

## **PUBLICACIONES CIENTÍFICAS 2017**

### **GRUPO DE BIOSENSORES ANALÍTICOS (GBA)**

**Enzymatic methods for choline-containing water soluble phospholipids base on fluorescence of choline oxidase: application to lyso-PAF.**

Isabel Sanz-Vicente, Andrés Domínguez, Carlos Fernández, Javier Galbán (GBA)  
Analytical Biochemistry, 519, 30-37 (2017)

**A label-free platform for dopamine biosensing.**

Jesús Navarro, Susana de Marcos, Javier Galbán (GBA)  
Byoanalysis, doi.org/10.4155/bio-2017-0161 Epub 15 diciembre (2017)

**Glucose oxidase immobilized on magnetic nanoparticles: nanobiosensors for fluorescence glucose monitoring.**

Melisa del Barrio, María Moros, Sara Puertas, Jesús M. de la Fuente, Valeria Grazú, Vicente Cebolla, Susana de Marcos, Javier Galbán (GBA)  
Microchimica Acta, 184, 5, 1325-1333 (2017)

**Nanobiosensores ópticos.**

Susana de Marcos, Alba Martín, Jesús Navarro, Isabel Sanz, Javier Galbán (GBA)  
Nanomedicina (SE BBM), 192, 19-23 (2017)

**Hacia la determinación in situ de aminas biógenas.**

Jesús Navarro, Isabel Sanz-Vicente, R. Lozano, I. Rivero, Angel López, Susana de Marcos, Javier Galbán (GBA)  
Actualidad Analítica, 60, 20-23 (2017)

### **GRUPO DE ESPECTROSCOPIA ANALÍTICA Y SENSORES (GEAS)**

**Comparison between non-invasive methods used on paintings by Goya and his contemporaries: hyperspectral imaging vs. point-by-point spectroscopic analysis.**

Floréal Daniel, Aurélie Mounier, Josefina Pérez-Arantegui, Carlos Pardos, Nagore Prieto-Taboada, Silvia Fernández-Ortiz de Vallejuelo, K. Castro (GEAS)  
Analytical and Bioanalytical Chemistry, 409, 16, 4047-4056 (2017)

**Rapid simultaneous extraction and magnetic particle-based enzyme immunoassay for the parallel determination of ochratoxin A, fumonisin B1 and deoxynivalenol mycotoxins in cereal samples.**

Juan C. Vidal, Juan R. Bertolín, Alba Ezquerro, Susana Hernández, Juan R. Castillo (GEAS)  
Analytical Methods, 9, 24, 3602-3611 (2017)

**Fate and Toxicity of Inorganic Engineered Nanomaterials in the Marine Environment. Analytical Techniques and Methods.**

Francisco Laborda, Eduardo Bolea, Javier Jimenez-Lamana (GEAS)  
Environmental problems in marine biology: Methodological aspects and applications, chapter 12, pp. 246-267. Ed. Tamara Garcia B., Jose L. Gómez A., CRC Press. ISBN 9781482264500 (2017)

**An ICP-MS-based platform for release studies on silver-based nanomaterials.**

Isabel Abad, Eduardo Bolea, Francisco Laborda, Juan R. Castillo (GEAS)  
Journal of Analytical Atomic Spectrometry, 32, 1101-1108 (2017)

**Caracterización arqueométrica de la cerámica del Castillo de Albarracín (Teruel, España) en la transición entre los siglos XII y XIII.**

Josefina Pérez-Arategui, Antonio Hernández Pardos (GEAS)

Revista digital de Arqueología, Arquitectura y Artes: digital, 4, 41-50 (2017)

**Colores y pigmentos en los libros de canto miniados de la Orden de San Jerónimo en la catedral de Huesca: Estudio analítico no invasivo de los materiales empleados en su decoración.**

Josefina Pérez-Arategui (GEAS)

Cantoriales de la Orden de San Jerónimo en la catedral de Huesca: estudio multidisciplinar, capítulo 11, pp. 213-230. Carmen Morte, Instituto de Estudios Altoaragoneses. ISBN: 978-84-8127-284-0 (2017)

**MultiFlip Tech: redmultidisciplinar en Flipped Learning y nuevas tecnologías y metodologías.**

Enrique Romero, Jesus S. Artal, Jose M. Carmona, Jose R. Gargía, M. José Luesma, Jose M. Mir, Teresa Montaner, Rosa M. Serrano (GEAS)

Actas de las XI Jornadas de innovación docente e investigación educativa UZ, pp. 212. Universidad de Zaragoza. Zaragoza. ISBN 978-84-697-5166-4 (2017)

## **GRUPO UNIVERSITARIO DE INVESTIGACIÓN ANALÍTICA (GUIA)**

**Raman spectroscopy, electronic microscopy and SPME-GC-MS to elucidate the mode of action of a new antimicrobial food packaging material**

Isabel Clemente, Margarita Aznar, Jesús Salafranca, Cristina Nerin (GUIA)

Analytical and Bioanalytical Chemistry, 409(4), 1037-1048 (2017)

**Development and Characterisation of HPMC films containing PLA Nanoparticles Loaded with Green Tea Extract for Food Packaging Applications.**

Magdalena Wrona, Marlene J. Cran, Cristina Nerin, Stephen W. Bigger (GUIA)

Carbohydrate Polymers, 156, 108–117 (2017)

**Scientific Opinion on the safety assessment of the process 'Alimpet', based on EREMA MPR technology, used to recycle post-consumer PET into food contact materials.**

EFSA CEF Panel (EFSA Panel on Food Contact Materials, Enzymes, Flavourings and Processing Aids), Vitorio Silano, Claudia Bolognesi, Laurence Castle, Jean-Pierre Cravedi, Karl-Heinz Engel, Paul Fowler, Konrad Grob, Rainer Gürtler, Trine Husøy, Sirpa Kärenlampi, Win Mennes, André Penninks, Andrew Smith, Maria Fátima Tavares, Christina Tlustos, Detlef Wölfle, Holger Zorn, Corina-Aurelia Zugravu, Vicent Dudler, Nathalie Gontard, Eugenia Lampi, Cristina Nerin, Constantine Pappaspyrides, Alexandros Lioupis, Maria Rosario Milana (GUIA)

EFSA Journal, 15(6):4844, 12 pp. 2017. DOI:10.2903/j.efsa.2017.4844

**Scientific Opinion on the safety assessment of the process 'Coexpan Deutschland', based on EREMA Basic technology, used to recycle post-consumer PET into food contact materials.**

EFSA CEF Panel (EFSA Panel on Food Contact Materials, Enzymes, Flavourings and Processing Aids), Vitorio Silano, Claudia Bolognesi, Laurence Castle, Jean-Pierre Cravedi, Karl-Heinz Engel, Paul Fowler, Konrad Grob, Rainer Gürtler, Trine Husøy, Sirpa Kärenlampi, Win Mennes, André Penninks, Andrew Smith, Maria Fátima Tavares, Christina Tlustos, Detlef Wölfle, Holger Zorn, Corina-Aurelia Zugravu, Vicent Dudler, Nathalie Gontard, Eugenia Lampi, Cristina Nerin, Constantine Pappaspyrides, Katharina Volk, Maria Rosario Milana (GUIA)

EFSA Journal, 15(6):4846, 13 pp. 2017. DOI:10.2903/j.efsa.2017.4846

**Scientific Opinion on the safety assessment of the process 'Coexpan Montonate', based on Starlinger Decon technology, used to recycle post-consumer PET into food contact materials.**

EFSA CEF Panel (EFSA Panel on Food Contact Materials, Enzymes, Flavourings and Processing Aids), Vitorio Silano, Claudia Bolognesi, Laurence Castle, Jean-Pierre Cravedi, Karl-Heinz Engel, Paul Fowler, Konrad Grob, Rainer Gürtler, Trine Husøy, Sirpa Kärenlampi, Win Mennes, André Penninks, Andrew Smith, Maria Fátima Tavares, Christina Tlustos, Detlef Wölfle, Holger Zorn, Corina-Aurelia Zugravu, Vicent Dudler, Nathalie Gontard, Eugenia Lampi, Cristina Nerin, Constantine Papaspyrides, Cristina Croera, Katharina Volk, Maria Rosario Milana (GUIA)  
EFSA Journal, 15(6):4848, 11 pp. 2017. DOI:10.2903/j.efsa.2017.4848

**Scientific Opinion on the safety assessment of the process 'EREMA Recycling (MPR, Basic and Advanced technologies)', used to recycle post-consumer PET into food contact materials.**

EFSA CEF Panel (EFSA Panel on Food Contact Materials, Enzymes, Flavourings and Processing Aids), Vitorio Silano, Claudia Bolognesi, Laurence Castle, Jean-Pierre Cravedi, Karl-Heinz Engel, Paul Fowler, Konrad Grob, Rainer Gürtler, Trine Husøy, Sirpa Kärenlampi, Win Mennes, André Penninks, Andrew Smith, Maria Fátima Tavares, Christina Tlustos, Detlef Wölfle, Holger Zorn, Corina-Aurelia Zugravu, Vicent Dudler, Nathalie Gontard, Eugenia Lampi, Cristina Nerin, Constantine Papaspyrides, Alexandros Lioupi, Maria Rosario Milana (GUIA)  
EFSA Journal, 15(6):4842, 16 pp. 2017. DOI:10.2903/j.efsa.2017.4842

**Scientific Opinion on the safety assessment of the process 'Krones' used to recycle post-consumer PET into food contact materials.**

EFSA CEF Panel (EFSA Panel on Food Contact Materials, Enzymes, Flavourings and Processing Aids), Vitorio Silano, Claudia Bolognesi, Laurence Castle, Jean-Pierre Cravedi, Karl-Heinz Engel, Paul Fowler, Konrad Grob, Rainer Gürtler, Trine Husøy, Sirpa Kärenlampi, Win Mennes, André Penninks, Andrew Smith, Maria Fátima Tavares, Christina Tlustos, Detlef Wölfle, Holger Zorn, Corina-Aurelia Zugravu, Vicent Dudler, Nathalie Gontard, Eugenia Lampi, Cristina Nerin, Constantine Papaspyrides, Cristina Croera, Maria Rosario Milana (GUIA)  
EFSA Journal, 15(10):5015, 12 pp. 2017. DOI:10.2903/j.efsa.2017.5015

**Scientific Opinion on the safety assessment of the process 'Märkische Faser', based on NGR technology, used to recycle post-consumer PET into food contact materials.**

EFSA CEF Panel (EFSA Panel on Food Contact Materials, Enzymes, Flavourings and Processing Aids), Vitorio Silano, Claudia Bolognesi, Laurence Castle, Jean-Pierre Cravedi, Karl-Heinz Engel, Paul Fowler, Konrad Grob, Rainer Gürtler, Trine Husøy, Sirpa Kärenlampi, Win Mennes, André Penninks, Andrew Smith, Maria Fátima Tavares, Christina Tlustos, Detlef Wölfle, Holger Zorn, Corina-Aurelia Zugravu, Vicent Dudler, Nathalie Gontard, Eugenia Lampi, Cristina Nerin, Constantine Papaspyrides, Cristina Croera, Maria Rosario Milana (GUIA)  
EFSA Journal, 15(7):4898, 12 pp. 2017. DOI:10.2903/j.efsa.2017.4898

**Scientific Opinion on the safety assessment of the process '4PET', based on EREMA Basic technology, used to recycle post-consumer PET into food contact materials.**

EFSA CEF Panel (EFSA Panel on Food Contact Materials, Enzymes, Flavourings and Processing Aids), Vitorio Silano, Claudia Bolognesi, Laurence Castle, Jean-Pierre Cravedi, Karl-Heinz Engel, Paul Fowler, Konrad Grob, Rainer Gürtler, Trine Husøy, Sirpa Kärenlampi, Win Mennes, André Penninks, Andrew Smith, Maria Fátima Tavares, Christina Tlustos, Detlef Wölfle, Holger Zorn, Corina-Aurelia Zugravu, Vicent Dudler, Nathalie Gontard, Eugenia Lampi, Cristina Nerin, Constantine Papaspyrides, Katharina Volk, Maria Rosario Milana (GUIA)  
EFSA Journal, 15(6):4845, 13 pp. 2017. DOI:10.2903/j.efsa.2017.4845

**Scientific Opinion on the safety assessment of the process 'PEGRA-V', based on Starlinger IV+® technology, used to recycle post-consumer PET into food contact materials.**

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EFSA Journal, 15(7):4899, 12 pp. 2017. DOI:10.2903/j.efsa.2017.4899

**Scientific opinion on the safety assessment of the process 'Plastienvase', based on EREMA Basic technology, used to recycle post-consumer PET into food contact materials.**

EFSA CEF Panel (EFSA Panel on Food Contact Materials, Enzymes, Flavourings and Processing Aids), Vitorio Silano, Claudia Bolognesi, Laurence Castle, Jean-Pierre Cravedi, Karl-Heinz Engel, Paul Fowler, Konrad Grob, Rainer Gürtler, Trine Husøy, Sirpa Kärenlampi, Win Mennes, André Penninks, Andrew Smith, Maria Fátima Tavares, Christina Tlustos, Detlef Wölfle, Holger Zorn, Corina-Aurelia Zugravu, Vicent Dudler, Nathalie Gontard, Eugenia Lampi, Cristina Nerin, Constantine Papaspyrides, Katharina Volk, Maria Rosario Milana (GUIA)  
EFSA Journal, 15(6):4843, 13 pp. 2017. DOI:10.2903/j.efsa.2017.4843

**Scientific Opinion on the safety assessment of the process 'Veroniki Ecogrup SRL', based on Starlinger Decon technology, used to recycle post-consumer PET into food contact materials.**

EFSA CEF Panel (EFSA Panel on Food Contact Materials, Enzymes, Flavourings and Processing Aids), Vitorio Silano, Claudia Bolognesi, Laurence Castle, Jean-Pierre Cravedi, Karl-Heinz Engel, Paul Fowler, Konrad Grob, Rainer Gürtler, Trine Husøy, Sirpa Kärenlampi, Win Mennes, André Penninks, Andrew Smith, Maria Fátima Tavares, Christina Tlustos, Detlef Wölfle, Holger Zorn, Corina-Aurelia Zugravu, Vicent Dudler, Nathalie Gontard, Eugenia Lampi, Cristina Nerin, Constantine Papaspyrides, Katharina Volk, Maria Rosario Milana (GUIA)  
EFSA Journal, 15(7):4900, 11 pp. 2017. DOI:10.2903/j.efsa.2017.4900

**Migration assessment and the Threshold of Toxicological Concern applied to the safe-design of an acrylic adhesive for food contact laminates.**

Elena Canellas, Paula Vera, Cristina Nerín (GUIA)  
Food Additives and Contaminants, Part A, 34(10), 1721-1729 (2017)

**Overall and specific migration from multilayer high barrier food contact materials – kinetic study of cyclic polyester oligomers migration.**

Sara Úbeda, Margarita Aznar, Paula Vera, Cristina Nerín, Luis Henríquez, Laura Taborda, Claudia Restrepo (GUIA)  
Food Additives & Contaminants: Part A, 34(10), 1784-1794 (2017)

**Safe by design of printed multilayer materials intended for food packaging.**

Celia Domeño, Margarita Aznar, Cristina Nerin, Francesca Isella, Mauro Fedeli, Osvaldo Bosetti (GUIA)  
Food Additives and Contaminants Part A, 34(7), 1239-1250 (2017)

**Antioxidant effect of an innovative active plastic film containing olive leaves extract on fresh pork meat and its evaluation by Raman Spectroscopy.**

Messaad Moudache, Cristina Nerin, Marta Colón, Farid Zaidi (GUIA)  
Food Chemistry, 229, 98–103 (2017).

**Effect of an active label based on benzyl isothiocyanate on the morphology and ochratoxins production of *Aspergillus ochraceus*.**

Isabel Clemente, Margarita Aznar, Cristina Nerín (GUIA)  
Food Research International, 101, 61-72 (2017).

**Active and Intelligent Food Packaging.**

Cristina Nerin, Paula Vera, Elena Canellas (GUIA)  
Food Safety and Protection, chapter 14, pp. 459-482. Editors: V Ravishankar Rai and Jamuna A Bai (University of Mysore, Mysore, India). CRC Press, Taylor & Francis Group. ISBN 9781498762878. (2017)

**Antioxidant packaging with encapsulated green tea for fresh minced meat.**

Magdalena Wrona, Cristina Nerín, M. José Alfonso, Miguel Ángel Caballero (GUIA)  
Innovative Food Science and Emerging Technologies, 41, 307-313 (2017)

**Fabric Phase Sorptive Extraction as a Reliable Tool for Rapid Screening and Detection of Freshness Markers in Oranges.**

Margarita Aznar, Sara Ubeda, Cristina Nerín, A. Kabir, K.G. Furton (GUIA)  
Journal of Chromatography A, 1500, 32-42 (2017)

**Determination of total plasma oxysterols by enzymatic hydrolysis, solid phase extraction and liquid chromatography coupled to mass-spectrometry.**

Isabel Mendiara, Celia Domeño, Cristina Nerín, Aron M. Geurts, Jesús Osada, Roberto Martínez-Beamonte (GUIA)  
Journal of Pharmaceutical and Biomedical Analysis, DOI:10.1016/j.jpba.2017.12.033 (2017)

**Toxic compounds from tobacco in placenta samples analyzed by UPLC-QTOF-MS.**

Somayah Mohammadi, Celia Domeno, Isabel Nerin, Margarita Aznar, Pilar Samper, Gholamreza Khayatian, Cristina Nerin (GUIA)  
Journal of Pharmaceutical and Biomedical Analysis, 145, 331-338 (2017)

**Fast assessment of oxo-biodegradable polyethylene film oxidation by surface-enhanced Raman scattering with in situ formation of a silver nanoparticle substrate.**

Magdalena Wrona, Jesus Salafrañca, Cristina Nerin (GUIA)  
Journal of Materials Chemistry C, 5, 463-469 (2017)

**Control microbial growth on fresh chicken meat using pinosylvin inclusion complexes based packaging absorbent pads.**

Filomena Silva, Fernanda C. Domingues, Cristina Nerín (GUIA)  
LWT - Food Science and Technology, DOI:10.1016/j.lwt.2017.10.043

**Asymmetrical flow field-flow fractionation coupled to inductively coupled plasma mass spectrometry for sizing SeNPs for packaging applications.**

María Palomo-Siguero, Paula Vera, Yolanda Echegoyen, Cristina Nerin, Carmen Cámara, Yolanda Madrid (GUIA)  
Spectrochimica Acta Part B: Atomic Spectroscopy, 132, 19-25 (2017)

**Identification and quantification of odours from oxobiodegradable polyethylene oxidised under a free radical flow by headspace solid-phase microextraction followed by gas chromatography-olfactometry-mass spectrometry.**

Magdalena Wrona, Paula Vera, Davinson Pezo, Cristina Nerín (GUIA)  
Talanta, 172, 37-44 (2017)

## **LABORATORIO DE ANÁLISIS DE AROMA Y ENOLOGÍA (LAAE)**

### **Effect of bentonite fining on polyfunctional mercaptans and other volatile compounds in Sauvignon Blanc wines.**

Eduardo Vela, Purificación Hernández-Orte, Eva Castro, Vicente Ferreira, Ricardo López (LAAE)  
American Journal of Enology and Viticulture, 68 (1), 30-38 (2017)

### **Levels of higher alcohols inducing aroma changes and modulating experts' preferences in wine model solutions.**

Arancha de la Fuente, María Pilar Sáenz-Navajas, Vicente Ferreira (LAAE)  
Australian Society of Viticulture and Oenology, 23 (2), 162-169 (2017)

### **Rapid strategies for the determination of sensory and chemical differences between a wealth of similar sines.**

Yohanna Alegre, M. Pilar Sáenz-Navajas, Vicente Ferreira, David García, Iosu Razquin, Purificación Hernández-Orte (LAAE)  
European Food Research and Technology, 243 (8), 1295-130 (2017)

### **Does the host tree exert any influence on the aromatic composition of the black truffle (*Tuber melanosporum*)?**

Laura Culleré, Vicente Ferreira, Pedro Marco, M<sup>a</sup> Eugenia Venturini, Domingo Blanco (LAAE)  
Flavour and Fragrance Journal, 32, 133-140 (2017)

### **Sensory and chemical drivers of wine minerality aroma: An application to Chablis wines.**

Heber Rodrigues, M. Pilar Sáenz-Navajas, Ernesto Franco-Luesma, Dominique Valentin, Purificación Fernández-Zurbano, Vicente Ferreira, Arancha de la Fuente, Jordi Ballester (LAAE)  
Food Chemistry, 230, 553-562 (2017)

### **The effects of copper fining on the wine content in sulfur off-odors and on their evolution during accelerated anoxic storage.**

Eduardo Vela, Purificación Hernández-Orte, Ernesto Franco-Luesma, Vicente Ferreira (LAAE)  
Food Chemistry, 231, 212-221 (2017)

### **Aroma profiling of an aerated fermentation of natural grape must with selected yeast strains at pilot scale.**

Jordi Tronchoni, José Antonio Curiel, M. Pilar Sáenz-Navajas, Pilar Morales, Arancha de la Fuente, Purificación Fernández-Zurbano, Vicente Ferreira, Ramón González (LAAE)  
Food Microbiology, 70, 214-223 (2017).

### **Cross-modal interactions and effects of the level of expertise on the perception of bitterness and astringency of red wines.**

Arancha de la Fuente, Purificación Fernández-Zurbano, Dominique Valentin, Vicente Ferreira, M. Pilar Sáenz-Navajas (LAAE)  
Food Quality and Preference, 62, 155-161 (2017)

### **Chemo-sensory characterization of fractions driving different mouthfeel properties in red wines.**

M. Pilar Sáenz-Navajas, José Miguel Avizcuri, Sara Ferrero, Dominique Valentin, Vicente Ferreira, Purificación Fernández-Zurbano (LAAE)  
Food Research International, 94, 54-64 (2017)

### **Study of the influence of varietal amino acid profiles on the polyfunctional mercaptans released from their precursors.**

Yohanna Alegre, Laura Culleré, Vicente Ferreira, Purificación Hernández-Orte (LAAE)  
Food Research International, 100, 740-747 (2017)

**Elusive Chemistry of Hydrogen Sulfide and Mercaptans in Wine.**

Vicente Ferreira, Ernesto Franco-Luesma, Eduardo Vela, Ricardo López (LAEE)  
Journal of Agricultural and Food Chemistry. doi: 10.1021/acs.jafc.7b02427. Epub 2017

**Oxygen and SO<sub>2</sub> consumption rates in white and rose wines: Relationship with and effects on wine chemical composition.**

Vanesa Carrascón, Mónica Bueno, Purificación Fernández-Zurbano, Vicente Ferreira (LAEE)  
Journal of Agricultural and Food Chemistry, 65 (43), 9488-9495 (2017)

**Gas chromatography-mass spectrometry strategies for the accurate and sensitive speciation of sulfur dioxide in wine.**

Vanesa Carrascón, Ignacio Ontañón, Mónica Bueno, Vicente Ferreira (LAEE)  
Journal of Chromatography A, 1504, 27-34 (2017)

**LABORATORIO LÁSER Y MEDIO AMBIENTE (LASLAB)**

**Quantitative analysis of roman archaeological ceramics by laser induced breakdown spectroscopy.**

Roberto J. Lasheras, Jesús Anzano, Cristina Bello, Miguel Escudero, Jorge O. Cáceres (LASLAB)  
Analytical Letters, 50 (8), 1-10 (2017)

**Qualitative and quantitative analysis of milk for the detection of adulteration by laser induced breakdown spectroscopy (LIBS).**

Samuel Moncayo, Sadia Manzoor, Daniel Rosales, Jesús Anzano, Jorge O. Cáceres (LASLAB)  
Food Chemistry, 232, 322-328 (2017)

**Determination of lanthanides in fossil samples using laser induced breakdown spectroscopy.**

Jesús Anzano, Jaime Cajal, Roberto J. Lasheras, Miguel Escudero, Ignacio Canudo, Mariano Laguna, Amara Dar, Jamil Anwar (LASLAB)  
Journal of the Chemical Society of Pakistan, 39(4), 516-526 (2017)

**Laser-induced breakdown spectroscopy (LIBS) for monitoring the formation of hydroxapatite porous layers.**

Daniel Sola, Daniel Paúles, Lorena Grima, Jesús Anzano (LASLAB)  
Materials, 10(12), 1395 (2017)

**GRUPO DE INVESTIGACIÓN EN MÉTODOS DE ANÁLISIS RÁPIDOS (MARTE)**

**Thallium in spruce needles: A comparison of the analytical capabilities of spectrochemical methods.**

Jan Patočka, Lenka Bendakovská, Anna Krejčová, Tomas Černožský, Martín Resano, Petr Bělina (MARTE)  
Analytical Methods, 9 (4), 705-715 (2017)

**Analysis of whole blood by ICP-MS equipped with a high temperature total sample consumption system.**

Águeda Cañabate, Esperanza García-Ruiz, Martín Resano, Jose Luis Todolí (MARTE)  
Journal of Analytical Atomic Spectrometry, 32(1), 78-87 (2017)

**Cerebrospinal fluid elemental analysis by using a total sample consumption system operated at high temperature adapted to inductively coupled plasma mass spectrometry.**

Águeda Cañabate, Esperanza García-Ruiz, Martín Resano, Jose Luis Todolí (MARTE)  
Journal of Analytical Atomic Spectrometry, 32 (10), 1916-1924 (2017)

**Characterization of SiO<sub>2</sub> nanoparticles by single particle-inductively coupled plasma-tandem mass spectrometry (SP-ICP-MS/MS).**

Eduardo Bolea-Fernandez, Diego Leite, Ana Rúa-Ibarz, Lieve Balcaen, M. Teresa Aramendía, Martín Resano, Frank Vanhaecke (MARTE)  
Journal of Analytical Atomic Spectrometry, 32 (11), 2140-2152 (2017)

**Direct mercury determination in blood and urine by means of high-resolution continuum source graphite furnace atomic absorption spectrometry using gold nanoparticles as a chemical modifier.**

M. Teresa Aramendía, Ananda Guarda, Diego Leite, Martín Resano (MARTE)  
Journal of Analytical Atomic Spectrometry, 32 (12), 2352-2359 (2017)

**Overcoming spectral overlap: Via inductively coupled plasma-tandem mass spectrometry (ICP-MS/MS). A tutorial review.**

Eduardo Bolea-Fernández, Lieve Balcaen, Martín Resano, Frank Vanhaecke (MARTE)  
Journal of Analytical Atomic Spectrometry, 32(9), 1660-1679 (2017)

**The JAAS community: We few, we lucky few, we band of brothers.**

Martín Resano (MARTE)  
Journal of Analytical Atomic Spectrometry, 32 (1), 9-10 (2017)

**Determination of chlorine via the CaCl molecule by high-resolution continuum source graphite furnace molecular absorption spectrometry and direct solid sample analysis.**

Ananda Guarda, M. Teresa Aramendía, Irene Andrés, Esperanza García-Ruiz, Paolo C. do Nascimento, Martín Resano (MARTE)  
Talanta, 162, 354-361 (2017)

**Formation mechanism of maghemite nanoflowers synthesized by polyol mediated process.**

Helena Gavilan, Elena H. Sánchez, Maria E. F. Brollo, Laura Asín, Katrine K. Moerner, Catherine Frandsen, Francisco J. Lázaro, Carlos J. Serna, Sabino Veintemillas-Verdaguer, María del Puerto Morales, Lucía Gutiérrez  
ACS Omega, 2 (10), 7172-7184 (2017)

**How Shape and Internal Structure Affect the Magnetic Properties of Anisometric Magnetite Nanoparticles.**

Helena Gavilán, Oliver Posth, Laura K. Bogart, Uwe Steinhoff, Lucía Gutiérrez, María del Puerto Morales  
Acta Materialia, 125, 416-424 (2017)

**Time-course assessment of the aggregation and metabolization of magnetic nanoparticles.**

Jose M. Rojas, Vanesa del Dedo, Helena Gavilán, Eduardo Lorente-Sorolla, Laura Sanz-Ortega, Gustavo B. da Silva, Rocio Costo, Sonia Perez-Yagüe, Marina Talelli, Marzia Marciello, María del Puerto Morales, Domingo F. Barber, Lucía Gutiérrez  
Acta Biomaterialia, 58, 181-195 (2017)

**The actin binding protein profilin 2 is a novel regulator of iron homeostasis.**

Sara Lusciati, Bruno Galy, Lucía Gutiérrez, Michael Reinke, Jorge Couso, Maya Shvartsman, Antonio Di Pascale, Walter Witke, Matthias W. Hentze, Pietro Pilo Boyl, Mayka Sanchez  
Blood, 130 (17), 1934-1945 (2017)

**Targeted Nanoparticles for the Treatment of Alzheimer's Disease.**

Rafael Martín-Rapún, Laura De Matteis, Alfredo Ambrosone, Sonia García-Embid, Lucía Gutiérrez, Jesus M. de la Fuente  
Current Pharmaceutical Design, 23 (13), 1927-1952 (2017)

**Facile Microwave Synthesis of Uniform Magnetic Nanoparticles with Minimal Sample Processing.**

Thomas Schneider, Anna Löwa, Stoyan Karagiozov, Lisa Sprenger, Lucía Gutiérrez, Tullio Esposito, Gernot Marten, Katayoun Saatchi, Urs O. Häfeli  
Journal of Magnetism and Magnetic Materials, 421, 283-291 (2017)

**Counterion and solvent effects on the size of magnetite nanocrystals obtained by oxidative precipitation.**

Yurena Luengo, María del Puerto Morales, Lucía Gutiérrez, Sabino Veintemillas-Verdaguer  
Journal of Materials Chemistry C 4 (40), 9482-9488 (2017)

**One-step fast synthesis of nanoparticles for MRI: coating chemistry as the key variable determining positive or negative contrast.**

Juan Pellico, Jesús Ruiz-Cabello, Irene Fernández-Barahona, Lucía Gutiérrez, Ana V. Lechuga-Vieco, Jose A. Enríquez, María del Puerto Morales, Fernando Herranz  
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**Nanomedicina.**

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