101. Enhanced tunneling electroresistance in Pt/PZT/LSMO ferroelectric tunnel junctions in presence of magnetic field 872
D. Barrionuevo, Le Zhang, N. Ortega, A. Sokolov, **A. Kumar**, J. F. Scott, and R. S. Katiyar
Integrated Ferroelectrics Vol 174, Vol.174, 174-185
102. Enhanced visible light induced photocatalytic activity on the degradation of organic pollutants by SnO nanoparticle decorated hierarchical ZnO nanostructures 884
S. Harish, J. Archana, M. Navaneethan, A. Silambarasan, K. D. Nisha, S. Ponnusamy, C. Muthamizhchelvan, H. Ikeda, **D. K. Aswal** and Y. Hayakawa
RSC Adv., 2016, 6, 89721
103. Enhancement of dye sensitized solar cell efficiency via incorporation of upconverting phosphor nanoparticles as spectral converters 895
Nikhil Chander, Atif F. Khan, Vamsi K. Komarala, **Santa Chawla** and Viresh Dutta
Prog. Photovolt: Res. Appl. 2016; 24:692–703
104. Environmentally Benign TiO₂ Nanomaterials for Removal of Heavy Metal Ions with Interfering Ions present in Tap Water 907
Robin George, Nupur Bahadur, **Nahar Singh**, Rajni Singh, Abhishek Verma, A.K. Shukla
Materials Today: Proceedings 3 (2016) 162 – 166
105. Epitaxial growth of high In-content In_{0.41}Ga_{0.59}N/GaN heterostructure on (11e20) Al₂O₃ substrate 912
Shibin Krishna, Neha Aggarwal, Monu Mishra, K.K. Maurya, Mandeep Kaur, Geetanjali Sehgal, Sukhveer Singh, Nita Dilawar, Bipin Kumar Gupta, Govind Gupta
Journal of Alloys and Compounds 658 (2016) 470e475
106. Estimation of uncertainty of effective area of a pneumatic pressure reference standard using Monte Carlo method 918
Jasveer Singh, L A Kumaraswamidhas, Aditi Vijay, Ashok Kumar, Nita Dilawar Sharma
Indian Journal of Pure & Applied Physics Vol. 54, Dec 2016, pp. 755-764

CONTENTS

107. Eu³⁺ doped a-sodium gadolinium fluoride luminomagnetic nanophosphor as a bimodal nanoprobe for high-contrast in vitro bioimaging and external magnetic field tracking applications 928
Satbir Singh, Pawan Kumar, Benny Abraham Kaipparettu and **Bipin Kumar Gupta**
RSC Adv., 2016, 6, 44606
108. Evaluation of physicochemical and biological properties of chitosan/poly (vinyl alcohol) polymer blend membranes and their correlation for Vero cell growth 938
Parul Sharma, Garima Mathur, **Sanjay R. Dhakate**, Subhash Chand, Navendu Goswami, Sanjeev K. Sharma, Ashwani Mathur
Carbohydrate Polymers 137 (2016) 576–583
109. Evaluation of suitability of AMT single crystal for optical limiting applications by performing structural, dielectric, mechanical, optical and third order nonlinearity characterization studies 946
N. Elavarasu, P.Sathy, S.Pugazhendhi, **N.Vijayan, K.K.Maurya**, R.Gopalakrishnan
Optics & Laser Technology 84(2016)107–117
110. Excellent electromagnetic interference shielding effectiveness of chemically reduced graphitic oxide paper at 101 GHz 957
Parveen Saini, Sachin Kaushik, Rahul Sharma, Disha Chakravarty, Rishi Raj, and Jyotirmay Sharma
Eur. Phys. J. B (2016) 89: 137
111. Excellent mechanical properties of carbon fiber semi-aligned electrospun carbon nanofiber hybrid polymer composites 962
S. R. Dhakate, A. Chaudhary, A. Gupta, A. K. Pathak, B. P. Singh, K. M. Subhedar and T. Yokozeki
RSC Adv., 2016, 6, 36715
112. Experimental and theoretical study of the electronic structure and optical spectral features of PbIn₆Te₁₀ 970
A. H. Reshak, Oleg. V. Parasyuk, H. Kamarudin, I. V. Kityk, Zeyad A. Alahmed, Nasser S. AlZayed, **Sushil Auluck**, Anatolii O. Fedorchuk and J. Chysky
RSC Adv., 2016, 6, 73107
113. Exploring an Emissive Charge Transfer Process in Zero-Twist Donor-Acceptor Molecular Design as a Dual-State Emitter 981
Sunil Kumar, **Punita Singh**, Pushpendra Kumar, **Ritu Srivastava**, Suman Kalyan Pal, and Subrata Ghosh
J. Phys. Chem. C 2016, 120, 12723–12733
114. Extraction of low-toxicity nanodiamonds from carbonaceous wastes 992
Vanish Kumar, **Avanish K. Srivastava**, Shin Toyoda, and Inderpreet Kaur
Fuller Nanotub Car N 2016, Vol. 24, No. 3, 190–194

CONTENTS

115. F2 region response to geomagnetic disturbances across Indian latitudes: O(1S) dayglow emission 997
A. K. Upadhyaya, Sumedha Gupta, and P. S. Brahmanandam
J. Geophys. Res. Space Physics, 121, 2595-2620
116. Fabrication of nanofiber stationary phases from chopped polyacrylonitrile co-polymer microfibers for use in ultrathin layer chromatography of amino acids 1023
A. Moheman, M. Sarwar Alam, **A. Gupta, S. R. Dhakate**, A. Kumar and A. Mohammad
RSC Adv., 2016, 6, 90100
117. Fabrication of nanowire arrays over micropyramids for efficient Si solar cell 1034
Namrata Pant, Prashant Singh, Sanjay Kumar Srivastava, and Vivek Kumar Shukla
AIP Conference Proceedings 1728, 020451 (2016)
118. Facile synthesis of defect-induced highlyluminescent pristine MgO nanostructures for promising solid-state lighting applications 1040
Navita Jain, Neeraj Marwaha, Rajni Verma, Bipin Kumar Gupta and Avanish Kumar Srivastava
RSC Adv., 2016, 6, 4960
119. Facile synthesis of higher manganese silicide employing spark plasma assisted reaction sintering with enhanced thermoelectric performance 1049
Saravanan Muthiah, R.C. Singh, B.D. Pathak, Ajay Dhar
Scripta Materialia 119 (2016) 60–64
120. Fast Suppression of Superconductivity with Fe Site Ni Substitution in Fe_{1-x}Ni_xSe0.5Te0.5 (x = 0.0 to 0.20) Single Crystals 1054
P. K. Maheshwari, Bhasker Gahtori, V. P. S. Awana
J Supercond Nov Magn (2016) 29:2473–2478
121. Fast switching response of Na-doped CZTS photodetector from visible to NIR range 1060
Om Pal Singh, Alka Sharma, K.S. Gour, Sudhir Husale, V.N. Singh
Solar Energy Materials & Solar Cells 157(2016)28–34
122. Fe₃C-filled carbon nanotubes: permanent cylindrical nanomagnets possessing exotic magnetic properties 1067
Reetu Kumari, Lucky Krishnia, Vinay Kumar, **Sandeep Singh, H. K. Singh, R. K. Kotnala**, R. R. Juluri, U. M. Bhatta, P. V. Satyam, Brajesh S. Yadav, Zainab Naqvi, and Pawan K. Tyagi
Nanoscale, 2016, 8, 4299

CONTENTS

123. Ferri-magnetic order in Mn induced spinel Co_{3-x}Mn_xO₄ (0.1 <= x <= 1.0) ceramic compositions 1079
P.L. Meena, K. Sreenivas, M.R. Singh, **Ashok Kumar, S.P. Singh**, Ravi Kumar
Journal Of Magnetism And Magnetic Materials 403(2016)193–198
124. Field emission properties of highly ordered lowaspect ratio carbon nanocup arrays 1085
Bipin Kumar Gupta, Garima Kedawat, **Pawan Kumar, Satbir Singh**, Sachin R. Suryawanshi, Neetu Agrawal (Garg), **Govind Gupta**, Ah Ra Kim, R. K. Gupta, Mahendra A. More, Dattatray J. Late and Myung Gwan Hahn
RSC Adv., 2016, 6, 9932
125. Final report of APMP.T-S7: APMP regional comparison of Co-C eutectic melting point using Pt/Pd thermocouples 1093
Y -G Kim, Z Wei, H Ogura, F Jahan, and **Y P Singh**
Metrologia, Volume 53, Technical Supplement
<https://doi.org/10.1088/0026-1394/53/1A/03003>
126. Final Report on Key Comparison CCAUV.U-K3.1 1142
J Haller, C Koch, R P B Costa-Felix, **P K Dubey**, G Durando, Y T KIM, and M Yoshioka
Metrologia, Volume 53, Technical Supplement
<https://doi.org/10.1088/0026-1394/53/1A/09002>
127. Flux free growth of superconducting FeSe single crystals 1189
P K Maheshwari, L M Joshi, Bhasker Gahtori, A K Srivastava, Anurag Gupta, S P Patnaik and V P S Awana
Mater. Res. Express 3 (2016) 076002
128. Formation of low-dimensional GaN on trenched Si(5 5 12), probed by STM and XPS 1199
Mahesh Kumar, Praveen Kumar, Pooja Devi, and SM Shivaprasad
Mater. Res. Express 3 (2016) 035010
129. Fullerene grafted graphene oxide with effective charge transfer interactions 1205
Rachana Kumar, Saba Khan, Neha Gupta, Samya Naqvi, Kumar Gaurav, Chhavi Sharma, Mahesh Kumar, Pramod Kumar, Suresh Chand
Carbon 107 (2016) 765e773
130. Functionalized organic frameworks explored as second order NLO agents 1214
Anil K Singh, Brijesh Rathi, Volodymyr V Medviediev, Oleg V Shishkin, Vijay Bahadur, Taruna Singh, Brajendra K Singh, **N Vijayan**, V Balachandran and Nikolay Yu Gorobets
J. Chem. Sci. Vol. 128, No. 2, February 2016, pp. 297–309

CONTENTS

131. Functionalized polyacrylonitrile-nanofiber based immunosensor for *Vibrio cholerae* detection 1227
Pramod K. Gupta, A. Gupta, S. R. Dhakate, Zishan H. Khan, Pratima R. Solanki
J. Appl. Polym. Sci. 2016, doi: 10.1002/app.44170
132. Future prospects of luminescent nanomaterial based security inks: from synthesis to anti-counterfeiting applications 1236
Pawan Kumar, Satbir Singh, and Bipin Kumar Gupta
Nanoscale, 2016, 8, 14297
133. Genetically Engineered Antibody Functionalized Platinum Nanoparticles Modified CVD-Graphene Nanohybrid Transistor for the Detection of Breast Cancer Biomarker, HER3 1280
Rajesh, Zhaoli Gao, Ramya Vishnubhotla, Pedro Ducos, Madeline Díaz Serrano, Jinglei Ping, Matthew K. Robinson, and Alan Thornton Charlie Johnson
Adv. Mater. Interfaces 2016, 1600124
134. Giant magneto resistance and temperature coefficient of resistance in Sm_{0.55}Sr_{0.30}Ag_{0.15}MnO₃ perovskite 1288
Masroor Ahmad Bhat, Rayees A. Zargar, Anchit Modi, Manju Arora, N.K. Gaur
Progress in Natural Science: Materials International 26 (2016) 579–583
135. Giant pyroelectric energy harvesting and a negative electrocaloric effect in multilayered nanostructures 1293
Gaurav Vats, Ashok Kumar, Nora Ortega, Chris R. Bowen, and Ram S. Katiyar
Energy Environ. Sci., 2016, 9, 1335
136. Grazing Incidence X-Ray Diffraction (Girxd) Study Of The Phase Composition Of SiCxFey and SiCxNyFez Thin Films 1304
R. V. Pushkarev, N. I. Fainer, and K. K. Maurya
Journal of Structural Chemistry. Vol. 56, No. 6, pp. 1176-1178, 2015
137. Green hydroelectrical energy source based on water dissociation by nanoporous ferrite 1307
Ravinder Kumar Kotnala, and Jyoti Shah
Int. J. Energy Res. 2016; 40:1652–1661
138. Green Synthesis of Graphene Based Biomaterial Using Fenugreek Seeds for Lipid Detection 1317
Chandan Singh, Md. Azahar Ali, Gajjala Sumana
ACS Sustainable Chem. Eng. 2016, 4, 871–880
139. Growth of single and bilayer graphene by filtered cathodic vacuum arc technique 1327
A.K. Kesarwani, O.S. Panwar, S.R. Dhakate, R.K. Rakshit, V.N. Singh, Atul Bisht, Ashish Kumar
J. Vac. Sci. Technol. A 34(2), 021504 (2016); doi: 10.1116/1.4936258

CONTENTS

140. Growth, optical, spectral and thermal characterization of brucinium hydrogen fumarate sesquihydrate: An organic material for optical application 1336
S.K. Gayathri, J. Mohana, J. Srividya, **G. Bhagavannarayana**, G. Anbalagan
Optik 127 (2016) 1176–1183
141. High Performance and Flexible Supercapacitors based on Carbonized Bamboo Fibers for Wide Temperature Applications 1344
Camila Zequine, C.K. Ranaweera, Z. Wang, Sweta Singh, Prashant Tripathi, O.N. Srivastava, **Bipin Kumar Gupta**, K. Ramasamy, P.K. Kahol, P.R. Dvornic, Ram K. Gupta
Scientific Reports, 6:31704, doi: 10.1038/srep31704
142. High performance broadband photodetector using fabricated nanowires of bismuth selenide 1354
Alka Sharma, Biplab Bhattacharyya, A.K. Srivastava, T.D. Senguttuvan, Sudhir Husale
Scientific Reports, 6:19138, doi: 10.1038/srep19138
143. High performance dendrimer functionalized single-walled carbon nanotubes field effect transistor biosensor for protein detection 1362
Rajesh, Vikash Sharma, Nitin K. Puri, Ashok Mulchandani, Ravinder K. Kotnala
Applied Physics Letters 109, 243504 (2016)
144. Highly Directional 1D Supramolecular Assembly of New Diketopyrrolopyrrole-Based Gel for Organic Solar Cell Applications 1368
Gautam Sheel Thool, K. Narayanaswamy, A. Venkateswararao, **Sheerin Naqvi, Vinay Gupta, Suresh Chand**, V. Vivekananthan, Rik Rani Koner, Venkata Krishnan, Surya Prakash Singh
Langmuir 2016, 32, 4346–4351
145. Highly efficient dye-sensitized solar cell performance from template derived high surface area mesoporous TiO₂ nanospheres 1374
J. Archana, S. Harish, M. Sabarinathan, M. Navaneethan, S. Ponnusamy, C. Muthamizhchelvan, M. Shimomura, H. Ikeda, **D.K. Aswal**, Y. Hayakawa
RSC Adv., 2016, 6, 68092
146. Highly purified CNTs: an exceedingly efficient catalyst support for PEM fuel cell 1382
Chanchal Gupta, Priyanka H. Maheshwari, Divya Sachdev, A.K. Sahud, **S.R. Dhakate**
RSC Adv., 2016, 6, 32258

CONTENTS

147. Highly stable hollow bifunctional cobalt sulfides for flexible supercapacitors and hydrogen evolution 1396
C.K. Ranaweera, Z. Wang, Esam Alqurashi, P.K. Kahol, P.R. Dvornic,
Bipin Kumar Gupta, Karthik Ramasamy, Aditya D. Mohite, Gautam Gupta,
Ram K. Gupta
J. Mater. Chem. A, 2016, 4, 9014
148. High-Performance Non-Fullerene Acceptor Derived from Diathiafulvalene Wings 1401
for Solution-Processed Organic Photovoltaics
Suman, Anirban Bagui, **Vinay Gupta, K.K. Maurya**, Surya Prakash Singh
J. Phys. Chem. C 2016, 120, 24615–24622
149. Hot electron induced NIR detection in CdS films 1409
Alka Sharma, Rahul Kumar, Biplab Bhattacharyya, Sudhir Husale
Scientific Reports, 6:22939, doi: 10.1038/srep22939
150. Hybrid materials of ZnO nanostructures with reduced graphene oxide and gold nanoparticles: enhanced photodegradation rates in relation to their composition and morphology 1415
K. Bramhaiah, **Vidya N. Singh**, Neena S. John
Phys.Chem.Chem.Phys., 2016, 18, 1478
151. Immunoassay for troponin I using a glassy carbon electrode modified with a hybrid film consisting of graphene and multiwalled carbon nanotubes and decorated with platinum nanoparticles 1424
Shobhita Singal, Avanish K Srivastava, Bhasker Gahtori, Rajesh
Microchim Acta (2016) 183:1375–1384
152. Impact of anthropogenic emissions and open biomass burning on carbonaceous aerosols in urban and rural environments of Indo-Gangetic Plain 1434
Ruchi Singh, Monika J Kulshrestha, B. Kumar, S. Chandra
Air Qual Atmos Health (2016) 9:809–822
153. Impact of Ni doping on critical parameters of PdTe superconductor 1448
Reena Goyal, Rajveer Jha, Brajesh Tiwari, Ambesh Dixit, **V.P.S Awana**
Supercond. Sci. Technol. 29 (2016) 075008 doi:10.1088/0953-2048/29/7/075008
154. Impedance spectroscopy of crystalline silicon solar cell: Observation of negative capacitance 1458
Jagannath Panigrahi, Vandana, Rajbir Singh, Neha Batra, Jhuma Gope, Mukul Sharma, P. Pathi, S.K. Srivastava, C.M.S. Rauthan, P.K. Singh
Solar Energy 136 (2016) 412–420

CONTENTS

155. Impedance Spectroscopy Study of 2, 2, 7, 7' –Tetra Kis-(N,N-Di-4-Methoxy phenyl amino)-9,9'-Spirobifluorene Thin Films 1467
Omwati Rana, Kalpana Agrawal, S.S. Rajput, M. Zulfequar, M. Husain, M.N. Kamalasanan, Ritu Srivastava
AIP Conf. Proc. 1728, 020247-1–020247-5; doi: 10.1063/1.4946298
156. Improved All-Polymer Solar Cell Performance of n-Type Naphthalene Diimide–Bithiophene P(NDI2OD-T2) Copolymer by Incorporation of Perylene Diimide as Coacceptor 1473
Sandeep Sharma, Nagesh B. Kolhe, Vinay Gupta, Vishal Bharti, Abhishek Sharma, Ram Datt, Suresh Chand, S.K. Asha
Macromolecules 2016, 49, 8113–8125
157. Improved hole mobility and suppressed trap density in polymer-polymer dual donor based highly efficient organic solar cells 1486
Vishal Bharti, Abhishek Sharma, Vinay Gupta, Gauri D. Sharma, Suresh Chand
Applied Physics Letters 108, 073505 (2016)
158. Improved mechanical properties of carbon fiber/graphene oxide/epoxy hybrid composites 1492
Abhishek K. Pathak, Munu Borah, Ashish Gupta, T. Yokozeiki, Sanjay R. Dhakate
Composites Science and Technology 135 (2016) 28e38
159. Improved superconducting properties of La₃Co₄Sn₁₃ with indium substitution 1503
P. Neha, P. Srivastava, R. Jha, Shruti, V.P.S. Awana, S. Patnaik
Journal of Alloys and Compounds 665 (2016) 333e338
160. Improvement in granularity of NdFeAsO_{0.8}F_{0.2} superconductor through Ag_x doping (x=0.0–0.3) 1509
Poonam Rani, A.K. Hafiz, V.P.S. Awana
Physica C: Superconductivity and its applications 520 (2016) 1–7
161. In situ growth of silicon carbide–carbon nanotube composites 1516
Santwana Pati, Bhanu Pratap Singh, Devendra Kumar Saket, Bipin Kumar Gupta, Vidya Nand Singh, Sanjay R. Dhakate
NewJ.Chem., 2016, 40, 3863
162. Incorporation of liquid crystalline triphenylene derivative in bulk heterojunction solar cell with molybdenum oxide as buffer layer for improved efficiency 1522
Manisha Bajpai, Neelam Yadav, Sandeep Kumar, Ritu Srivastava, Ravindra Dhar
Liquid Crystals, 2016, Vol. 43, No. 7, 928–936

CONTENTS

163. Influence of 2mol% Na/Bi Excess on Multiferroic Properties of (Na_{0.5}Bi_{0.5})_{0.99}La_{0.01}Ti_{0.988}Fe_{0.012}O₃ Lead Free System 1531
Kusum Parmar, Hakikat Sharma, **R.K. Kotnala**, N.S. Negi
AIP Conf. Proc. 1731, 140058-1–140058-3; doi: 10.1063/1.4948224
164. Influence of active nitrogen species on surface and optical properties of epitaxial GaN 1535 films
Neha Aggarwal, Shibin Krishna, Monu Mishra, K.K. Maurya, Govind Gupta
Journal of Alloys and Compounds 661 (2016) 461-465
165. Influence of an oxygen vacancy on the electronic structure of the asymmetric mixed 1540 borate–carbonate Pb₇O(OH)₃(CO₃)₃(BO₃)
A.H. Reshak, **Sushil Auluck**
RSC Adv., 2016, 6, 18965
166. Influence of laser repetition rate on the structural and optical properties of GaN layers 1548 grown on sapphire (0001) by laser molecular beam epitaxy
S.S. Kushvaha, Senthil Kumar, B.S. Yadav, Pawan K. Tyagi, Sunil Ojha,
K.K. Maurya, B.P. Singh
CrystEngComm, 2016, 18, 744
167. Inorganic photovoltaics – Planar and nanostructured devices 1558
Jeyakumar Ramanujam, Amit Verma, B. González-Díaz, R. Guerrero-Lemus, Carlos del Cañizo, Elisa García-Tabarés, Ignacio Rey-Stolle, Filip Granek, Lars Korte, Mario Tucci, Jatin Rath, Udai P. Singh, Teodor Todorov, Oki Gunawan, S. Rubio, J.L. Plaza, Ernesto Diéguez, Björn Hoffmann, Silke Christiansen, George E. Cirlin
Progress in Materials Science 82 (2016) 294–404
168. In-situ electrosynthesized nanostructured Mn₃O₄-polyaniline nanofibers- 1669 biointerface for endocrine disrupting chemical detection
Nawab Singh, Md. Azahar Ali, Kali Suresh, **Ved Varun Agrawal**, Prabhakar Rai, Ashutosh Sharma, B.D. Malhotra, Renu John
Sensors and Actuators B 236 (2016) 781–793
169. Interactions of titania based nanoparticles with silica and green-tea: Photo- 1682 degradation and -luminescence
Rajni Verma, Aditi Awasthi, Punita Singh, Ritu Srivastava, Huaping Sheng, Jianguo Wen, Dean J. Miller, **Avanish K. Srivastava**
Journal of Colloid and Interface Science 475 (2016) 82–95
170. Investigation of Anti-Cancer Drug Nimustine Interaction with Calf Thymus DNA 1696
D. Chadha, S. Agarwal, R. Mehrotra
MAPAN-Journal of Metrology Society of India (September 2016) 31(3):169–175

CONTENTS

171. Investigation of luminescence properties of Dy³⁺ doped YAlO₃ phosphors synthesized through solid state method 1703
Huma Nazli Baig, Jagjeet Kaur Saluja, D. Haranath
Optik 127 (2016) 9178–9191
172. Investigation of powder dynamics in silane-argon discharge using impedance analyser 1721
Deepika Chaudhary, Mansi Sharma, S. Sudhakar, Sushil Kumar
Physics of Plasmas 23, 123704 (2016)
173. Investigation of structural,magnetic and Mössbauer properties of Co²⁺ and Cu²⁺ substituted Ni-Zn nanoferrites 1732
Sarveena, Gagan Kumar, Arun Kumar, **R.K. Kotnala**, Khalid M. Batoo, M. Singh
Ceramics International 42 (2016) 4993–5000
174. Investigation on the physical properties of Zn0.94Cu0.06O coated film 1740
S. Chackrabarti, R.A. Zargar, D. Ali, **M. Arora**, A. Aziz, A.K. Hafiz
Optik 127 (2016) 2911–2913
175. Key issues in development of thermoelectric power generators: High figure-of-merit materials and their highly conducting interfaces with metallic interconnects 1743
Dinesh K. Aswal, Ranita Basu, Ajay Singh
Energy Conversion and Management 114 (2016) 50–67
176. Large Area Fabrication of Semiconducting Phosphorene by Langmuir-Blodgett Assembly 1761
Harneet Kaur, Sandeep Yadav, **Avanish. K. Srivastava, Nidhi Singh**,
Jörg J. Schneider, Om. P. Sinha, **Ved V. Agrawal, Ritu Srivastava**
Scientific Reports, 6:34095, DOI: 10.1038/srep34095
177. Lattice Defects Induce Multiferroic Responses in Ce, La-Substituted BaFe0.01Ti0.99O₃ Nanostructures 1769
Kuldeep Chand Verma, Ravinder Kumar Kotnala
J. Am. Ceram. Soc., 99 (5) 1601–1608 (2016)
178. LiMoO₃(IO₃), a novel molybdenyl iodate with strong second-order optical nonlinearity 1777
A.H. Reshak, S. Auluck
Journal of Alloys and Compounds 660 (2016) 32-38
179. Low band gap polymeric solar cells using solution-processable copper iodide as hole transporting layer 1784
Neeraj Chaudhary, J.P. Kesari, Rajiv Chaudhary, Asit Patra
Optical Materials 58 (2016) 116-120

CONTENTS

180. Low voltage organic permeable base N-type transistor 1789
Kalpana Agrawal, Omwati Rana, Nidhi Singh, Ritu Srivastava, S.S. Rajput
Applied Physics Letters 109, 163301 (2016)
181. Low-frequency noise properties of p-type GaAs/AlGaAs heterojunction detectors 1794
Seyoum Wolde, Y.F. Lao, P.K.D.D.P. Pitigala, A.G.U. Perera, L.H. Li, **S.P. Khanna, E.H. Linfield**
Infrared Physics & Technology 78 (2016) 99–104
182. Low-voltage electro-optical memory device based on NiO nanorods dispersed in a ferroelectric liquid crystal 1800
Achu Chandran, Jai Prakash, Jitendra Gangwar, Tilak Joshi, Avanish Kumar Srivastava, D. Haranath, Ashok M. Biradar
RSC Adv., 2016, 6, 53873
183. Luminescence and advanced mass spectroscopic characterization of sodium zinc orthophosphate phosphor for low-cost light-emitting diodes 1809
Savvi Mishra, G. Swati, B. Rajesh, Kriti Tyagi, Bhasker Gahtori, B. Sivaiah, N. Vijayan, M.K. Dalai, A. Dhar, S. Auluck, M. Jayasimhadri, D. Haranath
Luminescence 2016; 31: 348–355
184. Luminescence spectral studies of Tm³⁺ ions doped Lead Tungsten Tellurite glasses 1817
for visible Red and NIR applications
M. Venkateswarlu, Sk.Mahamuda, K.Swapna, A. Srinivasa Rao, A. Mohan Babu, Suman Shakya, **D. Haranath, G. Vijaya Prakash**
Journal of Luminescence 175 (2016) 225–231
185. Luminescent cathode buffer layer for enhanced power conversion efficiency and 1824
stability of bulk-heterojunction solar cells
Swati Bishnoi, Vinay Gupta, Chhavi Sharma, D. Haranath, Mahesh Kumar, Suresh Chand
Organic Electronics 38 (2016) 193–199
186. Luminescent GdVO₄:Sm₃₁ quantum dots enhance power conversion efficiency of 1831
bulk heterojunction polymer solar cells by Forster resonance energy transfer
Swati Bishnoi, Vinay Gupta, Chhavi Sharma, D. Haranath, Sheerin Naqvi, Mahesh Kumar, Gauri D. Sharma, Suresh Chand
Applied Physics Letters 109, 023902 (2016)
187. Magnetic and dielectric properties of rare earth substituted 1837
Ni_{0.5}Zn_{0.5}Fe_{1.95}R_{0.05}O₄ (R = Pr, Sm and La) ferrite nanoparticles
Rakesh Kumar Singh, Jyoti Shah, R.K. Kotnala
Materials Science & Engineering B 210 (2016) 64–69

CONTENTS

188. Magnetic nature of the austenite–martensite phase transition and spin glass behaviour in nanostructured Mn₂Ni1.6Sn0.4 melt-spun ribbons 1843
Nidhi Singh, Barsha Borgohain, A.K. Srivastava, Ajay Dhar, H.K. Singh
Appl. Phys. A (2016) 122:237
189. Measurement of Ambient NH₃, NO and NO₂ at an Urban Area of Kolkata, India 1851
S.K. Sharma, Rohtash, T.K. Mandal, N.C. Deb, S. Pal
MAPAN-Journal of Metrology Society of India (March 2016) 31(1):75–80
190. Measurement of Refractive Index of Liquids Using Length Standards Traceable to SI Unit 1857
M. Arif Sanjid, K.P. Chaudhary
MAPAN-Journal of Metrology Society of India (June 2016) 31(2):89–95
191. Measurement uncertainty in airborne sound insulation and single-number quantities using sound pressure and sound intensity approaches 1864
N. Garg, L. Gandhi, A. Kumar, P. Kumar, P.K. Saini
Noise Control Engr. J. 64 (2), March-April 2016, 153-169
192. Measurement Uncertainty in Airborne Sound Insulation and Single-Number Quantities: Strategy and Implementation in Indian Scenario 1881
N. Garg, A. Kumar, S. Maji
MAPAN-Journal of Metrology Society of India (March 2016) 31(1):43–55
193. Mesoporous Few-Layer Graphene Platform for Affinity Biosensing Application 1894
Md. Azahar Ali, **Chandan Singh**, Kunal Mondal, Saurabh Srivastava, Ashutosh Sharma, Banshi D. Malhotra
ACS Appl. Mater. Interfaces 2016, 8, 7646–7656
194. Mg₉Si₅: a potential non-toxic thermoelectric material for mid-temperature applications 1905
Vijeta Singh, J.J. Pulikkotil, S. Auluck
RSC Adv., 2016, 6, 62445
195. Microwave device jig characterization for ferromagnetic resonance induced spin Hall effect measurement in bilayer thin films 1911
Saood Ahmad, Jyoti Shah, Anurag K Katiyar, Rishu Chaujar, Nitin K Puri, P.S. Negi, R.K. Kotnala
Indian Journal of Pure & Applied Physics. 54 (2016), 60-65
196. Molecular Functionalization of Carbon Nanomaterials for Immuno-diagnosis of Cancer 1917
Anu Singh, Meenakshi Choudhary, Satbir Kaur, **Surinder P. Singh**, Kavita Arora
Materials Today: Proceedings 3 (2016) 157 – 161

CONTENTS

197. Molecular Markers of Secondary Organic Aerosol in Mumbai, India 1922
Pingqing Fu, **Shankar G. Aggarwal**, Jing Chen, Jie Li, Yele Sun, Zifa Wang,
Huansheng Chen, Hong Liao, Aijun Ding, G.S. Umarji, R.S. Patil, Qi Chen, Kimitaka
Kawamura
Environ. Sci. Technol. 2016, 50, 4659–4667
198. Monochromatic orange emission under blue and green excitation from Eu³⁺ doped 1931
ZnO-Y₂O₃ luminomagnetic microcomposite
Vineet Kumar, Swati Bishnoi, R.K. Kotnala, Santa Chawla
Journal of Luminescence 179 (2016) 100–106
199. Morphology and Doping Level of Electropolymerized Biselenophene-Flanked 3,4- 1938
Ethylenedioxythiophene Polymer: Effect of Solvents and Electrolytes
Vikash Agrawal, Shahjad, Dinesh Bhardwaj, Ranoo Bhargav,
Gauri Datt Sharma, Ramil Kumar Bhardwaj, Asit Patra, Suresh Chand
Electrochimica Acta 192 (2016) 52–60
200. Morphology and micro-structural studies of distinct silicon thin films deposited using 1947
very high frequency plasma enhanced chemical vapor deposition process
Sucheta Juneja, S. Sudhakar, A.K. Srivastava, Sushil Kumar
Thin Solid Films 619 (2016) 273–280
201. Multiferroic approach for Cr,Mn,Fe,Co,Ni,Cu substituted BaTiO₃ nanoparticles 1955
Kuldeep Chand Verma, R.K. Kotnala
Mater. Res. Express 3 (2016) 055006
202. Nanoindentation study on nitrogenated tetrahedral amorphous carbon thin films with 1969
ultra low load
Ravi Kant Tripathi, Omvir Singh Panwar, Sreekumar Chockalingam
Indian Journal of Pure & Applied Physics. (2016). 54. 543-550
203. Nanoparticles induced multiferroicity in liquid crystal 1977
Prasun Ganguly, Ajay Kumar, K. Muralidhar, A.M. Biradar
Applied Physics Letters 108, 182905 (2016); doi: 10.1063/1.4948652
204. Nano-pathways:Bridging the divide between water-processable nanoparticulate and 1982
bulk heterojunction organic photovoltaics
Natalie P. Holmes, Melissa Marks, **Pankaj Kumar**, Renee Kroon, Matthew G. Barr,
Nicolas Nicolaidis, Krishna Feron, Almantas Pivrikas, Adam Fahy,
Amaia Diaz de Zerio Mendaza, A.L. David Kilcoyne, Christian Müller, Xiaojing
Zhou, Mats R. Andersson, Paul C. Dastoor, Warwick J. Belcher
Nano Energy(2016) 19, 495–510

CONTENTS

205. Nanoscale thermoelectric properties of Bi₂Te₃ e Graphene nanocomposites: 1998
Conducting atomic force, scanning thermal and kelvin probe microscopy studies
Khushboo Agarwal, Vishakha Kaushik, Deepak Varandani, **Ajay Dhar**, B.R. Mehta
Journal of Alloys and Compounds 681 (2016) 394e401
206. Nanostructural and lattice contributions to multiferroism in NiFe₂O₄/ BaTiO₃ 2006
Kuldeep Chand Verma, **R.K. Kotnala**
Materials Chemistry and Physics 174 (2016) 120e128
207. New emerging radially aligned carbon nano tubes comprised carbon hollow cylinder 2015
as an excellent absorber for electromagnetic environmental pollution
Ch. Ravi Prakash Patel, Prashant Tripathi, Sweta Singh, **Avanish Pratap Singh**,
S.K. Dhawan, R.K. Kotnala, Bipin Kumar Gupta, O.N. Srivastava
J. Mater. Chem. C, 2016, 4, 5483
208. Nickel-shell assisted growth of nickel-cobalt hydroxide nanofibres and their 2023
symmetric/asymmetric supercapacitive characteristics
Ram Bhagat Marichi, Vikrant Sahu, Shubra Lalwani, **Monu Mishra, Govind Gupta**,
Raj Kishore Sharma, Gurmeet Singh
Journal of Power Sources 325 (2016) 762e771
209. NIR absorbing D-π-A-π -D structured diketopyrrolopyrrole-dithiafulvalene based 2033
small molecule for solution processed organic solar cells
K. Narayanaswamy, A. Venkateswararao, **Vinay Gupta, Suresh Chand**,
Surya Prakash Singh
Chem. Commun., 2016, 52, 210
210. Non-linear polaronic conduction in magnetite nanowires 2037
Pooja Singh, P.K.Rout, Sudhir Husale, Anurag Gupta, Manju Singh,
R.K. Rakshit, Anjana Dogra
Journal of Magnetism and Magnetic Materials 419 (2016) 566–571
211. Nonpolar Resistive Switching of Reactively Sputtered Amorphous Nb₂O₅ 2043
Sweety Deswal, Ashok Kumar, Ajeet Kumar
AIP Conf. Proc. 1728, 020379-1–020379-4; doi: 10.1063/1.4946430
212. Novel 3D lightweight carbon foam as an effective adsorbent for arsenic (V) removal 2048
from contaminated water
Pinki Rani Agrawal, Rajeev Kumar, Himani Uppal, Nahar Singh,
Saroj Kumari, Sanjay R. Dhakate
RSC Adv., 2016, 6, 29899
213. Novel optically active lead-free relaxor ferroelectric (Ba_{0.6}Bi_{0.2}Li_{0.2})TiO₃ 2058
Hitesh Borkar, Vaibhav Rao, Soma Dutta, Arun Barvat, Prabir Pal, M Tomar,
Vinay Gupta, J.F. Scott, Ashok Kumar
J. Phys.: Condens. Matter 28 (2016) 265901

CONTENTS

214. Numerical and experiment fracture modeling for multiple cracks of a finite aluminum plate 2068
Amit K. Srivastava, P.K. Arora, **Harish Kumar**
International Journal of Mechanical Sciences 110 (2016) 1–13
215. Nutritive value and methane production potential of energy and protein rich feedstuffs fed to livestock in India 2081
Sultan Singh, B.P. Kushwaha, A.K. Mishra, S.K. Nag, U.Y. Anele, A Singh, S Bhattacharya, **P.K. Gupta**, J Jayashankar
Indian Journal of Animal Sciences 86 (5): 581–588, May 2016
216. On the wettability and optical properties of nanocrystalline CeO₂ thin films 2089
Preetam Singh, K.M.K. Srivatsa
Indian Journal of Pure & Applied Physics, 54, 2016, 359-364
217. Optical properties of ZnO/SnO₂ composite coated film 2095
R.A. Zargar, M.A. Bhat, I.R. Parrey, **M. Arora, J. Kumar**, A.K. Hafiz
Optik 127 (2016) 6997–7001
218. Optimal Design of a Production System 2100
P.K. Arora, Abid Haleem, M.K. Singh, **Harish Kumar**, D.P. Singh
CAD/CAM, Robotics and Factories of the Future. Lecture Notes in Mechanical Engineering. 2016. 697-703 https://doi.org/10.1007/978-81-322-2740-3_67
219. Optimization of a-Si: H absorber layer grown under a low pressure regime by plasma-enhanced chemical vapor deposition: Revisiting the significance of the p/i interface for solar cells 2107
Mansi Sharma, Sucheta Juneja, S. Sudhakar, Deepika Chaudhary, Sushil Kumar
Materials Science in Semiconductor Processing 43 (2016) 41–46
220. Optimization of energy and fluence of N₂+ions in the conversion of Al₂O₃ surface into AlN at room temperature 2113
Praveen Kumar, Pooja Devi, **Mahesh Kumar**, S.M. Shivaprasad
Applied Surface Science 361 (2016) 265–268
221. Optimization of processing parameters for designing an efficient AC driven powder electroluminescent device 2117
Paramjeet Singh, B. Rajesh, Swati Bishnoi, G. Swati, V.V. Jaiswal, V. Shanker, D. Haranath
Ceramics International 42(2016)17016–17022

CONTENTS

222. Organic and elemental carbon variation in PM2.5 over megacity Delhi and Bhubaneswar, a semi-urban coastal site in India 2124
Sipra Panda, **S.K. Sharma**, Parth Sarathi Mahapatra, Upasana Panda, Satyajit Rath, Minakshi Mahapatra, **T.K. Mandal**, Trupti Das
Nat Hazards (2016) 80:1709–1728
223. Organic–inorganic hybrid cathodes: facile synthesis of polypyrrole/zinc oxide nanofibers for low turn-on electron field emitters 2144
Ishpal Rawal, J. David Carey, **O.S. Panwar**, **Ravi Kant Tripathi**
RSC Adv., 2016, 6, 46372
224. Oxygen vacancy induced by La and Fe into ZnO nanoparticles to modify ferromagnetic ordering 2152
Kuldeep Chand Verma, **R.K. Kotnala**
Journal of Solid State Chemistry 237 (2016) 211–218
225. Photocatalytic mineralization and degradation kinetics of ampicillin and oxytetracycline antibiotics using graphene sand composite and chitosan supported BiOCl 2160
Bhanu Priya, Pooja Shandilya, Pankaj Raizada, Pankaj Thakur, **Nahar Singh**, Pardeep Singh
Journal of Molecular Catalysis A: Chemical 423 (2016) 400–413
226. Photoelectrochromic cell with a CdS quantum dots/graphitic-nanoparticles sensitized anode and a molybdenum oxide cathode 2174
P. Naresh Kumar, Remya Narayanan, Subhajit Laha, Melepurath Deepa, **Avanish K. Srivastava**
Solar Energy Materials & Solar Cells 153 (2016) 138–147
227. Photophysical and charge transport properties of pyrazolines 2184
Joseph Ajantha, Elumalai Varathan, Vishal Bharti, Venkatesan Subramanian, Shanmugam Eswaramoorthi, Suresh Chand
RSC Adv., 2016, 6, 786
228. Photo-physics of PTB7, PCBM and ICBA based ternary solar cells 2194
Ramakant Sharma, Hyunwoo Lee, **Vinay Gupta**, Hoyeon Kim, **Mahesh Kumar**, **Chhavi Sharma**, Suresh Chand, Seunghyup Yoo, Dipti Gupta
Organic Electronics 34 (2016) 111-117
229. Photo-resistive properties of LaAl_{0.6}Cr_{0.4}O₃/SrTiO₃ heterostructures: a comparative study with LaAlO₃/SrTiO₃ 2201
Aswin V., Pramod Kumar, Prabir Pal, Anjana Dogra
Optics Letters, Vol. 41, No. 6, March 15 2016, 1134-1137

CONTENTS

230. Photovoltaic effect in BiFeO₃/BaTiO₃ multilayer structure fabricated by chemical solution deposition technique 2205
Savita Sharma, Monika Tomar, **Ashok Kumar**, Nitin K.Puri, Vinay Gupta
Journal of Physics and Chemistry of Solids 93 (2016) 63–67
231. Physico-chemical properties based differential toxicity of graphene oxide/reduced graphene oxide in human lung cells mediated through oxidative stress 2210
Sandeep Mittal, **Veeresh Kumar**, Nitesh Dhiman, Lalit Kumar Singh Chauhan, **Renu Pasricha**, Alok Kumar Pandey
Scientific Reports, 6:39548, doi: 10.1038/srep39548
232. Physico-chemical properties based differential toxicity of graphene oxide/reduced graphene oxide in human lung cells mediated through oxidative stress [Erratum] 2225
Sandeep Mittal, **Veeresh Kumar**, Nitesh Dhiman, Lalit Kumar Singh Chauhan, **Renu Pasricha**, Alok Kumar Pandey
Scientific Reports, 7:41200, doi: 10.1038/srep41200
233. Piperazine functionalized mesoporous silica for selective and sensitive detection of ascorbic acid 2227
Divya Sachdev, **Priyanka H. Maheshwari**, Amit Dubey
J Porous Mater (2016) 23:123–129
234. Planetary scale modulations in aerosol properties at Delhi, in the Indo-Gangetic Plain: a quantitative analysis from intra-seasonal to inter-annual timescales 2234
S. Naseema Beegum, Neelesh K. Lodhi, Sachchidanand Singh
Int. J. Climatol. 36: 3469–3478 (2016)
235. Plasma assisted atomic layer deposited hafnium oxide films for silicon surface passivation 2244
Rajbir Singh, Vandana, Jagannath Panigrahi, P.K. Singh
RSC Adv., 2016, 6, 97720
236. Platinum nanoparticles-single-walled carbon nanotubes hybrid based chemiresistive sensor array for myoglobin detection 2252
Vikash Sharma, Nitin K Puri, Ashok Mulchandani, **Rajesh**
Mater. Res. Express 3 (2016) 035006 doi:10.1088/2053-1591/3/3/035006
237. Polaron-electron assisted giant dielectric dispersion in SrZrO₃ high-k dielectric 2259
Hitesh Borkar, Arun Barvat, Prabir Pal, A.K. Shukla, J.J. Pulikkotil, Ashok Kumar
Journal of Applied Physics 119, 214101 (2016)

CONTENTS

238. Poly (3, 4-ethylene dioxythiophene) laminated reduced graphene oxide composites for effective electromagnetic interference shielding 2266
Jasvir Dalal, Anjli Gupta, Sushma Lather, Kuldeep Singh, S.K. Dhawan, Anil Ohlan
Journal of Alloys and Compounds 682 (2016) 52-60
239. Poly(Styrene Sulfonate) Free Poly (3,4-Ethylenedioxythiophene) as a Robust and Solution-Processable Hole Transport Layer for Organic Solar Cells 2275
Ranoo Bhargav, Dinesh Bhardwaj, Shahjad, Asit Patra, Suresh Chand
Chemistry Select 2016, 1, 1347 – 1352
240. Post-perovskite CaIrO₃: a conventional Slater type antiferromagnetic insulator 2281
Vijeta Singh, J.J. Pulikkotil
Phys.Chem.Chem.Phys., 2016, 18, 26300
241. Precise Phase and Frequency Measurement using all Digital Dual Mixer Time Difference Technique 2287
Aishik Acharya, Poonam Arora, Amitava Sen Gupta
IEEE International Frequency Control Symposium (IFCS) (2016),
doi: 10.1109/FCS.2016.7546811
242. Preliminary test of functionalized ZnO₂ against Bipolaris sorokiniana and other seed associated mycoflora for better wheat germination 2289
Nahar Singh, Ansuman Khandual, Prabhat K. Gupta, S.S. Vaish
Research Journal of Biotechnology Vol. 11 (6) June (2016) 60-73
243. Preparation and Photoluminescence of Sm 3+ Doped YAlO 3 Phosphor 2303
Huma Nazli Baig, Jagjeet Kaur Saluja, **D. Harnath**, A.S. Sai Prasad, K.V.R. Murthy
J Fluoresc (2016) 26:757–768
244. Present status of Primary Frequency Standards at NPL, India 2315
Aishik Acharya, Shuchi Yadav, Poonam Arora, Ashish Agarwal, Vattikonda Bharath, Amitava Sen Gupta
IEEE International Frequency Control Symposium (IFCS) (2016),
doi: 10.1109/FCS.2016.7546774
245. Pressure effects on topological crystalline insulator SnTe and derived superconductor Sn_{0.5}In_{0.5}Te 2317
V.K. Maurya, Shruti, **Rajveer Jha, V.P.S. Awana**, S. Patnaik
AIP Conference Proceedings 1731, 100011 (2016); doi: 10.1063/1.4948017
246. Pressure-Induced Structural Transition Trends in Nanocrystalline Rare-Earth Sesquioxides: A Raman Investigation 2321
Nita Dilawar Sharma, Jasveer Singh, Aditi Vijay, K. Samanta, S. Dogra, A.K. Bandyopadhyay
J. Phys. Chem. C 2016, 120, 11679–11689

CONTENTS

247. Probing high temperature ferromagnetism and its paramagnetic phase change due to Eu³⁺ incorporation in ZnO nanophosphors 2332
K. Jayanthi Rajan, Kausalya Ganesan, Satyanarayana Lanka, **Swati Bishnoi**, Manorama V. Sunkara
RSC Adv., 2016, 6, 75669
248. Probing high temperature ferromagnetism and its paramagnetic phase change due to Eu³⁺ incorporation in ZnO nanophosphors [Erratum] 2344
K. Jayanthi Rajan, Kausalya Ganesan, Satyanarayana Lanka, **Swati Bishnoi**, Manorama V. Sunkara
RSC Adv., 2016, 6, 77507
249. Prospects of Emerging Engineered Oxide Nanomaterials and their Applications 2345
Jitendra Gangwar, Bipin Kumar Gupta, Avanish Kumar Srivastava
Defence Science Journal, Vol. 66, No. 4, July 2016, 323-340
250. Purification method dependent fluorescence from nitrogen-vacancy (NV) centers of nano-diamonds 2363
Ravi Kumar, S.J. Yoon, K.G. Lee, **Prabir Pal, R.P. Pant, C.K. Suman, S.R. Dhakate**, Raj Kumar, Devesh K. Avasthi, **Dilip K. Singh**
RSC Adv., 2016, 6, 47164
251. Pyroelectric control of magnetization for tuning thermomagnetic energy conversion and magnetocaloric effect 2373
Gaurav Vats, **Ashok Kumar**, Nora Ortega, Chris R. Bowen, Ram S. Katiyar
Energy Environ. Sci., 2016, 9, 2383
252. Quantum dot monolayer for surface plasmon resonance signal enhancement and DNA hybridization detection 2382
Aditya Sharma Ghrera, **Manoj Kumar Pandey, Bansi Dhar Malhotra**
Biosensors and Bioelectronics 80(2016)477–482
253. Radar Cross-Section of a Parallel-Fed Cylindrical Array of Dipoles 2388
Harish Singh Rawat, Hema Singh, R.M. Jha
Electromagnetics 2016, Vol. 36, No. 5, 287–304
254. Realization of coaxial reference air-lines as high frequency capacitance standard at CSIR-NPL 2406
Satish, Sachin Kumar, Babita, Thomas John, A.K. Saxena
Measurement 92 (2016) 166–171
255. Realization of large-scale photonic crystal cavity-based devices 2412
Amit Kumar Goyal, Hemant Sankar Dutta, Sumitra Singh, **Mandeep Kaur, Sudhir Husale**, Suchandan Pala
J. Micro/Nanolith. MEMS MOEMS 15(3), 031608 (Jul–Sep 2016)

CONTENTS

256. Realization of structural and optical properties of CdZnO composite coated films for photovoltaic cell applications 2417
S. Chackrabarti, R.A. Zargar, S. Joseph, **M. Arora**, A. Aziz, A.K. Hafiz
Optik 127 (2016) 9966–9973
257. Realizing ferromagnetic ordering in SnO₂ and ZnO nanostructures with Fe, Co, Ce ions 2425
Kuldeep Chand Verma, **R.K. Kotnala**
Phys. Chem. Chem. Phys., 2016, 18, 17565—17574
258. Residential Biomass Burning Emissions over Northwestern Himalayan Region of India: Chemical Characterization and Budget Estimation 2435
Mohit Saxena, Sudhir Kumar Sharma, Nidhi Tomar, Humaira Ghayas, **Avirup Sen, Rohtash Singh Garhwal**, Naresh Chandra Gupta, **Tuhin Kumar Mandal**
Aerosol and Air Quality Research, 16: 504–518, 2016
259. Retentivity of spin state transitions in LaCoO₃ with chemical disorder 2450
Aswin V, Anjana Dogra, Anurag Gupta, J.J. Pulikkotil
RSC Adv., 2016, 6, 1403
260. Reversion of Asthmatic Complications and Mast Cell Signalling Pathways in BALB/c Mice Model Using Quercetin Nanocrystals 2455
Kriti Gupta, Sandeep Kumar, Rinkesh Gupta, Akanksha Sharma, Alok K. Verma, **K. Stalin**, Bhushan P. Chaudhari, Mukul Das, **Surinder P. Singh**,
Premendra D. Dwivedi
Journal of Biomedical Nanotechnology Vol. 12, 1–15, 2016
261. Role of reduced pi-pi stacking in the charge transport in polyfluorene 2470
Manisha Bajpai, **Ritu Srivastava**, Ravindra Dhar, R.S. Tiwari
Materials Science and Engineering B 212 (2016) 62–70
262. Role of spin-glass phase for magnetoresistance enhancement in nickel substituted lanthanum calcium manganite 2479
Akash Yadav, Jyoti Shah, Rekha Gupta, Ajay Shukla, Sukhvir Singh, R.K. Kotnala
Ceramics International 42 (2016) 12630–12638
263. Scalable Production of Sensor Arrays Based on High-Mobility Hybrid Graphene Field Effect Transistors 2488
Zhaoli Gao, Hojin Kang, Carl H. Naylor, Frank Streller, Pedro Ducos, Madeline D. Serrano, Jinglei Ping, Jonathan Zauberman, **Rajesh**, Robert W. Carpick, Ying-Jun Wang, Yung Woo Park, Zhengtang Luo, Li Ren, A.T. Charlie Johnson
ACS Appl. Mater. Interfaces 2016, 8, 27546–27552

CONTENTS

264. Silver based nanomaterial, as a selective colorimetric sensor for visual detection of post harvest spoilage in onion 2495
Divya Sachdev, Vinay Kumar, **Priyanka H. Maheshwari**, Renu Pasricha, Deepthi, Neeraj Baghel
Sensors and Actuators B 228 (2016) 471–479
265. Single gap s-wave superconductivity in Nb 2 PdS 5 2504
Shruti, **R. Goyal**, **V.P.S. Awana**, S. Patnaik
Physica C: Superconductivity and its applications 524 (2016) 24–27
266. Size distributions of n-alkanes, fatty acids and fatty alcohols in springtime aerosols from New Delhi, India 2508
Mingjie Kang, Pingqing Fu, **Shankar G. Aggarwal**, Sudhanshu Kumar, Ye Zhao, Yele Sun, Zifa Wang
Environmental Pollution 219 (2016) 957-966
267. Size-Independent Parameter for Temperature-Dependent Surface Plasmon Resonance in Metal Nanoparticles 2518
Muni Raj Maurya, Vijaykumar Toutam
J. Phys. Chem. C 2016, 120, 19316–19321
268. Sodium induced grain growth, defect passivation and enhancement in the photovoltaic properties of Cu₂ZnSnS₄ thin film solar cell 2524
Om Pal Singh, Kuldeep Singh Gour, Rahul Parmar, Vidya Nand Singh
Materials Chemistry and Physics 177 (2016) 293-298
269. Solution-based colloidal synthesis of hybrid P3HT:Ternary CuInSe₂ nanocomposites using a novel combination of capping agents for low-cost photovoltaics 2530
Shailesh Narain Sharma, Parul Chawla, Akanksha, A.K. Srivastava
Physica E80 (2016) 101–107
270. Source Apportionment of PM_{2.5} in Delhi, India Using PMF Model 2537
S. K. Sharma, T.K. Mandal, Srishti Jain, Saraswati, A. Sharma, Mohit Saxena
Bull Environ Contam Toxicol (2016) 97:286–293
271. Sources of chemical species in rainwater during monsoon and nonmonsoonal periods over two mega cities in India and dominant source region of secondary aerosols 2545
P.S.P. Rao, S. Tiwari, J.L. Matwale, S. Pervez, P. Tunved, P.D. Safai, A.K. Srivastava, D.S. Bisht, **S. Singh**, P.K. Hopke
Atmospheric Environment 146 (2016) 90-99

CONTENTS

272. Spatial variability in ambient atmospheric fine and coarse mode aerosols over Indo-Gangetic plains, India and adjoining oceans during the onset of summer monsoons, 2014 2555
Avirup Sen, Yadiki Nazeer Ahammed, Tirthankar Banerjee, Abhijit Chatterjee, Anil Kumar Choudhuri, Trupti Das, Narayan Chandara Deb, Amit Dhir, Sangita Goel, Altaf Hussain Khan, **Tuhin Kumar Mandal**, Vishnu Murari, Shrimanta Pal, Padma Shrinivas Rao, **Mohit Saxena**, **Sudhir Kumar Sharma**, **Ashima Sharma**, Chaturvedula Viswanatha Vachaspati
Atmospheric Pollution Research 7 (2016) 521-532
273. Spatio-temporal variation in chemical characteristics of PM10 over Indo Gangetic Plain of India 2567
S.K. Sharma, **T.K. Mandal**, M.K. Srivastava, A. Chatterjee, **Srishti Jain**,
M. Saxena, B.P. Singh, **Saraswati**, **A. Sharma**, A. Adak, S.K.Ghosh
Environ Sci Pollut Res (2016) 23:18809–18822
274. Star shaped zinc sulphide quantum dots self-assembled monolayers: Preparation and applications in food toxin detection 2581
Hema Bhardwaj, **Chandan Singh**, **Manoj Kumar Pandey**, **Gajjala Sumana**
Sensors and Actuators B 231(2016) 624–633
275. Statistical analysis and engineering fit models for two-diode model parameters of large area silicon solar cells 2591
Vandana Khanna, B.K. Das, **Vandana**, **P.K. Singh**, Prabha Sharma, S.K. Jain
Solar Energy 136 (2016) 401–411
276. Statistical variability comparison in MODIS and AERONET derived aerosol optical depth over Indo-Gangetic Plains using time series modeling 2602
Kirti Soni, Kulwinder Singh Parmar, Sangeeta Kapoor, Nishant Kumar
Science of the Total Environment 553 (2016) 258–265
277. Strategy to synthesise nano-engineered polymer nanocomposite with a mechanically strong interface: a highly flexible ammonia gas sensor 2610
Payal Mazumdar, **Sreekumar Chockalingam**, Sunita Rattan
RSC Adv., 2016, 6, 73269
278. Structural and electrical transport studies on CrN(001) thin films 2623
G. Venkat Swamy, Dinesh Kumar, **R.K. Rakshit**, **G.A. Basheed**, **K.K. Maurya**,
Manju Singh, **Anurag Gupta**
AIP Conference Proceedings 1731, 110048 (2016); doi: 10.1063/1.4948069
279. Structural and impedance spectroscopic studies of spark plasma sintered CaCu₃Ti₄O₁₂ dielectric ceramics: an evidence of internal resistive barrier effect 2627
Ranjit Kumar, M. Zulfequar, **T.D. Senguttuvan**
J Mater Sci: Mater Electron (2016) 27:5233–5237

CONTENTS

280. Structural and magnetic properties of Mn₁₂-Stearate nanomagnets 2632
Shilpi Verma, Apoorva Verma, Avanish K. Srivastava, Anurag Gupta, Surinder P. Singh, Priti Singh
Materials Chemistry and Physics 177 (2016) 140-146
281. Structural and opto-electronic features of pulsed laser ablation grown Cu₂ZnSnS₄ 2639 films for photovoltaic applications
Shubhra Kala, Hardeep Kaur, Ankur Rastogi, V.N. Singh, T.D. Senguttuvan
Journal of Alloys and Compounds 658 (2016) 324-330
282. Structural and Transport Studies of Under-Doped FeTe_{1-x}Sex(x=0.0, 0.01, 0.03, 0.05) Single Crystals 2646
P.K. Maheshwari, Rajveer Jha, Bhasker Gahtori, V.P.S. Awana
J Supercond Nov Magn (2016) 29:543–545
283. Structural and ultrafast charge carrier dynamics of in-situ synthesized rGO/Fe₃O₄ 2649 nanocomposite
Pooja Devi, Praveen Kumar, **Chhavi Sharma**, Chhavi Sharma, **Mahesh Kumar**, Manoj Nayak
Materials Letters 181 (2016) 99–102
284. Structural, conformational and thermodynamic aspects of groove-directed-intercalation of flavopiridol into DNA 2653
Bhumika Ray, Shweta Agarwal, Neelam Lohani, Moganty R. Rajeswari, Ranjana Mehrotra
Journal of Biomolecular Structure and Dynamics, 2016 Vol. 34, No. 11, 2518–2535
285. Structural, dielectric, magnetic and magnetoelectric properties of (x) 2671 Bi_{0.5}Na_{0.5}TiO₃-(1 - x) Ni_{0.2}Co_{0.8}Fe₂O₄ composites
Yogesh Kumar, K.L. Yadav, Manjusha, **Jyoti Shah, R.K. Kotnala**
Mater. Res. Express 3 (2016) 065701 doi:10.1088/2053-1591/3/6/065701
286. Structural, electrical and magnetic characteristics of improper multiferroic: GdFeO₃ 2681 Sushrisangita Sahoo, P.K. Mahapatra, RNP Choudhary, M.L. Nandagoswami, **Ashok Kumar**
Mater. Res. Express 3 (2016) 065017 doi:10.1088/2053-1591/3/6/065017
287. Structural, electrical and magnetic features of Kagom e YBaCo₄O₇ system 2702 Masroor Ahmad Bhat, R.A. Zargar, Anchit Modi, **M. Arora**, N.K. Gaur
Materials Science-Poland, 34(4), 2016, pp. 786-793
288. Structural, magnetic and electrical transport properties of 2710 Sm_{0.43}Nd_{0.10}Sr_{0.47}MnO₃ thin film by DC-magnetron sputtering
S. Ramkumar, G. Rajarajan, **H.K. Singh**
J Mater Sci: Mater Electron (2016) 27:5114–5120

CONTENTS

289. Structural, magnetic and Mössbauer study of BaLaxFe12-xO19 nanohexaferrites synthesized via sol–gel auto-combustion technique 2717
Virender Pratap Singh, Gagan Kumar, Arun Kumar, Radhey Shyam Rai,
M.A. Valente, Khalid M. Batoo, **R.K. Kotnala**, M. Singh
Ceramics International 42(2016) 5011–5017
290. Structural, Magnetic, and Magnetocaloric Studies of Ni50Mn30Sn20 Shape Memory Alloy 2724
Ramesh Chandra Bhatt, R.S. Meena, H. Kishan, V.P.S. Awana, S.K. Agarwal
J Supercond Nov Magn (2016) 29:3201–3206
291. Structural, Optical and Magnetic Properties of (In_{0.90}Sn_{0.05}Cu_{0.05})₂O₃ Nanoparticles 2730
S. Harinath Babu, S. Kaleemulla, N. Sai Krishna, N. Madhusudhana Rao,
M. Kuppan, C. Krishnamoorthi, Girish M. Joshi, **R.K. Kotnala, J. Shah**
AIP Conference Proceedings 1731, 130005 (2016); doi: 10.1063/1.4948111
292. Structural, Optical, and Magnetic Properties Of FeVO₃ 2734
Pooja Singh, Anurag Gupta, Anjana Dogra
AIP Conference Proceedings 1728, 020454 (2016); doi: 10.1063/1.4946505
293. Studies on Low Altitude Clouds Over New Delhi, India Using Lidar 2739
S.R. Radhakrishnan, B.C. Arya, C. Sharma, A. Kumar, S.K. Mishra, D.K. Shukla
MAPAN-Journal of Metrology Society of India (2016) 31(2):137–144
294. Studies on structural, optical, magnetic, and resistive switching properties of doped BiFe_{1-x}CrxO₃ thin films 2747
Y. Sharma, R. Martinez, R. Agarwal, D. Barrionuevo, R.K. Katiyar, **A. Kumar, R.S. Katiyar**
Journal of Applied Physics 120, 194101 (2016)
295. Study of xCo0.8Ni0.2Fe2O4+(1-x) Pb0.99625 La0.0025Zr0.55Ti0.45O₃ Magneto electric composites 2754
Dipti, Sangeeta Singh, J.K. Juneja, K.K. Raina, **R.K. Kotnala**, Chandra Prakash
Journal of Magnetism and Magnetic Materials 407 (2016) 279–284
296. Study on comparison of Indian ozonesonde data with satellite data 2760
Rohtash, T.K. Mandal, S.K. Peshin, S.K. Sharma
MAPAN-Journal of Metrology Society of India (September 2016) 31(3):197–217
297. Substitution driven structural and magnetic properties and evidence of spin phonon coupling in Sr-doped BiFeO₃ nanoparticles 2781
Sunil Chauhan, Manoj Kumar, **Prabir Pal**
RSC Adv., 2016, 6, 68028

CONTENTS

298. Substrate bias induced synthesis of flowered-like bunched carbon nanotube directly on bulk nickel 2794
Atul Bisht, S. Chockalingam, O.S. Panwar, A.K. Kesarwani, B.P. Singh, V.N. Singh
Materials Research Bulletin 74 (2016) 156–163
299. Sui Generis Cerulean Fluorescence from YAG:Ce by Selective Plasmonic Mode Coupling with Silver Nanorods 2802
Parikshit Phadke, Santa Chawla
Plasmonics (2016) 11:395–402
300. Superconductivity at 5.5 K in Nb₂PdSe₅ Compound 2810
Reena Goyal, Govind Gupta, A.K. Srivastava, V.P.S. Awana
J Supercond Nov Magn (2016) 29:2705–2710
301. Surface passivation of boron emitters on n-type c-Si solar cells using silicon dioxide and a PECVD silicon oxynitride stack 2816
Nagarajan Balaji, Seunghwan Lee, Cheolmin Park, Jayapal Raja, Huong Thi Thanh Nguyen, Somenath Chatterjee, K. Nikesh, **R. Jeyakumar**, Junsin Yi
RSC Adv., 2016, 6, 70040
302. Surface plasmon enhanced blue organic light emitting diode with nearly 100% fluorescence efficiency [Org. Electron.13 (2012) 1750e1755] [Erratum] 2822
Arunandan Kumar, Ritu Srivastava, Dalip Singh Mehta, M.N. Kamalasanan
Organic Electronics 34 (2016) 289
303. Synergistic effect on static and dynamic mechanical properties of carbon fiber-multiwalled carbon nanotube hybrid polycarbonate composites 2823
Arun Singh Babal, Bhanu Pratap Singh, Jeevan Jyoti, Sushant Sharma, Abhishek Kumar Arya, Sanjay R. Dhakate
RSC Adv., 2016, 6, 67954
304. Synthesis and characterization of Al₂O₃–TiC nano-composite by spark plasma sintering 2837
Rohit Kumar, A.K. Chaubey, **Sivaiah Bathula, B.B. Jha, Ajay Dhar**
Int. Journal of Refractory Metals and Hard Materials 54 (2016) 304–308
305. Synthesis and characterization of Li_{0.5}Fe_{2.5-x}GdxO₄ ferrite nano-particles as a potential candidate for microwave device applications 2842
M. Abdullah Dar, KowsarMajid, Mohd. Hanief Najar, **R.K. Kotnala, Jyoti Shah**
Materials and Design 90 (2016) 443–452
306. Synthesis and characterization of multiwalled CNT–PAN based composite carbon nanofibers via electrospinning 2852
Narinder Kaur, Vipin Kumar and **Sanjay R. Dhakate**
Springer Plus (2016) 5:483 doi: 10.1186/s40064-016-2051-6

CONTENTS

307. Synthesis and characterization of PZT: CFmagnetoelectric composites 2859
Dipti, Sangeeta Singh, J.K. Juneja, K.K. Raina, **R.P. Pant, R.K. Kotnala**,
Chandra Prakash
Integrated Ferroelectrics 2016, Vol. 176, 109-117
308. Synthesis and characterization of thiolated pectin stabilized gold coated magnetic 2868
nanoparticles
Varun Arora, Ankur Sood, **Jyoti Shah, R.K. Kotnala**, Tapan K. Jain
Materials Chemistry and Physics 173 (2016) 161-167
309. Synthesis and characterizations of (In0.90Sn0.05Ni0.05)2O3 nanoparticles using 2875
solid state reaction method
S. Harinath Babu, N. Sai Krishna, S. Kaleemulla,N. Madhusudhana Rao,
M.Kuppan,C. Krishnamoorthi, Girish M. Joshi, **G.A. Basheed**
AIP Conference Proceedings 1731, 120003 (2016); doi: 10.1063/1.4948075
310. Synthesis and ultrafast spectroscopic study of new [6,6] methanofullerenes 2879
Samya Naqvi, Neha Gupta, Neelam Kumari, Mukesh Jewariya, Pramod Kumar,
Rachana Kumar, Suresh Chand
RSC Adv., 2016, 6, 24889
311. Systematic Shifts in the Frequency of NPLI-CsF1 2888
Aishik Acharya, Shuchi Yadav, Poonam Arora, Ashish Agarwal,
Vattikonda Bharath, Amitava Sen Gupta
IEEE URSI Asia-Pacific Radio Science Conference (URSI AP-RASC)
doi: 10.1109/URSIAP-RASC.2016.7601136
312. Tailoring the multiferroic behavior in BiFeO3 nanostructures by Pb doping 2892
Kuldeep Chand Verma, **R.K. Kotnala**
RSC Adv., 2016, 6, 57727
313. Temperature sensitivity of soil organic carbon decomposition as affected by long- 2904
term fertilization under a soybean based cropping system in a sub-tropical Alfisol
Avijit Ghosh, Ranjan Bhattacharyya, B.S. Dwivedi, M.C. Meena, B.K. Agarwal,
P. Mahapatra, D.K. Shahi, **R. Salwani, R. Agnihorti**
Agriculture, Ecosystems and Environment 233 (2016) 202–213
314. The effect of doping on thermoelectric performance of p-type SnSe:Promising 2916
thermoelectric material
Niraj Kumar Singh, Sivaiah Bathula, Bhasker Gahtori, Kriti Tyagi,
D. Haranath, Ajay Dhar
Journal of Alloys and Compounds 668 (2016) 152-158

CONTENTS

315. The impact of RF-plasma power in carrier relaxation dynamics of unintentional doped GaN epitaxial layers grown by MBE 2923
Nisha Prakash, Kritika Anand, Arun Barvat, Prabir Pal, Dilip K. Singh, Mukesh Jewariya, Srinivasa Ragam, Sonachand Adhikari, Kamlesh K. Maurya, Suraj P. Khanna
Optical Materials 54 (2016) 26–31
316. The low and high temperature thermoelectric properties of Sb doped Cu₂SnSe₃ 2929
Shyam Prasad K., Ashok Rao, **Bhasker Gahtori, Sivaiah Bathula, Ajay Dhar, Jia-Shiun Du, Yung-Kang Kuo**
Materials Research Bulletin 83 (2016) 160–166
317. Theoretical insights into kesterite and stannite phases of Cu₂(Sn₁–XGeX)ZnSe₄ 2936 based alloys: A prospective photovoltaic material
S. Kumar, Durgesh Kumar Sharma, Bipin Joshi, S. Auluck
AIP Advances 6, 125303 (2016); doi: 10.1063/1.4971323
318. Thermoelectric properties of In and I doped PbTe 2946
Ashoka Bali, Raju Chetty, Amit Sharma, Gerda Rogl, Patrick Heinrich, Satyam Suwas, **Dinesh Kumar Misra**, Peter Rogl, Ernst Bauer, Ramesh Chandra Mallik
Journal of Applied Physics 120, 175101 (2016)
319. Thermoelectric properties of SnSe nanoribbons: a theoretical aspect 2957
Kriti Tyagi, Kevin Waters, Gaoxue Wang, Bhasker Gahtori, D. Haranath, Ravindra Pandey
Mater. Res. Express 3 (2016) 035013 doi:10.1088/2053-1591/3/3/035013
320. Thickness dependent structural, magnetic and magneto-transport properties of 2965 epitaxial Nd_{0.50}Sr_{0.50}MnO₃ thin films
Pawan Kumar, Hari Krishna Singh
AIP Conference Proceedings 1728, 020587 (2016); doi: 10.1063/1.4946638
321. Three-dimensional and highly ordered porous carbon–MnO₂ composite foam for 2972 excellent electromagnetic interference shielding efficiency
Pinki Rani Agarwal, Rajeev Kumar, Saroj Kumari, Sanjay R. Dhakate
RSC Adv., 2016, 6, 100713
322. Tracing dust transport from Middle-East over Delhi in March 2012 using metal and 2982 lead isotope composition
S. Kumar, S.G. Aggarwal, J. Malherbe, J.P.G. Barre, S. Berail, P.K. Gupta, O.F.X. Donard
Atmospheric Environment 132 (2016) 179-187

CONTENTS

323. Tunable EMI shielding effectiveness using new exotic carbon: Polymer composites 2991
Monika Mishra, Avanish Pratap Singh, Vinay Gupta, Amita Chandra, S.K. Dhawan
Journal of Alloys and Compounds 688 (2016) 399-403
324. Tunable field effect properties in solid state and flexible graphene electronics on composite high - low k dielectric 2996
Arunandan Kumar, Priyanka Tyagi, Janardan Dagar, Ritu Srivastava
Carbon 99 (2016) 579-584
325. Tuning the carrier concentration using Zintl chemistry in Mg₃Sb₂, and its implications for thermoelectric figure-of-merit 3002
A. Bhardwaj, N.S. Chauhan, S. Goel, Vijeta Singh, J.J. Pulikkotil, T.D. Senguttuvan, D.K. Misra
Phys.Chem.Chem.Phys., (2016), 18, 6191
326. Tuning the magnetocrystalline anisotropy in RCoPO by means of R substitution: A ferromagnetic resonance study 3012
G. Prando, A. Alfonsov, **A. Pal, V.P.S. Awana**, B.Buchner, V. Kataev
Physical Review B 94, 024412 (2016)
327. Two Donor–One Acceptor Random Terpolymer Comprised of Diketopyrrolopyrrole Quaterthiophene with Various Donor π-Linkers for Organic Photovoltaic Application 3024
B. SambathKumar, P. Shyam Vinod Kumar, F. Shantanu Deepakrao, Sundar Kumar Iyer, V. Subramanian, **Ram Datt, Vinay Gupta, Suresh Chand, N. Somanathan**
The Journal of Physical Chemistry C, (2016), 120, 26609–26619
328. Ultrafast pump-probe spectroscopy studies of CeO₂ thin film deposited on Ni-W substrate by RF magnetron sputtering 3035
Preetam Singh, K.M.K. Srivatsa, Mukesh Jewariya
Optical Materials 58 (2016) 1- 4
329. Ultrasensitive interplay between ferromagnetism and superconductivity in NbGd composite thin films 3039
Ambika Bawa, Anurag Gupta, Sandeep Singh, V.P.S. Awana & Sangeeta Sahoo
Scientific Reports, 6:18689, doi: 10.1038/srep18689
330. Ultrasensitive self-powered large area planar GaN UV-photodetector using reduced graphene oxide electrodes 3050
Nisha Prakash, Manjri Singh, Gaurav Kumar, Arun Barvat, Kritika Anand, Prabir Pal, Surinder P. Singh, Suraj P. Khanna
Appl. Phys. Lett. 109, 242102 (2016); doi: 10.1063/1.4971982

CONTENTS

331. Unraveling the role of vacancies in the potentially promising thermoelectric clathrates Ba₈ZnxGe_{46-x-y}y 3056
Amrita Bhattacharya, Saswata Bhattacharya
Physical Review B 94, 094305 (2016)
332. Unusual Dirac Fermions on the Surface of a Noncentrosymmetric α -BiPd Superconductor 3062
S. Thirupathaiah, Soumi Ghosh, **Rajveer Jha**, E.D.L. Rienks, Kapildeb Dolui, V.V. Ravi Kishore, B. Büchner, Tanmoy Das, **V.P. S. Awana**, D.D. Sarma, J. Fink
Physical Review Letters 117, 177001 (2016)
333. Vacancies driven magnetic ordering in ZnO nanoparticles due to low concentrated Co ions 3067
Kuldeep Chand Verma, Ravi Bhatia, Sanjeev Kumar, **R.K. Kotnala**
Mater. Res. Express 3 (2016) 076103 doi:10.1088/2053-1591/3/7/076103
334. Valence band electronic structure of Pd based ternary chalcogenide superconductors 3080
H. Lohani, P. Mishra, **R. Goyal**, **V.P.S. Awana**, B.R. Sekhar
Physica C: Superconductivity and its applications 531 (2016) 98–102
335. Validation of Software Used for Calibration of Angle Block at CSIR-NPL, India 3085
M. Arif Sanjid, K.P. Chaudhary
MAPAN-Journal of Metrology Society of India (March 2016) 31(1):31–41
336. Violation of Kohler's rule in Ta₂PdTe₆ and absence of same in Nb₂PdS₅: A high field magneto transport study 3096
Reena Goyal, Rajveer Jha, V.P.S. Awana
AIP Conference Proceedings, 1731, 130058 (2016)
337. Weak ferromagnetism in a noncentrosymmetric BiPd 4K superconductor 3098
Rajveer Jha, Reena Goyal, P Neha, V.K Maurya, A.K. Srivastava, Anurag Gupta, S Patnaik, V.P.S. Awana
Supercond. Sci. Technol. 29 (2016) 025008
338. X-band frequency response and electromagnetic interference shielding in multiferroic BiFeO₃ nanomaterials 3105
Hilal Ahmad Reshi, Avanish Pratap Singh, Shreeja Pillai, Touseef Ahmad Para, **S.K. Dhawan**, Vilas Shelke
Applied Physics Letters 109, 142904 (2016)
339. X-ray photoelectron spectroscopic studies of CeO₂ thin films deposited on Ni-W (100), c-Al₂O₃ (0001) and Si (100) substrates 3110
Preetam Singh, K.M.K. Srivatsa, Arun Barvat, Prabir Pal
Current Applied Physics 16 (2016) 1388-1394