

**PERSONAL INFORMATION****Aris E. Giannakas-Assistant Professor**

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| **Researchgate** | [https://www.researchgate.net/profile/Aris\\_Giannakas](https://www.researchgate.net/profile/Aris_Giannakas)

**Google Scholar profile Aris Giannakas**

[https://scholar.google.gr/citations?user=SrFUnG8AAAAJ&hl=el](https://scholar.google.gr/citations?user=SrFUnG8AAAAJ&hl/el)

**Place of birth** Paravola Aitoloakarnanias | **Date of birth** 31/08/1978 | **Nationality** Greek

**Marital status** Married, 4 children

**Significant Distinction**

Member of the Stanford list of 2% of the world's leading scientists in the updated bibliometric study of Elsevier Publishing House for the single year 2022-2023 of J. P.A. Ioannidis  
<https://elsevier.digitalcommonsdata.com/datasets/btchxktzyw/6>

**BRIEF PRESENTATION****Academic experience**

14 years of independent teaching

	PEER REVIEWED INTERNATIONAL JOURNALS	AS CORRESPONDING AUTHOR	1 <sup>ST</sup> AUTHOR
	69	25	28
	LAST CO-AUTHOR	CHAPTERS IN BOOKS	PATENTS
	4	4	1
	PEER REVIEWED INTERNATIONAL CONFERENCES	EDITORIAL BOARD MEMBER	EDITING BOOK PUBLICATION
	18	6	1
Citation Impact	h-Index	AVERAGE IMPACT FACTOR OF PUBLISHED WORK	CITATIONS
	27	4,895	2230 (Google Scholar)
Supervision	POSTDOCTORAL STUDIES	DOCTORAL STUDIES	CO-SUPERVISION OF DOCTORAL STUDIES
	9	4 (in progress)	3 (in progress)
Research Programs	PhD THESIS EXAMINER	REVIEWER OF INTERNATIONAL SCIENTIFIC JOURNALS	
	1	10	
	SCIENTIFIC ASSOCIATE	CHIEF SCIENTIFIC OFFICER	SUBMISSION OF RESEARCH PROPOSALS
	10	3	4

**CURRENT POSITION**

**Assistant Professor**, Department of Food Science & Technology, School of Agricultural Sciences, University of Patras, Greece

**WORK EXPERIENCE**

- 2015-2023** Member of the Advisory Educational Staff (AEP), School of Positive Sciences and Technology, Hellenic Open University, Patras, Greece  
Postgraduate Programs:  
▫ Environmental Catalysis for Anti-Pollution and Clean Energy Production  
▫ Waste Management
- 2014-2020** Laboratory Teaching Staff (EDIP), Department of Business Administration of Food and Agricultural Enterprises, University of Patras
- 2013-2014** Laboratory Teaching Assistant, Food Technology Laboratory, Department of Business Administration of Food and Agricultural Enterprises, University of Patras
- 2008-2013** IDAX Employee, Laboratory Assistant & Technical Support, Department of Environmental and Natural Resources Management, University of Ioannina  
Laboratories:  
▫ General Chemistry  
▫ Environmental Organic Chemistry  
▫ Physical Chemistry  
▫ Geochemistry  
▫ Instrumental Analysis
- 2009-2010** Scientific Associate, Department of Plant Production, School of Agricultural Technology, ATEI Epirus, Arta
- 2005-2008** Laboratory Associate, Department of Floriculture and Landscape Architecture, School of Agricultural Technology, ATEI Epirus, Arta
- 2006-2008** IDAX Employee, Secretarial support, Department of Environmental and Natural Resources Management, University of Ioannina
- 2005-2006** Chemistry Teacher, Private Upper Secondary/Senior High School Palladio, Agrinio

**EDUCATION**

- 2000-2004** PhD Thesis  
Department of Chemistry, School of Sciences, University of Ioannina, Greece  
▪ Use of microemulsion in the preparation of perovskite type and spinel type mixed oxides and implementation of them as heterogeneous catalysts.  
<http://hdl.handle.net/10442/hedi/34212>
- 1996-2000** Bachelor's degree  
Department of Chemistry, School of Sciences, University of Ioannina, Greece

**Current research activity**

- Circular Economy/ Chemical Technology/ Food Nanotechnology.  
Volarization of biomass and food by-products in the development and characterization of biobased/bioactive nanostructures and their application in food safety, food processing, food preservation, and active or smart food packaging by following circular economy spirit

**Teaching Courses**

- FST\_303 Instrumental Food Analysis

- FST\_403 Food Processing and Preservation Technologies
- FST\_702 Food Packaging
- FST\_X10 Nanotechnology & Biomaterials in Food Production
- FST\_E08 Food Additives

**Publications**

- P\_1. A E Giannakas\*, TC Valmeki's, AK Ladavos, P N Trikalitis, P J Pomonis: "Variation of surface properties and textural features of spinel  $ZnAl_2O_4$  and perovskite  $LaMnO_3$  nanoparticles prepared via CTAB–butanol–octane–nitrate salt microemulsions in the reverse and bicontinuous states". Journal of Colloid and Interface Science 04/2003; 259(2):244-53., DOI:10.1016/S0021-9797(02)00068-1.
- P\_2. A E Giannakas, A K Ladavos, P J Pomonis: "Preparation, characterization and investigation of catalytic activity for NO + CO reaction of  $LaMnO_3$  and  $LaFeO_3$  perovskites prepared via microemulsion method". Applied Catalysis B Environmental 05/2004; 49(3):147-158., DOI:10.1016/j.apcatb.2003.12.002
- P\_3. P. J. Pomonis, D. E. Petrakis, A. K. Ladavos, K. M. Kolonia, C. C. Pantazis, A. E. Giannakas, A. A. Leontiou: "The I-point method for estimating the surface area of solid catalysts and the variation of C term of the BET equation". Catalysis Communications 01/2005; 6(1):93-96., DOI:10.1016/j.catcom.2004.11.006
- P\_4. A E Giannakas, A K Ladavos, G S Armatas, D E Petrakis, P J Pomonis: "Effect of composition on the conductivity of CTAB–butanol–octane–nitrate salts ( $Al(NO_3)_3 + Zn(NO_3)_2$ ) microemulsions and on the surface and textural properties of resulting spinels  $ZnAl_2O_4$ ". Applied Surface Science 01/2006; 252(6):2159-2170., DOI:10.1016/j.apsusc.2005.03.229
- P\_5. A.E. Giannakas, A.A. Leontiou, A.K. Ladavos, P.J. Pomonis: "Characterization and catalytic investigation of NO + CO reaction on perovskites of the general formula  $La_xM_{1-x}FeO_3$  (M = Sr and/or Ce) prepared via a reverse micelles microemulsion route". Applied Catalysis A General 08/2006; 309(2):254–262., DOI:10.1016/j.apcata.2006.05.016
- P\_6. A.E. Giannakas\*, A K Ladavos, G.S. Armatas, P.J. Pomonis: "Surface properties, textural features and catalytic performance for NO + CO abatement of spinels  $MAI_2O_4$  (M = Mg, Co and Zn) developed by reverse and bicontinuous microemulsion method". Applied Surface Science 03/2007; 253(16):6969-6979., DOI:10.1016/j.apsusc.2007.02.031

- P\_7. A A Leontiou, A K Ladavos, **A E Giannakas**, T V Bakas, P J Pomonis: "A comparative study of substituted perovskite-type solids of oxidic  $\text{La}_{1-x}\text{Sr}_x\text{FeO}_{3\pm\delta}$  and chlorinated  $\text{La}_{1-x}\text{Sr}_x\text{FeO}_{3\pm\delta}\text{Cl}_\sigma$  form: Catalytic performance for CH<sub>4</sub> oxidation by O<sub>2</sub> or N<sub>2</sub>O". Journal of Catalysis 10/2007; 251(1):103-112., DOI:10.1016/j.jcat.2007.07.012
- P\_8. Maria Antonopoulou, Aris Giannakas, Ioannis Konstantinou: "Simultaneous Photocatalytic Reduction of Cr(VI) and Oxidation of Benzoic Acid in Aqueous N-F-Codoped TiO<sub>2</sub> Suspensions: Optimization and Modeling Using the Response Surface Methodology". International Journal of Photoenergy 09/2012; 10(1), DOI:10.1155/2012/520123
- P\_9. Andreas Giannakas, **Aris Giannakas**, Athanasios Ladavos: "Preparation and Characterization of Polystyrene/Organolaponite Nanocomposites". Polymer-Plastics Technology and Engineering 10/2012; 51(14), DOI:10.1080/03602559.2012.704115.
- P\_10. **A E Giannakas**, E Seristatidou, Y Deligiannakis, I Konstantinou: "Photocatalytic activity of N-doped and N-F co-doped TiO<sub>2</sub> and reduction of chromium (VI) in aqueous solution: An EPR study". Applied Catalysis B Environmental 03/2013; 132(133):460-468., DOI: 10.1016/j.apcatb.2012.12.017
- P\_11. A. Giannakas, M. Antonopoulou, Y. Deligiannakis, I. Konstantinou: "Preparation, characterization of N-I co-doped TiO<sub>2</sub> and catalytic performance toward simultaneous Cr(VI) reduction and benzoic acid oxidation". Applied Catalysis B: Environmental 08/2013; 140-141:636., DOI:10.1016/j.apcatb.2013.04.052
- P\_12. M. Antonopoulou, **A. Giannakas**, Y. Deligiannakis, I. Konstantinou: "Photocatalytic degradation of the N,N-diethyl-m-toluamide DEET: kinetic and mechanistic investigation". The Chemical Engineering Journal 09/2013; 231:314., DOI:10.1016/j.cej.2013.06.123
- P\_13. Katerina Katerinopoulou, **Aris Giannakas**, Kalouda Grigoriadi, Nektaria M. Barkoula, Athanasios Ladavos: "Preparation and characterization of acetylated corn starch-(PVOH)/clay nanocomposite films". Carbohydrate Polymers 02/2014;, DOI:10.1016/j.carbpol.2013.11.030
- P\_14. Charalambos G. Skoutelis, **Aris E. Giannakas**, Maria Antonopoulou, Yiannis Deligiannakis, Ioannis K. Konstantinou: "Mechanism of Synergistic Photocatalytic Cr(VI)-reduction and Benzoic Acid Oxidation by Visible Light Active TiO<sub>2</sub> Photocatalysts". Journal of

Advanced Oxidation Technologies 07/2014;, DOI:10.1515/jaots-2014-0205

- P\_15. Aris Giannakas, Kalouda Grigoriadi, Areti Leontiou, Nektaria-Marianthi Barkoula, Athanasios Ladavos: "**Preparation, characterization, mechanical and barrier properties investigation of chitosan-clay nanocomposites**". Carbohydrate Polymers 08/2014; 108:103-111., DOI:10.1016/j.carbpol.2014.03.019
- P\_16. Kalouda Grigoriadi, Aris, Giannakas, Athanasios K Ladavos, Nektaria-Marianthi Barkoula: "**Interplay between processing and performance in chitosan-based clay nanocomposite films**". Polymer Bulletin 02/2015; 72(5), DOI:10.1007/s00289-015-1329-
- P\_17. Vasiliki Makrigianni, Aris Giannakas, Yiannis Deligiannakis, Ioannis Konstantinou: "**Adsorption of phenol and methylene blue from aqueous solutions by pyrolytic tire char: Equilibrium and kinetic studies**". Journal of Environmental Chemical Engineering 03/2015; 3(1):574-582., DOI:10.1016/j.jece.2015.01.006
- P\_18. V Makrigianni, A Giannakas, C Daikopoulos, Y Deligiannakis, I Konstantinou: "**Preparation, characterization and photocatalytic performance of pyrolytic-tire-char/TiO<sub>2</sub> composites, toward phenol oxidation in aqueous solutions**". Applied Catalysis B Environmental 03/2015; 174-175:244-252., DOI:10.1016/j.apcatb.2015.03.007
- P\_19. Aris Giannakas, Maria Vlachaki, Constantinos Salmas, Areti Leontiou, Petros Katapodis, Haralambos Stamatis, Nektaria-Marianthi Barkoula, Athanasios Ladavos: "**Preparation, characterization, mechanical, barrier and antimicrobial properties of chitosan/PVOH/clay nanocomposites**". Carbohydrate Polymers 12/2015; 140., DOI:10.1016/j.carbpol.2015.12.072
- P\_20. Maria Vlachaki, Aris Giannakas, Petros Katapodis, Haralambos Stamatis, Athanasios Ladavos, Nektaria-Marianthi Barkoula: "**On the efficiency of oleic acid as plasticizer of chitosan/clay nanocomposites and its role on thermo-mechanical, barrier and antimicrobial properties - Comparison with glycerol**". Food Hydrocolloids 01/2016; 57., DOI:10.1016/j.foodhyd.2016.01.003
- P\_21. M. Antonopoulou, P. Karagianni, A. Giannakas, V. Makrigianni, E. Mouzourakis, Y. Deligiannakis, I. Konstantinou: "**Photocatalytic degradation of phenol by char/N-TiO<sub>2</sub> and char/N-F-TiO<sub>2</sub> composite photocatalysts**". Catalysis Today 05/2016;, DOI:10.1016/j.cattod.2016.03.054

- P\_22. A.E. Giannakas, M. Antonopoulou, C. Daikopoulos, Y. Deligiannakis, I. Konstantinou: "Characterization and catalytic performance of B-doped, B-N co-doped and B-N-F tri-doped TiO<sub>2</sub> towards simultaneous Cr(VI) reduction and benzoic acid oxidation". Applied Catalysis B Environmental 05/2016; 184:44-54., DOI:10.1016/j.apcatb.2015.11.009
- P\_23. M. Antonopoulou, I. Chondrodimou, F. Bairamis, A. Giannakas, I. Konstantinou: "Photocatalytic reduction of Cr (VI) by char/TiO<sub>2</sub> composite photocatalyst: optimization and modeling using the response surface methodology (RSM)". Environmental Science and Pollution Research 05/2016; 24(2), DOI:10.1007/s11356-016-6779-x
- P\_24. M. Antonopoulou, A. Giannakas, F. Bairamis, M. Papadaki, I. Konstantinou: "Degradation of organophosphorus flame retardant Tris (1-chloro-2-propyl) phosphate (TCPP) by visible light N,S-co-doped TiO<sub>2</sub> photocatalysts". DOI:10.1016/j.cej.2016.06.124
- P\_25. Vassiliki Makrigianni, Aris Giannakas, Feidias Bairamis, Maria Papadaki, Ioannis Konstaninou: "Adsorption of Cr(VI) from aqueous solutions by HNO<sub>3</sub> -purified and chemically activated pyrolytic tire char". Journal of Dispersion Science and Technology 08/2016; 38(7), DOI:10.1080/01932691.2016.1216862
- P\_26. Aris Giannakas, A. Patsaoura, N.-M. Barkoula, A. Ladavos: "A novel solution blending method for using olive oil and corn oil as plasticizers in chitosan based organoclay nanocomposites". Carbohydrate Polymers 10/2016; 157., DOI:10.1016/j.carbpol.2016.10.020
- P\_27. A Kotsakidou, M Antonopoulou, E Evgenidou, I Konstantinou, A.E. Giannakas, M Papadaki, D Bikaris, D.A. Lambropoulou, bullet N Tio, Barcelo: "Photocatalytical removal of fluorouracil using TiO<sub>2</sub> -P25 and N/S doped TiO<sub>2</sub> catalysts: A kinetic and mechanistic study". Science of The Total Environment 11/2016; 578., DOI:10.1016/j.scitotenv.2016.08.208
- P\_28. V. Makrigianni, A. Giannakas D. Hela M. Papadaki I. Konstantinou: "Adsorption of methylene blue dye by pyrolytic tire char in fixed-bed column". Desalination and water treatment 03/2017; 65:346–358., DOI:10.5004/dwt.2017.20340
- P\_29. A.E. Giannakas, M. Antonopoulou, J. Papavasiliou, Y. Deligiannakis, I. Konstantinou: "Photocatalytic performance of Pt-TiO<sub>2</sub>, Pt-N-TiO<sub>2</sub> and Pt-N/F-TiO<sub>2</sub> towards simultaneous Cr(VI) reduction/benzoic acid oxidation: Insights into photogenerated charge carrier dynamics and

**catalyst properties". Journal of Photochemistry and Photobiology A: Chemistry 08/2017; 349., DOI:10.1016/j.jphotochem.2017.08.066**

P\_30. Aris Giannakas\*, Ioannis Tsagalias, Dimitris S. Achilias, Athanasios Ladavos: "A novel method for the preparation of inorganic and organo-modified montmorillonite essential oil hybrids". Applied Clay Science 09/2017; 145:362–370., DOI:10.1016/j.clay.2017.06.018

P\_31. A. Giannakas, F. Bairamis, I. Papakostas, T. Zerva, I. Konstantinou: "Evaluation of TiO<sub>2</sub>/V<sub>2</sub>O<sub>5</sub>nd N,F-doped-TiO<sub>2</sub>/V<sub>2</sub>O<sub>5</sub> nanocomposite photocatalysts towards reduction of Cr(VI) and oxidation reactions by OH radicals". DOI:10.1016/j.jiec.2018.05.008

P\_32. Vasiliki Chalkia, Nikolaos Tachos, Pavlos K. Pandis, Aris Giannakas, Maria K. Koukou, Michalis Gr. Vrachopoulos, Luis Coelho, Athanasios Ladavos and Vassilis N. Stathopoulos: "Influence of organic phase change materials on the physical and mechanical properties of HDPE and PP polymers". RSC Adv., 2018, 8, 27438, DOI: 10.1039/c8ra03839b.

P\_33. Katerina Katerinopoulou, Aris Giannakas\*, Nektaria-Marianthi Barkoula & Athanasios Ladavos: "Preparation, characterization and biodegradability assessment of Maize starch-(PVOH)/Clay nanocomposite films". Starch - Stärke 2018, 1800076 DOI: 10.1002/star.201800076.

P\_34. Aris Giannakas\*, Martha Pissanou: "Chitosan/Bentonite nanocomposites for wastewater treatment: A Review". SF Journal of Nanochemistry and Nanotechnology, published 26 Nov. 2018

P\_35. Panagiotis – Spyridon Konstas, Dimitra Hela, Aris Giannakas, Albanis Triantafyllos & Ioannis Konstantinou. "Photocatalytic degradation of organophosphate flame retardant TBEP: kinetics and identification of transformation products by orbitrap mass spectrometry". International Journal of Environmental Analytical Chemistry, (2019). <https://doi.org/10.1080/03067319.2019.1593399>

P\_36. Maria Solakidou, Aris Giannakas, Yiannis Georgiou, Maria Louloudi, Yiannis Deligiannis: "Efficient photocatalytic water-splitting performance by ternary CdS/Pt-N-TiO<sub>2</sub> and CdS/Pt-N,F-TiO<sub>2</sub>: interplay between CdS photo corrosion and TiO<sub>2</sub>-dopping" Applied Catalysis B: Environmental. 254 (2019) 194-205. <https://doi.org/10.1016/j.apcatb.2019.04.091>

P\_37. Aris Giannakas\*: Constantinos Salmas Areti Leontiou, Dimitrios Tsimogiannis, Antigoni Oreopoulou and Joerg Brauhli. "Novel LDPE/Chitosan Rosemary and Melissa Extract Nanostructured Active

Packaging Films” Nanomaterials (Special Issue: Nanostructured Materials and Natural Extract) 9(8):1105,  
<https://doi.org/10.3390/nano9081105>

P\_38. Aris Giannakas\*: Panayota Stathopoulou, George Tsiamis and Constantinos Salmas: “The effect of preparation procedure in packaging performance of chitosan/thyme oil/montmorillonite nanocomposite films”. Journal of Food Processing and Preservation. 44(2) 2020, 1-15. <https://doi.org/10.1111/jfpp.14327>.

P\_39. O. Boura-Theodoridou, A. Giannakas, P. Katapodis, H. Stamatis, Athanasios Ladavos: Nektaria-Marianthi Barkoula: “Effect of ZnO growth on the morphological, mechanical, barrier and antimicrobial properties of chitosan-based films for food packaging applications”. Food Packaging and Shelf Life 23 (2020) 100456.  
<https://doi.org/10.1016/j.fpsl.2019.100456>

P\_40. Aris Giannakas\*: “Na-Montmorillonite Vs. Organically Modified Montmorillonite as Essential Oil Nanocarriers for Melt-Extruded Low-Density Poly-Ethylene Nanocomposite Active Packaging Films with a Controllable and Long-Life Antioxidant Activity.” Nanomaterials Special Issue Nanomaterials for Food Packaging 10 (6), 1027.  
<https://doi.org/10.3390/nano10061027>

P\_41. Constantinos Salmas\*, Aris Giannakas\*, Petros Katapodis, Areti Leontiou, Dimitrios Moschovas, Andreas Karydis-Messinis, “Development of ZnO/Na-Montmorillonite Hybrid Nanostructures Used for PVOH/ZnO/Na-Montmorillonite Active Packaging Films Preparation via a Melt-Extrusion Process” Nanomaterials Special Issue Nanomaterials for Food Packaging 10 (6), 1079.  
<https://doi.org/10.3390/nano10061079>

P\_42. Dimitrios Gournis and Michael A. Karakassides Vasilis Kostas, Maria Baikousi, Nektaria-Marianthi Barkoula, Aris Giannakas, Antonios Kouloumpis, Apostolos Avgeropoulos, “Synthesis, Characterization and Mechanical Properties of Nanocomposites Based on Novel Carbon Nanowires and Polystyrene” Applied Sciences 10 (17), 5737.  
<https://doi.org/10.3390/app10175737>

P\_43. CE Salmas\*, AE Giannakas\*, M Baikousi, A Leontiou, Z Siasou, MA Karakassides, “Development of Poly (L-Lactic Acid)/Chitosan/Basil Oil Active Packaging Films via a Melt-Extrusion Process Using Novel Chitosan/Basil Oil Blends.” Processes Special Issue Multifunctional Hybrid Materials Based on Polymers: Design and Performance, 2021, 9, 88. <https://doi.org/10.3390/pr9010088>

P\_44. Aris E Giannakas\*, Constantinos E Salmas\*, Areti Leontiou, Maria Baikousi, Dimitrios Moschovas, Georgios Asimakopoulos, Nikolaos E Zafeiropoulos, Apostolos Avgeropoulos, "Synthesis of a Novel Chitosan/Basil Oil Blend and Development of Novel Low Density Poly Ethylene/Chitosan/Basil Oil Active Packaging Films Following a Melt-Extrusion Process for Enhancing Chicken Breast Fillets Shelf-Life" Molecules Special Issue: Food Packaging Strategies for Enhancing Food Product Shelf Life, 26 (6), 1585.  
<https://doi.org/10.3390/molecules26061585>

P\_45. Ioannis S Tsagkalias, Alexandra Loukidi, Stella Chatzimichailidou, Constantinos E Salmas, Aris E Giannakas, Dimitris S Achilias, "Effect of Na-and Organo-Modified Montmorillonite/Essential Oil Nanohybrids on the Kinetics of the In Situ Radical Polymerization of Styrene" Nanomaterials Special Issue Nanomaterials for Food Packaging, 11 (2), 474. <https://doi.org/10.3390/nano11020474>

P\_46. Athanasios Ladavos, Aris E Giannakas, Panagiotis Xidas, Dimitrios J Giliopoulos, Maria Baikousi, Dimitrios Gournis, Michael A Karakassides, Konstantinos S Triantafyllidis, "Preparation and Characterization of Polystyrene Hybrid Composites Reinforced with 2D and 3D Inorganic Fillers" Micro 1 (1), 3-14. <https://doi.org/10.3390/micro1010002>

P\_47. Aris E. Giannakas,\* Constantinos E. Salmas , \*Andreas Karydis-Messinis, Dimitrios Moschovas, Eleni Kollia, Vasiliki Tsigkou, Charalampos Proestos, Apostolos Avgeropoulos and Nikolaos E. Zafeiropoulos "Nanoclay and polystyrene type efficiency on the development of polystyrene/montmorillonite/oregano oil antioxidant active packaging nanocomposite films" Applied Sciences Special Issue Antioxidants in Natural Products II, 2021, 11(20), 9364.  
<https://doi.org/10.3390/app11209364>

P\_48. Constantinos E. Salmas,\* Aris E. Giannakas, Maria Baikousi, Eleni Kollia, Vasiliki Tsigkou and Charalampos Proestos "Effect of Copper and Titanium-Exchanged Montmorillonite Nanostructures on the Packaging Performance of Chitosan/Poly-Vinyl-Alcohol-Based Active Packaging Nanocomposite Films." Foods Special Issue Current Trends in Biopolymer-Based Films and Coatings for Food Packaging, 2021, 10, 3038. <https://doi.org/10.3390/foods10123038>

P\_49. Aris E. Giannakas\*, Constantinos E. Salmas\*, Areti Leontiou, Dimitrios Moschovas, Maria Baikousi, Eleni Kollia, Vasiliki Tsigkou, Anastasios Karakassides, Apostolos Avgeropoulos, Charalampos Proestos. "Performance of thyme oil@Na-montmorillonite and thyme oil@organo-modified montmorillonite nanostructures on the

development of melt-extruded poly-L-lactic acid antioxidant active packaging films” Molecules/MDPI, Section: Natural Products Chemistry, Special Issue: Essential Oils: Biological Activities and New Possible Applications.” <https://doi.org/10.3390/molecules27041231>

P\_50. Aris E. Giannakas\*, Constantinos E. Salmas\*, Dimitrios Moschovas, Maria Baikousi, Eleni Kollia, Vasiliki Tsigkou, Anastasios Karakassides, Areti Leontiou, George Kehayias, Apostolos Avgeropoulos, Charalampos Proestos\* «Nanocomposite films development based on chitosan/poly-vinyl-alcohol using ZnO@montmorillonite and ZnO@Halloysite hybrid nanostructures for active food packaging applications» Nanomaterials MDPI special issue Nanomaterials for Food Packaging Nanomaterials 2022, 12, 1843.  
<https://doi.org/10.3390/nano12111843>.  
<https://www.mdpi.com/about/announcements/6830>

P\_51. Panagiotis Ziogas, Alexios P Douvalis, Athanasios B Bourlinos\*, Christina Papachristodoulou, Nikolaos Chalmpes, Michael A Karakassides, Aris E Giannakas, Constantinos E Salmas\*, “Isolation, Characterization and Hydrogen Sulfide H<sub>2</sub>S Sorption Properties at Room Temperature of Magnetite Sludge from Radiator”, Journal of Nanotechnology Research 2022; 4 (2): 97-110 DOI: 10.26502/jnr.2688-85210032.

P\_52. Aris E. Giannakas\*, Constantinos E. Salmas\*, Dimitrios Moschovas, Konstantinos Zaharioudakis, Stavros Georgopoulos, Georgios Asimakopoulos, Anastasios Aktypis, Charalampos Proestos, Anastasios Karakassides, Apostolos Avgeropoulos, Nikolaos E. Zafeiropoulos, George-John Nychas, “The increase of soft cheese shelf-life packaged with edible films based on novel hybrid nanostructures” Gels/MDPI, Special Issue: Bioactive Gel Films and Coatings Applied in Active Food Packaging, 2022, 8, 539.  
<https://doi.org/10.3390/gels8090539>.

P\_53. Constantinos E Salmas\*, Aris E Giannakas\*, Dimitrios Moschovas, Eleni Kollia, Stavros Georgopoulos, Christina Gioti, Areti Leontiou, Apostolos Avgeropoulos, Anna Kopsacheili, Learda Avdylaj, Charalampos Proestos, “Kiwi Fruits Preservation Using Novel Edible Active Coatings Based on Rich Thymol Halloysite Nanostructures and Chitosan/Polyvinyl Alcohol Gels”, Gels 2022, 8(12), 823;  
<https://doi.org/10.3390/gels8120823>

P\_54. Aris E Giannakas\*, Constantinos E Salmas\*, Dimitrios Moschovas, Vassilios K Karabagias, Ioannis K Karabagias, Maria Baikousi, Stavros Georgopoulos, Areti Leontiou, Katerina Katerinopoulou, Nikolaos E Zafeiropoulos, Apostolos Avgeropoulos, “Development,

Characterization, and Evaluation as Food Active Packaging of Low-Density-Polyethylene-Based Films Incorporated with Rich in Thymol Halloysite Nanohybrid for Fresh “Scaloppini” Type Pork Meat Fillets Preservation”, *Polymers* 2023, 15(2), 282;  
<https://doi.org/10.3390/polym15020282>

P\_55. Constantinos E Salmas\*, Aris E Giannakas\*, Vassilios K Karabagias, Dimitrios Moschovas, Ioannis K Karabagias, Christina Gioti, Stavros Georgopoulos, Areti Leontiou, George Kehayias, Apostolos Avgeropoulos, Charalampos Proestos, “Development and Evaluation of a Novel-Thymol@Natural-Zeolite/Low-Density-Polyethylene Active Packaging Film: Applications for Pork Fillets Preservation”, *Antioxidants* 2023, 12(2), 523;  
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