ΒΙΟΓΡΦΙΚΟ ΣΗΜΕΙΩΜΑ
Ιωάννης Δεληγιαννάκης

Θέση Εργασίας
Εργαστήριο Φυσικοχημείας Υλικών και Περιβάλλοντος
Τμήμα Φυσικής
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ΑΚΑΔΗΜΑΪΚΕΣ ΣΠΟΥΔΕΣ

1986-**Πτυχίο** Φυσικής, Πανεπιστήμιο Ιωαννίνων, Ιωάννινα.
1990-**MsC**. Ινστιτούτο Επιστήμης Υλιών «ΕΚΕΦΕ ΔΗΜΟΚΡΙΤΟΣ» Αθήνα.
1994-**Διδακτορική Διατριβή** Εργαστήριο Ηλεκτρονικού Παραμαγνητικού Συντονισμού (Επιβλέπων Δρ. Β. Πετρουλέας) Ινστιτούτο Επιστήμης Υλιών «ΕΚΕΦΕ ΔΗΜΟΚΡΙΤΟΣ» Αθήνα.

1994-1997 **Post Doctoral Researcher** (Individual Marie-Curie Fellowship) :Centre des Etudes Nucleaires SBE-CEA-Saclay France.
1997-1998 **Post Doctoral Researcher** (Marie-Curie Fellowship EU Return Grant) : Institute of Materials Science, NCSR Demokritos Athens, Greece
1999-2000 **Senior Researcher** :Universite Orsay-Saclay France.

ΑΚΑΔΗΜΑΪΚΗ ΕΞΕΛΙΞΗ

2014- **Καθηγητής**, Τμήμα Φυσικής, Πανεπιστήμιο Ιωαννίνων.
2012-2014 **Εκλεχθείς Επισκέπτης Καθηγητής** Department Mechamical Engineering ETH Zurich Switzerland
2010-2012 **Καθηγητής** Τμήμα Διχείρισης Πετιβάλλοντος & Φυσικών Πόρων Παν-μιο Πατρών
2006-2010 **Αναπληρωτής Καθηγητής** Τμ. Διαχείρισης Περιβάλλοντος & Φυσικών Πορων Πανεπιστ. Ιωαννίνων.
2000-2006 **Επίκουρος Καθηγητής** Τμ. Διαχείρισης Περιβάλλοντος & Φυσικών Πορων Πανεπιστήμιο Ιωαννίνων.

ΔΙΟΙΚΗΤΙΚΟ ΕΡΓΟ

1. (**2020**-σήμερα) **Διεθυντής Προγράμματος Μεταπτυχιακών Σπουδών στη Φυσική** Τμήμα Φυσικής , Π.Ι.
2. (**2018-2020**) **Αναπληρωτής Πρόεδρος** Τμήματος Φυσικής, Π.Ι.
3. (**2016-2018**) **Διευθύντής Τομέα** Στερεάς Κατάστσης Τμήματος Φυσικής, Π.Ι.
4. Μέλος της • Γενικής Συνέλευσης του Τμήματος Φυσικής (2014-σήμερα) • της ΕΔΕ του ΔΠΜΣ 'Χημεία και Τεχνολογία Υλικών' του Π.Ι. (2018-σήμερα)
5. Μέλος της Γενικής Συνέλευσης του Τμήματος ΔΠΦΠ (2000-2012)

ΔΙΟΙΚΗΤΙΚΕΣ ΘΕΣΕΙΣ ΣΕ ΔΙΕΘΝΕΙΣ ΟΡΓΑΝΙΣΜΟΥΣ

2018-2020 ***President*** International Humic Substances Society (IHSS) https://humic-substances.org/
2016-2018 ***Vice President*** International Humic Substances Society (IHSS) https://humic-substances.org/

ΕΠΙΒΛΕΨΗ ΜΕΤΑΠΤΥΧΙΑΚΩΝ ΦΟΙΤΗΤΩΝ/ΜΕΤΑΔΙΔΑΚΤΟΡΙΚΩΝ ΕΡΕΥΝΗΤΩΝ

Επιβλέπων Καθηγητής **23** Διδακτορικών Διατριβών (20 ολοκληρωθείσες, 3 εν εξελίξει) http:// *nanomaterials.physics.uoi.gr*

Επιβλέπων Καθηγητής **25** M.Sc. Theses (22 accomplished, 2 in progress)
Επιβλέπων Καθηγητής **87** Diploma theses (86 accomplished, 1 in progress)

ΣΥΓΓΡΑΦΙΚΟ-ΕΚΠΑΙΔΕΥΤΙΚΟ ΕΡΓΟ

Βιβλίο-Μονογραφία

ΥΛΙΚΑ ΚΑΙ ΠΕΡΙΒΑΛΛΟΝ
Ιωάννης Δεληγιαννάκης,
648σελ. *2η Εκδοσεις ΤΖΙΟΛΑ* ***2022,*** ISBN: 978-960-418-946-5

Επιστημονική Συν-επιμέλεια

[1] Φυσικη (Πρωτος Τομος) *Βασικες Αρχες, Μηχανικη - Κυματικη - Θερμοδυναμικη (Νεα Εκδοση)*
Halliday David, Resnick Robert, Walker Jearl,
2021, *Εκδόσεις GUTENBERG* ISBN13 9789600122343

[2] Βασικές Αρχές Φυσικής στις Επιστήμες Υγείας
Roger A. Freedman, Todd G. Ruskell, Philip R. Kesten, David L. Tauc
2019, *Εκδόσεις Broken Hill ISBN 9789925575237k*

EDITORIAL-BOARD MEMBERSHIP IN JOURNALS

[1] *Nanoenergy Advances* (MDPI) *https://www.mdpi.com/journal/nanoenergyadv/editors*
[2] *Nanomaterials* (MDPI) *https://www.mdpi.com/journal/nanomaterials/editors*
[3] *Energies* (MDPI) *https://www.mdpi.com/journal/energies/editors#editorialboard*

ΕΠΙΣΚΕΨΕΙΣ ΣΕ ΔΙΕΘΝΗ ΕΡΓΑΤΗΡΙΑ
2012-2013- Visiting Professor Particle Technology Laboratory ETH Zurich Dept of Mechanical and Process Engineering
2010-Institute of Physical and Theoretical Chemistry Center of Magnetic Resonance Goethe-University Frankfurt.
2009- Frumkin Inst. of Physical Chemistry, Russian Academy of Sci. Moscow Russia.
2007- Dept. of Chemistry Lemonosof University, Moscow Russia.
2003 -Section De Bioenergetique, Centre des Etudes Nucleaires, Saclay, France.
2002–Dept. of Chemistry University of Wrochlaw, Poland .
2001–Dept. of Physical Chemistry, Weissman Institute, Rehovot, Israel.

LAB OF *PHYSICAL CHEMISTRY OF MATERIALS & ENVIRONMENT*: RESEARCH INTERESTS AND ACTIVITY
www.nanomaterials.physics.uoi.gr

- **Industrilal Level Develoment od Apllied NanoMaterials for Energy & Environmental Technologies**

Our research aims to bridge the gap between lab-scale/academic research (TRL<4) and industrial-scale R&D (TRL>6) of nano-materials. Our strategy is to develop **High-Prerformance** functional nanostructutee using Flsme -Srrary-Pyrolysis (FSP) technology via precise control of the physics os nanolatices, photophysical properties and interfacial physical-chemisrty.

- **Artificial Photosytnehsis:** CO_2 convertion to green-fuels using solar power (photo-electrocatlysis). H_2 production from photo-catalytic H_2O splitting using highghly-efficent nanocatalysts. **http://nanomaterials.physics.uoi.gr/index.php/nartphoto/ :**

Fuell Cell Nanomaterials: Oxygen Reducction Reaction (ORR) electrodes, Hygrogen Oxidation electrodes.

- **Plasmonic Photoactive Nanomaterials:** plasmonic-heating, plasmonic hot-electron phenomena, plasmonic catalsysis
- **Nanosenosrs**: *in-situ* development of nanofilms for anansensosng of gases (H_2, CO_2, O_2, small organics)
- **Environmental Remediation Nanotechnology**: Heavy metal (Pd, Cd, Zn, Cu, Fe) depolution of waters with emphasis on High-Effciency Arseninc Remedation, Cr^{6+}-depolution, Lake-waters Amonia/Phsphate Anoxia abatment.
  Development of acive nananofilters for Microplastics, Nanotyreware remadiation.
  Nanohybrids

Physics of Nanomaterials -Flame Spray Pyrolysis (FSP) technology.
http://nanomaterials.physics.uoi.gr/index.php/2019/04/22/instalation-and-operation-of-scale-up-fsp-reactor/

Single- and Double Nozzle FSP engineering of Semiconductiong metal oxides, metal-oxide perovsikes or metalic nanomaterials and their heterostructures.
Reducing-Flame FSP engineering of suboxides oxides [magnelli phases Ti_mO_{2x-x}, Cu_2O, Cu^0, Cu_2S, FeO, Fe_3O_4, Fe^0, Ni^0] and their heterostructures.
Industrial-Scale FSP: Scale up production of nanomateirals, Kg-per-hour-capacity.
Z-scheme phtoresponsive nanodevices. Superparamagnetic nanomaterials. Plasmonic phenomena, Hydrogen Atom Tranfer physics.
Safe-by-Design Production on Nanomaterials using FSP-technology: nantotxicity control at the production-level (Mictotox, Rea ctive Oxygen Species, Metal-Leacing, Nano-size effects)

- **Development and applications of Advanced Electron Paramagnetic Resonance Spectroscopy.**

Spin Physics, Spin dynamics, spin lattice phenomena, Pulsed EPR spectroscopy, ESEEM, HYSCORE, study of interfacial phenome-na, radical reactions, transient intermadiates in (photo)catalytic cycles. High temperature EPR spectrosocpy, Parallel Mode EPR on Integer Spins.

ΔΙΠΛΩΜΑΤΑ ΕΥΡΕΣΙΤΕΧΝΙΑΣ (35 PATENTS)
HTTPS://PATENTSCOPE.WIPO.INT/SEARCH/EN/RESULT.JSF?_VID=P10-LUIG8I-27306(2023)

1. 1008850 MATERIAL BEING DERIVED FROM RECYCLED TYRE'S PYROLYTIC CARBON AND OPTIMIZED FOR ARSE-NIC REMOVAL **GR** - 13.09.2016 Int.Class C09C 1/48 Appl.No 20150100235

2.1008854PHOTOCATALYTICALLY-REGENERATED ABSORBENT COMPOSITE MATERIAL DERIVED FROM WASTED-TYRE PY-ROLYTIC CARBON AND TIO2-N,F DEPOSITION FOR PHENOL SORPTION-DEGRADATION (PHO.RE.CA)
GR - 20.09.2016 Int.Class C02F 1/28 Appl.No 20150100249

3.1007843ABSORBENT FOR REMOVING PHOSPHOROUS AND AMMONIA **GR** - 27.02.2013 Int.Class B01J 20/10 Appl.No 20110100702

4.1008352ANTIBACTERIAL HYBRID MATERIAL **GR** - 18.11.2014 Int.Class C09C 1/30 Appl.No 20130100459

5.2722369Hybrid nanoantioxidant materials **EP** - 23.04.2014 Int.Class C09C 1/30 Appl.No 12007181

6.3986842NANOCLINKER POWDER WITH BELITE AND, OPTIONALLY, ALITE CRYSTALLINE PHASES
EP - 27.04.2022 Int.Class C04B 7/345 Appl.No 20737527

7.WO/2014/060080HYBRID NANOANTIOXIDANT MATERIALS **WO** - 24.04.2014 Int.Class C09C 1/30 Appl.No PCT/EP2013/003055

8.1010073NANOCLINKER POWDER WITH BELITE AND, OPTIONALLY, ALITE CRYSTALLINE PHASES
GR - 19.01.2021 Int.Class C04B 7/345 Appl.No 20190100262

9.WO/2020/254840NANOCLINKER POWDER WITH BELITE AND, OPTIONALLY, ALITE CRYSTALLINE PHASES

WO - 24.12.2020 Int.Class C04B 7/345 Appl.No PCT/GR2020/

10.2842627Visible light photoactive nanoparticles and methods for the preparation thereof
EP - 04.03.2015 Int.Class B01J 35/02 Appl.No 13004278

11.WO/2023/118208COATED PARTICLES OF OXIDES OF METALS AND OF PHOSPHORUS, AND THEIR PREPARATION BY FLAME SPRAY PYROLYSIS **WO** - 29.06.2023 Int.Class C09C 3/06 Appl.No PCT/EP2022/087087

12.3130566PARTICULES D'OXYDES DE METAUX ET DE PHOSPHORE ENROBEES, ET LEUR PREPARATION PAR PYROLYSE PAR PROJECTION DE FLAMME **FR** - 23.06.2023 Int.Class A61K 8/19 Appl.No 2114163 E

13.WO/2023/118233COATED COLOURING PARTICLES OF METAL OXIDES AND SUBOXIDES, AND THEIR PREPARATION BY FLAME SPRAY PYROLYSIS **WO** - 29.06.2023 Int.Class C09C 3/06 Appl.No PCT/EP2022/087125

14.WO/2023/118188COATED CERIUM SUBOXIDE PARTICLES AND PREPARATION THEREOF BY FLAME SPRAY PYROLYSIS
WO - 29.06.2023 Int.Class C01F 17/235 Appl.No PCT/EP2022/087057

15.3130789PARTICULES DE SOUS-OXYDES DE CERIUM ENROBEES ET LEUR PREPARATION PAR PYROLYSE PAR PROJECTION DE FLAMME **FR** - 23.06.2023 Int.Class C01F 17/235 Appl.No 2114169

16.3105788PROCEDE DE PREPARATION DE PARTICULES ENROBEES D'OXYDE DE SILICIUM PAR PYROLYSE PAR PROJECTION DE FLAMME **FR** - 02.07.2021 Int.Class C01B 33/18 Appl.No 1915679

17.20230035202PROCESS FOR PREPARING PARTICLES COATED WITH SILICON OXIDE BY FLAME SPRAY PYROLYSIS
US - 02.02.2023 Int.Class C01B 13/34 Appl.No 17789496

18.4081482PROCESS FOR PREPARING PARTICLES COATED WITH SILICON OXIDE BY FLAME SPRAY PYROLYSIS
EP - 02.11.2022 Int.Class C01F 5/06 Appl.No 20839336

19.112022012664PROCESSO PARA PREPARAR PARTÍCULAS REVESTIDAS COM ÓXIDO DE SILÍCIO POR PIRÓLISE DE ASPERSÃO DE CHAMA **BR** - 06.09.2022 Int.Class C01F 5/06 Appl.No EP2020087874

20.3130563PARTICULES COLORANTES D'OXYDES ET DE SOUS-OXYDES DE METAUX ENROBEES, ET LEUR PREPARATION PAR PYROLYSE PAR PROJECTION DE FLAMME **FR** - 23.06.2023 Int.Class A61K 8/19 Appl.No 2114166

21.3105787PROCEDE DE PREPARATION DE PARTICULES D'OXYDE DE ZINC ENROBEES PAR PYROLYSE PAR PROJECTION DE FLAMME **FR** - 02.07.2021 Int.Class C01B 13/34 Appl.No 1915678

22.20220356071PROCESS FOR PREPARING COATED ZINC OXIDE PARTICLES BY FLAME SPRAY PYROLYSIS
US - 10.11.2022 Int.Class C01G 9/02 Appl.No 17789488

23.4081483PROCESS FOR PREPARING COATED ZINC OXIDE PARTICLES BY FLAME SPRAY PYROLYSIS
EP - 02.11.2022 Int.Class C01G 9/02 Appl.No 20839335

24.112022012659PROCESSO PARA PREPARAR PARTÍCULAS DE ÓXIDO DE ZINCO REVESTIDAS POR PIRÓLISE DE ASPERSÃO DE CHAMA **BR** - 06.09.2022 Int.Class C01G 9/02 Appl.No EP2020087873

25.20230037614METAL OXIDE PARTICLES COATED WITH A RARE-EARTH OXIDE AND PROCESS FOR PREPARING SAME BY FLAME SPRAY PYROLYSIS **US** - 09.02.2023 Int.Class A61K 8/02 Appl.No 17789501

26.112022012665PARTÍCULAS DE ÓXIDO DE METAL REVESTIDAS COM UM ÓXIDO DE TERRAS RARAS E PROCESSO DE PREPARAÇÃO DAS MESMAS POR PIRÓLISE POR ASPERSÃO DE CHAMA **BR** - 06.09.2022 Int.Class C01G 9/02 Appl.No EP2020087876

27.4081484METAL OXIDE PARTICLES COATED WITH A RARE-EARTH OXIDE AND PROCESS FOR PREPARING SAME BY FLAME SPRAY PYROLYSIS **EP** - 02.11.2022 Int.Class C01G 9/02 Appl.No 20842230

28.WO/2015/028529VISIBLE LIGHT PHOTOACTIVE NANOPARTICLES AND METHODS FOR THE PREPARATION THEREOF
WO - 05.03.2015 Int.Class B01J 35/02 Appl.No PCT/EP2014/068212

29.3105789PARTICULES D'OXYDE DE METAL ENROBEES D'OXYDE DE TERRE RARE ET SON PROCEDE DE PREPARATION PAR PYROLYSE PAR PROJECTION DE FLAMME **FR** - 02.07.2021 Int.Class C01F 17/32 Appl.No 1915681

30.3116434Utilisation d'un oxyde métallique particulier pour la photoconversion de composés organiques sur les matières kératiniques
FR - 27.05.2022 Int.Class A61K 8/19 Appl.No 2012072

31.20230414464USE OF A PARTICULAR METAL OXIDE FOR THE PHOTOCONVERSOIN OF ORGANIC COMPOUNDS ON KERATIN MATERIALS **US** - 28.12.2023 Int.Class A61K 8/22 Appl.No 18254041

32.4251120USE OF A PARTICULAR METAL OXIDE FOR THE PHOTOCONVERSION OF ORGANIC COMPOUNDS ON KERATIN MATERIALS **EP**
- 04.10.2023 Int.Class A61K 8/22 Appl.No 21810024

33.WO/2021/130370PROCESS FOR PREPARING PARTICLES COATED WITH SILICON OXIDE BY FLAME SPRAY PYROLYSIS
WO - 01.07.2021 Int.Class C01F 5/06 Appl.No PCT/EP2020/087874

34.WO/2021/130369PROCESS FOR PREPARING COATED ZINC OXIDE PARTICLES BY FLAME SPRAY PYROLYSIS
WO - 01.07.2021 Int.Class C01G 9/02 Appl.No PCT/EP2020/087873

35.WO/2021/130371METAL OXIDE PARTICLES COATED WITH A RARE-EARTH OXIDE AND PROCESS FOR PREPARING SAME BY FLAME SPRAY PYROLYSIS **WO** - 01.07.2021 Int.Class C01G 9/02 Appl.No PCT/EP2020/087876

ΜΕΛΛΟΣ ΔΙΕΘΝΩΝ ΕΠΙΤΗΜΟΝΙΚΩΝ ΕΝΩΣΕΩΝ

1] Member of the American Chemical Sociery
2] Member of the Materials Research Society
3] Member of the International EPR [ESR] Sociery
3] National Coordinator of the Greek-Chapter of the International Humic Substance Society (IHSS https://humic-substances.org/
4] Member of the Greek Catalytic Society

Ενδεικτική Λιστα Χρηματοδοούμενοων Προγραμμάτων στο πεδίο Νανουλικά-Ενέργεια-Περιβάλλον

- **[2024-2026] "***Multi-Functional Solid Oxide Electrolysis Cells for Renewable Hydrogen Production and reCycling of Carbon Dioxide* **ECoS** " Grant funded by Helenic Foundation for Research & Innovation (ΕΛΙΔΕΚ)

- **[2023-2027] "** *Elimination of Microplasticns Nanoplasticns and Nanotyreware from Surface Waters (INSPIRE)* (EU-HORIZON) **)**

- **[2020-2023] "***Engineering of High-Conduction Band (HCB) Nanophotocatalysts by Flame Spray Pyrolysis for Artificial-Photosynthesis* **nARTPHOTO" Grant funded by Helenic Foundation for Research & Innovation (ΕΛΙΔΕΚ) (Coordinator)**

- **[2020-2021] "***Engineering of Highly Reducing Nanophotocatalysts by Flame Spray Pyrolysis for H2O splitting and CO2 reduction* **"** Grant funded by Helenic General Secrerary of Research and Technology **(Coordinator)**

- **[2016-2017] "***Production of C3S Concrete phase by Flame Spray Pyrolysis* **"** Grant funded by TITAN **S.A. (Coordinator)**

- **[2016-2017] "***Reducing FSP production of Clored Nanomaterials***"** Grant funded by L OREAL **(Coordinator)**

- **[2017-2018] "***Production of Photoadsorbing Nanomaterials by Flame Spray Pyrolysis***"** Grant funded by L OREAL **(Coordinator)**

- **[2016-2017] "***Production of C3S Concrete phase by Flame Spray Pyrolysis* **"** Grant funded by TITAN **S.A. (Coordinator)**

- **[2016-2017] "***Reducing FSP production of Clored Nanomaterials***"** Grant funded by L OREAL **(Coordinator)**
- **[2016-2017] "***Ceramic-Pyrolytic Carbon Composites* **"** Grant funded by IKERAL **S.A. (Coordinator)**
- **[2015-2016] "***Controled Optical Properties of Nanomaterials***"** Grant funded by L OREAL **(Coordinator)**
- **[2012-2015]** THALIS **"***Development of Hybrid Meso and Nano prous Materaisl for Environmental and Catalytic Applications***" (Coordinator)**
- **[2012-2015]** SYNERGASIA **"***Development of Pyrolytic Carbon Materials for Environmental and Catalytic Applications***"**
- **[2011-2012] "***Development of low-Tg Glasses exploiting Red Mud wastes for HeavyMetal Remadiation***"** Grant funded by ALUMINION S.A. **(Coordinator)**

LIST of (ISI) PUBLICATIONS (>220 publications/ h index >46/ citations >6000)

ΕΝΔΕΙΚΤΙΚΈΣ ΠΡΟΣΦΑΤΕΣ ΔΗΜΟΣΙΕΥΣΕΙΣ ΣΤΟ ΠΕΔΙΟ ΝΑΝΟΤΕΧΝΟΛΙΑ-ΕΝΕΡΓΕΙΑ

Non-graphitized carbon/Cu_2O/Cu^0 nanohybrids with improved stability and enhanced photocatalytic H_2 production	Zindrou, A., Belles, L., Solakidou, M., Boukos, N., Deligiannakis, Y.*	*2023*	**Scientific Reports (Nature),** 13(1), 13999 DOI 10.1038/s41598-023-41211-4
Industrial-Scale Engineering of Nano {RuO_2/TiO_2} for Photocatalytic Water Splitting: The Distinct Role of {(Rutile)TiO_2-(Rutile)RuO_2} Interfacing	Solakidou, M., Zindrou, A., Smykała, S., Deligiannakis, Y.*	*2023*	**ACS Industrial and Engineering Chemistry Research** **DOI 10.1021/acs.iecr.3c04548**
Highly Crystalline Nanosized $NaTaO_3$/NiO Heterojunctions Engineered by Double-Nozzle Flame Spray Pyrolysis for Solar-to-H_2 Conversion: Toward Industrial-Scale Synthesis	Psathas, P., Moularas, C., Smykała, S., Deligiannakis, Y.*	*2023*	**ACS Appl. Nano Materi**als 6, 4, 2658–2671 DOI 10.1021/acsanm.2c05066
Advanced Flame Spray Pyrolysis (FSP) Technologies for Engineering Multifunctional Nanostructures and Nanodevices REVIEW	Dimitriou, C., Psathas, P., Solakidou, M., Deligiannakis, Y*.	*2023*	**Nanomaterials,** 13(23), 3006 **DOI 10.3390/nano13233006**
Electron Paramagnetic Resonance Quantifies Hot-Electron Transfer from Plasmonic Ag@SiO_2 to Cr^{6+}/Cr^{5+}/Cr^{3+}	Moularas, C., Dimitriou, C., Georgiou, Y., Boukos, N., Deligiannakis, Y.*	*2023*	**Journal of Physical Chemistry C** 127(4), pp. 2045-2057 DOI 10.1021/acs.jpcc.2c07837
Controlled Photoplasmonic Enhancement of H_2 Production via Formic Acid Dehydrogenation by a Molecular Fe Catalyst	Gemenetzi, A., Deligiannakis, Y., Louloudi, M.	*2023*	**ACS Catalysis,** 13(14), pp. 9905–9917 DOI 10.1021/acscatal.3c01925
Control of monomeric Vo's versus Vo clusters in ZrO_{2-x} for solar-light H_2 production from H_2O at high-yield (millimoles gr^{-1} h^{-1})	Deligiannakis, Y.* Mantzanis, A., Zindrou, A., Smykala, S., Solakidou, M.	*2022*	**Scientific Reports (Nature)** 12(1),15132 DOI_10.1038/s41598-022-19382-3
Reversible Plasmonic Switch in a Molecular Oxidation Catalysis Process	Gemenetzi, A., Moularas, C., Belles, L., Deligiannakis, Y.* Louloudi, M.*	*2022*	**ACS Catalysis** 12(16), pp. 9908-9921 DOI_10.1021/acscatal.2c02287
Safe-by-Design Flame Spray Pyrolysis of SiO2 Nanostructures for Minimizing Acute Toxicity	Fragou, F., Stathi, P., Deligiannakis, Y.* Louloudi, M.*	*2022*	**ACS Applied Nano Materials** 5(6), pp. 8184-8195 DOI_10.1021/acsanm.2c01273
Double-nozzle flame spray pyrolysis as a potent technology to engineer noble metal-TiO_2 nanophotocatalysts for efficient H_2 production REVIEW	Solakidou, M., Georgiou, Y., Deligiannakis, Y.*	*2021*	**Energies** 14(4),817 DOI 10.3390/en14040817
A Hybrid Silk@Zirconium MOF Material as Highly Efficient As^{III}-sponge	Georgiou, Y., Rapti, S., Mavrogiorgou, A., Louloudi, M., Deligiannakis, Y.*	*2020*	**Scientific Reports (Nature)** 10(1),9358 DOI_10.1038/s41598-020-66091-w
Thermoplasmonic heat generation efficiency by nonmonodisperse core-Shell Ag^0@SiO_2 Nanoparticle Ensemble	Moularas, C., Georgiou, Y., Adamska, K., Deligiannakis, Y.*	*2019*	**Journal Physical Chemistry C** 123(36), pp. 22499-22510 DOI 10.1021/acs.jpcc.9b06532

FULL-LIST of Publicatiosn is accessible at

https://www.scopus.com/results/results.uri?sid=880d8fa332f931b42e04c238809edbd2&src=s&sot=b&sdt=b&origin=searchbasic&rr=&sl=28&s=AUTHOR-NAME(deligiannakis%2Cy)&searchterm1=deligiannakis%2Cy&searchTerms=&connectors=&field1=AUTHOR_NAME&fields=