

Titlu proiect: *Sinteza unor sisteme moleculare tranziente complexe in plasmе de laborator cu relevanta pentru astrofizica moleculara a regiunilor fierbinti din norii moleculari / Synthesis of transient complex molecular systems in laboratory plasmas with relevance for molecular astrophysics of hot cores*

Categoria de proiect: CDI

Contractul de finanțare: nr. 96 / 11.12.2013

Manager proiect: Lect. dr. Ionut TOPALA

Lista rezultate

Nr. crt.	NUME AUTORI	TITLUL ARTICOLULUI/ CĂRȚII / COMUNICĂRII ȘTIINȚIFICE	REVISTA / VOLUMUL/EDITURA IN CARE A APARUT / CONFERINTA LA CARE S-A COMUNICAT	ANUL PUBLIC ARII/ COMUN ICARII
ARTICOLE ISI				
1	Mihai Asandulesa, Ionut Topala, Yves-Marie Legrand, Stephanie Roualdes, Vincent Rouessac, Valeria Harabagiu	Chemical Investigation on Various Aromatic Compounds Polymerization in low Pressure Helium Plasma	Plasma Chemistry and Plasma Processing, 34(5), 1219-1232	2014
2	Teodora Teslaru, Ionut Topala, Marius Dobromir, Valentin Pohoata, Lavinia Curecheriu, Nicoleta Dumitrascu	Polythiophene films obtained by polymerization under atmospheric pressure plasma conditions	Materials Chemistry and Physics, 169, 120-127	2016
3	Valentin Pohoata, Ilarion Mihaila, Roxana Jijie, Andrei Vasile Nastuta, Ioana Alexandra Rusu, Ionut Topala	Formation of positive ions in hydrocarbon containing dielectric barrier discharge plasmas	Advances in Space Research, 58, 2416-2423	2016
COMUNICARI ȘTIINȚIFICE INTERNATIONALE				
1	A.V. Nastuta, I. Mihaila, V. Pohoata, I.A. Rusu, I. Topala	Mass spectrometry diagnosis of atmospheric pressure laboratory plasmas with relevance for molecular astrophysics of hot cores	4th International Workshop and Summer School on Plasma Physics (IWSSPP 2014), Kiten, Bulgaria, 30 June – 6 July 2014, Conference Abstracts, oral presentation http://iwsspp.deo.uni-sofia.bg/	2014
2	A.V. Nastuta, I. Mihaila, V. Pohoata, I.A. Rusu, I. Topala	Laboratory plasma experiments with relevance to molecular astrophysics of hot cores: mass spectrometry diagnosis of helium/hydrogen/alcohols barrier discharges	13th International Conference on Global Research and Education (Inter-Academia 11), Riga, Latvia, 10 - 12 September, Book of Abstracts, (2014) – oral presentation http://ia2014.rtu.lv/	2014

3	I. Mihaila, R. Jijie, V. Pohoata, A.V. Nastuta, I.A. Rusu, I. Topala	Mass spectrometry diagnosis of hydrocarbon containing plasmas with relevance for molecular astrophysics of hot cores	COST CM1401 Workshop on Our Astrochemical History, First General Meeting, Prague, May 25 - 29 2015, Book of abstracts, 77, (2015) – poster presentation http://prague2015astrohistory.vscht.cz/	2015
4	I. Topala, R. Jijie, A.V. Nastuta, I. Mihaila, I.A. Rusu, V. Pohoata	Considerations on the use of atmospheric pressure plasma to generate complex molecular environments with relevance for molecular astrophysics	22nd International Symposium on Plasma Chemistry (ISPC-22), Antwerp, Belgium, 5 - 10 July 2015, Conference Proceedings P-I-2-68, (2015) – poster presentation https://www.uantwerpen.be/en/conferences/ispc22/	2015
5	I. Topala, K. Hensel, K. Kučerová, K. Sano, B. Tarabová, M. Janda, Z. Machala, C. T. Mihai, L. D. Gorgan, R. Jijie, M. Ciorpac, V. Pohoata	Cell exposure to atmospheric pressure plasmas: modification of cell cycle and molecular structure	XXXII International Conference on Phenomena in Ionized Gases (ICPIG 32), Iasi, Romania 26-31 July 2015, SpS2_3, (2015) – invited lecture http://icpig2015.net/	2015
6	I. Mihaila, V. Pohoata, R. Jijie, A.V. Nastuta, I.A. Rusu, I. Topala	Influence of discharge geometry on extraction of positive ion populations from atmospheric pressure plasmas	XXXII International Conference on Phenomena in Ionized Gases (ICPIG 32), Iasi, Romania 26-31 July 2015 – poster presentation http://icpig2015.net/	2015
7	A. V. Nastuta, R. Jijie, V. Pohoata, I. Mihaila, I.A. Rusu, I. Topala	Laboratory plasma experiments relevant for molecular astrophysics	II Future in Plasma Science Workshop, February 15 - 18, 2016, Greifswald, Germany, (2016) – invited lecture http://www.inp-plasmashape.eu/download/fips2/fips2016_final_programme.pdf	2016
8	D. Ciubotaru, R. Jijie, V. Pohoata, I. Mihaila, A.V. Nastuta, M. Dobromir, I. Topala	Diagnosis of atmospheric pressure plasma in hydrocarbon mixtures with relevance for astrophysics laboratory experiments	7th International Workshop & Summer School on Plasma Physics 26 June – 2 July 2016, Kiten, Bulgaria (2016) – invited lecture http://iwsspp.deo.uni-sofia.bg/	2016
9	Delia Ciubotaru, Roxana Jijie, Valentin Pohoata, Ilarion Mihaila, Andrei Vasile Nastuta, Marius Dobromir, Ionut Topala	Spectroscopic studies of gas phase and deposited films in He / H ₂ / C _n H _{2n+2} atmospheric pressure plasmas	23rd Europhysics Conference on Atomic and Molecular Physics of Ionized Gases (ESCAMPIG XXIII), Bratislava, Slovakia, July 12-16, 2016, Book of abstracts, P03-08-01, (2016) – poster presentation http://www.escampig2016.org/	2016
10	D. Ciubotaru, B.G. Rusu, M. Dobromir, R. Jijie, V. Pohoata, I. Mihaila, I. Topala	Direct exposure of amino acids and proteins powders to atmospheric pressure helium plasmas with impurities	6th International Conference on Plasma Medicine (ICPM-6), September 4-9, 2016, Bratislava, Slovakia, Conference Proceedings P1-17-2, (2016) – poster presentation http://www.icpm6.com/	2016

11	Roxana Jijie, Delia Ciubotaru, Valentin Pohoata, Ilarion Mihaila, Andrei Vasile Nastuta, Marius Dobromir, Ionut Topala	Characterization of carbonaceous deposits as interstellar dust analogs produced in hydrocarbon containing plasmas at atmospheric pressure	11th International Conference on Physics of Advanced Materials (ICPAM 11), September 8-14, Cluj-Napoca, Romania, Book of Abstracts T2 - P6 (2016) – poster presentation https://www.icpam.ro/	2016
12	Roxana Jijie, Delia Ciubotaru, Valentin Pohoata, Ilarion Mihaila, Marius Dobromir, George Bogdan Rusu, Ionut Topala	Atmospheric pressure plasma assisted deposition of carbonaceous interstellar dust analogs	Astrochemical Week, Jan. 16 to Jan. 20, Faro-Portugal, (2017) – poster presentation https://astrochem2017.scienc.esconf.org/	2017
ALTE rezultate				
1	Aderarea la Acțiunea Europeană CMST COST Action CM1401 “Our Astro-Chemical History”, în derulare pana in 2018 cu membri din 26 de țări: http://www.cost.eu/COST_Actions/cmst/CM1401			

Lista achizițiilor realizate în cadrul proiectului

Denumire echipament	Categorie de achiziții: (numai mijloace fixe)	Valoarea (lei)	Locație
Incinta vid	dotari independente	23367,80	Universitatea alexandru Ioan Cuza din Iasi
Senzor H2	dotari independente	3865,95	Universitatea alexandru Ioan Cuza din Iasi
Pompa uscata de vid preliminar	dotari independente	15450,40	Universitatea alexandru Ioan Cuza din Iasi
Debitmetru cu afisaj incorporat - 5 sccm	dotari independente	12462,00	Universitatea alexandru Ioan Cuza din Iasi
Debitmetru cu afisaj incorporat - 10000 sccm	dotari independente	9889,00	Universitatea alexandru Ioan Cuza din Iasi
Sistem modular Raman	dotari independente	105995,20	Universitatea alexandru Ioan Cuza din Iasi
Debitmetru	dotari independente	11494,80	Universitatea alexandru Ioan Cuza din Iasi
Joja vid de tip capacitiv	dotari independente	7560,00	Universitatea alexandru Ioan Cuza din Iasi
Joja vid de tip capacitiv	dotari independente	7560,00	Universitatea alexandru Ioan Cuza din Iasi
Flanșa mobilă cu vizor pentru incinta vid (cuplare spectrometru de masa)	dotari independente	3820,00	Universitatea alexandru Ioan Cuza din Iasi

Director proiect,

Lect. dr. Ionut TOPALA