

Monitoring of the IST RTD Implementation in 2006
Publications - Articles

| No | Title of the article | Journal | | | | | | | Authors | | | | | | | | | | |
|----|--|--|--------|--------|-----------|-----------|------|-----------------|---------|----------|------------------|----------|------------------|----------|------------------|----------|------------------|----------|---------------|
| | | Name | Volume | Issues | Pages | | Date | | | Author 1 | | Author 2 | | Author 3 | | Author 4 | | Author 5 | |
| | | | | | from | to | Day | Month | Year | Initials | Surname | Initials | Surname | Initials | Surname | Initials | Surname | Initials | Surname |
| 1 | Metal/Metal-oxide/Metal etalon structures grown by pulsed laser deposition | Applied Physics A | 79 | 4 to 6 | 1395 | 1397 | | September | 2004 | N.A. | Tsigara | A. | Tsigara | J. | Manasis | A. | Giannoudakos | G. | Mousdis |
| 2 | Pulsed laser deposited lead germanate glass systems | Applied Physics A | 79 | 4 to 6 | 1319 | 1321 | | September | 2004 | A. | Tsigara | L. | Velli | A. | Giannoudakos | C. | Varsamis | N.A. | Vainos |
| 3 | Cobalt chloride based nanocomposite humidity sensors | Glass Technology - European Journal of Glass Science and Technology Part A | 46 | 2 | 171 | 174 | | April | 2005 | G. | Manasis | A. | Tsigara | A. | Giannoudakos | G. | Anyfantis | N.A. | Vainos |
| 4 | Fullerenes-Organic glassy polymer composites: Synthesis and Nonlinear Optical Properties | Glass Technology - European Journal of Glass Science and Technology Part A | 46 | 2 | 62 | 66 | | April | 2005 | K. | Gatsouli | A. | Pispas | N.A. | Vainos | G. | Mousdis | S. | Couris |
| 5 | Laser ablative processing: A route to innovative photonics | Pulsed laser deposition of optoelectronic films, Optoelectronic Materials and Devices Series | 2 | | | | | | 2005 | N.A. | Vainos | | | | | | | | |
| 6 | NiCl ₂ /SiO ₂ Sol-Gel Material for Ammonia Sensing | Advanced Environmental, Chemical, and Biological Sensing Technologies IV, Proc. of SPIE | 6377 | | | | | | | A. | Tsigara | L. | Athanasekos | G. | Mousdis | G. | Manasis | N.A. | Vainos |
| 7 | Diffractive optical elements for photonic gas sensors | Nanosensing: Materials and Devices II, | 6008 | | 282 | 292 | | November | 2005 | N.A. | Madamopoulos | G. | Siganakis | N.A. | Vainos | S. | Pispas | K. | Kibasi |
| 8 | Polymer based photonic sensors for physicochemical monitoring | Advanced Environmental, Chemical, and Biological Sensing Technologies III | 5993 | | 31 | 39 | | November | 2005 | N.A. | Madamopoulos | S. | Pispas | N.A. | Vainos | L. | Athanasekos | K. | Kibasi |
| 9 | Optical fiber long-period grating humidity sensor utilizing PEO/CoCl ₂ outcladding overlayers | Optical Fibers: Technology, Proc SPIE | 5952 | | 126 | 132 | | September | 2005 | M. | Konstantaki | S. | Pispas | N.A. | Vainos | S. | Pissadakis | N. | Madamopoulos |
| 10 | Hybrid polymer/cobalt chloride humidity sensors based on optical diffraction | Sensors and Actuators B | 120 | | 470 | | | | 2007 | A. | Tsigara | G. | Mountrichas | S. | Pispas | A. | Nichelatti | N.A. | Vainos |
| 11 | SiO ₂ /NiCl ₂ nanocomposites for optical detection of ammonia and cross sensitivity effects of relative humidity | Sensors and Actuators B | | | | | | To be submitted | | A. | Tsigara | L. | Athanasekos | M. | Hands | A. | Meristoudi | N.A. | Vainos |
| 12 | Detection of nitro-aromatic compounds by optical gas sensors based on sensitive or photoluminescent polymers | SPIE proceedings | 6189 | | | | | | 2006 | T | Lamarque | P | Le Barny | E | Obert | E | Chastaing | B | Loiseaux |
| 13 | Stable aqueous dispersions of C ₆₀ fullerene by the use of a block copolymer | Journal of Physics: Conference series | 10 | | 163 | 166 | | | 2005 | G. | Mountrichas | S. | Pispas | E.I. | Kamitsos | E. | Xenogiannopoulou | S. | Couris |
| 14 | Nonlinear optical properties of fullerene-Organic glassy polymer composites | Glass Technology | 46 | | 62 | 66 | | | 2005 | K. | Gatsouli | S. | Pispas | G. | Mousdis | N.A. | Vainos | S. | Couris |
| 15 | Transient nonlinear optical response of novel neutral unsymmetrical nickel dithiolene complexes | Chemical Physics Letters | 428 | | 109 | 113 | | | 2006 | P. | Aloukos | S. | Couris | J.B. | Koutselas | G.C. | Anyfantis | G.C. | Papavassiliou |
| 16 | Third-order nonlinear optical properties of thin sputtered gold films | Optics Communications | 275 | 1 | 217 | 222 | 1 | July | 2007 | E. | Xenogiannopoulou | P. | Aloukos | S. | Couris | E. | Kaminska | A. | Piotrowska |
| 17 | Unsymmetrical single-component nickel 1,2-dithiolene complexes with extended tetrachalcogenfulvalenedithiolato ligands | Z. Naturforsch | 62b | | 200 | 204 | | | 2007 | G.C. | Anyfantis | G.C. | Papavassiliou | P. | Aloukos | S. | Couris | Y.F. | Weng |
| 18 | Aqueous dispersions of C ₆₀ fullerene by use of amphiphilic block copolymers: Preparation and nonlinear optical properties | Journal of Chemical Physics | 111 | 17 | 4315 | 4319 | | | 2007 | G. | Mountrichas | S. | Pispas | E. | Xenogiannopoulou | P. | Aloukos | S. | Couris |
| 19 | Third-order nonlinear optical response of gold island films | To Be submitted | | | | | | | | K. | Iliopoulos | S. | Couris | T. | Karakouz | A. | Vaskevich | I. | Rubinstein |
| 20 | Nonlinear optical properties of water-soluble C ₆₀ colloids | To Be submitted | | | | | | | | P. | Aloukos | E. | Xenogiannopoulou | S. | Couris | G. | Mountrichas | S. | Pispas |
| 21 | p-type conducting ZnO: fabrication and characterisation | phys. stat. sol. (c) | 2 | | 1119 | 1124 | | | 2005 | E | Kamińska | A | Piotrowska | J | Kossut | R | Butkute | W | Dobrowolski |
| 22 | Transparent p-type ZnO by oxidation of Zn-based compounds | AIP Conf. Proc. | 772 | | 185 | 186 | | | 2005 | E | Kamińska | J | Kossut | A | Piotrowska | E | Przeździecka | W | Dobrowolski |
| 23 | Transparent p-type ZnO films obtained by oxidation of sputter-deposited Zn ₃ N ₂ | Sol. State. Commun. | 135 | | 11 | 15 | | | 2005 | E | Kamińska | A | Piotrowska | J | Kossut | A | Barc | R | Butkute |
| 24 | p-type in ZnO:N by codoping with Cr | Mat. Res. Soc. Symp. Proc. | 786 | | E6.1.1 | E6.1.6 | | | 2004 | E | Kamińska | A | Piotrowska | J | Kossut | R | Butkute | W | Dobrowolski |
| 25 | ZnO-based p-n Junctions with p-type ZnO by ZnTe Oxidation | Mat. Res. Soc. Symp. Proc. | 891 | | EE08-11.1 | EE08-11.6 | | | 2006 | E | Kamińska | E | Przeździecka | A | Piotrowska | J | Kossut | E | Dynowska |
| 26 | Towards efficient p-type doping of ZnO with group-V atoms: N vs As and Sb | AIP Conf. Proc. (ICPS-28) | | | | | | in press | | E | Kamińska | E | Przeździecka | A | Piotrowska | J | Kossut | E | Dynowska |
| 27 | Ultrathin Gold Island Films on Silanized Glass: Morphology and Optical Properties | Chemistry of Materials | 16 | 18 | 3476 | 3483 | 18 | June | 2004 | I | Doron-Mor | Z | Barkay | N | Filip-Granit | A | Vaskevich | I | Rubinstein |
| 28 | Preparative Manipulation of Gold Nanoparticles by Reversible Binding to a Polymeric Solid Support | Chemistry - A European Journal | 11 | 9 | 2836 | 2841 | 3 | March | 2005 | O | Abed | A | Vaskevich | R | Arad-Ellin | A | Shanzer | I | Rubinstein |
| 29 | Transmission Localized Surface Plasmon Resonance (T-LSPR) Transducers for Sensing in Vapor Phase | in preparation | | | | | | | | T | Karakouz | A | Vaskevich | I | Rubinstein | | | | |
| 30 | Optical characterizations of ZnO, SnO ₂ and TiO ₂ thin films for butane detection | Applied Optics | 45 | 7 | 1425 | 1435 | | | 2006 | T | Mazingue | L | Escoubas | L | Spalluto | F | Flory | P | Jacquouton |
| 31 | Laser-deposited thin films for butane detection | Laser Physics | 16 | 2 | 217 | 222 | | | 2006 | M | Jelinek | T | Kocourek | F | Flory | L | Escoubas | T | Mazingue |
| 32 | Plasma Analyses During Femtosecond Laser Ablation of Ti, Zr and Hf | Journal of Applied Physics | 97 | | | | 15 | March | 2005 | D. | Grojo | J. | Hermann | A. | Perrone | | | | |
| 33 | Pulsed Laser Deposition and Characterization of Textured Pd-doped-SnO ₂ Thin Films for Gas Sensing Applications | Thin Solid Films | 497 | | 142 | 146 | | | 2006 | | Pereira | L. | Cultrera | A. | Dima | M. | Susu | A. | Perrone |
| 34 | Investigation of Liquid Droplets, Plume Deflection and a Columnar Structure in Laser Ablation of Silicon | Physical Review B | 73 | 7 | | | | | 2006 | L. | Cultrera | M.I. | Zeifman | A. | Perrone | | | | |
| 35 | Double-peak Droplet Mass Distribution Observed During sub-ps Laser Ablation of Si Target | Applied Physics A | | | | | | | 2007 | L. | Cultrera | A. | Dima | A. | Perrone | D. | Pisignano | R. | Cingolani |

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| 36 | Doped thin metal oxide films for catalytic gas sensors | Applied Surface Science | 252 | 13 | 4578 | 4581 | 30 | April | 2006 | E. | Gyorgy | E. | Axente | I. N. | Mihailescu | C. | Ducu | H. | Du |
| 37 | Anatase phase TiO ₂ thin films obtained by pulsed laser deposition for gas sensing applications | Applied Surface Science | 247 | | 429 | 433 | | | 2005 | E. | Gyorgy | G. | Socol | E. | Axente | I. N. | Mihailescu | C. | Ducu |
| 38 | Nanostructured ZnO coatings grown by pulsed laser deposition for optical gas sensing of butane | Journal of Applied Physics | 98 | | 74312_1 | 74312_6 | | | 2005 | Th. | Mazingue | L. | Escoubas | L. | Spalluto | F. | Flory | G. | Socol |
| 39 | Structural and optical characterization of WO ₃ thin films for gas sensor applications | Journal of Applied Physics | 97 | | 93527_1 | 93527_4 | | | 2005 | E. | Gyorgy | G. | Socol | I. N. | Mihailescu | C. | Ducu | S. | Ciuca |
| 40 | SnO ₂ nanostructured films obtained by pulsed laser ablation deposition | Applied Surface Science | 247 | 1_4 | 95 | 105 | | | 2005 | C. | Ristoscu | L. | Cultrera | A. | Dima | A. | Perrone | R. | Cutting |
| 41 | Pulsed laser deposited zinc oxide thin films for optical gas sensor applications | Proc. SPIE | 5830 | | 50 | | | | 2005 | E. | Gyorgy | G. | Socol | I. N. | Mihailescu | J. | Santiso | C. | Ducu |
| 42 | Functional nanostructured metal oxide thin films for applications in optical gas detection | NATO Science Series by Springer Science and Business Media, Eds. Cyril Popov and Wilhelm Kulisch | | | 341 | 344 | | | 2006 | G. | Socol | I. N. | Mihailescu | E. | Axente | C. | Ristoscu | E. | Gyorgy |
| 43 | Structural and optical characterization of undoped, doped, and clustered ZnO thin films obtained by PLD for gas sensing applications | Applied Surface Science | 253 | | 6499 | 6503 | | | 2007 | C. | Ristoscu | D. | Caiteanu | G. | Prodan | G. | Socol | S. | Grigorescu |
| 44 | Growth of oxide thin films for optical gas sensor applications | Applied Surface Science | 252 | 13 | 4582 | 4586 | 30 | April | 2006 | D. | Caiteanu | E. | Gyorgy | S. | Grigorescu | I. N. | Mihailescu | G. | Prodan |
| 45 | Enhanced gas sensing of Au nanocluster-doped or coated zinc oxide thin films | Journal of Applied Physics | Accepted | | | | | May | 2005 | G. | Socol | E. | Axente | C. | Ristoscu | F. | Sima | A. | Popescu |
| 46 | "Microwave-assisted Synthesis of GaO(OH) and Ga ₂ O ₃ Nanorods" | Journal of Nanoparticle Research | 6 | 5 | 509 | 518 | | | 2004 | C R | Patra | Y | Mastai | A | Gedanken | | | | |
| 47 | Rapid Synthesis of Nanoparticles of Hexagonal Type In ₂ O ₃ and Spherical Type Ti ₂ O ₃ by Microwave Irradiation | New Journal of Chemistry | 28 | 8 | 1060 | 1065 | | | 2004 | CR | Patra | A | Gedanken | | | | | | |
| 48 | Thin (001) tungsten trioxide films grown by laser deposition | Appl. Surf. Sci. | 247 (1-4) | | 401 | 405 | | | 2005 | N.E. | Stankova | P.A. | Atanasov | T.J. | Stanimirova | A.Og. | Dikovska | R.W. | Eason |
| 49 | Structural and optical properties of thin indium oxide films produced by pulsed laser deposition | Proc. SPIE | 5830 | | 55 | 59 | | | 2005 | T.J. | Stanimirova | P.A. | Atanasov | A.Og. | Dikovska | N.E. | Stankova | S.H. | Tonchev |
| 50 | Growth of anatase TiO ₂ thin films by laser ablation | Proc. SPIE | 5830 | | 60 | 64 | | | 2005 | N.E. | Stankova | P.A. | Atanasov | A.Og. | Dikovska | I.G. | Dimitrov | G. | Socol |
| 51 | Investigation of the structural and optical properties of tin oxide films grown by pulsed laser deposition | J. Optoelectronics & Advanced Mater. | 7 | | 1335 | 1340 | | | 2005 | T.J. | Stanimirova | P.A. | Atanasov | I.G. | Dimitrov | A.Og. | Dikovska | | |
| 52 | Thin ZnO films produced by pulsed laser deposition | J. Optoelectronics & Advanced Mater. | 7 | | 1329 | 1334 | | | 2005 | A.Og. | Dikovska | P.A. | Atanasov | C. | Vasilev | I.G. | Dimitrov | T.R. | Stoyancho |
| 53 | Fabrication and study of periodically structured Y ₂ O ₃ waveguides | Plasma Proc. & Polymers | 3 | | 201 | 204 | | | 2006 | A.Og. | Dikovska | S.H. | Tonchev | C. | Vasilev | P.A. | Atanasov | | |
| 54 | Pulsed laser deposited ZnO film on side-polished fiber as a gas sensing element | Appl. Optics | | | | | | in press | | A.Og. | Dikovska | P.A. | Atanasov | T.R. | Stoyancho | A.Tz. | Andreev | E.I. | Karakoleva |
| 55 | Optical and structural properties of undoped and palladium doped indium tin oxide films grown by pulsed laser deposition | Appl. Surf. Sci. | | | | | | in press | | T.J. | Stanimirova | P.A. | Atanasov | N.E. | Stankova | I.G. | Dimitrov | T.R. | Stoyancho |
| 56 | Characterization of Vanadium doped ZnO films produced by pulsed laser deposition | Proc. SPIE | 6604 | | | | | | 2007 | M.E. | Koleva | P.A. | Atanasov | J. | Perriere | | | | |
| 57 | Thin-film photonic gas sensors | J. of the Bulg. Acad. of Sci. | 5 | | 20 | 30 | | | 2005 | P.A. | Atanasov | | | | | | | | |
| 58 | Periodically structured ZnO thin films for optical gas sensor application | Sensors and Actuators A | | | | | | In Press | | A.Og. | Dikovska | P.A. | Atanasov | S.H. | Tonchev | J. | Ferreira | L. | Escoubas |