Producción científica derivada de las tesis defendidas en el programa de Doctorado en Ciencia y Tecnología Química

(Índice impacto y cuartiles hacen referencia a los valores de J. Chemical Reports del año 2018 si no se indica el año entre paréntesis)

Año de defensa	Doctorando/a	Título de la tesis
2016	Fatima Abouhiat	Automatisation des méthodes cinétiques-catalytiques par les techniques d'analyses en flux.

Contribuciones científicas derivadas:

1 Sensitive kinetic-catalytic spectrophotometric method for cobalt determination using a chip coupled to a multisyringe flow injection analysis system F.Z. Abouhiat, C. Henriquez, F. El Yousfi, V. Cerdá **Talanta, 166** (2017) 405-411 DOI: 10.1016/j.talanta.2015.12.005	**4.92**	**Q1**
2 Automatic flow kinetic-catalytic methods C. Henriquez, F. Maya, P. Phansi, F.Z. Abouhiat, K. Danchana, V. Cerdá **Trac-Trends in Analytical Chemistry part C, 85** (2016) 33-45 DOI: 10.1016/j.trac.2016.08.009	**8.42**	**Q1**
3 A miniaturized analyzer for the catalytic determination of iodide in seawater and pharmaceutical samples F. Z. Abouhiat, C. Henríquez, B. Horstkotte, F. El Yousuf, V. Cerdá **Talanta, 108** (2013) 92-102 https://doi.org/10.1016/j.talanta.2013.02.072	**4.91**	**Q1**
4 Sensitive kinetic-catalytic spectrophotometric method for cobalt determination using a chip coupled to a multisyringe flow injection analysis system F. Z. Abouhiat, C. Henríquez, F. El Yousuf, V. Cerdá **Talanta, 166** (2017) 405-411 https://doi.org/10.1016/j.talanta.2015.12.005	**4.91**	**Q1**
5 Automatic integrated system for catalytic spectrophotometric determination of vanadium in water samples F. Z. Abouhiat, C. Henríquez, E. Palacios, F. El Yousuf, V. Cerdá	**1.71**	**Q2**

Analytical Methods, 6 (2014) 9142-9151 6 Kinetic-catalytic method for sequential determination of iron and copper using a chip coupled to a multipumping flow system F. Z. Abouhiat, C. Henríquez, F. El Yousuf, V. Cerdá **Analytical Methods, 7** (2015) 7858-7865	**1.71**	**Q2**

Año de defensa	Doctorando/a	Título de la tesis
2016	Francisco Berga Montaner	Estudio de los efectos del fitato sobre la calcificación cardiovascular en pacientes con enfermedad renal crónica.

Contribuciones científicas derivadas:

1 Intake of myo-inositol hexaphosphate and urinary excretion of inositol phosphates in Wistar rats: Gavage vs. oral administration with sugar F. Grases, A. Costa Bauzà, F. Berga, R. M. Gomila, C. Martorell, M. R. Martínez-Cigoni **PloS one, 14** (2019) e0223959 DOI:10.1371/journal.pone.0223959	**2.78**	**Q2**
2 2,4-Diamino-N10-methylpteroic acid (DAMPA) crystalluria in a patient with osteosarcoma treated with carboxypeptidase-G2 rescue after high-dose methotrexate-induced nephrotoxicity F. Berga, P. Luna, C. Martorell, J. Rey, I. Gomila, S. Giménez, A. Costa-Bauzá, M. A. Elorza, I. Sánchez, F. Grases **Clinica Chimica Acta, 487** (2018) 1-5 DOI: 10.1016/j.cca.2018.09.006	**2.73**	**Q2**
3 Phytate Decreases Formation of Advanced Glycation End-Products in Patients with Type II Diabetes: Randomized Crossover Trial P. Sanchís, R. Rivera, F. Berga, R. Fortuny, M. Adrover, A. Costa Bauzà, F. Grases, L. Masmiquel **Scientific Reports, 8** (2018) 9616 DOI: 10.1038/s41598-018-27853-9	**4.01**	**Q1**
4		

A Pilot Randomized Crossover Trial Assessing the Safety and Short-Term Effects of Walnut Consumption by Patients with Chronic Kidney Disease P. Sanchís, R. M. Molina, F. Berga, E. Muñoz, R. Fortuny, A. Costa Bauzà, F. Grases, J. M. Buades **Nutrients, 12** (2019) issue 1 DOI: 10.3390/nu12010063	**2.36**	**Qx**
5 Evaluation of inositol phosphates in urine after topical administration of myo-inositol hexaphosphate to female Wistar rats F. Grases, A. Costa Bauzà, F. Berga, A. Rodríguez, R.M. Gomila, C. Martorell, M. R. Martínez-Cignoni **Life Sciences, 192** (2018) 33-37 DOI: 10.1016/j.lfs.2017.11.02	**3.44**	**Q2**
6 Protective Effect of Myo-Inositol Hexaphosphate (Phytate) on Abdominal Aortic Calcification in Patients With Chronic Kidney Disease P. Sanchís, M. Buades, F. Berga, M. M. Gelabert, M. Molina, M. V. Iñigo, S. Garcias, J. González, M. R. Barenabeu, A. Costa Bauzà, F. Grases **J. Renal Nutrition, 26** (2016) 226-236 DOI: 10.1053/j.jrn.2016.01.01	**2.75**	**Q2**
7 Novel Colorimetric Determination of Phytate in Urine F. Berga, A. Rodríguez, A. Costa Bauzà, F. Grases **Analytical Letters ,49** (2016) 307-318 DOI: 10.1080/00032719.2015.1060599	**1.25**	**Q4**
8 Urinary Phytate (Myo-Inositol Hexaphosphate) in Healthy School Children and Risk of Nephrolithiasis F. Grases, C. Sáez-Torres, A. Rodríguez, A. Costa Bauzà, D. Rodrigo, G. Frontera, F. Berga, S. Fackler **J. Renal Nutrition, 24** (2014) 219-223 DOI: 10.1053/j.jrn.2014.03.004	**2.75**	**Q2**
9 A new device for simple and accurate urinary pH testing by the Stone-former patient F. Grases, A. Rodríguez, F. Berga, A. Costa Bauzá, R. M. Prieto, I. Burdallo, A. Carrasco, C. Jiménez Jorquera, A. Baldi, R. Garganta **SPRINGERPLUS, 3** (2014) Article Number: 209 DOI: 10.1186/2193-1801-3-209	**1.78**	

Año de defensa	Doctorando/a	Título de la tesis

2019	Carlos Mauricio Calderilla Jaime	Avances en la determinación de metales basados en la técnica de análisis en flujo multijeringa e impresión 3D.

Contribuciones científicas derivadas:

1 Direct photoimmobilization of extraction disks on “green state” 3D printed devices C. Calderilla, F. Maya, V. Cerdà, L. O. Leal **Talanta**, **202** (2019) 67-73 DOI: 10.1016/j.talanta.2019.04.026	**4.91**	**Q1**
2 Recent advances in flow-based automated solid-phase extraction C. Calderilla, F. Maya, L. O. Leal, V. Cerdà **TRAC-TRENDS IN ANALYTICAL CHEMISTRY, 108** (2018)370-380 **DOI:** 10.1016/j.trac.2018.09.011	**8.42**	**Q1**
3 3D printed device for the automated preconcentration and determination of chromium (VI) C. Calderilla, F. Maya, V. Cerdà, L. O. Leal **Talanta, 184** (2018) 15-22 DOI: 10.1016/j.talanta.2018.02.065	**4.92**	**Q1**
4 3D printed device including disk-based solid-phase extraction for the automated speciation of iron using the multisyringe flow injection analysis technique C. Calderilla, F. Maya, V. Cerdà, L. O. Leal **Talanta, 175** (2017) 463-469 DOI: 10.1016/j.talanta.2017.07.028	**4.92**	**Q1**
5 Multivariate optimisation of a rapid and simple automated method for bismuth determination in well water samples exploiting long path length spectrophotometry C. Calderilla, J. Avivar, L.O. Leal, V. Cerdà **Int. J. Env. Anal. Chem, 96** (2016) 653-666 DOI: 10.1080/03067319.2016.1180378	**1.26**	**Q1**

Año de defensa	Doctorando/a	Título de la tesis

2018	Adrián Cordero García	Eficiencia fotocatalítica solar del WO3/TiOs-A (A:N,C) en la degradación del dicofenanto en medio acuoso.

Contribuciones científicas derivadas:

1 Photocatalytic behaviour of WO3/TiO2-N for diclofenac degradation using simulated solar radiation as an activation source A. Cordero-García, G. Turnes-Palomino, L. Hinojosa-Reyes, L. Maya-Tevinno, J. L. Guzmán-Mar, A. Hernández-Ramírez **Env. Sci. Poll. Research. 24** (2017) 4631-4624 DOI: 10.1007/s11356-016-8157-0	**2.91**	**Q2**
2 Effect of carbon doping on WO_3/TiO_2 coupled oxide and its photocatalytic activity on diclofenac degradation A. Cordero-García, J. L. Guzmán-Mar, L. Hinojosa-Reyes, E. Ruiz-Ruiz, A. Hernández-Ramírez **Ceram. Int., 42** (2016) 9796–9803	**3.45**	**Q1**

Año de defensa	Doctorando/a	Título de la tesis
2016	Alba Córdoba Insensé	Covalent Functionalization of Titanium with Natural Small Molecules for Bioactive Bone Implants.

Contribuciones científicas derivadas:

1 Quercitrin Nanocoated Implant Surfaces Reduce Osteoclast Activity In Vitro and In Vivo A. Córdoba, N. Manzanaro-Moreno, C. Colom, H. J. Ronold, S. P. Lingstadass, M. Monjo, J. M. Ramis **Int. J. Molecular Sciences, 19** (2018) article number 3319 DOI: 10.3390/ijms19113319	**4.18**	**Q2**
2 Direct Covalent Grafting of Phytate to Titanium Surfaces through Ti-O-P Bonding Shows Bone Stimulating Surface Properties and Decreased Bacterial Adhesion A. Córdoba, M. Hierro-Oliva, M. A. Pacha Olivenza, M. C. Fernández Calderón, J. Perelló, B. Isern, M. L. González Martín, M. Monjo, J. M. Ramis **ACS APPLIED MATERIALS & INTERFACES , 8** (2016) 11326-11335	**8.45**	**Q1**

DOI: 10.1021/acsami.6b02533 3. Quercitrin-nanocoated titanium surfaces favour gingival cells against oral bacteria M. Gómez Florit, M. A. Pacha-Olivenza, M. A. Fernández-Calderón, A. Córdoba, M. L. González Martín, M. Monjo, J. M. Ramis **SCIENTIFIC REPORTS, 6** (2016) Article Number: 22444 DOI: 10.1038/srep22444	**4.01**	**Q1**
4 Bioinspired Quercitrin Nanocoatings: A Fluorescence-Based Method for Their Surface Quantification, and Their Effect on Stem Cell Adhesion and Differentiation to the Osteoblastic Lineage A. Córdoba, M. Monjo, M. Hierro Oliva, M. L. González Martín, J. M. Ramis **ACS APPLIED MATERIALS & INTERFACES 7** (2015) 16857-16864 DOI: 10.1021/acsami.5b05044	**8.45**	**Q1**
5 Flavonoid-Modified Surfaces: Multifunctional Bioactive Biomaterials with Osteopromotive, Anti-Inflammatory, and Anti-Fibrotic Potential A. Córdoba, M. Satué, M. Gómez Florit, M. Hierro-Oliva, C. Petzold, S. P. Lyngstadaas, M. L. González Martín, M. Monjo, J. B. Ramis **ADVANCED HEALTHCARE MATERIALS, 4** (2015):540-549 DOI: 10.1002/adhm.201400587	**6.27**	**Q1**
6 UV-irradiated 7-dehydrocholesterol coating on polystyrene surfaces is converted to active vitamin D by osteoblastic MC3T3-E1 cells M. Satué, A. Córdoba, J. M. Ramis, M. Monjo **PHOTOCHEMICAL & PHOTOBIOLOGICAL SCIENCES, 12** (2013) 1025-1035 DOI: 10.1039/c3pp50025j	**2.41**	**Q3**

Año de defensa	Doctorando/a	Título de la tesis
2019	Maria Esperança Dalmau Estelrich	Revalorización de subproductos vegetales, efecto del procesado sobre la extracción, estabilidad y bioaccesibilidad de compuestos antioxidantes.

Contribuciones científicas derivadas:

1 Effects of convective drying and freeze-drying on the release of bioactive compounds		

from beetroot during in vitro gastric digestion M. E. Dalmau, V. S. Eim, C. Rosselló, J. A. Carcel, S. Simal **FOOD & FUNCTION, 10** (2019) 3209-3223 DOI: 10.1039/c8fo02421a	**3.24**	**Q1**
2 Influence of freezing on the bioaccessibility of beetroot (Beta vulgaris) bioactive compounds during in vitro gastric digestion M. E. Dalmau, P. J. Llabrés, V. S. Eim, C. Rosselló, S. Simal **JOURNAL OF THE SCIENCE OF FOOD AND AGRICULTURE, 99** (2019) 1055-1065 DOI: 10.1002/jsfa.9272	**2.42**	**Q1**
3 Influence of drying on in vitro gastric digestion of beetroot: evaluation of the microstructure M. E. Dalmau, J. A. Carcel, V. S. Eim, S. Simal Conference: 21st International Drying Symposium (IDS) Location: Valencia, SPAIN Date: SEP 11-14, 2018 **IDS'2018: 21ST INTERNATIONAL DRYING SYMPOSIUM** páginas: 57-64 (2018) DOI: 10.4995/ids2018.2018.7898	**?**	
4. Effects of freezing, freeze drying and convective drying on in vitro gastric digestion of apples M. E. Dalmau, G. Bornhorst, V. S. Eim, C. Rosselló, S. Simal **FOOD CHEMISTRY, 215** (2017) 7-16 DOI: 10.1016/j.foodchem.2016.07.134	**3.39**	**Q1**

Año de defensa	Doctorando/a	Título de la tesis
2018	Alba González López	Diseño y desarrollo de sistemas microfluídicos automáticos para la determinación de contaminantes de interés ambiental.

Contribuciones científicas derivadas:

1 Development of an on-line lab-on-valve micro-solid phase extraction system coupled to liquid chromatography for the determination of flavonoids in citrus juices M. S. Sammani, S. Clavijo, A. González López, V. Cerdà **ANALYTICA CHIMICA ACTA, 1082** (2019) 56-65 DOI: 10.1016/j.aca.2019.06.032	**5.26**	**Q1**

2 Development of an automatic sequential injection analysis-lab on valve system exploiting molecularly imprinted polymers coupled with high performance liquid chromatography for the determination of estrogens in wastewater samples A. González, V. Cerdà **TALANTA, Volume: 209** (2020) Article Number: 120564 DOI: 10.1016/j.talanta.2019.120564	**4.92**	**Q1**
3 High-Performance Liquid Chromatographic Method for the Simultaneous Determination of Four Flavonols in Food Supplements and Pharmaceutical Formulations M. S. Sammani, S. Clavijo, A. González López, V. Cerdà **ANALYTICAL LETTERS, 52** (2019) 1298-1314 DOI: 10.1080/00032719.2018.1536138	**1.24**	**Q4**
4 Estrogens determination exploiting a SIA-LOV system prior in-port derivatization-large volume injection-programmable temperature vaporization-gas chromatography A. González, S. Clavijo, V. Cerdà **TALANTA, 194** (2019) 852-858 DOI: 10.1016/j.talanta.2018.10.10	**4.92**	**Q1**
5 Microsequential injection lab-on-valve system for the spectrophotometric bi-parametric determination of iron and copper in natural waters Alba González, Raquel B. R. Mesquita, Jessica Avivar, Tânia Moniz, Maria Rangel, Víctor Cerdà, António O. S. S. Rangel **TALANTA , 167** (2017) 703-708 DOI: 10.1016/j.talanta.2017.02.055	**4.92**	**Q1**
6 From thermometric to spectrophotometric kinetic-catalytic methods of analysis. A review V. Cerdà, A. González, K. Danchana **TALANTA 167** (2017) 733-746 DOI: 10.1016/j.talanta.2017.02.004	**4.92**	**Q1**
7 In-syringe dispersive mu-SPE of estrogens using magnetic carbon microparticles obtained from zeolitic imidazolate frameworks A. González, J. Avivar, F. Maya, C. Palomino Cabello, G. Turnes Palomino, V. Cerdà **ANALYTICAL AND BIOANALYTICAL CHEMISTRY, 409** (2017) 225-234 DOI: 10.1007/s00216-016-9988-8	**3.29**	**Q1**
8 Estrogens determination in wastewater samples by automatic in-syringe dispersive liquid-liquid microextraction prior silylation and gas chromatography A. González, J. Avivar, V. Cerdá **JOURNAL OF CHROMATOGRAPHY A**,**1413** (2015) 1-8 DOI: 10.1016/j.chroma.2015.08.031	**3.85**	**Q1**

9 Determination of priority phenolic pollutants exploiting an in-syringe dispersive liquid-liquid microextraction-multisyringe chromatography system A. González, J. Avivar, V. Cerdà **ANALYTICAL AND BIOANALYTICAL CHEMISTRY, 407** (2015) 2013-2022 DOI: 10.1007/s00216-015-8464-1	**3.29**	**Q1**
10 Determination of herbicides in environmental water samples by means of a simultaneous in-syringe magnetic stirring-assisted dispersive liquid–liquid microextraction and silylation followed by GC-MS Ruth Suárez, Sabrina Clavijo, Alba González, Víctor Cerdà **Journal of Separation Science, 41** (2018) 1096-1103	**1.25**	**Q4**
11 High Performance Liquid Chromatographic method for the simultaneous determination of four flavonols in food supplements and pharmaceutical formulations M. Subhi, Sabrina Clavijo, Alba González López, Víctor Cerdà **Analytical Letters, 52** (2019) 1-17 DOI: 10.1080/00032719.2018.1536138	**5,26**	**Q1**
12 Development of an on-line lab-on-valve micro-solid phase extraction system coupled to liquid chromatography for the determination of flavonoids in citrus juices. Mohamad Subhi Sammani, Sabrina Clavijo, Alba González, Víctor Cerdà. **Analytica Quimica Acta**, **1082** (2019) 56-65 DOI: https://doi.org/10.1016/j.aca.2019.06.032	**4.92**	**Q1**
13 Development of an automatic SIA-LOV system exploiting molecularly imprinted polymers coupled with high performance liquid chromatography for the determination of estrogens in wastewater samples Alba González, Víctor Cerdà **Talanta, 209** (2020) 120564 DOI: https://doi.org/10.1016/j.talanta.2019.120564		**Q1**

Año de defensa	Doctorando/a	Título de la tesis
2018	María Susana Gutiérrez Gómez	Síntesis y aplicación de compuestos híbridos nanoestructurados basados en óxido de hierro y/o nanodiamantes.

1 Introducing Selectivity on Carbonaceous Material: Removing Noble Salts, Au^{3+}, and Ag^{+} from Aqueous Media by Nanodiamonds Functionalized with Squaramides M. S. Gutiérrez, K. A. López, J. Morey, M. N. Piña **Materials** (Basel, Switzerland), **13** (2020) issue 5 DOI: 10.3390/ma13051086	**2.97**	**Q2**
2 A Very Highly Efficient Magnetic Nanomaterial for the Removal of PAHs from Aqueous Media M. S. Gutiérrez, P. Duel, F. Hierro, J. Morey, N. Piña **SMALL, 14** (2018) Article Number: UNSP 1702573 DOI: 10.1002/smll.201702573	**10.85**	**Q1**
3 Adsorption and Quantification of Volatile Organic Compounds (VOCs) by using Hybrid Magnetic Nanoparticles M. N. Piña, P. Rodríguez, M. S. Gutiérrez, D. Quiñonero, J. Morey, A. Frontera **CHEMISTRY-A EUROPEAN JOURNAL, 24** (2018)12820-12826 DOI: 10.1002/chem.201802945	**5.16**	**Q1**
4 Removal of Au3+ and Ag+ from aqueous media with magnetic nanoparticles functionalized with squaramide derivatives P. Duel, M. S. Gutiérrez, P. Rodríguez, A. León, K. A. López, J. Morey, M. N. Piña **RSC ADVANCES, 8** (2018)36123-36132	**3.04**	**Q2**
5 Fast microwave-assisted conjugation of magnetic nanoparticles with carboxylates of biological interest M. S. Gutiérrez, M. N. Piña, J. Morey **RSC ADVANCES, 7** (2017)19385-19390 DOI: 10.1039/c7ra00830a	**3.04**	**Q2**
6 Influence of the aromatic surface on the capacity of adsorption of VOCs by magnetite supported organic–inorganic hybrids María de las Nieves Piña, María Susana Gutiérrez, Mario Penagos, Pulino Duel, Alberto León, Jeroni Morey, David Quiñonero, Antonio Frontera **RSC ADVANCES, 9** (2019) 24184-24191 DOI: 10.1039/c9ra04490f	**3.04**	**Q2**

Año de defensa	Doctorando/a	Título de la tesis
2019	Laura Mariño Pérez	Effect of glycation on the protein structure, conformation and aggregation tendency.

Contribuciones científicas derivadas:

1 The Janus face of N-terminal lysines in α-synuclein A. B. Uceda, L. Mariño, M. Adrover **NEURAL REGENERATION RESEARCH** 15(10) (2020) 1840-1841 DOI: 10.4103/1673-5374.280309	**2.47**	**Q3**
2 Unravelling the effect of N(ε)-(carboxyethyl)lysine on the conformation, dynamics and aggregation propensity of a-synuclein L. Mariño, R. Ramis, R. Casasnovas, J. Ortega-Castro, B. Vilanova, J. Frau, M. Adrover **CHEMICAL SCIENCE, 11** (2020) 3332 DOI: 10.1039/d0sc00906g	**9.56**	**Q1**
3 Unravelling the effect of N(epsilon)-(carboxymethyl)lysine (CML) and N(epsilon)-(carboxyethyl)lysine (CEL) on the ability of alpha-Synuclein to reduce the formation of Cu^{2+}-catalyzed reactive oxygen species M. Adrover, H. M. Martínez Orozco, A. B. Uceda, L. Mariño, B. Vilanova, J. Ortega Castro, J. Frau **FREE RADICAL BIOLOGY AND MEDICINE, 139** (2019**)** S10-S10 suplement 1 Document Type: Conference Abstract	**5.66**	**Q1**
4 Nitration and Glycation Diminish the alpha-Synuclein Role in the Formation and Scavenging of Cu^{2+}-Catalyzed Reactive Oxygen Species H. Martínez Orozco, L. Mariño, A. B. Uceda, J. Ortega Castro, B. Vilanova, J. Frau, M. Adrover **ACS CHEMICAL NEUROSCIENCE**, **10** (2019) 2919-2930 DOI:10.1021/acschemneuro.9b00142	**3.86**	**Q1**
5 Does glycation really distort the peptide alpha-helicity? L. Mariño, R. Casasnovas, R. Ramis, B. Vilanova, J. Ortega Castro, J. Frau, M. Adrover **INTERNATIONAL JOURNAL OF BIOLOGICAL MACROMOLECULES , 129** (2019) 254-266 DOI: 10.1016/j.ijbiomac.2019.01.213	**4.78**	**Q1**
6 A Coarse-Grained Molecular Dynamics Approach to the Study of the Intrinsically Disordered Protein alpha-Synuclein R. Ramis, J. Ortega Castro , R. Casasnovas, L. Mariño, B. Vilanova, M. Adrover, J. Frau **JOURNAL OF CHEMICAL INFORMATION AND MODELING, 59** (2019) 1458-1471 DOI: 10.1021/acs.jcim.8b00921	**3.97**	**Q1**
7 Glycation of Lysozyme by Glycolaldehyde Provides New Mechanistic Insights in		

Diabetes-Related Protein Aggregation L. Mariño, C. Maya Aguirre, K. Pauwels, B. Vilanova, J. Ortega Castro, J. Frau, J. Donoso, M. Adrover **ACS CHEMICAL BIOLOGY, 12** (2017) 1152-1162 DOI: 10.1021/acschembio.6b01103	**4.59**	**Q1**
8 Ortho-methylated 3-hydroxypyridines hinder hen egg-white lysozyme fibrillogenesis L. Mariño, K. Pauwels, R. Casasnovas, P. Sanchis, B. Vilanova, F. Muñoz, J. Donoso, M. Adrover **SCIENTIFIC REPORTS, 5** (2015) Article Number: 12052 DOI: 10.1038/srep12052	**5.23**	**Q1**

Año de defensa	Doctorando/a	Título de la tesis
2020	Sandra Yadira Mendiola Álvarez	Degradación de sulfonamidas y remoción de NOx utilizando el catalizador Fe2O3-TiO2/P bajo radiación visible

Contribuciones científicas derivadas:

1 Coupled heterogeneous photocatalysis using a P-TiO_2-αFe_2O_3 catalyst and $K_2S_2O_8$ for the efficient degradation of a sulfonamide mixture Sandra Yadira Mendiola-Álvarez, Carlos Palomino-Cabello, Gemma Turnes-Palomino, M.ª Aracely Hernández-Ramírez, Jorge Luis Guzmán-Mar, Laura Hinojosa-Reyes **Journal of Photochemistry and Photobiology A: Chemistry, 394 (**2020) 112485 DOI: 10.1016/j.cattod.2019.01.004	**3.26**	**Q2**
2 A novel P-doped Fe_2O_3-TiO_2 mixed oxide: Synthesis, characterization and photocatalytic activity under visible radiation Sandra Yadira Mendiola-Álvarez, M.ª Aracely Hernández-Ramírez, Jorge Luis Guzmán-Mar, María de Lourdes Maya-Treviño, Adolfo Caballero-Quintero, Laura Hinojosa-Reyes **Catalysis Today, 328** (2019) 91-98 DOI: 10.1016/j.cattod.2019.01.004	**4.89**	**Q1**
3 Phosphorous-doped TiO_2 nanoparticles: synthesis, characterization, and visible photocatalytic evaluation on sulfamethazine degradation Sandra Yadira Mendiola-Álvarez, M.ª Aracely Hernández-Ramírez, Jorge Luis Guzmán-Mar, Lorena Leticia Garza-Tovar, Laura Hinojosa-Reyes **Environmental Science and Pollution Research, 26** (2018) 4180-4191 DOI: 10.1007/s11356-018-2314-6	**2.91**	**Q2**

Año de defensa	Doctorando/a	Título de la tesis
2015	José María Natta March	El programa informático APPO y su aplicación a los accidentes de mercancías peligrosas derivadas del petróleo.

Contribuciones científicas derivadas:

Programa APPO (Accidentes de mercancías Peligrosas derivadas del Petróleo). J. M. Natta, J. R. Bergueiro URI: http://hdl.handle.net/11201/2521 Propiedad de la UIB, del cual hacen uso las empresas del listado: ANTONIO NADAL DESTILERIES (SLU) y también destilería BODEGAS SUAU y varias empresas de transportes de mercancías peligrosas (contenedores de alcohol, etc.): TRANSPORTES MARITIMOS ALCUDIA SA TRANSPORTES SOLAZO SA CONCISA TRANSMEDITERRANEA CARGO		

Año de defensa	Doctorando/a	Título de la tesis
2020	Miguel Oliver Rodríguez	Novel bioavailability tests for risk assessment of organic emerging contaminants in environmental samples and food commodities: A holistic approach.

Contribuciones científicas derivadas:

1 In quest of effect directed analysis in the smart laboratory: Automated system for flow-through evaluation of membranotropic effects of emerging contaminants M. Oliver, M. Roca-Jiménez, M. Miró, D. J. Cocoví-Solberg **TALANTA, Volume: 209** (2020) Article Number: 120600 Published: MAR 2020 DOI: 10.1016/j.talanta.2019.120600 2 Ecotoxicological equilibria of triclosan in Microtox, XenoScreen YES/YAS, Caco2, HEPG2 and liposomal systems are affected by the occurrence of other pharmaceutical and personal care emerging contaminants. M. Oliver, B. Kudlak, M. Wieczerzak, S. Reis, S. A. C. Lima, M. A. Segundo, M. Miró	**4.92**	**Q1**

The Science of the total environment, 719 (2020) 137358 Published: 2020-Feb-16 (Epub 2020 Feb 16) DOI: 10.1016/j.scitotenv.2020.137358	**5.59**	**Q1**
3 Reliable Sensing Platform for Plasmonic Enzyme-Linked Immunosorbent Assays Based on Automatic Flow-Based Methodology N. Kaewwonglom, M. Oliver, D. J. Cococí-Solberg, K. Zirngibl, D. Knopp, J. Jakmunee, M. Miró **ANALYTICAL CHEMISTRY, 91** (2019): 13260-13267 DOI: 10.1021/acs.analchem.9b03855	**6.35**	**Q1**
4 Fluorescent Lipid Nanoparticles as Biomembrane Models for Exploring Emerging Contaminant Bioavailability Supported by Density Functional Theory Calculations M. Oliver, A. Bauzá, A. Frontera, M. Miró **ENVIRONMENTAL SCIENCE & TECHNOLOGY , 50** Issue: 13 Special Issue: SI (2016) 7135-7143 DOI: 10.1021/acs.est.6b00772	**7.15**	**Q1**
5 High-throughput automatic flow method for determination of trace concentrations of aluminum in dialysis concentrate solutions using salicylaldehyde picolinoylhydrazone as a turn-on fluorescent probe A. Garau, M. Oliver, M. Rosende, M. P. Manuel-Vez, M. Miró **TALANTA, 133** special Issue: SI (2015) Pages: 120-126 DOI: 10.1016/j.talanta.2014.04.094	**4.92**	**Q1**

Año de defensa	Doctorando/a	Título de la tesis
2019	Joana Palou Mir	B12-Riboswitch from Klebsiella pneumoniae as target for new antibiotics. Interaction study with natural and synthetic adenosylcobalamin derivatives.

Contribuciones científicas derivadas:

1 Characterization of the full-length btuB riboswitch from Klebsiella pneumoniae J. Palou Mir, A. Musiari, R. K. O. Sigel, M. Barceló Oliver **JOURNAL OF INORGANIC BIOCHEMISTRY, 160** (2016): 106-113 DOI: 10.1016/j.jinorgbio.2015.12.012	**3.22**	**Q1**

Año de defensa	Doctorando/a	Título de la tesis
2018	Melisa Alejandra Rodas Ceballos	Development of devices to integrate in automatic methodologies for determining radionuclides in residues and environmental samples.

Contribuciones científicas derivadas:

1 Flow-through magnetic-stirring assisted system for uranium(VI) extraction: First 3D printed device application M. Rodas Ceballos, J. M. Estela, V. Cerdà, L. Ferrer **TALANTA, 202** (2019) 267-273 DOI: 10.1016/j.talanta.2019.05.026	**4.92**	**Q1**
2. 3D printed resin-coated device for uranium (VI) extraction M. Rodas Ceballos, F. M. González Serra, J. M. Estela, V. Cerdà **TALANTA, 196** (2019) 510-514 DOI: 10.1016/j.talanta.2018.12.055	**4.92**	**Q1**
3. Ra-226 dynamic lixiviation from phosphogypsum samples by an automatic flow-through system with integrated renewable solid-phase extraction M. Rodas Ceballos, A. Borràs, R. García Tenorio, R. Rodríguez, J. M. Estela, V. Cerdà, L. Ferrer **TALANTA, 167** (2017) 398-403 DOI: 10.1016/j.talanta.2017.02.036	**4.92**	**Q1**
4. Monitoring of Be-7 and gross beta in particulate matter of surface air from Mallorca Island, Spain M. Rodas Ceballos, A. Borràs, E. Gomila, J. M. Estela, V. Cerdà, L. Ferrer **CHEMOSPHERE, 152** (2016) 481-489 DOI: 10.1016/j.chemosphere.2016.03.021	**5.10**	**Q1**
5 An integrated automatic system to evaluate U and Th dynamic lixiviation from solid matrices, and to extract/pre-concentrate leached analytes previous ICP-MS detection M. Rodas, R. García-Tenorio, J. M. Estela, V. Cerdà, L. Ferrer **Talanta, 175** (2017) 507–513 DOI: 10.1016/j.talanta.2017.07.061	**4.91**	**Q1**

Año de defensa	Doctorando/a	Título de la tesis
2016	Rogelio Rodríguez Maese	Automatización de métodos radioquímicos para la separación y preconcentración de radionúclidos en muestras ambientales.

Contribuciones científicas derivadas:

1 Strategies for automating solid-phase extraction and liquid-liquid extraction in radiochemical analysis R. Rodríguez, J. Avivar, L. Leal, V. Cerdà, L. Ferrer **Trends in Analytical Chemistry-TrAC, 76** (2016) 145–152 DOI: 10.1016/j.trac.2015.09.009	**8.3**	**Q1**
2 MSFIA-LOV system for ^{226}Ra isolation and pre-concentration from water samples previous radiometric detection. R. Rodríguez, A. Borràs, L. Leal, V. Cerdà, L. Ferrer **Analytica Chimica Acta, 911** (2016) 75–81 DOI: 10.1016/j.aca.2016.01.004	**4.9**	**Q1**
3 Uranium monitoring tool for rapid analysis of environmental samples based on automated liquid-liquid microextraction R. Rodríguez, J. Avivar, L. Ferrer, L. Leal, V. Cerdà **Talanta**, **134** (2015) 674–680 DOI: 10.1016/j.talanta.2014.12.007	**4.0 (2015)**	**Q1**
4 Automation of ^{99}Tc extraction by LOV prior ICP-MS detection: application to environmental samples R. Rodríguez, L. Leal, S. Miranda, L. Ferrer, J. Avivar, A. García, V. Cerdà **Talanta, 133 (**2015) 88–93 DOI: 10.1016/j.talanta.2014.04.093	**4.0 (2015)**	**Q1**
Otros artículos 1 Automated total and radioactive strontium separation and preconcentration in samples of environmental interest exploiting a lab-on-valve system R. Rodríguez, J. Avivar, L. Ferrer, L. Leal, V. Cerdà **Talanta, 96** (2012) 96–101 DOI: 10.1016/j.talanta.2011.11.042	**3.7 (2012)**	**Q !**
2 Fully automatic system for lead monitoring in water R. Rodríguez Maese, L. Ferrer, V. Cerdà, L. O. Leal	**3.21**	**Q2**

Microchemical Journal, 154 (2020) 104450 DOI: 10.1016/j.microc.2019.104550		
3 Automatic solid phase extraction of cadmium from tobacco samples exploiting a multicommutated flow system previous icp-ms detection Angélica Cervantes, Rogelio Rodríguez, Laura Ferrer, Víctor Cerdà, Luz O. Leal **Microchemical Journal, 132** (2017) 107-111	**3.21**	**Q2**
4 ^{226}Ra dynamic lixiviation from phosphogypsum samples by an automatic flow-through system with integrated renewable solid-phase extraction Melisa Rodas Ceballos, Antoni Borràs, Rafael Garcia-Tenorio, Rogelio Rodríguez, José Manuel Estela, Víctor Cerdà **Talanta, 167** (2017) 398-403	**4.91**	**Q2**

Año de defensa	Doctorando/a	Título de la tesis
2018	Adrián Rodríguez Rodríguez	Litiasis renal: avances en el estudio de inhibidores de la cristalización y en nuevas herramientas diagnósticas.

Contribuciones científicas derivadas:

1 Association of Adherence to The Mediterranean Diet with Urinary Factors Favoring Renal Lithiasis: Cross-Sectional Study of Overweight Individuals with Metabolic Syndrome R. M. Prieto, A. Rodríguez, P. Sanchís, M. Morey, M. Fiol, F. Grases, O. Castañer, M. A. Martínez González, J. Salas Salvadó, D. Romaguera **NUTRIENTS, 11** (2019) Article Number: 1708 DOI: 10.3390/nu11081708	**4.17**	**Q1**
2 Urinary phytate concentration and risk of fracture determined by the FRAX index in a group of postmenopausal women A. López González, F. Grases, B. Marí, M. Tomàs Salvà, A. Rodríguez **TURKISH JOURNAL OF MEDICAL SCIENCES, 49** (2019) 458-463 DOI: 10.3906/sag-1806-117	**0,60**	**Q4**
3 Effect of sample time on urinary lithogenic risk indexes in healthy and stone-forming adults and children A. Rodríguez, C. Sáez Torres, C. Mir, P. Casasayas, N. Rodríguez, G. Frontera, J. M. Buades, C. Gómez, A. Costa Bauzà, F. Grases	**1.58**	**Q3**

BMC UROLOGY, 18 (2018)Article Number: 116 3 DOI: 10.1186/s12894-018-0430-8		**Q1**
4 Orbitrap ™ high-resolution mass spectrometry for the identification of amoxicillin crystalluria B. Barceló, A. Rodríguez, M. López Ocón, A. Costa Bauzà, I. Gomila, M. B. B. Cogul, F. Grases **CLINICAL CHEMISTRY AND LABORATORY MEDICINE, 56** (2018) E268-E271 DOI: 10.1515/cclm-2018-0163	**3.63**	**Q1**
5 Effect of Consumption of Cocoa-Derived Products on Uric Acid Crystallization in Urine of Healthy Volunteers A. Costa Bauzà, F. Grases, P. Calvo, A. Rodríguez, R. M. Prieto **NUTRIENTS, 10** (2018) Article Number: 1516 DOI: 10.1515/cclm-2018-0163 5	**4.17**	**Q2**
6 Xanthine urolithiasis: Inhibitors of xanthine crystallization F. Grases, A. Costa Bauzà, J. Roig, A. Rodríguez **PLOS One, 13** (2018) Article Number: e0198881 DOI: 10.1371/journal.pone.0198881	**1.95**	
7 Quantification of xanthine- and uric acid-related compounds in urine using a “dilute-and-shoot” technique coupling ultra-high-performance liquid chromatography and high-resolution Orbitrap mass spectrometry A. Rodríguez, R. M. Gomila, G. Martorell, A. Costa Bauzà, F. Grases **JOURNAL OF CHROMATOGRAPHY B-ANALYTICAL TECHNOLOGIES IN THE BIOMEDICAL AND LIFE SCIENCES, 1067** (2017) 53-60 DOI: 10.1016/j.jchromb.2017.09.047	**2.81**	**Q2**
8 AP(CAOX) INDEX AND CALCIUM/CITRATE RATIO MAY REPRESENT USEFUL TOOLS TO ASSESS THE RISK OF CRYSTALLIZATION IN PEDIATRIC RENAL LITHIASIS J. Lumbreras, M. D. Rodrigo, C. Saéz, A. Rodríguez, N. Espinosa, C. Mir, R. Prieto, C. Gómez, F. Grases **PEDIATRIC NEPHROLOGY, 32** (2017) 1812-1812 Meeting Abstract: P-408	**2.82**	**Q1**

Año de defensa	Doctorando/a	Título de la tesis
2015	José Martín Rosas Castor	Estudio de la acumulación y especiación de arsénico en cultivos de maíz y su riesgo potencial para la salud humana.

Contribuciones científicas derivadas:

1 An evaluation of the bioaccessibility of arsenic in corn and rice samples based on cloud point extraction and hydride generation coupled to atomic fluorescence spectrometry J. M. Rosas Castor, L. Portugal, L. Ferrer, L. Hinojos, R. Jorge, L. Guzmán, M. A. Hernández Ramírez, V. Cerdà. **Food Chemistry, 204** (2016), 475-482	**5.4**	**Q1**
2 Arsenic fractionation in agricultural soils using a modified BCR three-step flow-based sequential extraction method by hydride generation-atomic fluorescence spectrometry J. M. Rosas-Castor, L. Portugal, L. Ferrer, J. L. Guzmán-Mar, A. Hernández-Ramírez, V. Cerdà, L. Hinojosa-Reyes **Anal. Chim. Acta, 874** (2015) 1-10	**5.26**	**Q1**
3 Arsenic accumulation in maize crop (*Zea mays*): A review J. M. Rosas Castor, J. Guzmán, A. Hernández, M. Garza, L. Hinojosa **Science of The Total Environment, 488–489** (2014) 176–187 DOI: 10.1016/j.scitotenv.2014.04.075	**4.1**	**Q1**
4 Evaluation of the transfer of soil arsenic to maize crops in suburban areas of San Luis Potosi, Mexico J. M. Rosas Castor, J. Guzmán, A. Hernández, M. Garza, L. Hinojosa **Science of The Total Environment, 497–498** (2014) 153–162 DOI: 10.1016/j.scitotenv.2014.07.072	**4.1**	**Q1**
Otros artículos Cloud point extraction method for bioaccesible arsenic determination in corn and rice samples J. M. Rosas-Castor, L. Hinojosa-Reyes, L. Portugal, L. Ferrer, J. L. Guzmán-Mar, A. Hernández-Ramírez, V. Cerdà **Toxicology Letters, 259S** (2016) S73–S247	**3,5**	**Q1**

Año de defensa	Doctorando/a	Título de la tesis
2019	Daniel Salazar Beltrán	Determinación de ftalatos en PET, su grado de migración al agua y su degradación mediante fotocatálisis heterogénea.

Contribuciones científicas derivadas:

1 Nanoparticle@Metal-Organic Frameworks as a Template for Hierarchical Porous Carbon Sponges D. Salazar Beltrán, C. Palomino Cabello, J. L. Guzmán Mar, I. Hinojosa Reyes, G. Turnes Palomino, F. Maya **Chemistry Eur. J. , 24** (2018) 13450-13456 DOI: 10.1002/chem.201802545	**5.16**	**Q1**
2 Determination of phthalate acid esters plasticizers in polyethylene terephthalate bottles and its correlation with some physicochemical properties D. Salazar Beltrán, C. Palomino Cabello, J. L. Guzmán Mar, I. Hinojosa Reyes, G. Turnes Palomino, F. Maya **Polymer Testing, 68** (2018) 87-94	**2.94**	**Q1**
3 Automated on-line monitoring of the TiO2-based photocatalytic degradation of dimethyl phthalate and diethyl phthalate D. Salazar Beltrán, I. Hinojosa Reyes, F. Maya, , G. Turnes Palomino, C. Palomino Cabello, A. Hernández Ramírez, J. L. Guzmán Mar **Photochemical and Photobiological Sciences, 18** (2019) 863-870 DOI: 10.1039/c8pp00307f	**2,41**	**Q3**
4 Phthalates in beverages and plastic bottles: sample preparation and determination Daniel Salazar-Beltrán, Laura Hinojosa-Reyes, Edgar Ruiz-Ruiz, Aracely Hernández-Ramírez, Jorge Luis Guzmán-Mar **Food Analytical Methods, 11** (2018) 48-61 DOI: 10.1007/s12161-017-0961-8	**2.41**	**Q2**
5 Determination of phthalates in bottled water by automated on-line solid phase extraction coupled to high performance liquid chromatography with UV detection Daniel Salazar-Beltrán, Laura Hinojosa-Reyes, Edgar Ruiz-Ruiz, Aracely Hernández-Ramírez, Jorge Luis Guzmán-Mar **Talanta, 168** (2017) 291-297 DOI: http://dx.doi.org/10.1016/j.talanta.2017.03.060	**4.92**	**Q1**

Año de defensa	Doctorando/a	Título de la tesis

2019	Francisca Vallespir Torrens	Drying process intensification by using freezing pre-treatments and ultrasound application at high and low temperature.

Contribuciones científicas derivadas:

1. Intensification of Low-Temperature Drying of Mushroom by Means of Power Ultrasound: Effects on Drying Kinetics and Quality Parameters F. Vallespir, L. Crescenzo, O. Rodríguez, F. Marra, S. Simal **FOOD AND BIOPROCESS TECHNOLOGY, 12** (2019) 839-851 DOI: 10.1007/s11947-019-02263-5	**3.03**	**Q2**
2. Effects of freezing treatments before convective drying on quality parameters: Vegetables with different microstructures F. Vallespir, O. Rodríguez, V. S. Eim, C. Rosselló, S. Simal **JOURNAL OF FOOD ENGINEERING, 249** (2019) 15-24 DOI: 10.1016/j.jfoodeng.2019.01.006	**3.62**	**Q1**
3. Ultrasound assisted low-temperature drying of kiwifruit: Effects on drying kinetics, bioactive compounds and antioxidant activity F. Vallespir, O. Rodríguez, J. A. Carcel, C. Rosselló, S. Simal **JOURNAL OF THE SCIENCE OF FOOD AND AGRICULTURE, 99** (2019) 2901-2909 DOI: 10.1002/jsfa.9503	**2.42**	**Q2**
4. Freezing pre-treatments on the intensification of the drying process of vegetables with different structures F. Vallespir, O. Rodríguez, V. S. Eim, C. Rosselló, S. Simal **JOURNAL OF FOOD ENGINEERING, 239** (2018) 83-91 DOI: 10.1016/j.jfoodeng.2018.07.008	**3.62**	**Q1**
5. Improvement of Mass Transfer by Freezing Pre-treatment and Ultrasound Application on the Convective Drying of Beetroot (Beta vulgaris L.) F. Vallespir, J. A. Carcel, F. Marra, V. S. Eim, S. Simal **FOOD AND BIOPROCESS TECHNOLOGY,11** (2018) 72-83 DOI: 10.1007/s11947-017-1999-8	**3.03**	**Q2**

Año de defensa	Doctorando/a	Título de la tesis
2017	Marina Villar Pulido	Sistemas en flujo automatizados para extraer, preconcentrar y determinar tecnecio-99 en muestras biológicas y en residuos de medicina nuclear.

Contribuciones científicas derivadas:

1 Fully Automated System for Tc-99 Monitoring in Hospital and Urban Residues: A Simple Approach to Waste Management M. Villar, A. Borràs, J. Avivar, F. Vega, V. Cerdà, L. Ferrer **ANALYTICAL CHEMISTRY, 89** (2017) 5858-5864 DOI: 10.1021/acs.analchem.7b00184	**6.35**	**Q1**
2 Automatic in-syringe dispersive liquid-liquid microextraction of Tc-99 from biological samples and hospital residues prior to liquid scintillation counting M. Villar, J. Avivar, L. Ferrer, A. Borràs F. Vega, V. Cerdà, L. Ferrer **ANALYTICAL AND BIOANALYTICAL CHEMISTRY , 407** (2015) 5571-5578 DOI: 10.1007/s00216-015-8761-8	**3.28**	**Q1**
3 Automatic and Simple Method for Tc-99 Determination Using a Selective Resin and Liquid Scintillation Detection Applied to Urine Samples M. Villar, J. Avivar, L. Ferrer, M. Galmés, F. Vega, V. Cerdà, L. Ferrer **ANALYTICAL CHEMISTRY, 85** (2013) 5491-5498 DOI: 10.1021/ac4006217	**6.35**	**Q1**

Año de defensa	Doctorando/a	Título de la tesis
2019	Marta Ximenis	Development of Squaramide-Based Self-

	Campins	Immolative Spacers for Drug Delivery.

Contribuciones científicas derivadas:

1. Water-Soluble Squaramide Dihydrates: N-Methylation Modulates the Occurrence of One- and Two-Dimensional Water Clusters through Hydrogen Bonding and Dipolar Interactions M. Ximenis, J. Pitarch, S. Blasco, C. Rotger, E. García España, A. Costa **CRYSTAL GROWTH & DESIGN, 18** (2018) 4420-4427 DOI: 10.1021/acs.cgd.8b00401	**4.15**	**Q1**
2. Kinetic Analysis and Mechanism of the Hydrolytic Degradation of Squaramides and Squaramic Acids M. Ximenis, E. Bustelo, A. G. Algarra, M. Vega, C. Rotger, M. G. Basallote, A. Costa **JOURNAL OF ORGANIC CHEMISTRY, 82** (2017) 2160-2170 DOI: 10.1021/acs.joc.6b02963	**5.16**	**Q1**