

CV

KOUDOUMAS Emmanuel



October 2022

Personal information

Name : Emmanuel **Koudoumas**
Citizenship : Greek
Business Address : Department of Electrical and Computer Engineering
School of Engineering
Hellenic Mediterranean University (HMU)
71004, Heraklion, Crete, Greece
Tel/Fax: (+30-2810) 379887/379845
E-mail: koudoumas@hmu.gr

Webpages:

ORCID <https://orcid.org/0000-0002-2995-6992>

Scholar Google

https://scholar.google.com/citations?hl=en&user=B9d5C8gAAAAJ&view_op=list_works&sortby=pubdate

Scopus <https://www.scopus.com/authid/detail.uri?authorId=7003805733>

Web of Science <http://www.webofscience.com/wos/author/record/GXW-0969-2022>

Brain Map ID: <https://www.brainmap.ro/emmanouil-koudoumas>

Education

1. Ph.D in Physics, 1991, "A study of the generation of coherent VUV radiation in Hg" University of Patras, Greece
2. M.Sc. in Applied Physics, 1987, University of Crete, Greece
3. M.Sc. in Lasers and their Applications, 1984, University of Essex, England
4. B.Sc. in Physics, 1983, University of Athens, Greece

Professional experience

Dec. 2002-today	Professor, Department of Electrical and Computer Engineering HMU
Nov. 1997- Nov. 2002	Researcher, FORTH-IESL
Oct. 1993-Oct. 1997	Research Associate, FORTH-IESL
Apr. 1992-Sept 1993	Army service
July 1987- March 1992	Research Assistant, FORTH-IESL
Sept. 1984-June 1987	Research Assistant, FORTH-IESL and Teaching Assistant, Physics Department, University of Crete

Experience in Education

Teaching in undergraduate level

Physics, Electrical measurements, Sensors, Electric Circuits, Antennas, Optical Fibers, Optical Systems,

Teaching in graduate level

Advanced functional materials: development, properties and applications, Lasers systems for metrology and materials processing, Technology exploitation

Thesis Supervision

8 PhD Theses, 12 MSc Theses and more than 150 diploma theses

Lecture notes

1) Theory and laboratory notes in "Advanced functional materials: development, properties and applications", postgraduate level

- 2) Theory and laboratory notes in "Laser systems for measurements and machining", postgraduate level
- 3) Theory and laboratory in "Optical devices for detection and analysis", postgraduate level
- 5) Theory notes in "Optical devices for measurement, detection, analysis and control", undergraduate level
- 6) Theory notes in "Optical fibers, optical communications and optical fiber sensors", undergraduate level
- 7) Laboratory notes in "Electrical Measurements", undergraduate level
- 8) Theory and laboratory notes in "Electromagnetic radiation transmission - Antennas", undergraduate level

Experience in research

- Development, characterization and investigation of the performance of metal oxides and carbon allotropes in applications like solar cells, transparent electrodes, photocatalysis, antibacterial action, electrochromic/thermochromic devices, Li ion batteries and electromagnetic shielding
- Development, characterization and investigation of the electrical and mechanical response of polymer nanocomposites
- Investigation of the performance of polymer based outdoor insulators used in high voltage applications
- Investigation of optical, electrical and mechanical properties of materials and devices
- Laser based diagnostic techniques
- Nonlinear optical response of novel materials
- Generation of VUV radiation

Experience in administration

During the last years, he was in the following administration activities

- Vice-president of the Research Committee of the Hellenic Mediterranean University for 6 years
- Director of the Master's Program "MBA for Engineers" for 6 years
- Vice-president of the Center for Further Education and Lifelong Learning of the Hellenic Mediterranean University for 4 years
- Director of the Center of Materials and Photonics Technology for 4 years
- Member of the University Council for 4 years
- Chairman of the Electrical Engineering Department for 5 years
- Founder of the laboratory "Center of Materials Technology and Photonics"
- Representative of the University in the Board of Stakeholders of the spin off company "Mediterranean Agrofood Competence Center"
- Representative of the University in the Regional Innovation Council of Crete for 4 years
- Representative of the University in the Regional Training Committee of Crete for 4 years

Research projects

- 1) New germicide nanocomposites for biological protection and decontamination, **SPS NATO** project (project code: G5868), 2022-2025
- 2) Real time remote assessment of the functionality of polymeric outdoor insulators in high voltage installations, under the call **RESEARCH – CREATE – INNOVATE** (project code: T2EDK- 02717), 2021-2023
- 3) Enhancement of Educational Tourism for the Promotion of Natural and Cultural Heritage, **Interreg Greece-Cyprus** (MIS 5050713) 2021-2023
- 4) Alternative maritime power in the Port of Heraklion, Connecting Europe Facility, **TRANS-EUROPEAN TRANSPORT NETWORK (TEN-T)**
- 5) Actions to Support the operation of the Special Account for Research Funds of the Hellenic Mediterranean University, **EPEAEK**, Greek funded (2021-2023)
- 6) Actions to support the Internal Quality Assurance Office of the Hellenic Mediterranean University, **EPEAEK**, Greek funded (2021-2023)
- 7) Nanostructured composite paints for electronics electromagnetic shielding, **SPS NATO** project (project code: G5477), 2018-2022
- 8) Innovative materials for nets for fish farms with environmentally friendly anti-fouling action, **Greek Operational Program Maritime and Fishery**, 2019-2022
- 9) Sustainable food packaging based on polymers incorporating essential oils, Greek Operational Program Competitiveness, Entrepreneurship and Innovation, under the call for **Special Actions in "AQUACULTURE" - "INDUSTRIAL MATERIALS" - "OPEN INNOVATION IN CULTURE"**, 2019-2021
- 10) Polymer Nanocomposites for Electromagnetic Shielding applications (PolyShield), Operational Program Competitiveness, Entrepreneurship and Innovation, under the call **RESEARCH – CREATE – INNOVATE** (project code: T1EDK-02784), 2018-2021
- 11) Graphene-CA: **Graphene Flagship**, Ramp Phase, FP7
- 12) Plasmonic nanoparticles for efficient, stable and cheap organic photovoltaic devices, **Excellence** project funded by Greece
- 13) Smart and low cost thermochromic windows for energy saving in buildings, **Cooperation** project funded by Greece
- 14) Investigation of the performance of polymer based outdoor insulators used in high voltage applications and development of a remote and real-time diagnostic technique for the evaluation of their functionality, **Cooperation** project funded by Greece
- 15) Graphene and its Nanocomposites: production, properties and applications, **Thalis** project, funded by Greece
- 16) Central Administration of the **Archimedes III** projects of TEI of Crete, funded by Greece
- 17) Design and fabrication of nanostructured hybrid solar cells with improved performance, **Archimedes III** project, funded by Greece
- 18) Nanostructured metal oxide photocatalysts, **Archimedes III** project, funded by Greece
- 19) Growth and characterization of novel nanostructured layers suitable for the confinement of GHz electromagnetic radiation, **Archimedes III** project, funded by Greece
- 20) Electrochromic, low cost, advanced windows, **Archimedes III** project, funded by Greece
- 21) **PENED 1991**, "Generation of coherent VUV and XUV radiation"

- 22) **PENED 1995**, “Nanoscale analysis of biological samples using Photon Scanning Tunneling Microscope (P.S.T.M.).
- 23) **PEP of Crete 1996**, “Development and application of laser based analytical techniques in the environmental pollution”.
- 24) **EPEAEK Archimedes 2004**, “Novel, low cost solar cells”
- 25) **EPEAEK Archimedes 2004**, “Infrared phosphors for optical imaging”
- 26) **EPEAEK Archimedes 2004**, “Radiation and polymers”
- 27) **EPEAEK Archimedes 2005**, “ZnO films for gas sensing applications”
- 28) **LIDAR B-01-52**, “Measurements of atmospheric pollutant using laser”, 1987-1989
- 29) **LARGE INSTALLATION PLAN DG XII, G/89100086/GEP**, European Ultraviolet Laser Facility, 1990-2002
- 30) **PICS No 152**, “ Dynamics and spectroscopy of highly excited molecules of astronomical interest”, 1991-1996
- 31) **BRITE/EURAM BE 7717**, “High speed laser identification of plastics and polymers from domestic waste for recycling purposes”, 1994-1996
- 32) **HUMAN CAPITAL AND MOBILITY PROGRAM ERBCHRXCT940485**: “Molecular Rydberg States - Spectroscopy, Properties and Theory”, 1994-1996
- 33) **BRITE-EURAM III BE-96-3804**, “On line Sensing for integrated Monitoring of the Reactions and Processes in Industrial-Scale Metallurgical and Mineral Processing Furnaces”, 1996-1998
- 34) **TMR Research Network ERB 4061 PL97-0217**, “Usable Fullerene Derivatives: Synthesis, Stabilization, Spectroscopy and Systematics”, 1997-2001.
- 35) **BRITE: BRPR-CT98-0783**, “Development of multi-purpose industrial units for recycling of plastic wastes by on-line pattern recognition of polymer features”, 1998-2001
- 36) **Greek-French collaboration: No 2531/26-2-98**, “Real time dynamics of the molecular fragmentation”, 1998-2001
- 37) **ECSC-99: 7120 PR 128**, “Improved process control of hot metal production through a non-intrusive, on-line sensing system for metals in topgas of blast furnace”, 1999-2002
- 38) **Research Training Network RTN 1-1999-00442**, “Reactive Intermediates”, 2001-2005
- 39) **Greek-Russian: No 10691/7-8-2000**, “Nonlinear optical properties of semiconductor thin films” 2000-2002

Publications in international refereed journals

- 1) Romanitan, C., Tudose, I.V., Mouratis, K., Popescu, M.C., Pachiu, C., Couris, S., Koudoumas, E., Suchea, M., Structural Investigations in Electrochromic Vanadium Pentoxide Thin Films (2022) *Physica Status Solidi (A) Applications and Materials Science*, 219 (16), art. no. 2100431.
- 2) Tudose, I.V., Mouratis, K., Ionescu, O.N., Romanitan, C., Pachiu, C., Tutunaru-Brincoveanu, O., Suchea, M.P., Koudoumas, E., Comparative Study of Graphene Nanoplatelets and Multiwall Carbon Nanotubes-Polypropylene Composite Materials for Electromagnetic Shielding (2022) *Nanomaterials*, 12 (14), art. no. 2411.
- 3) Tudose, I.V., Mouratis, K., Ionescu, O.N., Romanitan, C., Pachiu, C., Pricop, E., Khomenko, V.H., Butenko, O., Chernysh, O., Barsukov, V.Z., Suchea, M.P., Koudoumas, E., Carbon Allotropes-Based Paints and Their Composite Coatings for Electromagnetic Shielding Applications (2022) *Nanomaterials*, 12 (11), art. no. 1839.

- 4) Khomenko, V., Butenko, O., Chernysh, O., Barsukov, V., Sucheá, M.P., Koudoumas, E., Electromagnetic Shielding of Composite Films Based on Graphite, Graphitized Carbon Black and Iron-Oxide (2022) *Coatings*, 12 (5), art. no. 665.
- 5) Mouratis, K., Tudose, I.V., Romanitan, C., Pachiu, C., Popescu, M., Simistiras, G., Couris, S., Sucheá, M.P., Koudoumas, E., WO₃ Films Grown by Spray Pyrolysis for Smart Windows Applications (2022) *Coatings*, 12 (4), art. no. 545.
- 6) Bouranta, A., Tudose, I.V., Georgescu, L., Karaiskou, A., Vrithias, N.R., Viskadourakis, Z., Kenanakis, G., Sfakaki, E., Mitrizakis, N., Strakantounas, G., Papandroulakis, N., Romanitan, C., Pachiu, C., Tutunaru, O., Barbu-Tudoran, L., Sucheá, M.P., Koudoumas, E., 3D Printed Metal Oxide-Polymer Composite Materials for Antifouling Applications (2022) *Nanomaterials*, 12 (6), art. no. 917.
- 7) Tudose, I.V., Mouratis, K., Ionescu, O.N., Romanitan, C., Pachiu, C., Popescu, M., Khomenko, V., Butenko, O., Chernysh, O., Kenanakis, G., Barsukov, V.Z., Sucheá, M.P., Koudoumas, E., Novel Water-Based Paints for Composite Materials Used in Electromagnetic Shielding Applications (2022) *Nanomaterials*, 12 (3), art. no. 487.
- 8) Stavrou, M., Stathis, A., Papadakis, I., Lyuleeva-Husemann, A., Koudoumas, E., Couris, S., Silicon nanosheets: An emerging 2d photonic material with a large transient nonlinear optical response beyond graphene (2022) *Nanomaterials*, 12 (1), art. no. 90.
- 9) Pascariu, P., Cojocaru, C., Airinei, A., Olaru, N., Rosca, I., Koudoumas, E., Sucheá, M.P., Innovative ag-tio₂ nanofibers with excellent photocatalytic and antibacterial actions (2021) *Catalysts*, 11 (10), art. no. 1234.
- 10) Karanikolopoulos, D., Gagaoudakis, E., Droulias, S., Louloudakis, D., Mouratis, K., Polychronaki, M., Katsoprinakis, G.E., Aperathitis, E., Vernardou, D., Binas, V., Kalpouzou, C., Kiriakidis, G., Koudoumas, E., Lappas, A., Loukakos, P.A., Influence of Mg doping on the ultrafast electron dynamics of VO₂ films, (2021) *Applied Physics A: Materials Science and Processing*, 127 (10), art. no. 751.
- 11) Louloudakis, D., Mouratis, K., Gil-Rostra, J., Koudoumas, E., Alvarez, R., Palmero, A., Gonzalez-Elipe, A.R., Electrochromic response and porous structure of WO₃ cathode layers (2021) *Electrochimica Acta*, 376, art. no. 138049.
- 12) Mouratis, K., Tudose, I.V., Bouranta, A., Pachiu, C., Romanitan, C., Tutunaru, O., Couris, S., Koudoumas, E., Sucheá, M., Annealing effect on the properties of electrochromic V₂O₅ thin films grown by spray deposition technique (2020) *Nanomaterials*, 10 (12), art. no. 2397, pp. 1-12.
- 13) Vernardou, D., Drosos, C., Kafizas, A., Pemble, M.E., Koudoumas, E., Towards High Performance Chemical Vapour Deposition V₂O₅ Cathodes for Batteries Employing Aqueous Media (2020) *Molecules (Basel, Switzerland)*, 25 (23).
- 14) Maniadi, A., Vamvakaki, M., Sucheá, M., Tudose, I.V., Popescu, M., Romanitan, C., Pachiu, C., Ionescu, O.N., Viskadourakis, Z., Kenanakis, G., Koudoumas, E., Effect of graphene nanoplatelets on the structure, the morphology, and the dielectric behavior of low-density polyethylene nanocomposites (2020) *Materials*, 13 (21), art. no. 4776, pp. 1-12.
- 15) Vidakis, N., Petousis, M., Maniadi, A., Koudoumas, E., Liebscher, M., Tzounis, L., Mechanical properties of 3D-printed acrylonitrile-butadiene-styrene TiO₂ and ATO nanocomposites (2020) *Polymers*, 12 (7), art. no. 1589.
- 16) Vidakis, N., Petousis, M., Maniadi, A., Koudoumas, E., Kenanakis, G., Romanitan, C., Tutunaru, O., Sucheá, M., Kechagias, J., The mechanical and physical properties of 3D-Printed materials composed of ABS-ZnO nanocomposites and ABS-ZnO microcomposites (2020) *Micromachines*, 11 (6), art. no. 615, pp. 1-20.

- 17) Vidakis, N., Petousis, M., Maniadi, A., Koudoumas, E., Vairis, A., Kechagias, J., Sustainable additive manufacturing: Mechanical response of acrylonitrile-butadiene-styrene over multiple recycling processes (2020) *Sustainability* (Switzerland), 12 (9), art. no. 3568.
- 18) Vidakis, N., Maniadi, A., Petousis, M., Vamvakaki, M., Kenanakis, G., Koudoumas, E., Mechanical and Electrical Properties Investigation of 3D-Printed Acrylonitrile–Butadiene–Styrene Graphene and Carbon Nanocomposites, (2020) *Journal of Materials Engineering and Performance*, 29 (3), pp. 1909-1918.
- 19) Kokkinaki, O., Klini, A., Polychronaki, M., Mavrikakis, N.C., Siderakis, K.G., Koudoumas, E., Pylarinos, D., Thalassinakis, E., Kalpouzos, K., Anglos, D., Assessing the type and quality of high voltage composite outdoor insulators by remote laser-induced breakdown spectroscopy analysis: A feasibility study, (2020) *Spectrochimica Acta - Part B Atomic Spectroscopy*, 165, art. no. 105768.
- 20) P. Pascariu, P., Tudose, I.V., Vernardou, D., Koudoumas, E. Ionescu, O.N. Bucur, S., M. Suche, M., SnO₂ and Ni doped SnO₂ /polithiophene nanocomposites for gas sensing applications, (2020), *Solid State Electronics Letters*, in press.
- 21) Mouratis, K., Tudose, V., Romanitan, C., Pachi, C., Tutunaru, O., Suche, M., Couris, S., Vernardou, D., Koudoumas, E., Electrochromic performance of V₂O₅ thin films grown by spray pyrolysis (2020) *Materials*, 13 (17), art. no. 3859.
- 22) Vidakis, N., Petousis, M., Savvakis, K., Maniadi, A., Koudoumas, E., A comprehensive investigation of the mechanical behavior and the dielectrics of pure polylactic acid (PLA) and PLA with graphene (GnP) in fused deposition modeling (FDM), *International Journal of Plastics Technology*, 23 (2), pp. 195-206 (2019).
- 23) Pascariu, P., Vernardou, D., Suche, M.P., Airinei, A., Ursu, L., Bucur, S., Tudose, I.V., Ionescu, O.N., Koudoumas, E., Tuning electrical properties of polythiophene/ nickel nanocomposites via fabrication, (2019) *Materials and Design*, 182, art. no. 108027.
- 24) Panagopoulou, M., Vernardou, D., Koudoumas, E., Tsoukalas, D., Raptis, Y.S., Tungsten doping effect on V₂O₅ thin film electrochromic performance, (2019) *Electrochimica Acta*, 321, art. no. 134743, .
- 25) Louloudakis, D., Thongpan, W., Mouratis, K., Koudoumas, E., Kiriakidis, G., Singjai, P., Novel Spark Method for Deposition of Metal Oxide Thin Films: Deposition of Hexagonal Tungsten Oxide, (2019) *Physica Status Solidi (A) Applications and Materials Science*, 216 (7), art. no. 1800513.
- 26) Drakakis, E., Suche, M., Tudose, V., Kenanakis, G., Stratakis, D., Dangakis, K., Miaoudakis, A., Vernardou, D., Koudoumas, E., Zinc oxide-graphene based composite layers for electromagnetic interference shielding in the GHz frequency range (2018) *Thin Solid Films*, 651, 152-157.
- 27) D. Louloudakis , D. Vernardou, G. Papadimitropoulos, D. Davazoglou, E. Koudoumas, The effect of growth time and oxygen flow on the properties of electrochromic WO₃ thin layers grown by LPCVD, *Advanced Materials Letters*, 9(8), 578-584 (2018)
- 28) D. Louloudakis, D. Vernardou, G. Papadimitropoulos, D. Davazoglou, E. Koudoumas, Effect of deposition temperature on the electrochromic properties of WO₃ grown by LPCVD, *Advanced Materials Letters*, 9(3), 192-198 (2018)
- 29) Stylianakis, M.M., Konios, D., Viskadourous, G., Vernardou, D., Katsarakis, N., Koudoumas, E., Anastasiadis, S.H., Stratakis, E., Kymakis, E., Ternary organic solar cells incorporating zinc phthalocyanine with improved performance exceeding 8.5% (2017) *Dyes and Pigments*, 146, pp. 408-413.

- 30)** Panagopoulou, M., Vernardou, D., Koudoumas, E., Tsoukalas, D., Raptis, Y.S., Oxygen and temperature effects on the electrochemical and electrochromic properties of rf-sputtered V_2O_5 thin films, (2017) *Electrochimica Acta*, 232, pp. 54-63.
- 31)** Vernardou, D., Kazas, A., Apostolopoulou, M., Katsarakis, N., Koudoumas, E., Cationic Effect on the Electrochemical Characteristics of the Hydrothermally Grown Manganese Dioxide, (2017) *Journal of Electronic Materials*, 46 (4), pp. 2232-2240.
- 32)** Drakakis, E., Kymakis, E., Tzagkarakis, G., Louloudakis, D., Katharakis, M., Kenanakis, G., Sucheas, M., Tudose, V., Koudoumas, E., A study of the electromagnetic shielding mechanisms in the GHz frequency range of graphene based composite layers (2017) *Applied Surface Science*, 398, pp. 15-18.
- 33)** Panagopoulou, M., Vernardou, D., Koudoumas, E., Katsarakis, N., Tsoukalas, D., Raptis, Y.S., Tunable properties of Mg-doped V_2O_5 thin films for energy applications: Li-ion batteries and electrochromics (2017) *Journal of Physical Chemistry C*, 121 (1), pp. 70-79.
- 34)** Vernardou, D., Marathanou, I., Katsarakis, N., Koudoumas, E., Kazadojev, I.I., O'Brien, S., Pemble, M.E., Povey, I.M., Capacitive behavior of Ag doped V_2O_5 grown by aerosol assisted chemical vapour deposition (2016) *Electrochimica Acta*, 196, pp. 294-299.
- 35)** Louloudakis, D., Vernardou, D., Spanakis, E., Sucheas, M., Kenanakis, G., Pemble, M., Savvakis, K., Katsarakis, N., Koudoumas, E., Kiriakidis, G., Atmospheric pressure chemical vapor deposition of amorphous tungsten doped vanadium dioxide for smart window applications (2016) *Advanced Materials Letters*, 7 (3), pp. 192-196. 5 citations. IF 0.41
- 36)** Liaros, N., Couris, S., Koudoumas, E., Loukakos, P.A., Ultrafast Processes in Graphene Oxide during Femtosecond Laser Excitation, (2016) *Journal of Physical Chemistry C*, 120 (7), pp. 4104-4111.
- 37)** Vernardou D., Louloudakis D., Spanakis E., Katsarakis N., Koudoumas E., "Functional properties of APCVD VO_2 layers", *International Journal of Thin Films Science and Technology* 4, 187 (2016).
- 38)** Sucheas M., M. Vamvakaki, D. Louloudakis, M. Sigalas, N. Katsarakis, D. Vernardou, E. Koudoumas, "Influence of thickness on the properties of TiO_2 and $Ti(Nb)O_2$ thin films", *Studia Universitatis Babeş-Bolyai Chemia* 61, 97-106 (2016).
- 39)** Vernardou, D., Louloudakis, D., Katsarakis, N., Koudoumas, E., Kazadojev, I.I., O'Brien, S., Pemble, M.E., Povey, I.M., Electrochemical evaluation of vanadium pentoxide coatings grown by AACVD (2015) *Solar Energy Materials and Solar Cells*, 143, pp. 601-605.
- 40)** Vernardou, D., Psifis, K., Louloudakis, D., Papadimitropoulos, G., Davazoglou, D., Katsarakis, N., Koudoumas, E., Low pressure CVD of electrochromic WO_3 at $400^\circ C$ (2015) *Journal of the Electrochemical Society*, 162 (9), pp. H579-H582.
- 41)** Psifis, K., Louloudakis, D., Vernardou, D., Spanakis, E., Papadimitropoulos, G., Davazoglou, D., Katsarakis, N., Koudoumas, E., Effect of O_2 flow rate on the electrochromic response of WO_3 grown by LPCVD (2015) *Physica Status Solidi (C) Current Topics in Solid State Physics*, 12 (7), pp. 1011-1015.
- 42)** Sucheas, M., Tudose, I.V., Tzagkarakis, G., Kenanakis, G., Katharakis, M., Drakakis, E., Koudoumas, E., Nanostructured composite layers for electromagnetic shielding in the GHz frequency range (2015) *Applied Surface Science*, 352, pp. 151-154.

- 43) Louloudakis, D., Vernardou, D., Spanakis, E., Dokianakis, S., Panagopoulou, M., Raptis, G., Aperathitis, E., Kiriakidis, G., Katsarakis, N., Koudoumas, E., Effect of O₂ flow rate on the thermochromic performance of VO₂ coatings grown by atmospheric pressure CVD (2015) *Physica Status Solidi (C) Current Topics in Solid State Physics*, 12 (7), pp. 856-860.
- 44) Christou, K., Louloudakis, D., Vernardou, D., Katsarakis, N., Koudoumas, E., One-pot synthesis of WO₃ structures at 95 °C using HCl (2015) *Journal of Sol-Gel Science and Technology*, 73 (3), pp. 520-526.
- 45) Vernardou, D., Louloudakis, D., Spanakis, E., Katsarakis, N., Koudoumas, E., Amorphous thermochromic VO₂ coatings grown by APCVD at low temperatures (2015) *Advanced Materials Letters*, 6 (7), pp. 660-663.
- 46) Vernardou, D., Apostolopoulou, M., Louloudakis, D., Katsarakis, N., Koudoumas, E., Electrochemical Performance of Vanadium Oxide Coatings Grown using Atmospheric Pressure CVD (2015) *Chemical Vapor Deposition*, 2015, 21, 369.
- 47) Apostolopoulou, M., Louloudakis, D., Vernardou, D., Katsarakis, N., Koudoumas, E., Kiriakidis, G., Study of the pH effect on the properties of the hydrothermally grown V₂O₅ (2015) *Thin Solid Films*, 594, pp. 338-342.
- 48) Christou, K., Louloudakis, D., Vernardou, D., Savvakis, C., Katsarakis, N., Koudoumas, E., Kiriakidis, G., Effect of solution chemistry on the characteristics of hydrothermally grown WO₃ for electroactive applications (2015) *Thin Solid Films*, 594, pp. 333-337.
- 49) Louloudakis, D.; Vernardou, D.; Spanakis, E.; Dokianakis, S.; Panagopoulou, M.; Raptis, G.; Aperathitis, E.; Kiriakidis, G.; Katsarakis, N.; Koudoumas, E., Effect of O₂ flow rate on the thermochromic performance of VO₂ coatings grown by atmospheric pressure CVD, *Physica Status Solidi (c)*, 2015, 12, 856.
- 50) ZnO nanostructures for potential applications in organic solar cells, Sucheai, M., Tudose, I.V., Ionita, S., Sandu, I., Iacomì, F., Koudoumas, E., *Revista de Chimie*, 66, 2015, 2044-2046
- 51) Vernardou, D.; Louloudakis, D.; Spanakis, E.; Katsarakis, N.; Koudoumas, E., Thermochromic amorphous VO₂ coatings grown by APCVD using a single-precursor, *E. Solar Energy Materials and Solar Cells*, 2014, 128, 36.
- 52) Vernardou, D.; Louloudakis, D.; Spanakis, E.; Katsarakis, N.; Koudoumas, E., Electrochemical properties of vanadium oxide coatings grown by hydrothermal synthesis on FTO substrates, *E. New Journal of Chemistry*, 2014, 38, 1959.
- 53) Vernardou, D.; Apostolopoulou, M.; Louloudakis, D.; Katsarakis, N.; Koudoumas, E., Hydrothermal growth and characterization of shape-controlled NH₄V₃O₈, *New Journal of Chemistry*, 2014, 38, 2098.
- 54) Vernardou, D.; Apostolopoulou, M.; Louloudakis, D.; Katsarakis, N.; Koudoumas, E., Hydrothermally grown β-V₂O₅ electrode at 95 °C, *Journal of Colloid and Interface Science*, 2014, 424, 1.
- 55) Vernardou, D.; Apostolopoulou, M.; Louloudakis, D.; Spanakis, E.; Katsarakis, N.; Koudoumas, E.; McGrath, J.; Pemble, M.E., Electrochemical properties of opal-V₆O₁₃ composites, *Journal of Alloys and Compounds*, 2014, 586, 621.
- 56) Vernardou, D.; Drosos, H.; Fasoulas, J.; Koudoumas, E.; Katsarakis, N., Photocatalytic properties of chemically grown vanadium oxide at 65 °C, *N. Thin Solid Films*, 2014, 555, 169.
- 57) Liaros N., Koudoumas E., Couris S, Broadband near infrared optical power limiting of few layered graphene oxides, *Applied Physics Letters*, 2014, 104, Article number 191112.

- 58)** Kenanakis, G., Katsarakis, N., Koudoumas, E., Influence of precursor type, deposition time and doping concentration on the morphological, electrical and optical properties of ZnO and ZnO:Al thin films grown by ultrasonic spray pyrolysis, (2014) *Thin Solid Films*, 555, pp. 62-67.
- 59)** Vernardou, D.; Spanakis, E.; Katsarakis, N.; Koudoumas, E., Electrodeposition of V₂O₅ using ammonium metavanadate at room temperature, *E. Advanced Materials Letters*, 2014, 5, 569.
- 60)** E. Spanakis, M. Pervolaraki, J. Giapintzakis, N. Katsarakis, E. Koudoumas, D. Vernardou, Effect of gold and silver nanoislands on the electrochemical properties of carbon nanofoam, *Electrochimica Acta*, (2013), 111 (30) pp 305-313
- 61)** Louloudakis, D; Vernardou, D; Spanakis, E; Katsarakis, N ; Koudoumas, E , Electrochemical properties of vanadium oxide coatings grown by APCVD on glass substrates, *SURFACE & COATINGS TECHNOLOGY* (2013), 230, pp 186-189
- 62)** Liaros, N., Iliopoulos, K., Stylianakis, M.M., Koudoumas, E., Couris, S, Optical limiting action of few layered graphene oxide dispersed in different solvents (2013), *Optical Materials*, 36 (1), pp 112-117
- 63)** Stratakis, E., Stylianakis, M.M., Koudoumas, E., Kymakis, E., Plasmonic organic photovoltaic devices with graphene based buffer layers for stability and efficiency enhancement (2013), *Nanoscale* 5 (10), pp. 4144-4150
- 64)** Vernardou, D., Sapountzis, A., Spanakis, E., Kenanakis, G., Koudoumas, E., Katsarakis, N., Electrochemical activity of electrodeposited V₂O₅ coatings (2013) *Journal of the Electrochemical Society* 160 (1), pp. D6-D9
- 65)** Stylianakis, M.M., Stratakis, E., Koudoumas, E., Kymakis, E., Anastasiadis, S.H., Organic bulk heterojunction photovoltaic devices based on polythiophene-graphene, composites (2012) *ACS Applied Materials and Interfaces*, 4 (9), pp. 4864-4870.
- 66)** D. Vernardou, D. Louloudakis, E. Spanakis, N. Katsarakis, E. Koudoumas, Electrochemical properties of vanadium oxide coatings grown by hydrothermal synthesis on FTO substrates, *New Journal of Chemistry*. DOI:10.1039/C3NJ00931A
- 67)** D. Louloudakis, D. Vernardou, E. Spanakis, N. Katsarakis, E. Koudoumas Thermo-chromic vanadium oxide coatings grown by APCVD at low temperatures, , *Physics Procedia*. <http://dx.doi.org/10.1016/j.phpro.2013.07.055>
- 68)** D. Vernardou, A. Sapountzis, E. Spanakis, G. Kenanakis, E. Koudoumas, N. Katsarakis, Electrochemical activity of electrodeposited vanadium oxide coatings grown at room temperature, *Journal of the Electrochemical Society*. DOI:10.1149/2.054301jes
- 69)** H. Drosos, A. Sapountzis, E. Koudoumas, N. Katsarakis, D. Vernardou, Effect of current density on electrodeposited vanadium oxide coatings, *Journal of the Electrochemical Society*. DOI:10.1149/2.017208jes
- 70)** Electrochemical properties of amorphous WO₃ coatings grown on polycarbonate by Aerosol – Assisted CVD, D. Vernardou, H. Drosos, E. Spanakis, E. Koudoumas, N. Katsarakis, M.E. Pemble, *Electrochimica Acta*. <http://dx.doi.org/10.1016/j.electacta.2012.01.035>
- 71)** Kymakis, E., Stylianakis, M.M., Spyropoulos, G.D., Stratakis, E., Koudoumas, E., Fotakis, C. , Spin coated carbon nanotubes as the hole transport layer in organic photovoltaics, (2012) *Solar Energy Materials and Solar Cells*, 96 (1), pp. 298-301.
- 72)** “Photoluminescence study of ZnO structures grown by aqueous chemical growth”, Kenanakis, G., Androulidaki, M., Vernardou, D., Katsarakis, N., Koudoumas, E., (2011), *Thin Solid Films*, 10.1016/j.tsf.2011.04.123

- 73) "Spin coated graphene films as the transparent electrode in organic photovoltaic devices", Kymakis, E., Stratakis, E., Stylianakis, M.M., Koudoumas, E., Fotakis, C., (2011), *Thin Solid Films*, 10.1016/j.tsf.2011.04.208
- 74) "A study of the electrochemical performance of vanadium oxide thin films grown by atmospheric pressure chemical vapour deposition", Vernardou, D., Paterakis, P., Drosos, H., Spanakis, E., Povey, I.M., Pemble, M.E., Koudoumas, E., Katsarakis, N. (2011) *Solar Energy Materials and Solar Cells*, 95 (10), pp. 2842-2847.
- 75) "Electrochemical and photocatalytic properties of WO₃ coatings grown at low temperatures", Vernardou, D., Drosos, H., Spanakis, E., Koudoumas, E., Savvakis, C., Katsarakis, N., *Journal of Materials Chemistry*, (2011), 21 (2), pp. 513-517
- 76) "Plasmonic organic photovoltaic devices on transparent carbon nanotube films", Kymakis, E., Stratakis, E., Koudoumas, E., Fotakis, C., (2011), *IEEE Transactions on Electron Devices* 58 (3), art. no. 5701662, pp. 860-864
- 77) "Hydrothermal growth of V₂O₅ photoactive films at low temperatures", Vernardou, D., Spanakis, E., Kenanakis, E., Koudoumas, E., Katsarakis, N., (2010), *Materials Chemistry and Physics* 124 (1), pp. 319-322
- 78) "Hydrothermal growth of V₂O₅ photoactive films at low temperatures", Vernardou, D., Spanakis, E., Kenanakis, G., Koudoumas, E., Katsarakis, N., (2010) *Materials Chemistry and Physics*, 124, 1, pp. 319-322.
- 79) "Zinc oxide films chemically grown onto rigid and flexible substrates for TFT applications", Suche, M., Kornilios, N., Koudoumas, E., (2010) *Physica B: Condensed Matter*, 405 (20), pp. 4389-4392.
- 80) "Modelling the photovoltaic potential of a site", by Mavromatakis F., Makrides G., Georghiou G., Pothrakis A., Franghiadakis Y., Drakakis E., Koudoumas E., *Renewable Energy* (2010), 35, (7), pp. 1387-1390.
- 81) "Growth of c-axis oriented ZnO nanowires from aqueous solution: The decisive role of a seed layer for controlling the wires' diameter", Kenanakis, G., Vernardou, D., Koudoumas, E., Katsarakis, N., *Journal of Crystal Growth* (2009), 311 (23-24), pp. 4799-4804.
- 82) "Influence of solution chemistry on the properties of hydrothermally grown TiO₂ for advanced applications", D. Vernardou, K. Vlachou, E. Spanakis, E. Stratakis, N. Katsarakis, E. Kymakis and E. Koudoumas, *Catalysis Today*, (2009) 144 (1-2), pp. 172-176.
- 83) "Photoinduced hydrophilic and photocatalytic response of hydrothermally grown TiO₂ nanostructured thin films", D. Vernardou, G. Kalogerakis, E. Stratakis, G. Kenanakis, E. Koudoumas and N. Katsarakis, *Solid State Sciences* (2009), 11 (8), pp. 1499-1502
- 84) "Nonlinear optical response of titanium oxide nanostructured thin films", K. Iliopoulos, G. Kalogerakis, D. Vernardou, N. Katsarakis, E. Koudoumas, S. Couris, *Thin Solid Films* (2009), 518 (4), pp. 1174-1176
- 85) "One pot direct hydrothermal growth of photoactive TiO₂ films on glass», Vernardou, D., Stratakis, E., Kenanakis, G., Yates, H.M., Couris, S., Pemble, M.E., Koudoumas, E., Katsarakis, N., *Journal of Photochemistry and Photobiology A: Chemistry* (2009), 202 (2-3), pp. 81-85
- 86) "Influence of thickness and growth temperature on the optical and electrical properties of ZnO thin films", Suche, M., Christoulakis, S., Katharakis, M., Vidakis, N., Koudoumas, E., *Thin Solid Films* (2009), 517 (15), pp. 4303-4306.

- 87)** “Polymer-nanotube composite mats with improved field emission performance and stability”, Stratakis, E., Kymakis, E., Spanakis, E., Tzanetakis, P., Koudoumas, E., (2009) *Physical Chemistry Chemical Physics* 11 (4), pp. 703-709
- 88)** “Carbon nanotube doping of P3HT : PPCBM photovoltaic devices”, Kymakis, E., Kornilios, N., Koudoumas, E. (2008), *Journal of Physics D: Applied Physics* 41 (16), art. no. 165110.
- 89)** “Light-induced reversible hydrophilicity of ZnO structures grown by aqueous chemical growth”, Kenanakis, G., Stratakis, E., Vlachou, K., Vernardou, D., Koudoumas, E., Katsarakis, N., (2008), *Applied Surface Science* 254 (18), pp. 5695-5699.
- 90)** “Influence of solution concentration and temperature on the aqueous chemical growth of ZnO structures”, D. Vernardou, G. Kenanakis, K. Vlachou, E. Koudoumas, G. Kiriakidis, A. Vairis, and N. Katsarakis, *phys. stat. sol. (c)*, 1-5 (2008) / DOI 10.1002/pssc.200778879.
- 91)** “Structural and morphological properties of thin ZnO films grown by pulsed laser deposition”, Suchea, M., Christoulakis, Tibeica C., S., Katharakis, M., Kornilios, N., Efthimiopoulos T., Koudoumas E., (2008), *Appl. Surf. Sci.*, 254 (17), pp. 5475-5480
- 92)** “CaS:Eu,Sm and CaS:Ce,Sm films grown by embedding active powder into an inert matrix”, Suchea, M., Christoulakis, S., Androulidaki M., Koudoumas, E., (2008) *Mat. Sci. and Eng. B.*, 150 (2), pp. 130-134
- 93)** “Effective mobility and photocurrent in carbon nanotube-polymer composite photovoltaic cells”, Kymakis, E., Servati, P., Tzanetakis, P., Koudoumas, E., Kornilios, N., Rompogiannakis, I., Franghiadakis, Y., Amaratunga, G.A.J., *Nanotechnology*, 18 (43), 435702, 2007.
- 94)** “Integration of carbon nanotubes as hole transport electrode in polymer/fullerene bulk heterojunction solar cells”, Kymakis, E., Stratakis, E., Koudoumas, E., *Thin Solid Films*, 515, pp. 8598-8600, 2007
- 95)** “pH effect on the morphology of ZnO nanostructures grown with aqueous chemical growth”, D. Vernardou, G. Kenanakis, S. Couris, E. Koudoumas, E. Kymakis and N. Katsarakis, *Thin Solid Films*, 515, pp. 8764-8767, 2007
- 96)** “Ozone sensing properties of ZnO nanostructures grown by the aqueous chemical growth technique”, G. Kenanakis, D. Vernardou, E. Koudoumas and N. Katsarakis, *Sensors and Actuators B*, 124, 187, 2007
- 97)** “Photoluminescence of ZnO nanostructures grown by the aqueous chemical growth technique”, G. Kenanakis, M. Androulidaki, E. Koudoumas, C. Savvakis, N. Katsarakis, *Superlattices and Microstructures*, 42 (1-6), pp. 473-478, 2007
- 98)** “Europium and Samarium doped Calcium Sulfide thin films grown by PLD”, S Christoulakis, M Suchea, N Katsarakis , E Koudoumas, *Appl. Surf. Science*, 253 (19), pp. 8169-8173, 2007
- 99)** “Substrate temperature influence on the properties of nanostructured ZnO transparent ultrathin films grown by PLD”, M Suchea, S Christoulakis, M Katharakis, G Kiriakidis, N Katsarakis , E Koudoumas, *Appl. Surf. Science*, 253 (19), pp. 8141-8145, 2007
- 100)** “Nonlinear optical response of silicon nanocrystals”, E. Koudoumas, O. Kokkinaki, M. Konstantaki, N. Kornilios, S. Couris, S. Korovin, V. Pustovoi, V.E. Ogluzdin, *Opt. Materials*, 30 (2), pp. 260-263, 2007.
- 101)** “The effect of growth time on the morphology of ZnO structures deposited on Si (1 0 0) by the aqueous chemical growth technique”, Vernardou, D., Kenanakis, G.,

Couris, S., Manikas, A.C., Voyiatzis, G.A., Pemble, M.E., Koudoumas, E., Katsarakis, N., *Journal of Crystal Growth*, 308 (1), pp. 105-109, 2007

102) “Ultrafast third-order nonlinear optical response of C84, C84-D2 (IV) and C84-D2d (II)”, E. Xenogiannopoulou, E. Koudoumas, N. Tagmatarchis, H. Shinohara, S. Couris, *Chemical Physics Letters*, 425, 110, 2006.

103) “Carbon nanotube/PEDOT:PSS electrodes for organic photovoltaics”, E. Kymakis, G. Klapsis, E. Koudoumas, E. Stratakis, N. Kornilios, N. Vidakis, Y. Franghiadakis, *EPJ Appl. Phys.*, 36, 257, 2006

104) “Thickness Influence on Surface Morphology and Ozone Sensing Properties of Nanostructured ZnO Transparent Thin Films Grown by PLD”, S Christoulakis, M Suche, E Koudoumas, M Katharakis, N Katsarakis ,G Kiriakidis, *Appl. Sur. Science*, 252, 5351, 2006

105) “Bi-layer photovoltaic devices with PPQ as the electron acceptor layer”, E Kymakis, E Koudoumas, I Franghiadakis, *Sol. Ener. Mater. & Sol. Cells*, 90, 1705, 2006

106) “Post-fabrication annealing effects in polymer-nanotube photovoltaic cells”, E Kymakis, E Koudoumas, I Franghiadakis, G.A.J. Amaratunga, *J. Phys. D: Appl. Phys.*, 39, 1058, 2006

107) “ZnO nanostructured transparent thin films by PLD”, S Christoulakis, M Suche, M Katharakis, N Katsarakis , E Koudoumas, G Kiriakidis, *Rev. Adv. Mater. Sci.*, 10, 331, 2005.

108) “Adaptive optimization of ultrafast laser generated low-energy ion beams form silicon targets”, R. Stoian, A. Mermillod-Blondin, A. Rosenfeld, I.V. Hertel, M. Spyridaki, E. Koudoumas, P. Tzanetakis, and C. Fotakis, *Appl. Phys. Lett.*, 87, 124105-1, 2005.

109) “Temporal pulse manipulation and consequences for ultrafast laser processing of materials”, R. Stoian, A. Mermillod-Blondin, S. W. Winkker, A. Rosenfeld, I.V. Hertel, M. Spyridaki, E. Koudoumas, P. Tzanetakis, and C. Fotakis, *J. Opt. Engineering*, 44, 051106-01, 2005..

110) “Nonlinear optical response of some isomerically pure higher fullerenes and their corresponding endohedral metallofullerene derivatives: C82-C2v, Dy@C82 (I), Dy2@C82 (I), C92-C2, Er2@C92 (IV)”, E. Xenogiannopoulou, S. Couris, E. Koudoumas, N. Tagmatarchis, T. Inoue, H Shinohara, *Chem. Phys. Lett.*, 394, 14, 2004.

111) “Influence of pulse temporal manipulation on the properties of laser ablated Si ion beams”, E. Koudoumas, M. Spyridaki, R. Stoian, A. Rosenfeld, P. Tzanetakis, I.V. Hertel and C. Fotakis, *Thin Solid Films*, 453-454, 372, 2004

112) “Temporal pulse manipulation in ultrafast laser ablation of silicon”, M. Spyridaki, R. Stoian, E. Koudoumas, A. Rosenfeld, P. Tzanetakis, C. Fotakis and I.V. Hertel, *Appl. Phys. Lett.*, 83, 1474, 2003.

113) “Stimulated 5P-4S axial and conical emissions and quantum interference in a laser K atom interaction”, N. Merlemis, M. Katharakis, E. Koudoumas, T. Efthimiopoulos, *J. Phys. B: At. Mol. Opt. Phys.*, 36, 1943, 2003.

114) “Large enhancement of the nonlinear optical response of reduced fulleropyrrolidines”, E. Koudoumas, M. Konstantaki, M. Mavromanolakis, S. Couris, M. Fanti, F. Zerbetto, K. Kordatos, M. Prato, *Chemistry-A European Journal*, 9, 1529, 2003.

115) “An experimental investigation of the nonlinear refractive index (n2) of carbon disulfide and toluene by spectral shearing interferometry and z-scan techniques”, S.

Couris, M. Renard, O. Faucher, B. Lavorel, R. Chaux, E. Koudoumas, X. Michaut, *Chem. Phys. Lett.*, 369, 318, 2003.

116) “Optical limiting and nonlinear optical absorption properties of fullerene C60-(polystyrene) star polymer films: C60 concentration dependance”, J. Venturini, S. Couris, E. Koudoumas, P. Seta, Y. Ederle, C. Mathis, S. Leach, *J. Mat. Chem.*, 12, 2071, 2002.

117) “Onion-like carbon and diamond nanoparticles for optical limiting”, E. Koudoumas, O. Kokkinaki, M. Konstantaki, S. Couris, P. Detkov, S. Korovin, V. Kuznetchov, S. Pimenov, V. Pustovoi, *Chem. Phys. Lett.*, 357, 336, 2002.

118) “Laser ablation studies of deposited silver colloids active in SERS”, R. Torres La Porte, D. Silva Moreno, M. Castillejo Striano, M. Martin Munoz, J. V. Garcia-Ramos, S. Sanchez Cortes, E. Koudoumas, *Laser Chemistry*, 20, 23, 2002.

119) “Dissociative ionization of halogenated ethylenes in intense femtosecond laser pulses”, Marta Castillejo, Margarita Martín, Rebeca de Nalda, Mohamed Oujja, Stelios Couris, Emmanuel Koudoumas, *Chem. Phys. Lett.*, 353, 295, 2002.

120) “Anisotropic distributions of ion fragments produced by dissociative ionization of halogenated ethylenes in intense femtosecond laser pulses”, Marta Castillejo, Margarita Martín, Rebeca de Nalda, Stelios Couris, Emmanuel Koudoumas, *J. Phys. Chem.*, 106, 2838, 2002.

121) “Nonlinear optical properties of C60-polystyrene star polymers”, S. Couris, M. Konstantaki, E. Koudoumas, Y. Ederle, C. Mathis, S. Leach and P. Seta, *Nonlinear Optics*, 27, 269, 2001.

122) “Transient and instantaneous third order nonlinear optical response of C60 and the higher fullerenes C70, C76 and C84”, E. Koudoumas, M. Konstantaki, A. Mavromanolakis, X. Michaut, S. Couris, S. Leach, *J. Phys. B: At. Mol. Opt. Phys.*, 34, 4983, 2001.

123) “Nonlinear optical response of new Ru and Os complexes of modified terpyridines”, M. Konstantaki, E. Koudoumas, S. Couris, P. Laine, E. Amouyal, S. Leach, *J. Phys. Chem*, 105, 10797, 2001.

124) “Single-photon photolysis of C60, C70, C76, and C84 in solution”, L. Juha, B. Ehrenberg, S. Couris, E. Koudoumas, V. Hamplová, Z. Pokorná, A. Müllerová, P. Kubát, *Chem. Phys. Lett.*, 335, 539, 2001.

125) “Nonlinear absorption in silicon nanocrystals”, S. B. Korovin, A. N. Orlov, A. M. Prokhorov, V. I. Pustovoi, M. Konstantaki, S. Couris, E. Koudoumas, *Quant. Electr.*, 31, 817, 2001.

126) “Ultrafast nonlinear optical response of C60-polystyrene star polymers”, E. Koudoumas, M. Konstantaki, M. Mavromanolakis, S. Couris, Y. Ederle, C. Mathis, S. Leach, P. Seta, *Chem. Phys. Lett.*, 335, 533, 2001.

127) “Near-infrared laser-induced decomposition of C60 dissolved in toluene”, L. Juha, B. Ehrenberg, S. Couris, E. Koudoumas, V. Hamplova, Z. Pokorna, *Fullerene Science and Technology*, 3-4, 319, 2000.

128) “The role of oxygen molecule in the photolysis of fullerenes”, L. Juha, M. Farnikova, V. Hamplova, J. Kodymova, J. Krasa, L. Laska, O. Palek, P. Kubat, I. Stibor, D. Slezak, E. Koudoumas and S. Couris, *Fullerene Science and Technology*, 3-4, 289 2000.

129) “Optical limiting behaviour of the water-soluble C60/ γ -cyclodextrine complex”, M. Konstantaki, E. Koudoumas, S. Couris, J.M. Janot, H. Eddaoudi, A. Deratani, P. Seta, S. Leach, *Chem. Phys. Lett.*, 318, 488, 2000.

- 130)** “Third order susceptibility of Li@C60”, E. E. B. Campbell, S. Couris, M. Fanti, E. Koudoumas, N. Krawez, F. Zerbetto, *Adv. Mat.*, 11, 405, 1999. (3 citations)
- 131)** “Polarization effects on the ionization and fragmentation of small molecules under psec and fsec laser excitation”, S. Couris, E. Koudoumas, S. Leach and C. Fotakis, *J. Phys. B: At., Mol., Opt. Phys.*, 32, L439, 1999.
- 132)** “Fullerene decomposition induced by near infrared laser radiation studied by real-time turbidimetry”, L. Juha, B. Ehrenberg, S. Couris, E. Koudoumas, V. Hamplova, Z. Pokorna, A. Mullerova, M. Pavel, *Chem. Phys. Lett.*, 313, 431, 1999.
- 133)** “Ionization and fragmentation of double and single bonded hydrocarbons with 50 fsec laser pulses at 800 nm”, M. Castillejo, S. Couris, E. Koudoumas and M. Martín, *Chem. Phys. Lett.*, 308, 373, 1999.
- 134)** “Multiphoton ionization and fragmentation of CS₂ under intense short pulse laser radiation”, E. Koudoumas, R. De Nalda, C. Fotakis and S. Couris, *Laser Chem.*, 18, 129, 1999.
- 135)** “Subpicosecond ionization and dissociation of Benzene and Cyclic Alkanes at 800 and 400 nm”, M. Castillejo, S. Couris, E. Koudoumas and M. Martin, *Chem. Phys. Lett.*, 289, 303, 1998.
- 136)** “Sub-picosecond resonant third-order nonlinear optical response of azobenzene-doped polymer film”, F. Dong, E. Koudoumas, S. Couris, Y. Shen, L. Qiu, X. Fu, *J. Appl. Phys.*, 81, 7073, 1997.
- 137)** “High order nonlinear optical response of fullerene solutions in the nanosecond regime”, E. Koudoumas, F. Dong, S. Couris and S. Leach, *Opt. Comm.*, 138, 301, 1997.
- 138)** “High order nonlinear optical response of C60-toluene solutions in the sub-psec regime”, E. Koudoumas, F. Dong, M.D. Tzatzadaki, S. Couris and S. Leach, *J. Phys. B, At. Mol. Opt. Phys.*, 29, L773, 1996.
- 139)** “Sub-picosecond studies of the third-order optical nonlinearities of C60-toluene solutions”, S. Couris, E. Koudoumas, F. Dong and S. Leach, *J. Phys. B: At. Mol. Opt. Phys.*, 29, 5033, 1996.
- 140)** “Solvent effects on the optical limiting action of C60 solutions”, E. Koudoumas, S. Couris, A.A. Ruth and S. Leach, *Mol. Phys.*, 88, 125, 1996.
- 141)** “Concentration and wavelength dependence of the effective third-order susceptibility and optical limiting of C60 in toluene solution”, S. Couris, E. Koudoumas, A.A. Ruth and S. Leach, *J. Phys. B: Atom. Mol. Opt. Phys.*, 28, 4537, 1995.
- 142)** “Fullerene cages breakdown induced in solution by ultraviolet radiation: experimental support for the “window” formation in fullerenes?”, L. Juha, V. Hamplova, P. Engst, P. Kubat, E. Koudoumas and S. Couris, *J. Phys. Chem.*, 99, 8200, 1995.
- 143)** “The influence of a second resonance on the saturation characteristics of the four-wave sum mixing”, E. Koudoumas and T. Efthimiopoulos, *IEEE J. Quant. Electr.*, 31, 365, 1995.
- 144)** “Comparison of the efficiency of the laser photolysis of C60 and C70 fullerenes in solution”, L. Juha, V. Hamplova, P. Kubat, E. Koudoumas and S. Couris, *Chem. Phys. Lett.*, 231, 314, 1994.
- 145)** “Emission Spectrum in a two-photon resonant transition in mercury”, E. Koudoumas and T. Efthimiopoulos, *J. Opt. Soc. Am. B*, 10, 982, 1993.
- 146)** “Two-photon resonant third harmonic generation in Hg”, E. Koudoumas and T. Efthimiopoulos, *Laser Chem.*, 13, 129, 1993.

- 147) “The effect of an autoionizing state in the double-resonant four-wave sum mixing in Hg”, E. Koudoumas and T. Efthimiopoulos, Appl. Phys. B, 55, 355, 1992.
- 148) “Intensity and resonance effects on the three-photon resonance third harmonic generation in Hg”, T. Efthimiopoulos and E. Koudoumas, Appl. Phys. B, 54, 193, 1992.
- 149) “Laser annealed refractory metal silicide films on GaAs”, W.T. Anderson, A. Christou, P.E. Thomson, C.R. Gosset, J.M. Eridon, Z. Hatzopoulos, T. Efthimiopoulos, E. Koudoumas and C. Michelakis, Electr. Lett., 26, 62, 1990.

3.650 citations exist for these publications, corresponding to h-factor of 36 (WoS)

Books and conference proceedings

1. L. Draghiciu, I.V.Tudose, C. Romanitan, R. Gavrilă, O.A. Brincoveanu, F.C. Comanescu, C. Pachiou, R. Müller, A.Dinescu, E. Koudoumas and M.P. Suchea “Substrate influence on V2O5 growth by spray pyrolysis method” CAS 2022, IEEE 2022 International Semiconductor Conference (CAS) event, 12 - 4 October 2022, Poiana Brasov, Romania, page 244 – to be published in <https://ieeexplore.ieee.org>
2. E. Koudoumas, O. N. Ionescu, V. Z. Barsukov, M. P. Suchea “Innovative composite materials for electromagnetic shielding” CAS 2022, IEEE 2022 International Semiconductor Conference (CAS) event, 12 - 4 October 2022, Poiana Brasov, Romania, page 23 – to be published in <https://ieeexplore.ieee.org>
3. I.V. Tudose, I. Rosca, C. Romanitan, O.N. Ionescu, K. Petrotos, S. Zaoutsos, M.P. Suchea, E. Koudoumas “PLA nanocomposites with antimicrobial action, based on olive fruit polyphenols and citrus fruit extracts encapsulated in Maltodextrin”, CAS 2021, IEEE 2021 International Semiconductor Conference (CAS) event, online 6 - 8 October 2021. <https://ieeexplore.ieee.org/document/9604116>
4. C Pachiou, M Carp, A Radoi, R Popa, M Suchea, O Tutunaru “Direct writing of Prussian blue patterns down to micrometer scale: preliminary tests results” 2019 International Semiconductor Conference (CAS) IEEE 41-44
5. A Maniadi, M Vamvakaki, M Petousis, N Vidakis, M Suchea, M Sevastaki, Z Viskadourakis, G Kenanakis, E Koudoumas “Effect of Zinc Oxide concentration on the dielectric properties of 3D Printed Acrylonitrile Butadiene Styrene nanocomposites” 2019 International Semiconductor Conference (CAS) IEEE 221-224.
6. Ioan Valentin Tudose, Florin Comanescu, Petronela Pascariu, Stefan Bucur, Laurentiu Rusen, Felicia Iacomî, Emmanouel Koudoumas and Mirela Suchea, Chapter 2 “Chemical and physical methods for Multifunctional Nanostructured Interfaces fabrication” “Functional nanostructured interfaces for environmental and biomedical applications” Book in publication by Elsevier 978-0-12-814401-5 - 2019
7. Ioan Valentin Tudose, Emmanouel Koudoumas, Cristina Pachiou, Florin Comanescu, Valentina Dinca, Laurentiu Rusen, Petronela Pascariu and Mirela Suchea, Chapter 9 “Graphene Based Materials and their biomedical and environmental Applications –Recent Advances”. “Functional nanostructured interfaces for environmental and biomedical applications” Book in publication by Elsevier 978-0-12-814401-5 - 2019
8. Ioan Valentin Tudose, Narcisa Vrinceanu, Cristina Pachiou, Stefan Bucur, Petronela Pascariu, Laurentiu Rusen, Emmanouel Koudoumas and Mirela Suchea, Chapter 11

“Nanostructured ZnO based materials for biomedical and environmental applications”
“Functional nanostructured interfaces for environmental and biomedical applications”
Book in publication by Elsevier 978-0-12-814401-5 - to 2019

9. Mirela Suche, Ioan Valentin Tudose, Emmanouel Koudoumas, Viorel Tiganeşcu and Irina Codita, Chapter 13 “TiO₂ based nanostructured materials with germicidal properties and other applications in biomedical fields”. “Functional nanostructured interfaces for environmental and biomedical applications” Book in publication by Elsevier 978-0-12-814401-5 - 2019

10. I. V. Tudose, P. Pascariu, C. Pachiu, F. Comanescu, M. Danila, R. Gavrila, E. Koudoumas, M. Suche, “Comparative study of Sm and La doped ZnO properties” International Semiconductor Conference - CAS 2018, an IEEE , IEEE Proceedings, 2018.

11. P. Pascariu, I. V. Tudose, C. Pachiu, M. Danila, O. Ionescu, M. Popescu, E. Koudoumas, M. Suche, “Graphene and TiO₂ - PVDF nanocomposites for potential applications in triboelectronics” International Semiconductor Conference - CAS 2018, IEEE Proceedings, 2018.

12. P. Pascariu, I.V. Tudose, C. Pachiu, M. Danila, O. Ionescu, E. Koudoumas, M. Suche, “Electrospinning fabricated novel graphene and TiO₂ - PVDF nanocomposites”, Proceedings of International conference “Expert Evaluation and Control of Compounds of Semiconductor Materials and Technologies” EXMATEC2018, May 2018.

13. P. Pascariu, I.V. Tudose, C. Pachiu, M. Danila, R. Gavrila, E. Koudoumas, M. Suche, “Comparative study of structural and optical properties of Sm and La doped ZnO”, Proceedings of International Workshop on Compound Semiconductor Devices and Integrated Circuits held in Europe WOCSDICE2018, May 2018.

14. Mavrikakis, N., Siderakis, K., Kourasani, D., Pechynaki, M., Koudoumas, E., Hydrophobicity transfer mechanism evaluation of field aged composite insulators (2015) International Conference on Power Engineering, Energy and Electrical Drives, 2015-September, art. no. 7266322, pp. 215-219.

15. A Comparative Study of the Photoinduced Properties of TiO₂/SiO₂ and TiO₂/ZnO/SiO₂ Layers Prepared by Chemical Routes, D. Vernardou, E. Spanakis, K. Vlachou, G. Kalogerakis, J. Costello, E. Koudoumas, N. Katsarakis, M.E. Pemble, ECS Transactions, 2009, 25, 73.

16. “Metal oxide nanostructures for use inorganic photovoltaic cells”, E. Spanou, A. Kyprianou, G.E. Georgiou, D. Vernardou, G. Kenanakis, E. Kymakis, N. Katsarakis, E. Koudoumas, Proceedings of International Conference on Deregulated Electricity Market Issues in South-Eastern Europe (2008)

17. “P3HT/PCBM/SWNTs photovoltaic devices”, Kymakis E., Koudoumas E., (2008), Proceedings of SPIE - The International Society for Optical Engineering 6999, art. no. 69991N

18. “Adaptive control of ion beams produced by ultrafast laser ablation of silicon”, R. Stoian, N.M. Bulgakova, A. Mermillod-Blondin, A. Rosenfeld, M. Spyridaki, E. Koudoumas, C. Fotakis, I.V. Hertel, SPIE, vol. 5725, 329, 2005

19. “Temporal pulse manipulation and adaptive optimization in ultrafast laser processing of materials”, R. Stoian, A. Mermillod-Blondin, S. Winkler, A. Rosenfeld, I.V. Hertel, M. Spyridaki, E. Koudoumas, C. Fotakis, I.M. Bukarov, N.M. Bulgakova, SPIE, vol. 5662, 593, 2004

20. “Adaptive optimization in ultrafast laser material processing”, R. Stoian, A. Mermillod-Blondin, S. Winkler, A. Rosenfeld, I.V. Hertel, M. Spyridaki, E.

Koudoumas, C. Fotakis, I.M. Bukarov, N.M. Bulgakova, SPIE, vol. 5448 (PART 1), 73, 2004.

21. «Temporal Pulse Shaping and Optimization in Ultrafast Laser Ablation of Materials», R. Stoian, S. Winkler, M. Hildebrand, M. Boyle, A. Thoss, M. Spyridaki, E. Koudoumas, N.M. Bulgakova, A. Rosenfeld, P.Tzanetakis, C. Fotakis, I.V. Hertel, MRS Proceedings, vol. 780, Y.5.1-Y5.1.12, 2003.

22. “Nonlinear optical properties of fullerene materials”, S. Couris, E. Koudoumas, in “Nonlinear optical response of molecules, solids and liquids: methods and applications”, Ed. M. Papadopoulos, Research Signpost, p. 231, 2003

23. “Ultrafast nonlinear optical response of higher fullerenes”, E. Koudoumas, S. Couris, SPIE, vol.5131, 319, 2002

24. “Wave mixing and quantum interference effect in Potassium atoms”, N. Merlemis, M.Katharakis, E. Koudoumas and T. Efthimiopoulos, SPIE, vol. 5131, 83, 2003.

25. “Nonlinear absorption of silicon nanocomposites”, S. B. Korovin, V. I. Pustovoi, V. E. Ogluzdin, M. Konstantaki, O. Kokkinaki, S. Couris, E. Koudoumas, SPIE, vol. 4762, 297, 2002.

26. “Comparison of photochemical reactivity of lower and higher fullerenes at higher intensities and shorter wavelengths”, L. Juha, S. Couris, E. Koudoumas, P. Kubat, V. Hamplova, Z. Pokorna, and A. Mullerova, “Fullerenes for the new millennium”, p.162, Eds. K. M. Kadish, P. V. Kamat, D. M. Guldi, The Electrochemical Society, Pennington 2001.

27. “Optical properties of metal-coated silicon nanocrystals”, S. B. Korovin, B.B. Krinetskii, V. I. Pustovoi, S. Fadeeva, M. Konstantaki, E. Koudoumas, S. Couris, SPIE, vol 4070, 465, 2000.

28. “Photochemistry of Higher Fullerenes”, L. Juha, S. Couris, E. Koudoumas, P. Kubat, V. Hamplova, Z. Pokorna, and A. Mullerova, “Fullerene 2000 vol 8: Electrochemistry and Photochemistry”, p.233, Eds. S. Fukuzumi, F. D'Souza, D. M. Guldi, The Electrochemical Society, Pennington 2000.

29. “Characterization of nonlinear optical materials for photonic applications”, S. Couris, E. Koudoumas, M. Konstantaki, NATO Science Series 3 - High Technology, vol 75, 143, 2000.

30. “Photochemistry of fullerenes in the near infrared”, L. Juha, B. Ehrenberg, S. Couris, E. Koudoumas, F. P. Boody, V. Hamplova, Z. Pokorna, A. Mullerova, M. Pavel, “Recent Advances in the Chemistry and Physics of Fullerenes and Related Materials”, vol 7, p. 424, Eds. K.M. Kadish, P.V. Kamat, and D.M. Guldi, The Electrochemical Society, Pennington 1999

31. “Ionization and fragmentation of small molecules under psec and fsec laser excitation”, S. Couris, E. Koudoumas, C. Fotakis, AIP 454, p. 331, 1998.

32. “Optical nonlinearities of fullerenes and their implications in optoelectronics”, E. Koudoumas, S. Couris, SPIE, vol. **3423**, p.184, 1998.

33. “Transient Population and Electronic Polarization Nonlinear Optical Response of Fullerenes in Solution”, S. Couris, E. Koudoumas, S. Tzortzakos and S. Leach, “Recent Advances in the Chemistry and Physics of Fullerenes and Related Materials”, Vol. **5**, p. 225, Eds. K.M. Kadish and R.S. Ruoff, The Electrochemical Society, Pennington 1997.

34. “Comparison of photophysical and photochemical behavior of fullerene derivatives with unfunctionalized fullerenes”, L. Juha, V. Hamplova, Z. Pokorna, J. Kodymova, O. Spalek, J. Krasa, K. Lang, P. Kubat, F. P. Boody, E. Koudoumas, S.

Couris, I. Stibor, T. Gareis, O. Kothe, J. Daub, "Recent Advances in the Chemistry and Physics of Fullerenes and Related Materials", Vol. 4, p. 56, Eds. K.M. Kadish and R.S. Ruoff, The Electrochemical Society, Pennington 1997.

35. "Experimental evidence of quasi absorption-less type of resonant sum mixing process", T. Efthimiopoulos, E. Koudoumas, M.V. Doglorova and Yu.I. Heller, SPIE, Vol. 2798, p. 238, 1996.

36. "Photochemical reactivity of the fullerenes dissolved in different solvents", L. Juha, V. Hamplova, M. Farnikova, J. Kodymova, O. Palek, J. Krasa, L. Laska, , P. Kubat, E. Koudoumas, S. Couris, I. Stibor, "Recent Advances in the Chemistry and Physics of Fullerenes and Related Materials", Vol. 3, p. 363, Eds. K.M. Kadish and R.S. Ruoff, The Electrochemical Society, Pennington 1996.

37. "Double resonant four-wave sum mixing near an autoionizing state", E. Koudoumas and T. Efthimiopoulos, SPIE, Vol. 1810, p. 729, 1993.

38. "Laser-induced continuum structure and third harmonic generation in calcium", O. Faucher, D. Charalambidis, E. Koudoumas and C. Fotakis, SPIE, Vol. 1810, p. 744, 1993.

39. "Laser processed silicides for GaAs HEMTS", W.T. Anderson, A. Christou, P.E. Thomson, J.L. Davis, C.R. Gosset, J.M. Eridon, C. Michelakis, G. Kiriakidis, Z. Hatzopoulos, T. Efthimiopoulos, E. Koudoumas and D.V. Morgan, MRS Fall Meeting Proceedings, 1989.

International conferences

1) Mirela Petruta Sucheana, Andrianna Bouranta, Ioan Valentin Tudose, Luciana Georgescu, Nikolaos Rafail Vrithias, George Kenanakis, Efsevia Sfakaki, Nikolaos Mitrizakis, George Strakantounas, Nikolaos Papandroulakis, Cosmin Romanitan, Cristina Pachiu, Oana Brincoveanu, Emmanouel Koudoumas "Pure and doped TiO₂/HDPE 3D printed composite materials with antifouling properties for aquaculture applications" Invited Oral in 5th International Conference on Emerging Technologies in Materials Engineering EMERGEMAT No.5 / 2022 27-28 October 2022 ONLINE Bucharest, ROMANIA.

2) P. Pascariu, L. Georgescu, E. Koudoumas, M. P. Sucheana "TiO₂ based semiconductor nanofibers with enhanced UV and visible photocatalytic properties" CAS 2022, IEEE 2022 International Semiconductor Conference (CAS) event, 12 - 4 October 2022, Poiana Brasov, Romania.

3) A. Bouranta, I. V. Tudose, L. Georgescu, N. R. Vrithias, G. Kenanakis, E. Sfakaki, N. Mitrizakis, G. Strakantounas, N. Papandroulakis, C. Romanitan, C. Pachiu, O. Brincoveanu-Tutunaru, L. Barbu-Tudoran, M. P. Sucheana, E. Koudoumas "3d printed metal oxide-polymer composite materials with antifouling properties for aquaculture applications" CAS 2022, IEEE 2022 International Semiconductor Conference (CAS) event, 12 - 4 October 2022, Poiana Brasov, Romania.

4) L. Draghiciu, I.V.Tudose, C. Romanitan, R. Gavrila, O.A. Brincoveanu, F.C. Comanescu, C. Pachiu, R. Muller, A.Dinescu, E. Koudoumas and M.P. Sucheana "Substrate influence on V₂O₅ growth by spray pyrolysis method" CAS 2022, IEEE 2022 International Semiconductor Conference (CAS) event, 12 - 4 October 2022, Poiana Brasov, Romania,

5) E. Koudoumas, O. N. Ionescu, V. Z. Barsukov, M. P. Sucheana "Innovative composite materials for electromagnetic shielding" CAS 2022, IEEE 2022 International Semiconductor Conference (CAS) event, 12 - 4 October 2022, Poiana Brasov, Romania.

- 6) P. Pascariu, L. Georgescu, E. Koudoumas, M.P. Suchea "Electrospinning of TiO₂ based semiconductor nanofibers with enhanced photocatalytic properties" 36th Panhellenic Conference on Solid State Physics and Materials Science, 26-29 September 2022, Heraklion, Crete, Greece.
- 7) A. Bouranta, I.V. Tudose, L. Georgescu, N.R. Vrithias, G. Kenanakis, E. Sfakaki, N. Mitrizakis, G. Strakantounas, N. Papandroulakis, C. Romanitan, C. Pachiu, O. Tutunaru, L. Barbu -Tudoran, M.P. Suchea, E. Koudoumas "3D printed composite materials with antifouling properties for aquaculture applications" 36th Panhellenic Conference on Solid State Physics and Materials Science, 26-29 September 2022, Heraklion, Crete, Greece.
- 8) K. Mouratis, I.V. Tudose, C. Romanitan, M. Popescu, G. Simistiras, S. Couris, M.P. Suchea, E. Koudoumas "Fabrication and performance of electrochromic devices based on V₂O₅ and WO₃ thin films" 36th Panhellenic Conference on Solid State Physics and Materials Science, 26-29 September 2022, Heraklion, Crete, Greece.
- 9) I.V. Tudose, C. Romanitan, C. Pachiu, I. Rosca, K. Petrotos, S. Zaoutsos, G.A. Fragkiadakis, A. Bouranta, M.P. Suchea, E. Koudoumas "PLA nanocomposites with antimicrobial action, based on encapsulated natural extracts for food packaging applications" 36th Panhellenic Conference on Solid State Physics and Materials Science, 26-29 September 2022, Heraklion, Crete, Greece.
- 10) M.P. Suchea, I.V. Tudose, L. Draghiciu, C. Romanitan, C. Pachiu, R. Gavrila, O.A. Brincoveanu, I. Mihalache, F. Comanescu, R. Muller, A. Dinescu and E. Koudoumas "Engineering of V₂O₅ thin films surface properties via the control of the growth parameters" Oral presentation ONLINE the 14th International Conference on Physics of Advanced Materials (ICPAM-14) and the 5th Autumn School on Physics of Advanced Materials (PAMS-5) . September 8 – 15, 2022, Dubrovnik, Croatia.
- 11) A. Bouranta, I.V. Tudose, C. Romanitan, C. Pachiu, I. Rosca, K. Petrotos, S. Zaoutsos, G. A. Fragkiadakis, M.P. Suchea, E. Koudoumas "Antimicrobial nanocomposite materials for food packaging applications -fabrication and properties" ONLINE the 14th International Conference on Physics of Advanced Materials (ICPAM-14) and the 5th Autumn School on Physics of Advanced Materials (PAMS-5) . September 8 – 15, 2022, Dubrovnik, Croatia.
- 12) L. Georgescu, P. Pascariu, I.V. Tudose, C. Romanitan, Barbu-Tudoran, M.P. Suchea, E. Roditakis, E. Koudoumas "Fabrication and properties of pure and doped TiO₂ materials for potential agricultural applications" ONLINE the 14th International Conference on Physics of Advanced Materials (ICPAM-14) and the 5th Autumn School on Physics of Advanced Materials (PAMS-5) . September 8 – 15, 2022, Dubrovnik, Croatia.
- 13) I.V. Tudose, O. N. Ionescu, C. Romanitan, C. Pachiu, O. Brincoveanu, D. Stratakis, M. P. Suchea, E. Koudoumas "Composite materials for electromagnetic shielding - fabrication and characterisation" ONLINE the 14th International Conference on Physics of Advanced Materials (ICPAM-14) and the 5th Autumn School on Physics of Advanced Materials (PAMS-5) . September 8 – 15, 2022, Dubrovnik, Croatia.
- 14) M. Orfanou, A. Bouranta, I.V. Tudose, L. Georgescu, N. R. Vrithias, G. Kenanakis, E. Sfakaki, N. Mitrizakis, G. Strakantounas, N. Papandroulakis, C. Romanitan, C. Pachiu, O. Brincoveanu, L. Barbu -Tudoran, M. P. Suchea and E. Koudoumas "TiO₂ based composite materials with antifouling properties for aquaculture applications," ONLINE the 14th International Conference on Physics of

Advanced Materials (ICPAM-14) and the 5th Autumn School on Physics of Advanced Materials (PAMS-5) . September 8 – 15, 2022, Dubrovnik, Croatia.

15) Mirela Petruta Sucheai, Ioan Valentin Tudose, Kyriakos Mouratis, Cosmin Romanitan, Cristina Pachiou, Marian Popescu, Oana Tutunaru and Emmanouel Koudoumas “Fabrication and properties of novel functional nanostructured metal oxide thin films made by spray pyrolysis” **Invited** Materials Science, Engineering & Technology International Conference, Online 27 – 29 July 2022 in association with the University of Queensland, Australia. <https://msiconference.com/australia-2022/>

16) Ioan Valentin Tudose, Kyriakos Mouratis, Octavian Narcis Ionescu, Cosmin Romanitan, Cristina Pachiou, Marian Popescu, Volodymyr Khomenko, Oksana Butenko, Oksana Chernysh, Viacheslav Z. Barsukov, Emmanouel Koudoumas and Mirela Petruta Sucheai. “Novel paints for composite materials coatings used in electromagnetic shielding applications” NANOPOSTER 2022 - 11th Virtual Nanotechnology Poster Conference, 25th to 30th April 2022 <https://www.nanopaprika.eu/groups/nanoposter-2022/forum/topics/np2022-025>

17) I.V. Tudose, I. Rosca, C. Romanitan, O.N. Ionescu, K. Petrotos, S. Zaoutsos, M.P. Sucheai, E. Koudoumas, “PLA nanocomposites with antimicrobial action, based on olive fruit polyphenols and citrus fruit extracts encapsulated in Maltodextrin”, 44th edition of the conference – CAS 2021, an IEEE event, online 6 - 8 October 2021.

18) M. Sucheai, I.V. Tudose, K. Mouratis, O.N. Ionescu, C. Romanitan, M. Popescu, V. Khomenko, O. Butenko, O. Chernysh, G. Kenanakis, V. Barsukov and E. Koudoumas „Novel composite materials for electromagnetic shielding applications”(**invited speaker**), FUTURE MATERIALS 2021- GLOBAL SUMMIT ON FUTURE OF MATERIALS SCIENCE AND RESEARCH JULY 29-30 2021 <http://materialsscience.peersalleyconferences.com/>

19) K. Mouratis, I. V. Tudose, C. Romanitan, M. Popescu, G. Simistiras, S. Couris, M. P. Sucheai and E. Koudoumas „Nanostructured electrochromic WO₃ films grown by spray pyrolysis”, XXXV Panhellenic Conference on Solid State Physics and Materials Science, Congress Center, NCSR “Demokritos”, 26-29 September 2021, Athens, Greece.

20) K. Mouratis, I. V. Tudose, C. Romanitan, M. Popescu, G. Simistiras, S. Couris, M. P. Sucheai and E. Koudoumas „Fabrication and properties of WO₃ films grown by spray pyrolysis for smart windows applications” 3th International Conference on Physics of Advanced Materials (ICPAM-13), September 24-30, 2021, hybrid event, Sant Feliu de Guixols, Costa Brava, Spain. T10-P

21) A. Bouranta, N. Vrithias, G. Kenanakis, E. Sfakaki, N. Mitrizakis, C. Strakantounas, N. Papandroulakis, C. Romanitan, C. Pachiou, L. Barbu, M. P. Sucheai, E. Koudoumas. „3D printed metal oxide-polymer composite materials for antifouling applications”, 4th Autumn School on Physics of Advanced Materials (PAMS-4); September 24 – 30, 2021, Sant Feliu de Guixols, Costa Brava, Spain.

22) K. Mouratis, I. V. Tudose, C. Romanitan, M. Popescu, G. Simistiras, S. Couris, M. P. Sucheai and E. Koudoumas „Comparative study of electrochromic V₂O₅ and WO₃ films grown by spray pyrolysis” 4th Autumn School on Physics of Advanced Materials (PAMS-4); September 24 – 30, 2021, Sant Feliu de Guixols, Costa Brava, Spain.

23) C. Romanitan, I.V. Tudose, K. Mouratis, M. Popescu, C. Pachiou, S. Couris, E. Koudoumas, M. Sucheai „Orthorhombic V₂O₅ for electrochromism and charge storage devices: unveiling the microstructural features via non-destructive methods” 4th

Autumn School on Physics of Advanced Materials (PAMS-4); September 24 – 30, 2021, Sant Feliu de Guixols, Costa Brava, Spain.

24) M. Sucheai, I. V. Tudose, O. N. Ionescu, C. Romanitan, C. Pachiou, M. Popescu, D. Vernardou, G. Kenanakis, A. Dinescu, E. Koudoumas „Photocatalytic materials for air and water purification - an overview” (oral presentation), The 3rd International Workshop Advances on Photocatalysis (AdvPhotoCat-EE2021), 2021, June 28 –29, Online event, Bucharest, România,

25) Barsukov, V. Khomenko, I.V. Tudose, K. Muratis , O.N.Ionescu , O. Butenko , O. Chernysh , V. Tverdokhleba , M. Sucheai, E. Koudoumas “Carbon-Graphene-Polymer Nanostructured Paints for Electromagnetic Interference Shielding “, NN21 International Conference on Nanosciences & Nanotechnologies, 6-9 July 2021, Thessaloniki, Greece, www.nanotextnology.com

26) Ioan Valentin Tudose, Kyriakos Mouratis, George Kenanakis, Mirela Sucheai, Emmanouel Koudoumas “Graphene nanoplatelets based nanocomposites for EMI Shielding applications” NANOPOSTER 2021 - 10th Virtual Nanotechnology Poster Conference, 12-18 April 2021,

27) A. Maniadi, M. Vamvakaki, M. Petousis, N. Vidakis, M. Sucheai, M. Sevastaki, Z. Viskadourakis, G. Kenanakis, E. Koudoumas, Effect of Zinc Oxide concentration on the dielectric properties of 3D Printed Acrylonitrile Butadiene Styrene nanocomposites, International Semiconductor Conference (CAS 2020), 7 to 9 October 2020 Sinaia, Romania

28) A. Maniadi, N. Vidakis , M. Petousis, G. Kenanakis, Z. Viskadourakis, M. Sucheai, M. Vamvakaki, E. Koudoumas, Mechanical properties of ABS/ZnO nanocomposites developed via 3D printing, 34th annual Panhellenic Conference on Solid State Physics and Materials Science (XXXIV SSM 2019), Patras, Greece, September 11-14, 2019.

29) N. Vidakis, A. Maniadi, M. Petousis, G. Kenanakis, M. Sucheai, M. Vamvakaki, E. Koudoumas, Basic characteristics and electrical behavior of Acrylonitrile Butadiene Styrene/Zinc Oxide nanocomposites, 34th annual Panhellenic Conference on Solid State Physics and Materials Science (XXXIV SSM 2019), Patras, Greece, September 11-14, 2019

30) O’Brien, S.; Kazadojev, I. I.; Ryan, L. P.; Koudoumas, E.; Katsarakis, N.; Pemble, M. E.; Povey, I. P.; Vernardou, D., Electrochemical properties of V₂O₅ and V₂O₅:Ag coatings grown by Atomic Layer Deposition at 250 °C”, 12th International Conference on Physics of Advanced Materials, Heraklion, Crete, Greece, September 2018.

31) M. Sucheai, C. Pachiou, F. Comanescu, P. Pascariu, M. Popescu, I V Tudose, E. Koudoumas “Raman microscopy and spectroscopy studies of graphene/TiO₂/PVDF composite fibers “ 12th International Conference on Physics of Advanced Materials (ICPAM-12), Heraklion, Crete, Greece., September 22 – 28, 2018.

32) P. Pascariu, I.V. Tudose, C. Pachiou, M. Danila, O. Ionescu, E. Koudoumas, M. Sucheai, “Electrospinning fabricated novel graphene and TiO₂ - PVDF nanocomposites”, International conference “Expert Evaluation and Control of Compounds of Semiconductor Materials and Technologies” EXMATEC2018, Bucharest, Romania, 16-18 May 2018.

33) P. Pascariu, I.V. Tudose, C. Pachiou, M. Danila, R. Gavrilă, E. Koudoumas, M. Sucheai, “Comparative study of structural and optical properties of Sm and La doped

ZnO”, International Workshop on Compound Semiconductor Devices and Integrated Circuits held in Europe WOCSDICE2018, Bucharest, Romania, 14-16 May 2018

34) D. Louloudakis, J. Gil-Rostra, K. Mouratis, D. Vernardou, E. Koudoumas, A. R. Gonzalez-Elipe, Effect of the porosity on the electrochromic response of WO₃ grown using magnetron sputtering 12th International Conference on Physics of Advanced Materials, Heraklion, Crete, Greece, September 2018.

35) V. Tudose, P. Pascariu, C. Pachiu, F. Comanescu, M. Danila, R. Gavrilă, E. Koudoumas, M. Sucheă, “Comparative study of Sm and La doped ZnO properties” International Semiconductor Conference - CAS 2018, an IEEE event, held Sinaia Romania October 10-12, 2018.

36) P. Pascariu, I. V. Tudose, C. Pachiu, M. Danila, O. Ionescu, M. Popescu, E. Koudoumas, M. Sucheă “Graphene and TiO₂ - PVDF nanocomposites for potential applications in triboelectronics” International Semiconductor Conference - CAS 2018, an IEEE event, held Sinaia Romania, October 10-12, 2018.

37) I V Tudose, P. Pascariu, C. Pachiu, M. Danila, R. Gavrilă, M. Popescu, E. Koudoumas, M. Sucheă, Dopant effect on ZnO thin films properties, 12th International Conference on Physics of Advanced Materials (ICPAM-12), Heraklion, Crete, Greece., September 22 – 28, 2018.

38) N. Vidakis, M. Petousis, A. Maniadi, M. Sucheă, E. Koudoumas, Mechanical properties of ABS–Graphene and ABS–Carbon nanotubes nanocomposites developed with fused deposition modeling, 12th International Conference on Physics of Advanced Materials (ICPAM-12), Heraklion, Crete, Greece., September 22 – 28, 2018.

39) A. Maniadi, N. Vidakis, M. Petousis, G. Kenanakis, C. Pachiu, M. Popescu, M. Sucheă, M. Vamvakaki, E. Koudoumas, Graphene nanoplatelets / polymer nanocomposites: Basic characteristics and functional behavior of low density polyethylene, , 12th International Conference on Physics of Advanced Materials (ICPAM-12), Heraklion, Crete, Greece., September 22 – 28, 2018.

40) M. Sucheă, C. Obreja, V. Dediu, C. Pachiu, M. A. Dinescu, F. Comanescu, O. Ionescu, I V Tudose, E. Koudoumas, Metal oxides based coatings onto textile substrates for air purification applications, 12th International Conference on Physics of Advanced Materials (ICPAM-12), Heraklion, Crete, Greece., September 22 – 28, 2018.

41) D. Louloudakis, W. Thongpan, K. Mouratis, E. Koudoumas, G. Kiriakidis, P. Singjai, Effect of doping on deposition of WO₃ grown using a simple spark method, EMRS 2018, June 2018, Strasbourg, France

42) D. Louloudakis, D. Vernardou, G. Papadimitropoulos, D. Davazoglou, E. Koudoumas, Effect of preferred orientation on the electrochromic properties of tungsten oxide coatings grown by a LPCVD system, EUROMAT 2017, September 2017, Thessaloniki, Greece.

43) Petronela Pascariu Dorneanu, Ioan Valentin Tudose, Mirela Sucheă, Emmanouel Koudoumas, Anton Airinei and Nicusor Fifere, “Preparation And Characterization Of Ni, Co Doped ZnO Nanoparticles Obtained By Sol Gel Method”, presented in The 9th International Conference On Advanced Materials (ROCAM), July 11-14, 2017.

44) Insulators’ Pollution Problem: Experience from the Coastal Transmission System of Crete, N. C. Mavrikakis, E. Koudoumas, K. Siderakis, D. Pylarinos, E. Thalassinakis, O. Kokkinaki, A. Klini, C. Kalpouzou, M. Polychronaki, D. Anglos, UPEC 2017, Heraklion, Grece.

- 45)** Evaluation of V_2O_5 coatings grown by plasma enhanced and thermal atomic layer deposition, Kazadojev, I.I.; Brien, S.O’.; Mondreanu, M.; Osiceanu, P.; Somacescu, S.; Apostolopoulou, M.; Katsarakis, N.; Koudoumas, E.; Vernardou, D.; Pemble, M.E.; Povey, I.M. 18th International Meeting on Lithium Batteries, Chicago USA 2016.
- 46)** Effect of oxygen source on the properties of vanadium oxide coatings grown by atmospheric pressure CVD, Louloudakis, D.; Vernardou, D.; Spanakis, E.; Panagopoulou, Raptis, Y.; Kiriakidis, G.; Katsarakis, N.; Koudoumas, E., E-MRS 2015 Lille France.
- 47)** Effect of deposition temperature and amount of vanadium precursor on the thermochromic performance of VO_2 coatings grown by atmospheric pressure CVD, Louloudakis, D.; Vernardou, D.; Spanakis, E.; Panagopoulou, Raptis, Y.; Kiriakidis, G.; Katsarakis, N.; Koudoumas, E., E-MRS 2015 Lille France.
- 48)** Study the effect of deposition period on the electrochemical properties of LPCVD WO_3 , Louloudakis, D.; Psifis, K.; Vernardou, D.; Spanakis, E.; Papadimitropoulos, G.; Davazoglou, D.; Katsarakis, N.; Koudoumas, E., E-MRS 2015 Lille France
- 49)** A comparative study of two APCVD systems for the growth of thermochromic vanadium dioxide coatings, Louloudakis, D.; Vernardou, D.; Spanakis, E.; Panagopoulou, Raptis, G.; Kiriakidis, G.; Katsarakis, N.; Koudoumas, E., MRS 2015 San Francisco USA.
- 50)** Electrochromic response of WO_3 grown using LPCVD, Louloudakis, D.; Vernardou, D.; Psifis, K.; Spanakis, E.; Katsarakis, N.; Papadimitropoulos, G.; Davazoglou, D.; Koudoumas, E., MRS 2015 San Francisco USA..
- 51)** O. Kokkinaki, A. Klini, N. Mavrikakis, K. Siderakis, E. Koudoumas, D. Pylarinos, E. Thalassinakis, C. Kalpouzou, D. Anglos, "Assessing the type and operational quality of SIR HV insulators by remote LIBS analysis", 8th Euro-Mediterranean Symposium on Laser Induced Breakdown Spectroscopy (LIBS), Linz, Austria, September 14-18, 2015.
- 52)** O. Kokkinaki, A. Klini, D. Pylarinos, E. Thalassinakis, N. Mavrikakis, K. Siderakis, E. Koudoumas, D. Anglos, K. Kalpouzou, "NDT to investigate the behavior of composite polymer HTV SIR insulators in high voltage installations using the LIBS technique", 8th National Conference of Non-Destructive Testing of the Hellenic Society of NDT (HSNT), Athens, Greece, May 8-9, 2015
- 53)** N Mavrikakis, K Siderakis, D Kourasani, M Pechynaki, E Koudoumas, "Hydrophobicity transfer mechanism evaluation of field aged composite insulators", 5th International Conference on Power Engineering, Energy and Electrical Drives, Riga, Latvia, May 2015.
- 54)** M. Sucheá, I. V. Tudose, F. Iacomi and E. Koudoumas, "Nanostructured metal oxides for energy and environmental applications". Materials & Micro-nano Technology in International Conference "Science in Technology" (SCinTE 2015), Athens on 5-7 November 2015.
- 55)** M. Sucheá, I.V. Tudose, F. Iacomi and E. Koudoumas, Nanostructured metal oxides for potential applications in organic solar cells" (P15-26) NANOPOSTER 2015 - 5th Virtual Nanotechnology Conference 13-19 Aprilie 2015 on line.
- 56)** M. Sucheá, I V. Tudose, F. Iacomi, E. Koudoumas, "Thickness influence on physical properties of TiO_2 and $Ti(Nb)O_2$ thin films" The 1st International Workshop "Advances on Photocatalysis AdvPhotoCat2015, Iasi, Romania, 6–8th of July, 2015 Book of Abstracts.

- 57) Mirela Suche, Ioan Valentin Tudose, Felicia Iacom, Emmanouel Koudoumas "Metal oxide based smart materials" 2nd CommScie International Conference "Challenges for Sciences and Society in Digital Era" Iași, December 4th–5th, 2015.
- 58) M. Suche, I. V. Tudose, F. Iacom, E. Koudoumas, „Pure and doped TiO₂ thin films for environmental and energy applications”, Poster no 48 in “Sesiunea de comunicări științifice a Facultatii de Chimie”, 29-30 October 2015
- 59) M. Suche, I. V. Tudose, F. Iacom, E. Koudoumas, Pure and doped TiO₂ thin films for environmental and energy applications”, Poster no 48 “Alexandru Ioan Cuza” University Days Faculty of Chemistry Conference 29-30 October 2015, Iasi, Romania.
- 60) K. Christou, D. Louloudakis, D. Vernardou, C. Savvakis, N. Katsarakis, E. Koudoumas, G. Kiriakidis, Effect of solution chemistry on the characteristics of hydrothermally grown WO₃ for electroactive applications, 5th International Symposium on Transparent Conducting Materials in Platania (Greece).
- 61) D. Louloudakis, D. Vernardou, E. Spanakis, N. Katsarakis, E. Koudoumas, G. Kiriakidis, Atmospheric pressure chemical vapor deposition of thermochromic amorphous tungsten doped vanadium dioxide, 5th International Symposium on Transparent Conducting Materials in Platania (Greece).
- 62) D. Louloudakis, D. Vernardou, E. Spanakis, N. Katsarakis, E. Koudoumas, E. Gagaoudakis, E. Aperathitis, G. Kiriakidis, Effect of antireflection TiO₂ layer on the thermochromic performance of vanadium dioxide, 5th International Symposium on Transparent Conducting Materials in Platania (Greece).
- 63) Apostolopoulou, M.; Louloudakis, D.; Vernardou, D.; Katsarakis, N.; Koudoumas, E.; Kiriakidis, Study of the pH effect on the properties of the hydrothermally grown V₂O₅, G. 5th International Symposium on Transparent Conducting Materials in Platania (Greece).
- 64) K. Christou, D. Louloudakis, D. Vernardou, N. Katsarakis, E. Koudoumas, One-pot synthesis of WO₃ nanostructures at 95 °C using NaOH and HCl, E-MRS 2014 in Lille (France).
- 65) M. Apostolopoulou, D. Louloudakis, D. Vernardou, N. Katsarakis, E. Koudoumas, pH effect on the electrochemical properties of the hydrothermally grown V₂O₅, E-MRS 2014 in Lille (France).
- 66) M. Apostolopoulou, D. Louloudakis, D. Vernardou, N. Katsarakis, E. Koudoumas, Hydrothermal growth and characterization of vanadium oxide coatings using VOSO₄ as precursor, E-MRS 2014 in Lille (France).
- 67) D. Vernardou, D. Louloudakis, N. Katsarakis, E. Koudoumas, I.I. Kazadojev, S.O' Brien, I.M. Povey, M.E. Pemble, Electrochemical evaluation of vanadium pentoxide coatings grown by AACVD, E-MRS 2014 in Lille (France).
- 68) D. Louloudakis, D. Vernardou, K. Psifis, E. Spanakis, N. Katsarakis, G. Papadimitropoulos, D. Davazoglou, E. Koudoumas, Effect of the growth parameters on the electrochromic properties of low pressure CVD WO₃ films, 65th Annual Meeting of the International Society of Electrochemistry 2014 in Lausanne (Switzerland).
- 69) D. Louloudakis, D. Vernardou, E. Spanakis, N. Katsarakis, E. Koudoumas, G. Kiriakidis, Intelligent thermochromic coatings grown by chemical vapor deposition at atmospheric pressure, 30th Panhellenic Conference on Solid-State Physics and Materials Science 2014 in Heraklion (Greece).
- 70) K. Psifis, D. Louloudakis, G. Papadimitropoulos, D. Davazoglou, N. Katsarakis, C. Savvakis, E. Spanakis, D. Vernardou, E. Koudoumas, LPCVD electrochromic

WO₃ layers on FTO glass substrates using different substrate temperatures, 30th Panhellenic Conference on Solid-State Physics and Materials Science 2014 in Heraklion (Greece).

71) D. Louloudakis, D. Vernardou, E. Spanakis, N. Katsarakis, E. Koudoumas, G. Kiriakidis, Tungsten doped vanadium oxide coatings grown by APCVD using isopropoxide precursors, International Conference on Nanotechnology, Nanomaterials & Thin Films for Energy Applications in London (UK) 2014.

72) N. Mavrikakis, K. Siderakis, E. Koudoumas, Assessment diagnostics of the functionality of composite insulators operating in the 150kV power network of Crete, 30th Panhellenic Conference on Solid-State Physics and Materials Science, Heraklion, Crete, Greece, 21-24 September, 2014

73) N. Mavrikakis, K. Siderakis, D. Pylarinos, E. Koudoumas, Assessment of Field Aged Composite Insulators Condition in Crete, 9th International Conference on Deregulated Electricity Market Issues in South Eastern Europe, Nicosia, Cyprus, 25-26 September, 2014

74) D. Pylarinos, K. Siderakis, E. Koudoumas, E. Thalassinakis, "Polymer Insulators and Coatings in the Cretan Power System. The Transmission Line Case", 9th Mediterranean Conference on Power Generation, Transmission Distribution and Energy Conversion, Athens, Greece, 2-5 November, 2014

75) Nanostructured coatings for electromagnetic shielding in the GHz frequency band, G. Tzagkarakis, M. Sucheas, I. V. Tudose, G. Kenanakis, M. Katharakis, E. Drakakis, E. Koudoumas, 30th Panhellenic Conference on Solid-State Physics and Materials Science, Heraklion, Crete, Greece, 21-24 September, 2014

76) M. Sucheas, I. V. Tudose, G. Kenanakis, E. Koudoumas, E. Drakakis, Graphene based paint-like composites for electromagnetic shielding in the GHz frequency range, Graphene2014, International Conference & Exhibition, Toulouse-France, May 06-09,

77) Vassilaki E., Vernardou D., Georgaki I., Kenanakis G. and N. Katsarakis, "TiO₂ / WO₃ photoactive bilayers in the visible-light region", poster, 8th European Meeting on Solar Chemistry and Photocatalysis: Environmental Applications (SPEA8), Thessaloniki, Greece, 25-28 June 2014.

78) M. Sucheas, I.V. Tudose, A. Kougiyas, D. Manica, C. Tinica, C. Varlan, F. Iacomi, E. Koudoumas, Nanostructured WO₃: Synthesis and characterization" Poster P21 10th International Conference on Physics of Advanced Materials ICPAM-10, Alexandru Ioan Cuza University of Iasi, Romania, September 22 - 28 2014

79) M. Sucheas, I.V. Tudose, A. Kougiyas, D. Manica, C. Tinica, C. Varlan, F. Iacomi, E. Koudoumas „Nanostructured WO₃: Synthesis and characterization" Poster P21 10th International Conference on Physics of Advanced Materials ICPAM-10, Alexandru Ioan Cuza University of Iasi, Romania, September 22 - 28 2014

80) D. Louloudakis, D. Vernardou, E. Spanakis, N. Katsarakis, E. Koudoumas, Thermochromic vanadium oxide coatings grown by APCVD at low temperatures, EuroCVD 19 in Varna (Bulgaria) 2013.

81) Louloudakis, D. Vernardou, E. Spanakis, N. Katsarakis, E. Koudoumas, Electrochemical properties of vanadium oxide coatings grown by APCVD on FTO substrates, D. EuroCVD 19 in Varna (Bulgaria) 2013.

82) D. Louloudakis, D. Vernardou, E. Spanakis, N. Katsarakis, E. Koudoumas, Study of the pH effect on the electrochemical properties of the hydrothermally grown vanadium oxide coatings, International Conference on Advanced Complex Inorganic Nanomaterials 2013 in Namur (Belgium).

- 83)** D. Louloudakis, D. Vernardou, E. Spanakis, N. Katsarakis, E. Koudoumas, Electrochemical properties of vanadium oxide coatings grown by hydrothermal synthesis on FTO substrates, International Conference on Advanced Complex Inorganic Nanomaterials 2013 in Namur (Belgium).
- 84)** E. Gagaoudakis, V. Kampylafka, I. Kortidis, V. Binas, E. Aperathitis, D. Vernardou, D. Louloudakis, E. Spanakis, N. Katsarakis, E. Koudoumas, G. Iliadis, G. Kiriakidis, Thermochromic VO₂ layers grown by APCVD and Sputtering techniques, E-MRS 2013 in Warsaw (Poland).
- 85)** Vernardou, D.; Louloudakis, D.; Gagaoudakis, M.; Kampylafka, V.; Spanakis, E.; Katsarakis, N.; Koudoumas, M.; Aperathitis, E.; Iliadis, G.; Kiriakidis, G. Effect of buffer layer and deposition parameters on thermochromic properties of VO₂, 2nd International Conference on Advanced Electromaterials in Jeju (Korea) 2013.
- 86)** M. Sucheá, I.V. Tudose, N. Vínceanu, E. Koudoumas, "Comprehensive overview of recent biomedical applications of nano-structured zinc oxide" International Seminar on Biomaterials & Regenerative Medicine BioReMed'2013 and National Symposium on Biomaterials IX-th edition Iași, 30 May – 02 June 2013
- 87)** N. Vínceanu, M. Sucheá, I.V. Tudose, F. Iacomí, E. Koudoumas, "Metal Oxide Active Nanostructured Coatings On Fabric Substrates", Poster S1 P07 in The 13th International Balkan Workshop on Applied Physics and Materials Science, Constanta, Romania 5-7 July 2013
- 88)** I.V. Tudose, M. Sucheá, K. Siderakis, E. Thalassinakis, E. Koudoumas, Comparative study on field collected samples of aged silicon rubber composite coatings for high voltage insulators, ACTA CHEMICA IASI, 21_2, 93-106 (2013)
- 89)** H. Drosos, M. Vezirh, E. Koudoumas, N. Katsarakis, D. Vernardou, Electrodeposition of vanadium oxides on various substrates, 9th International Conference on Nanosciences and Nanotechnologies, 2012, Thessaloniki (Greece).
- 90)** H. Drosos, A. Sapountzis, E. Koudoumas, N. Katsarakis, D. Vernardou, Effect of current density on electrodeposited vanadium oxide coatings, 9th International Conference on Nanosciences and Nanotechnologies, 2012, Thessaloniki (Greece).
- 91)** D. Vernardou, D. Louloudakis, E. Koudoumas, N. Katsarakis, J. McGrath, M.E. Pemble, Electrochemical properties of hydrothermally grown vanadium oxides on fluorine doped tin oxide and photonic crystal substrates, 4th International Symposium on Transparent Conductive Materials, 2012, Crete (Greece).
- 92)** M.M. Stylianakis, G.D. Spyropoulos, E. Stratakis, E. Koudoumas, S.H. Anastasiadis, E. Kymakis, "Graphene oxide in organic photovoltaics", 4th International Symposium on Flexible Organic Electronics, Thessaloniki, Greece, July 2011
- 93)** M. M. Stylianakis, G.D. Spyropoulos, E. Stratakis, E. Koudoumas, S.H. Anastasiadis, E. Kymakis, "Expandable Graphene Linked with Small Molecule as Electron Acceptor", 3rd International conference from Nanoparticles to Nanodevices, Hersonissos, Crete, Jun 2011.
- 94)** Drosos H.; Vernardou, D.; Koudoumas, E.; Katsarakis, N.; Savvakis, C.; Povey, I.M.; Pemble, Electrochemical Properties of Tungsten Oxide films prepared on Polycarbonate at Low temperatures by Chemical Vapour Deposition, M.E. 8th International Conference on Nanosciences & Nanotechnologies (NN11), 12-15 July 2011, Thessaloniki, Greece.
- 95)** Vernardou, D.; Spanakis, E.; Drosos, H.; Koudoumas, E.; Savvakis, C.; Katsarakis, Study of the electrochemical properties of WO₃ coatings grown by

APCVD on various substrates, N. EUROCV D 18, 4 – 9 September 2011, Cork, Ireland.

96) Antoniou, G.; Doumoussiaris, K.; Vernardou, D.; Koudoumas, E.; Katsarakis, N., Electrochemical Characterization of Metal Oxides Grown by Atmospheric Pressure Chemical Vapor Deposition for Smart Window Applications, presented in XXVII Panhellenic Conference on Solid State Physics and Materials Science, Limassol, Cyprus, September 18-21, 2011

97) E. Kymakis, E. Stratakis, E. Koudoumas, C. Fotakis, "Incorporation of metallic nanoparticles in organic photovoltaic devices using carbon nanotubes transparent electrodes" X International Conference on Nanostructured Materials, Rome, Italy, October 2010

98) E. Kymakis, E. Stratakis, E. Koudoumas, C. Fotakis, "Thin transparent graphene films for organic photovoltaic devices" 3rd International Symposium on Transparent Conductive Materials, Crete, Greece, October 2010

99) E. Kymakis, E. Stratakis, G.D. Spyropoulos, E. Koudoumas, C. Fotakis "Strategies for performance improvement of organic photovoltaic devices" 4th International Conference on Micro-Nanoelectronics, Nanotechnologies, Athens, December 2010

100) G. Kenanakis, M. Androulidaki, D. Vernardou, N. Katsarakis, E. Koudoumas, Photoluminescence study of ZnO structures grown by Aqueous Chemical Growth, presented in 3rd International Symposium on Transparent Conductive Materials (TCM 2010), Analipsi/Hersonissos, Crete, Greece, October 17-21, 2010.

101) Vernardou, D.; Drosos, H.; Spanakis, E.; Koudoumas, E.; Savvakis, C.; Katsarakis, N., Electrochemical and photocatalytic properties of WO₃ coatings grown at low temperatures, 3rd International Symposium on Transparent Conductive Materials in Crete (Greece) 2010.

102) Electrochemical and photocatalytic properties of amorphous WO₃ coatings, D. Vernardou, H. Drossos, E. Spanakis, E. Koudoumas, C. Savvakis, N. Katsarakis, 3rd International Symposium on Transparent Conductive Materials, 17 - 21 October, 2010 Analipsi / Hersonissos, Crete, Greece

103) E. Kymakis, E. Stratakis, E. Koudoumas, C. Fotakis, "Incorporation of metallic nanoparticles in organic photovoltaic devices using carbon nanotubes transparent electrodes", X International Conference on Nanostructured Materials, Rome, Italy, September 2010.

104) M. Suchea, I.V. Tudose, D. Vernardou, G. Kenanakis, E. Kymakis, N. Katsarakis, K. Savvakis and E. Koudoumas, "Nanostructured metal oxide surfaces as active layers for smart windows and solar energy devices", Nanostructured Multifunctional Materials, NMM – 2010, November 4 - 5, 2010, Iași, Romania

105) Vernardou, D.; Papadakis, G.; Spanakis, E.; Koudoumas, E.; Savvakis, C.; Katsarakis, N.; Using an Atmospheric Pressure Chemical Vapor Deposition Process for the Development of "Smart Windows", 3rd International Scientific Conference on "Energy and Climate Change" in Athens (Greece) 2010.

106) Vernardou, D.; Drosos, H.; Spanakis, E.; Koudoumas, E.; Savvakis, C.; Katsarakis, N.; Electrochromic properties of WO₃, V₂O₅ and TiO₂ prepared by hydrothermal growth at 95 oC, International Conference on Coatings on Glass and Plastics in Braunschweig (Germany) 2010.

107) Vernardou, D.; Kenanakis, G.; Kalousis, K.; Vlachou, K.; Rizos, K.; Koudoumas, E.; Katsarakis, N.; Study of metal oxides for the design and development

of smart materials, Chemical Consciousness on the 21st century in Crete (Greece) 2009.

108) Vernardou, D.; Spanakis, E.; Vlachou, K.; Kalogerakis, G.; Costello, J.; Koudoumas, E.; Katsarakis, N.; Pemble, M.E., A comparative study of the photoinduced properties of TiO₂/SiO₂ and TiO₂/ZnO/SiO₂ layers prepared by chemical routes, EuroCVD-17 in Vienna (Austria) 2009

109) Vernardou, D.; Spanakis, E.; Kenanakis, G.; Koudoumas E.; Katsarakis, N., “One-pot direct hydrothermal approach to the design and fabrication of photoactive materials”, Fall Materials Research Society Conference, Boston, USA, November 30-December 3, 2009

110) E. Kymakis, E. Stratakis, S. Ioannou, E. Koudoumas, “Plasmonic nanoparticles for enhanced performance of organic photovoltaics“, Emerging trends & novel materials in photonics, October 2009 Delphi, Greece

111) K. Iliopoulos, G. Kalogerakis, D. Vernardou, N. Katsarakis, E. Koudoumas, S. Couris, “Nonlinear optical response of titanium oxide nanostructured thin films”, presented in the 2nd International Symposium on Transparent Conducting Oxides, Hersonissos, Crete, Greece, October 22-26, 2008.

112) D. Vernardou, K. Rizos, K. Moschovis, G. Kortidis, G. Kenanakis, E. Koudoumas, N. Katsarakis and G. Kiriakidis, “A comparative study of solution concentration and temperature on the hydrothermally grown ZnO ozone sensors”, presented in the 2nd International Symposium on Transparent Conducting Oxides, Hersonissos, Crete, Greece, October 22-26, 2008.

113) D. Vernardou, E. Spanakis, A. Mohamed, G. Kenanakis, E. Koudoumas and N. Katsarakis, “Hydrothermal growth of Fe⁺³ doped TiO₂ on glass for self-cleaning applications”, presented in the 2nd International Symposium on Transparent Conducting Oxides, Hersonissos, Crete, Greece, October 22-26, 2008.

114) D. Vernardou, K. Vlachou, E. Stratakis, E. Spanakis, N. Katsarakis, E. Kymakis and E. Koudoumas, “Influence Of Solution Chemistry On The Properties Of Hydrothermally Grown TiO₂ For Advanced Applications”, 5^o European Meeting on Solar Chemistry and Photocatalysis: Environmental Applications, Palermo, Italy, October 4-8, 2008.

115) D. Vernardou, G. Kalogerakis, E. Stratakis, G. Kenanakis, E. Koudoumas and N. Katsarakis, “Photoinduced Hydrophilic And Photocatalytic Response Of Hydrothermally Grown Anatase TiO₂ Nanostructured Thin Films”, 6th International Conference on Inorganic Materials, Dresden, Germany, September 28-30, 2008.

116) Eleni Spanou, Andreas Kyprianou, George E. Georgiou, D. Vernardou, G. Kenanakis, E. Kymakis, N. Katsarakis, E. Koudoumas, “Metal oxide nanostructures for use in organic photovoltaic cells”, DEMSEE 2008, International Conference on Deregulated Electricity Market Issues in South-Eastern Europe, Lefkosia, Cyprus, September 22-23, 2008.

117) George Kenanakis, Zacharias Giannakoudakis, Dimitra Vernardou, Emmanuel Koudoumas and Nikos Katsarakis, “Structural, optical and photocatalytic properties of ZnO thin films and nanostructures deposited by different chemical routes”, 7th International Conference on Coatings on Glass and Plastics, Eindhoven, Netherlands, June 15-19, 2008

118) D. Vernardou, M. Zaimaki, E. Spanakis, N. Katsarakis and E. Koudoumas, “Characterization Of Hydrothermally Grown Vanadium Oxides For Potential Application On Smart Glazings”, XXIV Panhellenic Conference on Solid-State Physics and Materials Science 2008 in Heraklion (Greece).

- 119)** G. Kenanakis, D. Vernardou, E. Koudoumas, C. Savvakis and N. Katsarakis, “Structural, optical and photocatalytic properties of ZnO thin films and nanostructures deposited by different chemical routes”, XXIV Panhellenic Conference on Solid-State Physics and Materials Science 2008 in Heraklion (Greece).
- 120)** M. Suhea, I. Kraniotakis, P. Kouremenos, I. Kortidis, E. Koudoumas, T. Kitsopoulos and G. Kiriakidis, “ ZnO Thin Films Surface Modification for Selective Sensing Applications”, XXIV Panhellenic Conference on Solid-State Physics and Materials Science 2008 in Heraklion (Greece).
- 121)** D. Vernardou, V. Nikiforaki, G. Filipou, E. Stratakis, E. Koudoumas and N. Katsarakis, “Hydrothermal Synthesis Of Photocatalytically Active Tungsten Oxides”, XXIV Panhellenic Conference on Solid-State Physics and Materials Science 2008 in Heraklion (Greece).
- 122)** E. Kymakis, P. Servati, E. Koudoumas, G.A.J. Amaratunga, “Carbon nanotubes and nanohorns for organic photovoltaics”, SPIE Europe Photonics, Strasbourg April 2008. M. Konstantaki, Y. Franghiadakis, F. Mavromatakis, V. Zacharopoulos, E. Koudoumas and D. Kalymnios, “The effect of concentrated sunlight transfer on the transmission characteristics of plastic optical fibers”, 16th International Conference on Plastic Optical Fibers POF 2007, Turin, Italy, 10-12 September 2007.
- 123)** D. Vernardou, E. Stratakis, G. Kenanakis, E. Koudoumas and N. Katsarakis, “Hydrophilicity of ZnO nanostructures grown by aqueous chemical growth”, EMRS European Materials Research Society 2007, Strasbourg, France, May 28 - June 1, 2007.
- 124)** D. Vernardou, G. Kenanakis, E. Koudoumas, G. Kiriakidis and N. Katsarakis, “Effect of Deposition Parameters on the Growth of Zinc Oxide Nanostructures Using Chemical Methods”, EMRS European Materials Research Society 2007, Strasbourg, France, May 28 - June 1, 2007.
- 125)** G. Kenanakis, Z. Giannakoudakis, D. Vernardou, E. Koudoumas, C. Savvakis and N. Katsarakis, “Investigation of the Structural, Morphological and Photocatalytic Properties of ZnO Thin Films and Nanostructures Deposited by Different Chemical Routes”, XXIII Panhellenic Conference on Solid-State Physics and Materials Science 2007 in Athens (Greece).
- 126)** D. Vernardou, E. Stratakis, G. Kenanakis, H.M. Yates, S. Couris, M.E. Pemble, E. Koudoumas and N. Katsarakis, “Light-induced reversible hydrophilicity of hydrothermal grown TiO₂ films”, XXIII Panhellenic Conference on Solid-State Physics and Materials Science 2007 in Athens (Greece).
- 127)** K. Vlachou, G. Kalogerakis, D. Vernardou, E. Stratakis, G. Kenanakis, E. Koudoumas and N. Katsarakis, “Substrate and deposition time effect on the hydrothermally grown TiO₂ films”, XXIII Panhellenic Conference on Solid-State Physics and Materials Science 2007 in Athens (Greece).
- 128)** G. Kenanakis, M. Androulidaki, E. Koudoumas, C. Savvakis, and N. Katsarakis, “Photoluminescence of ZnO nanostructures grown by the aqueous chemical growth technique”, EMRS European Materials Research Society 2006, Nice, France, May 28-June 1, 2006.
- 129)** G. Kenanakis, D. Vernardou, E. Koudoumas, and N. Katsarakis, “Ozone sensing properties of ZnO nanostructures grown by the aqueous chemical growth technique”, 4th International Workshop on ZnO and Related Materials, Giessen, Germany, October 3-6, 2006.

- 130)** G. Kenanakis, D. Vernardou, M. Sucheas, S. Christoulakis, E. Koudoumas, G. Kiriakidis, and N. Katsarakis, "Ozone sensing properties of ZnO nanostructures grown by the aqueous chemical growth technique", 1st International Symposium on Transparent Conducting Oxides, Hersonissos, Crete, Greece, October 23-25, 2006.
- 131)** D. Vernardou, G. Kenanakis, S. Couris, E. Koudoumas, E. Kymakis, and N. Katsarakis, "pH effect on the growth of ZnO nanostructures by aqueous chemical growth", 1st International Symposium on Transparent Conducting Oxides, Hersonissos, Crete, Greece, October 23-25, 2006.
- 132)** E. Kymakis, E. Stratakis, E. Koudoumas, Y. Franghiadakis, "Transparent conductive electrodes based on carbon nanotubes-PEDOT:PSS blends for use in organic photovoltaics", 1st International Symposium on Transparent Conducting Oxides, Hersonissos, Greece, October 2006.
- 133)** E. Kymakis, G. Klapsis, E. Koudoumas, Y. Franghiadakis, "Integration of Carbon Nanotubes in Organic Photovoltaic Devices" European Conference on Hybrid and Organic Solar Cells, Paris, France, June 2006.
- 134)** E. Kymakis, E. Koudoumas, I. Franghiadakis, G.A.J. Amaratunga "Photovoltaic cells based on dispersed polymer-carbon nanotube heterojunctions" 2nd International Conference on Nanomaterials & Nanotechnologies, Hersonissos, Crete, Greece, June 2005.
- 135)** "Observation and optimization of laser-induced structural transitions in band-gap materials", R. Stoian, Mermillod-Blondin, A. Rosenfeld, M. Boyle, A Husakou, I.V. Hertel, I.M. Burakov, N.M. Bulgakova, M. Spyridaki, E. Koudoumas, P. Tzanetakis, C. Fotakis, COLA' 05, Banff, Canada, September 11-16, 2005
- 136)** "ZnO nanostructured transparent thin films for gas sensing applications", S Christoulakis, M Sucheas, M Katharakis, N Katsarakis, E Koudoumas and G Kiriakidis, International Conference in Nanomaterials and Nanotechnology (NN 2005), June 14 – 18, 2005, Crete, Greece.
- 137)** "Photovoltaic cells based on dispersed polymer-carbon nanotubes heterojunctions", S Christoulakis, E. Kymakis, E. Koudoumas, I. Franghiadakis, P. Tzanetakis, International Conference in Nanomaterials and Nanotechnology (NN 2005), June 14 – 18, 2005, Crete, Greece.
- 138)** "Plastic optical fibre for solar power transfer", M. Raptis, I Franghiadakis, E Koudoumas, D. Kalymnios, M. Konstantaki, TEMU2005 Annual Conference on Telecommunications & Multimedia, June 23-26, 2005, Heraklion, Crete.
- 139)** "Thickness Influence on Surface Structure and Optical Properties of Nanostructured ZnO Transparent Thin Films Grown by PLD", S Christoulakis, M Sucheas, E Koudoumas, M Katharakis, N Katsarakis, G Kiriakidis, 13th International Congress on Thin Films and 8th International Conference on Atomically Controlled Surfaces, Interfaces and Nanostructures ICTF 13/ACSIN 8, June 19-23, 2005, Stockholm, Sweden.
- 140)** "Ablation of Si with ultrafast laser pulses: study of the properties of high flux, sub-keV kinetic energy ion beams", Mermillod-Blondin, M. Spyridaki, R. Stoian, E. Koudoumas, A. Rosenfeld, P. Tzanetakis, I.V. Hertel and C. Fotakis, COLA' 03, Hersonissos, Crete, Greece, October 5-10, 2003
- 141)** "Optimized laser material processing by temporally tailored ultrafast laser pulses", R. Stoian, S. Winkler, M. Spyridaki, E. Koudoumas, A. Rosenfeld, P. Tzanetakis, C. Fotakis, and I.V. Hertel COLA' 03, Hersonissos, Crete, Greece, October 5-10, 2003

- 142)** “Femtosecond laser ablation of Si: Influence of temporally shaped pulses”, M. Spyridaki, E. Koudoumas, P. Tzanetakis, R. Stoian, A. Rosenfeld, I.V. Hertel and C. Fotakis, E-MRS 2003, Strasbourg, France, June 2003
- 143)** “Comparison of photochemical reactivity of lower and higher fullerenes at higher intensities and shorter wavelengths”, L. Juha, S. Couris, E. Koudoumas, P. Kubat, V. Hamplova, Z. Pokorna, and A. Mullerova, 199th Electrochemical Society Meeting, 25-30 March 2001, Washington D.C, USA.
- 144)** “Dissociative ionization of halogenated ethylenes in intense femtosecond laser pulses”, M. Castillejo, M. Martín, R. de Nalda, S. Couris, E. Koudoumas, Gordon Research Conference on Quantum Control of Atomic and Molecular Motion, 29 July- 3 August 2001, Mount Holyoke, MA, USA.
- 145)** “Onion-like carbon for nonlinear optics”, P. Detkof, S. Korovin, S. Pimenov, V. Pustovoi, E. Koudoumas, O. Kokkinaki, M. Konstantaki, S. Couris, International Conference on Advanced Laser Technologies ALT’01, September 11-14, 2001, Constanta, Romania.
- 146)** “Nonlinear absorption of silicon nanocomposites: nanocrystal interface effects”, S. Korovin, V. Pustovoi, V. E. Ogluzdin, E. Koudoumas, O. Kokkinaki, M. Konstantaki, S. Couris, International Conference on Advanced Laser Technologies ALT’01, September 11-14, 2001, Constanta, Romania.
- 147)** “Modification of the optical properties of silicon nanoclusters covered by silver”, S. Korovin, V. Pustovoi, V. E. Ogluzdin, E. Koudoumas, O. Kokkinaki, M. Konstantaki, S. Couris, International Conference on Advanced Laser Technologies ALT’01, September 11-14, 2001, Constanta, Romania.
- 148)** “Interaction of small molecules with intense short pulse laser radiation”, X. Michaut, E. Koudoumas, C. Fotakis and S. Couris, Ultraintense Laser interactions and Applications-2, Sept. 29- Oct. 3 2000, Pisa, Italy.
- 149)** “Third order non-linear optical response of higher fullerenes and C60-star polymers”, S. Couris, M. Konstantaki, E. Koudoumas, Y. Ederle, C. Mathis, S. Leach and P. Seta, 2nd International Symposium on Optical Power Limiting, 2-5 July 2000, Venice, Italy.
- 150)** “Photochemistry of Higher Fullerenes”, L. Juha, S. Couris, E. Koudoumas, P. Kubat, V. Hamplova, Z. Pokorna, and A. Mullerova, 197th Electrochemical Society Meeting, 14-18 May 2000, Toronto, Ontario, Canada.
- 151)** “Nonlinear optics-SHG”, E. Koudoumas, TMR Network “USEFULL” Training event, 13-16 April 2000, University of Sussex, UK.
- 152)** “Nonlinear optical properties of fullerenes and fullerene derivatives”, M. Konstantaki, E. Koudoumas, S. Couris, Workshop on the applications of nonlinear optical phenomena and related industrial perspectives, Cost Action P2, Amaldi, Italy, 6-8 October 1999.
- 153)** “Nonlinear optical response of silicon nanoclusters”, E. Koudoumas, M. Konstantaki, S. Couris, S. Korovin, K. Pustovoi, European Research Conference on “Chemistry and physics of multifunctional materials”, San Feliou de Guixols, Spain, 21-26 September 1999.
- 154)** “Investigation of the third order nonlinear optical properties of higher fullerenes C70, C76 and C84”, M. Konstantaki, E. Koudoumas, S. Couris, European Research Conference on “Chemistry and physics of multifunctional materials”, San Feliou de Guixols, Spain, 21-26 September 1999.
- 155)** “Characterization of the nonlinear optical properties of photonic materials”, S. Couris, M. Konstantaki, E. Koudoumas, European Research Conference on

“Chemistry and physics of multifunctional materials”, San Feliou de Guixols, Spain, 21-26 September 1999.

156) “Third-order non-linear response of fullerene and some fullerene derivatives”, E. Koudoumas, TMR Network “USEFULL” Workshop, 3-6 June 1999, Reykjavik, Iceland.

157) “Photochemistry of fullerenes in the near infrared”, L. Juha, B. Ehrenberg, S. Couris, E. Koudoumas, F. P. Boody, V. Hamplova, Z. Pokorna, A. Mullerova, M. Pavel, 195th Electrochemical Society Meeting, 2-7 May 1999, Seattle, Washington, USA

158) “An experimental investigation of the ionization/fragmentation of CS₂ under intense short pulse laser excitation”, S. Couris and E. Koudoumas, Ultraintense Laser Interactions and Applications-1, 7-11 May 1999, Elounda, Crete, Greece.

159) “Ionization and fragmentation of aromatic and single bonded hydrocarbons with femtosecond lasers”, M.Castillejo, S. Couris, E. Koudoumas and M. Martín, Ultraintense Laser Interactions and Applications-1, 7-11 May 1999, Elounda, Crete, Greece.

160) “Optical Limiting Action of Methano Fullerenes and Fullerenes Incorporated in Cyclodextrins”, E. Koudoumas, S. Couris, P. Seta, A. Rassat, S. Leach, CLEO/Eurore 1998, 13-18 September 1998, Glasgow, U.K

161) “Subpicosecond ionization and dissociation of benzene and alkanes at 800 and 400 nm”, M.Castillejo, S. Couris, E. Koudoumas, M. Martín, II International Workshop on Reaction Dynamics and Photochemistry, Avila, Spain, 2-6 September 1998.

162) “Investigations of the transient and electronic optical response of fullerene solutions”, S. Couris, E. Koudoumas, S. Tzortzakis and S. Leach, Joint International Meeting of The Electrochemical Society and The International Society of Electrochemistry, Aug. 31- Sept. 5 1997, Paris, France.

163) “Optical nonlinearities of fullerenes and their implications in optoelectronics”, E. Koudoumas, S. Couris, 2nd Greek-Italian International Conference on New Laser Technologies and Applications, 1-4 June 1997, Ancient Olympia, Greece.

164) “Comparison of Photophysical and Photochemical Behavior of Fullerene Derivatives with Unfunctionalized Fullerenes”, L. Juha, V. Hamplova, Z. Pokorna, J. Kodymova, O. Palek, J. Krasa, K. Lang, P. Kubat, F. P. Boody, E. Koudoumas, S. Couris, I. Stibor, T. Gareis, O. Kothe, J. Daub, 191st Electrochemical Society Meeting, 4-9 May 1997, Montreal, Quebec, Canada.

165) “The origin of optical nonlinearities of fullerene solutions”, E. Koudoumas, S. Couris, F. Dong and S. Leach, 7th International Conference on Multiphoton Processes, ICOMP VII, 30 September-8 October 1996, Garmisch, Germany.

166) “Nonlinear optical properties of fullerenes”, E. Koudoumas, PICS 152, Workshop on Spectroscopy and Nonlinear Optics of Molecules of Astrophysical and Related Interest, 27-28 September 1996, Paris, France.

167) “Nonlinear optical properties of fullerenes”, S. Couris, E. Koudoumas, F. Dong and S. Leach, CLEO/Europe, 8-13 September 1996, Hamburg, Germany.

168) “Photochemical reactivity of the fullerenes dissolved in different solvents”, L. Juha, V. Hamplova, M. Farnikova, J. Kodymova, O. Palek, J. Krasa, L. Laska, P. Kubat, E. Koudoumas, S. Couris and I. Stibor, 189th Electrochemical Society Meeting, May 5-10 1996, Los Angeles, USA.

169) “Experimental evidence of quasi absorption-less type of resonant sum mixing process”, T. Efthimiopoulos, E. Koudoumas, M.V. Doglorova and Yu.I. Heller, 15th

International Conference on Coherent and Nonlinear Optics, June 27 - July 1 1995, St. Petersburg, Russia.

170) "Optical nonlinearities of C₆₀", S. Couris, E. Koudoumas, A.A. Ruth, and S. Leach, Eurolight I, November 7-11 1994, Thessaloniki, Greece.

171) "Nonlinear optical properties of C₆₀", E. Koudoumas, S. Couris A.A. Ruth and S. Leach, 2nd South European Conference on the Atomic and Molecular Physics, SECAMP 94, September 27-30 1994, Pisa, Italy.

172) "Double resonant four-wave sum mixing near an autoionizing state", E. Koudoumas and T. Efthimiopoulos, 9th International Symposium on Gas Flow and Chemical Lasers, September 21-25 1992, Heraklion, Crete, Greece.

173) "Laser-induced continuum structure and third harmonic generation in calcium", O. Faucher, D. Charalambidis, E. Koudoumas and C. Fotakis, 9th International Symposium on Gas Flow and Chemical Lasers, September 21-25 1992, Heraklion, Crete, Greece.

174) "Limiting processes and phase matching conditions in four-wave mixing involving 81S₀, 6p' 3D₁ states in Hg vapor", E. Koudoumas and T. Efthimiopoulos, 5th International Conference on Multiphoton Processes, ICOMP V, September 24-28 1990, Paris, France.

National conferences

1. "Surface ZnO microstructures manufactured by PLD method", M. Katharakis, S. Christoulakis, N. Katsarakis, M. Koudoumas, M. Sucheas, K. Savvakis, T. Efthimiopoulos, G. Kiriakidis, 20th Panhellenic Conference on Solid State Physics & Materials Science (XX ΠΣΣΥ), September 26-29, 2004, Ioannina – Greece.

2. "ZnO structures manufactured by PLD method", M. Katharakis, S. Christoulakis, N. Katsarakis, M. Koudoumas, M. Sucheas, K. Savvakis, T. Efthimiopoulos, G. Kiriakidis, Laser Olympics 2004, 15-17 October 2004, Athens, Greece.

3. "Applications of fullerenes in optoelectronics: optical limiting action of C₆₀ in solution", E. Koudoumas, S. Couris and S. Leach, 10th Greek Conference on Lasers and their Applications, September 22-24, 1994, Ioannina, Greece.

4. "Generation of coherent tunable VUV radiation - physical processes", E. Koudoumas, T. Efthimiopoulos, 8th Greek Conference on Lasers and their Applications, April 25-27, 1990, Heraklion, Crete, Greece.

5. "The effect of an autoionizing state on the double resonant four wave sum mixing in Hg", E. Koudoumas, T. Efthimiopoulos, 9th Greek Conference on Lasers and their Applications, May 28-30, 1992, Athens, Greece.

Theses

1. E Koudoumas "Study of the emission of coherent VUV radiation in Hg vapours", 1991, PhD thesis, Department of Physics, University of Patras.

2. E Koudoumas "Methods for detecting pollution in the atmosphere with laser radiation", 1986, thesis within the framework of MSc studies at the Physics Department of the University of Crete

3. E Koudoumas "Optical heterodyne detection and its applications", 1985, thesis within the framework of MSc studies at the Physics Department of the University of Crete

4. E Koudoumas "On line monitoring of optical fiber diameter", 1984, thesis within the framework of MSc studies at the Department of Physics, University of Essex, UK

5. E Koudoumas "Monomode fiber splicing", 1984, thesis within the framework of MSc studies at the Department of Physics, University of Essex, UK
6. E Koudoumas "Determination of low temperature regions in the interplanetary plasma using data of the Helios 1 and 2 satellites", 1982, diploma thesis, Physics Department, University of Athens.