

**PAPERS PUBLISHED BY NPL SCIENTISTS IN SCI JOURNALS  
IN 2005**

S. No.	Title	*STIF2005
1.	AC conductivity and dielectric relaxation behavior of solution grown poly (vinylidene fluoride) films Singh R, Sinha RDP, Kaur A, et al.  FERROELECTRICS 329: 995-1003 2005	<b>0.459</b>
2.	Aerosols over Delhi during pre-monsoon months: Characteristics and effects on surface radiation forcing Singh S, Nath S, Kohli R, et al.  GEOPHYSICAL RESEARCH LETTERS 32 (13): Art. No. L13808 JUL 6 2005	<b>2.491</b>
3.	Analysis of silicates materials: A review Singh N, Gupta PK  REVIEWS IN ANALYTICAL CHEMISTRY 24 (1): 1-7 2005	<b>0.591</b>
4.	Annealing induced microstructural evolution of electrodeposited electrochromic tungsten oxide films Deepa M, Srivastava AK, Saxena TK, et al.  APPLIED SURFACE SCIENCE 252 (5): 1568-1580 DEC 15 2005	<b>1.263</b>
5.	Antenna beam tilting effects in fixed and mobile communication links Prasad MVSN, Gupta MM, Sarkar SK, et al.  CURRENT SCIENCE 88 (7): 1142-1147 APR 10 2005	<b>0.728</b>
6.	Antibacterial activity of some unsymmetrical diorganyltellurium(IV) dichlorides Soni D, Gupta PK, Kumar Y, et al.  INDIAN JOURNAL OF BIOCHEMISTRY & BIOPHYSICS 42 (6): 398-400 DEC 2005	<b>0.505</b>
7.	APMP international comparison of AC-DC transfer standards at the lowest attainable level of uncertainty Budovsky I, Abidin ARBZ, Yan AYK, et al.  IEEE TRANSACTIONS ON INSTRUMENTATION AND MEASUREMENT 54 (2): 795-798 APR 2005	<b>0.665</b>
8.	Application of photoconductivity decay and photocurrent generation methods for determination of minority carrier lifetime in silicon Singh SN, Gandotra R, Singh PK, et al.  BULLETIN OF MATERIALS SCIENCE 28 (4): 317-323 JUL 2005	<b>0.777</b>

9.	Application of polyaniline as enzyme based biosensor Gerard M, Malhotra BD  CURRENT APPLIED PHYSICS 5 (2): 174-177 FEB 2005	<b>1.00</b>
10.	Below band-gap optical absorption in $GaxIn_{1-x}Sb$ alloys Chandola A, Kim HJ, Dutta PS, et al.  JOURNAL OF APPLIED PHYSICS 98 (9): Art. No. 093103 NOV 1 2005	<b>2.498</b>
11.	Blue organic light emitting diode based on lithium tetra-(8-hydroxy-quinolinato) boron complex Kumar L, Koireng RR, Misra A, et al.  INDIAN JOURNAL OF PURE & APPLIED PHYSICS 43 (1): 56-59 JAN 2005	<b>0.495</b>
12.	Blue-green emission from organic light emitting diodes based on aluminum complex Misra A, Kumar P, Kumar L, et al.  INDIAN JOURNAL OF ENGINEERING AND MATERIALS SCIENCES 12 (4): 321-324 AUG 2005	<b>0.16</b>
13.	Bright-blue organic electroluminescent device based on bis (2-methyl 8-quinolinolato) (triphenyl siloxy) aluminium Misra A, Kumar P, Dhawan SK, et al.  INDIAN JOURNAL OF PURE & APPLIED PHYSICS 43 (7): 522-526 JUL 2005	<b>0.495</b>
14.	Carbon monoxide sensitivity of vacuum deposited polyaniline semiconducting thin films Dixit V, Misra SCK, Sharma BS  SENSORS AND ACTUATORS B-CHEMICAL 104 (1): 90-93 JAN 3 2005	<b>2.646</b>
15.	Carbonaceous aerosol emissions from India Parashar DC, Gadi R, Mandal TK, et al.  ATMOSPHERIC ENVIRONMENT 39 (40): 7861-7871 DEC 2005	<b>2.724</b>
16.	Certified reference materials of trace elements in water Agrawal AK  BULLETIN OF MATERIALS SCIENCE 28 (4): 373-378 JUL 2005	<b>0.777</b>
17.	Characterization of as grown and nitrogen incorporated tetrahedral amorphous carbon films deposited by pulsed unfiltered cathodic vacuum arc process Panwar OS, Deb B, Satyanarayana BS, et al. THIN SOLID FILMS 472 (1-2): 180-188 JAN 24 2005	<b>1.569</b>

18.	Characterization of CdSexTe1-x sintered films for photovoltaic applications Kumar L, Singh BP, Misra A, et al.  PHYSICA B-CONDENSED MATTER 363 (1-4): 102-109 JUN 15 2005	<b>0.796</b>
19.	Characterization of Si1-xGex/Si layers and depth profile of their heterobipolar transistor structures by high-resolution x-ray diffractometry and computer simulations Bhagavannarayana G, Halder SK  JOURNAL OF APPLIED PHYSICS 97 (2): Art. No. 024509 JAN 15 2005	<b>2.498</b>
20.	Charge storage mechanism in vacuum deposited PVF films Chand S, Sharma GD, Dwivedi S, et al.  JOURNAL OF MATERIALS SCIENCE 40 (17): 4597-4604 SEP 2005	<b>0.901</b>
21.	Citric acid induced improved homogeneity of CeO2 coatings for electrochromic device applications Verma A, Bakhshi AK, Agnihotry SA  INDIAN JOURNAL OF PHYSICS AND PROCEEDINGS OF THE INDIAN ASSOCIATION FOR THE CULTIVATION OF SCIENCE 79 (7): 719-724 JUL 2005	
22.	Cloud height, cloud temperature and cloud attenuation in microwave and millimeterwave frequency bands over Indian tropical East Coast Sarkar SK, Ahmad I, Das J, et al. INTERNATIONAL JOURNAL OF INFRARED AND MILLIMETER WAVES 26 (2): 329-340 FEB 2005	<b>0.337</b>
23.	A clutter canceller for remote victim locator Banerjee PK, Sen Gupta A IETE TECHNICAL REVIEW 22 (2): 109-116 MAR-APR 2005	<b>0.01</b>
24.	Collective dielectric relaxation in smectic A and smectic C star phases near transition temperature of electroclinic liquid crystals Thakur AK, Chadha GK, Kaur S, et al. JOURNAL OF APPLIED PHYSICS 97 (11): Art. No. 113514 JUN 1 2005	<b>2.498</b>
25.	Comparative study of effect of initial sintering in rod/tube shape on J(c) and fracture strength of Bi-2223: 10 wt % Ag bulk rod conductors Padam GK, Ekbote SN, Arora NK, et al. JAPANESE JOURNAL OF APPLIED PHYSICS PART 1-REGULAR PAPERS BRIEF COMMUNICATIONS & REVIEW PAPERS 44 (11): 7943-7949 NOV 2005	<b>2.498</b>

26.	Comparative study of the total ozone column over Maitri, Antarctica during 1997, 2002 and 2003 Ghude SD, Kumar A, Jain SL, et al.  INTERNATIONAL JOURNAL OF REMOTE SENSING 26 (16): 3413-3421 AUG 2005	<b>0.925</b>
27.	A comparative study on the development of pitch precursor for general-purpose carbon fibres Mishra A, Saha M, Bhatia G, et al.  JOURNAL OF MATERIALS PROCESSING TECHNOLOGY 168 (2): 316-320 SEP 30 2005	<b>0.592</b>
28.	Computational interfacing of resistivity of high temperature superconductor using Visual Basic program Ansari IA, Singh KP, Shahabuddin M, et al. INDIAN JOURNAL OF PURE & APPLIED PHYSICS 43 (6): 439-445 JUN 2005	<b>0.495</b>
29.	Continuous observations of surface air concentration of carbon dioxide and methane at Maitri, Antarctica Jain SL, Ghude SD, Kumar A, et al.  CURRENT SCIENCE 88 (12): 1941-1948 JUN 25 2005	<b>0.728</b>
30.	Design of a simple low cost tethered sonde data acquisition system for meteorological measurements John T, Garg SC, Maini HK, et al.  REVIEW OF SCIENTIFIC INSTRUMENTS 76 (8): Art. No. 084501 AUG 2005	<b>1.235</b>
31.	Detection of continuous SmC*-Sm a phase transition in electroclinic liquid crystals by dielectric method Thakur AK, Biradar AM, Singh SP, et al.  JAPANESE JOURNAL OF APPLIED PHYSICS PART 1-REGULAR PAPERS SHORT NOTES & REVIEW PAPERS 44 (3): 1348-1351 MAR 2005	<b>1.096</b>
32.	Determination of surface flatness by spectral interferometric method Kandpal HC, Mehrotra R, Raman S  OPTICS AND LASERS IN ENGINEERING 43 (12): 1315-1321 DEC 2005	<b>0.847</b>
33.	Development of a lactate biosensor based on conducting copolymer bound lactate oxidase Suman S, Singhal R, Sharma AL, et al. SENSORS AND ACTUATORS B-CHEMICAL 107 (2): 768-772 JUN 29 2005	<b>2.646</b>

34.	Development of carbon-ceramic composites Raman V, Bhatia G, Mishra A, et al.  MATERIALS SCIENCE AND ENGINEERING A-STRUCTURAL MATERIALS PROPERTIES MICROSTRUCTURE AND PROCESSING 412 (1-2): 31-36 Sp. Iss. SI DEC 5 2005	<b>1.347</b>
35.	Development of nanophosphors - A review Chander H  MATERIALS SCIENCE & ENGINEERING R-REPORTS 49 (5): 113-155 JUN 16 2005	<b>10.517</b>
36.	Dielectric and piezoelectric studies of Fe doped PLZT ceramics Rai R, Sharma S, Choudhary RNP  MATERIALS LETTERS 59 (29-30): 3921-3925 DEC 2005	<b>1.299</b>
37.	Dielectric relaxation and anisotropy of nematic mixture E-24 Singh AK, Manohar R, Shukla JP, et al.  JOURNAL OF PHYSICS AND CHEMISTRY OF SOLIDS 66 (7): 1183-1186 JUL 2005	<b>1.41</b>
38.	Direct evidence for charge ordering and electronic phase separation in Bi <sub>x</sub> Sr <sub>1-x</sub> MnO <sub>3</sub> at room temperature Gupta A, Samanta SB, Awana VPS, et al.  PHYSICA B-CONDENSED MATTER 370 (1-4): 172-177 DEC 15 2005	<b>0.796</b>
39.	Direct evidence of weak-link grain boundaries in a polycrystalline MgB <sub>2</sub> superconductor Khare N, Singh DP, Gupta AK, et al.  JOURNAL OF APPLIED PHYSICS 97 (7): Art. No. 076103 APR 1 2005	<b>2.498</b>
40.	Diurnal, seasonal and latitudinal variations of ionospheric temperatures of the topside F region over the Indian region during solar minimum (1995- 1996) Sharma DK, Rai J, Israil M, et al.  JOURNAL OF ATMOSPHERIC AND SOLAR-TERRESTRIAL PHYSICS 67 (3): 269-274 FEB 2005	<b>1.309</b>
41.	The effect of ambient temperature on the sensitivity of hot-cathode ionization gauges Abbott PJ, Looney JP, Mohan P  VACUUM 77 (2): 217-222 JAN 17 2005	<b>0.909</b>

42.	Effect of Ba doping on structure and magneto-transport properties of layered manganite $\text{La}_{1.4}\text{Ca}_{1.6-x}\text{Ba}_x\text{Mn}_2\text{O}_7$ Singh HK, Gupta AK, Siwach PK, et al.  JOURNAL OF MAGNETISM AND MAGNETIC MATERIALS 292: 483-489 APR 2005	<b>0.985</b>
43.	Effect of Ca doping for Y on structural/microstructural and superconducting properties of $\text{YBa}_2\text{Cu}_3\text{O}_{7-\delta}$ Giri R, Awana VPS, Singh HK, et al.  PHYSICA C-SUPERCONDUCTIVITY AND ITS APPLICATIONS 419 (3-4): 101-108 MAR 1 2005	<b>0.948</b>
44.	Effect of low temperature oxidation on dielectric properties of mercury sensitized photo-deposited silicon nitride films Sahu BS, Srivastava P, Agnihotri OP, et al.  JOURNAL OF NON-CRYSTALLINE SOLIDS 351 (8-9): 771-776 APR 1 2005	<b>1.264</b>
45.	Effect of oxalic acid dihydrate on optical and electrochemical properties of sol-gel derived amorphous electrochromic $\text{WO}_3$ films Deepa M, Sharma R, Basu A, et al. ELECTROCHIMICA ACTA 50 (16-17): 3545-3555 MAY 30 2005	<b>2.453</b>
46.	Effect of reduced states of Mo on optical absorption in amorphous/polycrystalline $\text{MoO}_3$ thin films Sian TS, Reddy GB, Shivaprasad SM  ELECTROCHEMICAL AND SOLID STATE LETTERS 8 (2): A96-A99 2005	<b>1.97</b>
47.	Effect of stabilizer on structural, optical and electrochemical properties of sol-gel derived spin coated $\text{TiO}_2$ films Verma A, Samanta SB, Bakhshi AK, et al.  SOLAR ENERGY MATERIALS AND SOLAR CELLS 88 (1): 47-64 JUN 15 2005	<b>2.002</b>
48.	Effect of thermal annealing on surface morphology and physical properties of poly(3-octylthiophene) films Singh R, Kumar J, Singh RK, et al.  POLYMER 46 (21): 9126-9132 OCT 7 2005	<b>2.849</b>
49.	Effect of $\text{TiO}_2$ addition on the durability of sol-gel derived $\text{WO}_3$ films Sharma R, Saxena TK, Agnihotry SAA  INDIAN JOURNAL OF PHYSICS AND PROCEEDINGS OF THE INDIAN ASSOCIATION FOR THE CULTIVATION OF SCIENCE 79 (7): 733-736 JUL 2005	

50.	Efficient analysis for nonlinear microwave characteristics of high-power HTS thin film microstrip resonators Kedar A, Kataria ND  SUPERCONDUCTOR SCIENCE & TECHNOLOGY 18 (8): 1129-1134 AUG 2005	<b>1.896</b>
51.	Electrochemical and optical studies of conjugated polymers for three primary colours Misra A, Kumar P, Srivastava R, et al.  INDIAN JOURNAL OF PURE & APPLIED PHYSICS 43 (12): 921-925 DEC 2005	<b>0.495</b>
52.	Electron paramagnetic resonance, optical and electrical properties of vanadyl doped alkali germanoborate glasses Gahlot PS, Seth VP, Agarwal A, et al.  JOURNAL OF PHYSICS AND CHEMISTRY OF SOLIDS 66 (5): 766-772 MAY 2005	<b>1.41</b>
53.	Enhancement of crystalline, piezoelectric and optical quality of LiNbO <sub>3</sub> single crystals by post-growth annealing and poling Bhagavannarayana G, Budakoti GC, Maurya KK, et al.  JOURNAL OF CRYSTAL GROWTH 282 (3-4): 394-401 SEP 1 2005	<b>1.681</b>
54.	EPR, UV-vis, magnetic, spectral studies and electrochemical behaviour of mononuclear transition metal complexes derived from novel hexa-aza-macrotricyclic ligand Chandra S, Gupta N, Gupta R, et al.  SPECTROCHIMICA ACTA PART A-MOLECULAR AND BIOMOLECULAR SPECTROSCOPY 62 (1-3): 552-556 NOV 2005	<b>1.29</b>
55.	Estimation of uncertainty in measurement in precision calibration of DC high current source up to 100 A Jaiswal SK, Ojha VN, Singh A  JOURNAL OF SCIENTIFIC & INDUSTRIAL RESEARCH 64 (9): 666-673 SEP 2005	<b>0.232</b>
56.	Exchange bias studies of NiFe/FeMn/NiFe trilayer by ion beam etching Sankaranarayanan VK, Kim DY, Yoon SM, et al.  EUROPEAN PHYSICAL JOURNAL B 45 (2): 203-206 MAY 2005	<b>1.72</b>
57.	Exchange bias variations of the seed and top NiFe layers in NiFe/FeMn/NiFe trilayer as a function of seed layer thickness Sankaranarayanan VK, Yoon SM, Kim CG, et al.  JOURNAL OF MAGNETISM AND MAGNETIC MATERIALS 286: 196-199 Sp. Iss. SI FEB 1 2005	<b>0.985</b>

58.	Formation of cobalt silicides as a buried layer in silicon using high energy heavy ion irradiation Chakraborty BR, Haider SK, Karar N, et al.  JOURNAL OF PHYSICS D-APPLIED PHYSICS 38 (16): 2836-2840 AUG 21 2005	<b>1.957</b>
59.	Formation of Sb submonolayer phases on high index Si(5512) surface Kumar M, Paliwal VK, Joshi AG, et al.  SURFACE SCIENCE 596 (1-3): 206-211 DEC 10 2005	<b>1.78</b>
60.	Growth, structure and field emission characteristics of petal like carbon nano-structured thin films Srivastava SK, Shukla AK, Vankar V, et al.  THIN SOLID FILMS 492 (1-2): 124-130 DEC 1 2005	<b>1.569</b>
61.	High pressure high temperature synthesis and magnetization of magneto-superconducting RuSr <sub>2</sub> (LnCe(2))Cu <sub>2</sub> O <sub>12.25</sub> (Ru-1232) compounds (Ln=Y and Dy) Awana VPS, Kishan H, Kawashima T, et al. JOURNAL OF APPLIED PHYSICS 97 (10): Art. No. 10B111 Part 2 MAY 15 2005	<b>2.498</b>
62.	High-pressure Mossbauer measurements on nanocrystalline perovskite (La,Sr)(Mn,Fe)O <sub>3</sub> Chandra U, Mudgal P, Kumar M, et al. HYPERFINE INTERACTIONS 163 (1-4): 129-141 JUN 2005	<b>0.254</b>
63.	3-Hydroxy-3-phenyl-1-m-chlorophenyltriazene as spectrophotometric and complexometric reagent in the determination of iron(III) Singh N, Chauhan RS, Gupta PK  ASIAN JOURNAL OF CHEMISTRY 17 (1): 265-269 JAN-MAR 2005	<b>0.153</b>
64.	Impact of Zn substitution on phase formation and superconductivity of Bi <sub>1.6</sub> Pb <sub>0.4</sub> Sr <sub>2</sub> Ca <sub>2</sub> Cu <sub>3-x</sub> Zn <sub>x</sub> O <sub>10-δ</sub> with x=0.0, 0.015, 0.03, 0.06, 0.09 and 0.12 Saxena RB, Giri R, Awana VPS, et al.  MODERN PHYSICS LETTERS B 19 (16): 771-778 JUL 20 2005	<b>0.621</b>
65.	Improved FGMOS-based low-voltage voltage follower Sharma S, Mangotra L, Rajput SS, et al.  IETE JOURNAL OF RESEARCH 51 (4): 321-325 JUL-AUG 2005	<b>0.052</b>
66.	Improvement in crystalline perfection, piezo-electric property and optical transparency of in-situ poled Fe-LiNbO <sub>3</sub> single crystals by post growth annealing and poling Buclakoti GC, Kumar B, Bhagavannarayana G, et al. PHYSICA STATUS SOLIDI A-APPLIED RESEARCH 202 (2): R7-R9 JAN 2005	<b>1.041</b>



67.	Improvements in the determination of extinction coefficients of a thin film using an envelope method Kar M, Verma BS  JOURNAL OF OPTICS A-PURE AND APPLIED OPTICS 7 (10): 599-603 OCT 2005	<b>1.295</b>
68.	Influence of aging and composition of the precursor sol on the properties of CeO <sub>2</sub> -TiO <sub>2</sub> thin films for electrochromic applications Verma A, Singh DP, Bakhshi AK, et al.  JOURNAL OF NON-CRYSTALLINE SOLIDS 351 (30-32): 2501-2512 SEP 1 2005	<b>1.264</b>
69.	Influence of native defects on the infrared transmission of undoped Ga <sub>1-x</sub> In <sub>x</sub> Sb bulk crystals Kim HJ, Chandola A, Guha S, et al.  JOURNAL OF ELECTRONIC MATERIALS 34 (11): 1391-1398 NOV 2005	<b>1.358</b>
70.	Interaction effects in magnetic oxide nanoparticle systems Sharma R, Pratima C, Lamba S, et al.  PRAMANA-JOURNAL OF PHYSICS 65 (4): 739-743 Sp. Iss. SI OCT 2005	<b>0.38</b>
71.	Is Curie-Weiss law valid in every ferro-to-para transition? Kaur S, Thakur AK, Choudhary A, et al.  APPLIED PHYSICS LETTERS 87 (10): Art. No. 102507 SEP 5 2005	<b>4.127</b>
72.	I-V characteristics of dark and illuminated PPV-PCBM blends solar cells Jain SC, Aernout T, Kapoor AK, et al.  SYNTHETIC METALS 148 (3): 245-250 FEB 10 2005	<b>1.32</b>
73.	Kumar V, Pal R, Chaudhury PK, et al. CdTe passivation process for long wavelength infrared HgCdTe photo-detectors A  JOURNAL OF ELECTRONIC MATERIALS 34 (9): 1225-1229 SEP 2005	<b>1.358</b>
74.	Low field AC susceptibility study of intergranular critical current density in Mg-substituted CuBa <sub>2</sub> Ca <sub>3</sub> Cu <sub>4</sub> O <sub>12-y</sub> high temperature superconductors Agarwal SK, Kumaraswamy BV JOURNAL OF PHYSICS AND CHEMISTRY OF SOLIDS 66 (5): 729-734 MAY 2005	<b>1.41</b>
75.	Low-noise, high resolution microwave synthesis for atomic frequency standards Sen Gupta A, Howe DA INDIAN JOURNAL OF PURE & APPLIED PHYSICS 43 (3): 221-227	<b>0.495</b>

	MAR 2005	
76.	Luminescence properties of cerium doped nanocrystalline yttrium silicate Karar N, Chander H  JOURNAL OF PHYSICS D-APPLIED PHYSICS 38 (19): 3580-3583 OCT 7 2005	<b>1.957</b>
77.	Magnetic and superconducting properties of RuSr <sub>2</sub> Gd <sub>1.5</sub> Ce <sub>0.5</sub> Cu <sub>2</sub> O <sub>10-δ</sub> samples: Dependence on the oxygen content and aging effects Cardoso CA, Lanfredi AJC, Chiquito AJ, et al.  PHYSICAL REVIEW B 71 (13): Art. No. 134509 APR 2005	<b>3.185</b>
78.	Magnetic properties of polypyrrole-coated iron oxide nanoparticles Sharma R, Lamba S, Annapoorni S  JOURNAL OF PHYSICS D-APPLIED PHYSICS 38 (18): 3354-3359 SEP 21 2005	<b>1.957</b>
79.	Magnetic, electronic and electrochemical studies of mono and binuclear Cu(II) complexes using novel macrocyclic ligands Gupta N, Gupta R, Chandra S, et al.  SPECTROCHIMICA ACTA PART A-MOLECULAR AND BIOMOLECULAR SPECTROSCOPY 61 (6): 1175-1180 APR 2005	<b>1.29</b>
80.	Memory effect in smectic-A phase of ferroelectric liquid crystal Thakur AK, Bawa SS, Biradar AM, et al.  JOURNAL OF APPLIED PHYSICS 97 (8): Art. No. 084106 APR 15 2005	<b>2.498</b>
81.	Methane emission characteristics and its relations with plant and soil parameters under irrigated rice ecosystem of northeast India Gogoi N, Baruah KK, Gogoi B, et al.  CHEMOSPHERE 59 (11): 1677-1684 JUN 2005	<b>2.297</b>
82.	Methane emission estimates from enteric fermentation in Indian livestock: Dry matter intake approach Singhal KK, Mohini M, Jha AK, et al. CURRENT SCIENCE 88 (1): 119-127 JAN 10 2005	<b>0.728</b>
83.	Microstructural and electrochromic characteristics of electrodeposited and annealed WO <sub>3</sub> films Srivastava AK, Deepa M, Singh S, et al.  SOLID STATE IONICS 176 (11-12): 1161-1168 MAR 31 2005	<b>1.571</b>

84.	Microstructural investigations on CdTe thin films electrodeposited using high current pulses Sharma RK, Rastogi AC, Jain K, et al.	<b>0.796</b>
	PHYSICA B-CONDENSED MATTER 366 (1-4): 80-88 SEP 1 2005	
85.	Nanocomposite electrolytes with fumed silica in poly(methyl methacrylate): thermal, rheological and conductivity studies Ahmad S, Ahmad S, Agnihotry SA	<b>2.77</b>
	JOURNAL OF POWER SOURCES 140 (1): 151-156 JAN 10 2005	
86.	Nanocrystal formation and luminescence properties of ZnS based doped nanophosphors Karar N, Chander H	<b>1.932</b>
	JOURNAL OF NANOSCIENCE AND NANOTECHNOLOGY 5 (9): 1498-1502 SEP 2005	
87.	NIR spectroscopy and fiber optic probe for determination of alcohol, sugar and tartaric acid in alcoholic beverages Mehrotra R, Gupta A, Nagarajan R	<b>0.232</b>
	JOURNAL OF SCIENTIFIC & INDUSTRIAL RESEARCH 64 (2): 134-137 FEB 2005	
88.	Nitrous oxide fluxes in a tropical shallow urban pond under influencing factors Singh VP, Dass P, Kaur K, et al.	<b>0.728</b>
	CURRENT SCIENCE 88 (3): 478-483 FEB 10 2005	
89.	Novel ammonia-sensing phenomena in sol-gel derived Ba <sub>0.5</sub> Sr <sub>0.5</sub> TiO <sub>3</sub> thin films Roy SC, Sharma GL, Bhatnagar MC, et al.	<b>2.646</b>
	SENSORS AND ACTUATORS B-CHEMICAL 110 (2): 299-303 OCT 14 2005	
90.	Observational study of surface ozone at New Delhi, India Jain SL, Arya BC, Kumar A, et al.	<b>0.925</b>
	INTERNATIONAL JOURNAL OF REMOTE SENSING 26 (16): 3515-3524 AUG 2005	
91.	Optimization of boric acid content in developing efficient blue emitting, long persistent phosphor Haranath D, Sharma P, Chander H	<b>1.957</b>
	JOURNAL OF PHYSICS D-APPLIED PHYSICS 38 (3): 371-375 FEB 7 2005	

92.	The origin of low-frequency negative transconductance dispersion in a pseudomorphic HEMT Balakrishnan VR, Kumar V, Ghosh S  SEMICONDUCTOR SCIENCE AND TECHNOLOGY 20 (8): 783-787 AUG 2005	<b>1.222</b>
93.	Performance deterioration of a communication link at 13 GHz due to rain Sarkar SK, Ahmed L, Gupta MM, et al.  INDIAN JOURNAL OF PHYSICS AND PROCEEDINGS OF THE INDIAN ASSOCIATION FOR THE CULTIVATION OF SCIENCE 79 (2): 117-121 FEB 2005	
94.	Performance evaluation and software validation of automatic bank of DC reference standard Sharma SK, Ojha VN  JOURNAL OF SCIENTIFIC & INDUSTRIAL RESEARCH 64 (7): 487-490 JUL 2005	<b>0.232</b>
95.	Phosphorous passivation of In <sub>0.53</sub> Ga <sub>0.47</sub> As using MOVPE and characterization of Au-Ga <sub>2</sub> O <sub>3</sub> (Gd <sub>2</sub> O <sub>3</sub> )-In <sub>0.53</sub> Ga <sub>0.47</sub> As MIS capacitor Pal S, Shivaprasad SM, Aparna Y, et al.  APPLIED SURFACE SCIENCE 245 (1-4): 196-201 MAY 30 2005	<b>1.263</b>
96.	Photoluminescence study of the sol-gel derived (Ba <sub>0.5</sub> Sr <sub>0.5</sub> ) TiO <sub>3</sub> thin films for the characterization of trap states Roy SC, Bhatnagar MC, Sharma GL, et al.  JAPANESE JOURNAL OF APPLIED PHYSICS PART 1-REGULAR PAPERS SHORT NOTES & REVIEW PAPERS 44 (1A): 34-37 JAN 2005	<b>1.096</b>
97.	Preparation and low field magnetoresistance of double layered manganite La <sub>1.4</sub> Ca <sub>1.6</sub> Mn <sub>2</sub> O <sub>7</sub> Khare N, Gupta AK, Bhalla GL  JOURNAL OF PHYSICS AND CHEMISTRY OF SOLIDS 66 (6): 949-953 JUN 2005	<b>1.41</b>
98.	Proficiency testing through interlaboratory comparison in the pressure range up to 70 MPa using pressure dial gauge as an artifact Yadav S, Gupta VK, Prakash O, et al.  JOURNAL OF SCIENTIFIC & INDUSTRIAL RESEARCH 64 (10): 722-740 OCT 2005	<b>0.232</b>

99.	Quantum confinement effects of CdTe nanocrystals sequestered in TiO <sub>2</sub> matrix: effect of oxygen incorporation Sharma SN, Kohli S, Rastogi AC	<b>0.946</b>
	PHYSICA E-LOW-DIMENSIONAL SYSTEMS & NANOSTRUCTURES 25 (4): 554-561 JAN 2005	
100.	Quasi-periodic backscatters from the E region at Gadanki: Evidence for Kelvin-Helmholtz billows in the lower thermosphere? Choudhary RK, St Maurice JP, Kagan LM, et al.	<b>2.784</b>
	JOURNAL OF GEOPHYSICAL RESEARCH-SPACE PHYSICS 110 (A8): Art. No. A08303 AUG 10 2005	
101.	Ramification of uncertainty due to limited resolution of universal measuring machine Sanjid MA, Nasrin M, Chaudhary KP, et al.	<b>0.495</b>
	INDIAN JOURNAL OF PURE & APPLIED PHYSICS 43 (5): 319-328 MAY 2005	
102.	Recent trends in biosensors Malhotra BD, Singhal R, Chaubey A, et al.	<b>1.00</b>
	CURRENT APPLIED PHYSICS 5 (2): 92-97 FEB 2005	
103.	Reply to "Comment on 'Dipolar interaction energy for a system of magnetic nanoparticles'" Lamba S	<b>0.836</b>
	PHYSICA STATUS SOLIDI B-BASIC SOLID STATE PHYSICS 242 (14): 2958-2959 NOV 2005	
104.	Resistivity and thermoelectric power of Na <sub>x</sub> CoO <sub>2</sub> (x=1.0, 0.7, and 0.6) system Kishan H, Awana VPS, Ansari MA, et al.	<b>2.498</b>
	JOURNAL OF APPLIED PHYSICS 97 (10): Art. No. 10A904 Part 2 MAY 15 2005	
105.	Revival of superconductivity by Y <sup>3+</sup> /Ca <sup>2+</sup> substitution in YBa <sub>2</sub> Cu <sub>2.7</sub> Co <sub>0.3</sub> O <sub>7</sub> without reported phase transformation Ansari MA, Nigam R, Awana VPS, et al.	<b>2.498</b>
	JOURNAL OF APPLIED PHYSICS 97 (10): Art. No. 10B104 Part 2 MAY 15 2005	
106.	Role of an electrolyte and substrate on the stability of porous silicon Sharma SN, Sharma R, Lakshmikumar ST	<b>0.946</b>
	PHYSICA E-LOW-DIMENSIONAL SYSTEMS & NANOSTRUCTURES 28 (3): 264-272 AUG 2005	

107.	<p>Role of neutral wind and storm time electric fields inferred from the storm time ionization distribution at low latitudes: in-situ measurements by Indian satellite SROSS-C2 Subrahmanyam P, Jain AR, Singh L, et al.</p> <p>ANNALES GEOPHYSICAE 23 (10): 3289-3299 2005</p>	<b>1.45</b>
108.	<p>Sb adsorption and desorption pathways on (2X1) and c(4X4) reconstructed Si(001) surfaces Paliwal VK, Kumar M, Shivaprasad SM</p> <p>SURFACE SCIENCE 585 (1-2): 53-58 JUL 1 2005</p>	<b>1.78</b>
109.	<p>Signature of increasing total column water vapour and surface temperature at Maitri, Antarctica Jain SL, Ghude SD, Arya BC, et al.</p> <p>CURRENT SCIENCE 89 (11): 1917-1922 DEC 10 2005</p>	<b>0.728</b>
110.	<p>Sintering of cubic boron nitride under high pressures and temperatures in the presence of boron carbide as the binding material Singhal SK, Singh BP</p> <p>INDIAN JOURNAL OF ENGINEERING AND MATERIALS SCIENCES 12 (4): 325-330 AUG 2005</p>	<b>0.16</b>
111.	<p>Size-induced changes in optical and X-ray photoelectron spectra of GaN nanoparticles deposited at lower substrate temperature Mann AK, Varandani D, Mehta BR, et al.</p> <p>JOURNAL OF NANOSCIENCE AND NANOTECHNOLOGY 5 (11): 1858-1863 NOV 2005</p>	<b>1.932</b>
112.	<p>Size-induced stability and structural transition in monodispersed indium nanoparticles Balamurugan B, Kruis FE, Shivaprasad SM, et al.</p> <p>APPLIED PHYSICS LETTERS 86 (8): Art. No. 083102 FEB 21 2005</p>	<b>4.127</b>
113.	<p>Smart sensors: Physics, technology and applications Singh VR</p> <p>INDIAN JOURNAL OF PURE &amp; APPLIED PHYSICS 43 (1): 7-16 JAN 2005</p>	<b>0.495</b>
114.	<p>Sol-gel derived nanocrystalline CeO<sub>2</sub>-TiO<sub>2</sub> coatings for electrochromic windows Verma A, Samanta SB, Mehra NC, et al.</p> <p>SOLAR ENERGY MATERIALS AND SOLAR CELLS 86 (1): 85-103 FEB 15 2005</p>	<b>2.002</b>

115.	Sol-gel processed cerium oxide and mixed cerium-titanium oxide films as passive counter electrodes for transmissive electrochromic devices Verma A, Samanta SB, Bakhshi AK, et al.  INDIAN JOURNAL OF CHEMISTRY SECTION A-INORGANIC BIO-INORGANIC PHYSICAL THEORETICAL & ANALYTICAL CHEMISTRY 44 (9): 1756-1765 SEP 2005	<b>0.632</b>
116.	Sol-gel processed nanostructured CeO <sub>2</sub> -TiO <sub>2</sub> thin films for electrochromic applications Verma A, Srivastava AK, Bakhshi AK, et al.  MATERIALS LETTERS 59 (27): 3423-3426 NOV 2005	<b>1.299</b>
117.	Special issue - Indo-Japan Workshop on Advanced Molecular Electronics and Bionics Kitakyushu, Japan, 11-12 December 2003 - Preface Kaneto K, Malhotra BD  CURRENT APPLIED PHYSICS 5 (2): 91-91 FEB 2005	<b>1.00</b>
118.	Spectral properties of doped bilayer high T <sub>c</sub> cuprates: Role of intra-bilayer coupling Pathak PK, Ajay, Joshi SK  PHYSICA C-SUPERCONDUCTIVITY AND ITS APPLICATIONS 423 (3-4): 127-136 JUL 15 2005	<b>0.948</b>
119.	Stability and hydrogenation of "bare" gadolinium nanoparticles Aruna I, Mehta BR, Malhotra LK, et al.  ADVANCED FUNCTIONAL MATERIALS 15 (1): 131-137 JAN 2005	<b>6.77</b>
120.	Structural and dielectric properties of Bi modified PLZT ceramics Rai R, Sharma S, Choudhary RNP  SOLID STATE COMMUNICATIONS 133 (10): 635-639 MAR 2005	<b>1.489</b>
121.	Structural and morphological studies of chemical bath-deposited nanocrystalline CdS films and its alloys Sharma SN, Sharma RK, Sood KN, et al.  MATERIALS CHEMISTRY AND PHYSICS 93 (2-3): 368-375 OCT 15 2005	<b>1.136</b>
122.	Structural, optical and electrochemical properties of sol-gel derived TiO <sub>2</sub> films: Annealing effects Verma A, Basu A, Bakhshi AK, et al.  SOLID STATE IONICS 176 (29-30): 2285-2295 SEP 2005	<b>1.571</b>
123.	Structure-property correlation in (50-x)Na <sub>2</sub> O-50P(2)O(5)-xCoCl(2) glassy systems Singh P, Das SS, Agnihotry SA JOURNAL OF NON-CRYSTALLINE SOLIDS 351 (49-51): 3730-3737	<b>1.264</b>

	DEC 1 2005	
124.	<p>Studies on acenaphthene (C<sub>12</sub>H<sub>10</sub>) single crystals grown by vertical Bridgman technique Babu RR, Balamurugan N, Vijayan N, et al.</p> <p>JOURNAL OF CRYSTAL GROWTH 285 (4): 649-660 DEC 15 2005</p>	<b>1.681</b>
125.	<p>Study of EPR, optical properties and electrical conductivity of vanadyl doped Bi<sub>2</sub>O<sub>3</sub> center dot PbO center dot B<sub>2</sub>O<sub>3</sub> glasses Gahlot PS, Agarwal A, Seth VP, et al.</p> <p>SPECTROCHIMICA ACTA PART A-MOLECULAR AND BIOMOLECULAR SPECTROSCOPY 61 (6): 1189-1194 APR 2005</p>	<b>1.29</b>
126.	<p>Study of point defects in as-grown and annealed bismuth germanate single crystals Bhagavannarayana G, Choubey A, Shubin YV, et al.</p> <p>JOURNAL OF APPLIED CRYSTALLOGRAPHY 38: 448-454 Part 3 JUN 2005</p>	<b>5.248</b>
127.	<p>A study of the effect of annealing on Fe-doped LiNbO<sub>3</sub> by HRXRD, XRT and FT-IR Bhagavannarayana G, Ananthamurthy RV, Budakoti GC, et al.</p> <p>JOURNAL OF APPLIED CRYSTALLOGRAPHY 38: 768-771 Part 5 OCT 2005</p>	<b>5.248</b>
128.	<p>Surface and optical characterization of the porous silicon textured surface Vinod PN, Lal M</p> <p>JOURNAL OF MATERIALS SCIENCE-MATERIALS IN ELECTRONICS 16 (1): 1-6 JAN 2005</p>	<b>0.781</b>
129.	<p>Surface distribution studies and improved photoluminescence characteristics of silica coated ZnS : Mn nanophosphor layers Haranath D, Chander H, Bhalla N, et al.</p> <p>APPLIED PHYSICS LETTERS 86 (20): Art. No. 201904 MAY 16 2005</p>	<b>4.127</b>
130.	<p>Synthesis of cubic boron nitride at reduced pressures in the presence of Co(NH<sub>3</sub>)<sub>6</sub>]Cl<sub>3</sub> and NH<sub>4</sub>F Singhal SK, Von der Gonna J, Nover G, et al.</p> <p>DIAMOND AND RELATED MATERIALS 14 (8): 1389-1394 AUG 2005</p>	<b>1.988</b>



131.	Synthesis of cubic and hexagonal CdTe nanoparticles dispersed in SiO <sub>2</sub> films: Role of oxygen during sintering Dayal PB, Mehta BR, Shivaprasad SM JAPANESE JOURNAL OF APPLIED PHYSICS PART 1-REGULAR PAPERS BRIEF COMMUNICATIONS & REVIEW PAPERS 44 (11): 8222-8226 NOV 2005	<b>1.096</b>
132.	Synthesis of silicon carbide nanofibers by sol-gel and polymer blend techniques Raman V, Bhatia G, Bhardwaj S, et al. JOURNAL OF MATERIALS SCIENCE 40 (6): 1521-1527 MAR 2005	<b>0.901</b>
133.	Systematic induction of superconductivity in the Cu(Y <sub>1-x</sub> Ca <sub>x</sub> )Ba <sub>2</sub> Cu <sub>2</sub> O <sub>6+δ</sub> (δ approximate to 0.3) system by Ca substitution Awana VPS, Ansari MA, Nigam R, et al. SUPERCONDUCTOR SCIENCE & TECHNOLOGY 18 (5): 716-720 MAY 2005	<b>1.896</b>
134.	TOF-SIMS and laser-SNMS investigations of dopant distribution in nanophosphors Chakraborty BR, Haranath D, Chander H, et al. NANOTECHNOLOGY 16 (8): 1006-1015 AUG 2005	<b>2.993</b>
135.	Transmission electron microscopy and X-ray diffraction analysis of aluminum-induced crystallization of amorphous silicon in alpha-Si : H/Al and Al/alpha-Si : H structures Kishore R, Hotz K, Naseem HA, et al. MICROSCOPY AND MICROANALYSIS 11 (2): 133-137 APR 2005	<b>1.878</b>
136.	VHF radar observations of weak echo regions in tropical mesoscale convective systems Kumar KK, Joseph J, Jain AR, et al. GEOPHYSICAL RESEARCH LETTERS 32 (10): Art. No. L10804 MAY 18 2005	<b>2.491</b>
137.	VHF/UHF radar observations of tropical mesoscale convective systems over southern India Kumar KK, Jain AR, Rao DN ANNALES GEOPHYSICAE 23 (5): 1673-1683 2005	<b>1.45</b>
138.	X-ray powder diffraction and spectral studies of transition metal complexes using novel tetradentate macrocyclic ligand Chandra S, Gupta R, Gupta N, et al. SYNTHESIS AND REACTIVITY IN INORGANIC METAL-ORGANIC AND NANO-METAL CHEMISTRY 35 (9): 683-689 2005	<b>0.576</b>

**\*STIF2004 (Source Title impact Factor of 2005)**