

# Научни приноси на гл. ас. д-р Любен Михайлов

## Научен проект

- 1 *Любен Михайлов, ННП „Нисковъглеродна енергия за транспорта и бита (Е+)”, Член,* 2018
- 2 *Любен Михайлов, Център за върхови постижения „Национален център по мехатроника и чисти технологии”, Член, , Номер на договора:BG05M2OP001-1.001-0008* 2018
- 3 *Любен Михайлов, Център за компетентност "Интелигентни мехатронни, еко- и енергоспестяващи системи и технологии” , Член, , Номер на договора:BG05M2OP001-1.002-0023* 2018
- 4 *Любен Михайлов, Национална Научна Инфраструктура ИНФРАМАТ, Член,* 2017
- 5 *Любен Михайлов, Enhancing the scientific capacity of the Faculty of Chemistry and Pharmacy at Sofia University as leading regional research and innovation centre in the area of advanced functional materials , Член, , Номер на договора:H2020-EU.4.b. - Twinning of research institutions (Project ID: 692146)* 2016
- 6 *Любен Михайлов, Течнокристален подход за оптимизиране функциите на моделни липидни мембрани при вграждане на наночастици, Член, , Номер на договора:ДН08-2/13.12.2016* 2016
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- 8 *Любен Михайлов, Национален център за нови материали UNION Модул 1: “Център за съвременни материали”, Член, , Номер на договора:ДЦВП 02-2/2009* 2009
- 9 *Любен Михайлов, Оптимизиране и приложение на модел и инструменти за интезифицирането на взаимодействието наука-бизнес, Член, , Номер на договора:ДТК 02 – 31/2009* 2009
- 10 *Любен Михайлов, Нанокompозити на основата на магнезий и магнезиеви сплави за съхранение на водород, Член, , Номер на договора:ДО 02 – 226/2008* 2008

## Научно ръководство

Любен Михайлов, **Получаване на нанопорьозни метални структури чрез селективно разтваряне на аморфни паладиеви сплави**, дипломна работа:Евелина Василева 2019

#### Статия в научно списание

1 *Vassileva E., Mihaylov L., Spassova M., Spassov T., Porous metallic structures by de-alloying microcrystalline melt-spun ternary Zn<sub>70</sub>(Sn,Bi)<sub>30</sub>*, Journal of Porous Materials, , 2023, ISSN (online):13802224, doi:10.1007/s10934-022-01361-8, Ref, Web of Science, Web of Science Quartile: Q2 (2023), SCOPUS Quartile: Q2 (2023), PhD 2023

2 *Hristova M., Lesov I., Mihaylov L., Denkov N., Tcholakova S., Role of particle size on the cohesive strength of non-sintered (green) ceramics*, Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2023, ISSN (online):09277757, doi:10.1016/j.colsurfa.2022.130653, Ref, Web of Science, Web of Science Quartile: Q1 (2023), SCOPUS Quartile: Q1 (2023), PhD 2023

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4 *Todorova S., Abrashev B., Rangelova V., Mihaylov L., Vassileva E., Petrov K., Spassov T., Hydrogen gas phase and electrochemical hydriding of lani<sub>5</sub>-xmx (M = sn, co, al) alloys*, Materials, 2021, pages:1-13, ISSN (online):19961944, doi:10.3390/ma14010014, Ref, Web of Science, Web of Science Quartile: Q2 (2021), SCOPUS Quartile: Q2 (2021), PhD 2021

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- 8 *Damyanova S., Shtereva I., Pawelec B., Mihaylov L., Fierro J.L.G.,* **Characterization of none and yttrium-modified Ni-based catalysts for dry reforming of methane**, Applied Catalysis B: Environmental, 2020, ISSN (online):09263373, doi:10.1016/j.apcatb.2020.119335, Ref, Web of Science, Web of Science Quartile: Q1 (2020), SCOPUS Quartile: Q1 (2020), International 2020
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- 10 *Anife Ahmedova, R. Mihaylova, S. Stoykova, V. Mihaylova, T. Paunova-Krasteva, L. Mihaylov, S. Stoitsova, G. Momekov, D. Momekova, M. Yoshizawa,* **Enhanced cellular uptake of platinum by a tetracationic Pt(II) nanocapsule and its implications to cancer treatment**, European Journal of Pharmaceutical Sciences, vol:155, issue:105545, 2020, doi:10.1016/j.ejps.2020.105545, Ref, Web of Science, IF (4.227 - 2020), Web of Science Quartile: Q2 (Pharmacology & Pharmacy), SCOPUS, SJR (0.84 - 2020), SCOPUS Quartile: Q1 (Pharmaceutical Science), International 2020
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- 16 *Georgiev P., Simeonova S., Chanachev A., Mihaylov L., Nihtianova D., Balashev K.,* **Acceleration effect of copper(II) ions on the rate of citrate synthesis of gold nanoparticles**, Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2016, pages:39-48, ISSN (online):09277757, doi:10.1016/j.colsurfa.2015.12.031, Ref, Web of Science, Web of Science Quartile: Q2 (2016), SCOPUS Quartile: Q2 (2016), PhD 2016

- 17 *Ivanova S., Zhecheva E., Kukeva R., Tyuliev G., Nihtianova D., Mihailov L., Stoyanova R.,* **Effect of Sodium Content on the Reversible Lithium Intercalation into Sodium-Deficient Cobalt-Nickel-Manganese Oxides NaxCo<sub>1</sub>/3Ni<sub>1</sub>/3Mn<sub>1</sub>/3O<sub>2</sub> (0.38 ≤ x ≤ 0.75) with a P3 Type of Structure**, Journal of Physical Chemistry C, 2016, pages:3654-3668, ISSN (online):19327447, 2016

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### Участие в конференция

- 1 Присъствие, *E. Vassileva, L. Mihaylov, T. Boyadjieva, V. Koleva, R. Stoyanova, T. Spassov*, **Porous Sn obtained by selective electrochemical dissolution of melt-spun Zn<sub>70</sub>Sn<sub>30</sub> alloys with lithium and sodium storage properties** 2021
- 2 Постер, *Lyuben Mihailov; Ivailo Tsvetanov; Tony Spassov*, **Electrocatalytic Activity of Ni- and Zr-Based Glasses For Hydrogen Evolution** 2021
- 3 Присъствие, *T. Spassov, E. Vassileva, L. Mihaylov*, **Three-dimensional porous metallic structures by selective dissolution of amorphous and nanocrystalline alloys** 2021
- 4 Секционен доклад, *Любен Михайлов*, **Елементен анализ в ТЕМ - особености** 2019
- 5 Присъствие, *L. Mihaylov, T. Boyadzhieva, V. Kumar, R. Tomov, V. Koleva, R. Stoyanova, Tony Spassov*, **LiMnPO<sub>4</sub>-olivine deposited on microporous alloy as additive-free electrodes for lithium ion batteries** 2019
- 6 Присъствие, *L. Mihaylov, E. Vassileva, L. Lyubenova, A. Inoue, T. Spassov*, **Synthesis and catalytic properties of nanoporous Pd-based alloys: chemical vs. electrochemical de-alloying of Pd-Ni-Si glasses** 2019
- 7 Присъствие, *T. Spassov, L. Mihaylov, A. Inoue*, **Microporous Metals by De-Alloying of glasses** 2018
- 8 Присъствие, *Lazar Draganov Kardozo, Lyuben Mihaylov, Tony Spassov*, **Electrochemical selective dissolution of Pd-based amorphous alloys** 2018
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- 14 Присъствие, *T. Spassov, L. Mihailov, M. Bojinov*, **Electrocatalytic activity for hydrogen evolution and storage of Zr-based amorphous and nanocrystalline alloys** 2012
- 15 Присъствие, *L. Mihailov, M. Redzeb, T. Spassov*, **Selective dissolution and electrocatalytic activity for HER of amorphous and nanocrystalline  $\text{Zr}_2\text{Ni}$**  2012
- 16 Постер, *L. Mihailov, M. Redzeb, T. Spassov*, **Selective dissolution of amorphous and nanocrystalline Zr-Ni alloys** 2012
- 17 Присъствие, *T. Spassov, L. Mihailov, Z. Zlatanova, M. Spassova*, **Electrocatalytic activity for hydrogen evolution of amorphous and nanocrystalline alloys** 2011