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PERSONAL

Date and Place of Birth: 3-11-1947, Paleochorion Dorieon Phthiotidos, Greece
Marital Status: Married to Manuela Plataki (Psychologist), two children
Education: BS University of Thessaloniki, Physics Dept., Greece, 1970
PhD University of Tennessee, Physics Dept., Knoxville, Tenn., USA, 1978
Military Service: 1970-1973 Greek Army
Employment:
2014- Professor Emeritus, University of Patras, Patras, Greece
1992-2014 Professor, University of Patras, Patras, Greece
1984-1992 Associate Professor, University of Patras, Patras, Greece
1982-1984 Lecturer, University of Crete, Heraklion, Greece
1978-1982 Research Associate, Université Louis Pasteur, Strasbourg, France
Knowledge of Languages: Greek (mother tongue),
English and French (Spoken and written),
Russian and Spanish (written).

SUMMARY OF RESEARCH INTERESTS

Previous studies

Colloids and Surfaces: Structure and dynamics of micelles, microemulsions and lipid vesicles. Self-organization of surfactants and lipids in solution and in thin films. Interaction of proteins with lipid bilayers. Growth of organic or inorganic particles in organized molecular assemblies. Water-soluble polymers. Hydrogels-Cross-linked hydrophilic polymers.

Photophysics: Photophysical studies of aromatic molecules, semiconductors and conjugated polymers. Fluorescence probing of organized molecular assemblies, gels and macromolecules. Light emission and amplification. Lasers. Organic LEDs. Solar Cells.

Materials and Devices: Sol-gel chemistry. Semiconductor nanoparticles. Heterogeneous photocatalysis for water and air purification. Organic and Hybrid Organic-Inorganic Mesoscopic Solar Cells. Organic light-emitting diodes. New materials for light emission and amplification. Water purification materials. Photocatalytic hydrogen production. Photoelectrocatalytic hydrogen and electricity production. Perovskite solar cells.

Recent Studies

Energy storage, Metal-air batteries, Supercapacitors, Biochar applications, Hydrogen peroxide production

SUMMARY OF PUBLISHED WORK AND ITS IMPACT

Publications in International journals	336
Citations	~17450*
h-index	69*
i10-index	266*

*Source: Google scholar

RESEARCH HIGHLIGHTS

Fluorescence probing of organized molecular assemblies. Prof. Lianos' early scientific work on fluorescence probing of organized molecular assemblies including micelles, microemulsions and lipid vesicles has been widely cited. In this respect, a significant contribution is made by introducing the idea of non-integer-dimension diffusion of reactants in organized molecular assemblies.

Semiconductor nanoparticles synthesized by surfactant templating. Prof. P. Lianos is among the first researchers who used self-organized molecular assemblies as templates to synthesize nanocrystalline semiconductors. Thus in 1985 he synthesized CdS quantum dots using reverse micelles and later he used a similar technique to synthesize finely distributed anatase nanoparticles of controlled size. The related publications have been widely cited.

Quasi-solid state Dye-sensitized Solar Cells. He has developed quasi-solid state dye-sensitized solar cells, where the liquid electrolyte is substituted by a gel, comprising functional redox species. Such cells do not need sealing since the gel electrolyte plays the additional role of acting as adhesive holding electrodes together and as sealant protecting active components. The gel is based on a Ureasil, which is polymerized by means of the sol-gel condensation procedure.

Photoluminescence and Electroluminescence of composite materials. Composite organic-inorganic materials demonstrate photoluminescence and electroluminescence deriving from unconventional excitation routes differing from common molecular or excitonic transitions. Even though, this issue remains unresolved, Prof. Lianos has performed some pioneering studies in this domain.

Graphene-based electrocatalysts for sensitized solar cells. Very efficient reduction electrocatalysts have been developed in recent years by based on a combination of graphene and organic conductive polymers as well as graphene and active elemental dopants. Such electrocatalysts have been used as counter electrodes in sensitized solar cells and also in Photocatalytic Fuel Cells.

Photocatalytic and photoelectrocatalytic hydrogen and electricity generation

Photocatalytic Fuel Cells have been intensively studied in recent years. Functional devices have been designed and constructed with results that encourage upscaling. Device designs apply to both electricity and hydrogen production.

Perovskite solar cells

Soluble butyl substituted copper phthalocyanine has been successfully introduced as alternative low cost hole transporting material. Competitive solar conversion efficiencies have been obtained by introducing graphene oxide as intermediate buffer layer. Also graphene oxide and modified graphene oxide have been employed as hole and electron transporting agents in inverted all inorganic perovskite solar cells. Fully printable perovskite solar cells have been developed using inorganic components.

Supercapacitors

Supercapacitors have been developed by employing biochar, i.e. porous carbon obtained by calcination of biomass under limited oxygen supply and further treatment in strong alkaline environment. These materials reach very high specific surface and because they are electrically conductive they can make a superconductor in conduct with an electrolyte. They have been combined with photoelectrochemical cells to store energy.

Metal-air batteries

Al-air and Zn-air batteries can be used as handy and powerful electric power sources. Electricity can be stored in the form of pure metal by electrolysis of the corresponding oxides. Photoelectrochemical cells have been combined with Zn to store energy in the metal by conversion of solar energy. Carbonaceous materials based on biochars have been employed as electrocatalysts to operate metal-air batteries. Quasi-solid-state cells have been constructed by employing novel ion solvating membranes to construct very efficient membrane-electrode assemblies. Metal-air devices have been employed for electrochemical production of hydrogen peroxide.

TEN MOST RECENT PUBLICATIONS

1. *Study of the functionalities of a biochar electrode combined with a photoelectrochemical cell:* Spyridon Giannakopoulos, John Vakros, Ioannis D. Manariotis, Dionissios Mantzavinos and Panagiotis Lianos, *Materials* 16 (2023) 43 <https://doi.org/10.3390/ma16010043>
2. *A brief review on solar charging of Zn-air batteries:* Panagiotis Lianos, *Phys. Chem. Chem. Phys.* 25 (2023) 11883-11891 <https://pubs.rsc.org/en/content/articlehtml/2023/cp/d3cp00307h>
3. *Construction of small Zn-air batteries by dendrite-free Zn electrodeposition using renewable electricity:* Vasiliki Premeti, Maria Katsaiti, Evangelos Papadogiannis, Vassilios Dracopoulos and Panagiotis Lianos, *Materials Plus* 2 (2023) 24-32 <https://ojs.wiserpub.com/index.php/MP/article/view/3443>
4. *Experimental and Theoretical Investigation of the Mechanism of the Reduction of O_2 from Air to O_2^{2-} by $V^{IV}O^{2+}$ -N,N,N-Amidate Compounds and Their Potential Use in Fuel Cells:* Michael Papanikolaou, Sofia Hadjithoma, Odysseas Keramidas, Chrysoula Drouza, Angelos Amoiridis, Alexandros Themistokleous, Sofia C. Hayes, Haralampos N. Miras, Panagiotis Lianos, Athanassios C. Tsipis, Themistoklis A. Kabanos, and Anastasios D. Keramidas, *Inorganic Chemistry* 63 (2024) 3229–3249 <https://doi.org/10.1021/acs.inorgchem.3c03272>
5. *Biochar from olive tree twigs and spent malt rootlets as electrodes in Zn-air batteries:* Theodoros Kottis, Nikolaos Soursos, Katerina Govatsi, Lamprini Sygellou, John Vakros, Ioannis D. Manariotis, Dionissios Mantzavinos, Panagiotis Lianos, *Journal of Colloid and Interface Science* 665 (2024) 10-18 <https://doi.org/10.1016/j.jcis.2024.03.114>
6. *A solar battery containing functional metal electrodes:* Nikolaos Xerovasilas, Alexios Antonopoulos, Vassilios Dracopoulos, Panagiotis Lianos, *Electrochimica Acta* 491 (2024) 144336 <https://doi.org/10.1016/j.electacta.2024.144336>
7. *Study of the Suitability of Corncob Biochar as Electrocatalyst for Zn–Air Batteries:* Nikolaos Soursos, Theodoros Kottis, Vasiliki Premeti, John Zafeiropoulos, Katerina Govatsi, Lamprini Sygellou, John Vakros, Ioannis D. Manariotis, Dionissios Mantzavinos and Panagiotis Lianos, *Batteries* 10 (2024) 209 <https://doi.org/10.3390/batteries10060209>
8. *Biochar from residues of anaerobic digestion and its application as electrocatalyst in Zn–air batteries:* Konstantinos Pergamalis, Charalampos Chaliotis, Antonios–Alkinoos Papadopoulos, Natalia Tsoukala, Angelos Amoiridis, John Vakros, Lamprini Sygellou, Eleana Kordouli, Katerina Govatsi, Michael Kornaros, Ioannis D. Manariotis, Anastasios Keramidas, Dionissios Mantzavinos, Panagiotis Lianos, *Journal of the Taiwan Institute of Chemical Engineers* 165 (2024) 105826 <https://doi.org/10.1016/j.jtice.2024.105826>
9. *Biochar made from *Luffa Cylindrica* and applied as bifunctional electrocatalyst in Zn-air batteries:* Natalia Tsoukala, Antonios-Alkinoos Papadopoulos, Vasiliki Premeti, Alexandros K. Bikogiannakis, Eftychia Martino, Angelos Amoiridis, Eleana Kordouli, Katerina Govatsi, Ioannis D. Manariotis, Georgios Kyriakou, Anastasios Keramidas, Dionissios Mantzavinos, Panagiotis Lianos, *RSC Advances* 14 (2024) 38924-38933 <https://pubs.rsc.org/en/content/articlelanding/2024/ra/d4ra07600a>
10. *An optimized Zn-air battery using a polymer-blend anion transfer membrane and a biochar electrocatalyst:* Maria Katsaiti, Sara Gjoshi, Valadoula Deimede, Ioannis D. Manariotis, Ioannis K. Kallitsis, Dionissios Mantzavinos, Panagiotis Lianos, *Electrochimica Acta*, in press.

FULL LIST OF PUBLICATIONS

1. Complex Formation Between Pyrene and the Nucleotides GMP, CMP, TMP and AMP : P. LIANOS and S. GEORGHIU, Photochem. Photobiol. 29 (1979) 13.
2. Complex Formation Between Alcohols and the Aromatic Hydrocarbons Pyrene and 1-Methylpyrene: P. LIANOS and S. GEORGHIU, Photochem. Photobiol. 29 (1979) 843.
3. Solute-Solvent Interaction and its Effect on the Vibronic and Vibrational Structure of Pyrene Spectra: P. LIANOS and S. GEORGHIU, Photochem. Photobiol. 30 (1979) 355.
4. Environmental Effects on the Electronic Spectral Properties of 1-Pyrenecarboxaldehyde and their Application in Probing Biological Structures: P. LIANOS and G. CREMEL, Photochem. Photobiol. 31 (1980) 429.
5. Surfactant-Alcohol Mixed-Micelle Formation. Cetyltrimethyl-amonium Bromide-1 Butanol System: P. LIANOS and R. ZANA. Chem. Phys. Lett. 72 (1980) 171.
6. Microenvironment of Aromatic Hydrocarbons Employed as Fluorescent Probes of Liposomes: P. LIANOS, K. MUKHOPADYAY and S. GEORGHIU, Photochem. Photobiol. 32 (1980) 415.
7. Photophysical properties of Pyrene and its Derivatives of Biophysical Importance: P. LIANOS, B. LUX and D. GERARD, J. Chim. Phys. 77 (1980) 907.
8. Effect of Alcohol on the Properties of Micellar Systems. I. Critical Micellar Concentration, Micelle Molecular Weight and Ionization Degree and Solubility of Alcohols in Micellar Solutions: R. ZANA, S. YIV, C. STRAZIELLE and P. LIANOS, J. Colloid Interface Sci., 80 (1981) 208.
9. Fluorescence Probing Study of the Effect of Medium Chain Length Alcohols on the Properties of Tetradecyltrimethylammonium Bromide, Aqueous Micelles: P. LIANOS and R. ZANA, Chem. Phys. Letters, 76 (1980) 62.
10. Use of Pyrene as Fluorescent Probe to study the Effect of NaCl on the Structure of SDS Micelles: P. LIANOS and R. ZANA, J. Phys. Chem., 84 (1980) 3339.
11. Study of Luminescence Quenching and Excimer Formation in Micellar systems and Microemulsions. Case of small Interaction Rate Constants: P. LIANOS, M. DINH-CAO, J. LANG and R. ZANA, J. Chim. Phys., 78 (1981) 497.
12. Fluorescence Probe Studies of the Effect of Concentration on the state of Aggregation of Surfactants in Aqueous Solution : P. LIANOS and R. ZANA, J. Colloid Interface Sci., 84 (1981) 100.
13. Fluorescence Probe Study of the Interaction Between Pyrene and Microemulsion-Polymerized Styrene P. LIANOS, J. Phys. Chem., 86 (1982) 1935-1937.
14. Fluorescence Probe Study of Oil-in-Water Microemulsions. I. Effect of Pentanol and Dodecane or Toluene on Some Properties of Sodium Dodecylsulfate Micelles: P. LIANOS, J. LANG, C. STRAZIELLE and R. ZANA, J. Phys. Chem., 86 (1982) 1019-1025.
15. Fluorescent Probe Study of Oil-in-Water Microemulsions. II. Effect of the Nature Of Alcohol, Oil and Surfactant Aggregation Number in the Aggregates: P. LIANOS, J. LANG and R. ZANA, J. Phys. Chem., 86 (1982) 4809-4814.
16. Study of Micelles of Tetradecyltrialkylammonium Bromides with Fluorescent Probes: P. LIANOS and R. ZANA, J. Collo. Interface Sci., 88 (1982) 594-598.
17. Fluorescent Probe Study of the Effect of Concentration on Some Properties of Dodecyltrimethylalkylammonium and Dialkyltrimethylammonium Halide Micelles: P. LIANOS, J. LANG and R. ZANA, J. Colloid Interface Sci., 91 (1983) 276-279.
18. Fluorescence Probe Studies of the Aggregation State of Sodium Dodecylsulfate in Aqueous Solutions of Polyoxyethylenglycol and Poly-N-vinylpyrrolidone: R. ZANA, J. LANG and P. LIANOS, Polymer Reprints 23 (1982) 39-40.
19. Fluorescence Probe Study of Oil-in-Water Microemulsions: R. ZANA, J. LANG and P. LIANOS, in Proceedings, Surfactants in Solution, K. L. Mittal and B. Lindman, eds., Plenum Press, N. Y., 1984, Vol. III.

20. Micellar Properties of Alkyltrimethylammonium Hydroxides in Aqueous Solution: P. LIANOS and R. ZANA, *J. Phys. Chem.*, 87 (1983) 1289-1291.
21. Static and Dynamic Properties of Sodium p-(1propylnonyl)benzenesulfonate Micelles: P. LIANOS and J. LANG, *J. Colloid Interface Sci.*, 96 (1983) 222-228.
22. Fluorescence Probe Study of Oil-in-Water Microemulsions. III. Further Investigations Involving Other Surfactants and Oil Mixtures: P. LIANOS, J. LANG, J. STURM and R. ZANA, *J. Phys. Chem.*, 88 (1984) 819-822.
23. Study of the Solubilization of Aromatic Hydrocarbons by Aqueous Micellar Solutions : P. LIANOS, M.-L. VIRIOT and R. ZANA, *J. Phys.Chem.*, 88 (1984) 1098-1101.
24. Effect of Medium-Chain-Length Alcohols on the Micelles of Tetradecyltrimethylammonium Bromide: P. LIANOS and R. ZANA, *J. Colloid Interface Sci.*, 101 (1984) 587-590.
25. Subnanosecond Pulse Fluorometric Study of the Ca^{++} and Mg^{++} -induced Conformational Changes on S100-a Protein: J.BAUDIER, J. TYRZYK, J.-E. LOFROTH and P. LIANOS, *Biophys. Biochem. Res. Comm.*, 123 (1984) 959-965.
26. Fluorescence Probe Studies of the Interactions Between Polyoxyethylene and Surfactant Micelles and Microemulsion Droplets in Aqueous Solutions: R. ZANA, P. LIANOS and J. Phys. Chem. 89 (1985) 41-44.
27. Fluorescence-Probe Studies of the Aggregation State of Surfactants in Aqueous Polymer Solutions: R.ZANA, J.LANG and P.LIANOS, in *Microdomains in Polymer Solutions*, P.Dubin,ed., Plenum Press, 1985, p.357.
28. Luminescence-Probe Study of Water-in-oil Microemulsions: P.LIANOS, R.ZANA, J.LANG and A.-M.CAZABAT, in *Surfactants in Solution*, Vol.6, K.L.Mittal and P.Bothorel, eds., Plenum Press, 1986, p.1365.
29. Cadmium Sulfide of Small Dimensions, Produced in Inverted Micelles: P.LIANOS and J.K.THOMAS, *Chem.Physics Letters*, 125(1986)299-302 [10.1016/0009-2614\(86\)87069-5](https://doi.org/10.1016/0009-2614(86)87069-5)
30. Small CdS Particles in Inverted Micelles: P.LIANOS and J.K.THOMAS, *J.Colloid.Interface Sci.*, 117(1987)505.
31. Colloidal Metal Sulfides of Extremely Small Dimensions Produced in Reversed Micelles: P.LIANOS and J.K.THOMAS, in *Chemistry of Interfaces*, J.Czarnecki, ed., Trans Tech Publications, Switzerland, 1988, p.369.
32. Fractal Modeling of Luminescence Quenching in Microemulsions: P.LIANOS and S.MODES, *J.Phys.chem.*, 91(1987)6088.
33. Microemulsions and Other Organized Assemblies as Media of Fractal Dimensions. A Luminescence Probe Study. P.LIANOS, *Progress in Colloid and Polymer Science*,76(1988)140.
34. Fractal Modeling of Pyrene Excimer Quenching in Phospholipid Vesicles: G.DUPORTAIL and P.LIANOS, *Chem.Phys.Letters*, 149(1988)73.
35. Luminescence Quenching in Organized Assemblies Treated as Media of Non-Integer Dimensions:P.LIANOS *J.Chem.Phys.*, 89(1988)5237.
36. Structural Study of Silicate Glasses by Luminescence Probing: The Nature of Small Semiconductor Particles Formed in Glasses: S.MODES and P.LIANOS, *Chem.Phys.Letters*, 153(1988)351.
37. Luminescence Probe Study of the Conditions Affecting Colloidal Semiconductor Growth in Reverse Micelles and Water-inOil Microemulsions:S.MODES and P.LIANOS, *J.Phys.Chem.*,93(1989)5854.
38. Chemical Reactions in Restricted Spaces. Decay in the Presence of Quenchers: P.LIANOS and P.ARGYRAKIS, *Phys.Rev. A*, 39(1989)4170.
39. Phospholipid Vesicles Treated as Fractal Objects. A Fluorescence Probe Study: G.DUPORTAIL and P.LIANOS, *Chem.Phys.Letters*, 165(1990) 35.
40. Luminescence Probe Study of Organized Assemblies Treated as Fractal Objects: P.LIANOS, in "Structure, Dynamics and Equilibrium Properties of Colloidal Systems", D.M.Bloor and E.Wyn-Jones, eds., Kluwer Academic Publishers, 1990, p.309.

41. Relation of Fractal Behavior of Luminescence Quenching with Electric Percolation in Water-in-oil Microemulsions: S.MODES, P.LIANOS and A.XENAKIS, J.Phys.Chem., 94(1990)3363.
42. Fractal Nature of Fluorescence Quenching and its Relation to Percolative Conduction in Water-in-oil Microemulsions: P.LIANOS and A.MALLIARIS, Israel J.Chem. 31(1991)177.
43. Reactions in Microemulsions: Fractal Modeling. : P.LIANOS and A.ARGYRAKIS, in "Large Scale Molecular Systems: Quantum and Stochastic Aspects. Beyond the simple Molecular Picture", W.Gans, A.Blumen and A.Amann Eds., Plenum Press, New York, 1991, p.573.
44. Fluorescence probing of Phospholipid Vesicles using Fractal Models: P.LIANOS and G.DUPORTAIL, Applied Fluorescence Technology,2(1990)15.
45. One-dimensional Singlet Energy Migrational in the Columnar Liquid Crystal of a Triphenyl Derivative.: D.MARKOVITSI, I.LECUYER, P.LIANOS and J.MALTHETE, J.Chem.Soc.Far.Trans., 87(1991)1785.
46. Fractal Models for Luminescence Probing of Organized Assemblies. Studies with respect to the Nature of the Assembly, the Temperature and the Quencher Concentration.: P.LIANOS and G.DUPORTAIL. Progr.Coll.Polym.Sci. 84(1991)151.
47. Behavior of the Rate Constant for Reactions in Restricted Spaces:Fluorescence probing of Lipid Vesicles.: P.ARGYRAKIS, G.DUPORTAIL and P.LIANOS, J.Chem.Phys., 95(1991)3808.
48. Reactions in Lipid Vesicles. Pyrene Excimer Formation studied with Fractal Models. Effect of Temperature and Concentration.: P.LIANOS and G.DUPORTAIL, Eur.Biophys.J, 21(1992)29.
49. Interaction of Polyoxyethyleneglycol with cyclohexanepentanol-sodium dodecylsulfate water-in-oil microemulsions.: P.LIANOS, S.MODES, G.STAIKOS and W.BROWN, Langmuir, 8(1992)1054.
50. Time-correlated study of Fluorescent Probes in Lipid Aggregates using Fractal Models.: G.DUPORTAIL, J.C.BROCHON and P.LIANOS, J.Phys.Chem., 96(1992)1460.
51. Behavior of the rate constant for reactions in restricted spaces: 2.Luminescence probing of water-in-oil microemulsions.: P.LIANOS, J.C.BROCHON and P.TAUC, Chem.Phys., 170(1993)235.
52. Effect of Temperature on the Structural Properties of the Poly(ethylene oxide)/Poly(propylene oxide)/Poly(ethylene oxide) Triblock Copolymer studied with Time-correlated Fluorescence Probing Techniques: P.LIANOS and W.BROWN, J.Phys.Chem., 96(1992)6439.
53. Time-correlated models applicable to reactions in restricted geometries: Phospholipid vesicles in their gel and liquid crystalline phases: G.DUPORTAIL, J-C.BROCHON and P.LIANOS, Biophys.Chem., 45(1993)227.
54. Interaction of α -Hydro- ω -hydroxypoly(oxy-1,2ethanediyl) with water-in-oil microemulsions. 2. Medium size polymer. Cyclohexane and toluene microemulsions: D.PAPOUTSI, P.LIANOS and W.BROWN. Langmuir 9(1993)663.
55. Electric Percolation of Enzyme Containing Microemulsions.: V.PAPADIMITRIOU, A.XENAKIS and P.LIANOS, Langmuir, 9(1993)912.
56. Microemulsion Gels obtained by the Sol-Gel method using Metal Alkoxides: P.LIANOS and D.PAPOUTSI, Progr. Colloid Polym. Sci. 93(1993)292.
57. Enzyme induced percolation of w/o Microemulsions: A.XENAKIS, V.PAPADIMITRIOU AND P.LIANOS, Progr. Colloid Polym. Sci. 93(1993)370.
58. Calculation of the Rate Constant for Fluorescence Quenching in Organized Molecular Assemblies: P.LIANOS, Chem.Phys.Lett., 202(1993)471.
59. Time-correlated Fluorescence Fractal Analysis in Lipid Aggregates: P.LIANOS and G.DUPORTAIL, Biophys.Chem.,48(1993)293.
60. Sol-gel derived TiO₂ Microemulsion Gels and Coatings: D.PAPOUTSI, P.LIANOS, P.YIANOULIS AND P.KOUTSOUKOS, Langmuir 10(1994)1684.

61. Photophysical Properties of Dyes incorporated into SiO₂ matrices by the Sol-gel Method: P.LIANOS, *Chimica Chronica*, New Series, 23(1994)169.
62. The A+B $\rightarrow$ B reaction for unequal reactant concentration: P.LIANOS and P.ARGYRAKIS, *J.Phys.Chem.* 98(1994)7278.
63. Interaction of Polyoxyethylene glycol with Water-in-Oil Microemulsions. 3. Effect of Polymer size and Polymer Concentration: D.PAPOUTSI, P.LIANOS AND W.BROWN, *Langmuir* 10(1994)3402.
64. Fluorescence Energy Transfer in Lipid Vesicles. A Time-resolved analysis by using stretched exponentials: G.DUPORTAIL, F.MEROLA and P.LIANOS, *J.Photochem.Photobiol. A.Chem.*, 89(1995)135.
65. Fluorescence probing of Vesicles using Pyrene and Pyrene Derivatives: G.DUPORTAIL and P.LIANOS, in "Vesicles", *Surfactant Science Series/62*, M.Rosoff, ed., Marcel Dekker, Inc. New York 1996, p.295.
66. Effect of Polyethylene Glycol of Varying Chain length on Cyclohexane-pentanol-sodium dodecylsulfate Water-in-oil Microemulsions: P.LIANOS, D.PAPOUTSI and W.BROWN, *Progr.Colloid.Polym.Sci.*, 97(1994)243.
67. TiO₂ Microemulsion Gels obtained by the Sol-gel method using Titanium isopropoxide: P.LIANOS and D.PAPOUTSI, *Progr.Colloid.Polym.Sci.*, 97(1994)240.
68. Pyrene in mixed titania-surfactant films made by hydrolysis of titanium isopropoxide in the presence of reversed micelles: D.PAPOUTSI and P.LIANOS, *Langmuir*, 11(1995)1.
69. Pressure Effects on Reaction Rates in the Lipid Bilayer. A Fluorescence Time-correlated Study: C.R.MATEO, P.TAUC, S.TOSTI, G.DUPORTAIL and P.LIANOS, *Spectrochimica Acta A* 51(1996)565.
70. Photophysical Studies of Pyrene Solubilized in Thin Films on Glass Substrates: D.PAPOUTSI and P.LIANOS, *Progr.Coll.Polym.Sci.*, 98(1995)288.
71. Comment on the "Effect of Addition of Water-soluble Polymers in Water-in-oil Microemulsions Made with Anionic and Cationic Surfactants": P.LIANOS, *J.Phys.Chem.*, 100(1996)5155.
72. Molecular Diffusion and Fluorescence Energy Transfer Studies in thin Surfactant Films: D.PAPOUTSI, V.BEKIARI, E.STATHATOS, P.LIANOS and A.LASCHEWSKY, *Langmuir* 11(1995)4355.
73. Time-resolved Fluorescence Quenching Models in Restricted Geometries: P.LIANOS, *Heterogeneous Chemistry Reviews* 3(1996)53.
74. Nanocrystallite Titanium dioxide Films made by the Sol-gel Method using Reverse Micelles: E.STATHATOS, P.LIANOS, F.DEL MONTE, D.LEVY and D.TSIOURVAS, *Journal of Sol-gel Science and Technology*, 10(1997)83..
75. An Amphiphilic Hemicyanine Dye Employed as a Sensitive Probe of Water in Reverse AOT Micelles: M.HOF, P.LIANOS and A.LASCHEWSKY, *Langmuir*, 13(1997)2181.
76. Lecithin w/o Microemulsions as a Host for Trypsin. Enzyme Activity and Luminescence Decay Studies: S.AVRAMIOTIS, A.XENAKIS and P.LIANOS, *Progr.Coloid Polym.Sci.*, 100(1996)286.
77. Trypsin Studies in Lesithin Based w/o Microemulsions. Fluorescence and Enzyme Activity Studies: S.AVRAMIOTIS, P.LIANOS and A.XENAKIS, *Biocatalysis and Biotransformations*, 14(1997)299.
78. A Pyrene-loaded Film composed of Triton X-100 and Poly(vinylmethylether): V.BEKIARI and P.LIANOS, *J.Coll.Interf.Sci.*, 182(1996)304.
79. Photophysical Studies in AOT Films Deposited on Fused Silica Slides: V.BEKIARI and P.LIANOS, *J.Coll.Interf.Sci.*, 183(1996)552.
80. Structural Studies of Thin AOT Films by Using the Polarity Fluorescent probe Coumarin-153: M.HOF and P.LIANOS, *Langmuir*, 13(1997)290.
81. *Photophysical Properties of an Amphiphilic Hemicyanine Dye in Solution and Adsorbed on a TiO₂ Mesoporous Film*: E.Stathatos, P.Lianos and A.Laschewsky, *Langmuir*, 13(1997)259.

82. *Study of Silica-Surfactant Composite Films with Fluorescent Probes*: M.Ferrer and P.Lianos, *Langmuir*, 12(1996)5620.
83. *Photophysical studies of Aerosol-OT films loaded with biological macromolecules and made from reverse micelles*: V.Bekiari, P.Lianos, S.Avramiotis and A.Xenakis, *Progr.Colloid Polym.Sci.* 105(1997)109.
84. *Structural studies of lecithin and AOT based w/o microemulsions, in the presence of lipase*: S.Avramiotis, H.Stamatis, F.N.Kolisis, P.Lianos and A.Xenakis, *Langmuir*, 12(1996)6320.
85. *Titanium dioxide films made from reverse micelles and their use for the photocatalytic degradation of adsorbed dyes*: E.Stathatos, D.Tsiourvas and P.Lianos, *Colloids and Surfaces A. Physicochemical and Engineering Aspects*, 149(1999)49.
86. *Fluorescence probing of composite organic/inorganic transparent matrices*: V.Bekiari, M.Ferrer, S.Stathatos and P.Lianos, *J.Sol-gel Sci.Techn.* 13(1998)95-98.
87. *Formation of TiO₂ nanoparticles in reverse micelles and their deposition as thin films on glass substrates*: E.Stathatos, P.Lianos, F.DelMonte, D.Levy and D.Tsiourvas, *Langmuir* 13(1997)4295.
88. *Structural and dynamic properties of lecithin-alcohol based w/o microemulsions. A luminescence quenching study*: S.Avramiotis, V.Bekiari, P.Lianos and A.Xenakis, *J.Colloid Interf.Sci.*, 194(1997)326.
89. *Study of leaching of organic molecules from composite silica/surfactant films into water*: M.-L.Ferrer, V.Bekiari, P.Lianos and D.Tsiourvas, *Chem.Mater.*, 9(1997)2652.
90. *Improvement of the emission properties of sol-gel silica matrices containing Eu³⁺ in the presence of poly(ethylene glycol)-200*: V.Bekiari, G.Pistolis and P.Lianos, *J.Non-crystal.Solids*, 226(1998)200.
91. *Investigation of hydrophobic interactions in dilute aqueous solutions of hydrogen-bonding interpolymer complexes by steady-state and time-resolved fluorescence measurements*: M.Koussathana, P.Lianos and G.Staikos *Macromolecules* 30(1997)7798.
92. *Spectral narrowing in the emission of rhodamine 6G incorporated in thin surfactant films*: E.Stathatos, P.Lianos and S.Couris, *SPIE Vol.3423*, p.224.
93. *Time-resolved fluorescence quenching studies in nanocomposite materials made of silica and cetyltrimethylammoniumbromide*: V.Bekiari, M.-L.Ferrer and P.Lianos, *J.Phys.Chem.B.*, 103(1999)9085.
94. *Preparation of Zn_xCd_{1-x}S nanocomposites in polymer matrices and their photophysical properties*: J.Huang, P.Lianos, Y.Yiang and J.Shen, *Langmuir*, 14(1998)4342.
95. *Characterization of Photoluminescence from a Material made by interaction of 3-Aminopropyltriethoxysilane with Acetic acid*: V.Bekiari and P.Lianos, *Langmuir*, 14(1998)3459.
96. *Photoluminescence of ZnS Nanoparticles doped with Europium ions in a Polymer Matrix*: D.-D.Papakonstantinou, J.Huang, and P.Lianos, *J.Mater.Sci.Letters*, 17(1998)1571.
97. *Intensely luminescent materials obtained by combining lanthanide ions, 2,2'-bipyridine and poly(ethyleneglycol) in various fluid or solid environments.*: V.Bekiari, G.Pistolis and P.Lianos, *Chem.Mater.*, 11(1999)3189.
98. *Investigation of Neutral polymer-Ionic surfactant interactions by Fluorescence in conjunction with Viscosity measurements*: Y.Mylonas, K.Karayanni, G.Staikos, M.Koussathana and P.Lianos, *Langmuir*, 14(1998)6320.
99. *Efficient luminescent materials made by incorporation of terbium(III) and 2,2'-bipyridine in silica/poly(ethylene oxide) hybrid gels*: V.Bekiari, P.Lianos and P.Judeinstein, *Chem.Phys.Letters*, 307(1999)310.
100. *Study of poly(methyl methacrylate) thin films doped with laser dyes*: J.Huang, V.Bekiari, P.Lianos and S.Couris, *J.Luminescence*, 81(1999)285.
101. *Strongly luminescent poly(ethyleneglycol)-2,2'-bipyridine-lanthanide ion complexes*: V.Bekiari and P.Lianos, *Advanced Materials*, 10(1998)1455.

102. *Tunable photoluminescence from a material made by interaction between (3-aminopropyl)triethoxysilane and organic acids*: V.Bekiari and P.Lianos, *Chemistry of Materials*, 10(1998)3777.
103. *Photocatalytically deposited silver nanoparticles on mesoporous TiO₂ films*: E.Stathatos, P.Lianos, P.Falaras and A.Siokou, *Langmuir*, 16(2000)2398-2400
<http://pubs.acs.org/doi/abs/10.1021/la981783t>
104. *Spectral narrowing in a rhodamine doped TiO₂/surfactant thin film*: E.Stathatos, P.Lianos and S.Couris, *Appl.Phys.Letters*, 75(1999)319.
105. *Titanium dioxide films made by using poly(ethylene glycol) oligomers as templates*: E.Stathatos, P.Lianos and P.Falaras, *Progr.Coll.Poly.Sci.*, 118(2001)96-99.
106. *Investigation of the Poly(N-isopropylacrylamide)-Sodiumdodecylsulfate complexation with viscosity, dialysis and time-resolved fluorescence quenching measurements*: Y.Mylonas, G.Staikos and P.Lianos, *Langmuir*, 15(1999)7172.
107. *High-yield luminescence from cadmium sulfide nanoclusters supported in a poly(ethyleneglycol) oligomer*: V.Bekiari and P.Lianos, *Langmuir*, 16(2000)3561.
108. *Dye-sensitized photoelectrochemical cell using a nanocomposite SiO₂/poly(ethylene glycol) thin film as electrolyte support. Characterization by time-resolved luminescence and conductivity measurements.*: E. Stathatos, P.Lianos and Ch.Krontiras, *J.Phys.Chem. B*. 105(2001)3486-3492.
109. *Photophysical behavior of a new gemini surfactant in neat solvents and in micellar environments*: E. Stathatos, P.Lianos, R.H.Rakotoaly, A. Laschewsky and R.Zana , *J.Colloid Interf.Sci.*, 227(2000)476.
110. *Structural Study of Hybrid Organic/inorganic Polymer Gels by using Time-Resolved Fluorescence Probing* : E. Stathatos, P.Lianos, U.Lavrencic Stangar, B.Orel and P.Judeinstein, *Langmuir*, 16(2000)8672-8676.
111. *Photophysical properties of a series of blue-emitting rigid-flexible polyethers in solution and in thin films*: V.Bekiari, E.Stathatos, P.Lianos, F.Konstandakopoulou, J.Kallitsis and S.Couris, *J.Lumin.*, 93(2001)223-227.
112. *Optimization of luminescence emission from silica/poly(ethyleneoxide) and silica/poly(propyleneoxide) nanocomposite gels* : V.Bekiari, P.Lianos, U.Lavrencic Stangar, B.Orel and P.Judeinstein, *Chem.Mater.* 12(2000)3095-3099.
113. *New high-yield luminescent materials obtained by combining terpyridine, metal cations (including lanthanides) and poly(ethylene glycol)* : V.Bekiari and P.Lianos, *Adv.Mater.*, 12(2000)1603.
114. *Studies on hybrid organic/inorganic nanocomposite gels by using photoluminescence techniques*: V.Bekiari, E.Stathatos, P.Lianos, U.Lavrencic Stangar, B.Orel and P.Judeinstein, *Chemical Monthly*, 132(2001)97-102 and in *Molecular Materials and functional polymers*: W.J.Blau, P.Lianos and U.Schubert (Editors), Springer-Verlag Wien, 2001.
115. *Organic-Inorganic sol-gel hybrids with iono-optic properties*: B.Orel, Urska Lavrencic Stangar, N.Groselj, P.Judeinstein, F.Decker and P.Lianos, *Chemical Monthly*, 132(2001)103 and in *Molecular Materials and functional polymers*: W.J.Blau, P.Lianos and U.Schubert (Editors), Springer-Verlag Wien, 2001.
116. *Micellar thin films*: P.Lianos, *Encyclopedia of Surface and Colloid Science*, Marcel Dekker Inc. 2002.
117. *Enhancement of weak radiative transitions of Eu³⁺ in thin surfactant films in the presence of PMMA*: J.Huang, V.Bekiari and P.Lianos, *Progr.Coll.Poly.Sci.*, 118(2001)27-29.
118. *Synthesis of a hemicyanine dye bearing two carboxylic groups and its use as photosensitizer in Dye-Sensitized Photoelectrochemical Cell*: E. Stathatos, P.Lianos, A.Laschewsky, O.Ouari and P. Van Cleuvenbergen, *Chem.Mater.*, 13(2001)3888-3892.
119. *Amplified Spontaneous Emission and Laser Action from solutions of substituted p-Oligophenylenes*: M.Ciaris, K.G.Gravalos, E.Stathatos and P.Lianos, *Optical Materials*, 18(2001)351-354.

120. *Luminescent materials obtained by combining Oligopyridine ligands, Lanthanide ions and Poly(ethylene glycol) in solid gels*: V.Bekiari and P.Lianos, Proceedings of the 6th. Seminar on Physics and Chemistry of Molecular Systems, Brno, Czech Republic, 2001.
121. *Study of Laser Action of Coumarine-153 incorporated in Sol-gel made silica/poly(propylene oxide) nanocomposite gels*.: E.Stathatos, P.Lianos, U.Lavrencic Stangar and Boris Orel, Chem.Physics Letters, 345(2001)381-385.
122. *Study of the efficiency of visible-light photocatalytic degradation of Basic Blue adsorbed on pure and doped mesoporous titania films*: E.Stathatos, T.Petrova and P.Lianos, Langmuir, 17(2001)5025-5030.
123. *Organic/inorganic nanocomposite gels employed as electrolyte supports in Dye-sensitized Photoelectrochemical cells*: E.Stathatos and P.Lianos, Intern.J.Photoenergy, 4(2002)11-16.
124. *Photophysical behavior of a homologous series of amphiphilic hemicyanine dyes in thin AOT films*.: L.K. Gallos, E. Stathatos, P. Lianos and P. Argyrakis, Chem.Phys., 275(2002)253-260.
125. *Multicolor emission from terpyridine-lanthanide ion complexes encapsulated in nanocomposite silica/poly(ethylene glycol) sol-gel matrices*: V.Bekiari and P.Lianos, J.Lumin. 101/1-2(2003)135-140.
126. *Gold colloids from cationic surfactant solutions. 1. Mechanisms that control particle morphology*: E.Leontidis, K.Kleitou, T.Kyprianidou-Leodidou, V.Bekiari and P.Lianos, Langmuir 18(2002)3659-3668.
127. *Photophysical studies on Terpyridine-Eu³⁺ complexes in sol-gel nanocomposite materials*: V.Bekiari and P.Lianos, J.Sol-gel Sci.Techn., 26(2003)887-890.
128. *A sol-gel type electrolyte for a dye-sensitized solar cell: Attenuated total reflectance (ATR) vibrational spectra studies*: U.Lavrencic Stangar, B.Orel, B.Neumann, E.Stathatos and P.Lianos, J.Sol-gel Sci.Techn., 26(2003)1113-1118.
129. *In situ resonance Raman microspectroscopy of a solid state dye-sensitized photoelectrochemical cell*: U.Lavrencic Stangar, B.Orel, Ph.Colomban, E.Stathatos and P.Lianos, J.Electrochem.Soc., 149(2002)E413-E423.
130. *In situ resonance Raman studies of a dye-sensitized photoelectrochemical cell with a sol-gel electrolyte*: U.Lavrencic Stangar, B.Orel, N.Groselj, Ph.Colomban, E.Stathatos and P.Lianos, J.New Mater.Electrochemical Systems, 5(2002)223-231.
131. *A high performance solid state Dye-sensitized Photoelectrochemical Cell employing a nanocomposite gel electrolyte made by the sol-gel route* : E.Stathatos, P.Lianos, U.Lavrencic Stangar and B.Orel, Advanced Materials, 14(2002)354-357
<http://onlinelibrary.wiley.com/doi/10.1002/1521>
132. *Study of solid transparent nanocomposite organic/inorganic matrices and thin films by time-resolved fluorescence techniques*: P.Lianos J.Fluorescence 12(2002)303-310.
133. *A Nanocomposite Gel Electrolyte Made by the Sol-Gel Route for a Solid-State Dye-Sensitized Photoelectrochemical and Electrochromic Cells*: Boris Orel, Urska Lavrencic Stangar, Angela Surca Vuk, Panagiotis Lianos, Philippe Colomban, Materials Research Society Symposium Proceedings 725(2002)P7.3.1-P7.3.6.
134. *Preparation of thin ureasil films with strong luminescence based on incorporated europium-thenoyltrifluoroacetone-bipyridine complexes*: R.Moleski, E.Stathatos, V.Bekiari and P.Lianos, Thin Solid Films, 416(2002)279-283.
135. *Photoluminescence from sol-gel organic/inorganic hybrid gels obtained through carboxylic acid solvolysis*: T.Brankova, V.Bekiari and P.Lianos, Chem.Mater., 15(2003)1855-1859.
136. *Electroluminescence by a Sm³⁺-diketonate-phenanthroline complex*: E.Stathatos, P.Lianos, E.Evgeniou and A.D. Keramidas, Synthetic Metals, 139(2003)433-437. .
137. *A sensitive fluorescent sensor of lanthanide ions*: V.Bekiari, P.Judeinstein and P.Lianos, J.Luminescence, 104/1-2 (2003)13 - 15
138. *Development of sol-gel redox I₃⁻/I⁻ electrolytes and their applications in hybrid electrochromic devices*: B.Orel, A.Surca-Vuk, R.Jese, P.Lianos, E.Stathatos, P.Judeinstein, Ph.Colomban, Solid State Ionics, 165(2003)235-246.

139. *Lasing of coumarin-153 incorporated in sol-gel nanocomposite organic/inorganic matrices:* E.Stathatos and P.Lianos, SPIE Proceedings 5131(2003)15.
140. *A quasi-solid-state dye-sensitized solar cell based on a sol-gel nanocomposite electrolyte containing ionic liquid:* E.Stathatos, P.Lianos, S.M.Zakeeruddin, P. Liska and M.Grätzel, Chem.Mater., 15(2003)1825-1829 <http://pubs.acs.org/doi/abs/10.1021/cm0213568>
141. *Study of acetic-acid-catalyzed nanocomposite organic/inorganic ureasil sol-gel ionic conductors:* E.Stathatos, P.Lianos, B. Orel, A. Surca Vuk, R. Jese, Langmuir, 19(2003)7587-7591.
142. *Optimization of quasi-solid state dye-sensitized photoelectrochemical solar cell employing a ureasil/sulfolane gel electrolyte:* E.Stathatos, P.Lianos, A . Surca Vuk and B. Orel, Advanced Functional Materials, 14(2004)45-48.
143. *Highly Efficient Nanocrystalline Titania Films made from Organic/Inorganic Nanocomposite Gels:* E.Stathatos, P.Lianos and C.Tsakiroglou, Microporous.-Mesoporous Materials, 75(2004)255-260.
144. *The unusual luminescence properties of 2,2',2'' terpyridine-metal ion complexes:* Vlasoula Bekiari and Panagiotis Lianos, Chem.Phys.Letters 383(2004)59-61.
145. *Use of Fluorescence Probing Techniques to Assess Molecular Mobility and Ionic Conductivity in Nanocomposite Organic/inorganic Gels:* Panagiotis Lianos, J.Fluorescence, 14(2004)11-15.
146. *Photodegradation of basic blue by highly efficient nanocrystalline titania films:* Panagiotis Bouras, Elias Stathatos Panagiotis Lianos and Christos Tsakiroglou, Appl.Catal. B., 51(2004)275-281.
147. *Photodegradation of Basic Blue 45 dye on undoped and doped TiO₂ films:* I.C.Ladiu, V.Danciu, V.Cosoveanu, A.Rustoiu-Csavdari, and P.Lianos Revue Roumaine de Chimie 47(2002)1247-1253.
148. *Metachromatic effects and photodegradation of Basic Blue on nanocrystalline titania films:* Elias Stathatos, Panagiotis Lianos and Christos Tsakiroglou, Langmuir, 20(2004)9103-9107.
149. *Dye-sensitized photoelectrochemical solar cells based on nanocomposite organic-inorganic materials:* Elias Stathatos, Panagiotis Lianos, Vasko Jovanovski and Boris Orel, J.Photochem.Photobiol. A. Chemistry 169 (2005) 57-61
150. *Study of Poly(N,N-dimethylacrylamide)/CdS nanocomposite organic/inorganic gels:* Vlasoula Bekiari, Konstantinos Pagonis, Georgios Bokias and Panagiotis Lianos, Langmuir, 20(2004)7972-7975.
151. *Photodegradation of dyes in aqueous solutions catalyzed by highly efficient nanocrystalline titania films:* Panagiotis Bouras and Panagiotis Lianos, J.Appl. Electrochem., 35(2005)831-836.
152. *Dinuclear versus tetranuclear cluster formation in zinc(II) nitrate/di-2-pyridyl ketone chemistry: synthetic, structural and spectroscopic studies:* Eugenia Katsoulakou, Vlasoula Bekiari, Catherine P. Raptopoulou, Aris Terzis, Panagiotis Lianos, Evy Manessi-Zoupa and Spyros P. Perlepes, Spectrochimica Acta Part A: Mol. & Biomol.Spectroscopy, 61(2005)1627-1638.
153. *Dye-sensitized solar cells with electrolyte based on a trimethoxysilane derivatized ionic liquid:* Vasko Jovanovski, Elias Stathatos, Boris Orel, Panagiotis Lianos, Thin Solid Films 511-512(2006)634-637.
154. *Electroluminescence from a volatile europium complex:* Elias Stathatos, Lefkia Panayiotidou, Panagiotis Lianos and Anastasios D. Keramidas, Thin Solid Films, 496/2(2006)489-493.
155. *Intrinsic photoluminescence from gels containing amine or amide chemical groups:* Vlasoula Bekiari and Panagiotis Lianos, J.Nanoscience and Nanotechnology, 6(2006)372-376.
156. *A Novel Polysilsesquioxane-I2/I3- ionic electrolyte for dye-sensitized photoelectrochemical cells:* Vasko Jovanovski, Boris Orel, Robi Jese, Angela Surca Vuk, Gregor Mali, Joze Grdadolnik, Adolf Jesih, Elias Stathatos and Panagiotis Lianos, J.Phys.Chem. B, 109(2005)14387-14395.

157. *Positively charged polysilsesquioxane/iodide ionic liquid as a quasi solid state redox electrolyte for dye-sensitized photoelectrochemical cells : Infrared, ²⁹Si NMR and electrical studies:* Vasko Jovanovski, Boris Orel, Robi Jese, Gregor Mali, Elias Stathatos and Panagiotis Lianos, *Intern.J.Photoenergy* (2006) Art.23703.
158. *Enhanced photoluminescence from films made by titanium isopropoxide, Eu³⁺ ions and thenoyltrifluoroacetone blend:* Elias Stathatos and Panagiotis Lianos, *Chem.Phys.Letters* 417(2006)406-409.
159. *Ureasil gels as highly efficient adsorbent for water purification:* Vlasoula Bekiari and Panagiotis Lianos, *Chemistry of Materials*, 18(2006) 4142-4146.
160. *Dinuclear lanthanide(III) complexes from the use of di-2-pyridyl ketone : Preparation, structural characterization and spectroscopic studies:* Katerina A. Thiakou, Vlasoula Bekiari, Catherine P. Raptopoulou, Vassilis Psycharis, Panagiotis Lianos and Spyros P. Perlepes, *Polyhedron* 25(2006)2869-2879.
161. *Pure versus metal-ion-doped nanocrystalline titania for photocatalysis:* Panagiotis Bouras, Elias Stathatos and Panagiotis Lianos, *Applied Catalysis B. Environmental* 73(2007)51-59
<http://dx.doi.org/10.1016/j.apcatb.2006.06.007>
162. *Photophysical behavior of terpyridine-lanthanide-ion complexes incorporated in a Poly(N,N-dimethylacrylamide) hydrogel:* Vlasoula Bekiari and Panagiotis Lianos, *Langmuir*, 22(2006)8602-8606.
163. *Study of the conditions affecting dye adsorption on titania films and of their effect on dye photodegradation rates:* Nikoleta Strataki, Vlasoula Bekiari and Panagiotis Lianos, *Journal of Hazardous Materials* 146(2007)514-519.
164. *Highly efficient photoluminescent films made by mixing, Aminopropyltriethoxysilane, Eu³⁺ ions and Thenoyltrifluoroacetone:* Elias Stathatos and Panagiotis Lianos, *Applied Physics Letters* 90(2007)061110 and *Virtual Journal of Nanoscale Science & Technology* February 19, 2007
165. *Dye-sensitized solar cells based on nanocrystalline titania electrodes made at various sintering temperatures :* Elias Stathatos and Panagiotis Lianos, *J.Nanoscience and Nanotechnology*, 7(2007)555-559.
166. *Increase of the efficiency of Quasi-Solid State Dye-sensitized Solar Cells by a synergy between titania nanocrystallites of two distinct nanoparticle sizes:* Elias Stathatos and Panagiotis Lianos, *Advanced Materials*, 19(2007)3338-3341.
167. *Use of Ureasil gels to extract ions from aqueous solutions:* Vlasoula Bekiari and Panagiotis Lianos, *Journal of Hazardous Materials*, 147(2007)184-187.
168. *Lecithin Organogels Used as Bioactive Compounds Carriers. A Microdomain Properties Investigation:* Spyridon Avramiotis, Vassiliki Papadimitriou, Elina Hatzara, Vlasoula Bekiari, Panagiotis Lianos and Aris Xenakis, *Langmuir* 23(2007)4438-4447
169. *Effect of aggregation of dyes adsorbed on nanocrystalline titania films on the efficiency of photodegradation:* Nikoleta Strataki, Vlasoula Bekiari, Elias Stathatos and Panagiotis Lianos, *J.Photochem.Photobiol.*, 191(2007)13-18.
170. *Dye-sensitized solar cells made by using a polysilsesquioxane polymeric ionic fluid as redox electrolyte:* Elias Stathatos, Vasko Jovanovski, Boris Orel, Ivan Jerman and Panagiotis Lianos, *J.Phys.Chem. C*, 111(2007)6528-6532.
171. *Structure and photophysical behavior of 2,2'-bipyrimidine/lanthanide ion complexes in various environments:* Vlasoula Bekiari, Katerina A.Thiakou, Catherine P. Raptopoulou, Spyros P. Perlepes and Panagiotis Lianos, *J.Luminescence*, 128(2008)481-488.
172. *Hydrogen production by photocatalytic alcohol reforming employing highly efficient nanocrystalline titania films:* Nikoleta Strataki, Vlasoula Bekiari, Dimitris I. Kondarides and Panagiotis Lianos, *Appl.Catal.B. Environmental*, 77(2007)184-189
<http://dx.doi.org/10.1016/j.apcatb.2007.07.015>
173. *Use of poly(N,N-dimethylacrylamide-co-sodium acrylate) hydrogel to extract cationic dyes and metals from water:* Vlasoula Bekiari, Maria Sotiropoulou, Georgios Bokias and Panagiotis

- Lianos, *Colloids and Surfaces A: Physicochemical and Engineering Aspects*, 312(2008)214-218.
174. *Photoluminescence and Electroluminescence by Gallium(III) complexes of N-Salicylidene-o-aminophenol and its Derivatives*: Adamadia Kagkelari, Vlasoula Bekiari, Elias, Stathatos, Giannis S. Papaefstathiou, Catherine P. Raptopoulou, Theodoros F. Zafiroopoulos and Panagiotis Lianos, *J.Luminescence*, 129(2009)578-583.
 175. *Optimization of parameters for hydrogen production by photocatalytic alcohol reforming in the presence of Pt/TiO₂ nanocrystalline thin films*: Nikoleta Strataki and Panagiotis Lianos, *J.Adv.Oxid.Technol.* 11(2008)111-115.
 176. *Gas-phase photocatalytic degradation of 2,4,6-Trichloroanisole in the presence of a nanocrystalline Titania film. Applications to the treatment of cork stoppers*: Panagiotis Vlachos, Elias Stathatos, Gerasimos Lyberatos and Panagiotis Lianos, *Catalysis Communications*, 9(2008)1987-1990.
 177. *Nanocrystalline Titania films as Photocatalyst for Hydrogen production. Background and Prospects*: P.Lianos, *Advanced Science Letters*, 1(2008)128–131.
 178. *Synergy effect in the combined photodegradation of an azo dye by titanium dioxide photocatalysis and Photo-Fenton oxidation*: Panagiotis Bouras and Panagiotis Lianos *Catalysis Letters* 123(2008)220-225.
 179. *Adsorption of dyes on Sahara desert sand*: Canan Varlikli, Vlasoula Bekiari, Mahmut Kus, Numan Boduroglu, Ilker Oner, Panagiotis Lianos, Gerasimos Lyberatos, Siddik Icli, *J.Hazardous Materials*, 170(2009)27-34.
 180. *Ehhancement of the photodegradation of methylene blue by combined Titania photocatalyst and Photo-Fenton*: Panagiotis Bouras, Panagiotis Lianos and Dionysios Dionysiou, *Journal of Advanced Oxidation Technologies*, 11(2008)463-467.
 181. *Photodegradation of the herbicide Azimsulfuron using nanocrystalline Titania films as photocatalyst and low intensity Black Light Radiation or Simulated Solar radiation as excitation source*: Katerina Pelentridou, Elias Stathatos, Eleni Karasali, Panagiotis Lianos, *Journal of Hazardous Materials*, 163(2009)756-760.
 182. *Hydrogen and Electricity generation by photoelectrochemical decomposition of ethanol over nanocrystalline Titania*: Maria Antoniadou, Panagiotis Bouras, Nikoleta Strataki and Panagiotis Lianos, *International Journal of Hydrogen Energy*, 33(2008)5045-5051.
 183. *Photoelectrochemical oxidation of organic substances and electricity generation in the presence of nanocrystalline titania photocatalyst*: Maria Antoniadou and Panagiotis Lianos, *J.Nanoscience and Nanotechnology* 10(2010)6240-6244.
 184. *Photocatalytic degradation of a water soluble herbicide by pure and noble-metal deposited TiO₂ nanocrystalline films*: Katerina Pelentridou, Elias Stathatos, Eleni Karassali, Dionysios D.Dionysiou and Panagiotis Lianos, *International Journal of Photoenergy* (2008) doi:10.1155/2008/978329
 185. *A new precursor for the preparation of nanocrystalline TiO₂ films and their photocatalytic properties*: Katerina Pelentridou, Elias Stathatos, Panagiotis Lianos and Vassilios Drakopoulos, *J.Nanoscience and Nanotechnology* 10(2010)6093-6098
 186. *Photocatalytic and photoelectrochemical hydrogen production by photodegradation of organic substances*: Panagiotis Lianos, Nikoleta Strataki and Maria Antoniadou, *Pure and Applied Chemistry*, 81(2009)1441-1448.
 187. *Near Ultraviolet and Visible light photoelectrochemical degradation of organic substances producing electricity and hydrogen*: Maria Antoniadou and Panagiotis Lianos, *J. of Photochemistry and Photobiology A: Chemistry* 204(2009)69-74.
 188. *Photooxidation products of ethanol during photoelectrochemical operation using a nanocrystalline titania anode and a two compartment chemically biased cell*: Maria Antoniadou, Dimitris I. Kondarides and Panagiotis Lianos, *Catalysis Letters*, 129(2009)344-349.
 189. *Effect of the conditions of platinum deposition on titania nanocrystalline films on the efficiency of photocatalytic oxidation of ethanol and production of hydrogen*: Nikoleta Strataki,

- Nikolaos Boukos, Fotis Paloukis, Stylianos G. Neophytides and Panagiotis Lianos, *Photochem. Photobiol. Sci.* 8(2009)639-643.
190. *Photoelectrochemical oxidation of organic substances over nanocrystalline Titania. Optimization of the photoelectrochemical cell:* Maria Antoniadou and Panagiotis Lianos, *Catalysis Today*, 144(2009)166-171.
 191. *Initial use of 1-hydroxybenzotriazole in the chemistry of group 12 metals: An 1D zinc (II) coordination polymer and a mononuclear cadmium(II) complex containing the deprotonated ligand in a novel monodentate ligation mode:* Athanassios D. Katsenis, Nikolia Lalioti, Vlasoula Bekiari, Panagiotis Lianos, Catherine P. Raptopoulou, Aris Terzis, Spyros P. Perlepes, Giannis S. Papaefstathiou, *Inorganic Chemistry Communications*, 12(2009)92-96.
 192. *An efficient photoelectrochemical cell functioning in the presence of organic wastes:* Maria Antoniadou, Dimitris I. Kondarides, Diamantoula Labou, Stylianos Neophytides and Panagiotis Lianos, *Solar Energy Materials and Solar Cells*, 94(2010)592-597.
 193. *Cost-effective dye-sensitized solar cells based on commercial nanocrystalline titania and a ureasil gel electrolyte:* Maria Antoniadou and Panagiotis Lianos, *European Physics Journal-Applied Physics*, 51(2010)33211(4 pages).
 194. *A round robin study of flexible large area roll-to-roll processed polymer solar cell modules:* Frederik C. Krebs, Suren A. Gevorgyan, Bobak Gholamkhass, Steven Holdcroft, Cody Schlenker, Mark E. Thompson, Barry C. Thompson, Dana Olson, David S. Ginley, Sean E. Shaheen, Husam N. Alshareef, John W. Murphy, W. Justin Youngblood, Nathan C. Heston, John R. Reynolds, Shijun Jia, Darin Laird, Sachetan M. Tuladhar, Justin G. A. Dane, Pedro Atienzar, Jenny Nelson, Jan M. Kroon, Martijn M. Wienk, René A. J. Janssen, Kristofer Tvingstedt, Fengling Zhang, Mattias Andersson, Olle Inganäs, Monica Lira-Cantu, Rémi de Bettignies, Stéphane Guillerez, Tom Aernouts, David Cheyns, Laurence Lutsen, Birger Zimmermann, Uli Würfel, Michael Niggemann, Hans-Frieder Schleiermacher, Paul Liska, Michael Grätzel, Panagiotis Lianos, Eugene A. Katz, Wolfgang Lohwasser and Bertrand Jannon, *Solar Energy Materials and Solar Cells* 93(2009)1968-1977.
 195. *Study of hybrid solar cells made of multilayer nanocrystalline titania and poly(3-octylthiophene) or poly-(3-(2-methylhex-2-yl)-oxy-carbonyldithiophene):* Maria Antoniadou, Elias Stathatos, Nikolaos Boukos, Andreas Stefopoulos, Joannis Kallitsis, Frederik C. Krebs and Panagiotis Lianos, *Nanotechnology* 20(2009) Art.No.495201
 196. *Visible-light photocatalytic hydrogen production from ethanol-water mixtures using a Pt-CdS-TiO₂ photocatalyst:* Nikoleta Strataki, Maria Antoniadou, V.Dracopoulos and Panagiotis Lianos, *Catalysis Today* 151(2010)53-57.
 197. *TiO₂-based advanced oxidation nanotechnologies for water purification and reuse:* Hyeok Choi, Souhail R.Al-Abed, Dionysios D.Dionysiou, Elias Stathatos and Panagiotis Lianos, *Sustainability Science and Engineering* 2(2010)229-254.
 198. *Solar Light-Responsive Pt/CdS/TiO₂ Photocatalysts for Hydrogen Production and Simultaneous Degradation of Inorganic or Organic Sacrificial Agents in Wastewater:* Vasileia M. Daskalaki, Maria Antoniadou, Gianluca Li Puma, Dimitris I. Kondarides, and Panagiotis Lianos, *Environmental Science and Technology* 44 (2010) 7200-7205
<http://pubs.acs.org/doi/abs/10.1021/es9038962>
 199. *Production of electricity by photoelectrochemical oxidation of ethanol in a PhotoFuelCell:* Maria Antoniadou and Panagiotis Lianos, *Applied Catalysis B: Environmental*, 99 (2010)307-313.
 200. *Solid-state Dye-sensitized Solar Cells made of multilayer nanocrystalline Titania and Poly(3-hexylthiophene):* Nikolaos Balis, Vassilios Dracopoulos, Maria Antoniadou and Panagiotis Lianos, *J.Photochem.Photobiol. A: Chemistry*, 214(2010)69-73.
 201. *Poly(sodium acrylate) hydrogels as potential pH-sensitive sorbents for removal of model organic and inorganic pollutants from water:* Vlasoula Bekiari and Panagiotis Lianos, *Global Nest Journal*, 12(2010)262-269.

202. *Aldol condensation products during photocatalytic oxidation of ethanol in a photoelectrochemical cell*: Paraskevi Panagiotopoulou, Maria Antoniadou, Dimitris I. Kondarides and Panagiotis Lianos, *Appl.Catal. B: Environ.*, 100(2010)124-132.
203. *A Photoactivated Fuel Cell used as an Apparatus that Consumes Organic Wastes to Produce Electricity*: Maria Antoniadou and Panagiotis Lianos, *Photochemical and Photobiological Science* 10(2011)431-435.
204. *Enhanced photon harvesting in Silicon multicrystalline solar cells by new lanthanide complexes as light concentrators*: Giannis Katsagounos, Elias Stathatos, Nikos B.Arabatzis, Anastasios D.Keramidas and Panagiotis Lianos, *J.Luminescence* 131 (2011) 1776–1781.
<http://dx.doi.org/10.1016/j.jlumin.2011.04.023>
205. *A quasi solid-state dye-sensitized solar cell made of polypyrrole counter electrodes*: Theodoros Makris, Vassilios Dracopoulos, Thomas Stergiopoulos and Panagiotis Lianos, *Electrochimica Acta* 56(2011)2004-2008. <http://www.sciencedirect.com/science/article/pii/S0013468610015884>
206. *Production of electricity and hydrogen by photocatalytic degradation of organic wastes in a Photoelectrochemical cell. The concept of the Photo-Fuel-Cell. A review of a re-emerging research field*: Panagiotis Lianos, *J.Hazardous Materials*, 185(2011)575-590
<http://dx.doi.org/10.1016/j.jhazmat.2010.10.083>
207. *A solid state hybrid solar cell made of nc-TiO₂, CdS quantum dots and P3HT with 2-amino-1-methylbenzimidazole as interface modifier*: Nikolaos Balis, Vassilios Dracopoulos, Elias Stathatos, Nikolaos Boukos and Panagiotis Lianos, *J.Phys.Chem.C* 115(2011)10911-10916.
<http://pubs.acs.org/doi/abs/10.1021/jp2022264>
208. *Photocatalysis and photoelectrocatalysis using (CdS-ZnS)/TiO₂ combined photocatalysts*: Maria Antoniadou, Vasileia M. Daskalaki, Nikolaos Balis, Dimitris I. Kondarides, Christos Kordulis and Panagiotis Lianos, *Appl.Catal B: Environ.* 107(2011)188-196
[doi:10.1016/j.apcatb.2011.07.013](http://dx.doi.org/10.1016/j.apcatb.2011.07.013)
209. *Quasi-Solid-State Dye-sensitized Solar Cells made with poly(3,4-ethylenedioxythiophene) (PEDOT)-functionalized counter electrodes*: Nikolaos Balis, Theodoros Makris, Vassilios Dracopoulos, Thomas Stergiopoulos and Panagiotis Lianos, *J.Power Sources*, 203(2012)302-307
<http://dx.doi.org/10.1016/j.jpowsour.2011.12.021>
210. *Photocatalysis and photoelectrocatalysis using nanocrystalline titania alone or combined with Pt, RuO₂ or NiO co-catalysts*: Maria Antoniadou, Paraskevi Panagiotopoulou, Dimitris I.Kondarides and Panagiotis Lianos, *J.Appl.Electrochem.*, 42 (2012)737–743
<http://link.springer.com/article/10.1007%2Fs10800-012-0408-2>
211. *One-step electrodeposition of polypyrrole applied as oxygen reduction electrocatalyst in Photoactivated Fuel Cells*: Nikolaos Balis, Vassilios Dracopoulos, Maria Antoniadou and Panagiotis Lianos, *Electrochimica Acta* 70(2012)338– 343
<http://dx.doi.org/10.1016/j.electacta.2012.03.086>
212. *Quantum dot sensitized titania applicable as photoanode in photoactivated fuel cells*: Maria Antoniadou, Dimitris I. Kondarides, Dionysios D.Dionysiou, Panagiotis Lianos, *J.Phys.Chem.*, 116(2012)16901-16909 <http://pubs.acs.org/doi/abs/10.1021/jp305098m>
213. *The use of polyurethane as encapsulating method for polymer solar cells. An inter laboratory study on outdoor stability in 8 countries*: Roar R.Søndergaard, Theodoros Makris, Panagiotis Lianos, Assaf Manor, Eugene A.Katz, Wei Gong, Sachetan M.Tuladhar, Jenny Nelson, Ralf Tuomi, Paul Sommeling, Sjoerd C. Veenstra, Agnes Rivaton, Aurelie Dupuis, Gerardo Teran-Escobar, Monica Lira-Cantu, Subarna B. Sapkota, Birger Zimmermann, Uli Wurfel, Andreas Matzarakis, Frederik C.Krebs *Solar Energy Materials and Solar Cells* 99(2012)292-300
<http://www.sciencedirect.com/science/article/pii/S0927024811006945>
214. *Structure, reactivity, luminescence and magnetism of dinuclear Ln³⁺ complexes produced by the Ln³⁺-assisted hydrolysis of 3,6-bis(2-pyridyl)tetrazine*: Lefkia Panayiotidou, Chryssoula Drouza, Nikos Arabatzis, Panagiotis Lianos, Elias Stathatos, Zacharias Viskadourakis, John

- Giapintzakis, Anastasios D. Keramidas, Polyhedron 64(2013)308-320
<http://www.sciencedirect.com/science/article/pii/S0277538713004221>
215. *Synthesis, crystal structure and luminescence of novel Eu^{3+} , Sm^{3+} and Gd^{3+} complexes of 1,3,5- and 1,2,4-Triazines*: Lefkia Panayiotidou, Marios Stylianou, Nikos Arabatzis, Chrysoula Drouza, Panagiotis Lianos, Elias Stathatos, Anastasios D.Keramidas, Polyhedron 52(2013)856-865 <http://dx.doi.org/10.1016/j.poly.2012.07.029>
216. *Buckypaper as Pt-free cathode electrode in photoactivated fuel cells*: Stavroula Sfaelou, Maria Antoniadou, Georgios Trakakis, Vassilios Dracopoulos, Dimitrios Tasis, John Parthenios, Constantinos Galiotis, Konstantinos Papagelis, Panagiotis Lianos, Electrochimica Acta, 80(2012)399-404. <http://dx.doi.org/10.1016/j.electacta.2012.07.046>
217. *Quantum dot sensitized solar cells based on an optimized combination of ZnS, CdS and CdSe with CoS and CuS counter electrodes*: Nikolaos Balis, Vassilios Dracopoulos, Kyriakos Bourikas and Panagiotis Lianos, Electrochimica Acta 91 (2013) 246– 252 <http://dx.doi.org/10.1016/j.electacta.2013.01.004>
218. *Solar energy conversion using photo-fuel-cells*: Maria Antoniadou, Changseok Han, Stavroula Sfaelou, Melpomeni Michailidi, Dionysios D.Dionysiou and Panagiotis Lianos, Science of Advanced Materials 5(2013) 1756-1763. <http://dx.doi.org/10.1166/sam.2013.1628>
219. *Photocatalytic oxidation of ethanol using undoped and Ru-doped titania: Acetaldehyde, hydrogen or electricity generation*: Maria Antoniadou, Vincenzo Vaiano, Diana Sannino and Panagiotis Lianos, Chemical Engineering Journal, 224 (2013) 144–148 <http://dx.doi.org/10.1016/j.cej.2012.09.104>
220. *Quantum dot sensitized titania as visible-light photocatalyst for solar operation of photoactivated fuel cells*: Stavroula Sfaelou, Maria Antoniadou, Vassilios Dracopoulos, Kyriakos Bourikas, Dimitris I. Kondarides and Panagiotis Lianos, J.Advanced Oxidation Technologies 17(2014)59-65. <http://www.scopus.com/record/display.url?eid=2-s2.0-84894130035&origin=resultslist&sort=plf-f&src=s&st1=Lianos%2cP&sid=7EC9D93EF2DB2F7FDE0620D7EA72E113.f594dyPDCy4K3aQHRor6A%3a20&sot=b&sdt=b&sl=21&s=AUTHOR-NAME%28Lianos%2cP%29&relopos=4&relopos=4&citeCnt=0&searchTerm=AUTHOR-NAME%28Lianos%2cP%29>
221. *Structural and stability studies on quantum dot sensitized solar cells*: Stavroula Sfaelou, Nikolaos Balis, Vassilios Dracopoulos and Panagiotis Lianos, Journal of Surfaces and Interfaces of Materials, 1(2013)148-154. <http://dx.doi.org/10.1166/jsim.2013.1020>
222. *Micro-Raman, photoluminescence and photocurrent studies on the photostability of quantum dot sensitized photoanodes*: Stavroula Sfaelou, Athanassios G. Kontos, Polycarpus Falaras and Panagiotis Lianos, J.Photochem.Photobiol. A: Chemistry 275(2014) 127-133 <http://www.sciencedirect.com/science/article/pii/S1010603013004851>
223. *Platinum-free photoelectrochemical water splitting*: Maria Antoniadou, Stavroula Sfaelou, Vassilios Dracopoulos, Panagiotis Lianos, Catalysis Communications, 43(2014)72-74. <http://www.sciencedirect.com/science/article/pii/S1566736713003464>
224. *Photocatalytic hydrogen production using TiO_2 -Pt aerogels*: Jarmila Puskelova, Lucian Baia, Adriana Vulpoi, Monica Baia, Maria Antoniadou, Vassilios Dracopoulos, Elias Stathatos, Kovacs Gabor, Zsolt Pap, Virginia Danciu, Panagiotis Lianos, Chemical Engineering Journal, 242(2014)96-101 <http://dx.doi.org/10.1016/j.cej.2013.12.018>
225. *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*: Archontoula Nikolakopoulou, Dimitrios Tasis, Lambrini Sygellou, Vassilios Dracopoulos, Costas Galiotis, Panagiotis Lianos, Electrochimica Acta 111(2013)698-706 <http://authors.elsevier.com/sd/article/S0013468613015922>

226. *Study of the stability of quantum dot sensitized solar cells*: Stavroula Sfaelou, Athanassios G. Kontos, Lida Givalou, Polycarpus Falaras, Panagiotis Lianos, *Catalysis Today* 230(2014)221-226.
<http://www.sciencedirect.com/science/article/pii/S0920586113005713>
227. *Quantum dot sensitized titania for photo-fuel-cell and for water splitting operation in the presence of sacrificial agents*: Maria Antoniadou, Stavroula Sfaelou, Panagiotis Lianos, *Chemical Engineering Journal* 254(2014)245-251
<http://www.sciencedirect.com/science/article/pii/S1385894714006901>
228. *Quantum-dot-sensitized solar cells with metal electrodes*: Stavroula Sfaelou, Vassilios Dracopoulos, Panagiotis Lianos, *J.Advanced Oxidation Technologies*,17(2014)53-58.
<http://www.scopus.com/record/display.url?eid=2-s2.0-84894193208&origin=resultslist&sort=plf-f&src=s&st1=Lianos%2cP&sid=934E7B616CCD6F53F146EB80F2133623.iqs8TDG0Wy6BURhZD3nFA%3a20&sot=b&sdt=b&sl=21&s=AUTHOR-NAME%28Lianos%2cP%29&relpos=3&relpos=3&citeCnt=0&searchTerm=AUTHOR-NAME%28Lianos%2cP%29>
229. *Wastewater treatment technologies in the degradation of hormones and pharmaceuticals with focus on TiO₂ technologies*: L.G.Bousiakou, K. Mohsin, P. Lianos, A.J.Fatani, E.Kalkani, G.A.Karikas *Pharmakeftiki*, 25 (2013)37-48. <http://www.scopus.com/record/display.url?eid=2-s2.0-84880946966&origin=resultslist&sort=plf-f&src=s&st1=Lianos%2cP&sid=19FB5A0916AFBE068BB422E990CFB5D8.euC1gMODexYlPkQec4u1Q%3a20&sot=b&sdt=b&sl=21&s=AUTHOR-NAME%28Lianos%2cP%29&relpos=2&relpos=2&citeCnt=0&searchTerm=AUTHOR-NAME%28Lianos%2cP%29>
230. *Hydrogen production by photocatalytic ethanol reforming using Eu- and S-doped anatase*: Jarmila Puskelova, Robert Michal, Maria Caplovicova, Maria Antoniadou, Lubomir Caplovic, Gustav Plesch, Panagiotis Lianos, *Applied Surface Science* 305(2014)665-669.
<http://www.sciencedirect.com/science/article/pii/S0169433214007089>
231. *Cerium-modified TiO₂ nanocrystalline films for visible light photocatalytic activity*: A. Rapsomanikis, A. Apostolopoulou, E. Stathatos, P. Lianos *Journal of Photochemistry and Photobiology A: Chemistry* 280 (2014) 46-53
<http://www.sciencedirect.com/science/article/pii/S1010603014000616>
232. *Composite ZnSe-CdSe quantum dot sensitizers of solid state solar cells and the beneficial effect of added Na₂S*: Georgia Sfyri, Stavroula Sfaelou, Konstantinos S.Andrikopoulos, Nikolaos Balis, George A.Voyiatzis and Panagiotis Lianos, *Journal of Physical Chemistry C*, 118(2014)16547-16551. <http://pubs.acs.org/doi/abs/10.1021/jp412134m>
233. *Dispersion of graphene in organic solvents and their use for improving efficiency of dye- and quantum dot-sensitized solar cells*: Archontoula Nikolakopoulou, Dimitrios Tasis, Lambrini Sygellou, Panagiotis Lianos, *Electrochimica Acta*, 139(2014)54-60.
<http://www.sciencedirect.com/science/article/pii/S001346861401370X>
234. *Effect of the nature of cadmium salts on the effectiveness of CdS SILAR deposition and its consequences on the performance of sensitized solar cells*: Stavroula Sfaelou, Lambrini Sygellou, Vassilios Dracopoulos, Anastasios Travlos, Panagiotis Lianos, *Journal of Physical Chemistry C*, 118(2014)22873-22880 <http://pubs.acs.org/doi/abs/10.1021/jp505787z>
235. *An alternative anchoring methodology of organic sensitizers onto TiO₂ semiconductors for photoelectrochemical applications*: Panagiotis Giannopoulos, Archontoula Nikolakopoulou, Aikaterini K. Andreopoulou, Lamprini Sygellou, Joannis K. Kallitsis, Panagiotis Lianos, *J.Mater.Chem A*, 2(2014)20748-20759
<http://pubs.rsc.org/en/Content/ArticleLanding/2014/TA/C4TA04515G#!divAbstract>
236. *Photocatalysis for Renewable Energy Production using PhotoFuelCells*: Robert Michal, Stavroula Sfaelou, Panagiotis Lianos. *Molecules* 19(2014)19732-19750.
<http://www.mdpi.com/1420-3049/19/12/19732/>

237. *Study of perovskite solar cells synthesized under ambient conditions and of the performance of small cell modules*: Georgia Sfyri, Challuri Vijay Kumar, Dimitrios Raptis, Vassilios Dracopoulos and Panagiotis Lianos, *Solar Energy Materials & Solar Cells* 134(2015)60–63
<http://www.sciencedirect.com/science/article/pii/S0927024814006217>
238. *Synergistic effect of CdS and PbS sensitizers in Quantum dot sensitized solar cells*: Stavroula Sfaelou and Panagiotis Lianos, *Journal of Surfaces and Interfaces of Materials*, 2(2014)109-114
<http://www.ingentaconnect.com/content/asp/jsim/2014/00000002/00000002/art00004>
239. *Photo-fuel cells. An alternative route for solar energy conversion*: Maria Antoniadou and Panagiotis Lianos, *Materials and Processes for Solar Fuel Production*, B. Viswanathan, V. Subramanian, J.-S. Lee, Editors, Springer, New York, 2014.
<http://www.springer.com/chemistry/analytical+chemistry/book/978-1-4939-1627-6>
240. *Photocatalytic and photoelectrocatalytic degradation of the antibacterial agent ciprofloxacin*: Iosif Tantis, Leda Bousiakou, George-Albert Karikas, Panagiotis Lianos, *Photochemical & Photobiological Sciences*, 14(2015)603-607.
<http://pubs.rsc.org/en/Content/ArticleLanding/2015/PP/C4PP00377B#!divAbstract>
241. *Perovskite Solar Cell with Low Cost Cu-Phthalocyanine as Hole Transporting Material*: Challuri Vijay Kumar, Georgia Sfyri^a, Dimitrios Raptis, Elias Stathatos and Panagiotis Lianos, *RSC Advances* 5(2015) 3786-3791.
<http://pubs.rsc.org/en/Content/ArticleLanding/2015/RA/C4RA14321C#!divAbstract>
242. *Cation adsorption by mesoporous titania photoanodes and its effect on the current-voltage characteristics of photoelectrochemical cells*: Lucian-Cristian Pop, Stavroula Sfaelou, Panagiotis Lianos, *Electrochimica Acta* 156 (2015) 223–227
<http://www.sciencedirect.com/science/article/pii/S0013468615000675>
243. *Photoelectrocatalytic degradation of potential water pollutants in the presence of NaCl using nanocrystalline titania films*: Iosif Tantis, Elias Stathatos, Dionysios Mantzavinos and Panagiotis Lianos, *Journal of Chemical Technology and Biotechnology*, 90(2015)1338-1344
<http://onlinelibrary.wiley.com/doi/10.1002/jctb.4549/abstract>
244. *Photoelectrocatalytic hydrogen production using nanoparticulate titania and a novel Pt/Carbon electrocatalyst: The concept of the “Photoelectrocatalytic Leaf”*: Lucian-Cristian Pop, Vassilios Dracopoulos, Panagiotis Lianos, *Applied Surface Science*, 333 (2015) 147–151.
<http://www.sciencedirect.com/science/article/pii/S0169433215002858>
245. *Study of upscaling possibilities for antimony sulfide solid state sensitized solar cells*: Archontoula Nikolakopoulou, Dimitrios Raptis, Vassilios Dracopoulos, Lamprini Sygellou, Konstantinos S. Andrikopoulos, Panagiotis Lianos, *Journal of Power Sources*, 278 (2015) 404-410. <http://www.sciencedirect.com/science/article/pii/S0378775314020953>
246. *Sulfur-doped Porous Carbon Nanosheets as High Performance Electrocatalysts in PhotoFuelCells*: Stavroula Sfaelou, Xiaodong Zhuang, Xinliang Feng, Panagiotis Lianos, *RSC Advances*, 5 (2015) 27953-27963
<http://pubs.rsc.org/en/content/articlelanding/2015/ra/c5ra02027a#!divAbstract>
247. *Solar energy materials and systems for an aesthetic and sustainable future*: Yiannis Tripanagnostopoulos, George Leftheriotis, Alexandros Vradis, Dimitrios Anastasopoulos, Nikolaos Spiliopoulos, Panagiotis Priftis, Ioannis Manariotis, Panagiotis Lianos, Elias Stathatos, *Contemporary Materials*, 2(2014)172-185.
<http://doisrpska.nub.rs/index.php/conterporarymaterials3-1/article/view/1729>
248. *One-step electrodeposition of CdSe on nanoparticulate titania films and their use as sensitized photoanodes for photoelectrochemical hydrogen production*: Lucian-Cristian Pop, Lamprini Sygellou, Vassilios Dracopoulos, Konstantinos S. Andrikopoulos, Stavroula Sfaelou, Panagiotis Lianos, *Catalysis Today* 252(2015)157-161.
<http://www.sciencedirect.com/science/article/pii/S0920586114006300#>
249. *Photoelectrocatalytic hydrogen production using nitrogen containing water soluble wastes*: Lucian-Cristian Pop, Iosif Tantis, Panagiotis Lianos, *International Journal of Hydrogen Energy*, 40(2015)8304-8310 <http://www.sciencedirect.com/science/article/pii/S036031991501054X>

250. *Photocatalytic and photoelectrocatalytic degradation of the drug omeprazole on nanocrystalline titania films in alkaline media: effect of applied electrical bias on degradation and transformation products*: Iosif Tantis, Leda Bousiakou, Zacharias Frontistis, Dionissios Mantzavinos, Ioannis Konstaninou, Maria Antonopoulou, George-Albert Karikas, Panagiotis Lianos, *Journal of Hazardous Materials* 294(2015)57-63
<http://www.sciencedirect.com/science/article/pii/S0304389415002472>
251. *Reduced graphene Oxide/Polypyrrole/PEDOT composite films as efficient Pt-free counter electrode for dye-sensitized solar cells*: Madeshwaran Sekkarapatti Ramasamy, Archontoula Nikolakapoulou, Dimitrios Raptis, Vassilios Dracopoulos, Georgios Paterakis, Panagiotis Lianos, *Electrochimica Acta* 173(2015)276-281
<http://www.sciencedirect.com/science/article/pii/S001346861501155X>
252. *Current Doubling effect revisited: Current multiplication in a PhotoFuelCell*: Evangelos Kalamaras, Panagiotis Lianos, *Journal of Electroanalytical Chemistry* 751(2015)37-42
<http://www.sciencedirect.com/science/article/pii/S1572665715002660>
253. *Study of an Indoline-Phenothiazine Based Organic Dye for Dye-Sensitized Solar Cells. Theoretical Calculations and Experimental Data*: Challuri Vijay Kumar, Dimitrios Raptis, Emmanuel N. Koukaras, Lamprini Sygellou and Panagiotis Lianos, *Organic Electronics* 25(2015)66-73
<http://www.sciencedirect.com/science/article/pii/S1566119915002578>
254. *Subphthalocyanine as Hole Transporting Material for Perovskite Solar Cells*: Georgia Sfyri, Challuri Vijay Kumar, Gokulnath Sabapathi, Lingamallu Giribabu, Konstantinos S. Andrikopoulos, Elias Stathatos and Panagiotis Lianos, *RSC Advances*, 5(2015)69813-69818
<http://pubs.rsc.org/en/content/articlelanding/2015/ra/c5ra12004g/unauth#!divAbstract>
255. *High efficiency titania nanoparticles produced by flame spray pyrolysis. Photoelectrochemical and solar cell applications*: Iosif Tantis, Maria Vittoria Dozzi, Luca Giacomo Bettini, Gian Luca Chiarello, Vassilios Dracopoulos, Elena Selli, Panagiotis Lianos, *Applied Catalysis B Environmental*, 182(2016)369-374
<http://www.sciencedirect.com/science/article/pii/S0926337315301661>
256. *BiOI solar cells*: Stavroula Sfaelou, Dimitrios Raptis, Vassilios Dracopoulos and Panagiotis Lianos, *RSC Advances*, 5(2015)95813 – 95816
<http://pubs.rsc.org/en/content/articlelanding/2015/ra/c5ra19835f#!divAbstract>
257. *Photoelectrocatalytic hydrogen production by water splitting using BiVO₄ photoanodes*: Olivier Monfort, Lucian-Cristian Pop, Stavroula Sfaelou, Tomas Plecenik, Tomas Roch, Vassilios Dracopoulos, Elias Stathatos, Gustav Plesch, Panagiotis Lianos, *Chemical Engineering Journal*, 286 (2016) 91-97
<http://www.sciencedirect.com/science/article/pii/S1385894715014540>
258. *Coupling of electrochemical and photocatalytic technologies for accelerating degradation of organic pollutants*: Iosif Tantis, Maria Antonopoulou, Ioannis Konstaninou, Panagiotis Lianos, *Journal of Photochemistry and Photobiology A: Chemistry*, 317 (2016) 100-107
<http://www.sciencedirect.com/science/article/pii/S101060301530023X>
259. *Tetra methyl substituted Cu(II) Phthalocyanine as alternative hole transporting material for Organometal halide Perovskite Solar Cells*: Georgia Sfyri, Challuri, Vijay Kumar, Yu-Long Wang, Zong-Xiang Xu, Panagiotis Lianos, *Applied Surface Science*, 360(2016)767-771.
<http://www.sciencedirect.com/science/article/pii/S0169433215027609>
260. *Copolymers of Ionic Liquids with Polymeric or Metallocomplex Chromophores for Quasi-Solid State DSSC Applications*: Panagiotis Giannopoulos, Aikaterini K Andreopoulou, Charalampos Anastasopoulos, Dimitrios Raptis, Georgia Sfyri, Joannis. K. Kallitsis and Panagiotis Lianos, *RSC Advances* 6(2016)8256-8266.
<http://pubs.rsc.org/en/content/articlelanding/2016/ra/c5ra27374a/unauth#!divAbstract>
261. *Photoactivated Fuel Cells (PhotoFuelCells). An alternative source of renewable energy with environmental benefits*: Stavroula Sfaelou and Panagiotis Lianos, *AIMS Materials Science*, 3(2016)270-288
<http://www.aimspress.com/article/10.3934/materci.2016.1.270>

262. *Electrochemically exfoliated graphene/PEDOT composite films as efficient Pt-free counter electrode for dye-sensitized solar cells*: Meltiani Belekoukia, Madeshwaran Sekkarapatti Ramasamy, Sheng Yang, Xinliang Feng, Georgios Paterakis Vassilios Dracopoulos, Costas Galiotis, Panagiotis Lianos, *Electrochimica Acta* 194(2016)110-115
<http://www.sciencedirect.com/science/article/pii/S0013468616303486>
263. *Electrodeposited Ti-doped hematite photoanodes and their employment for photoelectrocatalytic hydrogen production in the presence of ethanol*: Evangelos Kalamaras, Vassilios Dracopoulos, Lamprini Sygellou and Panagiotis Lianos, *Chemical Engineering Journal*, 295 (2016) 288-294
<http://www.sciencedirect.com/science/article/pii/S138589471630314X>
264. *Photocatalytic properties and selective antimicrobial activity of TiO₂(Eu)/CuO nanocomposite*: Robert Michal; Ewa Dworniczek; Maria Caplovicova; Panagiotis Lianos; Lubomir Caplovic; Gustav Plesch, *Applied Surface Science* 371 (2016) 538–546
<http://www.sciencedirect.com/science/article/pii/S0169433216304391>
265. *High performance perovskite solar cells with functional highly porous TiO₂ thin films constructed in ambient air*: A. Rapsomanikis, D. Karageorgopoulos, P. Lianos, E. Stathatos, *Solar Energy Materials and Solar Cells* 151 (2016) 36–43
<http://www.sciencedirect.com/science/article/pii/S0927024816000970>
266. *Mesoporous WO₃ photoanodes for hydrogen production: Water splitting and PhotoFuelCell operation*: Stavroula Sfaelou, Lucian-Cristian Pop, Olivier Monfort, Vassilios Dracopoulos, Panagiotis Lianos, *International Journal of Hydrogen Energy* 41 (2016) 5902-5907
<http://www.sciencedirect.com/science/article/pii/S036031991531380X>
267. *Investigation of efficient protocols for the construction of solution-processed antimony sulphide solid-state solar cells*: Dimitrios Raptis, Georgia Sfyri, Lamprini Sygellou, V.Dracopoulos, E.Nouri and P.Lianos, *RSC Advances* 6 (2016) 49537-49542
<http://pubs.rsc.org/en/content/articlelanding/2016/ra/c6ra10435e#!divAbstract>
268. *Photocatalysis and Photoelectrocatalysis for Energy Generation Using PhotoFuelCells*: Panagiotis Lianos, Stavroula Sfaelou, Lucian-Cristian Pop, *Royal Society of Chemistry, "Photocatalysis: Applications"*, p.236-254
<http://pubs.rsc.org/en/content/chapter/bk9781782627098-00236/978-1-78262-709-8#!divabstract>
269. *Soluble butyl substituted copper phthalocyanine as alternative hole-transporting material for solution processed perovskite solar cells*: Georgia Sfyri, Qian Chen, Yi-Wei Lin, Yu-Long Wang, Esmail Nouri, Zong-Xiang Xu, Panagiotis Lianos, *Electrochimica Acta*, 212(2016)929-933
<http://www.sciencedirect.com/science/article/pii/S0013468616315523>
270. *Comparative study between pristine and Nb-modified BiVO₄ films employed for photoelectrocatalytic production of H₂ by water splitting and for photocatalytic degradation of organic pollutants under simulated solar light*: Olivier Monfort, Stavroula Sfaelou, Leonid Satrapinsky, Tomas Plecenik, Tomas Roch, Gustav Plesch, Panagiotis Lianos, *Catalysis Today*, 280 (2017) 51–57
<http://www.sciencedirect.com/science/article/pii/S0920586116304710>
271. *Co-N doped reduced graphene oxide used as an efficient electrocatalyst for dye-sensitized solar cells*: Meltiani Belekoukia, Alexandros Ploumistos, Lamprini Sygellou, Esmail Nouri, Dimitrios Tasis, Panagiotis Lianos, *Solar Energy Materials and Solar Cells*, 157 (2016) 591-598
<http://www.sciencedirect.com/science/article/pii/S0927024816302744>
272. *Design of diketopyrrolopyrrole chromophores applicable as sensitizers in dye-sensitized photovoltaic windows for green houses*: Naresh Duvva, Dimitris Raptis, Challuri Vijay Kumar, Emmanuel N. Koukaras, Lingamalu Giribabu, Panagiotis Lianos, *Dyes and Pigments* 134 (2016) 472–479
<http://authors.elsevier.com/sd/article/S0143720816303631>

273. *Impact of preparation method of TiO₂-RGO nanocomposite photoanodes on the performance of dye-sensitized solar cells*: Esmail Nouri, Mohammad Reza Mohammadi, Panagiotis Lianos, *Electrochimica Acta*, 219 (2016) 38-48
<http://www.sciencedirect.com/science/article/pii/S0013468616320813>
274. *Synthesis and characterization of tetratriphenylamine Zn phthalocyanine as Hole Transporting Material for Perovskite Solar Cells*: Georgia Sfyri, Narra Vamshikrishna, Challuri Vijay Kumar, Lingamallu Giribabu, and Panagiotis Lianos, *Solar Energy* 140 (2016) 60-65
<http://www.sciencedirect.com/science/article/pii/S0038092X16305151>
275. *Soluble tetratriphenylamine Zn phthalocyanine as Hole Transporting Material for Perovskite Solar Cells*: Esmail Nouri, Jonnadula Venkata Suman Krishna, Challuri Vijay Kumar, Vassilios Dracopoulos, Lingamallu Giribabu, Mohammad Reza Mohammadi, Panagiotis Lianos, *Electrochimica Acta*, 222 (2016) 875-880.
<http://www.sciencedirect.com/science/article/pii/S0013468616323829>
276. *The Beneficial Effects of Mixing Spiro-OMeTAD with n-Butyl-Substituted Copper Phthalocyanine for Perovskite Solar Cells*: Esmail Nouri, Yu-Long Wang, Qian Chen, Jia-Ju Xu, Vassilios Dracopoulos, Lamprini Sygellou, Zong-Xiang Xu, Mohammad Reza Mohammadi, Panagiotis Lianos, *Electrochimica Acta*, 222 (2016) 1417-1423.
<http://www.sciencedirect.com/science/article/pii/S0013468616324550>
277. *Photoelectrochemical Cell for Simultaneous Electricity Generation and Heavy Metals Recovery from Wastewater*: Dawei Wang, Yi Li, Gianluca Li Puma, Panagiotis Lianos, Chao Wang, Peifang Wang, *Journal of Hazardous Materials*, 323 (2017) 681-689.
<http://www.sciencedirect.com/science/article/pii/S0304389416309359>
278. *Photocurrent increase by metal modification of Fe₂O₃ photoanodes and its effect on photoelectrocatalytic hydrogen production by degradation of organic substances*: Giuseppina Iervolino, Iosif Tantis, Lamprini Sygellou, Vincenzo Vaiano, Diana Sannino, Panagiotis Lianos, *Applied Surface Science*, 400 (2017) 176-183
<http://www.sciencedirect.com/science/article/pii/S0169433216329063>
279. *Inverted Perovskite Solar Cells Based on Lithium-functionalized Graphene Oxide as Electron-Transporting Layer*: Esmail Nouri, Mohammad Reza Mohammadi, Panagiotis Lianos, *Chemical Communications* 53 (2017) 1630 - 1633
<http://pubs.rsc.org/en/content/articlelanding/2017/cc/c6cc09876b/unauth#!divAbstract>
280. *A study of the photocatalytic and photoelectrocatalytic degradation of diclofenac sodium using nanocrystalline TiO₂ films*: Iosif Tantis, Leda G. Bousiakou, Panagiotis Lianos, Helen Kalkani, *J. Mater. Environ. Sci.* 8 (2017) 1-6
http://www.jmaterenvironsci.com/Document/vol8/vol8_N1/1-JMES-2647-Tantis.pdf
281. *Synthesis of new photosensitive H₂BBQ₂+ [ZnCl₄]²⁻/[(ZnCl)₂(μ-BBH)] complexes, through selective oxidation of H₂O to H₂O₂*: Marios Stylianou, Ioanna Hadjiadamou, Chrysoula Drouza, Sophia Charalambous Hayes, Eirini Lariou, Iosif Tantis, Panagiotis Lianos, Athanasios Tsipis, Anastasios Keramidas *Dalton Transactions*, 46 (2017) 3688-3699.
<http://pubs.rsc.org/en/content/articlelanding/2017/dt/c6dt04643f/unauth#!divAbstract>
282. *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*: Esmail Nouri, Yu-Long Wang, Qian Chen, Jia-Ju Xu, Georgios Paterakis, Vassilios Dracopoulos, Zong-Xiang Xu, Dimitrios Tasis, Mohammad Reza Mohammadi, Panagiotis Lianos, *Electrochimica Acta* 233 (2017) 36-43
<http://www.sciencedirect.com/science/article/pii/S0013468617304917>
283. *Renewable energy production by photoelectrochemical oxidation of organic wastes using WO₃ photoanodes*: Dimitrios Raptis, Vassilios Dracopoulos, Panagiotis Lianos, *Journal of Hazardous Materials* 333 (2017) 259-264
<http://www.sciencedirect.com/science/article/pii/S030438941730211X>

284. *Review of recent trends in photoelectrocatalytic conversion of solar energy to electricity and hydrogen*: Panagiotis Lianos, *Applied Catalysis B: Environmental*, 210 (2017) 235–254
<http://www.sciencedirect.com/science/article/pii/S0926337317302801>
285. *N-Doped Graphene/PEDOT Composite Films as Counter Electrodes in DSSCs: Unveiling the Mechanism of Electrocatalytic Activity Enhancement*: Georgios Paterakis, Dimitrios Raptis, Alexandros Ploumistos, Meltiani Belekoukia, Lamprini Sygellou, Madeshwaran Sekkarapatti Ramasamy, Panagiotis Lianos, Dimitrios Tasis *Applied Surface Science* 423 (2017) 443–450
<http://www.sciencedirect.com/science/article/pii/S0169433217318342>
286. *Organic Dyes End-Capped with Perfluorophenyl Anchors: Synthesis, Electrochemical Properties and Assessment of Sensitization Capacity of Titania Photoanodes*: Panagiotis Giannopoulos, Dimitrios Raptis, Krystallia Theodosiou, Aikaterini K. Andreopoulou, Charalampos Anastasopoulos, Alexandros Dokouzis, George Leftheriotis, Panagiotis Lianos, Joannis K. Kallitsis, *Dyes and Pigments* 148 (2018) 167–179
<http://www.sciencedirect.com/science/article/pii/S0143720817313906>
287. *Production of hydrogen by water splitting in a photoelectrochemical cell using a BiVO₄/TiO₂ layered photoanode*: Olivier Monfort, Dimitrios Raptis, Leonid Satrapinsky, Tomáš Roch, Gustav Plesch, Panagiotis Lianos, *Electrochimica Acta*, 251 (2017) 244–249.
<http://www.sciencedirect.com/science/article/pii/S0013468617317796>
288. *Photooxidative properties of various BiVO₄/TiO₂ layered composite films and study of their photocatalytic mechanism in pollutant degradation*: Olivier Monfort, Tomas Roch, Maros Gregor, Leonid Satrapinsky, Dimitrios Raptis, Panagiotis Lianos, Gustav Plesch, *Journal of Environmental Chemical Engineering* 5 (2017) 5143–5149
<https://www.sciencedirect.com/science/article/pii/S2213343717304888?via%3Dihub>
289. *Design of Bismuth Vanadate-Based Materials: New Advanced Photoanodes for Solar Hydrogen Generation*: Olivier Monfort, Panagiotis Lianos and Gustav Plesch, *Photoelectrochemical solar cells*, (2018) 219–249
https://books.google.gr/books?hl=en&lr=&id=hGd-DwAAQBAJ&oi=fnd&pg=PA219&dq=info:uXw_fgmKPPeJ:scholar.google.com&ots=V5PjDgp4-5&sig=SxPCkgeUO-R4rNnllybCCoddvW4&redir_esc=y#v=onepage&q&f=false
290. *Structural, Morphological and Raman Studies of CdS/CdSe Sensitized TiO₂ Nanocrystalline Thin Films for Quantum Dot Sensitized Solar Cell Applications*: Leda Bousiakou, Mile Ivanda, Lara Mikac, Dimitrios Raptis, Marijan Gotic, Panagiotis Lianos, Kerstin Jurschat and Colin Johnston, *Current Nanoscience* 14 (2018) 421–431
<https://www.ingentaconnect.com/contentone/ben/cnano/2018/00000014/00000005/art00011>
291. *Improving the stability of Inverted Perovskite Solar Cells under Ambient Conditions with inorganic Charge Transporting Layers*: Esmail Nouri, Mohammad Reza Mohammadi and Panagiotis Lianos, *Carbon*, 126 (2018) 208–214
<http://www.sciencedirect.com/science/article/pii/S0008622317310072?via%3Dihub>
292. *Improvement of Photovoltaic Parameters of Perovskite Solar Cells Using Reduced-Graphene-Oxide-Modified Titania Layer and Soluble Copper Phthalocyanine as Hole Transporter*: Esmail Nouri, Mohammad Reza Mohammadi, Zong-Xiang Xu, Vassilios Dracopoulos and Panagiotis Lianos, *Physical Chemistry Chemical Physics*, 20 (2018) 2388–2395
<http://pubs.rsc.org/en/content/articlehtml/2018/CP/C7CP04538G>
293. *Construction of perovskite solar cells using inorganic hole extracting components*: Esmail Nouri, Mohammad Reza Mohammadi and Panagiotis Lianos, *ACS Omega* 3 (2018) 46–54
<https://pubs.acs.org/doi/full/10.1021/acsomega.7b01775>
294. *Carbon based perovskite solar cells constructed by screen-printed components*: Camellia Raminafshar, Vassilios Dracopoulos, Mohammad Reza Mohammadi, Panagiotis Lianos, *Electrochimica Acta* 276 (2018) 261–267
<https://www.sciencedirect.com/science/article/pii/S0013468618309472>
295. *Co-N doped reduced graphene oxide as oxygen reduction electrocatalyst applied to Photocatalytic Fuel Cells*: Dimitrios Raptis, Alexandros Ploumistos, Eirini Zagoraiou, Eleni

- Thomou, Maria Daletou, Lamprini Sygellou, Dimitrios Tasis, Panagiotis Lianos, *Catalysis Today* 315 (2018) 31-35 <https://doi.org/10.1016/j.cattod.2018.02.047>
296. *A realistic approach for photoelectrochemical hydrogen production*: Elias Doukas, Paraskevi Balta, Dimitrios Raptis, George Avgouropoulos and Panagiotis Lianos, *Materials*, 11 (2018) 1269(12p) <http://www.mdpi.com/1996-1944/11/8/1269>
297. *Photoelectrocatalytic vs photocatalytic degradation of organic water born pollutants*: Ioannis Papagiannis, Georgia Koutsikou, Zacharias Frontistis, Ioannis Konstantinou, George Avgouropoulos, Dionissios Mantzavinos and Panagiotis Lianos, *Catalysts* 8 (2018) 455 (10p). <https://www.mdpi.com/2073-4344/8/10/455>
298. *Electrochemical hydrogen and electricity production by using anodes made of commercial aluminum*: Dimitrios Raptis, Andreas K. Seferlis, Vasiliki Mylona, Constantin Politis and Panagiotis Lianos, *International Journal of Hydrogen Energy* 44 (2019) 1359-1365 <https://www.sciencedirect.com/science/article/pii/S0360319918338655?via%3Dihub>
299. *Photoelectrocatalytic H₂ and H₂O₂ production using visible-light-absorbing photoanodes*: Ioannis Papagiannis, Elias Doukas, Alexandros Kalarakis, George Avgouropoulos and Panagiotis Lianos *Catalysts*, 9 (2019) 243 (14p) <https://www.mdpi.com/2073-4344/9/3/243>
300. *Study of hole-transporter-free perovskite solar cells based on fully printable components*: Camellia Raminafshar, Dimitrios Raptis, Mohammad Reza Mohammadi, Panagiotis Lianos, *Micromachines*, 10 (2019) 266 (9p) <https://www.mdpi.com/2072-666X/10/4/266>
301. *Bio-inspired N,S-Doped Siligraphenes as Novel Metal-Free Catalysts for Removal of Dyes in the dark*: Leila Seifikar Gomi, Maryam Afsharpour, Mitra Ghasemzadeh, Panagiotis Lianos, *Journal of Molecular Liquids*, 295 (2019) 111657 (14p) <https://www.sciencedirect.com/science/article/pii/S0167732219339352?dgcid=coauthor>
302. *Photoelectrocatalytic hydrogen production using a TiO₂/WO₃ bilayer photocatalyst in the presence of ethanol as a fuel*: Panagiotis Marios Adamopoulos, Ioannis Papagiannis, Dimitrios Raptis and Panagiotis Lianos, *Catalysts* 9 (2019) 976 (12p) <https://www.mdpi.com/2073-4344/9/12/976>
303. *Photoelectrocatalytic production of hydrogen peroxide using a photo(catalytic) fuel cell*: Ioannis Papagiannis, Panagiota Stathi, Yiannis Deligiannakis, Anastasios Keramidas, Panagiotis Lianos, *Journal of Photochemistry & Photobiology A: Chemistry* 389 (2020) 112210 (7p). <https://www.sciencedirect.com/science/article/pii/S1010603019315679?via%3Dihub>
304. *2020 Roadmap on gas-involved photo- and electro-catalysis*: Yulu Yang , Yang Tang , Haomin Jiang , Yongmei Chen , Pingyu Wan, Maohong Fan, Rongrong Zhang, Sana Ullah, Lun Pan, Ji-Jun Zou, Mengmeng Lao, Wenping Sun, Chao Yang, Gengfeng Zheng h, Qiling Peng, Ting Wang, Yonglan Luo, Xuping Sun i, Alexander S. Konev, Oleg V. Levin, Panagiotis Lianos, Zhuofeng Hum, Zhurui Shen, Qinglan Zhao, Ying Wang o, Nadia Todorova, Christos Trapalis p, Matthew V. Sheridan, Haipeng Wang, Ling Zhang, Songmei Sun, Wenzhong Wang, Jianmin Ma, *Chinese Chemical Letters*, 30 (2019) 2089-2109 <https://www.sciencedirect.com/science/article/pii/S100184171930645X>
305. *Visible-light activated titania and its application to photoelectrocatalytic hydrogen peroxide production*: Tatiana Santos Andrade, Ioannis Papagiannis, Vassilios Dracopoulos, Márcio César Pereira, Panagiotis Lianos *Materials* 12 (2019) 4238 (13p) <https://www.mdpi.com/1996-1944/12/24/4238>
306. *Study of some basic operation conditions of an Al-air battery using technical grade commercial aluminum*: Petros Katsoufis, Vasiliki Mylona, Constantin Politis, George Avgouropoulos and Panagiotis Lianos, *J. Power Source* 450 (2020) 227624 (8p). <https://www.sciencedirect.com/science/article/pii/S0378775319316179?via%3Dihub>
307. *Photoelectrocatalytic hydrogen peroxide production using nanoparticulate WO₃ as photocatalyst and glycerol or ethanol as sacrificial agents*: Ioannis Papagiannis, Nikolaos Balis, Vassilios Dracopoulos and Panagiotis Lianos, *Processes* 8 (2020) 37 (10p) <https://www.mdpi.com/2227-9717/8/1/37>

308. *Enhanced rate of hydrogen production by corrosion of commercial aluminum*: Petros Katsoufis, Elias Doukas, Constantin Politis, George Avgouropoulos and Panagiotis Lianos, *International Journal of Hydrogen Energy* 45 (2020) 10729-10734 <https://doi.org/10.1016/j.ijhydene.2020.01.215>
309. *Study of a thin film aluminum-air battery*: Petros Katsoufis, Maria Katsaiti, Christos Mourelas, Tatiana Santos Andrade, Vassilios Dracopoulos, Constantin Politis, George Avgouropoulos and Panagiotis Lianos, *Energies* 13 (2020) 1447(9p) <https://www.mdpi.com/1996-1073/13/6/1447>
310. *Use of chalcogenide-semiconductor-sensitized titania to directly charge a vanadium redox battery*: Tatiana Santos Andrade, Anastasios Keramidas and Panagiotis Lianos, *Nanomaterials* 10 (2020) 1137(8p) <https://www.mdpi.com/2079-4991/10/6/1137>
311. *Novel Porous SiO₂@ SiC Core-Shell nanospheres Functionalized with an Amino Hybrid of WO₃ as an Oxidative Desulfurization Catalyst*: Leila Seifikar Gomi, Maryam Afsharpour and Panagiotis Lianos, *Journal of Industrial & Engineering Chemistry*, 89 (2020) 448-457. <https://www.sciencedirect.com/science/article/pii/S1226086X2030277X?via%3Dihub>
312. *High voltage gain in photo-assisted charging of a metal-air battery*: Tatiana Santos Andrade, Marcio Cesar Pereira and Panagiotis Lianos, *Journal of Electroanalytical Chemistry*, 878 (2020) 114559 (5p) <https://www.sciencedirect.com/science/article/pii/S1572665720307876>
313. *Unmediated photoelectrochemical charging of a Zn-air battery. The realization of the Photoelectrochemical Battery*: Tatiana Santos Andrade, Vassilios Dracopoulos, Márcio César Pereira and Panagiotis Lianos, *Journal of Electroanalytical Chemistry* 878 (2020) 114709 (5p) <https://doi.org/10.1016/j.jelechem.2020.114709>
314. *Charging a vanadium redox battery with a Photo(catalytic) Fuel Cell*: Tatiana Santos Andrade, Vassilios Dracopoulos, Anastasios Keramidas, Márcio César Pereira and Panagiotis Lianos, *Solar Energy Materials and Solar Cells*, 221 (2021) 110889 (6p) <https://doi.org/10.1016/j.solmat.2020.110889>
315. *Biochar obtained by carbonization of spent coffee grounds and its application in the construction of an energy storage device*: Tatiana Santos Andrade, John Vakros, Dionissios Mantzavinos and Panagiotis Lianos, *Chemical Engineering Journal Advances*, 4 (2020) 100061 (7p) <https://doi.org/10.1016/j.cej.2020.100061>
316. *A photoassisted hydrogen peroxide fuel cell using dual photoelectrodes under tandem illumination for electricity generation*: Tatiana Santos Andrade, Bárbara Antunes Cunha Sá, Izabela Campos Sena, Antero Ricardo Santos Neto, Francisco Guilherme Esteves Nogueira, Panagiotis Lianos, Márcio César Pereira, *Journal of Electroanalytical Chemistry*, 881 (2021) 114948 <https://authors.elsevier.com/c/1cMTc5bbJ5d0-S>
317. *Solar energy conversion and storage using a photocatalytic fuel cell combined with a supercapacitor*: Tatiana Santos Andrade, Vassilios Dracopoulos and Panagiotis Lianos, *Electronics* 10 (2021) 273. <https://www.mdpi.com/2079-9292/10/3/273>
318. *Biochar from spent malt rootlets and its application to an energy conversion and storage device*: John Vakros, Ioannis D. Manariotis, Vassilios Dracopoulos, Dionissios Mantzavinos and Panagiotis Lianos, *Chemosensors* 9 (2021) 57 <https://www.mdpi.com/2227-9040/9/3/57>
319. *Production of hydrogen peroxide with a photocatalytic fuel cell and its application to UV/H₂O₂ degradation of dyes*: Rebecca Dhawle, Zacharias Frontistis, Dionissios Mantzavinos and Panagiotis Lianos, *Chemical Engineering Journal Advances* 6 (2021) 100109 <https://doi.org/10.1016/j.cej.2021.100109>
320. *Decreasing the charging voltage of a zinc-air battery using a bifunctional W:BiVO₄/V₂O₅ photoelectrode and sulfite as a sacrificial agent*: Tatiana Santos Andrade, Izabela Campos Sena, Luiz Carlos Alves de Oliveira, Panagiotis Lianos and Márcio César Pereira, *Materials Today Communications*, 28 (2021) 102546 <https://doi.org/10.1016/j.mtcomm.2021.102546>

321. *UV/H₂O₂ degradation of diclofenac in a photocatalytic fuel cell*: Rebecca Dhawle, Dionissios Mantzavinos and Panagiotis Lianos, *Applied Catalysis B: Environmental*, 299 (2021) 120706 <https://doi.org/10.1016/j.apcatb.2021.120706>
322. *Four electron selective O₂ reduction by a tetranuclear vanadium (IV/V)/hydroquinonate catalyst: application in the operation of Zn–air batteries*: Anastasios Keramidas, Sofia Hadjithoma, Chrysoula Drouza, Tatiana Santos Andrade and Panagiotis Lianos, *New Journal of Chemistry*, 46(2022)470-479 <https://pubs.rsc.org/en/content/articlehtml/2022/nj/d1nj03626b>
323. *Enhancement of the photoelectrochemical production of hydrogen peroxide under intermittent light supply in the presence of an optimized biochar supercapacitor*: Rebecca Dhawle, John Vakros, Vassilios Dracopoulos, Ioannis D. Manariotis, Dionissios Mantzavinos and Panagiotis Lianos, *Electrochimica Acta*, 427 (2022) 140846 <https://doi.org/10.1016/j.electacta.2022.140846>
324. *Enhancement of the photoelectrocatalytic degradation rate of a pollutant in the presence of a supercapacitor*: Spyridon Giannakopoulos, John Vakros, Vassilios Dracopoulos, Ioannis D. Manariotis, Dionissios Mantzavinos and Panagiotis Lianos, *Journal of Cleaner Production*, 377 (2022) 134456 <https://doi.org/10.1016/j.jclepro.2022.134456>
325. *Photo-charging a zinc-air battery using a Nb₂O₅-CdS photoelectrode*: Tatiana S. Andrade, Antero R. S. Neto, Francisco G. E. Nogueira, Luiz C. A. Oliveira, Márcio C. Pereira, Panagiotis Lianos, *Catalysts* 12 (2022) 1240; <https://doi.org/10.3390/catal12101240>
326. *Solar charging of a Zn-air battery*: Maria Katsaiti, Evangelos Papadogiannis, Vassilios Dracopoulos, Anastasios Keramidas and Panagiotis Lianos, *J. Power Sources* 555 (2023) 232384 <https://doi.org/10.1016/j.jpowsour.2022.232384>
327. *Study of the functionalities of a biochar electrode combined with a photoelectrochemical cell*: Spyridon Giannakopoulos, John Vakros, Ioannis D. Manariotis, Dionissios Mantzavinos and Panagiotis Lianos, *Materials* 16 (2023) 43 <https://doi.org/10.3390/ma16010043>
328. *A brief review on solar charging of Zn-air batteries*: Panagiotis Lianos, *Phys. Chem. Chem. Phys.* 25 (2023) 11883-11891 <https://pubs.rsc.org/en/content/articlehtml/2023/cp/d3cp00307h>
329. *Construction of small Zn-air batteries by dendrite-free Zn electrodeposition using renewable electricity*: Vasiliki Premeti, Maria Katsaiti, Evangelos Papadogiannis, Vassilios Dracopoulos and Panagiotis Lianos, *Materials Plus* 2 (2023) 24-32 <https://ojs.wiserpub.com/index.php/MP/article/view/3443>
330. *Experimental and Theoretical Investigation of the Mechanism of the Reduction of O₂ from Air to O₂²⁻ by V^{IV}O²⁺–N,N,N-Amide Compounds and Their Potential Use in Fuel Cells*: Michael Papanikolaou, Sofia Hadjithoma, Odysseas Keramidas, Chrysoula Drouza, Angelos Amoiridis, Alexandros Themistokleous, Sofia C. Hayes, Haralampos N. Miras, Panagiotis Lianos, Athanassios C. Tshipis, Themistoklis A. Kabanos, and Anastasios D. Keramidas, *Inorganic Chemistry* 63 (2024) 3229–3249 <https://doi.org/10.1021/acs.inorgchem.3c03272>
331. *Biochar from olive tree twigs and spent malt rootlets as electrodes in Zn-air batteries*: Theodoros Kottis, Nikolaos Soursos, Katerina Govatsi, Lamprini Sygellou, John Vakros, Ioannis D. Manariotis, Dionissios Mantzavinos, Panagiotis Lianos, *Journal of Colloid and Interface Science* 665 (2024) 10-18 <https://doi.org/10.1016/j.jcis.2024.03.114>
332. *A solar battery containing functional metal electrodes*: Nikolaos Xerovasilas, Alexios Antonopoulos, Vassilios Dracopoulos, Panagiotis Lianos, *Electrochimica Acta* 491 (2024) 144336 <https://doi.org/10.1016/j.electacta.2024.144336>
333. *Study of the Suitability of Corn Cob Biochar as Electrocatalyst for Zn–Air Batteries*: Nikolaos Soursos, Theodoros Kottis, Vasiliki Premeti, John Zafeiropoulos, Katerina Govatsi, Lamprini Sygellou, John Vakros, Ioannis D. Manariotis, Dionissios Mantzavinos and Panagiotis Lianos, *Batteries* 10 (2024) 209 <https://doi.org/10.3390/batteries10060209>
334. *Biochar from residues of anaerobic digestion and its application as electrocatalyst in Zn–air batteries*: Konstantinos Pergamalis, Charalampos Chaliotis, Antonios–Alkinoos Papadopoulos, Natalia Tsoukala, Angelos Amoiridis, John Vakros, Lamprini Sygellou, Eleana Kordouli, Katerina Govatsi, Michael Kornaros, Ioannis D. Manariotis, Anastasios Keramidas, Dionissios

- Mantzavinos, Panagiotis Lianos, *Journal of the Taiwan Institute of Chemical Engineers* 165 (2024) 105826 <https://doi.org/10.1016/j.jtice.2024.105826>
335. *Biochar made from Luffa Cylindrica and applied as bifunctional electrocatalyst in Zn-air batteries*: Natalia Tsoukala, Antonios-Alkinoos Papadopoulos, Vasiliki Premeti, Alexandros K. Bikogiannakis, Eftychia Martino, Angelos Amoiridis, Eleana Kordouli, Katerina Govatsi, Ioannis D. Manariotis, Georgios Kyriakou, Anastasios Keramidas, Dionissios Mantzavinos, Panagiotis Lianos, *RSC Advances* 14 (2024) 38924-38933 <https://pubs.rsc.org/en/content/articlelanding/2024/ra/d4ra07600a>
336. *An optimized Zn-air battery using a polymer-blend anion transfer membrane and a biochar electrocatalyst*: Maria Katsaiti, Sara Gjoshi, Valadoula Deimede, Ioannis D. Manariotis, Joannis K. Kallitsis, Dionissios Mantzavinos, Panagiotis Lianos, *Electrochimica Acta*, in press.