

George Kourmoulakis

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1. EDUCATION

- **Ph.D.** Candidate at Materials Science and Technology Department, University of Crete, Greece.
- **M.Sc** from Materials Science and Technology Department, University of Crete, Greece, 2018.
- **B.Sc.** in Physics, Department of Physics, University of Crete, Greece, 2015.
- Certificate of Proficiency, University of Michigan, C2 level in English
- Zertifikat, Goethe Institute, B1 level in German

2. ACADEMIC TEACHING EXPERIENCE

- Development of a teaching plan regarding the lesson of Physics at the Experimental General Lyceum of Heraklion, Crete (2010)
- Teaching assistant of the course “Physics Laboratory II (Optics)” Material Science Department, University of Crete (2016-2017)
- Teaching assistant of the course “Infinite Calculus II” Material Science Department, University of Crete (2019)
- Teaching assistant of the course “Infinite Calculus I” Material Science Department, University of Crete (2019)

3. RESEARCH EXPERIENCE

- **Ph.D.** “Optical and Electronic properties of Transition Metal Dichalcogenides on pre-patterned substrates”, IESL-FORTH
- **Ph.D.** “Fabrication and study of TMD hetero-bilayers”
- **M.Sc.** in Optoelectronics and Nanotechnology field “Optical and Electronic properties of few layers GeSe”, Department of Materials Science and Technology, University of Crete, Greece, 2018.
- **B.Sc.** in Physics, Department of Physics, University of Crete, Greece, 2015.
- Undergraduate diploma thesis regarding Selective Plane Illumination Microscopy and Optical Projection Tomography at IESL-FORTH

4. RESEARCH SKILLS

- Spin-Valley Polarization of 2D materials
- μ Raman Spectroscopy of 2D materials
- μ PL Spectroscopy of 2D materials
- Differential Reflectivity of 2D monolayers
- Heterostructure fabrication via mechanical deposition

- Non-linear imaging of hetero-bilayers
- High quality 2D material fabrication via PDMS mechanical exfoliation
- Selective Plane Illumination Microscopy
- Optical Projection Tomography

5. COMPUTER SKILLS

- Microsoft Office Suite
- Image j
- Origin lab Pro
- Fityk
- Google Sketch up 3D modelling
- Fortran

6. PUBLICATIONS IN JOURNALS

“A customized light sheet microscope to measure spatio-temporal protein dynamics in small model organisms” Matthias Rieckher, Ilias Kyparissidis-Kokkinidis, Athanasios Zacharopoulos, **Georgios Kourmoulakis**, Nektarios Tavernarakis, Jorge Ripoll, Giannis Zacharakis, PLoS one 10 (5), e0127869

“Twist Angle mapping in layered WS₂ by Polarization-Resolved Second Harmonic Generation” Sotiris Psilodimitrakopoulos¹, Leonidas Mouchliadis¹, Ioannis Paradisanos^{1,2}, **George Kourmoulakis**^{1,3} Andreas Lemonis¹, , George Kioseoglou^{1,3} and Emmanuel Stratakis^{1,3} [Sci Rep.](#) 2019; 9: 14285

7. ORAL AND POSTER PRESENTATIONS IN CONFERENCES

1. **Poster presentation:** *“In Vivo optical imaging of model organisms”*, summer school *“Photonics meets Biology”* 2013

2. **Poster contribution:** *“Characterization and non-linear optical imaging of 2D Transition Metal Dichalcogenides”*, 1st International Conference on Nanotechnologies and Bionanoscience” 2018

8. Research visits

- NFFA short term visit at the Materials Science Institute of UAB (Barcelona) studying Pressure-Dependent Raman spectroscopy of hybrid perovskite systems (November 2019)

9. REFERENCES

- Dr. Emmanuel Stratakis

Research Director & Group Leader of the Ultrafast Laser Micro and Nano Processing Laboratory, IESL, FORTH (E-mail: stratak@iesl.forth.gr , Tel.: (30) 2810 391274)

- Dr. George Kioseoglou

Associate Professor at Department of Materials Science and Technology, University of Crete, (E-mail: gnk@materials.uoc.gr , Tel.: (30) 2810 394318)