

Publications in International peer-review journals

1. ***Growth and characterization of polar (0001) and semipolar (11-22) InGaN/GaN quantum dots***
A. Das, P. Sinha, Y. Kotsar, P. K. Kandaswamy, G. P. Dimitrakopulos, Th. Kehagias, Ph. Komninou, G. Nataf, P. De Mierry and E. Monroy
Journal of Crystal Growth, DOI 10.1016/j.jcrysgr.2010.10.130 (article in press)
2. ***Morphology and strain of self-assembled semipolar GaN quantum dots in (11-22) AlN***
G. P. Dimitrakopulos, E. Kalesaki, J. Kioglou, Th. Kehagias, A. Lotsari, L. Lahourcade, E. Monroy, I. Häusler, H. Kirmse, W. Neumann, G. Jurczak, T. D. Young, P. Dluzewski, Ph. Komninou and Th. Karakostas
Journal of Applied Physics **108**, 104304 (2010)
3. ***Piezoelectric InAs (211)B quantum dots grown by molecular beam epitaxy: Structural and optical properties***
G. E. Dialynas, S. Kalliakos, C. Xenogianni, M. Androulidaki, T. Kehagias, P. Komninou, P. G. Savvidis, Z. Hatzopoulos, and N. T. Pelekanos
Journal of Applied Physics **108**, 103525 (2010)
4. ***Crystallization process of thermally treated vitrified EAFD waste***
I. Tsilika, I. Elefteriadis, T. Kehagias, E. Pavlidou, T. Karakostas and P. Komninou
Journal of the European Ceramic Society **30**, 2009 (2010)
5. ***Direct comparison of catalyst free and catalyst – induced GaN nanowires***
C. Cheze, L. Geelhaar, O. Brandt, W. M. Weber, H. Riechert, St. Munch, R. Rothermund, St. Reitzenstein, A. Forchel, Th. Kehagias, Ph. Komninou, G. P. Dimitrakopulos and Th. Karakostas
Nano Research **3**, 528 (2010)
6. ***Interfacial structure of semipolar AlN grown on m-plane sapphire by MBE***
T. Kehagias, L. Lahourcade, A. Lotsari, E. Monroy, G. P. Dimitrakopulos and P. Komninou
Physica Status Solidi (b) **247**, 1637 (2010)
7. ***Microstructure of N-face InN grown on Si (111) by plasma-assisted MBE using a thin GaN-AlN buffer layer***
G. P. Dimitrakopulos, Th. Kehagias, A. Ajagunna, J. Kioglou, I. Kerasiotis, G. Nouet, A. P. Vajpeyi, Ph. Komninou and Th. Karakostas
Physica Status Solidi (a) **207**, 1074 (2010)
8. ***Structure, stability and mechanical performance of AlN:Ag nanocomposite films***
A. Lotsari, G.P. Dimitrakopulos, Th. Kehagias, P. Kavouras, H. Zoubos, L.E. Koutsokeras, P. Patsalas, Ph. Komninou
Surface and Coatings Technology **204**, 1937 (2010)
9. ***Electron microscopy of InGaN nanopillars spontaneously grown on Si (111) substrates***
Th. Kehagias, I. Kerasiotis, A. P. Vajpeyi, I. Hausler, W. Neumann, A. Georgakilas, G. P. Dimitrakopulos, and Ph. Komninou

10. “*On the deposition mechanisms and the formation of glassy Cu-Zr thin films*”
G. A. Almyras, G. M. Matenoglou, Ph. Komninou, C. Kosmidis, P. Patsalas, and G. A. Evangelakis
J. Appl. Phys. **107**, 084313 (2010)
11. “*Continuum and atomistic modelling of the mixed straight dislocation*”
P. Dluzewski, T. D. Young, G. P. Dimitrakopoulos, and Ph. Komninou
International Journal for Multiscale Computational Engineering **8**, 331 (2010)
12. “*Metal-containing Diamond Like Carbon (DLC:Ag) and AlN (AlN:Ag) metallo-dielectric nanocomposites*”
G. M. Matenoglou, H. Zoubos, A. Lotsari, Ch. E. Lekka, Ph. Komninou, G. P. Dimitrakopoulos, C. Kosmidis, G. A. Evangelakis, P. Patsalas
Thin Solid Films **518**, 1508–1511 (2010)
13. “*The defect character of GaN growth on r-plane sapphire*”
J. Smalc-Koziorowska, G. Tsiakatouras, A. Lotsari, A. Georgakilas, and G. P. Dimitrakopoulos
Journal of Applied Physics **107**, 073525/1-10 (2010)
14. “*Bare-Eye View at the Nanoscale: a New Visual Interferometric Multi-Indicator (VIMI)*”
E. Lidorikis, P. Patsalas, N. Panagiotopoulos, C. Prouskas, G. Dimitrakopoulos, Ph. Komninou, Th. Karakostas, A. Tighe
ACS Applied Materials & Interfaces **2**, 3052–3058 (2010)
15. “*Rapid magnetic heating treatment by highly charged maghemite nanoparticles on Wistar rats exocranial glioma tumors at microliter volume*”
I. Rabias, D. Tsitrouli, E. Karakosta, T. Kehagias, G. Diamantopoulos, M. Fardis, D. Stamopoulos, T. G. Maris, P. Falaras, N. Zouridakis, N. Diamantis, G. Panayotou, D. A. Verganelakis, G. I. Drossopoulou, E. C. Tsilibari, and G. Papavassiliou
Biomicrofluidics **4**, 1 (2010)
16. “*Nanoscale indium variation along InGaN nanopillars grown on (111) Si substrates*”
Th. Kehagias
Physica E: Low-Dimensional Systems and Nanostructures **42**, 2197 (2010)
17. “*Self-assembled multifunctional Fe/MgO nanospheres for magnetic resonance imaging and hyperthermia*”
C. Martinez-Boubeta, Ll. Balcells, R. Cristòfol, C. Sanfeliu, E. Rodríguez, R. Weissleder, S. Lope-Piedrafita, K. Simeonidis, M. Angelakeris, F. Sandiumenge, A. Calleja, Ll. Casas, Cl. Montyh, B. Martínez
Nanomedicine: Nanotechnology, Biology, and Medicine **6**, Issue 2, 362-370 (2010).
18. “*Size-induced effects in wet-chemically synthesized CoPt₃ nanoparticles*”
S. Mourdikoudis, K. Simeonidis, K. Gloystein, M. Angelakeris, C. Dendrinou-Samara, F. Tuna and O. Kalogirou
J. Nanosci. Nanotechnol. **10**, 6087-6092 (2010)

19. “*Tuning the perpendicular magnetic anisotropy of Co-based layers in multilayered systems*”
M. Angelakeris, E. Th. Papaioannou, P. Poulopoulos, M. Kopsidis, O. Kalogirou and N. K. Flevaris
J. Nanosci. Nanotechno. **10**, 6082-6086 (2010)
20. “*The effect of composition and structural ordering on the magnetism of FePt nanoparticles*”
O. Kalogirou, M. Angelakeris, C. Dendrinou-Samara, S. Moudrikoudis, K. Simeonidis, K. Gloystein, A. Vilalta-Clemente, I. Tsiaouassis
J. Nanosci. Nanotechn. **10**, 6017-6023 (2010)
21. “*The role of synthetic parameters in the magnetic behavior of relative large hcp Ni nanoparticles*”
A. Kotoulas, M. Gjoka, K. Simeonidis, I. Tsiaouassis, M. Angelakeris, O. Kalogirou, C. Dendrinou-Samara
J. Nanopart. Res., doi 10.1007/s11051-010-9941-2 (2010)
22. “*Field-assisted organization, substrate effects and magnetic behavior of Ag₃₀Co₇₀ core-shell nanoparticles*”
A.D. Crisan, M. Angelakeris, K. Simeonidis, I. Tsiaouassis, O. Crisan
Solid State Sci. Solid State Sciences **12**, 1907-1911 (2010)
23. “*Influence of dipolar interactions on hyperthermia properties of ferromagnetic Particles*”
D. Serantes, D. Baldomir, C. Martinez-Boubeta, K. Simeonidis, M. Angelakeris, E. Natividad, M. Castro, D.-X. Chen, A. Sanchez, Ll. Balcells and B. Martínez
J. Appl. Phys. **108**, 073918 (2010)
24. “*Spreading of infection in a two species reaction-diffusion process in networks*”
P. Korosoglou, A. Kittas and P. Argyrakis
Physical Review E **82**, 061122 (2010)
25. “*Worldwide spreading of economic crisis*”
A. Garas, P. Argyrakis, C. Rozenblat, M. Tomassini and S. Havlin
New Journal of Physics **12**, 113043 (2010)
26. “*Magnetic confinement of Brownian rotation to a single axis and application to Janus and cluster microparticles*”
B. H. McNaughton, M. Shlomi, P. Kinnunen, C. Cionca, S. N. Pei, R. Clarke, P. Argyrakis and R. Kopelman
Applied Physics Letters **97**, 144103 (2010).
27. “*Percolation of randomly distributed growing clusters: Finite Size Scaling and Critical Exponents*”
N. Tsakiris, M. Maragakis, K. Kosmidis and P. Argyrakis
Physical Review E **82**, 041108 (2010)
28. “*Effect of the transition of networks from floppy to rigid on the diffusion coefficient*”
N. Tsakiris, P. Argyrakis and I. Avramov
Physical Review E **81**, 022101 (2010).
29. “*Crystal growth model with stress development and relaxation*”

N. Tsakiris, P. Argyrakis, I. Avramov, C. Bocker and C. Ruessel
Europhysics Letters **89**, 18004 (2010)

30. ***Indium implantation and annealing of GaN: Lattice damage and recovery***
M. Katsikini, J. Arvanitidis, S. Ves, E.C. Paloura et al
Physics Status Solidi c **7**, 36 (2010)
31. ***Local bonding geometry of oxygen implanted GaN: a depth dependent study***
M. Katsikini, F. Boscherini, E. C. Paloura
Journal of Nanoscience & Nanotechnology **10**, 6260 (2010)
32. ***Application of conventional and microbeam synchrotron radiation X-ray fluorescence and absorption for the characterization of human nails***
M. Katsikini, A. Mavromati, F. Pinakidou, E. C. Paloura, D. Gioulekas, D. Ioannides, A. Erko, I. Zizak
Journal of Nanoscience and Nanotechnology **10**, 6266 (2010)
33. ***Nanostructural characterization of TiN-Cu films using EXAFS spectroscopy***
F. Pinakidou, E. C. Paloura, G.M. Mateneoglou, P. Patsalas
Surface & Coatings Technology **204**, 1933 (2010)
34. ***Dose-dependent bonding environment of oxygen implanted in GaN***
M. Katsikini, F. Boscherini, E. C. Paloura
Nucl. Instr. & Methods B **268**, 241 (2010)
35. ***Micro-XRF and micro-XAFS studies of an Al matrix Fe-Ni composite***
F. Pinakidou, M. Katsikini, E.C. Paloura G. Vourlias, G. Stergioudis
Nucl. Instr. & Methods B **268**, 356 (2010)
36. ***Fe distribution and speciation in human nails***
M. Katsikini, F. Pinakidou, E. Mavromati, E. C. Paloura, D. Gioulekas, D. Grolimund
Nucl. Instr. & Methods B **268**, 420 (2010) (doi:10.1016/j.nimb.2009.09.047)
37. ***Raman scattering of $In_xAl_{1-x}N$ alloys with $0.2 < x < 0.9$***
M. Katsikini, J. Arvanitidis, D. Christofilos, S. Ves, A. Adikimenakis, A. Georgakilas
Physica Status Solidi c **7**, 76 (2010)
38. ***Vibrational properties of $(Gd_{1-x}Y_x)_3Ga_5O_{12}$ solid solutions***
Papagelis K, Arvanitidis J, Vinga E, Christofilos D, Kourouklis GA, Kimura H, Ves S.
JOURNAL OF APPLIED PHYSICS **107** , Article Number: 113504 (2010)
39. ***Electronic properties of binary and ternary, hard and refractory transition metal nitrides***
L.E. Koutsokeras, N. Hastas, S. Kassavetis, O. Valassiadis, C. Charitidis, S. Logothetidis, P. Patsalas
Surface and Coatings Technology **204 (12-13)**, 2038-2041 (2010)
40. ***Real-time optical modelling and investigation of inorganic nano-layer growth onto flexible polymeric substrates***
A. Laskarakis, D. Georgiou, S. Logothetidis

- 41.** “*Modification of the electrical properties of PEDOT:PSS by the incorporation of ZnO nanoparticles synthesized by laser ablation*”
N.G. Semaltianos, S. Logothetidis, N. Hastas, W. Perrie, S. Romani, R.J. Potter, G. Dearden, K.G. Watkins, P. French, M. Sharp
Chemical Physics Letters **484** (4-6), 283-289 (2010)
- 42.** “*Atomic-scale mechanisms for diffusion of impurities in transition-metal nitrides*”
L. Tsetseris, S. Logothetidis, S.T. Pantelides
Surface and Coatings Technology **204**, 2089-2094 (2010)
- 43.** “*In situ and real-time optical investigation of nitrogen plasma treatment of polycarbonate*”
A. Laskarakis, S. Kassavetis, C. Gravalidis, S. Logothetidis
Nuclear Instruments and Methods in Physics Research Section B: Beam Interactions with Materials and Atoms **268** (5), 460-465 (2010)
- 44.** “*Silicon nanoparticles generated by femtosecond laser ablation in a liquid environment*”
Semaltianos N. G., Logothetidis S., Perrie W., Romani S., Potter R. J., Edwardson S. P., French P., Sharp, M., Dearden, G., Watkins, K. G.
Journal of nanoparticle research **12** (2, Sp. Iss. SI), 573-580 (2010)
- 45.** “*Electronic and structural properties of TiB₂: Bulk, surface, and nanoscale effects*”
George Volonakis, Leonidas Tsetseris, Stergios Logothetidis
Materials Science and Engineering: B, In Press, Corrected Proof (2010)
- 46.** “*Atomic force microscopy probing in the measurement of cell mechanics*”
Dimitrios Kirmizis and Stergios Logothetidis
International Journal of Nanomedicine **5**, 137–145 (2010)
- 47.** “*Nanomedicine for the reduction of the thrombogenicity of stent coatings*”
Varvara C Karagkiozaki, Stergios D Logothetidis, Spyridon N Kassavetis, George D Giannoglou
International Journal of Nanomedicine **5**, 239–248 (2010)
- 48.** “*Simple method for coating Si (100) surfaces with ferritin monolayers - Iron oxide quantum dots*”
G. Papadopoulos, C. Anetakis, C. Gravalidis, S. Kassavetis, N. Vouroutzis, N. Frangis and S. Logothetidis
Materials Science and Engineering B In Press, Corrected Proof, (2010)
- 49.** “*Laser ablation in water: A route to synthesize nanoparticles of titanium monoxide*”
N.G. Semaltianos, S. Logothetidis, N. Frangis, I. Tsiaouassis, W. Perrie, G. Dearden, K.G. Watkins
Chemical Physics Letters **496** (1-3), 113-116 (2010)
- 50.** “*Focus on Flexible Organic Electronics*”
Logothetidis S.
EUROPEAN PHYSICAL JOURNAL-APPLIED PHYSICS **51** (3) 33201 (2010)

- 51. "Growth mechanisms and thickness effect on the properties of Al-doped ZnO thin films grown on polymeric substrates"**
 Koidis C; Logothetidis S, Kassavetis S, Laskarakis A¹, Hastas N, Valassiades O.
PHYSICA STATUS SOLIDI A-APPLICATIONS AND MATERIALS SCIENCE **207** (7), 1581-1585 (2010)
- 52. "Optical properties of organic thin films deposited via organic vapour phase deposition"**
 Laskarakis, A; Georgiou, D; Logothetidis, S.
PHYSICA STATUS SOLIDI A-APPLICATIONS AND MATERIALS SCIENCE **207** (7), 1765-1771 (2010)
- 53. "Far infrared properties of PbTe doped with Hg"**
 Nikolic P.M., Vujatovic S.S., Paraskevopoulos K.M., Pavlidou E., Zorba T.T., Ivetic T., Cvetkovic O., Aleksic O.S., Blagojevic V., Nikolic M.V.
Optoelectronics and Advanced Mater. -Rapid Communications **4**, 151 (2010)
- 54. "Efficiency Study of commercial Thermoelectric Power Generator (TEG)"**
 E. Hatzikraniotis, K.T. Zorbas, I. Samaras, Th. Kyratsi, K. M. Paraskevopoulos
Journal of Electronic Materials **39**, 2112 (2010)
- 55. "Thermoelectric Properties of Nano-crystalline PbTe Synthesized by Mechanical Alloying"**
 Ch. Papageorgiou, E. Hatzikraniotis, Ch.B. Lioutas, N. Frangis, O. Valasiades, K.M. Paraskevopoulos, Th. Kyratsi
Journal of Electronic Materials **39**, 1665 (2010)
- 56. "Characterisation of the bioactive behaviour of sol-gel hydroxyapatite-CaO and hydroxyapatite-CaO-bioactive glass composites"**
 E. Hatzistavrou, X. Chatzistavrou, L. Papadopoulou, N. Kantiranis, E. Kontonasaki, A.R. Boccaccini, K.M. Paraskevopoulos
Materials Science and Engineering C **30**, 497 (2010)
- 57. "Characterization and in vitro-bioactivity of natural hydroxyapatite based bio glass-ceramics synthesized by thermal plasma processing"**
 C.P. Yoganand, V. Selvarajan, Valeria Cannillo, Antonella Sola, E. Roumeli, O.M. Goudouri, K.M. Paraskevopoulos, Mahmoud Rouabchia
Ceramics International **36**, 1757 (2010)
- 58. "Thermal degradation kinetics and decomposition mechanism of two new aliphatic biodegradable polyesters poly(propylene glutarate) and poly(propylene suberate)"**
 K. Chrissafis, K. M. Paraskevopoulos, D. Bikaris
Thermochimica Acta **505**, 59 (2010)
- 59. "Sol-gel based fabrication of novel glass-ceramics and composites for dental applications"**
 X. Chatzistavrou, D. Esteve, E. Hatzistavrou, E. Kontonasaki, K. M. Paraskevopoulos, Aldo R. Boccaccini
Materials Science and Engineering C **30**, 730 (2010)
- 60. "Oxidized multi-walled carbon nanotubes as effective reinforcement and thermal stability agent of PLA ligaments"**
 K. Chrissafis, K.M. Paraskevopoulos, A. Jannakoudakis, T. Beslikas, D. Bikaris

- 61. “Optical far infrared properties of $PtSb_2$ ”**
N. Nikolic, S. S. Vujatovic, T. Ivetic, K. M. Paraskevopoulos, T. T. Zorba, O. S. Aleksic, V. Blagojevic, M. V. Nikolic, P. M. Nikolic
Optoelectronics & Advanced Materials-Rapid Communications **4**, 668 (2010)
- 62. “TL and OSL Response of Turquoise for Dosimetric Application”**
B. Subedi, D. Afouxenidis, G.S. Polymeris, N. Tsirlignanis, K.M. Paraskevopoulos, G. Kitis
Mediterranean Archaeology and Archaeometry **10**, No. 4, 43 (2010)
- 63. “Optical Properties PbTe doped with Nd”**
M. V. Nikolic, K. M. Paraskevopoulos, T. Ivetic', T. T. Zorba, S. S. Vujatovic E. Pavlidou, V. Blagojevic, A. Bojicic, O. S. Aleksic, N. Nikolic, W. Konig, P. M. Nikolic
Journal of Materials Science **45**, 5910 (2010)
- 64. “Non-isothermal crystallization kinetics of Poly(ethylene terephthalate) fumed silica (PET/SiO₂) prepared by in-situ polymerization”**
G. Antoniadis, K.M. Paraskevopoulos, D. Bikaris, K. Chrissafis
Thermochimica Acta **510**, 103 (2010)
- 65. “Structural Characterization of Nano-crystalline Mg₂Si Prepared by Ball Milling”**
K. Ioannou, E. Hatzikraniotis, Ch. B. Lioutas, K. M. Paraskevopoulos, Th. Kyrtasi
Advances in Science and Technology **74**, 48 (2010)
- 66. “Optical far infrared properties of FeS₂”**
M.V. Nikolic, S.S. Vujatovic, T. Ivetic, K.M. Paraskevopoulos, T.T. Zorba, O.S. Aleksic, V. Blagojevic, N. Nikolic, P.M. Nikolic
Optoelectronics and Advanced Materials- Rapid Communications **4**, 2000 (2010)
- 67. “Study of LiMgVO₄ electrical conductivity mechanism”**
C. Paraskeva, A. Kazakopoulos, K. Chrissafis and O. Kalogirou
J. Alloys Compd. **489**, 714 (2010)
- 68. “In-situ prepared PET nanocomposites: Effect of organically modified montmorillonite and fumed silica nanoparticles on PET physical properties and thermal degradation kinetics”**
A. Vassiliou, K. Chrissafis, D.N. Bikaris
Thermochim. Acta **500**, 21 (2010)
- 69. “Thermal degradation kinetics of poly(ethylene terephthalate) with multi-walled carbon nanotubes (PET/MWCNTs)”**
A. Vassiliou, K. Chrissafis, D.N. Bikaris
J. Therm. Anal. Calorim. **100**, 1063 (2010)
- 70. “Initial stages of oxidation resistance of a precipitation-hardening (PH) steel”**
G. Vourlias, N. Pistofidis, E. Pavlidou, K. Chrissafis
J. Therm. Anal. Calorim. **101**, 893 (2010)
- 71. “Detail kinetic analysis of the thermal decomposition of PLA with oxidized multi-wall carbon nanotubes”**
K. Chrissafis,

72. “*A different approach for the study of the crystallization kinetics in polymers. Key study: PET/SiO₂ nanocomposites*”
G. Papageorgiou, D.N. Bikaris, K. Chrissafis,
Polymer International **59**, 1630 (2010)
73. “*An estimate of the minting method of three silver coins of the 3rd century B.C. through their microstructural study*”
N. Pistofidis, G. Vourlias, T. Dilo, N. Civici, S. Gjongecaj, S. Skolianos, E.K. Polychroniadis
Physica B: Condensed Matter **405**, 2166-2170 (2010)
74. “*A self-organized nanostructure induced by phase separation in NiCuZn-ferrites*”
D. Sakellari, N. Frangis, E.K. Polychroniadis
Physica E: Low-Dimensional Systems and Nanostructures **42**, 1777-1780 (2010)
75. “*Incorporation of group III, IV and v elements in 3CSiC(1 1 1) layers grown by the vapourliquidsolid mechanism*”
J. Lorenzzi, G. Zoulis, M. Marinova, O. Kim-Hak, J.W. Sun, N. Jegenyes, H. Peyre, F. Cauwet, P. Chaudouet, M. Soueidan, D. Carole, J. Camassel, E.K. Polychroniadis, G. Ferro
Journal of Crystal Growth **312**, 3443-3450 (2010)
76. “*The effect of Al and Cr additions on pack cementation zinc coatings*”
Chaliampalias, D., Papazoglou, M., Tsipas, S., Pavlidou, E., Skolianos, S., Stergioudis, G., Vourlias, G.
Applied Surface Science **256** (11), 3618-3623 (2010)
77. “*Methanol oxidation at Pt-Cu, Pt-Ni, and Pt-Co electrode coatings prepared by a galvanic replacement process*”
Papadimitriou, S., Armyanov, S., Valova, E., Hubin, A., Steenhaut, O., Pavlidou, E., Kokkinidis, G., Sotiropoulos, S.
Journal of Physical Chemistry C **114** (11), 5217-5223 (2010)
78. “*Investigation of ZrN hard coatings obtained by cathodic arc evaporation*”
Kakanakov, R., Bahchedjiev, Hr., Kolaklieva, L., Cholakova, T., Evtimova, Sv., Polyhroniadis, E., Pavlidou, E., Tsiaoussis, I.
Diffusion and Defect Data Pt.B: Solid State Phenomena **159**, 113-116 (2010)
79. “*Microstructural characterization of oxide morphologies on Ni and Inconel foams exposed to concentrated solar radiation*”
Michailidis, N., Stergioudi, F., Omar, H., Pavlidou, E., Tsipas, D.N., Albanakis, C., Missirlis, D., Granier, B.
Journal of Alloys and Compounds **496** (1-2), 644-649 (2010)
80. “*A comparative study of yttria stabilized zirconia coatings deposited with atmospheric plasma spray and detonation gun*”
Pistofidis, N., Vourlias, G., Chaliampalias, D., Pavlidou, E., Chrissafis, K., Stergioudis, G., Polychroniadis, E.K.
Journal of Optoelectronics and Advanced Materials **12** (7), 1515-1519 (2010)
81. “*Deposition of oxidation resistant zinc coatings on copper and leaded brass substrates with pack cementation process*”

Papazoglou, M., Chaliampalias, D., Vourlias, G., Pavlidou, E., Skolianos, S., Stergioudis, G., Polychroniadis, E.K.

Journal of Optoelectronics and Advanced Materials **12 (7)**, 1520-1523 (2010)

82. “*Two-phases epitaxial growth of erbium silicide on Si (100)*”
N. Frangis
Physica E **43(1)**, 176-181 (2010)
83. “*Understanding Nanostructures in Thermoelectric Materials: An Electron Microscopy Study of AgPb₁₈SbSe₂₀ Crystals*”
Ch. B. Lioutas, N. Frangis, I. Todorov, D.Y. Chung and M.G. Kanatzidis
Chemistry of Materials **22 (19)**, 5630-5635 (2010)
- 84 “*Analytical modeling for the current-voltage characteristics of lightly-doped symmetric double-gate MOSFETs*”
A. Tsormpatzoglou, D. H. Tassis, C. A. Dimitriadis, G. Ghibaudo, G. Pananakakis and N. Collaert
Microelectron. Eng. **87**, 1764 (2010)
85. “*Source/drain optimization of underlapped lightly doped double-gate MOSFETs*”
D. H. Tassis, A. Tsormpatzoglou, C. A. Dimitriadis, G. Ghibaudo, G. Pananakakis and N. Collaert
Microelectron. Eng. **87**, 2353 (2010)
86. “*A new threshold voltage compensation technique of poly-Si TFTs for AMOLED displays pixel circuits*”
I. Pappas, S. Siskos and C.A. Dimitriadis,
Journal of the SID **18/10**, 721 (2010)
87. “*Analytical low-frequency noise model in the linear region of lightly doped nanoscale double-gate MOSFETs*”
E.G. Ioannidis, C.G. Theodorou, A. Tsormpatzoglou, D.H. Tassis, K. Papathanasiou, C.A. Dimitriadis, J. Jomaah, and G. Ghibaudo
J. Appl. Phys. **108**, 064512, 2010
88. “*Polycrystalline silicon TFTs threshold voltage compensated bias current generator for analog circuit design*”
I. Pappas, S. Siskos ans C.A.Dimitriadis,
IEEE/OSA Journal of Display Technology **6**, 633, 2010
89. “*Characterization of traps in the gate dielectric of amorphous and nanocrystalline silicon thin-film transistors by 1/f noise*”
E.G. Ioannidis, A. Tsormpatzoglou, D.H. Tassis, C.A. Dimitriadis, F. Templier, and G. Kamarinos,
J. Appl. Phys. **108**, 106103, 2010
90. “*Analytical threshold voltage model for lightly doped short-channel tri-gate MOSFETs*”
A. Tsormpatzoglou, D. H. Tassis, C. A. Dimitriadis, G. Ghibaudo, N. Collaert, and G. Pananakakis,
Solid State Electron. **57**, 31, 2010

Publications in International Conference Proceeding Volumes

1. **“Self-assembled multifunctional Fe/MgO nanospheres for MRI and Hyperthermia”**
C. Martinez-Boubeta, Ll. Balcells, B. Martínez, R. Cristòfol, C. Sanfeliu, E. Rodríguez, R. Weissleder, S. Lope-Piedrafita, A. Chalkidou, K. Simeonidis, M. Angelakeris, Th. Samaras, K. Papazisis, C. Dendrinou-Samara, O. Kalogirou, D. Serantes, and D. Baldomir
in 8th International Conference on the Scientific and Clinical Applications of Magnetic Carriers, Rostock-Germany, 25-29 May 2010.
2. **“Structural and Magnetic Hyperthermia Features of Iron Oxide Nanoparticles”**
A. Kotoulas, E. Gkanas, K. Simeonidis, M. Angelakeris, C. Dendrinou-Samara and O. Kalogirou
in 7th International Conference on Nanosciences & Nanotechnologies, Ouranoupolis, Halkidiki, Greece, 11-14 July 2010.
3. **“Hyperthermia Response of Iron Oxide Nanoparticles taken up by Cancer Cells”**
E. Gkanas, M. Koureta, A. Kotoulas, M. Angelakeris, K. Chlichlia, A. Dendrinou-Samara, Th. Samaras and O. Kalogirou
in 7th International Conference on Nanosciences & Nanotechnologies, Ouranoupolis, Halkidiki, Greece, 11-14 July 2010.
4. **“Synthesis and characterization of NiFe₂O₄ core shell nanoparticles”**
Th. Kalampaliki, M. Darda, K. Simeonidis, M. Angelakeris, C. Dendrinou-Samara
in 7th International Conference on Nanosciences & Nanotechnologies, Ouranoupolis, Halkidiki, Greece, 11-14 July 2010.
5. **“Synthesis of iron oxides nanoparticles for biomedical applications”**
M. Filippoussi, A. Kotoulas, G. Vourlias, N. Vouroutzis, M. Angelakeris, O. Kalogirou, D. Zamboulis, E. Pavlidou
in 7th International Conference on Nanosciences & Nanotechnologies, Ouranoupolis, Halkidiki, Greece, 11-14 July 2010.
6. **“Influence of Deposition Parameters on Self-assembled Ag-Co Core-shell Nanoparticles”**
A.D. Crisan, M. Angelakeris, K. Simeonidis, O. Crisan
in 7th International Conference on Nanosciences & Nanotechnologies, Ouranoupolis, Halkidiki, Greece, 11-14 July 2010.
7. **“Percolation in the growing clusters model”**
M. Maragakis, N. Tsakiris, K. Kosmidis, and P. Argyrakis
workshop proceedings, p.9, *TWCS'2010 – "Turunc Workshop on Complex Systems"* 2010, Marmaris, Turkey, August – September 2010.
8. **“Explosive Percolation as a tool of examining discontinuous phenomena in Nanotechnology”**
P. Giazitzidis, N. Mpastas, K. Kosmidis and P. Argyrakis
7th International Conference on Nanosciences & Nanotechnologies (NN10), Ouranoupoli, Chalkidiki, 11-14 July 2010.

- 9. "High pressure Raman study of the $Sm_{2.75}C_{60}$ fulleride"**
 S. M. Souliou, J. Arvanitidis, D. Christofilos, K. Papagelis, S. Ves, G. A. Kourouklis, K. Prassides, Y. Iwasa, and K. Syassen J. Arvanitidis, D. Christofilos, G. A. Kourouklis, S. Ves, T. Takenobu, Y. Iwasa, and H. Kataura.
48th EHPRG Conference, 25-29 July 2010 - Uppsala, Sweden
- 10. "ELNES study of AlN , $Al_xIn_{1-x}N$ and AlN_yO_{1-y} "**
 M.M. Soumelidou, E. Kalesaki, J. Kioseoglou, H. Kirmse, W. Neumann, Ph. Komninou and Th. Karakostas
"Frontiers in EELS", Vienna University of Technology, Austria, March 2010
- 11. "Intergranular boundaries in non-polar and semi-polar III-nitride heteroepitaxy: Introduction mechanisms, energetics and role as defect sources"**
 Ph. Komninou, J. Kioseoglou, Th. Kehagias, E. Kalesaki, A. Lotsari, J. Smałko-Koziorowska, Th. Karakostas, G. P. Dimitrakopoulos
XIII International Conference on Intergranular and Interphase Boundaries, Mie, Japan, 27 June – 2 July 2010
- 12. "Structural properties of Monolayer thick $In_xGa_{1-x}N/GaN$ heterostructures"**
 E. Kalesaki, J. Kioseoglou, S. -L. Sahonta, Th. Kehagias, G. P. Dimitrakopoulos, Ph. Komninou, Th. Karakostas
XIII International Conference on Intergranular and Interphase Boundaries, Mie, Japan, 27 June – 2 July 2010
- 13. "Morphology and strain state determination of semipolar GaN Quantum Dots in AlN matrix"**
 E. Kalesaki, J. Kioseoglou, Th. Kehagias, E. Monroy, H. Kirmse, W. Neumann, P. Dluzewski, G. P. Dimitrakopoulos, Ph. Komninou
XIII International Conference on Intergranular and Interphase Boundaries, Mie, Japan, 27 June – 2 July 2010
- 14. "Morphology and Interfacial Structure of InGaN Nanodisks Grown in GaN Nanorods"**
 Th. Kehagias, T. Koukoula, G.P. Dimitrakopoulos, E. Kalesaki, H. Kirmse, W. Neumann, F. Furtmayr, M. Eickhoff, Th. Karakostas, Ph. Komninou
International Conference on Extended Defects in Semiconductors, Brighton, UK, September 2010
- 15. "Structural characteristics and strain state of semipolar (11-22) GaN Quantum Dots in AlN matrix"**
 G. P. Dimitrakopoulos, E. Kalesaki, J. Kioseoglou, Th. Kehagias, A. Lotsari, L. Lahourcade, E. Monroy, H. Kirmse, W. Neumann, G. Jurczak, T. D. Young, P. Dluzewski, Ph. Komninou, and Th. Karakostas
International Conference on Extended Defects in Semiconductors, Brighton, UK, September 2010
- 16. "Effect of a-edge threading dislocations on the electronic properties of InN"**
 E. Kalesaki, J. Kioseoglou, L. Lymerakis, Ph. Komninou, and Th. Karakostas
International Conference on Extended Defects in Semiconductors, Brighton, UK, September 2010
- 17. "Indium adsorption and incorporation on polar AlN "**
 E. Kalesaki, J. Kioseoglou, Ph. Komninou, and Th. Karakostas

18. “*Atomic structure of nonpolar-semipolar boundaries in III-Nitride semiconductors*”
J. Kioseoglou, G. P. Dimitrakopoulos, J. Smalc-Koziorowska, Th. Kehagias, A. Lotsari, Th. Karakostas and Ph. Komninou
International Conference on Extended Defects in Semiconductors, Brighton, UK,
September 2010
19. “*A DFT investigation of Frank- Shockley partial dislocations in wurtzite GaN*”
J. Kioseoglou, E. Kalesaki, L. Lymerakis, J. Neugebauer, Ph. Komninou, and Th. Karakostas,
International Conference on Extended Defects in Semiconductors, Brighton, UK,
September 2010
20. “*Symmetry and nonlinear mechanics of a semipolar quantum dot*”
T. D. Young, G. Jurczak, P. Dluzewski, E. Kalesaki, G. Dimitrakopoulos, and Ph. Komninou
37th Solid Mechanics Conference, Warsaw, Poland, September 2010
21. “*Structural properties of Semipolar III-Nitride Quantum Dots*”
G. P. Dimitrakopoulos, E. Kalesaki, A. Lotsari, Th. Kehagias, J. Kioseoglou, A. Das, L. Lahourcade, E. Monroy, I. Hausler, H. Kirmse, W. Neumann, Ph. Komninou, and Th. Karakostas
19th European Workshop on Heterostructure Technology (HETECH), Crete, October 2010
22. “*InGaN Nanodiscs Embedded in GaN Nanorods Grown by MBE*”
Th. Kehagias, T. Koukoula, G.P. Dimitrakopoulos, E. Kalesaki, H. Kirmse, W. Neumann, F. Furtmayr, M. Eickhoff, Th. Karakostas, Ph. Komninou
19th European Workshop on Heterostructure Technology (HETECH), Crete, October 2010
23. “*Nanoscale Structure of InGaN Quantum Dot Superlattices Grown by MBE*”
T. Koukoula, Th. Kehagias, A. Lotsari, A. Das, E. Monroy, G.P. Dimitrakopoulos and Ph. Komninou
19th European Workshop on Heterostructure Technology (HETECH), Crete, October 2010
24. “*Surface Thermodynamics of (11-22) and (11-2-2) Semipolar AlN Surfaces*”
E. Kalesaki, L. Lymerakis, J. Kioseoglou, Ph. Komninou and Th. Karakostas
International Workshop on Nitride Semiconductors (IWN 2010), Tampa, USA,
September 2010
25. “*Structural Characteristics and Strain State of Semipolar (11-22) GaN/AlN Quantum Dots*”
G. P. Dimitrakopoulos, E. Kalesaki, J. Kioseoglou, Th. Kehagias, A. Lotsari, L. Lahourcade, E. Monroy, H. Kirmse, W. Neumann, G. Jurczak, T. D. Young, P. Dluzewski, Ph. Komninou and Th. Karakostas
International Workshop on Nitride Semiconductors (IWN 2010), Tampa, USA,
September 2010

- 26. “Optical and Structural Properties of InGaN/GaN Nanostructures Grown in GaN Nanowires”**
F. Furtmayr, Th. Kehagias, G. Dimitrakopoulos, Ph. Komninou, J. Teubert, M. Stutzmann and M. Eickhoff
International Workshop on Nitride Semiconductors (IWN 2010), Tampa, USA, September 2010
- 27. “Plasma-assisted MBE Growth of Semipolar (11-22) InGaN Layers and GaN/InGaN Quantum Dots”**
A. Das, A. Lotsari, S. Magalhaes, P. Sinha, G. P. Dimitrakopoulos, T. Kehagias, P. Komninou, K. Lorenz, E. Alves and E. Monroy
International Workshop on Nitride Semiconductors (IWN 2010), Tampa, USA, September 2010
- 28. “Nucleation, growth and microstructure of hexagonal InN with atomically smooth surface on Si(111)”**
A. O. Ajagunna, Th. Kehagias, T. Koukoula, K. Tsagaraki, M. Kayambaki, M. Androulidaki, Ph. Komninou, and A. Georgakilas
4th International Conference "Micro&Nano2010" on Micro- Nanoelectronics, Nanotechnologies and MEMs, NCSR-Democritos, Athens, Greece, December 2010
- 29. “Nanoscale mechanisms of misfit accommodation and defect introduction in nonpolar and semipolar III-N heteroepitaxy”**
G. Dimitrakopoulos, J. Smalc-Koziorowska, A. Lotsari, J. Kioseoglou, Th. Kehagias, Th. Karakostas, and Ph. Komninou
4th International Conference "Micro&Nano2010" on Micro- Nanoelectronics, Nanotechnologies and MEMs, NCSR-Democritos, Athens, Greece, December 2010
- 30. “Structure and morphology of InGaN nanodiscs set-in GaN nanorods”**
Th. Kehagias, T. Koukoula, G. P. Dimitrakopoulos, E. Kalesaki, H. Kirmse, W. Neumann, F. Furtmayr, M. Eickhoff, Th. Karakostas and Ph. Komninou
4th International Conference "Micro&Nano2010" on Micro- Nanoelectronics, Nanotechnologies and MEMs, NCSR-Democritos, Athens, Greece, December 2010
- 31. “Formation of single-crystal semipolar (1011) InN and polar (0001) InN heterostructures on r-plane sapphire”**
A. O. Ajagunna, K. Tsagaraki, A. Lotsari, G. P. Dimitrakopoulos, Th. Kehagias, M. Androulidaki, Ph. Komninou, and A. Georgakilas
4th International Conference "Micro&Nano2010" on Micro- Nanoelectronics, Nanotechnologies and MEMs, NCSR-Democritos, Athens, Greece, December 2010
- 32. “Structure of asymmetric V-defects in semipolar InGaN grown by MBE”**
A. Lotsari, G. P. Dimitrakopoulos, Th. Kehagias, A. Das, E. Monroy, Ph. Komninou
4th International Conference "Micro&Nano2010" on Micro- Nanoelectronics, Nanotechnologies and MEMs, NCSR-Democritos, Athens, Greece, December 2010
- 33. “Polar and Semipolar InGaN Quantum Dots”**
A. Lotsari, T. Koukoula, Th. Kehagias, A. Das, E. Monroy, G. P. Dimitrakopoulos, Ph. Komninou
4th International Conference "Micro&Nano2010" on Micro- Nanoelectronics, Nanotechnologies and MEMs, NCSR-Democritos, Athens, Greece, December 2010
- 34. “Microstructural evolution and anisotropy in MBE-grown a-plane GaN epilayers on r-plane sapphire”**

A. Lotsari, G. P. Dimitrakopoulos, Th. Kehagias, M. Katsikini, J. Arvanitidis, D. Christofilos, G. Tsiakatouras, A. Georgakilas, Ph. Komninou

4th International Conference "Micro&Nano2010" on Micro- Nanoelectronics, Nanotechnologies and MEMs, NCSR-Democritos, Athens, Greece, December 2010

- 35. "Indium Segregation Mechanisms in MBE and MOVPE-grown InAlN Epilayers"**
S.-L. Sahonta, Th. Kehagias, G.P. Dimitrakopoulos, J. Kioseoglou, H. Kirmse, W. Neumann, C. Giesen, M. Heuken, A. Adikimenakis, A. Georgakilas, and Ph. Komninou
Abstracts of the *MRS 2010 Spring Meeting*, San Francisco, 5-9 April 2010
- 36. "Indium Incorporation Mechanisms in MOVPE and MBE Grown InAlN Thin Films"**
Th. Kehagias, G. P. Dimitrakopoulos, J. Kioseoglou, E. Kalesaki, S.-L. Sahonta, H. Kirmse, W. Neumann, C. Giesen, M. Heuken, A. Adikimenakis, A. Georgakilas, and Ph. Komninou
Abstracts of the *X III International Conference on "Intergranular and Interphase Boundaries in Materials" (iib2010)*, June 27-July 2, 2010, Mie, Japan, p. 179
- 37. "Interfacial defect sources in the growth of a-plane GaN on sapphire"**
G. P. Dimitrakopoulos, J. Smalc-Koziorowska, G. Tsiakatouras, and A. Georgakilas
Abstracts of the *3rd International Symposium on Growth of III-Nitrides (ISGN-3)*, Montpellier, France, July 4-8, 2010
- 38. "Molecular beam epitaxy of a-plane and s-plane InN films on r-plane sapphire"**
A. O. Ajagunna, E. Iliopoulos, G. P. Dimitrakopoulos, A. Lotsari, G. Tsiakatouras, K. Tsagaraki, M. Androulidaki, Th. Kehagias, Ph. Komninou, and A. Georgakilas
Abstracts of the *3rd International Symposium on Growth of III-Nitrides (ISGN-3)*, Montpellier, France, July 4-8, 2010
- 39. "Study of the Internal Quantum Efficiency of III-nitride Quantum Dots"**
E. Monroy, A. Das, Z. Gacevic, P. Sinha, J. Tauber, Y. Kotsar, J. Renard, P. K. Kandaswamy, B. Gayral, G. P. Dimitrakopoulos, Th. Kehagias, and Ph. Komninou
Abstracts of the *3rd International Symposium on Growth of III-Nitrides (ISGN-3)*, Montpellier, France, July 4-8, 2010
- 40. "Electron energy loss spectroscopy of (In,Ga)N/GaN heterostructure nanowires: influence of strain and composition"**
H. Kirmse, I. Häusler, W. Neumann, Ph. Komninou, Th. Kehagias, G. P. Dimitrakopoulos, Th. Karakostas, F. Furtmayr, and M. Eickhoff
Abstracts of the *International Microscopy Congress – IMC17*, 19-24 September 2010, Rio, Brazil
- 41. "Structural characterization of self-assembled InGaN quantum dot superlattices grown by plasma assisted MBE"**
T. Koukoula, Th. Kehagias, A. Lotsari, E. Monroy, G. P. Dimitrakopoulos and Ph. Komninou
Abstracts of the *International Conference on Extended Defects in Semiconductors (EDS2010)*, Brighton, UK, 19-24 September 2010
- 42. "V-defects in semipolar (11̄22) InGaN"**
A. Lotsari, G.P. Dimitrakopoulos, Th. Kehagias, E. Monroy, and Ph. Komninou

- 43. “Properties of InN films grown on r-plane Al₂O₃ by PAMBE”**
A. O. Ajagunna, E. Iliopoulos, A. Lotsari, G. P. Dimitrakopoulos, G. Tsiakatouras, K. Tsagaraki, M. Androulidaki, Ph. Komninou, and A. Georgakilas
Abstracts of the 19th European Workshop on Heterostructure Technology (HETECH2010), Fodele, Crete, 18-20 October 2010
- 44. “Effect of the annealing on the nanomechanical properties and structure of P3HT:fullerene (PCBM) thin films”**
P.G. Karagiannidis, S. Kassavetis, C. Pitsalidis and S. Logothetidis
E-MRS 2010 Spring Meeting, European Materials Research Society, Strasbourg, France, 07-11.06.2010
- 45. “Growth mechanisms, opto-electronic and nanomechanical properties of Al-doped ZnO thin films grown by different techniques”**
C. Koidis, P. G. Karagiannidis, S. Kassavetis, S. Logothetidis, N. A. Hastas, K. Breza, N. Frangis and O. Valassiadis
E-MRS 2010 Spring Meeting, European Materials Research Society, Strasbourg, France, 07-11.06.2010
- 46. “Biological Evaluation of Nanocoatings: Analysis of Cytotoxicity and Proliferation”**
P. Kavatzikidou, S. Kassavetis, S. Logothetidis, E. Pavlidou, P. Patsalas
E-MRS 2010 Spring Meeting, European Materials Research Society, Strasbourg, France, 07-11.06.2010
- 47. “Nanomechanical, structural and optical characterization of micro & nano phase separated P3HT:PCBM blends for organic photovoltaics”**
P.G. Karagiannidis, S. Kassavetis, C. Pitsalidis, D. Georgiou, A. Laskarakis and S. Logothetidis
7th International Conference on Nanosciences & Nanotechnologies- NN10, (Χαλκιδική, Ελλάδα, 11-14.07.2010)
- 48. “Cardiovascular Therapies by Stents based on Nanostructured Biomaterials”**
V. Karagkiozaki, P. Karagiannidis, N.Kalfagiannis, P. Patsalas, E. Diamanti, D. Gournis, G.Giannoglou, S.Logothetidis
7th International Conference on Nanosciences & Nanotechnologies- NN10, (Χαλκιδική, Ελλάδα, 11-14.07.2010)
- 49. “Nanomechanical properties of high barrier thin films”**
S. Kassavetis, S Logothetidis
7th International Conference on Nanosciences & Nanotechnologies- NN10, (Χαλκιδική, Ελλάδα, 11-14.07.2010)
- 50. “Commercialization of academic research in Nanotechnology”**
M. Chachamidou, S. Logothetidis
7th International Conference on Nanosciences & Nanotechnologies- NN10, (Χαλκιδική, Ελλάδα, 11-14.07.2010)
- 51. “Remote Scanning Probe Microscopy for Nano-education”**
M. Chatzidis, S. Kassavetis, I. Zyganidis and S. Logothetidis

- 52. “The unveiling of Nanoscale Imaging for Human Blood Cells probing”**
V. Karagkiozaki, S.Logothetidis, E.Verrou , K.Zervas.
7th International Conference on Nanosciences & Nanotechnologies- NN10,
(Χαλκιδική, Ελλάδα, 11-14.07.2010)
- 53. “Optical investigation of thickness and optical properties of flexible substrates, electrodes & barrier materials”**
D. Georgiou, N. Kalfagiannis, C. Koidis, A. Laskarakis, M. Chatzidis, S. Logothetidis
3rd International Symposium on Flexible Organic Electronics (IS-FOE09)
(Χαλκιδική, Ελλάδα, 11-14.07.2010)
- 54. “Nanomechanical properties, morphology and structure of thermal annealed P3HT:PCBM thin films”**
P.G. Karagiannidis, S. Kassavetis, C. Pitsalidis and S. Logothetidis
3rd International Symposium on Flexible Organic Electronics (IS-FOE09)
(Χαλκιδική, Ελλάδα, 11-14.07.2010)
- 55. “Effect of annealing in the optical, surface and structural properties of P3HT & PCBM thin films”**
D. Georgiou, P. Karagiannidis, C. Pitsalidis, A. Laskarakis, S. Logothetidis
3rd International Symposium on Flexible Organic Electronics (IS-FOE09)
(Χαλκιδική, Ελλάδα, 11-14.07.2010)
- 56. “Surface Morphology and Optical Properties of α -quaterthiophene Thin Films Deposited by Thermal Evaporation”**
C. Pitsalidis, P. Karagiannidis, C. Koidis, A. Laskarakis, S. Logothetidis
7th International Conference on Nanosciences & Nanotechnologies- NN10,
(Χαλκιδική, Ελλάδα, 11-14.07.2010)
- 57. “On the optimization of gravure printed PEDOT:PSS thin films”**
C. Koidis, P. G. Karagiannidis, A. Ioakimidis, S. Kassavetis, N. A. Hastas, A. Laskarakis, and S. Logothetidis
7th International Conference on Nanosciences & Nanotechnologies- NN10,
(Χαλκιδική, Ελλάδα, 11-14.07.2010)
- 58. “Optical, surface, electrical, and nanomechanical properties of roll-to-roll gravure printed PEDOT:PSS thin films”**
C. Koidis, C. Kapnopoulos, P. G. Karagiannidis, M. Chatzidis, S. Kassavetis, N. A. Hastas, A. Laskarakis, and S. Logothetidis
3rd International Symposium on Flexible Organic Electronics (IS-FOE09)
(Χαλκιδική, Ελλάδα, 11-14.07.2010)
- 59. “Optical and vibrational properties of pentacene: polymorph identification and impurity effects”**
G. Volonakis, L. Tsetseris, and S. Logothetidis
3rd International Symposium on Flexible Organic Electronics (IS-FOE09)
(Χαλκιδική, Ελλάδα, 11-14.07.2010)
- 60. “Thematic Research Network - NANONET”**
S. Logothetidis

- 61. "Transmission Electron Microscopy study of P3HT:PCBM active layer in organic solar cells"**
K. Breza, N. Vouroutzis, N. Frangis, P. Karagiannidis, S. Logothetidis
3rd International Symposium on Flexible Organic Electronics (IS-FOE09)
(Χαλκιδική, Ελλάδα, 11-14.07.2010)
- 62. "Nanobiotechnology and Nanomedicine"**
S. Logothetidis
8th Southeast European Congress on Xenobiotic Metabolism and Toxicity (XEMET 2010) 1-5 October 2010
- 63. "Structural Characterization of Nano-crystalline Mg₂Si Prepared by Ball Milling"**
K. Ioannou, E. Hatzikraniotis, Ch. B. Lioutas, K. M. Paraskevopoulos, and Th. Kyratsi
CIMTEC 2010 -12th International Conference on Modern Materials and Technologies Montecatini Terme, Tuscany, Italy, on June 6 to 18, 2010
5th Forum on New Materials, Symposium FE, Advances in Materials and Technologies for Efficient Direct Thermal-to-Electrical Energy Conversion
- 64. "TEM studies in K₂Bi₈Se₁₃ nano-composites prepared by Ball Milling"**
M. Ioannou, E. Hatzikraniotis, K. Chrissafis, Ch. B. Lioutas, D.Y. Chung, K.M. Paraskevopoulos and Th. Kyratsi
7th International Conference on Nanosciences & Nanotechnologies (NN10), 11-14 July 2010, Halkidiki, Greece.
- 65. "Chitosan/Chitosan-Gelatine Composite Ceramics' degradation during human PDLF cell culture"**
A. Theocharidou, C. Tsioptsias, E. Kontonasaki, A. Sivropoulou, C. Panayiotou, K.M. Paraskevopoulos, and P. Koidis
Proceedings of the *International Association for Dental Research, General Session, Barcelona Spain July 14-17, 2010 Nr S3908, 207*
- 66. "Influence of heat-treatment on the surface microstructure of zirconia ceramics"**
A. Vatali, E. Siarambi, E. Kontonasaki, N. Kantiranis, L. Papadopoulou, T. Zorba, N. Vouroutzis, K.M. Paraskevopoulos, P. Koidis
Proceedings of the *International Association for Dental Research, General Session, Barcelona Spain July 14-17, 2010 Nr S4529, 228*
- 67. "Effect of ageing on the strength of yttrium-stabilized zirconia ceramics"**
E. Siarambi, E. Kontonasaki, N. Kantiranis, L. Papadopoulou, T. Zorba, A. Vatali, N. Vouroutzis, K. Paraskevopoulos, P. Koidis
Proceedings of the *International Association for Dental Research, General Session, Barcelona Spain July 14-17, 2010 Nr S4516, 227*
- 68. "Investigation of the in vitro Bioactivity and Flexural Strength of sol-gel derived Dental Ceramics"**
O.M. Goudouri, E. Kontonasaki, L. Papadopoulou, N. Kantiranis, X. Chatzistavrou, P. Koidis, K.M. Paraskevopoulos
23rd European Conference on Biomaterials (ESB) (September 11-15, 2010 Tampere, Finland) nr.233.3929

- 69. "Thermoluminescence as an experimental tool towards the characterization of bioactive materials: The case of 58S bioactive glass"**
 D. Afouzenidis, G. S. Polymeris, O.M. Goudouri, E. Kontonasaki, X. Chatzistavrou, N. C. Tsirliganis, K.M. Paraskevopoulos, G. Kitis
23rd European Conference on Biomaterials (ESB) (September 11-15, 2010 Tampere, Finland) nr.337.2017
- 70. "Reactive deposition epitaxy growth of iron silicide nanoparticles on Si(001)"**
 G. Molnár, L. Dózsa, Z. Vértesy, A. A. Koós, N. Vouroutzis, C. A. Dimitriadis, K. M. Paraskevopoulos
E MRS 2010 Fall meeting, Symposium: C Materials, Devices and Economics Issues for Tomorrow's Photovoltaics, September 13 -16, 2010
- 71. "Preparation of Mg₂Si Thin Films for Thermoelectric Applications"**
 M. Angelakeris, G. Vourlias, E. Hatzikraniotis, A. Siozos, P. Patsalas, K.M. Paraskevopoulos
Proceedings of the 8th European Conference on Thermoelectrics (ECT 2010) Como, Italy, September 22-24, 2010, p. 258
- 72. "Pigments and painting techniques in Abel Monastery Church, a representative monument, inscribed by famous Chioniades iconographers"**
 V. Ganitis, E.C. Stefanaki, T. Zorba, E. Pavlidou, K.M. Paraskevopoulos
Proceedings of the IIC Congress 2010: Conservation and the Eastern Mediterranean, Istanbul, September 20 – 24, 2010, p. 268
- 73. "Thermal behavior of freshwater cultured pearls"**
 E. Theodosoglou, S. Karampelas, E. Fritsch, K.M. Paraskevopoulos, K. Chrissafis and S. Sklavounos
Proceedings of the XIX Congress of the Carpathian Balkan Geological Association, Thessaloniki, Greece, September 23-26, 2010, GEOLOGICA BALCANICA **39**, 391 (2010)
- 74. "Application of traditional recipes for the preparation of the paintings – Physicochemical characterization and study of the ageing mechanisms towards luminescence dating"**
 Anastasia Rousaki, Eleni Kouloumpi, Agni-Vasileia Terlixi, Anna P. Moutsatsou, Georgios S. Polymeris, K. M. Paraskevopoulos
Proceedings of the International Conference on "Works of Art & Conservation Science Today", November 26-28, 2010, Thessaloniki, Greece p. 57
- 75. "Sublimation growth and structural characterization of 3C-SiC on hexagonal and cubic SiC seeds"**
 R. Vasiliauskas, M. Marinova, M. Syvajarvi, A. Mantzari, A. Andreadou, J. Lorenzzi, G. Ferro, E. K. Polychroniadis, R. Yakimova
Material Science Forum **645-648** (2010) 175-178
13th International Conference on Silicon Carbide and Related Materials (ICSCRM 2009), Nürnberg, Germany, October 11-16, 2009
- 76. "6H-type zigzag faults in low-doped 4H-SiC epitaxial layers"**
 T. Robert, M. Marinova, S. Juillaguet, A. Henry, E.K. Polychroniadis, J. Camassel
Material Science Forum **645-648** (2010) 347-350
13th International Conference on Silicon Carbide and Related Materials (ICSCRM 2009), Nürnberg, Germany, October 11-16, 2009

- 77. “The influence of the temperature gradient on the defect structure of 3C-SiC grown heteroepitaxially on 6H-SiC by sublimation epitaxy”**
 M. Marinova, A. Mantzari, M. Beshkova, M. Syväjärvi, R. Yakimova, E.K. Polychroniadis
Material Science Forum **645-648** (2010) 367-370
13th International Conference on Silicon Carbide and Related Materials (ICSCRM 2009), Nürnberg, Germany, October 11-16, 2009
- 78. “TEM and LTPL investigations of 3C-SiC layers grown by LPE on (100) and (111) 3C-SiC seeds”**
 M. Marinova, G. Zoulis, T. Robert, F. Mercier, A. Mantzari, I.G. Galben-Sandulache, O. Kim-Hak, J. Lorenzzi, S. Juillaguet, D. Chaussende, G. Ferro, J. Camassel, E.K. Polychroniadis
Material Science Forum **645-648** (2010) 383-386
13th International Conference on Silicon Carbide and Related Materials (ICSCRM 2009), Nürnberg, Germany, October 11-16, 2009
- 79. “Heavily p-type doping of bulk 6H-SiC and 3C-SiC grown from Al-Si melts”**
 F. Mercier, I.G. Galben-Sandulache, M. Marinova, G. Zoulis, T. Ouisse, E.K. Polychroniadis, D. Chaussende
Material Science Forum **645-648** (2010) 59-62
13th International Conference on Silicon Carbide and Related Materials (ICSCRM 2009), Nürnberg, Germany, October 11-16, 2009
- 80. “Some recent results on the 3C-SiC structural defects” (invited)**
 M. Marinova, A. Mantzari, E.K. Polychroniadis
Solid State Phenomena **159** (2010) 39-48
International Conference NANOHARD 2009, May 24-27, 2009, Sozopol, Bulgaria
- 81. “Surface Microstructure of NiCrBSi Coatings Deposited by Flame Spray and Evaluation of the Oxidation Resistance”**
 D. Chaliampalias, G. Vourlias, Stefanos Skolianos, Efstathios K. Polychroniadis, G. Stergioudis
Solid State Phenomena **163** (2010) 51-54
XXI Conference on Applied Crystallography, September 20-24, 2009, Zakopane, Poland
- 82. “A Combined Microscopical and XRD Study of Zinc Coatings”**
 N. Pistofidis, G. Vourlias, D. Chaliampalias, G. Stergioudis, Efstathios K. Polychroniadis
Solid State Phenomena **163** (2010) 93-96
XXI Conference on Applied Crystallography, September 20-24, 2009, Zakopane, Poland
- 83. “TEM Investigation of the 3C/6H-SiC Transformation Interface in Layers Grown by Sublimation Epitaxy”**
 M. Marinova, A. Mantzari, M. Beshkova, M. Syväjärvi, R. Yakimova, E.K. Polychroniadis
Solid State Phenomena **163** (2010) 97-100
XXI Conference on Applied Crystallography, September 20-24, 2009, Zakopane, Poland
- 84. “Formation and Characterization of Nanolayered Pd-Based Metal/p-4H SiC Systems with Ohmic Behaviour”**

M. Marinova, A. Mantzari, M. Beshkova, M. Syväjärvi, R. Yakimova, E.K. Polychroniadis

Solid State Phenomena **163** (2010) 97-100

XXI Conference on Applied Crystallography, September 20-24, 2009, Zakopane, Poland

- 85. “Formation and characterization of nanolayered Pd-based metal/p-4H SiC systems with ohmic behavior”**
L. Kolaklieva, R. Kakanakov, E. Polychroniadis, E. Pavlidou, I. Tsiaousis, B. Albert, A. Andreadou
Journal of Nano Research **10** (2010) 77-85
2nd International Conference from Nanoparticles and Nanomaterials to Nanodevices and Nanosystems (IC4N 2009), Rhodes, Greece, June 28 - July 3, 2009
- 86. “Preliminary study of DLC coatings aiming to the corrosion protection of ferrous materials”**
G. Vourlias, N. Pistofidis, D. Chaliampalias, P. Patsalas, E. K. Polychroniadis
Journal of Nano Research **10** (2010) 113-120
2nd International Conference from Nanoparticles and Nanomaterials to Nanodevices and Nanosystems (IC4N 2009), Rhodes, Greece, June 28 - July 3, 2009
- 87. “A TEM microstructural study of the factors affecting the compositional modulation in GaInAsSb/GaSb films”**
S. Konidaris, E. Welser, F. Dimroth, E.K. Polychroniadis
Journal of Nano Research **10** (2010) 131-136
2nd International Conference from Nanoparticles and Nanomaterials to Nanodevices and Nanosystems (IC4N 2009), Rhodes, Greece, June 28 - July 3, 2009
- 88. “On the nanostructure of SiC”**
M. Marinova and E.K. Polychroniadis
Journal of Nano Research **12** (2010) 99-104
2nd International Conference from Nanoparticles and Nanomaterials to Nanodevices and Nanosystems (IC4N 2009), Rhodes, Greece, June 28 - July 3, 2009
- 89. “Structural analysis of Au/Ti/Al/SiC contacts in dependence on the initial composition and annealing”**
L. Kolaklieva, R. Kakanakov, M. Marinova, E. Polychroniadis
Journal of Nano Research **12** (2010) 55-63
Proceedings of the *1st International Conference from Nanoparticles and Nanomaterials to Nanodevices and Nanosystems (IC4N) 2008*, Halkidiki, Greece, June 16-28, 2008
- 90. “On the study of inclined interfaces between β/α-SiC polytypes”**
M. Marinova, E.K. Polychroniadis
Proceedings of *17th International Microscopy Congress (IMC17)*, Rio de Janeiro, Brazil, September 19-24, 2010
- 91. “Influence of the C/Si Ratio on the Dopant Concentration and Defects in CVD Grown 3C-SiC Homoepitaxial Layers”**
N. Jegenyes, M. Marinova, G. Zoulis, J. Lorenzzi, A. Andreadou, A. Mantzari V. Soulière, S. Juillaguet, J. Camassel, E.K. Polychroniadis, G. Ferro
American Institute of Physics (AIP) Conference Proceedings **1292** (2010) 31
E-MRS Spring Meeting 2010 - Symposium F, Strasbourg, France, June 7-11, 2010

- 92. “Defects in (111) 3C-SiC layers grown at different temperatures by VLS and CVD on 6H-SiC substrates”**
 M. Marinova, N. Jegenyes, A. Andreadou, A. Mantzari, J. Lorenzzi, G. Ferro, E. K. Polychroniadis
American Institute of Physics (AIP) Conference Proceedings **1292** (2010)
E-MRS Spring Meeting 2010 - Symposium F, Strasbourg, France, June 7-11, 2010
- 93. “TEM investigation of the influence of the Ga-doping on the structure of 3C-SiC layers grown on 6H-SiC substrate by VLS mechanism”**
 A. Andreadou, M. Marinova, A. Mantzari, A. Bensely, J. Lorenzzi, G. Ferro, E.K. Polychroniadis
American Institute of Physics (AIP) Conference Proceedings **1292** (2010)
E-MRS Spring Meeting 2010 - Symposium F, Strasbourg, France, June 7-11, 2010
- 94. “On the microstructure and the polytype transformation in 3C-SiC crystals grown by LPE on (001) substrates at different growth conditions”**
 A. Mantzari, M. Marinova, A. Andreadou, F. Mercier, I.G. Galben-Sandulache, N. Frangis, D. Chaussende, E.K. Polychroniadis
American Institute of Physics (AIP) Conference Proceedings **1292** (2010)
E-MRS Spring Meeting 2010 - Symposium F, Strasbourg, France, June 7-11, 2010
- 95. “Crystal nucleation in plasma deposited DLC coating during annealing”**
 D. Chaliampalias, E. Pavlidou, P. Psyllaki, K. Chrissafis, and G. Vourlias
AIP Conf. Proc. **1203** (2010) 466
- 96. “Theoretical Study of the Oxidation Behavior of Precipitation Hardening Steel”**
 N. Pistofidis, G. Vourlias, P. Psyllaki, K. Chrissafis
AIP Conf. Proc. **1203** (2010) 840
- 97. “Ionic conductivity study on polycrystalline LiFeVO₄”**
 A. Kazakopoulos, K. Chrissafis, O. Kalogirou
AIP Conf. Proc. **1203** (2010) 644
- 98. “Kinetic analysis of the thermal decomposition of copper (I) complexes with heterocyclic thiones”**
 P. Aslanidis, M. Lalia-Kantouri, K. Chrissafis,
10th European Symposium on Thermal Analysis and Calorimetry, (August 22-27, 2010, Rotterdam, The Netherlands), Book of Abstracts p. 74
- 99. “Thermal decomposition kinetic analysis of PLA with oxidized multi-wall carbon nanotubes”**
 K. Chrissafis
10th European Symposium on Thermal Analysis and Calorimetry, (August 22-27, 2010, Rotterdam, The Netherlands), Book of Abstracts p. 75
- 100. “Thermogravimetric analysis of tool steels for the evaluation of their resistance in high temperature oxidation environments”**
 D. Chaliampalias, G. Vourlias, E. Pavlidou, P. Psyllaki, K.M. Paraskevopoulos, G. Stergioudis, K. Chrissafis
10th European Symposium on Thermal Analysis and Calorimetry, (August 22-27, 2010, Rotterdam, The Netherlands), Book of Abstracts p. 76
- 101. “The byzantine church of "40 holy martyrs" in Veliko Turnovo, Bulgaria: Pigments and technique”**

Sakellariou, E., Zorba, T., Pavlidou, E., Angelova, S., Paraskevopoulos, K.M.
AIP Conference Proceedings **1203**, pp. 501-506, (2010)

- 102. "Examination of the oxidation protection of zinc coatings formed on copper alloys and steel substrates"**
Papazoglou, M., Chaliampalias, D., Vourlias, G., Pavlidou, E., Stergioudis, G., Skolianos, S.
AIP Conference Proceedings **1203**, pp. 801-806 (2010)
- 103. "Efficiency Study of a Commercial Thermoelectric Power Generator (TEG) Under Thermal Cycling"**
Hatzikraniotis, E; Zorbas, KT; Samaras,I, et al.
28th International Conference on Thermoelectrics/7th European Conference on Thermoelectrics, Date: JUL 26-30, 2009 Freiburg GERMANY JOURNAL OF ELECTRONIC MATERIALS Vol39 Iss9, (2010) p2112-2116
- 104. "A New Threshold Voltage Compensation Technique of poly-Si TFTs for AMOLED Displays Pixel Circuits"**
I. Pappas, S. Siskos and C. A. Dimitriadis
in Proceedings of SID Display Week 2010, SID International Symposium on Displays, Seattle, Washington, USA, May 23 -28, 2010.
- 105. "Characteristics of double-gate polycrystalline silicon thin-film transistors for AMOLED pixel design"**
I. Pappas, S. Siskos and C. A. Dimitriadis
IEEE International Conference on Electronics, Circuits, and Systems, Athens, Greece, Dec. 12-15, 2010
- 106. "Analytical threshold voltage model for short-channel asymmetrical dual-gate material double-gate MOSFETs"**
A. Tsormpatzoglou, I. Pappas, D.H. Tassis, C.A. Dimitriadis, G. Ghibaudo
4th Intern Conf. on Micro-Nanoelectronics, Nanotechnologies & MEMs, 12-15 Dec. 2010, Athens.