

# DRACOPOULOS VASILEIOS

Senior Application Scientist

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## ADDRESSES

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## PERSONAL DATA

Date of birth: Feb 3 1972, Thessaloniki  
Nationality: Greek  
Family: Married (2 child)  
Languages: Greek (mother tongue)/English

## FUNDING

Submitted projects: 67  
Funded projects: 37  
Under evaluation: -

## BIBLIOMETRIC DATA

$h_{\text{index}} = 31$   
 $m_{\text{index}} = 1.2$   
citations >2300

## PROFESSIONAL POSITION

2012- : Senior Scientist, FORTH/ICE-HT  
2005-2012: Principal Scientist, FORTH/ICE-HT  
2002-2005: Associate Application Scientist, FORTH/ICE-HT  
2000-2001: Post-doctoral fellow, FORTH/ICE-HT

## EDUCATION

1994-2000: PhD candidate, Dept of Chemical Engineering, Univ of Patras  
PhD thesis: "Raman spectroscopic studies of molten fluoride mixtures:  $\text{LnF}_3\text{-KF}$  ( $\text{Ln}$ :  $\text{La}$ ,  $\text{Ce}$ ,  $\text{Nd}$ ,  $\text{Sm}$ ,  $\text{Dy}$ ,  $\text{Yb}$ ,  $\text{Y}$ ) and  $\text{ZnF}_2\text{-AF}$  ( $A$ :  $\text{K}$ ,  $\text{Cs}$ )"  
1989-1994: Diploma Engineer, Dept. of Chemical Engineering, Univ of Patras  
Diploma thesis: "Raman spectroscopic studies of partially stabilized Zirconia ceramics corrosion in molten fluoride bath"

## RESEARCH INTERESTS

**Materials Characterization** (HR-SEM/EDX/EBSD, XRD, high temperature XRD, AFM, Profilometry, Light microscopy, Raman, FTIR, high/low temperature Raman spectroscopy, DSC, modulated DSC, Isotopic Ratio Mass spectrometry)  
**Design of new ionic liquids for  $\text{CO}_2$  capture**  
Ionic liquid membranes for **water vapor/gas separations**  
**Structural characterization** (Raman/FTIR) of ionic liquids and molten salts  
**Thermal properties** of ionic liquids  
**Novel graphene** production and characterization  
**Environmental Scanning Electron Microscopy.**  
**Raman and FTIR spectroscopy**  
**High temperature** processes

## RESEARCH EXPERIENCE

**Responsible** for the *high-tech research equipment and services* of FORTH/ICE-HT.  
**Responsible** for (use/maintance/schedule organizer/courses) of X-ray diffraction and Microscopy lab of FORTH/ICE-HT which has the following instruments/techniques:

- A FE - Scanning Electron Microscope (1.7nm resolution) equipped with an EDX microanalysis system and EBSD detector EBSD for orientational imaging
- An Atomic Force Microscope (AFM), one optical profiler and one light microscope (polarised/fluorescence)
- One powder X-ray Diffractometer equiped with high temperature furnace and reflectometry stage

**Responsible** for (user/maintenance) of Raman (micro/macro/high temperature UV/FT) and IR (ATR/DRIFT) spectrometers, UV/Vis spectrophotometers, IRMS ( $\text{H}_2$  &  $\text{O}_2$  Isotopic Ratio Mass Spectrometer), X-ray fluorescence (XRF), Physiisorption/chemisorption

**Furnace Design** and construction for high temperature Raman spectroscopy

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## RESEARCH & LAB EXPERIENCE

- 09-11/1995:** Chemistry Dept, Univ of Liege, Belgium: "Spectroscopic study of molten lanthanide fluoride-potassium fluoride binary mixtures", FORTH/ICE-HT Scholarship funded by HUMAN CAPITAL and MOBILITY (HCM-1).
- 1-9/1999:** FORTH/ICE-HT: "Design and Construction of high temperature Raman System", FORTH/ICE-HT scholarship (PhD student)
- 11-12/1993:** Institute of Inorganic Chemistry, NTH, Trondheim, NORWAY: "Metal-Oxide solubilities in molten fluorides and purification control of recrystallised inorganic salts", FORTH/ICE-HT scholarship funded by SCIENCE (EU project) SCI-0294-C(TT).

## PROFESSIONAL AFFILIATIONS

- 2018-today:** Member of European Ionic Matter Society
- 2013-today:** National representative in COST ACTION CM1206 "Exchange in Ionic Liquids"
- 2010-today:** Hellenic Crystallographic Association (IUCr member)
- 2002-today:** Member of the Technical Chamber of Greece
- 2010-today:** Vice-President of the Chemical Engineers Association of Western Greece
- 2008-2010:** Member of the board of Chemical Engineers Association of Western Greece
- 1997-1998:** Member of the Electrochemical Society

## INSTITUTIONAL PROFESSIONAL ACTIVITIES

- 2018-today:** Member of the Scientific Council of FORTH/ICE-HT
- 2010 – today:** FORTH/ICE-HT head of the sector of Laboratory support (electrical/work shop).
- 2002 – today:** Head of the "Instrumentation and Services" FORTH/ICE-HT work group
- 2002 - today:** Member in several work groups of FORTH/ICE-HT (Lab safety, WEB etc.).
- 2004 - today:** Liaison person between ICE-HT and the FORTH public relation dept

## INTERNATIONAL CONFERENCE ORGANIZATION

- Chair-man of 28th conference on Ionic Liquids & Molten Salts (Patras 2020)
- Member of the international organizing committee of Euchem Conference on Ionic Liquids & Molten Salts
- Member of the international organizing committee of EMCC conference
- Member of the EMCC 7 organizing committee, Corfu, 2012
- Member of the "International George Papatheodorou Symposium" organizing committee, Patras 1999.

## DIPLOMA THESES

- 3 diploma thesis in collaboration with Prof. PG Koutsoukos (Chem.Eng.Dept, Univ.Patras) and Ass.Prof N. Mpouropoulos (Materials Science dpt, Univ Patras) in the field of ionic liquids and molten salts.
- 1 diploma thesis in collaboration with Prof. GN Papatheodorou (Chem.Eng.Dept, Univ.Patras) and Dr. V. Nikolakis (FORTH/ICE-HT) in the field of zeolite characterization.

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## PhD SUPERVISION

### Doctoral/Dissertations

**A.M. Moschovi**, Dept. Chemical Engineering University of Patras

Title: " Structural properties of protic ionic liquids"

**D. Vroulias**, Dept Chemistry University of Patras

Title: "Design of new ionic liquids for CO<sub>2</sub> capture" (in progress)

## TEACHING-COURSES TAUGHT

**2005-today:** Training course on Electron Microscopy: "Scanning electron microscopy: Theory and pratice"  
**(organized and coordinated by V. Dracopoulos)**

**2010-today:** Polymer characterization (Co-teaching, coordinated by G.A. Vogiatzis)

Interdepartmental Operational Program for Education and Initial Vocational Training on Polymer Science and Technology of the University of Patras

**1995-1998:** Physical Chemistry I,II, Physical Chemistry Laboratory, Chemical Thermodynamics  
Department of Chemical Engineering University of Patras

## SCIENTIFIC PUBLICATIONS –CONFERENCES PROCEEDINGS

In international refereed journals*	99
In International Conference Proceedings	8
In International Symposia Proceedings	3
In Greek Conference Proceedings	9
Presentations in International Conferences	>30
Presentations in Greek Conferences	>30

\* Highlighted articles are front cover in their issues

### PUBLICATIONS IN REFEREED JOURNALS

1. "Influence of Fluoride Melts on Partially Stabilized ZrO<sub>2</sub>". C.G.Kontoyiannis and V.Dracopoulos, High Temp. Sci. 34,59 (1995)
2. "Light Scattering from Molten Lithium Fluoride" G.N.Papatheodorou and V.Dracopoulos, Chem.Phys.Let. 241, 345 (1995)
3. "Vibrational Modes and Structure of Rare Earth Halide-Alkali Halide Binary Melts: YBr<sub>3</sub>-ABr (A= Li, K, Cs) and YF<sub>3</sub>-KF V.Dracopoulos, B.Gilbert B.Borrensen, G.Photiadis and G.N.Papatheodorou, J.Chem Soc., Faraday Trans. 93 (17), 3081, (1997)
4. "Vibrational Modes and Structure of Lanthanide Fluoride-Potassium Fluoride Binary Melts: LnF<sub>3</sub>-KF (Ln: La, Ce, Nd, Sm, Gd, Dy, Yb)" V.Dracopoulos, B.Gilbert and G.N.Papatheodorou, J.Chem Soc., Faraday Trans. 94(17), 2601 (1998)
5. "Solubility and Raman Spectra of NdOCl in Some Chloride Melts of Interest for the Electrowinning of Magnesium from its Oxide" H. Mediaas, O. Tkatcheva, V. Dracopoulos, G.N. Papatheodorou, G. Kipouros and T. Ostvold, Metal. Trans. B, Metal. Mat. Trans. B, 31B, 631 (2000)
6. "Isotropic and Anisotropic Raman Scattering from Molten LiF-KF and LiF-CsF Mixtures" V. Dracopoulos and G.N Papatheodorou, Phys. Chem. Chem. Phys., 2, 2021 (2000)
7. "Solubility and Raman spectra of Nb(V) in LiF-NaF-KF-Na<sub>2</sub>O melts" A.F. Vik, V. Dracopoulos, G. N. Papatheodorou, and T. Ostvold, J.Alloys Comp., 321,284 (2001)
8. "Raman spectroscopic studies of molten ZrF<sub>4</sub>-KF mixtures and of A<sub>2</sub>ZrF<sub>6</sub>, A<sub>3</sub>ZrF<sub>7</sub> (A:Li,K,Cs) compounds" V. Dracopoulos, J. Vagelatos and G.N. Papatheodorou, J.Chem Soc., Dalton Trans., 1117 (2001)
9. "Solubility and Raman spectra of Ta (V) in LiF-NaF-KF-Na<sub>2</sub>O melts" A.F. Vik, V. Dracopoulos, G. N. Papatheodorou, and T. Ostvold, J.Chem Soc., Dalton Trans., 2164 (2001)
10. "TiCl<sub>4</sub>(THF)<sub>2</sub> impregnation on a flat SiO<sub>x</sub>/Si(1 0 0) and on polycrystalline Au foil: determination of surface species using XPS" S. Ntais, V. Dracopoulos and A. Siokou, J.Mol.Cat. A Chem., 220(2), 199 (2004)
11. "Raman spectra and structure of molten fluorides: the binary mixtures MF<sub>2</sub>-AF (M=Zn,Pb; A=K,Cs) and the compounds K<sub>2</sub>ZnF<sub>4</sub> and K<sub>4</sub>PbF<sub>6</sub>" V. Dracopoulos, D.T. Kastrissios and G.N. Papatheodorou J. non Cryst. Sols. (in press) (2005)
12. "Raman spectra and structure of PbCl<sub>2</sub>-Acl (A=K, Cs) melts" V. Dracopoulos, D.T. Kastrissios and G.N. Papatheodorou, Poly-edron 24(5), 619 (2005)
13. "Morphological Study of the Organization Behavior of Rod-Coil Copolymers and their Blends in Thin Solid Films" N.P. Tzane-tos, V. Dracopoulos, J.K. Kallitsis and V.A. Deimede, Langmuir, 21(20), 9339 (2005) (in print)
14. "Synthesis of faujasite membranes for the separation of propane/propylene mixtures", I. G. Giannopoulos, K. Kalambaliki, V. Dracopoulos and V. Nikolakis, MOLECULAR SIEVES: FROM BASIC RESEARCH TO INDUSTRIAL APPLICATIONS, PTS A AND B, Book series: STUDIES IN SURFACE SCIENCE AND CATALYSIS Vol 158, 137, (2005)
15. "Substrate related properties of evaporated CeO<sub>x</sub> ion storage layers" A. Siokou, S. Ntais, V. Dracopoulos, S. Papaefthimiou, G. Lefteriotis and P. Yianoulis, Thin Solid Films , 514(1-2), 87 (2006)
16. "Novel ZnO nanostructures grown on carbon nanotubes by thermal evaporation", A. Chrissanthopoulos, S. Baskoutas, N. Bouropoulos, V. Dracopoulos, D. Tasis, and S.N. Yannopoulos, Thin Solid Films, 515(24), 8524 (2007)
17. "Preparation of ZnO nanoparticles by thermal decomposition of zinc alginate" S. Baskoutas, P. Giabouranis, S.N Yannopoulos, V. Dracopoulos, L. Toth, A. Chrissanthopoulos, and N. Bouropoulos, Thin Solid Films, 515(24), 8561 (2007)
18. "Investigation of silicalite-1 crystallization using attenuated total Reflection/Fourier transform infrared Spectroscopy" A.Patis, V. Dracopoulos and V. Nikolakis, J.Phys.Chem. C, 111(47), 17478 (2007)
19. "Transformation fatigue and stress relaxation of shape memory alloy wires", P. Pappas, D. Bollas, J. Parthenios, V. Dracopoulos, and C. Galiotis, SMART MATERIALS & STRUCTURES 16(6), 2560-2570 (2007)
20. "The interfacial properties of MgCl<sub>2</sub> thin films grown on Si(111)7x7", S.Karakalos, A. Siokou, V. Dracopoulos, F. Sutara, T. Skala, M. Skoda, S. Ladas, K. Prince, V. Matolin, and V. Chab, Phys.St.Sol. A- Appl. & Mat. Sci. 205(11), 2536 (2008)
21. "Carbon tolerant Ni-Au SOFC electrodes operating under internal steam reforming conditions" I. Gavrielatos, V. Drakopoulos and S. Neophytides, J.Cat., 259(1), 75 (2008)
22. "Electronic structure modifications and HER of annealed electrodeposited Ni overlayers on Mo polycrystalline surface" F. Paloukis, S. Zafeiratos, V. Drakopoulos and S.G. Neophytides, Elecctrochmica Acta, 53(27), 8015 (2008)

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25. "PLGA, chitosan or chitosan-coated PLGA microparticles for alveolar delivery? A comparative study of particle stability during nebulization" M.L. Manca, S. Mourtas, V. Dracopoulos, AM. Fadda and S.G. Antimisiaris, *Colloids & Surfaces B-Biointerfaces*, 62(2), 220 (2008)
26. "Effect of silver doping on the structure and phase separation of sulfur-rich As-S glasses: Raman and SEM studies" F. Kyriazis, A. Chrissanthopoulos, V. Dracopoulos, M. Krbal, T. Wagner, M. Frumar, and S. N. Yannopoulos,, *J. Non-Cryst. Solids*, 355, 2010–2014 (2009).
27. "Visible-light photocatalytic hydrogen production from ethanol-water mixtures using a Pt-CdS-TiO<sub>2</sub> photocatalyst" N.Stratakis, M. Antoniadou, V. Dracopoulos and P.Lianos, *Catal. Today*, 151(1-2),53 (2010)
28. "Au-doped Ni/GDC as a new anode for SOFCs operating under rich CH<sub>4</sub> internal steam reforming", D.K. Niakolas, J.P. Ouweijtjes, G. Riwtveld, V. Dracopoulos and S.G. Neophytides, *International J. of Hydrogen Economy*, 35(15), 7898 (2010)
29. "A New Precursor for the Preparation of Nanocrystalline TiO<sub>2</sub> Films and Their Photocatalytic Properties", K. Pelentridou, E. Stathatos, P. Lianos and V. Drakopoulos, *J. Nanosci. Nanotech.* 10, 1 (2010)
30. "Solid-state dye-sensitized solar cells made of multilayer nanocrystalline titania and poly(3-hexylthiophene)", N. Balis, V.Dracopoulos, M. Antoniadou and P. Lianos, *J. Photchemistry & Photobiology A : Chemistry*, 214,69 (2010)
31. "Synthesis and characterization of ZnO/NiO p-n heterojunctions: ZnO nanorods grown on NiO thin film by thermal evaporation" A. Chrissanthopoulos, S. Baskoutas, N. Bouropoulos, V. Dracopoulos, P. Poulopoulos and S. N. Yannopoulos, *Photonics and Nanostructure* 9, 132 (2011)
32. "Beam transfer characteristics of a commercial environmental SEM and a low vacuum SEM", G. Danilatos, J. Rattenberger and V. Dracopoulos, *J. Microscopy* 242, 166 (2011)
33. "Phase transformations and microstructural observations during sub-critical heat treatments of a high chromium cast iron", A.E. Karantzalis, A. Lekatou, A. Kapoglou, H.Mavros, and V. Dracopoulos, *J. Mat.Eng. & Performance* 21(6), 1030 (2012)
34. "Preparation and ion transport properties of NaY zeolite- HMITFSI ionic liquid composites", S. Ntais, A. M. Moschovi, F. Paloukis, S. Neophytides, V. N. Burganos, V. Dracopoulos and V. Nikolakis, *J. Power Sources* 196,2202 (2011)
35. "A quasi solid-state dye-sensitized solar cell made of polypyrrole counter electrodes" T. Makris, V. Dracopoulos, T. Stergiopoulos, P. Lianos, *Electr.Acta*, 56, 2004 (2011)
36. "A Solid State Hybrid Solar Cell Made of NC-TiO<sub>2</sub>, CdS Quantum Dots and P3HT with 2-Amino-1-Methylbenzimidazole as Interface Modifier" N. Balis, V. Dracopoulos, N. Boukos and P. Lianos *J.Phys.Chem C* , 115, 10911 (2011)
37. "Nanoindentation and Raman studies of phase-separated Ag-As-S glasses" K.S. Andrikopoulos, J. Arvanitidis, V. Dracopoulos, D. Christofilos, T. Wagner, S.N. Yannopoulos, *App. Phys. Letts.* 99 (17) 171911 (2011)
38. "Solidification observations of vacuum arc melting processed Fe-Al-TiC composites: TiC precipitation mechanisms" A.E. Karantzalis, A. Lekatou, E. Georgatis, Z. Arni and V. Dracopoulos, *Mat. Char.* 62(12), 1196 (2011)
39. "Vibrational modes and the boson peak of Y<sub>2</sub>O<sub>3</sub> – Al<sub>2</sub>O<sub>3</sub> glasses". N.K. Nasikas, V.Drakopoulos, S. Sen, and G.N. Papatheodorou, *Phys. Chem. Glasses –European Journal of Glass Science and Technology Part B*, 52(4), 143 (2011)
40. "CO<sub>2</sub> Laser-Induced Growth of Epitaxial Graphene on SiC(0001)" S.N. Yannopoulos, A. Siokou, N. Nasikas, V. Dracopoulos, F. Ravani and G.N. Papatheodorou, *Adv.Funct.Mat.*, 22(1), 133 (2012)
41. "Buckypaper as Pt-free cathode electrode in photoactivated fuel cells" Sfaelou, S., Antoniadou, M., Trakakis, G., Dracopoulos, V., Tasis, D., Parthenios, J., Galiotis, C., Papagelis, K., Lianos, P. *Elect. Acta*, 80, pp. 399 (2012).
42. "One-step electrodeposition of polypyrrole applied as oxygen reduction electrocatalyst in Photoactivated Fuel Cells" Balis, N., Dracopoulos, V., Antoniadou, M., Lianos, P. *Electr. Acta*, 70, 338 (2012).
43. "Quasi-Solid-State Dye-Sensitized Solar Cells made with poly(3,4-ethylenedioxythiophene)-functionalized counter-electrodes" N. Balis, T.Makris, V. Dracopoulos, T. Stergiopoulos, P. Lianos. *J. POWER SOURCES* 203, 302 (2012)
44. "ESEM modifications to LEO SUPRA 35 VP FESEM" V.Dracopoulos, G. Danilatos, *Micron*, 44, 238 (2013).
45. "Vibrational spectroscopic study of the protic ionic liquid 1-H-3-methylimidazolium bis(trifluoromethanesulfonyl)imide" AM Moschovi, S.Ntais, V.Dracopoulos and V. Nikolakis, *Vibr.Spectr.* 63, 350 (2012)
46. "Self-assembled Au nanoparticles on heated Corning glass by dc magnetron sputtering: size-dependent surface plasmon resonance tuning" Grammatikopoulos S , Pappas SD , Dracopoulos V, Poulopoulos P ,Fumagalli P , Velgakis, MJ and Politis, C, *J. Nanoparticle Research*, 15(2) Art.No 1446 (2013)
47. "Graphene production by dissociation of camphor molecules on nickel substrate" F. Ravani, K. Papagelis, V. Drakopoulos, J. Parthenios, K. Dassios, A. Siokou and C. Galiotis *Thin Solid Films* 527, 31 (2013)
48. "Laser-Assisted Growth of t-Te Nanotubes and their Controlled Photo-induced Unzipping to ultrathin core-Te/sheath-TeO<sub>2</sub> Nanowires" T. Vasileiadis, V. Dracopoulos, M. Kollia, & Yannopoulos, S.N. *Sci. Rep.* 3, 1209; DOI:10.1038/srep01209 (2013)

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47. Quantum dot sensitized solar cells based on an optimized combination of ZnS, CdS and CdSe with CoS and CuS counter electrodes N. Balis, V. Dracopoulos, K. Bourikas, P. Lianos Elect. Acta, 91, 246 (2013)
48. "Quantum-dot-sensitized Solar Cells with Metal Electrodes", S. Sfaelou, V. Dracopoulos, P. Lianos , J.Adv.Oxid.Technol., 17(1), 53 (2014)
49. Quantum Dot Sensitized Titania as Visible-light Photocatalyst for Solar Operation of Photofuel Cells" S. Sfaelou, M. Antoniadou, V. Dracopoulos, K. Bourikas, D.I. Kondarides, P. Lianos , J.Adv.Oxid.Technol., 17(1), 59 (2014)
50. "Study of the synergistic interaction between nickel, gold and molybdenum in novel modified NiO/GDC cermets, possible anode materials for CH<sub>4</sub> fueled SOFCs", DK. Niakolas, M. Athanasiou, V. Dracopoulos, I. Tsiaouassis, S. Bebelis, SG. Neophytides, Appl.Cat. A-General, 456, 223 (2013)
51. "Study of the thermal reduction of graphene oxide and of its application as electrocatalyst in quasi-solid state dye-sensitized solar cells in combination with PEDOT" A. Nikolakopoulou, D. Tasis, L. Sygellou, V. Dracopoulos, C. Galiotis, P. Lianos, Elec.Acta 111, 698 (2013)
52. "Platinum-free photoelectrochemical water splitting" M. Antoniadou, S. Sfaelou, V. Dracopoulos, P. Lianos, Cat.Comm, 43, 72 (2014)
53. "ZnO/zeolite hybrid nanostructures: synthesis, structure, optical properties, and simulation" A.Chrissanthopoulos, FC Kyriazis, V Nikolakis, G. Giannakopoulos, V. Dracopoulos, S. Baskoutas, N. Bouropoulos, SN Yannopoulos, Thin Solid Films, 555, 21 (2014)
54. "Photocatalytic hydrogen production using TiO<sub>2</sub>-Pt aerogels" J. Puskalova, L. Baia, A. Vulpoi, M. Baia, M. Antoniadou, V. Dracopoulos, E. Stathatos, K. Gabor, Z. Pap, V. Danciu, P. Lianos, Chem.Eng.J. 242, 96 (2014)
55. "The influence of Au film thickness and annealing conditions on the VLS-assisted growth of ZnO nanostructures" K. Govatsi, A. Chrissanthopoulos, V. Dracopoulos, SN. Yannopoulos, Nanotechnology, 25(21), Article number: 215601 (2014)
56. "Inter- and Intramolecular Interactions in Imidazolium Protic Ionic Liquids" AM Moschovi, V. Dracopoulos, V. Nikolakis, V, JPhysChem B, 118(29), 8673 (2014)
57. "Effect of the Nature of Cadmium Salts on the Effectiveness of CdS SILAR Deposition and Its Consequences on the Performance of Sensitized Solar Cells" S. Sfaelou, L. Sygellou, V. Dracopoulos, A. Travlos, P. Lianos, J.Phys.Chem. C 118 (40), 22873 (2014)
58. "The Effect of Thermal Reduction on the Water Vapor Permeation in Graphene Oxide Membranes" KS Andrikopoulos, G Bounos, D Tasis, L Sygellou, V Drakopoulos, GA Voyatzis, ADVANCED MATERIALS INTERFACES, 1(8),1400250 (2014)
59. "BiOI solar cells" S. Sfaelou, D. Raptis, V. Dracopoulos, P. Lianos, RSC Advances, 5 (116), 95813 (2015)
60. "Transmission environmental scanning electron microscope with scintillation gaseous detection device" G. Danilatos, M. Kollia, V. Dracopoulos, ULTRAMICROSCOPY, 150,44 (2015)
61. "Study of perovskite solar cells synthesized under ambient conditions and of the performance of small cell modules" G. Sfyri, G (Sfyri, CV Kumar, D Raptis, V Dracopoulos, P Lianos, SOLAR ENERGY MATERIALS AND SOLAR CELLS, 134, 60 (2015)
62. "Study of upscaling possibilities for antimony sulfide solid state sensitized solar cells" A. Nikolakopoulou, D Raptis, V Dracopoulos, L Sygellou, KS Andrikopoulos, P Lianos, J. Power Sources, 278, 404 (2015)
63. "Laser processing of SiC: From graphene-coated SiC particles to 3D graphene froths" A. Antonelou, V Dracopoulos, SN Yannopoulos, Carbon 85, 176 (2015)
64. "Photoelectrocatalytic hydrogen production using nanoparticulate titania and a novel Pt/carbon electrocatalyst: The concept of the "Photoelectrocatalytic Leaf"" LC Pop, V Dracopoulos, P Lianos, App.Sur.Sci., 333,147 (2015)
65. "Localized surface plasmon resonances after selective oxidation of AuCu solid solution nanocrystalline films" A Sousanis, S Grammatikopoulos, A Delimitis, V Dracopoulos, P Poulopoulos, App.Phys.Letts, 170(1), 011903 (2015)
66. "Reduced graphene oxide/Polyprrole/PEDOT composite films as efficient Pt-free counter electrode for dye-sensitized solar cells" MS Ramasamy, A Nikolakapoulou, D Raptis, V Dracopoulos, G Paterakis, P Lianos, Electrochimica Acta 173, 276 (2015)
67. "One-step electrodeposition of CdSe on nanoparticulate titania films and their use as sensitized photoanodes for photoelectrochemical hydrogen production" LC Pop, L Sygellou, V Dracopoulos, KS Andrikopoulos, S Sfaelou, P Lianos, Cat. Today, 252, 157 (2015)
68. "Structure of protic (HC(n)ImNTf(2), n=0-12) and aprotic (C(1)C(n)ImNTf(2), n=1-12) imidazolium ionic liquids: A vibrational spectroscopic study" AM Moschovi, V Dracopoulos, J.Mol.Liqs, 210, 189 (2015)
69. "Inhibition of Bacterial Attachment on Surfaces by Immobilization of Tobramycin-Loaded Liposomes" S Mourtas, G Diamanti, A Foka, V Dracopoulos, P Klepetsanis, V Stamouli, I Spiliopoulou, SG Antimisiaris, J.Biom.Nanot. 11 (12), 2186 (2015)

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Senior Application Scientist

70. "Comparative study of phase transition and textural changes upon calcination of two commercial titania samples: A pure anatase and a mixed anatase-rutile" E Kordouli, V Dracopoulos, T Vaimakis, K Bourikas, A Lycourghiotis, C Kordulis, *J.Sol.St.Chem.*, 232, 42 (2015)
71. "Investigation of efficient protocols for the construction of solution-processed antimony sulphide solid-state solar cells" By:Raptis, D (Raptis, D.)[ 1 ] ; Sfyri, G (Sfyri, G.)[ 2 ] ; Sygellou, L (Sygellou, L.)[ 3 ] ; Dracopoulos, V (Dracopoulos, V.)[ 3 ] ; Nouri, E (Nouri, E.)[ 1,4 ] ; Lianos, P(Lianos, P.)[ 1 ] *RSC ADVANCES* 6 (55) (2016)
72. "Facile, substrate-scale growth of mono- and few-layer homogeneous MoS<sub>2</sub> films on Mo Foils with enhanced catalytic activity as counter electrodes in DSSCs", A Antonelou, G Syrrokostas, L Sygellou, G Leftheriotis, V Dracopoulos, SN Yannopoulos, *NANO-TECHNOLOGY*, 27 (4) 045404 (2016)
73. "Photoelectrocatalytic hydrogen production by water splitting using BiVO<sub>4</sub> photoanodes", O Monfort, LC Pop, S Sfaelou, T Plecenik, T Roch, V Dracopoulos, E Stathatos, G Plesch, P Lianos, *CHEMICAL ENGINEERING JOURNAL*, 286, 91 (2016)
74. "Highly functional titania nanoparticles produced by flame spray pyrolysis. Photoelectrochemical and solar cell applications" I Tantis, MV Dozzi, LG Bettini, GL Chiarello, V Dracopoulos, E Sell, P Lianos, *App.Cat. B-Env*, 182, 3369 (2016)
75. "Electrochemically exfoliated graphene/PEDOT composite films as efficient Pt-free counter electrode for dye-sensitized solar cells" M Belekovka, MS Ramasamy, S Yang, XL Feng, G Paterakis, V Dracopoulos, C Galiotis, P Lianos, *Elec. Acta*, 194,110 (2016)
76. Mesoporous WO<sub>3</sub> photoanodes for hydrogen production by water splitting and PhotoFuelCell operation" Sfaelou, S Pop, LC, Monfort O, Dracopoulos V and Lianos, P, *Int. J. Hydrogen Energy*, 41 5902 (2016)
77. "Electrodeposited Ti-doped hematite photoanodes and their employment for photoelectrocatalytic hydrogen production in the presence of ethanol", Kalamaras, E, Dracopoulos V, Sygellou, L and Lianos, P , *CEN*, 295 288 (2016)
78. "Fabrication of TiC-Reinforced Composites by Vacuum Arc Melting: TiC Mode of Reprecipitation in Different Molten Metals and Alloys", Karantzalis AE, Arni Z, Tsirka K, Evangelou A, Lekatou A and Dracopoulos V, *J.Mat Eng.Per*, 25, 3161 (2016)
79. "Soluble tetratriphenylamine Zn phthalocyanine as Hole Transporting Material for Perovskite Solar Cells", Nouri, E Krishna, JVS , Kumar, CV, Dracopoulos, V, Giribabu, L, Mohammadi, MR and Lianos, P, *Elec Acta* 222,875 (2016)
80. "The beneficial effects of mixing spiro-OMeTAD with n-butyl-substituted copper phthalocyanine for perovskite solar cells" Nouri, E, Wang, YL, Chen, Q , Xu, JJ , Dracopoulos, V , Sygellou, L , Xu, ZX , Mohammadi, MR and Lianos, P, *Elec Acta* 222,1417 (2016)
81. "Introduction of Graphene Oxide as Buffer Layer in Perovskite Solar Cells and the Promotion of Soluble n-Butyl-substituted Copper Phthalocyanine as Efficient Hole Transporting Material", Nouri, E, Wang, YL, Chen, Q , Xu, JJ , Paterakis, G , Dracopoulos, V, Xu, ZX , Tasis, D, Mohammadi, MR and Lianos, P, *Elec Acta*232, 36 (2017)
82. "Renewable energy production by photoelectrochemical oxidation of organic wastes using WO<sub>3</sub> photoanodes",Raptis, D , Dracopoulos, V and Lianos, P, *J.Haz.Mat*, 333,259 (2017)
83. "Improvement of the photovoltaic parameters of perovskite solar cells using a reduced-graphene-oxide-modified titania layer and soluble copper phthalocyanine as a hole transporter" Nouri E, Mohammadi MR, Xu ZX , Dracopoulos V and Lianos P, *PCCP*,20(4), 2388 (2018)
84. "Carbon based perovskite solar cells constructed by screen-printed components" Raminafshar C, Dracopoulos V, Mohammadi MR and Lianos, P, *ELECTROCHIMICA ACTA* 276, 261 (2018)
85. "A long-chain protic ionic liquid inside silica nanopores: enhanced proton mobility due to efficient self-assembly and decoupled proton transport" Garaga MN, Dracopoulos V, Werner-Zwanziger U, Zwanziger JW, Marechal, M, Persson M, Nordstierna L and Martinelli A, *NANOSCALE* 10(26), 12337 (2018)
86. "Electrocatalytic performance and carbon tolerance of ternary Au-Mo-Ni/GDC SOFC anodes under CH<sub>4</sub>-rich Internal Steam Reforming conditions" Neofytidis C, Dracopoulos V, Neophytides SG and Niakolas DK, *CATALYSIS TODAY* 310, 157 (2018)
87. "Laser-induced transformation of graphitic materials to two-dimensional graphene-like structures at ambient conditions" Antonelou A, Benekou V, Dracopoulos V, Kollia, M and Yannopoulos SN, *NANOTECHNOLOGY* 29(38) Art.No 284001 (2018)
88. "Template synthesis of defect-rich MoS<sub>2</sub>-based assemblies as electrocatalytic platforms for hydrogen evolution reaction" Kagkoura A, Tzanidis I, Dracopoulos V, Tagmatarchis N, Tasis D, *Chem.Comm* 55(14),2078 (2019)
89. "Synthesis of t-Te and a-Se nanospheres using continuous wave visible light", Vasileiadis T, Dracopoulos V, Kollia M, Sygellou L, Yannopoulos, SN, *J. Nanoparticle Res.* 21(10), 218 (2019)
90. "Study of a Thin Film Aluminum-Air Battery", Katsoufis, P ; Katsaiti, M ; Mourelas, C ; Andrade, TS ; Dracopoulos, V ; Politis, C ; Avgouropoulos, G ; Lianos, P *ENERGIES*,13, 6, art. no. 1447 (2020)
91. "Photoelectrocatalytic Hydrogen Peroxide Production Using Nanoparticulate WO<sub>3</sub> as Photocatalyst and Glycerol or Ethanol as Sacrificial Agents" Papagiannis, I ; Balis, N ; Dracopoulos, V ; Lianos, P , , *PROCESSES*, 8, 1, art. no. 37, (2020)

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92. "Unmediated photoelectrochemical charging of a Zn-air battery: The realization of the photoelectrochemical battery" Andrade, T.S., Dracopoulos, V., Pereira, M.C., Lianos, P., Journal of Electroanalytical Chemistry, 878, art. no. 114709 (2020)
93. "Application of sorbents for oil spill cleanup focusing on natural-based modified materials: A review" Zamparas, M., Tzivras, D., Dracopoulos, V., Ioannides, T., Molecules, 25, 19, art. no. 4522 (2020)
94. "High-quality laser-assisted biomass-based turbostratic graphene for high-performance supercapacitors" Athanasiou, M., Samartzis, N., Sygellou, L., Dracopoulos, V., Ioannides, T., Yannopoulos, S.N., Carbon, 172, 750 (2021)
95. "Solar Energy Conversion and Storage Using a Photocatalytic Fuel Cell Combined with a Supercapacitor" Andrade, TS, Dracopoulos, V, Lianos, P, ELECTRONICS 10(3), Art No 273 (2021)
96. "Biochar from Spent Malt Rootlets and Its Application to an Energy Conversion and Storage Device" Vakros, J; Manariotis, ID; Dracopoulos, V; Mantzavinos, D; Lianos, P CHEMOSENSORS 9(3), Art No 57 (2021)
97. Charging a vanadium redox battery with a photo(catalytic) fuel cell Andrade, TS; Dracopoulos, V; Keramidas, A; Pereira, MC; Lianos, P; SOLAR ENERGY MATERIALS AND SOLAR CELLS 221, Art No110889 (2021)
98. "Exploring the effect of ammonium iodide salts employed in multication perovskite solar cells with a Carbon electrode" Bidikoudi M, Simal C, Dracopoulos V, Stathatos E, Molecules (under revision)
99. "Laser-mediated Explosive Synthesis and Transfer of Graphene and Graphene nanohybrids: Direct Preparation of Electrodes for Energy Conversion Applications" Bhorkar K, Samartzis N, Athanasiou M, Sygellou L, Boukos N, Dracopoulos V, Ioannides Th and Yannopoulos SN, Submitted to Advanced Functional Materials

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