

Titlu proiect: Nanomateriale oxidice cu proprietăți fotocatalitice aplicate în degradarea avansată a compușilor xenobiotici din apă

Categoria de proiect: Parteneriate în domenii prioritare - PN-II-PT-PCCCA-2011-3.1-0031

Contractul de finanțare: 139/02.07.2012

Manager proiect: Dr. Maria Crișan

Lista rezultate

Nr. crt.	NUME AUTORI	TITLUL ARTICOLULUI/ CĂRȚII / COMUNICĂRII ȘTIINȚIFICE	REVISTA / VOLUMUL/EDITURA IN CARE A APARUT / CONFERINȚA LA CARE S- A COMUNICAT	ANUL PUBLICĂRII/ COMUNICĂRII
ARTICOLE ISI				
1	M. Răileanu, M. Crișan, I. Nițoi, A. Ianculescu, P. Oancea, D. Crișan, L. Todan	TiO ₂ -based Nanomaterials with Photocatalytic Properties for the Advanced Degradation of Xenobiotic Compounds from Water. Literature Survey.	Water Air Soil Pollution (2013) 224:1548 (45 pg); DOI 10.1007/s11270-013-1548-7	2013
2	M. Răileanu, M. Crișan, A. Ianculescu, D. Crișan, N. Drăgan, P. Osiceanu, S. Șomărescu, N. Stănică, L. Todan, I. Nițoi	The influence of Ni dopant on the structure and photocatalytic properties of sol-gel TiO ₂ nanopowders.	Water Air Soil Pollut (2013) 224:1773 (10 pg), DOI 10.1007/s11270-013-1773-0.	2013
3	N. Drăgan, M. Crișan, M. Răileanu, D. Crișan, A. Ianculescu, P. Oancea, S. Șomărescu, L. Todan, N. Stănică, B. Vasile.	The effect of Co dopant on TiO ₂ structure of sol-gel nanopowders used as photocatalysts.	Ceramics International 40 (2014) 12273-12284	2014
4	M. Crișan, M. Răileanu, N. Drăgan, D. Crișan, A. Ianculescu, I. Nițoi, P. Oancea, S. Șomărescu, N. Stănică, B. Vasile, C. Stan	Sol-gel iron-doped TiO ₂ nanopowders with photocatalytic activity.	Applied Catalysis A: General 504 (2015) 130-142.	2015
5	I. Nițoi, P. Oancea, M. Răileanu, M. Crișan, L. Constantin, I. Cristea	UV-VIS photocatalytic degradation of Nitrobenzene from water using heavy metal doped titania.	Journal of Industrial and Engineering Chemistry, 21 (2015) 677-682	2015
6	M. Crișan, N. Drăgan, D. Crișan, A. Ianculescu, I. Nițoi, P. Oancea, L. Todan, C. Stan, N. Stănică;	The effects of Fe, Co and Ni dopants on TiO ₂ structure of sol-gel nanopowders used as photocatalysts for environmental protection: A comparative study.	Ceramics International 42 (2016) 3088-3095	2016
7	I. Nițoi, P. Oancea, L. Constantin, M. Răileanu, M. Crișan, I. Cristea, C. Cosma .	Relationship between structure of some nitroaromatic pollutants and their degradation kinetic parameters in UV-VIS/TiO ₂ system.	Journal of Environmental Protection and Ecology 17, 1 (2016), 315-322	2016
ARTICOLE ALTE BAZE DE DATE				
1	I. Nițoi, L. A. Constantin, P. Oancea, I. Cristea, M. Crișan	TiO ₂ solar light photocatalysis a promising treatment method for wastewater with trinitrotoluene content.	ISI Proceedings of 15 th International Multidisciplinary Scientific GeoConference, SGEM „The world sources of geosciences“, 18-24 June, 2015, Albena, Bulgaria, Vol.I, Ecology & Environmental Protection, p. 969-976	2015
2	I. Nițoi, P. Oancea, L. A. Constantin, M. Crișan, D. Crișan, I. Cristea, M. A. Constantin	Photocatalytic degradation of TNT from water in UV-VIS/Fe-TiO ₂ system	INCED ECOIND – International Symposium – SIMI 2016; “The Environment and Industry”, Proceedings Book, 2016, – pg 285-291	2016
CARTI				
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COMUNICARI ȘTIINȚIFICE NAȚIONALE				
1	M. Crișan, M. Răileanu, A.	Structural changes of sol-gel TiO ₂	XXXII-nd Romanian	2012

	Ianculescu, D. Crişan, N. Drăgan, L. Todan, C. Stan, B. Vasile	based nanomaterials induced by dopants.	Chemistry Conference, October 3-5, 2012, Călimăneşti-Căciulata, Vâlcea, Romania	
2	P. Oancea, I. Niţoi	Degradation of xenobiotics using heavy metals doped- TiO ₂ photocatalyst.	XXXII-nd Romanian Chemistry Conference, October 3-5, 2012, Călimăneşti-Căciulata, Vâlcea, Romania	2012
3	I. Niţoi, P. Oancea, M. Crişan	Aplicarea fotocatalizatorilor pe bază de TiO ₂ dopaţi cu metale grele (Fe, Co, Ni) în degradarea nitroderivatilor aromatici.	Salonul Cercetării Româneşti, Bucureşti, 15-18 Octombrie 2014	2014
COMUNICĂRI ȘTIINȚIFICE INTERNAȚIONALE				
1	D. Crişan, N. Drăgan, M. Răileanu, M. Crişan, A. Ianculescu, P. Osiceanu, S. Şomărescu, N. Stănică, C. Stan	Structural study of sol-gel iron doped TiO ₂ nanopowders with photocatalytic activity.	Fourth International Conference on Semiconductor Photochemistry, 23rd-27th June 2013, Prague, Czech Republic	2013
2	M. Crişan, A. Ianculescu, D. Crişan, M. Răileanu, N. Drăgan, P. Osiceanu, S. Şomărescu, N. Stănică, L. Todan	Structural study of sol-gel cobalt doped TiO ₂ nanopowders with photocatalytic activity.	Fourth International Conference on Semiconductor Photochemistry, 23rd-27th June 2013, Prague, Czech Republic	2013
3	M. Răileanu, M. Crişan, A. Ianculescu, D. Crişan, N. Drăgan, P. Osiceanu, S. Şomărescu, N. Stănică, L. Todan	Structural study of sol-gel nickel doped TiO ₂ nanopowders with photocatalytic activity.	Fourth International Conference on Semiconductor Photochemistry, 23rd-27th June 2013, Prague, Czech Republic	2013
4	D. Crişan, N. Drăgan, M. Crişan, M. Răileanu, A. Ianculescu, P. Osiceanu, S. Şomărescu, N. Stănică, C. Stan	The role of Fe dopant on TiO ₂ structure of sol-gel nanopowders.	15 th International Conference of Physical Chemistry, ROMPHYSICHEM 15, September 11-13, 2013, Bucharest, Romania	2013
5	M. Crişan, A. Ianculescu, M. Răileanu, D. Crişan, N. Drăgan, S. Şomărescu, P. Osiceanu, N. Stănică, L. Todan	The influence of Co dopant on TiO ₂ structure of sol-gel nanopowders.	15 th International Conference of Physical Chemistry, ROMPHYSICHEM 15, September 11-13, 2013, Bucharest, Romania	2013
6	M. Răileanu, M. Crişan, A. Ianculescu, D. Crişan, N. Drăgan, L. Todan, P. Osiceanu, S. Somărescu, N. Stănică	Effects of Ni dopant on TiO ₂ structure of sol-gel nanopowders”	15 th International Conference of Physical Chemistry, ROMPHYSICHEM 15, September 11-13, 2013, Bucharest, Romania	2013
7	P. Oancea, I. Niţoi, I. Cristea, N. Drăgan, D. Crişan, M. Răileanu, M. Crişan	Light-induced advanced degradation of nitrobenzene by metal doped TiO ₂ photocatalyst.	15 th International Conference of Physical Chemistry, ROMPHYSICHEM 15, September 11-13, 2013, Bucharest, Romania	2013
8	I. Niţoi, P. Oancea, M. Răileanu, M. Crişan, I. Cristea	Application of TiO ₂ - based photocatalysts for xenobiotics degradation from water: nitrobenzene case study.	International Symposium “Mediul şi Industria”, Bucureşti, 28-29.10.2013	2013
9	M. Crişan, M. Răileanu, N. Drăgan, D. Crişan, A. Ianculescu, I. Niţoi, P. Oancea, S. Şomărescu, N. Stănică, C. Stan	The influence of iron dopant on TiO ₂ structure of sol-gel nanopowders with photocatalytic properties.	10 th International Conference on Physics of Advanced Materials (ICPAM-10) September 22-28, 2014, Iasi, Romania	2014
10	D. Crişan, N. Drăgan, M. Răileanu, M. Crişan, A. Ianculescu, I. Niţoi, P. Oancea, S. Şomărescu, L. Todan	Comparative structural study of sol-gel cobalt and nickel doped TiO ₂ nanopowders with photocatalytic properties.	10 th International Conference on Physics of Advanced Materials (ICPAM-10) September 22-28, 2014, Iasi, Romania	2014
11	M. Crişan, M. Răileanu, D. Crişan, N. Drăgan, A. Ianculescu, I. Niţoi, P. Oancea, S. Somărescu, L. Todan, C. Stan	The effect of Fe, Co and Ni dopant on TiO ₂ structure of sol-gel nanopowders with photocatalytic properties: a comparative study.	14 th International Conference of the European Ceramic Society, ECeS 2015, 21-25 June, 2015, Toledo, Spain	2015
12	I. Niţoi, L. A. Constantin, P. Oancea, I. Cristea, M. Crişan	TiO ₂ solar light photocatalysis a promising treatment method of wastewater with trinitrotoluene content.	15 th International Multidisciplinary Scientific Geoconference, SGEM 2015, 18-24 June, 2015, Albena, Bulgaria.	2015
13	I. Niţoi, P. Oancea, L. Constantin, M. Răileanu, M. Crişan, I. Cristea,	Relationship between structure of some nitroaromatic pollutants and	INCD-ECOIND International Symposium SIMI 2015 „ The	2015

		their degradation kinetic parameters in UV-VIS/TiO ₂ system.	Environment and Industry“, 29-30.10.2015, București, Romania.	
14	P. Oancea, I. Nițoi, M. Crișan, L. Constantin, I. Cristea, M. Ștefănescu	Photocatalytic degradation of nitroaromatic pollutants and their kinetic parameters in UV-VIS/TiO ₂ system.	3 rd International Congress water, waste and energy management, EWWM, Rome, 18 th -20 th July 2016.	2016
15	I. Nițoi, P. Oancea, L. Constantin, M. Crișan, I. Cristea, L. Dinu	Fe-TiO ₂ assisted photocatalytic degradation of TNT in aqueous media under UV-VIS irradiation.	3 rd International Congress Water, Waste and Energy Management, EWWM, Rome, 18 th -20 th July 2016.	2016
16	P. Oancea, I. Nițoi, M. Crișan, L. Constantin, I. Cristea, M. Ștefănescu	Study on the photocatalytic degradation of nitrotoluene from water using heavy metal doped titania.	9 th International Conference on Interfaces against Pollution (IAP), Lleida, 4 th -7 th September, 2016.	2016
17	M. Crișan, D. Mardare, I. Nițoi, C. Adomniței, P. Oancea, N. Drăgan, A. Ianculescu, D. Crișan, M. Gabrovska, L. Todan	Iron doped TiO ₂ films and nanopowders and their photoactivity in nitrobenzene removal from water.	16 th International Conference of Physical Chemistry, ROMPHYSICHEM 16, September 21-23, 2016, Galați, Romania	2016
18	D. Crișan, N. Drăgan, M. Crișan, Adelina Ianculescu, I. Nițoi, P. Oancea, L. Todan, M. Gabrovska, C. Stan	Sol-gel doped TiO ₂ nanopowders with photocatalytic activity – The influence of dopants on titania structure	16 th International Conference of Physical Chemistry, ROMPHYSICHEM 16, September 21-23, 2016, Galați, Romania	2016
19	I. Nițoi, P. Oancea, L. Constantin, M. Crișan, D. Crișan, I. Cristea, M. A. Constantin	Photocatalytic degradation of TNT from water in UV-VIS/Fe-TiO ₂ system	19 th International Symposium “The Environment and Industry”, București, 13 th -14 th October, 2016	2016
	ATLASE, DICTIONARE DE SPECIALITATE			
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	CERERI BREVET DE INVENTII/BREVET OBTINUT			
1	Nițoi Ines, Cosma Cristiana, Dinu Laurențiu Răzvan, Crișan Maria, Oancea Petruța, Ianculescu Adelina Carmen, Constantin Lucian Alexandru, Cristea Nicolae Ionuț	Procedeu de epurare avansată a apelor reziduale impurificate cu 2,4,6-trinitrotoluen,	Cerere de brevet nr. A/00693/03.10.2016	2016
		ALTE rezultate		
1	Maria Crișan, Ines Nițoi, Petruța Oancea, Adelina Ianculescu	Workshop: “Nanomateriale oxidice cu proprietăți fotocatalitice aplicate în degradarea avansată a compușilor xenobiotici din apă – NATIXEN-“	ICF – prezentare orală	21 octombrie 2016
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Lista achizițiilor realizate în cadrul proiectului

Denumire echipament	Categorie de achiziții*: (numai mijloace fixe)	Valoarea (lei)	Locație

**Director proiect
Dr. Maria Crișan**