EUROPEAN CURRICULUM VITAE

PERSONAL DETAILS

Name VERNARDOU, DIMITRA

E-mail dvernardou@hmu.gr

Nationality Greek

Date of birth 01.03.1979

Marital status Married

EDUCATION

11/2001 – 03/2005

University of Salford, Institute for Materials Research, Manchester, United Kingdom in collaboration with University College of London (UCL, United Kingdom) and Pilkington Glass (United Kingdom)

Deposition of thermochromic vanadium dioxide thin films using a home-made APCVD (Atmospheric Pressure Chemical Vapour Deposition), Liquid-Injection MOCVD (Metalorganic CVD) and combustion CVD (CCVD) on SiO_2 - precoated glass (Pilkington, UK), soda lime glass (J. B. Treasures, UK) and SiO_2 - precoated glass by CCVD reactor studying two different chemical systems, VCl_4 / H_2O and $VO(acac)_2$ in the presence of O_2. Characterization of the samples was performed using X-ray diffraction, Raman spectroscopy, UV-vis transmittance and reflectance spectroscopy, Scanning electron microscopy, Atomic force microscopy, Rutherford backscattering spectroscopy, X-ray photoelectron spectroscopy and in-situ monitoring experiments during the reaction of the precursor systems in the APCVD reactor using Fourier Transform Infrared Spectroscopy.
PhD in Physical Chemistry

10/2000 – 10/2001
UMIST, Manchester Materials Science Centre, Manchester, United Kingdom

Main modules: Polymer Chemistry, Polymer Physics and Polymer Processing
Dissertation on Crosslinking of polyolefin foams, study of crosslinking systems based on dicumyl peroxide (DCP) and DCP with triallylcyanurate (TAC)
MSc in Polymer Science and Technology

09/1997 – 06/2000
University of Salford, Institute for Materials Research, Manchester, United Kingdom

Main modules: Analytical, organic, inorganic and physical chemistry, geochemistry, principles of photochemistry, atmospheric chemistry and laboratories in organic, inorganic and physical chemistry
Final year project on separation of metal ions
BSc in Chemistry

ACADEMIC APPOINTMENTS

04/11/2019 – Today *Assistant Professor*
Hellenic Mediterranean University, Department of Electrical & Computer Engineering, 710 04 Heraklion, Crete, Greece

01/03/2006 – 17/02/2012 *Visiting Assistant Professor*
University of Crete, Department of Materials Science and Technology, 710 04 Heraklion, Crete, Greece

26/09/2005– 30/06/2019 *Adjunct Professor*
Technological Educational Institute of Crete, Science Department, School of Applied Technology, 710 04 Heraklion, Crete, Greece

10/2001 – 5/2004 *Adjunct Lecturer*
University of Salford, Institute for Materials Research, Manchester, United Kingdom

RESEARCH APPOINTMENTS

21/01/2020 – Today *Researcher – Group Leader*
Hellenic Mediterranean University, Center of Materials Technology and Photonics, Advanced Materials for Energy Storage and Efficiency Group, School of Engineering, 710 04 Heraklion, Crete, Greece

01/10/2006 – 03/05/2019 *Research Fellow*
Technological Educational Institute of Crete, Center of Materials Technology and Photonics, School of Engineering, 710 04 Heraklion, Crete, Greece

01/11/2017 – 30/04/2018 *Post-doc*
Foundation for Research and Technology–Hellas, Institute of Electronic Structure and Laser, P.O. Box 1527, 711 10 Heraklion, Crete, Greece

01/04/2005 – 31/12/2005 *Research Scientist*
Foundation for Research and Technology–Hellas, Institute of Electronic Structure and Laser, P.O. Box 1527, 711 10 Heraklion, Crete, Greece

TEACHING

I. University of Crete

Academic year	*Fall semester*	*Spring semester*
2006-2009	-	Laboratory of Hard Materials
2009-2012	Structural and Chemical Analysis of Materials	Laboratory of Hard Materials

II. TEI of Crete

Academic year	*Fall semester*	*Spring semester*
2005-2006	Laboratory of Mechanical Materials Technology	Laboratory of Mechanical Materials Technology
2006-2007	Laboratory of Mechanical Materials Technology Laboratory of Chemical Technology	Laboratory of Mechanical Materials Technology
2008-2009	Laboratory of Mechanical Materials Technology	Laboratory of Mechanical Materials Technology
2009-2010	Laboratory of Mechanical Materials Technology Laboratory of Structural Materials Technology Laboratory of Electrochemistry	Laboratory of Mechanical Materials Technology Laboratory of Structural Materials Technology Laboratory of Electrochemistry
2010-2011	Laboratory of Mechanical Materials Technology Laboratory of Structural Materials Technology	Laboratory of Mechanical Materials Technology Laboratory of Structural Materials Technology
2011-2012	Laboratory of Mechanical Materials Technology	-
2012-2019	Laboratory of Mechanical Materials Technology Laboratory of Electrochemistry	Chemical & Environmental Technology

III. Hellenic Mediterranean University

Academic year	*Fall semester*	*Spring semester*
2019-today	Electrotechnical Materials I Materials Technology – Electrochemistry Energy Devices (MSc programme)	Environmental Chemistry Electrotechnical Materials II Chemistry of Materials (MSc programme)

IV. University of Salford

Academic year	*Fall semester*	*Spring semester*
2001-2004	Laboratory of Organic Chemistry Laboratory of Inorganic Chemistry	Laboratory of Physical Chemistry

TEACHING NOTES

1. **Electrotechnical Materials I**, Department of Electrical & Computer Engineering, Hellenic Mediterranean University, 2019.
2. **Energy Devices**, MSc in Nanotechnology for Energy Applications, Hellenic Mediterranean University, 2020.
3. **Environmental Technology**, Department of Electrical Engineering, TEI of Crete, 2020.
4. **Chemical and Environmental Technology**, Department of Mechanical Engineering, Hellenic Mediterranean University, 2020.
5. **Chemistry of Materials**, MSc in Nanotechnology for Energy Applications, Hellenic Mediterranean University, 2020.
6. **Electrotechnical Materials I**, Department of Electrical & Computer Engineering, Hellenic Mediterranean University, 2019.
7. **Materials Technology-Electrochemistry**, Department of Electrical Engineering, TEI of Crete, 2019.

8. **Chemical and Environmental Technology**, Department of Mechanical Engineering, TEI of Crete, 2018.
9. **Laboratorial exercise on Mechanical Properties of Materials (Laboratory of Mechanical Materials Technology)**, Department of Mechanical Engineering, TEI of Crete, 2009.
10. **Structural and Chemical Analysis of Materials**, Department of Materials Science and Technology, University of Crete, 2009.

STUDENT SUPERVISION

Final year projects

1) «Renewable energy sources in Greece: Ways to accept their installation in Greece», **E. Michail.**
2) «Battery recycling, recycling process, battery categorization and environmental problems arising from them», **A. Zetos**.
3) "Biomass-Biofuels: Pollutant emissions into the environment», **D. Iliadou**.
4) "Challenges and perspectives of energy accumulators", **E. Xagoraris**.
5) "AACVD of V_2O_5 cathodes with high rate capabilities for aqueous batteries", **S. Chalkiadakis**.
6) "Study of wastewater treatment and facilities estimation for Porto Elounda hotel", **K. Gouveris**.
7) "Biomass-Biofuels: Emissions of pollutants into the environment", **D. Eliadou**.
8) "Electrochemical study nanocomposite materials as electrodes for Li-ion batteries", **V. Logotheti**.
9) "Electrochemical study of all-inorganic perovskite based on aqueous electrolyte as an anode for Li-ion batteries", **D. Makri**.
10) "Electrochemical study of APCVD V2O5 as a cathode for Mg-ion batteries", **G. Astrinakis**.
11) "Electrochemical study of Fe_3O_4 and Nb_2O_5 coatings for capacitors", **I. Marathianou**.
12) "Electrochemical study of vanadium oxide layers for capacitors", **M. Rasoulis**.
13) "Electrochemical study of APCVD vanadium oxides as electroactive layers towards their application in capacitors", **A. Bei**.
14) "A comparative study among inorganic, organic and hybrid solar cells and their accession in Greece's energy system" **D. Barbaris**.
15) "Electrochemical study of vanadium oxide coatings for capacitors", **S. Nikolaidis.**
16) "Electrochemical study of vanadium oxide coatings for capacitors", **A. Samiotis.**
17) "Al and Cr depositions by spray plasma technology", **C. Mixalostamou.**
18) "Chemical deposition of nanostructured layers", **M. Sifakis.**
19) "Growth of vanadium oxide by chemical processes with controlled structural and morphological characteristics for energy applications", **A. Sarris.**
20) Co-supervision with Dr. E. Spanakis "Effect of pH solution on the vanadium oxide properties for energy applications", **M. Apostolopoulou**
21) "Characterization of hydrothermally grown electroactive WO_3", **K. Christou.**
22) 'Electrochemical characterization of vanadium oxide grown on various conductive substrates by electrodeposition', **M. Veziri.**
23) "Electrical energy storage", **A. Kontzos**.
24) "Nanotechnology and applications on energy"', **M. Tranta**.
25) "Electrodeposition of vanadium oxide and study of its properties for electrochromic application"', **A. Sapountzis**.
26) "Electrochemical and photocatalytic properties of WO_3, TiO_2, VO_X layers grown by solution process at 95 °C", **S. Anastasaki**.
27) "Deposition and characterization of TiO_2, V_2O_5 and WO_3 for electrochromic applications", **C. Drosos**.
28) "Electrochemical characterization of WO_3 and V_2O_5 prepared by chemical route"', **G. Antoniou and K. Doumousiaris**.
29) "Renewable technology and its applications in Greece"', **F. Fragopoulos**.
30) "Indoor air quality technologies", **K. Sfyropoulos**.
31) "Basic principles and advantages of a bioclimatic houses"', **N. Niotis**.
32) Co-supervision with Dr. E. Spanaki "Deposition of WO_3 layers for smart window"', **G. Filippou**.
33) "Electrochemical properties of TiO_2, ZnO and TiO_2/ZnO layers grown by solution process at 95 °C"', **T. Kiriazidis**.
34) "Smart windows for saving energy-Environmental, financial and social benefit"', **G. Manes**.
35) "Deposition of WO_3 layers and study of their photocatalytic response", **E. Nikiforaki**.
36) "Solution growth of TiO_2 layers with improved structural and optical characteristics", **A. Stefanakis**.
37) "Deposition and study of thermochromic properties of V_nO_{2n-1} layer"', **M. Zaimaki**
38) "Solution growth and study of the hydrophilic and electrical properties of ZnO layer"', **K. Rizos**.
39) "Solution growth and study of the hydrophilic properties of TiO_2 layers", **K. Vlachou**.
40) "Hydrophilic and photocatalytic response of solution grown TiO_2 layer"', **G. Kalogerakis.**

Work placements

1) "Deposition of V_2O_5 layers by atmospheric pressure chemical vapor deposition and their characterization (structural, optical, morphological and electrochemical)", **P. Paterakis**.
2) Co-supervision with Professor N. Katsarakis "Parametric study of chemically grown vanadium oxide and its electrochemical characterization", **C. Drosos**
3) "Parametric study of the electrodeposited vanadium oxide and its characterization (optical, morphological and electrochemical)", **A. Sapountzis**.
4) "Electrochemical characterization of metal oxides", **I. Pappa**.

Master dissertations

1) "Evaluation of Biomass-Derived Electrode Materials from Walnut Shells and Investigation of Their Performance in Sodium-Ion Electrolyte Systems for Sustainable Development," **E. Tsikritsaki**.

2) "LTO as a Highly Promising Anode Material for Aqueous Batteries: Synthesis Routes, Properties, and Electrode Preparation Approaches," **E. Pigounakis**.
3) "Investigation of Metal Oxide/Carbon Composite Materials: Growth Mechanism and Electrochemical Performance for Energy Storage," **D. Nikolidakis Owens**.
4) "Investigation of the Zinc-Ion Diffusion Mechanism in Aqueous Media for Electrodeposited Electrodes," **N. Kavousanos**.
5) "Investigation of the Growth Mechanism of Electrodeposited Carbon Components as Potential Interlayers for Energy Storage Applications," **M. Apostolopoulou**.
6) "Design and Optimization of Automated Spray Deposition Techniques for Materials Development," **D. Aivalioti**.
7) "Design, Synthesis, and Characterization of Composite Electrodes for Energy Storage Devices," **C. Floraki**.
8) "Electrochemical Characterization and Understanding of the Fundamental Mechanisms of Cation Insertion into Electrodes," **S. Daskalakis**.
9) "Evaluation of APCVD V_2O_5 for Energy Storage Applications," **A. Zogalis**.
10) "Design, Synthesis and Characterization of Composite Electrodes for Energy Storage Devices", **C. Floraki**.
11) Co-supervision with Professor N. Katsaraki "Development of an atmospheric pressure chemical vapor deposition system and deposition of vanadium oxides for applications on smart windows", **G. Papadakis**.
12) "Preparation of titanium dioxide (TiO_2) at low temperatures and study of its photocatalytic performance for the decomposition of methylene blue' in which I supervised the preparation and characterization of the titanium dioxide powders", **A. Psaroudakis**.

PhD dissertation

1) "Development of cathode electrodes for zinc ion batteries based on environmentally friendly processes", **N. Kavousanos** (starting day 06/25)
2) "Synthesis and Evaluation of Composite Anode Electrodes", **M. Apostolopoulou** (starting day 05/2024).
3) "Development of a Functional Cathode Prototype", **C. Floraki** (starting day 03/2022).
4) Co-supervision with Professor E. Koudoumas "Development and study of advanced chromic coatings and devices for applications in "smart windows", **D. Louloudakis**.

PERSONAL SKILLS AND COMPETENCES

PRIZES – DISCRIMINATIONS

15/07/2013-19/07/2013

CrystEngComm Poster Prize at International Conference on Advanced Complex Inorganic Nanomaterials.

05/05/2004

Second prize on Physical Chemistry in 21st Greater Manchester Prize Colloquium competition organized by RSC (Royal Society of Chemistry).

11/2001-11/2004

Engineering and Physical Sciences Research Council (EPSRC) scholarship for the completion of the PhD.

TECHNICAL SKILLS AND COMPETENCES

Windows XP and 2000. (Microsoft Word, Excel, PowerPoint and Microsoft Visio. Casa XPS and Quark simulation).

MEMBERSHIP

Association of Greek Chemists
Institute of Physics, United Kingdom
American Nano Society
International Society of Electrochemistry
Royal Society of Chemistry

SPECIAL REPORT

1) Heraklion Chamber pressmagazine December 2010, "Smart windows for energy efficiency".
2) TEI of Crete pressmagazine March 2010, "Large area coatings for solar energy efficiency".
3) https://www.chemistryworld.com/news/chemical-vapour-deposition-makes-glass-smarter/3000860.article

RESEARCH INTERESTS / SKILLS

TOPICS

Chemical synthesis and characterization of nanostructured metal oxides (thin films, powders)
Controlled nanostructured metal oxide synthesis via atmospheric pressure chemical vapour deposition, hydrothermal growth and electrodeposition

Synthesis of nanostructured metal oxide on flexible and rigid surfaces
Surface modification
Smart and functional metal oxides for environmental and energy applications (self-cleaning, photocatalysis, electrochromics, thermochromics, batteries and capacitors)

TECHNIQUES

X-ray diffraction
Raman spectroscopy
Fourier transform infrared spectroscopy
Scanning electron microscopy
X-ray photoelectron spectroscopy
Absorbance / Transmittance / Reflectance spectroscopy
Cyclic voltammetry / Electrochemical impedance spectroscopy
Contact angle measurements / Photocatalytic measurements

CONFERENCES-PRESENTATIONS

1) Effect of synthesis parameters on the electrochemical performance of $Li_4Ti_5O_{12}$ using aqueous electrolytes, Apostolopoulou, M.; Tsoukas, T.; Pigounakis, E.; Temam, A.G.; Alshoaibi, A.; Nwanya, A.C.; Ezema, F.I.; Ejikeme, P.M.; Vernardou, D. TCM-TOEO **(Greece) 2025**.

2) Low-temperature PECVD-deposited graphene thin films for sodium-ion supercapacitors, Kavousanos, N.; Apostolopoulou, M.; Spanakis, E.; Katsara, K.; Kenanakis, G.; Chronopoulos, I.; Yannopoulos, S.N.; Vernardou, D. TCM-TOEO **(Greece) 2025**.

3) Synthesis and optimization: A comprehensive approach for enhancing LTO electrodes, Apostolopoulou, M.; Vernardou, D. 17th International Conference on Materials Chemistry στο Edinburgh (Σκωτία) 2025.

4) Exploring sustainable buffer layers for anode materials in lithium-ion batteries: Paving the way for future energy storage, Apostolopoulou, M.; Vernardou, D. 17th International Conference on Materials Chemistry στο Edinburgh (**Scotland) 2025**.

5) Growth and electrochemical evaluation of sustainable electrodes for aqueous lithium-ion batteries, Apostolopoulou, M.; Floraki, C.; Kavousanos, N.; Vernardou, D. 38th Topical Meeting of International Society of Electrochemistry in Manchester **(United Kingdom) 2024**.

6) Electrodeposited graphene oxide-Cu electrodes for aqueous zinc-energy storage systems, Kavousanos, N.; Apostolopoulou, M.; Brintakis, K.; Kostopoulou, A.; Stratakis, E.; Vernardou, D. NanoBio International Conference on Nanotechnologies and Biosciences **(Greece) 2023**.

7) Effects of different nanoparticles on biogas production during anaerobic digestion of food waste, Dompara, I.; Papastefanakis, N.; Maragkaki, A.; Floraki, C.; Vernardou, D.; Manios, T. 9th International Conference on Sustainable Solid Waste Management **(Greece) 2022**.

8) Metal halide perovskites for low-cost and safe Li-air batteries, Kostopoulou, A.; Brintakis, K.; Vernardou, D.; Stratakis, E. E-MRS Fall Meeting και AIP Horizons Energy Storage and Conversion-Virtual **2021**.

9) Effect of Si doping on the stability and efficiency of graphene oxide as an anode material for aqueous Zn-ion batteries, Floraki, C.; Anagnostou, K.; Kostopoulou, A.; Brintakis, K.; Stratakis, E.; Kymakis, E.; Vernardou, D. International Conference on Materials: Advanced and Emerging Materials και Panhellenic Conference on Solid State Physics and Materials Science -Virtual **2021**.

10) Chemical vapour deposited Si@Carbon nanotubes as anode materials for low cost multivalent battery systems, Daskalakis, S.; Kostopoulou, A.; Brintakis, K.; Stratakis, E.; Menguelti, K.; Bahlawane, N.; Vernardou, D. International Conference on Materials: Advanced and Emerging Materials-Virtual **2021**.

11) All-inorganic metal halide perovskites for energy storage applications, Kostopoulou, A.; Brintakis, K.; Vernardou, D.; Stratakis, E. nanoGe Fall Meeting-Virtual **2020**.

12) V_2O_5 as a promising cathode material for aqueous magnesium ion batteries, Vernardou, D.; Drosos, C.; Moss, B.; Kafizas, A. 71st Annual Meeting of the International Society of Electrochemistry-Online **2020.**

13) Electrochromic performance of V_2O_5 thin films grown by spray pyrolysis, Mouratis, K.; Vernardou, D.; Suchea, M.; Tudose, V.; Koudoumas, E.; Couris, S. 71st Annual Meeting of the International Society of Electrochemistry-Online **2020.**

14) SnO_2 and Ni doped SnO_2/Polythiophene nanocomposites for gas sensing applications, Pascariu, P.; Tudose, I.V.; Vernardou, D.; Koudoumas, E.; Ionescu, O.N.; Suchea, M. 9th Virtual Nanotechnology Poster Conference **2020**.

15) Electrochemical properties of V_2O_5 and V_2O_5:Ag coatings grown by atomic layer deposition at 250 ^oC, O'Brien, S.; Kazadojev, I.I.; Ryan, L.P.; Koudoumas, E.; Katsarakis, N.; Pemble, M.E.; Povey, I.P.; Vernardou, D. 12th International Conference on Physics of Advanced Materials **(Greece) 2018**.

16) Growth of V2O5 films for electrochromic and battery applications by pulsed chemical vapour deposition, Kazadojev, I.I.; Brien, S.O'.; Ryan, L.P.; Mondreanu, M.; Osiceanu, P.; Somacescu, S.; Vernardou, D.; Pemble, M.E.; Povey, I.P. 233 rd ECS Meeting in Seattle **(USA) 2018**.

17) 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 in Chicago **(USA) 2016**.
18) 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 in Lille **(France) 2015**.
19) 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 in Lille **(France) 2015**.
20) 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 in Lille **(France) 2015**.
21) 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 in San Francisco **(USA) 2015**.
22) Electrochromic response of WO3 grown using LPCVD, Louloudakis, D.; Vernardou, D.; Psifis, K.; Spanakis, E.; Katsarakis, N.; Papadimitropoulos, G.; Davazoglou, D.; Koudoumas, E. MRS in San Francisco **(USA) 2015**.
23) Noble metal doped and reduced graphene oxide coupled photocatalysts for enhanced visible-light activity, Vasilaki, E.; Kaliva, M.; Vernardou, D.; Georgaki, I.; Konios, D.; Kymakis, E.; Vamvakaki, M.; Katsarakis, N. SPEA8 **(Greece) 2014**.
24) TiO_2/WO_3 photoactive bilayers in the visible-light region, Vasilaki, E.; Vernardou, D.; Georgaki, I.; Kenanakis, G.; Katsarakis, N. SPEA8 **(Greece) 2014**.
25) Intelligent thermochromic coatings grown by chemical vapour deposition at atmospheric pressure, Louloudakis, D.; Vernardou, D.; Spanakis, E.; Katsarakis, N.; Koudoumas, E.; Kiriakidis, G. 30th Panhellenic Conference on Solid-State Physics and Materials Science **(Greece) 2014**.
26) LPCVD electrochromic WO_3 layers on FTO glass substrates using different substrate temperatures, Psifis, K.; Louloudakis, D.; Papadimitropoulos, G.; Davazoglou, D.; Katsarakis, N.; Savvakis, C.; Spanakis, E.; Vernardou, D.; Koudoumas, E. 30th Panhellenic Conference on Solid-State Physics and Materials Science **(Greece) 2014**.
27) Effect of solution chemistry on the characteristics of hydrothermally grown WO_3 for electroactive applications, Christou, K.; Louloudakis, D.; Vernardou, D.; Savvakis, C.; Katsarakis, N.; Koudoumas, E.; Kiriakidis, G. 5th International Symposium on Transparent Conducting Materials **(Greece) 2014**.
28) Atmospheric pressure chemical vapor deposition of thermochromic amorphous tungsten doped vanadium dioxide, Louloudakis, D.; Vernardou, D.; Spanakis, E.; Katsarakis, N.; Koudoumas, E.; Kiriakidis, G. 5th International Symposium on Transparent Conducting Materials **(Greece) 2014**.
29) Effect of antireflection TiO_2 layer on the thermochromic performance of vanadium dioxide, Louloudakis, D.; Vernardou, D.; Spanakis, E.; Katsarakis, N.; Koudoumas, E.; Gagaoudakis, E.; Aperathitis, E.; Kiriakidis, G. 5th International Symposium on Transparent Conducting Materials **(Greece) 2014**.
30) Study of the pH effect on the properties of the hydrothermally grown V_2O_5, Apostolopoulou, M.; Louloudakis, D.; Vernardou, D.; Katsarakis, N.; Koudoumas, E.; Kiriakidis, G. 5th International Symposium on Transparent Conducting Materials **(Greece) 2014**.
31) Effect of the growth parameters on the electrochromic properties of low pressure CVD WO_3 films, Louloudakis, D.; Vernardou, D.; Psifis, K.; Spanakis, E.; Katsarakis, N.; Papadimitropoulos, G.; Davazoglou, D.; Koudoumas, E. 65th Annual Meeting of the International Society of Electrochemistry in Lausanne **(Switcherland) 2014.**
32) Tungsten doped vanadium oxide coatings grown by APCVD using isopropoxide precursors, Louloudakis, D.; Vernardou, D.; Spanakis, E.; Katsarakis, N.; Koudoumas, E.; Kiriakidis, G. NanoEnergy in London **(United Kingdom) 2014**.
33) One-pot synthesis of WO_3 nanostructures at 95 ^oC using NaOH and HCl, Christou, K.; Louloudakis, D.; Vernardou, D.; Katsarakis, N.; Koudoumas, E. E-MRS in Lille **(France) 2014**.
34) pH effect on the electrochemical properties of the hydrothermally grown V_2O_5, Apostolopoulou, M.; Louloudakis, D.; Vernardou, D.; Katsarakis, N.; Koudoumas, E. E-MRS in Lille **(France) 2014**.
35) Hydrothermal growth and characterization of vanadium oxide coatings using $VOSO_4$ as precursor, Apostolopoulou, M.; Louloudakis, D.; Vernardou, D.; Katsarakis, N.; Koudoumas, E. E-MRS in Lille **(France) 2014.**
36) Electrochemical evaluation of vanadium pentoxide coatings grown by AACVD, Vernardou, D.; Louloudakis, D.; Katsarakis, N.; Koudoumas, E.; Kazadojev, I.I.; Brien, S.O', Povey, I.M.; Pemble, M.E. E-MRS in Lille **(France) 2014**.
37) Electrocatalytic activity of carbon nanofoam in alkaline media, Dalamagkas, A.; Vernardou, D.;

Katsarakis, N.; Pervolaraki, M.; Giapintzakis, J. E-MRS in Lille **(France) 2014**.
38) Photocatalytic properties of WO_3 and WO_3/TiO_2 composites under UV and solar light illumination, Katsarakis, N.; Vernardou, D.; Kenanakis, G.; Vasilaki, E. 3rd European Conference on Photocatalysis in Portoroz **(Slovenia) 2013**.
39) Photocatalytic response of chemically grown ZnO and TiO_2 nanostructures on polymer substrates, Katsarakis, N.; Kenanakis, G.; Vernardou, D. 3rd European Conference on Environmental Applications of Advanced Oxidation Processes in Almeria **(Spain) 2013**.
40) Photocatalytic and electrochemical properties of TiO_2 thin films deposited by sol-gel, Katsarakis, N.; Kenanakis, G.; Vernardou, D.; Dalamagkas, A. 3rd European Conference on Environmental Applications of Advanced Oxidation Processes in Almeria **(Spain) 2013**.
41) Thermochromic properties of VO_2 films grown by RF sputtering and APCVD, Vernardou, D.; Louloudakis, D.; Illiadis, G.; Kiriakidis, G. E-MRS in Warsaw **(Poland) 2013.**
42) Thermochromic vanadium oxide coatings grown by APCVD at low temperatures, Louloudakis, D.; Vernardou, D.; Spanakis, E.; Katsarakis, N.; Koudoumas, E. EuroCVD 19 in Varna **(Bulgaria) 2013**.
43) Electrochemical properties of vanadium oxide coatings grown by APCVD on FTO substrates, Louloudakis, D.; Vernardou, D.; Spanakis, E.; Katsarakis, N.; Koudoumas, E. EuroCVD 19 in Varna **(Bulgaria) 2013**.
44) Study of the pH effect on the electrochemical properties of the hydrothermally grown vanadium oxide coatings, Louloudakis, D.; Vernardou, D.; Spanakis, E.; Katsarakis, N.; Koudoumas, E. International Conference on Advanced Complex Inorganic Nanomaterials in Namur **(Belgium) 2013**.
45) Electrochemical properties of vanadium oxide coatings grown by hydrothermal synthesis on FTO substrates, Louloudakis, D.; Vernardou, D.; Spanakis, E.; Katsarakis, N.; Koudoumas, E. International Conference on Advanced Complex Inorganic Nanomaterials in Namur **(Belgium) 2013**.
46) Effect of buffer layer and deposition parameters on thermochromic properties of VO_2, Vernardou, D.; Louloudakis, D.; Gagaoudakis, M.; Kampylafka, V.; Spanakis, E.; Katsarakis, N.; Koudoumas, M.; Aperathitis, E.; Iliadis, G.; Kiriakidis, G. 2nd International Conference on Advanced Electromaterials in Jeju **(Korea) 2013**.
47) Synthetic photocatalytic nano-powders of titanium and zinc oxides degrading persistent organic compounds in industrial effluents, Georgaki, I.; Mihailidis, M.; Iliadis, J.; Kenanakis, G.; Vernardou, D.; Katsarakis, N. Wastewater purification and reuse **(Greece) 2012**.
48) Electrodeposition of vanadium oxides on various substrates, Drosos, H.; Vezirh, M.; Koudoumas, E.; Katsarakis, N. Vernardou, D. 9th International Conference on Nanosciences & Nanotechnologies **(Greece) 2012**.
49) Effect of current density on electrodeposited vanadium oxide coatings, Drosos, H.; Sapountzis, A.; Koudoumas, E.; Katsarakis, N.; Vernardou, D. 9th International Conference on Nanosciences & Nanotechnologies **(Greece) 2012**.
50) Electrochemical properties of hydrothermally grown vanadium oxides on fluorine doped tin oxide and photonic crystal substrates, Drosos, H.; Vernardou, D.; Koudoumas, E.; Katsarakis, N.; McGrath, J.; Pemble, M.E. 4th International Symposium on Transparent Conductive Materials **(Greece) 2012**.
51) Electrochemical characterization of metal oxides grown by atmospheric pressure chemical vapor deposition for smart window applications, Antoniou, G.; Doumousiaris, K.; Vernardou, D.; Koudoumas, E.; Katsarakis, N. XXVII Panhellenic Conference on Solid State Physics and Materials Science in Limassol **(Cyprus) 2011**.
52) Electrochemical properties of tungsten oxide films prepared on polycarbonate at low temperatures by chemical vapour deposition, Drosos, D.; Vernardou, D.; Koudoumas, E.; Katsarakis, N.; Savvakis, C.; Povey, I.M.; Pemble, M.E. 8th International Conference on Nanosciences and Nanotechnologies **(Greece) 2011**.
53) Study of the electrochemical properties of WO_3 coatings grown by APCVD on various substrates, Vernardou, D.; Spanakis, E.; Drosos, H.; Koudoumas, E.; Savvakis, C.; Katsarakis, N. EuroCVD 18 in Kinsale **(Ireland) 2011**.
54) Photoluminescence study of ZnO structures grown by Aqueous Chemical Growth, Kenanakis, G.; Androulidaki, M.; Vernardou, D.; Katsarakis, N.; Koudoumas, E. 3rd International Symposium on Transparent Conductive Materials **(Greece) 2010**.
55) Electrochemical and photocatalytic properties of WO_3 coatings grown at low temperatures, Vernardou, D.; Drosos, H.; Spanakis, E.; Koudoumas, E.; Savvakis, C.; Katsarakis, N.; 3rd International Symposium on Transparent Conductive Materials **(Greece) 2010**.
56) Using an atmospheric pressure chemical vapor deposition process for the development of "Smart Windows", Vernardou, D.; Papadakis, G.; Spanakis, E.; Koudoumas, E.; Savvakis, C.; Katsarakis, N.; 3rd International Scientific Conference on "Energy and Climate Change" **(Greece) 2010**.
57) Electrochromic properties of WO_3, V_2O_5 and TiO_2 prepared by hydrothermal growth at 95 ^oC, Vernardou, D.; Drosos, H.; Spanakis, E.; Koudoumas, E.; Savvakis, C.; Katsarakis, N.; International Conference on Coatings on Glass and Plastics in Braunschweig **(Germany) 2010**.

58) Study of metal oxides for the design and development of smart materials, Vernardou, D.; Kenanakis, G.; Kalousis, K.; Vlachou, K.; Rizos, K.; Koudoumas, E.; Katsarakis, N.; Chemical Consciousness on the 21st century **(Greece) 2009**.
59) One-pot direct hydrothermal approach to the design and fabrication of photoactive materials, Vernardou, D.; Spanakis, E.; Kenanakis, G.; Koudoumas E.; Katsarakis, N. Fall Materials Research Society Conference in Boston **(USA) 2009**.
60) A comparative study of the photoinduced properties of TiO_2/SiO_2 and $TiO_2/ZnO/SiO_2$ layers prepared by chemical routes, Vernardou, D.; Spanakis, E.; Vlachou, K.; Kalogerakis, G.; Costello, J.; Koudoumas, E.; Katsarakis, N.; Pemble, M.E. EuroCVD-17 in Vienna **(Austria) 2009**.
61) Light-induced photocatalytic degradation of methylene blue by ZnO and TiO_2 nanostructures deposited onto polymer substrates, Kenanakis, G.; Lyroni, N.; Vernardou, D.; Katsarakis, N. 1st International Workshop on Application of Redox Technologies in the Environment in Instabul **(Turkey) 2009**.
62) Metal oxide nanostructures for use in organic photovoltaic cells, Spanou, E.; Kyprianou, A.; Georgiou, G.E.; Vernardou, D.; Kenanakis, G.; Kymakis, E.; Katsarakis, N.; Koudoumas, E. International Conference on Deregulated Electricity Market Issues in South-Eastern Europe in Nicossia **(Cyprus) 2008**.
63) Photoinduced hydrophilic and photocatalytic response of hydrothermally grown anatase TiO_2 nanostructured thin films, Vernardou, D.; Kalogerakis, G.; Stratakis, E.; Kenanakis, G.; Koudoumas, E.; Katsarakis, N. 6th International Conference on Inorganic Materials in Dresden **(Germany) 2008**.
64) Structural, optical and photocatalytic properties of ZnO thin films and nanostructures deposited by different chemical routes, Kenanakis, G.; Giannakoudakis, Z.; Vernardou, D.; Koudoumas E.; N. Katsarakis, N. 7th International Conference on Coatings on Glass and Plastics in Eindhoven **(Holland) 2008**.
65) Structural, optical and photocatalytic properties of ZnO thin films and nanostructures deposited by different chemical routes, Kenanakis, G.; Vernardou, D.; Koudoumas, E.; Savvakis, C.; N. Katsarakis, N. XXIV Panhellenic Conference on Solid State Physics and Materials Science **(Greece) 2008.**
66) Characterization of hydrothermally grown vanadium oxides for potential application on smart glazings, Vernardou, D.; Zaimaki, M.; Spanakis, E.; Katsarakis, N.; Koudoumas, E. XXIV Pan-Hellenic Conference on Solid State Physics and Materials Science **(Greece) 2008**.
67) Hydrothermal synthesis of photocatalytically active tungsten oxides, Vernardou, D.; Nikiforaki, V.; Filipou, G.; Spanakis, E.; Koudoumas, E.; Katsarakis, N. XXIV Pan-Hellenic Conference on Solid State Physics and Materials Science **(Greece) 2008**.
68) Influence of solution chemistry on the properties of hydrothermally grown TiO2 for advanced applications, Vernardou, D.; Vlachou, K.; Spanakis, E.; Stratakis, E.; Katsarakis, N.; Kymakis, E.; Koudoumas, E. 5th European meeting on solar chemistry and photocatalysis: Environmental applications in Palermo **(Italy) 2008**.
69) Nonlinear optical response of titanium oxide nanostructured thin films, Iliopoulos, K.; Kalogerakis, G.; Vernardou, D.; Katsarakis, N.; Koudoumas, E.; Couris, S. 2nd International Symposium on Transparent Conducting Oxides **(Greece) 2008**.
70) A comparative study of solution concentration and temperature on the hydrothermally grown ZnO ozone sensors, Vernardou, D.; Rizos, K.; Moschovis, K.; Kortidis, G.; Kenanakis, G.; Koudoumas, E.; Katsarakis, N.; Kiriakidis, G. 2nd International Symposium on Transparent Conducting Oxides **(Greece) 2008**.
71) Hydrothermal growth of Fe^{+3} doped TiO_2 on glass for self-cleaning application, Vernardou, D.; Spanakis, E.; Mohamed, A.; Kenanakis, G.; Koudoumas, E.; Katsarakis, N. 2nd International Symposium on Transparent Conducting Oxides **(Greece) 2008**.
72) Combinatorial approaches to the design and fabrication of photoactive materials, Pemble, M.E.; Chalvet, F.; Costello, J.; Dillon, F.; Povey, I.; Bardosova, M.; Tredgold, R.; Vernardou, D.; Yates, H.; Evans, P.; Brook, L.; Foster, H.; Steele, A.; Sheel, D. Materials Chemistry 8 in University College London **(United Kingdom) 2007**.
73) Substrate and deposition time effect on the hydrophilicity of the hydrothermally grown TiO_2 films, Vernardou, D.; Stratakis, E.; Kenanakis, G.; Yates, H.M.; Couris, S.; Pemble, M.E.; Koudoumas, E.; Katsarakis, N. XIX Pan-Hellenic Conference on Solid State Physics and Materials Science **(Greece) 2007**.
74) Light-induced reversible hydrophilicity of hydrothermally grown TiO_2 films, Vlachou, K.; Kalogerakis, G.; Vernardou, D.; Stratakis, E.; Kenanakis, G.; Koudoumas, E.; Katsarakis, N. XIX Pan-Hellenic Conference on Solid State Physics and Materials Science **(Greece) 2007**.
75) Investigation of the structural, morphological and photocatalytic properties of ZnO thin films and nanostructures deposited by different chemical routes, Kenanakis, G.; Giannakoudakis, Z.; Vernardou, D.; Koudoumas, E.; Katsarakis, N. XIII Panhellenic Conference on Solid State Physics and Materials Science **(Greece) 2007**.
76) Light–induced reversible hydrophilicity of ZnO structures grown by Aqueous Chemical Growth, Kenanakis, G.; Stratakis, E.; Vlachou, K.; Vernardou, D.; Koudoumas, E.; Katsarakis, N.; European Materials Research Society in Strasbourg **(France) 2007**.
77) Influence of solution concentration and temperature on the Aqueous Chemical Growth of zinc oxide

structures, Vernardou, D.; Kenanakis, G.; Vlachou, K.; Koudoumas, E.; Kiriakidis, G.; Dairies, A.; Katsarakis, N. European Materials Research Society in Strasbourg **(France) 2007**.
78) In-situ FTIR studies of the growth of vanadium dioxide coatings on glass by atmospheric pressure chemical vapour deposition for VCl_4 and H_2O system, Vernardou, D.; Pemble, M.E.; Sheel, D.W. 1st International Symposium on Transparent Conducting Oxides **(Greece) 2006**.
79) pH effect on the morphology of ZnO nanostructures grown with aqueous chemical growth, Vernardou, D.; Kenanakis, G.; Couris, S.; Koudoumas, E.; Kymakis, E.; Katsarakis, N. 1st International Symposium on Transparent Conducting Oxides **(Greece) 2006**.
80) Strategies for the design and fabrication of improved transparent conducting oxide thin films via the use of in-situ growth monitoring and the exploitation of photonic band gap materials, Pemble, M.E.; Costello, J.C.; Povey, I.M.; Vernardou, D.; Sheel, D.W. 1st International Symposium on Transparent Conducting Oxides **(Greece) 2006**.
81) Ozone sensing properties of ZnO nanostructures grown by the aqueous chemical growth technique, Kenanakis, G.; Vernardou, D.; Suchea, M.; Christoulakis, S.; Koudoumas, E.; Kiriakidis, G.; Katsarakis, N. 4th International Workshop on ZnO and Related Materials in Giessen **(Germany) 2006**.
82) Thermochromic coatings for Smart Glazings: an In-situ FTIR studies of the growth of vanadium dioxide coatings, Sheel, D.; Vernardou, D.; Pemble, M.E. 6th International Conference on Coating on Glass and Plastics in Dresden **(Germany) 2005**.
83) Vanadium oxides prepared by Liquid Injection MOCVD using vanadyl acetylacetonate, Vernardou, D.; Pemble, M.E.; Sheel, D.W. 31st International Conference on Thin films and Metallurgical Coatings in San Diego **(USA) 2004**.
84) Doped vanadium oxide coated glass for Smart Window applications prepared by Liquid Injection MOCVD, Vernardou, D.; Pemble, M.E.; Sheel, D.W. 5th International Conference on Coatings on Glass in Saarbruecken **(Germany) 2004**.
85) Characterization of vanadium oxide films prepared by Atmospheric Pressure Chemical Vapour Deposition, Vernardou, D.; Pemble, M.E.; Sheel, D.W. Chemical Vapour Deposition XVI and EUROCVD in Paris **(France) 2003**.
86) Structural and optical characterization of vanadium oxide thin films prepared by Atmospheric Pressure Chemical Vapour Deposition, Vernardou, D.; Pemble, M.E.; Sheel, D.W. XIX Pan-Hellenic Conference on Solid State Physics and Materials Science **(Greece) 2003**.

CONFERENCE COMMITTEE

1) Member of the Organizing Committee, **4th International Conference on Materials Science, Engineering and Technology, Singapore, 2025.**
2) Member of the International Committee, **3rd International Conference on Nanotechnology and Materials Science, Spain, 2025.**
3) Member of the International Committee, **4th International Online Conference on Nanomaterials, 2023**.
4) Member of the International Scientific Committee, **EUROCVD / Baltic ALD, Belgium, 2023**.
5) Member of the international scientific committee on **Materials Science Engineering and Technology (Singapore) 2022.**
6) Member of the organizing committee of **XXXVI Panhellenic Conference on Solid-State Physics and Materials Science in Crete (Greece) 2022.**
7) Member of the international scientific committee on **Advances on Photocatalysis-Virtual 2021**.
8) Member of the international scientific committee on **International Conference on Materials: Advanced and Emerging Materials-Virtual 2021.**
9) Member of the local organizing committee on **12th International Conference on Physics of Advanced Materials in Crete (Greece) 2018.**
10) Member of the international scientific committee on **Advances on Photocatalysis (Greece) 2017.**
11) Member of the local organizing committee on 3rd and 4th International Symposium on Transparent Conductive Materials in **Crete (Greece) 2010, 2012, 2014 and 2016**.
12) Member of the local organizing committee on 1st and 2nd International Symposium on Transparent Conducting Oxides in **Crete (Greece) 2006 and 2008**.

SEMINARS

1) ''Chemical Strategies for Developing Electrode Materials in Efficient Energy Storage Systems'' 2nd Edition of The Future Energy Summit **(Houston) 2026**.
2) ''Materials for Efficient Energy Storage: The Chemical Growth Approach'' 4th International Conference on Materials Science, Engineering and Technology **(Singapore) 2025**.
3) "Materials for Energy Storage" Athena Talks of the **Athena European University 2024**.
4) "Materials for efficient energy handling and storage: The Atmospheric pressure chemical vapour deposition approach", IESL- FORTH **(Greece) 2018**.
5) "Thermochromic smart windows", Uppsala University **(Sweden) 2018**.
6) "Chemical Approaches to the Design and Fabrication of Smart and Functional Materials", University of Crete **(Greece) 2007**.
7) "The Growth of Thermochromic Vanadium Oxides on Glass by Liquid Injection CVD", CVD Network Meeting London **(United Kingdom) 2004**.
8) "Doped vanadium oxides prepared by Liquid Injection MOCVD", University of Salford **(United Kingdom) 2004.**

PARTICIPATION IN FUNDED PROJECTS

- «DEVELOPMENT OF A FUNCTIONAL CATHODE PROTOTYPE» (15/11/2023-06/07/2026)
- «GREEN HYBRID PEROVSKITE/TWO-DIMENSIONAL MATERIAL SYSTEMS: FROM MATERIAL DEVICES TO HIGH-ENERGY LITHIUM-ION CELLS» (01/02/2024-31/12/2025)
- ADVANCED TECHNOLOGY HIGHER EDUCATION NETWORK ALLIANCE/ATHENA (16.11.2022-31.10.2023), **WP3 Education: Creating an Innovative and Inclusive Educational Offer**
- SAKURA SCIENCE PROGRAMME (Research collaboration between the HMU and the KIT in Japan in January-February 2023)
- LINABIOFLUID (01.11.2017-3 0.04.2018)
- ARCHIMEDES III 2012-2015 «Nanostructured metal oxide photocatalysts» (01.09.2012-30.11.2012)
- ARCHIMEDES III 2012-2015 «Design and fabrication of nanostructured hybrid solar cells with improved performance» (01.09.2012-31.12.2012)
- ARCHIMEDES III 2012-2015 «Growth and characterization of novel nanostructured layers for the confinement of GHz electromagnetic radiation» (01.09.2012-31.12.2012 and 01.07.2015-31.08.2015)
- ARCHIMEDES III 2012-2015 «Electrochromic low cost advanced window» (18.07.2013-17.09.2013 and 28.02.2014-30.06.2014)
- SYNERGASIA 09ΣΥΝ-32-1185 2012-2015 «Smart & Economic thermochromic windows for energy saving in buildings» (01.09.2012-31.12.2012 and 31.12.2014-28.03.2015)
- INTERREG IIIA/GREECE-CYPRUS 2000-2006, «Novel photovoltaic cells and photovoltaic systems with improved efficiency» (01.05.2007-28.02.2008 and 29.02.2008-31.05.2008)
- EPEAEK, ARCHIMEDES II, «ZnO thin films for gas sensing applications» (01.01.2007-28.02.2007)
- 3rd GENLAC 2003-2005, «3rd generation optical coatings for large area architectural glazing». (01.04.2005-31.12.2005)
- EPSRC 2000-2004, «Intelligent Thermochromic Coatings; APCVD prepared metal doped vanadium oxides» (Duration: 3 years)

PUBLICATIONS

1) Walnut shell-derived biochar as a sustainable carbon electrode for aqueous sodium-ion supercapacitors, Kavousanos, N.; Tsikritsaki, E.; Kalderis, D.; Vernardou, D. Next Materials 2026, 12, 102377.
2) LTO as a Promising Anode Material for Aqueous Batteries: Synthesis Routes, Properties, and Electrode Preparation Approaches, Apostolopoulou, M.; Pigounakis, E.; Vernardou, D. Nanomaterials 2026, 16, 612.
3) Exploring activation-free biochars through a comprehensive characterization, Apostolopoulou, M.; Kavousanos, N.; Bairamis, F.; Brintakis, K.; Kostopoulou, A.; Stratakis, E.; Spanakis, E.; Ramirez, R.S.; Kalderis, D.; Vernardou, D. C 2026, 12, 22.
4) Protective graphene oxide layers for enhanced stability of copper cathodes in zinc-ion energy storage systems, Kavousanos, N.; Ramirez, R.S.; Kostopoulou, A.; Brintakis, K.; Stratakis, E.; Vernardou, D. Discover Electrochemistry 2025, 2, 25.
5) From green cathode material to sustainable energy technology: A holistic approach, Tsoukas, T.; Kavousanos, N.; Floraki, C.; Apostolopoulou, M.; Ramirez, R.S.; Vernardou, D. Next Materials 2025, 9, 100970.
6) Dextran stabilised hematite: a sustainable anode in aqueous electrolytes, Panagiotidou, S.; Vasilaki, E.; Katsarakis, N.; Vernardou, D.; Vamvakaki, M. Nanoscale 2025, 17, 4578.
7) An affordable dual purpose spray setup for lithium-ion batteries thin film electrode deposition, Aivaliotis, D.; Vernardou, D. Materials 2024, 17, 5114.
8) Optimization strategies of hybrid lithium titanate oxide/carbon anodes for lithium-ion batteries, Apostolopoulou, M.; Vernardou, D.; Passerini, S. Nanomaterials 2024, 14, 1799.

9) Challenges and perspectives of biochar anodes for lithium-ion batteries, Vernardou, D.; Psaltakis, G.; Tsubota, T.; Katsarakis, N.; Kalderis, D. Future Batteries 2024, 4, 100011.
10) Harnessing laser technology to create stable metal halide perovskite-rGO conjugates as promising electrodes for Zn-ion capacitors, Kostopoulou, A.; Vernardou, D.; Livakas, N.; Brintakis, K.; Daskalakis, S.; Stratakis, E. Nanoscale 2024, 16, 6455-6463.
11) Reverse voltage pulse deposition of a porous polyaniline/Mn-Co sulfide composite cathode material for modified Zn-ion hybrid supercapacitors, Thiet, D.V.; Tung, D.T.; Tam, L.T.T.; Dung, N.T.; Tam, L.T.; Nam, P.T.; Trang, N.T.T.; Vernardou, D.; Le, T.K.; Tam, N.V.; Lam, T.D.; Lu, L.T. New Journal of Chemistry, 2023, 47, 14885-14893.
12) Investigation of Si-coated multiwalled carbon nanotubes as potential electrodes for multivalent metal-ion electrochemical energy storage systems, Daskalakis, S.; Kostopoulou, A.; Brintakis, K.; Stratakis, E.; Prasadam, V.P.; Menguelti, K.; Bahlawane, N.; Vernardou, D. The Journal of Physical Chemistry C 2023, 127, 13364-13379.
13) Effect of electrolyte concentration on the electrochemical performance of spray deposited $LiFePO_4$, Floraki, C.; Androulidaki, M.; Spanakis, E.; Vernardou, D. Nanomaterials 2023, 13, 1850.
14) Metal-ion intercalation mechanisms in vanadium pentoxide and its new perspectives, Alcántara, R.; Lavela, P.; Edström, K.; Fichtner, M.; Le, T.K.; Floraki, C.; Aivaliotis, D.; Vernardou, D. Nanomaterials 2023, 13, 3149.
15) Advances in solar energy harvesting integrated by Van der Waals graphene heterojunctions, Le, T.K.; Iqbal, M.A.; Vernardou, D.; Dao, V.-D.; Ponnusamy, V.K.; Rout, C.S.; Pham, P.V. RSC Advances 2023, 13, 31273-31291.
16) Recent advances of chemical vapor deposited thermochromic vanadium dioxide materials, Koudoumas, E.; Le, K.T.; Vernardou, D. Energy Nexus 2023, 11, 100237
17) Recent report on the hydrothermal growth of $LiFePO_4$ as a cathode material, Vernardou, D. Coatings 2022, 12, 1543.
18) High electrochemical performance of ink solution based on manganese cobalt sulfide/reduced graphene oxide nano-composites for supercapacitor electrode materials, Thanh Tam, L.T.; Thanh Tung, D.; Minh Nguyet, H.; Ngoc Linh, N.T.; Thanh Dung, N.; Van Quynh, N.; Van Dang, N.; Vernardou, D.; Khac Le, T.; Anh Tuan, L.; Ngoc Minh, P.; Trong Lu, L. RSC Advances, 2022, 12, 20182-10190.
19) Recent advances in vanadium pentoxide (V_2O_5) towards related-applications on chromogenic and beyond: fundamentals, progress, and perspectives, Khac Le, T.; Pham, P.V.; Dong, C.-L.; Bahlawane, N.; Vernardou, D.; Mjejri, I.; Rougier, A.; Kim, S.W. Journal of Materials Chemistry C, 2022, 10, 4019-4071.
20) APCVD graphene-based composite electrodes for Li-ion batteries, Floraki, C.; Sapountzis, A.; Vernardou, D. Energies, 2022, 15, 926.
21) Perspectives on iron oxide-based materials with carbon as anodes for Li- and K-ion Batteries, Valvo, M.; Floraki, C.; Paillard, E.; Edström, K.; Vernardou, D. Nanomaterials, 2022, 12, 1436.
22) Progress on V_2O_5 cathodes for multivalent aqueous batteries, Karapidakis, E.; Vernardou, D. Materials, 2021, 14, 2310.
23) Electrochemical investigation of phenethylammonium bismuth iodide as anode in aqueous Zn^{2+} electrolytes, Daskalakis, S.; Wang, M.; Carmalt, C.J.; Vernardou, D. Nanomaterials, 2021, 11, 656.
24) Progress and challenges in industrially promising chemical vapour deposition processes for the synthesis of large-area metal oxide electrode materials designed for aqueous battery systems, Vernardou, D. Materials, 2021, 14, 4177.
25) Towards high performance chemical vapour deposition V_2O_5 cathodes for batteries employing aqueous media, Vernardou, D.; Drosos, C.; Kafizas, A.; Pemble, M.E.; Koudoumas, E. Molecules, 2020, 25, 5558.
26) Highly stable metal halide perovskites microcube anodes for lithium-air batteries, Kostopoulou, A.; Vernardou, D.; Makri, D.; Brintakis, K.; Savva, K.; Stratakis, E. Journal of Power Sources Advances, 2020, 3, 100015.
27) Mouratis, K.; Tudose, V.; Romanitan, C.; Pachiu, C.; Tutunaru, O.; Suchea, M.; Couris, S.; Vernardou, D.; Koudoumas, E. Electrochromic performance of V_2O_5 thin films grown by spray pyrolysis, Materials, 2020, 13, 3859.
28) Drosos, C.; Moss, B.; Kafizas, A.; Vernardou, D. V_2O_5 as magnesium cathode material with extended cyclic stability, Journal of the Electrochemical Science and Engineering, 2020, 10, 257-262.
29) Pemble, M.E.; Povey, I.; Vernardou, D. Atomic layer deposited V_2O_5 cotaings: a promising cathode for Li-ion batteries, Journal of the Electrochemical Science and Engineering, 2020, 10, 21-28.
30) Electrochemistry studies of hydrothermally grown ZnO on 3D-printed graphene, Vernardou, D.; Kenanakis, G. Nanomaterials, 2019, 9, 1056.
31) Tungsten doping effect on V_2O_5 thin film electrochromic performance, Panagopoulou, M.; Vernardou, D.; Koudoumas, E.; Tsoukalas, D.; Raptis, Y.S. Electrochimica Acta, 2019, 321, 134743.
32) Tuning electrical properties of polythiophene/nickel nanocomposites via fabrication, Pascariu, P.; Vernardou, D.; Suchea, M.; Airinei, A.; Ursu, L.; Bucur, S.; Tudose, I.V.; Ionescu, O.; Koudoumas, E. Materials and Design, 2019, 182, 108027.
33) All-inorganic lead halide perovskite nanohexagons for high performance air-stable lithium batteries. Kostopoulou, A.; Vernardou, D.; Savva, K.; Stratakis, E. Nanoscale, 2019, 11, 882.
34) Advancements, challenges and prospects of chemical vapor pressure at atmospheric pressure on vanadium dioxide structures, Drosos, C.; Vernardou, D. Materials, 2018, 11, 384.
35) Aerosol-assisted chemical vapor deposition of V_2O_5 cathodes with high rate capabilities for magnesium-ion batteries, Drosos, C.; Jia, C.; Mathew, S.; Palgrave, R. G.; Moss, B.; Kafizas, A.; Vernardou, D. Journal of Power Sources, 2018, 384, 355.
36) Zinc oxide-graphene based composite layers for electromagnetic interference shielding in the GHz frequency range, Drakakis, E.; Suchea, M.; Tudose, V.; Kenanakis, G.; Stratakis, D.; Dangakis, K.; Miaoudakis, A.; Vernardou, D.; Koudoumas, E. Thin Solid Films, 2018, 651, 152.
37) Growth of V_2O_5 films for battery applications by pulsed chemical vapor deposition, Kazadojev, I. I.; O'Brien, S.; Ryan, L. P.; Modreanu, M.; Osiceanu, P.; Somacescu, S.; Vernardou, D.; Pemble, M. E.; Povey, I. P. ECS Transactions, 2018, 85, 83.

38) Effect of deposition temperature on the electrochromic properties of WO_3 grown by LPCVD, Louloudakis, D.; Vernardou, D.; Papadimitropoulos, G.; Davazoglou, D.; Koudoumas, E. Advanced Materials Letters, 2018, 9, 192.
39) 3D printed graphene-based electrodes with high electrochemical performance, Vernardou, D.; Vasilopoulos, K. C.; Kenanakis, G. Applied Physics A, 2017, 123, 623.
40) Ternary organic solar cells incorporating zinc phthalocyanine with improved performance exceeding 8.5 %, Stylianakis, M. H.; Konios, D.; Viskadouros, G.; Vernardou, D.; Katsarakis, N.; Koudoumas, E.; Anastasiadis, S. H.; Stratakis, E.; Kymakis, E. Dyes and Pigments, 2017, 146, 408.
41) Using an atmospheric pressure chemical vapor deposition process for the development of V_2O_5 as an electrochromic material, Vernardou, D. Coatings, 2017, 7, 24.
42) Oxygen and temperature effects on the electrochemical and electrochromic properties of rf-sputtered V_2O_5 thin films, Panagopoulou, M.; Vernardou, D.; Koudoumas, E.; Tsoukalas, D.; Raptis, Y.S. Electrochimica Acta, 2017, 232, 54.
43) TiO_2/WO_3 photoactive bilayers in the UV-Vis light region, Vasilaki, E.; Vernardou, D.; Kenanakis, G.; Vamvakaki, M.; Katsarakis, N. Applied Physics A, 2017, 123, 231.
44) Atmospheric pressure chemical vapor deposition of vanadium oxides at 300 ^oC for Li-ion batteries, Vernardou, D.; Louloudakis, D.; Rasoulis, M.; Suchea, M.; Katsarakis, N.; Koudoumas, E. Materials Focus, 2017, 6, 314.
45) Cationic effect on the electrochemical characteristics of the hydrothermally grown manganese dioxide, Vernardou, D.; Kazas, A.; Apostolopoulou, M.; Katsarakis, N.; Koudoumas, E. Journal of Electronic Materials, 2017, 46, 2232.
46) Electrodeposition of vanadium oxides at room temperature as cathodes in lithium-ion batteries, Rasoulis, M.; Vernardou, D. Coatings, 2017, 7, 100.
47) Tunable properties of Mg-doped V_2O_5 thin films for energy applications: Li-ion batteries and electrochromics, Panagopoulou, M.; Vernardou, D.; Koudoumas, E.; Katsarakis, N.; Tsoukalas, D.; Raptis, Y. S. The Journal of Physical Chemistry C, 2017, 121, 70.
48) Electrochemical properties of APCVD α-Fe_2O_3 nanoparticles at 300 ^oC, Vernardou, D.; Apostolopoulou, M.; Katsarakis, N.; Koudoumas, E.; Drosos, C.; Parkin, I. P. Chemistry Select, 2016, 1, 2228.
49) Capacitive behavior of Ag doped V_2O_5 grown by aerosol assisted chemical vapour deposition, Vernardou, D.; Marathianou, I.; Katsarakis, N.; Koudoumas, E.; Kazadojev, I. I.; Brien, S. O'.; Pemble, M. E.; Povey, I. M. Electrochimica Acta, 2016, 196, 294.
50) Atmospheric pressure chemical vapor deposition of amorphous tungsten doped vanadium dioxide for smart window applications, Louloudakis, D.; Vernardou, D.; Spanakis, E.; Suchea, M.; Kenanakis, G.; Pemble, M.; Savvakis, K.; Katsarakis, N.; Koudoumas, E.; Kiriakidis, G. Advanced Materials Letters, 2016, 7, 192.
51) Hydrothermal growth of MnO_2 at 95 ^oC as an anode material, Vernardou, D.; Kazas, A.; Apostolopoulou, M.; Katsarakis, N.; Koudoumas, E. International Journal of Thin Films Science and Technology, 2016, 5, 121.
52) Oxygen source-oriented control of atmospheric pressure chemical vapor deposition of VO_2 for capacitive applications, Vernardou, D.; Bei, A.; Louloudakis, D.; Katsarakis, N.; Koudoumas, E. Journal of the Electrochemical Science and Engineering 2016, 6, 165.
53) Functional properties of APCVD VO_2 layers, Vernardou, D.; Louloudakis, D.; Spanakis, E.; Katsarakis, N.; Koudoumas, E. International Journal of Thin Films Science and Technology, 2015, 4, 187.
54) Electrochemical performance of vanadium oxide coatings grown using atmospheric pressure CVD, Vernardou, D.; Apostolopoulou, M.; Louloudakis, D.; Katsarakis, N.; Koudoumas, E. Chemical Vapor Deposition, 2015, 21, 369.
55) Ag-loaded TiO_2/reduced graphene oxide nanocomposites for enhanced visible-light photocatalytic activity, Vasilaki, E.; Georgaki, I.; Vernardou, D.; Vamvakaki, M.; Katsarakis, N. Applied Surface Science, 2015, 353, 865.
56) Effect of solution chemistry on the characteristics of hydrothermally grown WO_3 for electroactive applications, Christou, K.; Louloudakis, D.; Vernardou, D.; Savvakis, C.; Katsarakis, N.; Koudoumas, E.; Kiriakidis, G. Thin Solid Films, 2015, 594, 333.
57) Study of the pH effect on the properties of the hydrothermally grown V_2O_5, Apostolopoulou, M.; Louloudakis, D.; Vernardou, D.; Katsarakis, N.; Koudoumas, E.; Kiriakidis, G. Thin Solid Films, 2015, 594, 338.
58) Amorphous thermochromic VO_2 coatings grown by APCVD at low temperatures, Vernardou, D.; Louloudakis, D.; Spanakis, E.; Katsarakis, N.; Koudoumas, E. Advanced Materials Letters, 2015, 6, 660.
59) Electrochemical evaluation of vanadium pentoxide coatings grown by AACVD, Vernardou, D.; Louloudakis, D.; Katsarakis, N.; Koudoumas, E.; Kazadojev, I. I.; Brien, S. O'.; Pemble, M.E.; Povey, I.M. Solar Energy Materials and Solar Cells, 2015, 143, 601.
60) Synthesis of WO_3 catalytic powders: evaluation of photocatalytic activity under NUV/visible light irradiation and alkaline reaction pH, Vamvasakis, I.; Georgaki, I.; Vernardou, D.; Kenanakis, G.; Katsarakis, N. Journal of Sol-Gel Science and Technology, 2015, 76, 120.
61) Effect of O_2 flow rate on the electrochromic response of WO_3 grown by LPCVD, Psifis, K.; Louloudakis, D.; Vernardou, D.; Spanakis, E.; Papadimitropoulos, G.; Davazoglou, D.; Katsarakis, N.; Koudoumas, E. Physica Status Solidi (c), 2015, 12, 1011.
62) Low pressure CVD of electrochromic WO_3 at 400 ^oC, Vernardou, D.; Psifis, K.; Louloudakis, D.; Papadimitropoulos, G.; Davazoglou, D.; Katsarakis, N.; Koudoumas, E. Journal of the Electrochemical Society, 2015, 162, H579.
63) Effect of O_2 flow rate on the thermochromic performance of VO_2 coatings grown by atmospheric pressure CVD, Louloudakis, D.; Vernardou, D.; Spanakis, E.; Dokianakis, S.; Panagopoulou, M.; Raptis, G.; Aperathitis, E.; Kiriakidis, G.; Katsarakis, N.; Koudoumas, E. Physica Status Solidi (c), 2015, 12, 856.
64) Perspectives of energy materials grown by APCVD, Drosos, C.; Vernardou, D. Solar Energy Materials and Solar Cells, 2015, 140, 1.
65) Photocatalytic and electrooxidation properties of TiO_2 thin films deposited by sol-gel, Kenanakis, G.; Vernardou, D.; Dalamagkas, A.; Katsarakis, N. Catalysis Today, 2015, 240, 146.

66) One-pot synthesis of WO_3 structures at 95 ^oC using HCl, Christou, K.; Louloudakis, D.; Vernardou, D.; Katsarakis, N.; Koudoumas, E. Journal of Sol-Gel Science and Technology, 2015, 73, 520.
67) Electrodeposition of V_2O_5 using ammonium metavanadate at room temperature, Vernardou, D.; Spanakis, E.; Katsarakis, N.; Koudoumas, E. Advanced Materials Letters, 2014, 5, 569.
68) Thermochromic amorphous VO_2 coatings grown by APCVD using a single-precursor, Vernardou, D.; Louloudakis, D.; Spanakis, E.; Katsarakis, N.; Koudoumas, E. Solar Energy Materials and Solar Cells, 2014, 128, 36.
69) Electrochemical properties of vanadium oxide coatings grown by hydrothermal synthesis on FTO substrates, Vernardou, D.; Louloudakis, D.; Spanakis, E.; Katsarakis, N.; Koudoumas, E. New Journal of Chemistry, 2014, 38, 1959.
70) Hydrothermal growth and characterization of shape-controlled $NH_4V_3O_8$, Vernardou, D.; Apostolopoulou, M.; Louloudakis, D.; Katsarakis, N.; Koudoumas, E. New Journal of Chemistry, 2014, 38, 2098.
71) Hydrothermally grown β-V_2O_5 electrode at 95 °C, Vernardou, D.; Apostolopoulou, M.; Louloudakis, D.; Katsarakis, N.; Koudoumas, E. Journal of Colloid and Interface Science, 2014, 424, 1.
72) Electrochemical properties of opal-V_6O_{13} composites, Vernardou, D.; Apostolopoulou, M.; Louloudakis, D.; Spanakis, E.; Katsarakis, N.; Koudoumas, E.; McGrath, J.; Pemble, M. E. Journal of Alloys and Compounds, 2014, 586, 621.
73) Photocatalytic properties of chemically grown vanadium oxide at 65 °C, Vernardou, D.; Drosos, H.; Fasoulas, J.; Koudoumas, E.; Katsarakis, N. Thin Solid Films, 2014, 555, 169.
74) State-of-the-art of chemically grown vanadium pentoxide nanostructures with enhanced electrochemical properties, Vernardou, D. Advanced Materials Letters, 2013, 4, 798.
75) Effect of gold and silver nanoislands on the electrochemical properties of carbon nanofoam, Spanakis, E.; Pervolaraki, M.; Giapintzakis, J.; Katsarakis, N.; Koudoumas, E.; Vernardou, D. Electrochimica Acta, 2013, 111, 305.
76) Thermochromic vanadium oxide coatings grown by APCVD at low temperatures, Louloudakis, D.; Vernardou, D.; Spanakis, E.; Katsarakis, N.; Koudoumas, E. Physics Procedia, 2013, 46, 137.
77) Electrochemical properties of vanadium oxide coatings grown by APCVD on glass substrates, Louloudakis, D.; Vernardou, D.; Spanakis, E.; Katsarakis, N.; Koudoumas, E. Surface & Coatings Technology, 2013, 230, 186.
78) Electrochemical activity of electrodeposited vanadium oxide coatings grown at room temperature, Vernardou, D.; Sapountzis, A.; Spanakis, E.; Kenanakis, G.; Koudoumas, E.; Katsarakis, N. Journal of The Electrochemical Society, 2013, 160, D6.
79) Effect of current density on electrodeposited vanadium oxide coatings, Drosos, H.; Sapountzis, A.; Koudoumas, E.; Katsarakis, N.; Vernardou, D. Journal of the Electrochemical Society, 2012, 159, E145.
80) Electrochemical properties of amorphous WO_3 coatings grown on polycarbonate by Aerosol – Assisted CVD, Vernardou, D.; Drosos, H.; Spanakis, E.; Koudoumas, E.; Katsarakis, N.; Pemble, M.E. Electrochimica Acta, 2012, 65, 185.
81) Light-induced self-cleaning properties of ZnO nanowires grown at low temperatures, Kenanakis, G.; Vernardou, D.; Katsarakis, N. Applied Catalysis A: General, 2012, 411-412, 7.
82) Photoluminescence study of ZnO structures grown by aqueous chemical growth, Kenanakis, G.; Androulidaki, M.; Vernardou, D.; Katsarakis, N.; Koudoumas, E. Thin Solid Films, 2011, 520, 1353.
83) Structural, optical and field emission properties of low-temperature, hydrothermally grown tungsten oxide, Trapatselli, M.; Vernardou, D.; Tzanetakis, P.; Spanakis, E. ACS Applied Materials and Interfaces, 2011, 3, 2726.
84) 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. Solar Energy Materials and Solar Cells, 2011, 95, 2842.
85) Electrochemical and photocatalytic properties of WO_3 coatings grown at low temperatures, Vernardou, D.; Drosos, H.; Spanakis, E.; Koudoumas, E.; Savvakis, C.; Katsarakis, N. Journal of Materials Chemistry, 2011, 21, 513.
86) Hydrothermal growth of V_2O_5 photoactive films at low temperatures, Vernardou, D.; Spanakis, E.; Kenanakis, G.; Koudoumas, E.; Katsarakis, N. Materials Chemistry and Physics, 2010, 124, 319.
87) Photocatalytic degradation of stearic acid by ZnO thin films and nanostructures deposited by different chemical routes, Kenanakis, G.; Giannakoudakis, Z.; Vernardou, D.; Savvakis, C.; Katsarakis, N. Catalysis Today, 2010, 151, 34.
88) A Comparative study of the photoinduced properties of TiO_2/SiO_2 and $TiO_2/ZnO/SiO_2$ layers prepared by chemical routes, Vernardou, D.; Spanakis, E.; Vlachou, K.; Kalogerakis, G.; Costello, J.; Koudoumas, E.; Katsarakis, N.; Pemble, M.E. ECS Transactions, 2009, 25, 73.
89) Nonlinear optical response of titanium oxide nanostructured thin films, Iliopoulos, K.; Kalogerakis, G.; Vernardou, D.; Katsarakis, N.; Koudoumas, E.; Couris, S. Thin Solid Films, 2009, 518, 1174.
90) 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, 4799.
91) Photoinduced hydrophilic and photocatalytic response of hydrothermally grown TiO2 nanostructured thin films, Vernardou, D.; Kalogerakis, G.; Stratakis, E.; Kenanakis, G.; Koudoumas, E.; Katsarakis, N. Solid State Sciences, 2009, 11, 1499.
92) Influence of solution chemistry on the properties of hydrothermally grown TiO_2 for advanced applications, Vernardou, D.; Vlachou, K.; Spanakis, E.; Stratakis, E.; Katsarakis, N.; Kymakis, E.; Koudoumas, E. Catalysis Today, 2009, 144, 172.
93) One pot direct hydrothermal growth photoactive TiO_2 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, 81.
94) Light-induced reversible hydrophilicity of ZnO structures grown by aqueous chemical growth, Kenanakis, G.; Stratakis, E.; Vlachou, K.; Vernardou, D.; Koudoumas, E.; Katsarakis, N. Applied Surface Science, 2008, 254, 5695.
95) Influence of solution concentration and growth temperature on the Aqueous Chemical Growth of zinc oxide structures,

Vernardou, D.; Kenanakis, G.; Vlachou, K.; Koudoumas, E.; Kiriakidis, G.; Vairis, A.; Katsarakis, N. Physica Status Solidi (c), 2008, 5, 3348.

96) Pure and Nb_2O_5-doped TiO_2 amorphous thin films grown by dc magnetron sputtering at room temperature: Surface and photo-induced hydrophilic conversion studies, Suchea, M.; Christoulakis, S.; Tudose, I. V.; Vernardou, D.; Lygeraki, M. I.; Anastasiadis, S. H.; Kitsopoulos, T.; Kiriakidis, G. Materials Science and Engineering: B, 2007, 144, 54.

97) In-situ Fourier transform infrared spectroscopy gas phase studies of vanadium (IV) oxide coating by atmospheric pressure chemical vapour deposition using vanadyl (IV) acetylacetonate, Vernardou, D.; Pemble, M. E.; Sheel, D. W. Thin Solid Films, 2007, 516, 4502.

98) The effect of growth time on the morphology of ZnO structures deposited on Si (100) 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, 2007, 308, 105.

99) pH effect on the morphology of ZnO nanostructures grown with aqueous chemical growth, Vernardou, D; Kenanakis, G.; Couris, S.; Koudoumas, E.; Kymakis, E.; Katsarakis, N. Thin Solid Films, 2007, 515, 8764.

100) In-situ FTIR studies of the growth of vanadium dioxide coatings on glass by atmospheric pressure chemical vapour deposition for VCl_4 and H_2O system, Vernardou, D.; Pemble, M. E.; Sheel, D. W. Thin Solid Films, 2007, 515, 8768.

101) Ozone sensing properties of ZnO nanostructures grown by the aqueous chemical growth technique, Kenanakis, G.; Vernardou, D.; Koudoumas, E.; Kiriakidis, G.; Katsarakis, N. Sensors and Actuators B, 2007, 124, 187.

102) Tungsten doped vanadium oxides prepared by DLI – MOCVD, Vernardou, D.; Pemble, M. E.; Sheel, D. W. Chemical Vapor Deposition, 2007, 13, 158.

103) The growth of thermochromic VO_2 films on glass by atmospheric pressure chemical vapour deposition (CVD): a comparative study of precursors, CVD methodology and substrates, Vernardou, D.; Pemble, M. E.; Sheel, D. W. Chemical Vapor Deposition, 2006, 12, 263.

104) Vanadium oxides prepared by Liquid Injection MOCVD using vanadyl acetylacetonate, Vernardou, D.; Pemble, M. E.; Sheel, D. W. Surface and Coatings Technology, 2004, 188-189, 250.

105) Intelligent Window Coatings: Atmospheric Pressure Chemical Vapor Deposition of tungsten-doped vanadium dioxide, Manning, T. D.; Parkin, I. P.; Pemble, M. E.; Sheel, D.; Vernardou, D. Chemistry of Materials, 2004, 16, 744.

106) Intelligent Window Coatings: Atmospheric Pressure Chemical Vapour Deposition of vanadium oxides, Manning, T. D.; Parkin, I. P.; Clark, R. J. H.; Sheel, D.; Pemble, M. E.; Vernardou, D. Journal of Materials Chemistry, 2002, 12, 2936.

CONFERENCE PROCEEDINGS

1) Structural and Optical Characterization of Vanadium Oxide Thin Films Prepared by Atmospheric Pressure Chemical Vapour Deposition, Vernardou, D.; Pemble, M. E.; Sheel, D. W. **XIX Panhellenic Conference on Solid State Physics - Materials Science Proceedings, 2003, 101.**

2) Characterization of Vanadium Oxide Films Prepared by Atmospheric Pressure Chemical Vapour Deposition, Vernardou, D.; Pemble, M. E.; Sheel, D. W.; Manning, T. D.; Parkin, I. P. **ECS Proceedings, Vol. II, 2003, 1448.**

INVITED CHAPTERS IN BOOKS

1) Kostopoulou, A.; Vernardou, D. *Perovskite Nanostructures: From material design to applications* **Printed Edition of the Special Issue Published in Nanomaterials**, MDPI, 2022.

2) Wang, S.; Vernardou, D.; Drosos, C.; Long, Y. *Chapter 8: Chemical Vapor Deposition and its Application in VO_2 Synthesis* in **Vanadium Dioxide-Based Thermochromic Smart Windows**, Jenny Stanford Publishing Pte. Ltd., 2021.

3) Vernardou, D. *Advances in Chemical Vapor Deposition* **Printed Edition of the Special Issue Published in Materials**, MDPI, 2021.

4) Vernardou, D.; Parkin, I.P.; Drosos, C. *Chapter 4: Chemical Vapor Deposition of Oxide Materials at Atmospheric Pressure* in **Handbook of Modern Coating Technologies: Fabrication Methods and Functional Properties**, Elsevier, 2021

5) Vernardou, D.; Drosos, C. *Advances of APCVD Graphene-Based Electrodes for Li-Ion Batteries* in **Chemical Vapor Deposition (CVD): Types, Uses and Selected Research**, NOVA Publications, 2017.

6) Vernardou, D.; Pemble, M.E. *Vanadium Oxides for Solar Energy Applications* in **Vanadium: Chemical Properties, Uses and Environmental Effects**, NOVA Publications, 2012.

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Applied Physics A, Thin Solid Films, Materials Science and Engineering B, Materials Chemistry and Physics, Physica Status Solidi, Materials Letters, Applied Surface Science, Applied Materials & Interfaces, Journal of Nanoscience and Nanotechnology, Materials Research Bulletin, Advanced Energy Materials.