



## Minas M. Stylianakis

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**Dr. Minas M. Stylianakis** is Assistant Professor in the Department of Nursing of the Hellenic Mediterranean University and Research Scientist (Hybrid Nanostructures group) in the Institute of Electronic Structure and Laser (IESL) of the Foundation for Research and Technology (FORTH) – Hellas. He received his PhD degree in Chemistry, in 2015 from the University of Crete. His expertise lies in the synthesis, solution processing and characterization of novel universal carbon- and graphene-based materials, 2D materials, metal oxides and organic compounds (small molecules and polymers). His fields of interest include the development of biomedical and environmental applications, regenerative nanomedicine (drug-delivery systems, implants design/development and tissue engineering), self-healing and antimicrobial coatings, additive manufacturing and energy production and storage. He has published 67 articles in international peer-reviewed journals, 3 book chapters, two edited books, 5 peer-reviewed articles in conference proceedings and 2 laboratory manuals. To date, he has received 3470 citations (3321 non-self), with an *h*-index of 34 (Scopus 07/2026), and 4350 citations, with an *h*-index of 36 (Google Scholar 07/2026). He has presented his work in 4 invited talks in international meetings and more than 70 times at international conferences. He also serves as Referee, Guest Editor and Editorial Board Member in high impact international scientific journals. Very recently he was invited to be the Chair of the Session *Carbon Nanomaterials, Graphene and 2D Materials*, in the frame of the 4th International Online Conference on Nanomaterials. Finally, he is a certified evaluator for the General Secretariat for Research and Technology (GSRT), Greece, since 2017.

## ACADEMIC RECORD

### 1. Education

#### **Ph.D. in Chemistry, 2014.**

Chemistry Department, University of Crete (UoC), Greece.

Thesis Title: Growth of Photosensitive Nanostructured Hybrid Applications.

Advisor: Professor Spiros H. Anastasiadis.

#### **M.Sc. in Chemistry of Advanced Materials, 2009.**

Chemistry Department, University of Patras (Upatras), Patras, Greece.

Thesis Title: Novel Materials and Polymers for Organic Solar Cells (OPVs) fabrication.

Advisor: Professor John A. Mikroyannidis.



## **B.Sc. in Chemistry, 2007.**

Chemistry Department, University of Patras (Upatras), Patras, Greece.

Diploma Thesis: Luminescent monomer of substituted tetrastrylpyrene and poly(*p*-phenylenevinylene) derivative with pyrene segments: Synthesis and photophysics.

Advisor: Professor John A. Mikroyannidis.

## **2. Career**

- **12/2021 - present**, Assistant Professor, Department of Nursing, Faculty of Health Sciences, Hellenic Mediterranean University (HMU).
- **12/2021 - present**, Collaborating University Faculty Member, Hybrid Nanostructures group, Institute of Electronic Structure & Laser (IESL), Foundation for Research and Technology - Hellas (FORTH).
- **07/2020 - 12/2021**, Post-Doctoral Researcher, Hybrid Nanostructures group, Institute of Electronic Structure & Laser (IESL), Foundation for Research and Technology - Hellas (FORTH).
- **04/2019 - 07/2020**, Department of Electrical and Computer Engineering - School of Engineering - Hellenic Mediterranean University (HMU).
- **11/2014 - 04/2019**, Post-Doctoral Researcher, Department of Electrical Engineering, School of Engineering, Technological Educational Institute of Crete (TEI of Crete).

## **3. Academic experience**

During his Academic career, he has taught several undergraduate modules in the Departments of Nursing and Electrical & Computer Engineering of the Hellenic Mediterranean University, including *Biochemistry, Introduction to Cell Biology, Human Genetics, Biomedical & Environmental Nanotechnology, Physiology, Environmental Technology* and *Advanced Materials & Microelectronics, Scientific Bibliography Search – Principles of Scientific Writing and Presentation, Research Methodology, Personalized Care-Precision Nursing*.

## **4. Fellowships/Awards**

- **Seal of Excellence (Horizon - S3E Start)**. (6<sup>th</sup> February – 18<sup>th</sup> June 2024) Development of Polymeric Nanocomposites for Surgical and Medical Tools and Consumables Reinforcement (DOPANTS) in the frame of S3E Start, a cohort-based training programme that provides skills in technology commercialization and entrepreneurship, funded by the EU.
- **State Scholarships Foundation (SSF)**. (2017-2019) Development of Printable 2D Semiconducting Nanomaterials as Universal Inks of Tunable Properties for Flexible Organic and Hybrid Electronics (2016-050-0503-8202).
- **1<sup>st</sup> Materials Horizons Poster Prize** of Royal Society of Chemistry (RSC) (2016) in the frame of the OPSC Conference, Heraklion, Greece 19<sup>th</sup> - 20<sup>th</sup> October 2016.
- **Heracleitus II**. (2011-2014) Operational Program “Education and Lifelong Learning” of the National Strategic Reference Framework (NSRF) Research Funding Program (KA 3396).

## **5. Participation in EU and National Funded Research & Educational Projects**

- **10/2024 – present, HORIZON Action Grant Budget Based, Type of action: HORIZON-RIA** (*Multi-scale multi-process machine for high value-added products with disruptive functionalities (WISE)*) - Project number: 101138718



- **The Hellenic Foundation for Research and Innovation (HFRI) (sub-action 1)** (*The role of food-derived microRNA in modulation of extracellular matrix (ECM) and microbiome in health and disease (XeMiBio)*) – Project number: 16378
- **2024 – 2025, «SUB2 «Πανεπιστήμια Αριστείας»** ΟΠΣ ΤΑ5180665 (HMU Senate decisions no. 57/20.06.2024) - Project number 17494)
- **06/2023 - present, HORIZON Action Grant Budget Based Type of Action: HORIZON-RIA** (*Surface Transfer of Pathogens (STOP)*) - Project number: 101057961
- **12/2022 – 12/2024, Internal Funding of the Hellenic Mediterranean University** (*Development of Polymeric Nanocomposites for Surgical and Medical Tools and Consumables Reinforcement (DOPANTS)*) - ΑΔΑ:6Ζ2446ΜΗ2Ι-ΖΓΚ
- **01/2021 – 06/2023, Operational Programme Competitiveness, Entrepreneurship and Innovation 2014-2020 (EPAnEK)** (*Synthesis of waterborne polyurethane dispersions with encapsulation of micro/nano structures for ecological self-healing coatings (SELFNANOPUD)*) – (Project No Τ2ΕΔΚ-00307)
- **07/2020 – 12/2020, Infrastructure Network for Nanotechnology, Advanced Materials and Micro/Nanoelectronics** (INNOVATION-EL - 5002772)
- **03/2019 – 06/2020, ERASMUS+ - Providing a Teaching and Learning Open and Innovate Toolkit for Evidence based Practice to Nursing European Curriculum** (Project No 80663)
- **01/2019 - 08/2020, Operational Programme Competitiveness, Entrepreneurship and Innovation 2014-2020 (EPAnEK)** (*Alternative Smart Ocular Implants with Controlled Ophthalmic Pharmacokinetics (EOF)*) - Project No Τ1ΕΔΚ-02024)
- **09/2018 – 09/2020, Innovative Photonics Education in NanoTechnology (iPEN) - Photonic Processes Education in Nanotechnology** (project No 586165-EPP-1-2017-ELEPPKA2-CBHE-JP (2017-2926/001-001))
- **12/2018 – 06/2020, Operational Programme Competitiveness, Entrepreneurship and Innovation 2014-2020 (EPAnEK)** (*Low-cost inkjet printable perovskite solar glass panels (PrintWin)*) - Project No Τ1ΕΔΚ-01082)
- **04/2016 – 12/2017, Graphene Core1 - Graphene-based Disruptive Technologies** (Project No 717/Θ.3ο/25.04.2016)
- **04/2016 – 04/2016, ERASMUS+ - Electronics for the beyond the silicon era (ELBYSIER)** (Project No 2015-1-EL01-KA203-013988)
- **09/2015 – 03/2016, Graphene Flagship - Graphene-Based Revolutions in ICT and Beyond** (Project No FP7-ICT-2013-604391)
- **11/2014 – 07/2015, ARISTEIA (Excellence Award) II - Plasmonic nanoparticles for efficient, stable and cheap organic photovoltaic devices (PeNEloPe)** (Project No 3116)
- **08/2014 – 09/2016 Erasmus LLP Multilateral Project - Organic Electronics and Applications** (Project No 539876-LLP-1-2013-1-GR-ERASMUS-EQR)

## 6. Published Work

### ➤ Publications in Peer-Reviewed Journals

1. A prospective randomised comparison of two different stenting sutures when using the Baerveldt 101–350 aqueous shunt – Lab transition to clinical process, E. Sykakis, A. Tsiogka, V. Selimis, M. I. Aslanides, A. Skouras, G. Kenanakis, I. M. Aslanides, **M. M. Stylianakis\***. *Acta Ophthalmologica* **2026**, <https://doi.org/10.1111/aos.70174>
2. A Precise Strategy to Evaluate the Dispersibility of *g*-C<sub>3</sub>N<sub>4</sub>, K. Giannaris, S. Stefa, V. Binas, **M. M. Stylianakis\***, K. Chrissopoulou, S. H. Anastasiadis. *Carbon Trends* **2026**, 24, 100666. <https://doi.org/10.1016/j.cartre.2026.100666>
3. Superhydrophobic and Water-Repellent Coatings with Dual-Scale Roughness Based on Waterborne MXene Nanocomposites, F. Gojda, M. Vlasiadi, A. Thomos, F. Krasanakis, **M. M.**



- Stylianakis\***, K. Chrissopoulou, S. H Anastasiadis. *ACS Applied Nano Materials* **2026**, 9, 12081–12095. <https://doi.org/10.1021/acsnm.6c01931>
- Graphene derivatives as self-healing enhancers in functional polyurethane coatings, E. Giannakaki, V. Tzatzadakis, **M. M. Stylianakis\***, K. Chrissopoulou, S. H. Anastasiadis. *Progress in Organic Coatings* **2026**, 219, 110333. <https://doi.org/10.1016/j.porgcoat.2026.110333>
  - Development of non-fluorinated superhydrophobic and cytocompatible polymer coatings, E. Petsi, F. Gojda, F. Krasanakis, A. Shaalan, **M. M. Stylianakis**, L. Di Silvio, K. Chrissopoulou, S. H Anastasiadis. *Polymer* **2026**, 352, 129851. <https://doi.org/10.1016/j.polymer.2026.129851>
  - A Comprehensive Life Cycle Assessment of Graphene Derivatives Synthesized by a Modified Hummers' Method, V. Tzatzadakis, E. Giannakaki, F. Krasanakis, A. Skouras, A. G Asimakopoulou, E. Patelarou, K. Chrissopoulou, S. H. Anastasiadis, **M. M. Stylianakis\***. *ACS Omega* **2026**, 11, 3108–3114. <https://doi.org/10.1021/acsomega.5c09672>
  - Environmental Footprint Assessment of Emerging PLA/MXene Nanocomposites, V. Tzatzadakis, A. Thomos, F. Gojda, F. Krasanakis, A. G Asimakopoulou, A. Skouras, K. Chrissopoulou, E. Patelarou, S. H. Anastasiadis, **M. M Stylianakis\***. *ACS Applied Engineering Materials* **2026**, 4, 157–168. <https://doi.org/10.1021/acsaenm.5c00885>
  - Trends, Patterns, and Public Health Implications of Dietary Supplement Recalls: A Decade-Long Analysis from the Greek National Organization for Medicines (2015–2024), A. Skouras, **M. M. Stylianakis**, V. Tzatzadakis, E. Magripli, A. Vantarakis, E. E. Ntzani. *Journal of Dietary Supplements* **2025**, 1–28.
  - Genomic-genetic literacy of healthcare professionals in the context of precision health implementation and future perspectives, E. Petrogianni, A. Patelarou, A. Laliotis, **M. Stylianakis**, M. Zografakis-Sfakianakis, E. Patelarou. *Archives of Hellenic Medicine* **2024**, 41, 470.
  - Improving the operational stability of perovskite solar cells with cesium-doped graphene oxide interlayer, M. Almalki, K. Anagnostou, K. Rogdakis, F. T. Eickemeyer, M. Othman, **M. M. Stylianakis**, D. Tsikritzis, A. Q. Alanazi, N. Tzoganakis, L. Pfeifer, R. Therisod, X. Mo, C. M. Wolff, A. Hessler-Wyser, S. M. Zakeeruddin, H. Zhang, E. Kymakis, M. Grätzel. *Journal of Energy Chemistry* **2024**, 96, 483.
  - Capitalization of Graphene/Chitosan Nanocomposites as Intriguing Vehicles for Targeted Anti-Cancer Drug Delivery. M. Kourti, A. Theodorakis, A. Skouras, K. Chrissopoulou, S. H. Anastasiadis, **M. M. Stylianakis\***. *Advanced Therapeutics* **2023**, 2300177.
  - Impact of Graphene Derivatives as Artificial Extracellular Matrices on Mesenchymal Stem Cells. R. Ikram, S. A. Ahmad Shamsuddin, B. Mohamed Jan, M. Abdul Qadir, G. Kenanakis, **M. M. Stylianakis\***, S. H. Anastasiadis. *Molecules* **2022**, 27, 379.
  - Recent Advances in Chitin and Chitosan/Graphene-Based Bio-Nanocomposites for Energetic Applications. R. Ikram, B. Mohamed Jan, M. Abdul Qadir, A. Sidek, **M. M. Stylianakis**, G. Kenanakis. *Polymers* **2021**, 13, 3266.
  - Development of Waste Polystyrene-Based Copper Oxide/Reduced Graphene Oxide Composites and Their Mechanical, Electrical and Thermal Properties. W. Ahmad, Q. Ahmad, M. Yaseen, I. Ahmad, F. Hussain, B. Mohamed Jan, R. Ikram, **M. M. Stylianakis**, G. Kenanakis. *Nanomaterials* **2021**, 11, 2372.
  - A high performance flexible and robust printed thermoelectric generator based on hybridized Te nanowires with PEDOT:PSS. G. Karalis, L. Tzounis, C. K. Mytafides, K. Tsirka, P. Formanek, **M. Stylianakis**, E. Kymakis, A. S. Paipetis. *Applied Energy* **2021**, 294, 117004.



16. Distinguished Contributions in the Fields of Biomedical and Environmental Applications Incorporating Nanostructured Materials and Composites in Journal *Molecules*. **M. M. Stylianakis\***. *Molecules* **2021**, 26, 2112.
17. Air-Processed Infrared-Annealed Printed Methylammonium-Free Perovskite Solar Cells and Modules Incorporating Potassium-Doped Graphene Oxide as an Interlayer. L. A. Castriotta, F. Matteocci, L. Vesce, L. Cina, A. Agresti, S. Pescetelli, A. Ronconi, M. Löffler, **M. M. Stylianakis**, F. Di Giacomo, P. Mariani, M. Stefanelli, E. Mae Speller, A. Alfano, B. Paci, A. Generosi, F. Di Fonzo, A. Petrozza, B. Rellinghaus, E. Kymakis, A. Di Carlo. *ACS Applied Materials & Interfaces* **2021**, 13, 11741.
18. Tribological Performance Investigation of a Commercial Engine Oil Incorporating Reduced Graphene Oxide as Additive. H. Kaleli, S. Demirtas, V. Uysal, I. Karnis, **M. M. Stylianakis\***, S. H. Anastasiadis, D.-E. Kim. *Nanomaterials* **2021**, 11, 386.
19. Highly Sensitive Humidity Sensors Based on Polyethylene Oxide/CuO/Multi Walled Carbon Nanotubes Composite Nanofibers. W. Ahmad, B. Jabbar, I. Ahmad, B. Mohamed Jan, **M. M. Stylianakis**, G. Kenanakis, R. Ikram. *Materials* **2021**, 14, 1037.
20. Oxidative Desulfurization of Petroleum Distillate Fractions Using Manganese Dioxide Supported on Magnetic Reduced Graphene Oxide as Catalyst. W. Ahmad, A. U. Rahman, I. Ahmad, M. Yaseen, B. Mohamed Jan, **M. M. Stylianakis**, G. Kenanakis, R. Ikram. *Nanomaterials* **2021**, 11, 203.
21. An Extensive Case Study on the Dispersion Parameters of HI-assisted Reduced Graphene Oxide and its Graphene Oxide Precursor. K. Anagnostou, **M. M. Stylianakis\***, G. Atsalakis, D. M. Kosmidis, A. Skouras, I. J. Stavrou, K. Petridis, E. Kymakis. *Journal of Colloid & Interface Science* **2020**, 580, 332.
22. A two-fold engineering approach based on Bi<sub>2</sub>Te<sub>3</sub> flakes towards efficient and stable inverted perovskite solar cells. D. Tsikritzis, K. Rogdakis, K. Chatzimanolis, M. Petrović, N. Tzoganakis, L. Najafi, B. Martín-García, R. Oropesa Nuñez, S. Bellani, A. Esà Del Rio Castillo, M. Prato, **M. M. Stylianakis**, F. Bonaccorso, E. Kymakis. *Materials Advances* **2020**, 1, 450.
23. Reduced Graphene Oxide Improves Moisture and Thermal Stability of Perovskite Solar Cells. H.-S. Kim, B. Yang, **M. M. Stylianakis**, E. Kymakis, S. M. Zakeeruddin, M. Grätzel, A. Hagfeldt. *Cell Reports Physical Science* **2020**, 1, 100053.
24. Optoelectronic Nanodevices. **M. M. Stylianakis\***. *Nanomaterials* **2020**, 10, 520.
25. Benzothiadiazole Based Cascade Material to Boost the Performance of Inverted Ternary Organic Solar Cells. M. Krassas, C. Polyzoidis, P. Tzourmpakis, D. M. Kosmidis, G. Viskadouros, N. Kornilios, G. Charalambidis, V. Nikolaou, A. G. Coutsolelos, K. Petridis, **M. M. Stylianakis\***, E. Kymakis. *Energies* **2020**, 13, 450.
26. Emphasizing the Operational Role of a Novel Graphene-Based Ink into High Performance Ternary Organic Solar Cells. **M. M. Stylianakis\***, D. M. Kosmidis, K. Anagnostou, C. Polyzoidis, M. Krassas, G. Kenanakis, G. Viskadouros, N. Kornilios, K. Petridis, E. Kymakis. *Nanomaterials* **2020**, 10, 89.
27. Limitations of a polymer-based hole transporting layer for application in planar inverted perovskite solar cells. M. Petrovic, T. Maksudov, A. Panagiotopoulos, E. Serpetzoglou, I. Konidakis, **M. M. Stylianakis**, E. Stratakis, E. Kymakis. *Nanoscale Advances* **2019**, 1, 3107.
28. Building an Organic Solar Cell: Fundamental Procedures for Device Fabrication. K. Anagnostou, **M. M. Stylianakis\***, K. Petridis, E. Kymakis. *Energies* **2019**, 12, 2188.
29. Inorganic and Hybrid Perovskite Based Laser Devices: A Review. **M. M. Stylianakis**, T. Maksudov, A. Panagiotopoulos, G. Kakavelakis, K. Petridis. *Materials* **2019**, 12, 859.



30. Updating the Role of Reduced Graphene Oxide Ink on Field Emission Devices in Synergy with Charge Transfer Materials. **M. M. Stylianakis\***, G. Viskadourous, C. Polyzoidis, G. Veisakis, G. Kenanakis, N. Kornilios, K. Petridis, E. Kymakis. *Nanomaterials* **2019**, 9, 137.
31. Graphene-Based Inverted Planar Perovskite Solar Cells: Advancements, Fundamental Challenges, and Prospects. K. Petridis, G. Kakavelakis, **M. M. Stylianakis**, Emmanuel Kymakis. *Chemistry An Asian Journal* **2018**, 13, 240.
32. Ternary solution-processed organic solar cells incorporating 2D materials. **M. M. Stylianakis**, D. Konios, C. Petridis, G. Kakavelakis, E. Stratakis, E. Kymakis. *2D Materials* **2017**, 4, 042005.
33. Ternary Organic Solar Cells incorporating Zinc Phthalocyanine with Improved Performance Exceeding 8.5%. **M. M. Stylianakis\***, D. Konios, G. Viskadourous, D. Vernardou, N. Katsarakis, E. Koudoumas, S. H. Anastasiadis, E. Stratakis, E. Kymakis. *Dyes & Pigments* **2017**, 146, 408.
34. Solution-Processed Reduced Graphene Oxide Electrodes for Organic Photovoltaics. C. Petridis, D. Konios, **M. M. Stylianakis**, G. Kakavelakis, M. Sygletou, K. Savva, P. Tzourmpakis, M. Krassas, N. Vaenas, E. Stratakis, E. Kymakis. *Nanoscale Horizons* **2016**, 1, 375.
35. Energy-level alignment and open-circuit voltage at graphene/polymer interfaces: Theory and experiment. K. Noori, D. Konios, **M. M. Stylianakis**, E. Kymakis, F. Giustino. *2D Materials* **2016**, 3, 015003.
36. Efficient ternary organic photovoltaics incorporating graphene-based porphyrin molecule as a universal electron cascade material. **M. M. Stylianakis**, D. Konios, G. Kakavelakis, G. Charalambidis, E. Stratakis, A. G. Coutsolelos, E. Kymakis, S. H. Anastasiadis. *Nanoscale* **2015**, 7, 17827.
37. Efficiency enhancement of organic photovoltaic devices by embedding uncapped Al nanoparticles in the hole transport layer. M. Krassas, G. Kakavelakis, **M. M. Stylianakis**, N. Vaenas, E. Stratakis, E. Kymakis. *RSC Advances* **2015**, 5, 7104.
38. Functionalized Graphene as an Electron Cascade Acceptor for Air Processed Organic Ternary Solar Cells. F. Bonaccorso, N. Balis, **M. M. Stylianakis**, M. Savarese, C. Adamo, M. Gemmi, V. Pellegrini, E. Stratakis, E. Kymakis. *Advanced Functional Materials* **2015**, 25, 3870.
39. Photochemical Synthesis of Solution-Processable Graphene Derivatives with Tunable Bandgaps for Organic Solar Cells. **M. M. Stylianakis**, M. Sygletou, K. Savva, G. Kakavelakis, E. Kymakis, E. Stratakis. *Advanced Optical Materials* **2015**, 3, 658.
40. Dispersion behavior of graphene oxide and reduced graphene oxide. D. Konios, **M. M. Stylianakis**, E. Stratakis, E. Kymakis *Journal of Colloid & Interface Science* **2014**, 430, 108.
41. Enhanced Field Emission of WS<sub>2</sub> Nanotubes. G. M. Viskadourous, A. Zak, **M. Stylianakis**, E. Kymakis, R. Tenne, E. Stratakis. *Small* **2014**, 10, 2398.
42. Enhanced Field Emission from Reduced Graphene Oxide Polymer Composites. G. M. Viskadourous, **M. M. Stylianakis**, E. Kymakis, E. Stratakis. *ACS Applied Materials & Interfaces* **2014**, 6, 388.
43. Optical limiting action of few layered graphene oxide dispersed in different solvents. N. Liaros, K. Iliopoulos, **M. M. Stylianakis**, E. Koudoumas, S. Couris. *Optical Materials* **2014**, 36, 112.
44. Plasmonic organic photovoltaic devices with graphene-based buffer layers for stability and efficiency enhancement. E. Stratakis, **M. M. Stylianakis**, E. Koudoumas, E. Kymakis. *Nanoscale* **2013**, 5, 4144.
45. Flexible Organic Photovoltaic Cells with In Situ Nonthermal Photoreduction of Spin-Coated Graphene Oxide Electrodes. E. Kymakis, K. Savva, **M. M. Stylianakis**, C. Fotakis, E. Stratakis. *Advanced Functional Materials* **2013**, 23, 2742.



46. Organic bulk heterojunction photovoltaic devices based on polythiophene - graphene composites. **M. M. Stylianakis**, E. Stratakis, E. Koudoumas, E. Kymakis, S. H. Anastasiadis. *ACS Applied Materials & Interfaces* **2012**, 4, 4864.
47. Solution-processable graphene linked to 3,5-dinitrobenzoyl as an electron acceptor in organic bulk heterojunction photovoltaic devices. **M. M. Stylianakis**, G. D. Spyropoulos, E. Stratakis, E. Kymakis. *Carbon* **2012**, 50, 5554.
48. Organic bulk heterojunction photovoltaic devices with surfactant-free Au nanoparticles embedded in the active layer. G. D. Spyropoulos, **M. M. Stylianakis**, E. Stratakis, E. Kymakis. *Applied Physics Letters* **2012**, 100, 213904.
49. Efficiency enhancement of organic photovoltaics by addition of carbon nanotubes into both active and hole transport layer. **M. M. Stylianakis**, E. Kymakis. *Applied Physics Letters* **2012**, 100, 093301.
50. Spin coated carbon nanotubes as the hole transport layer in organic photovoltaics. E. Kymakis, **M. M. Stylianakis**, G. D. Spyropoulos, E. Stratakis, E. Koudoumas, C. Fotakis. *Solar Energy Materials & Solar Cells* **2012**, 96, 298.
51. Spin coated graphene films as the transparent electrode in organic photovoltaic devices. E. Kymakis, E. Stratakis, **M. M. Stylianakis**, E. Koudoumas, C. Fotakis. *Thin Solid Films* **2011**, 520, 1238.
52. Plasmonic organic photovoltaics doped with metal nanoparticles. G. D. Spyropoulos, **M. M. Stylianakis**, E. Stratakis, E. Kymakis. *Photonics & Nanostructure-Fundamentals & Applications* **2011**, 9, 184.
53. Efficient Bulk Heterojunction Devices based on Phenylenevinylene Small Molecule and Perylene-Pyrene Bisimide. G. D. Sharma, P. Suresh, J. A. Mikroyannidis, **M. M. Stylianakis**. *Journal of Materials Chemistry* **2010**, 20, 561.
54. Synthesis of perylene monoimide derivative and its use for quasi-solid-state dye sensitized solar cells based on bare and modified nano-crystalline ZnO photoelectrodes. J. A. Mikroyannidis, **M. M. Stylianakis**, P. Suresh, M. S. Roy, G. D. Sharma. *Energy & Environmental Science* **2009**, 2, 1293.
55. Bulk heterojunction organic photovoltaic devices based on low band gap small molecule BTDTNP and perylene-anthracene diimide. G. D. Sharma, P. Balraju, J. A. Mikroyannidis, **M. M. Stylianakis**. *Solar Energy Materials & Solar Cells* **2009**, 93, 2025.
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58. A facile, covalent modification of single-wall carbon nanotubes by thiophene for use in organic photovoltaic cells. **M. M. Stylianakis**, J. A. Mikroyannidis, E. Kymakis. *Solar Energy Materials and Solar Cells* **2010**, 94, 267.
59. Low Band Gap Vinylene Compounds with Triphenylamine and Benzothiadiazole Segments for Use in Photovoltaic Cells. J. A. Mikroyannidis, **M. M. Stylianakis**, P. Suresh, P. Balraju and G. D. Sharma. *Organic Electronics* **2009**, 10, 1320.



60. Efficient Hybrid Bulk Heterojunction Solar Cells Based on Phenylenevinylene Copolymer, Perylene Bisimide and TiO<sub>2</sub>. J. A. Mikroyannidis, **M. M. Stylianakis**, P. Suresh and G. D. Sharma. *Solar Energy Materials & Solar Cells* **2009**, 93, 1792.
61. Synthesis, photophysics of two new perylene bisimides and their photovoltaic performances in quasi solid-state dye sensitized solar cells. J. A. Mikroyannidis, **M. M. Stylianakis**, M.S. Roy, P. Suresh, G. D. Sharma. *Journal of Power Sources* **2009**, 194, 1171.
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#### ➤ Chapters in Books

1. Solution-Processed Graphene-Based Transparent Conductive Electrodes as Ideal ITO Alternatives for Organic Solar Cells. **M. M. Stylianakis**, D. Konios, K. Petridis, E. Kymakis. *Graphene Materials - Advanced Applications* **2017**, Dr. George Kyzas (Ed.), InTech, DOI:10.5772/67919.
2. Organometallic Hybrid Perovskites for Humidity and Gas Sensing Applications. E. Kymakis, A. Panagiotopoulos, **M. M. Stylianakis**, K. Petridis. *2D Nanomaterials for Energy Applications, Graphene and Beyond, Micro and Nano Technologies* **2020**, Pages 131-147. DOI: 10.1016/B978-0-12-816723-6.00005-8.
3. Biodegradable Nanomaterials. K. Anagnostou, **M. M. Stylianakis**, S. Michaleas, A. Skouras. *Nanomaterials for Clinical Applications, Case Studies in Nanomedicines, Micro and Nano Technologies* **2020**, Pages 123-157, DOI: 10.1016/B978-0-12-816705-2.00005-9.

#### ➤ Editorships in Books

1. Optoelectronic Nanodevices. Editor: **Minas M. Stylianakis**. 2020, Pages: 338, ISBN 978-3-03928-697-3, DOI: 10.3390/books978-3-03928-697-3.



2. 2D Materials for Biomedical Applications. Editors: **Minas M. Stylianakis**, Athanasios Skouras. 2023, Pages 154, ISBN 978-3-0365-8738-7, DOI: 10.3390/books978-3-0365-8738-7.

### ➤ Publications in Peer-Reviewed Conference Proceedings

1. MXenes Embedded PLA Nanocomposites for Challenging Versatile Applications. V. Tzatzadakis, A. Thomos, F. Gojda, F. Krasanakis, A. Skouras, A. Patelarou, M. Zografakis-Sfakianakis, K. Giakoumidakis, K. Chrissopoulou, S. H. Anastasiadis, E. Patelarou, **M. M. Stylianakis**. ECCM21 – 21<sup>st</sup> European Conference on Composite Materials, 02-05 July 2024, Nantes, France.
2. Life Cycle Assessment (LCA) of PLA/MXene Nanocomposites. V. Tzatzadakis, A. Thomos, F. Gojda, F. Krasanakis, K. Chrissopoulou, S. H. Anastasiadis, E. Patelarou, **M. M. Stylianakis**. 3<sup>rd</sup> International Conference on Sustainable Chemical and Environmental Engineering, 4<sup>th</sup> – 8<sup>th</sup> September 2024, Rethymno, Greece.
3. Pulsed Laser Generation of Novel Nanomaterials for Organic Electronics. E. Stratakis, **M. M. Stylianakis**, K. Savva, C. Fotakis, E. Kymakis. Optics InfoBase Conference Papers 2013, The European Conference on Lasers and Electro-Optics, CLEO Europe 2013; Code 104365.
4. Pulsed Laser Processing of Graphene and related Two-Dimensional Materials. K. Savva, G. Kakavelakis, M. Sigletou, D. Konios, I. Paradissanos, **M. M. Stylianakis**, C. Petridis, G. Kioseoglou, C. Fotakis, E. Kymakis, E. Stratakis. 2015 European Conference on Lasers and Electro-Optics - European Quantum Electronics Conference (Optical Society of America, 2015), paper CM\_7\_3.
5. Pulsed Laser Processing of Graphene and related Two-Dimensional Materials. K. Savva, G. Kakavelakis, M. Sigletou, D. Konios, I. Paradissanos, **M. M. Stylianakis**, C. Petridis, G. Kioseoglou, C. Fotakis, E. Kymakis, E. Stratakis. 2019 European Conference on Lasers and Electro-Optics - European Quantum Electronics Conference (Optical Society of America, 2019), paper CM\_7\_3.

## 7. Research Interests

- Self-healing polymers and composites
- 2D materials treatment with polymers, small molecules, biomolecules, metal atoms and heteroatoms
- Inks preparation for printed applications
- Optoelectronics, energy generation and storage applications
- Organic and perovskite solar cells
- Water treatment technologies (desalination, wastewater treatment)
- Lubricants incorporating nanomaterials as additives
- Biomedical applications (graphene-based drug delivery systems for eye diseases treatment)
- Additive manufacturing – 3D printing

## 8. Memberships

- Association of Greek Chemists member, n° **15251**
- Certified evaluator for the General Secretariat for Research and Technology (GSRT), Greece, (2017) n° **211946/12.12.2016**
- Elsevier advisory board member (2017 - present)
- Member of the Journal of Physics D: Applied Physics advisory panel (2017 - )



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Curriculum Vitae  
Dr. Minas M. Stylianakis

- Editorial Board Member of *Nanomaterials* (2018- )
- Guest Editor in *Nanomaterials* (MDPI publisher) for the special issue on “Optoelectronic Nanodevices.
- Guest Editor in *Batteries* (MDPI publisher) for the special issues on “Micro- and Nanomaterials for Energy Storage Applications” and “Nanomaterials for Energy Storage and Saving Applications”.
- Guest Editor in *Molecules* (MDPI publisher) for the special issue “Nanotechnology in Europe”.
- Guest Editor in *Molecules* (MDPI publisher) for the special issue “2D Materials for Biomedical Applications”.
- Reviewer Board Member in *Polymers* (MDPI Publisher) (2019- )
- Editorial Board Member in *Heliyon* (Elsevier) (2018- )
- Editorial Board Member in *Applied Sciences* (MDPI) (2019- )