

## Ficha de grupo de investigación

### BIONANOPARTICULAS METALICAS

Código: FQM368

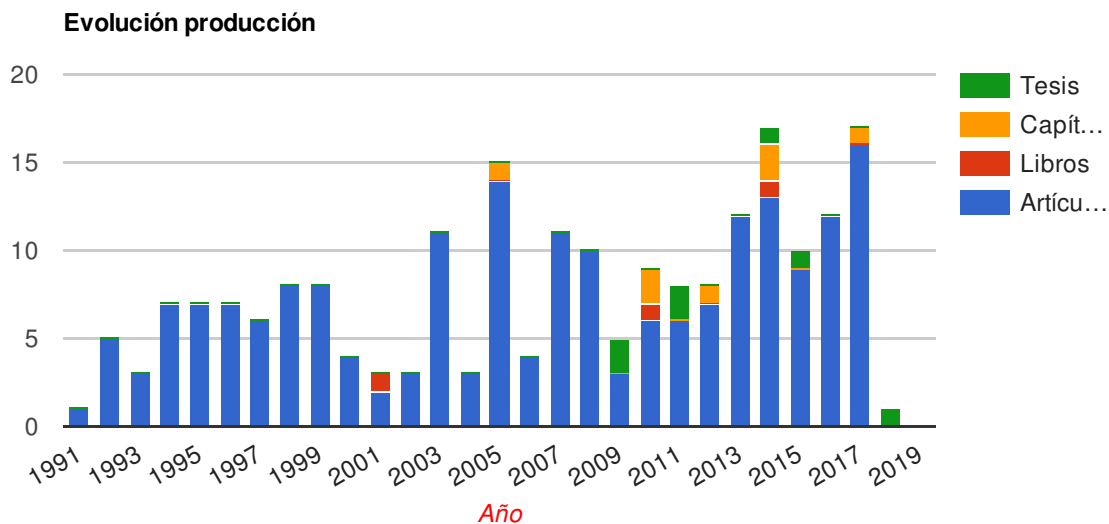
Responsable del grupo: JOSÉ MANUEL DOMÍNGUEZ VERA

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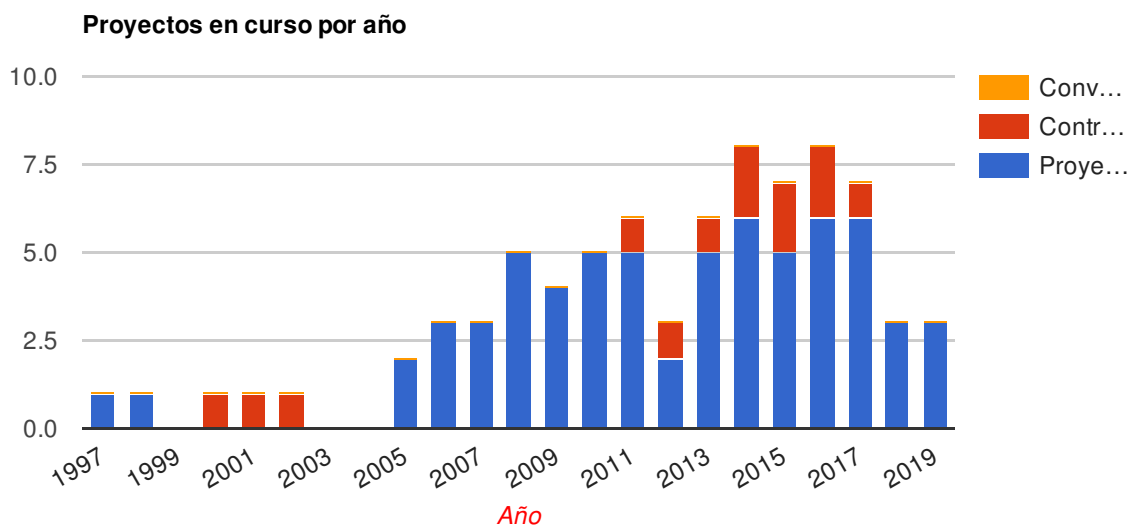
## Producción 331

- Artículos (307)
- Libros (3)
- Capítulos de Libros (9)
- Tesis dirigidas (12)



## Proyectos dirigidos 24

- Proyectos (20)
- Contratos (4)
- Convenios (0)



## Actividades 10

Titulo publicación	Fuente	Tipo	Fecha
Materiales bioinspirados basados en bacterias. aplicaciones biomédicas	Universidad de granada. facultad de ciencias	Tesis doctoral	2018
Ambient protection of few-layer black phosphorus via sequestration of reactive oxygen species	Advanced materials	Articulo	2017
Chembiochem	Chembiochem	Articulo	2017
Control over nanocrystalline apatite formation: what can the x-ray total scattering approach tell us	New perspectives on mineral nucleation and growth	Capítulo de libro	2017
Copper redox chemistry of plant frataxins	Journal of inorganic biochemistry	Articulo	2017
Correlative microscopy: hybrid nanoscopy of hybrid nanomaterials	Small	Articulo	2017
Differential iron release from transferrin and lactoferrin. a laboratory experiment	Biochemistry and molecular biology education	Articulo	2017
Identification of the key excreted molecule by lactobacillus fermentum related to host iron absorption	Food chemistry	Articulo	2017
Identification of two frataxin isoforms in zea mays: structural and functional studies	Biochimie	Articulo	2017
Iron chemistry at the service of life	Iubmb life	Articulo	2017
Mitochondrial ferritin deficiency reduces male fertility in mice	Reproduction, fertility and development	Articulo	2017
On the surface effects of citrates on nano-apatites: evidence of a decreased hydrophilicity	Scientific reports	Articulo	2017
Production and characterization of functional recombinant hybrid heteropolymers of camel hepcidin and human ferritin h and l chains	Protein engineering, design & selection	Articulo	2017
Recombinant overexpression of camel hepcidin cDNA in Pichia pastoris: purification and characterization of the polyhis-tagged peptide hepcd-his	Journal of molecular recognition	Articulo	2017
Study of ferritin self-assembly and heteropolymer formation by the use of fluorescence resonance energy transfer (FRET) technology	Biochimica et Biophysica Acta - General Subjects	Articulo	2017
Synthesis and optimization of a reactive oxygen species responsive cellular delivery system	New Journal of Chemistry	Articulo	2017
The synergic role of collagen and citrate in stabilizing amorphous calcium phosphate precursors with platy morphology	Acta Biomaterialia	Articulo	2017
Varying iron release from transferrin and lactoferrin proteins. a laboratory experiment	Biochemistry and molecular biology education	Articulo	2017
Apo-ferritin fibers: a new template for 1D fluorescent hybrid nanostructures		Articulo	2016
Apomaghemite as a doxorubicin carrier for anticancer drug delivery	Journal of inorganic biochemistry	Articulo	2016
Bioinspired citrate-apatite nanocrystals doped with divalent transition metal ions	Crystal Growth and Design	Articulo	2016
Biomimetic mineralization of recombinant collagen type I derived protein to obtain hybrid matrices for bone regeneration	Journal of Structural Biology	Articulo	2016
Crystallization of citrate-stabilized amorphous calcium phosphate to nanocrystalline apatite: a surface-mediated transformation	Crystal Engineering	Articulo	2016
Energetics of surface confined ferritin during iron loading	Colloids and Surfaces B: Biointerfaces	Articulo	2016
Insights on the (auto) photocatalysis of ferritin	Inorganic Chemistry	Articulo	2016
Macromolecules	Macromolecules	Articulo	2016

Macromolecules	Macromolecules	Articulo	2016
Magnetic study on biodistribution and biodegradation of oral magnetic nanostructures in the rat gastrointestinal tract	Nanoscale	Articulo	2016
Magnetism in living magnetically-induced bacteria	Rsc advances: an international journal to further the chemical sciences	Articulo	2016
Photoacoustic molecular imaging for in vivo liver iron quantitation	Journal of biomedical optics	Articulo	2016
Bacterias magnéticas biomiméticas. aplicaciones biomédicas	Universidad de granada. facultad de ciencias	Tesis doctoral	2015
Electrochromic polyoxometalate material as a sensor of bacterial activity	Chemical communication	Articulo	2015
Growth behaviour of monohydrocalcite in silica rich alkaline solution	Crystal growth and design	Articulo	2015
Monoclonal antibody-targeted fluorescein-5-isothiocyanate-labeled biomimetic nanoapatites: a promising fluorescent probe for imaging applications.	Langmuir	Articulo	2015
Nanopatterning of magnetic prussian blue nanoparticles	Inorganic chemistry	Articulo	2015
Nanoscale characterization of biotite alteration at ph 7 in the presence of ammonium	Macla	Articulo	2015
Natural inhibitors of lipase: examining lipolysis in a single droplet	Journal of agricultural and food chemistry	Articulo	2015
Raman identification of fe precipitates and evaluation of as fate during phase transformation in tinto and odiel river basins	Chemical geology	Articulo	2015
Synthesis and preliminary in vivo evaluation of well-dispersed biomimetic nanocrystalline apatites labeled with positron emission tomographic imaging agents	Acs applied materials and interfaces	Articulo	2015
Toward multiple conductance pathways with heterocycle-based oligo(phenyleneethynylene) derivatives	Journal of the american chemical society	Articulo	2015
Apatite synthesis structural characterization and biomedical applications	2014 nova science publishers, inc.	Libros	2014
Apatite: synthesis, structural characterization and biomedical applications,	Nanocrystalline apatites functionalized with monoclonal antibodies for targeted cancer therapies	Capítulo de libro	2014
Artificial magnetic bacteria	Advanced functional materials	Articulo	2014
Artificial magnetic bacteria: living magnets at room temperature		Articulo	2014
Bioinspired magneto-optical bacteria		Articulo	2014
Chemically and biologically harmless vs. harmful ferritin/copper-metallothionein couples	Chemistry (weinheim. internet)	Articulo	2014
Crystal size, morphology, and growth mechanism in bio-inspired apatite nanocrystals	Advanced functional materials	Articulo	2014
In vivo long-term magnetic resonance imaging activity of ferritin- $\zeta$ -based magnetic nanoparticles versus a standard contrast agent		Articulo	2014
Intestinal anti-inflammatory activity of the polyphenolic-enriched extract amanda® in the trinitrobenzenesulphonic acid model of rat colitis	Journal of functional foods	Articulo	2014
Journal of functional foods		Articulo	2014
Materiales basados en el metabolismo del hierro	Universidad de granada. facultad de ciencias	Tesis doctoral	2014
Monitoring lactoferrin iron levels by fluorescence resonance energy transfer: a combined chemical and computational study		Articulo	2014
Nanocrystalline apatites: synthesis, physical-chemical and	Apatite: synthesis, structural characterization and	Capítulo	2014

thermodynamic characterization	Characterization and biomedical applications	de libro	2014
Synthesis and photophysics of a new family of fluorescent 9-alkyl-substituted xanthenones	Chemistry (weinheim. internet)	Articulo	2014
The crystal structure of ferritin from chlorobium tepidum reveals a new conformation of the 4-fold channel for this protein family	Biochimie	Articulo	2014
Transient calcium carbonate hexahydrate (ikaite) nucleated and stabilized in confined nano- and picovolumes	Crystal growth and design	Articulo	2014
Ph-responsive collagen fibrillogenesis in confined droplets by vapour diffusion	Journal of materials science: materials in medicine	Articulo	2014
Bio-inspired citrate-functionalized apatite thin films crystallized on ti-6al-4v implants pre-coated with corrosion resistant layers	Journal of inorganic biochemistry	Articulo	2013
Bioinspired hybrid silica-protein material as antimicrobial by iron uptake	Metallomics	Articulo	2013
Cell surface receptor targeted biomimetic apatite nanocrystals for cancer therapy	Small	Articulo	2013
Crystallization of monohydrocalcite in a silica-rich alkaline solution	Crystengcomm	Articulo	2013
Espectroscopía raman para la detección de fases de fe en terrazas de río tinto	Macla	Articulo	2013
Evolution of calcium phosphate precipitation in hanging drop vapor diffusion by in situ raman microspectroscopy	Crystengcomm	Articulo	2013
Ferritin iron uptake and release in the presence of metals and metalloproteins: chemical implications in the brain	Coordination chemistry reviews	Articulo	2013
Magnetic bioactive and biodegradable hollow fe-doped hydroxyapatite coated poly(l-lactic) acid micro-nanospheres for medical applications	Chemistry of materials	Articulo	2013
Nucleación y crecimiento de schwertmannita en gel y medio acuoso	Macla	Articulo	2013
Poly(amino acid) functionalized maghemite and gold nanoparticles	Nanotechnology	Articulo	2013
Ph-responsive delivery of doxorubicin from citrate-apatite nanocrystals with tailored carbonate content	Langmuir	Articulo	2013
a bioinspired hybrid silica-protein material with antimicrobial activity by iron uptake	Metallomics	Articulo	2013
A new approach to the ferritin iron core growth: influence of the h/l ratio on the core shape	Dalton transactions	Articulo	2012
Clarifying the structure of granadaene: total synthesis of related analogue [2]-granadaene and confirmation of its absolute stereochemistry	Bioorganic and medicinal chemistry	Articulo	2012
Crystallization of bioinspired citrate-functionalized nanoapatite with tailored carbonate content	Acta biomaterialia	Articulo	2012
In situ infrared study of adenine adsorption on gold electrodes in acid media	Electrochimica acta	Articulo	2012
Preparation of core-shell poly(l-lactic) acid-nanocrystalline apatite hollow microspheres for bone repairing applications	Journal of materials science: materials in medicine	Articulo	2012
Vibrational spectroscopies for surface characterization of biomaterials	Surface tailoring of inorganic materials for biomedical applications	Capítulo de libro	2012
Water soluble fluorescent-magnetic perylenediimide-containing maghemite-nanoparticles for bimodal mri/oi imaging	Journal of inorganic biochemistry	Articulo	2012
Water soluble fluorescent-magnetic perylenediimide-containing maghemite-nanoparticles for bimodal mri/oi imaging	Journal of inorganic biochemistry	Articulo	2012

Aminoacidic control of calcium phosphate precipitation by using vapour diffusion method in microdroplets	Crystal growth and design	Articulo	2011
Estudio por microscopía electrónica de transmisión de nanopartículas de ferritinas nativas, sintéticas y patológicas	Universidad de cádiz. ciencia de los materiales e ingeniería metalúrgica y química inorgánica	Tesis doctoral	2011
Ferritin and metallothionein: dangerous liaisons	Chemical communications	Articulo	2011
Formation of calcium phosphates by vapour diffusion in highly concentrated ionic micro-droplets	Crystal research and technology	Articulo	2011
From synthetic to natural nanoparticles: monitoring the biodegradation of spio (p904) into ferritin by electron microscopy	Nanoscale	Articulo	2011
Magnetic nanoparticles-templated assembly of protein subunits: a new platform for carbohydrate-based mri nanoprobos	Journal of the american chemical society	Articulo	2011
Morfología de los cristales gigantes de yeso	Macla	Articulo	2011
Nanopartículas metálicas con aplicaciones biomédicas	Universidad de granada. química inorgánica	Tesis doctoral	2011
A bio-inspired approach to the synthesis of bimetallic con nanoparticles	Inorganic chemistry	Articulo	2010
Binding and removal of sulphate, phosphate, arsenate, tetrachloromercurate, and chromate in aqueous solution by means of an activated carbon functionalized with a pyrimidine-based anion receptor (hl). crystal structures of [h3l(hgcl4)]·h2o and [h3l(hgb	Inorganic chemistry	Articulo	2010
Cien años de estudios industriales en la eps de linares	Universidad de jaén	Libros	2010
Glycolate adsorption at gold and platinum electrodes: a theoretical and in situ spectroelectrochemical study	Electrochimica acta	Articulo	2010
In situ observation of step dynamics on gypsum crystals	Crystal growth and design	Articulo	2010
Introduction to nanoscale-ordered materials in biomedicine: the paradigmatic ferritin nanoparticle	Diffraction at the nanoscale. nanocrystals, defective and amorphous materials	Capítulo de libro	2010
La eps de linares (2005-actualidad): evolución de la investigación	Cien años de estudios industriales en la eps de linares	Capítulo de libro	2010
Structural and magnetic characterization of pd nanoparticles encapsulated in apoferritin	Nanotechnology	Articulo	2010
Theoretical and spectroelectrochemical studies on the adsorption and oxidation of glyoxylate and hydrated glyoxylate anions at gold electrodes	The journal of physical chemistry c	Articulo	2010
Dft and in-situ spectroelectrochemical study of the adsorption of fluoroacetate anions at gold electrodes	The journal of physical chemistry c	Articulo	2009
Ferritinas naturales y sintéticas	Universidad de granada. química inorgánica	Tesis doctoral	2009
Ferritinas naturales y sintéticas. implicaciones nanobiomédicas	Universidad de granada. facultad de ciencias	Tesis doctoral	2009
Magnetic-fluorescent langmuir-blodgett films of fluorophore-labeled ferritin nanoparticles	Solid state sciences	Articulo	2009
Mri relaxation properties of water-soluble apoferritin-encapsulated gadolinium oxide-hydroxide nanoparticles	Dalton transactions	Articulo	2009
Adsorption of a designed l-glutamic acid-pyrimidine derivative ligand on an activated carbon for the removal of cu(ii) from aqueous solution	Microporous and mesoporous materials	Articulo	2008
Apoferritin as a nanoreactor for preparing metallic nanoparticles	Comptes rendus. chimie	Articulo	2008
Comparative structural and chemical studies of ferritin cores with	Journal of physics and	Articulo	2008

gradual removal of their iron contents	chemistry of solids		
Covalent deposition of ferritin nanoparticles onto gold surfaces	Nanotechnology	Articulo	2008
Fluorescence resonance energy transfer in ferritin labeled with multiple fluorescent dyes	Journal of biological inorganic chemistry	Articulo	2008
Formate adsorption onto thin films of rutile tio <sub>2</sub> nanorods and nanowires	Langmuir	Articulo	2008
Quantum dots decorated with magnetic bionanoparticles	Advanced functional materials	Articulo	2008
Sputtered thin-film gold electrodes for in situ atr-seiras and sers studies	The journal of physical chemistry c	Articulo	2008
Structural aspects of the growth mechanism of copper nanoparticles inside apoferritin	European journal of inorganic chemistry	Articulo	2008
Thermal induced phase transitions and structural relaxation in apoferritin encapsulated copper nanoparticles	Physical chemistry chemical physics	Articulo	2008
A comparison between chemical and sputtering methods for preparing thin-film silver electrodes for in situ atr-seiras studies	Electrochimica acta	Articulo	2007
Adsorption of designed pyrimidine derivative ligands on an activated carbon for the removal of cu(ii) ions from aqueous solution	Langmuir	Articulo	2007
B3lyp and in situ atr-seiras study of the infrared behavior and bonding mode of adsorbed acetate anions on silver thin-film electrodes	The journal of physical chemistry c	Articulo	2007
In situ infrared study of the adsorption and surface acid-base properties of the anions of dicarboxylic acids at gold single crystal and thin-film electrodes	The journal of physical chemistry c	Articulo	2007
Langmuir monolayers and langmuir-blodgett films of ferritin prepared by using a surfactant mixture of eicosylamine (ea) and methyl stearate (sme)	Polyhedron	Articulo	2007
Permanent magnetism in apoferritin-encapsulated pd nanoparticles	Journal of materials chemistry	Articulo	2007
Red and blue ferritin nanomagnets by dye-labeling to the protein shell	Inorganica chimica acta	Articulo	2007
Red and blue ferritin nanomagnets by dye-ζ labeling to the protein shell	Inorganica chimica acta	Articulo	2007
Size-controlled water-soluble ag nanoparticles	European journal of inorganic chemistry	Articulo	2007
Spectroelectrochemical study of the adsorption of acetate anions at gold single crystal and thin-film electrodes	Electrochimica acta	Articulo	2007
Synthesis of new phenolic fatty acid esters and their evaluation as lipophilic antioxidants in an oil matrix	Food chemistry	Articulo	2007
Apoferritin-encapsulated ni and co superparamagnetic nanoparticles	Journal of materials chemistry	Articulo	2006
In-situ infrared study of the adsorption and oxidation of oxalic acid at single- crystal and thin-film gold electrodes: a combined external reflection infrared and atrseiras approach	Langmuir	Articulo	2006
Magnetic langmuir-blodgett films of ferritin with different iron contents	Langmuir	Articulo	2006
Rate of iron transfer through the horse spleen ferritin shell determined by the rate of formation of prussian blue and fe-desferrioxamine within the ferritin cavity	Biophysical chemistry	Articulo	2006
Adsorption of zn <sup>2+</sup> and cd <sup>2+</sup> from aqueous solution onto a carbon sorbent containing a pyrimidine-polyamine conjugate as ion receptor	European journal of inorganic chemistry	Articulo	2005
Atr-seiras study of the adsorption of acetate anions at chemically deposited silver thin film electrodes	Langmuir	Articulo	2005

deposited silver thin film electrodes			
Attractive magnetic prussian blues	Polyhedron	Articulo	2005
Catechol releases iron(iii) from ferritin by direct chelation without iron(ii) production	Dalton transactions	Articulo	2005
Desarrollo de material audiovisual para docencia práctica en química	Adaptación del profesorado universitario al espacio europeo de educación superior mediante el uso de nuevas tecnologías	Capítulo de libro	2005
Efficient lipase-catalyzed synthesis of new lipid antioxidants based on a catechol structure	Tetrahedron	Articulo	2005
Hexacyanocobaltate(iii) anions as precursors of co(ii)-ni(ii) cyano-bridged multidimensional assemblies: hydrothermal syntheses, crystal and powder x-ray structures, and magnetic properties	Inorganic chemistry	Articulo	2005
Langmuir-blodgett films based on inorganic molecular complexes with magnetic or optical properties	Advances in colloid and interface science	Articulo	2005
Ligand adsorption on an activated carbon for the removal of chromate ions from aqueous solutions	Langmuir	Articulo	2005
Magnetic langmuir-blodgett films of ferritin with different iron loadings	Synthetic metals	Articulo	2005
Preparation of cu and cufe prussian blue derivative nanoparticles using the apoferritin cavity as nanoreactor	Dalton transactions	Articulo	2005
Rational design of azide-bridged bimetallic complexes. crystal structure and magnetic properties of (femfeiii)-m-iii (m = ni-ii and cu-ii) trinuclear species	Chemical communications	Articulo	2005
Release of iron from ferritin by aceto- and benzohydroxamic acids	Inorganic chemistry	Articulo	2005
Rate of iron transfer through the horse spleen ferritin shell determined by formation of prussian blue and fe- $\zeta$ desferrioxamine in the ferritin cavity	American chemical society. abstracts of papers	Articulo	2005
Synthesis, structure, and properties of mu-oxo-bridged fe-2(iii) and heterometallic azide-bridged (fe2cu-ii)-cu-iii complexes of a picolinamide in-plane ligand	European journal of inorganic chemistry	Articulo	2005
Alkali cation influence on copper cyanide solid-state architecture: two self-assembled copper(i)-sodium and copper(i)-potassium complexes showing 2d and 3d structures	Inorganica chimica acta	Articulo	2004
Iron(iii) complexation of desferrioxamine b encapsulated in apoferritin	Journal of inorganic biochemistry	Articulo	2004
Protonation and zn(ii) complexation with versatile valine and glycyglycine n-pyrimidines derivatives: crystal structures of layered {[zn(hl1)2] . 2h2o)n and [zn(hl2)2(h2o)4]	Inorganica chimica acta	Articulo	2004
A novel one-dimensional cyano-bridged ni3fe2 ferromagnet constructed from bimetallic molecular squares	Inorganic chemistry	Articulo	2003
Ammonium n-(6-amino-3,4-dihydro-3-methyl-5-nitroso-4-oxopyrimidin-2-yl)glycinate monohydrate forms hydrogen-bonded bilayers	Acta crystallographica. section c, crystal structure communications.	Articulo	2003
Bifunctional pyrimidine-amino-acid ligands: solution study and crystal structure of a mn(ii) chain alternating six- and sevenfold coordination environments	Inorganica chimica acta	Articulo	2003
Bis[ $\mu$ -6-amino-3-methyl-5-nitroso-pyrimidine-2,4(1h,3h)-dionato-kappa o-3(4),n-5 : o-5]-di- $\mu$ -aqua-bis{diaqua[6-amino-3-methyl-5-nitrosopyrimidine-2,4(1h,3h)-dionato-kappa n-2(1),o-2]strontium(ii)}: centrosymmetric dimers containing nine-coordina	Acta crystallographica. section c, crystal structure communications.	Articulo	2003
Di- $\mu$ -aqua-bis[ $\mu$ -6-amino-3-methyl-5-nitrosopyrimidine-			



2,4(1h,3h)-dionato-kappa3o4,n5:o5]bis-aqua-[6-amino-3-methyl-5-nitrosopyrimidine-2,4(1h,3h)-dionato-kappa2n1,o2]strontium(ii): centrosymmetric dimers containing nine-coordinate sr, linked by m	Acta crystallographica. section c, crystal structure communications.	Articulo	2003
From magnetochemistry to molecular magnetism: pioneers and cornerstones	American chemical society. abstracts of papers	Articulo	2003
Hydrothermal syntheses, crystal structures, and properties of two-dimensional homo- and heterometallic cyanide-bridged complexes: [cu-2(cn)(2)(bpym)] and [fe(bipy)(2)(cn)(4)cu-2] (bpym=2,2 &#039;-bipyrimidine, bipy=2,2 &#039;-bipyridine)	Inorganic chemistry	Articulo	2003
Influence of lysozyme on the precipitation of calcium carbonate: a kinetic and morphologic study	Geochimica et cosmochimica acta	Articulo	2003
Nanoparticles of prussian blue ferritin: a new route for obtaining nanomaterials	Inorganic chemistry	Articulo	2003
Potassium n-(6-amino-3,4-dihydro-3-methyl-5-nitroso-4-oxopyrimidin-2-yl)-(s)-aspartate n-(6-amino-3,4-dihydro-3-methyl-5-nitroso-4-oxopyrimidin-2-yl)-(s)-aspartic acid 4.88-hydrate: a two-dimensional coordination polymer	Acta crystallographica. section c, crystal structure communications.	Articulo	2003
Surface effects in noninteracting gamma-fe2o3 nanoparticles	Journal of magnetism and magnetic materials	Articulo	2003
A tris-imidazolecarboxyaldehyde copper(ii) complex with unusual carbonyl co-ordination: structure and reactivity	Journal of the chemical society. dalton transactions	Articulo	2002
Catena-poly[[[n-(6-amino-3,4-dihydro-3-methyl-5-nitroso-4-oxopyrimidin-2-yl)glycinato-o]penta-aquastrontium]-mu-n-(6-amino-3,4-dihydro-3-methyl-5-nitroso-4-oxopyrimidin-2-yl)glycinato-o : o &#039;] monohydrate]: coordination polymer chains linked by	Acta crystallographica. section c, crystal structure communications.	Articulo	2002
Electrons at work in prussian blue analogues	The electrochemical society interface	Articulo	2002
Aceite de oliva virgen : nuestro patrimonio alimentario	Universidad de granada	Libros	2001
The reactivity of n-2-(4-amino-1,6-dihydro-1-methyl-5-nitroso-6-oxopyrimidinyl)-l-histidine towards copper(ii) ions	Transition metal chemistry	Articulo	2001
[6-amino-3-methyl-5-nitroso-pyrimidine-2,4(1h,3h)-dionato]-sodium dihydrate at 150 k: coordination-polymer ladders linked by hydrogen bonds	Acta crystallographica. section c, crystal structure communications.	Articulo	2001
A pro-chiral bis-imidazolyl-containing copper(ii) complex as precursor of a self-assembled polymer and a heterodinuclear copper(ii)-nickel(ii) complex	Inorganica chimica acta	Articulo	2000
Structure and magnetic properties of two cyanide-bridged one-dimensional m-cu-ii (m = fe-iii or fe-ii) bimetallic assemblies from ferricyanide and cun42+ (n-4 = 1,4,8,11-tetraazacyclotetradecane and n,n &#039;-bis(2-pyridylmethylene)-1,3- propanedi	Journal of the chemical society. dalton transactions	Articulo	2000
The effect of avian uterine fluid on the growth behavior of calcite crystals	Poultry science	Articulo	2000
{2-[(3-aminopropyl)aminopropyl-iminomethyl]imidazolato-n,n &#039;,n &#039;&#039;,n &#039;&#039;&#039;}(methanol-o)copper(ii) perchlorate	Acta crystallographica. section c, crystal structure communications.	Articulo	2000
A novel two-dimensional honeycomb-like bimetallic iron(iii)-nickel(ii) cyanide-bridged magnetic material [ni(cyclam)](3)[fe(cn)(6)](2)center dot nh(2)o (cyclam=1,4,8,11-tetraazacyclodecane)	Chemical communications	Articulo	1999
Effect of phosphate on the crystallization of hematite, goethite, and lepidocrocite from ferrihydrite	Clays and clay minerals	Articulo	1999
Growth of lysozyme crystals under microgravity conditions in the lms (sts-78) mission	Journal of crystal growth	Articulo	1999

Hexaaqua-zinc(ii) bis[n-(4-amino-1-methyl-5-nitroso-6-oxo-1,6-dihydropyrimidin-2-yl)-glycinate] dihydrate	Acta crystallographica. section c, crystal structure communications.	Articulo	1999
Hexaaquazinc(ii) bis[n-(4-amino-1-methyl-5-nitroso-6-oxo-1,6-dihydropyrimidin-2-yl)-glycinate] dihydrate	Acta crystallographica. section c, crystal structure communications.	Articulo	1999
One-dimensional iron(iii) and two-dimensional iron(iii)nickel(ii) cyanide-bridged ferromagnetic arrays from hexacyanoferrate(iii) and [ni(cyclam)](2+) building blocks: synthesis, crystal structure and magnetic properties	Molecular crystals and liquid crystals science and technology. section a. molecular crystals and liquid crystals	Articulo	1999
Preparation and properties of hematite with structural phosphorus	Clays and clay minerals	Articulo	1999
Singly anti-anti carboxylate-bridged zig-zag chain complexes from a carboxylate-containing tridentate schiff base ligand and m(hfac)(2) [m = mn-ii, ni-ii, and cu-ii]: synthesis, crystal structure, and magnetic properties	European journal of inorganic chemistry	Articulo	1999
A cyano bridged iron(iii) linear chain with alternating fe(cn)(6)-fe(cyclam) (cyclam = 1,4,8,11-tetraazacyclodecane) units and unexpected ferromagnetic behaviour	Chemical communications	Articulo	1998
A new mononuclear copper(ii) complex containing two imidazolyl moieties as precursor of self-assembled and (nicuniii)-cu-ii- ni-ii heterobimetallic complexes	Inorganic chemistry	Articulo	1998
A novel series of heterotrinnuclear complexes involving imidazolate bridging schiff's base ligands. synthesis, crystal structure, and magnetic properties	Inorganic chemistry	Articulo	1998
Copper (ii) complexes of two new oxamidate bis-tetradentate schiff-base ligands	Polyhedron	Articulo	1998
Octakis(dimethyl sulfoxide-o)-gadolinium(iii) hexacyanoferrate(iii)	Acta crystallographica. section c, crystal structure communications.	Articulo	1998
Structures, electrochemical and spectroscopic properties of ternary ruthenium(ii)-polypyridyl complexes with additional carboxylate, biguanide or sulfonamide donors	Polyhedron	Articulo	1998
Synthesis of polynuclear copper(ii) complexes by controlling the conformation (cis or trans) of n,n'-bis(3-aminopropyl)oxamidate and the coordination mode of 2,2'-bipyrimidine	Inorganica chimica acta	Articulo	1998
Teaching protein crystallisation by the gel acupuncture method	Journal of chemical education	Articulo	1998
Bis(didentate) open-chain and tetradentate pseudo-macrocyclic bridging co-ordination modes of n,n'-bis(1,3-dimethyl-5-nitroso-2,4-dioxypyrimidin-6-yl)butane-1,4-diamine	Journal of the chemical society. dalton transactions	Articulo	1997
Copper(i)-purine-phosphine complexes. syntheses and molecular structures of [cu-2(mu-hl(1))(2)(mu-dppm)(eta(1)-dppm)(2)] and {[cu3(mu(3)-cl)(2)(mu-dppm)(3)][cu(hl(2))(2)]} (h(2)l(1) equals 8-mercaptotheophylline and h(2)l(2) equals 8-ethyl-3-methylxa	Inorganic chemistry	Articulo	1997
Dinuclear copper(ii) complexes containing nitroso-oximate bridges: two different copper(ii)-bridging entities from the same precursor	Polyhedron	Articulo	1997
Epitaxial overgrowth of goethite on hematite synthesized in phosphate media: a scanning force and transmission electron microscopy study	The american mineralogist	Articulo	1997
Metal-purine interactions: homo- and heterodinuclear platinum(ii) and/or palladium(ii) complexes of 8-thiotheophylline. crystal structures of [pt(mu-tt)(dppm)](2)center dot 2dmsso and [pd(mu-tt)(2)bd(dppm)]center dot 7h(2)o	Inorganic chemistry	Articulo	1997

Structural characterization of closely related mononuclear cu-ii complexes of 5-nitrosooxime pyrimidines. a combined x-ray and epr study	Acta chemica scandinavica (copenhagen. 1989)	Articulo	1997
A preliminary study on the interaction of chelating agent with ferritine single crystals	Journal of crystal growth	Articulo	1996
A preliminary study on the interaction of ferritin single crystals with chelating agents	Journal of crystal growth	Articulo	1996
Crystal structure of [ni(cth)(ncs)(2)] with linearly and nonlinearly coordinated isothiocyanate groups	Acta chemica scandinavica (copenhagen. 1989)	Articulo	1996
Deprotonation and self-assembly of symmetric oxamidate-bridged dinuclear copper(ii) complex involving imidazole moieties	Journal of the chemical society. dalton transactions	Articulo	1996
Gold(i)-purine interactions: synthesis and characterization of cyclic and open chain polynuclear gold(i) complexes containing xanthine derivatives and bis(phosphine) as bridging ligands. crystal structures of [au-2(mu-hx)(mu-dmpe)]center dot 3h(2)o a	Inorganic chemistry	Articulo	1996
Growth of shaped single crystals of proteins	Journal of crystal growth	Articulo	1996
Role of gravity in the formation of liesegang patterns	Journal of physical chemistry (1952)	Articulo	1996
(1,3-dimethyl-2,6-dioxo-2,3,6,7-tetrahydro-1h-purin-7-yl) (dimethylphenyl phosphine)-gold(i)	Acta crystallographica. section c, crystal structure communications.	Articulo	1995
A heterodinuclear anti oximate-bridged copper(ii)-nickel(ii) complex - crystal-structure and magnetic-properties	Inorganica chimica acta	Articulo	1995
A mixed-bridged cu <sub>3</sub> cluster with an isosceles-triangular array of copper(ii) ions: synthesis, crystal structure and magnetic properties	Journal of the chemical society. dalton transactions	Articulo	1995
Aqua[1,3-propanediylldiiminobis(1,3-dimethyl-5-nitrosouracilato)-kappa-n- 4(5),n-6,- n-15,n-16]copper(ii) monohydrate	Acta crystallographica. section c, crystal structure communications.	Articulo	1995
Crystal structure and magnetic propeties of [cu(ox)(py) <sub>2</sub> ] (py=pyridine). a ferromagnetic oxalate-bridged zigzag chain complex	Journal of the chemical society. dalton transactions	Articulo	1995
Geometrical and optical isomers of the nickel(ii) complexes of chiral, tetradentate unmixed and mixed schiff bases: cd and nmr spectroscopic studies	Polyhedron	Articulo	1995
Heptahydrated monosodium salt of 6-amino-5-(2-carboxyphenyl)azouracil	Acta crystallographica. section c, crystal structure communications.	Articulo	1995
Activation of carbon-sulfur, carbon-chlorine by the electrophilic ruthenium fragment ru( $\zeta$ 05-c5me5)+.	Journal of the chemical society. dalton transactions	Articulo	1994
Geometrical and optical isomers of the dinickel complexes of two chiral ligands of the n,n-disubstituted oxamide type: 1d and 2d nmr-study	Inorganica chimica acta	Articulo	1994
Heterodinuclear copper(ii)-nickel(ii) complexes with unusual asymmetrical bridges from a new and versatile dioxime multidentate ligand - magnetostructural study	Inorganic chemistry	Articulo	1994
Stereoisomerism in the nickel(ii) complexes of a chiral tridentate ligand - solid-state and solution study	Inorganic chemistry	Articulo	1994
Synthesis and crystal-structure of the mu(2) (tris[bis(diphenylphosphine)methane])-mu(3)-3-methyl-8-ethylxanthin e-n,o,o]-mu(3)-chloro-triangle-tricopper(i)-water complex exhibiting a novel oxopurine coordination mode	Inorganica chimica acta	Articulo	1994
Synthesis of the first example of a dinuclear syn $\zeta$ anti carboxylate-bridged copper(ii) complex from a related hydrogen-	Termochimica acta	Articulo	1994

carboxylate bridged copper(ii) complex from a related hydrogen-bonded dinuclear copper(ii) complex by thermal treatment	Thermochimica acta	Articulo	1994
The preparation, spectroscopic study and crystal-structures of 2 copper(ii) complexes of closely-related carboxyphenylazopyrimidine ligands, involving distorted square-pyramidal <i>cun4o</i> and <i>cun3o2</i> chromophores	Polyhedron	Articulo	1994
Kinetics and mechanism of the homogeneous hydrogenation of quinoline using [rh(cod)(pph3)2]pf6 as the catalyst precursor	Organometallics	Articulo	1993
Structural and magnetic studies of a zigzag chain copper(ii) complex and a dipolar spin-coupled copper(ii) dimer with the versatile ligand 5-((2-carboxyphenyl)azo)-1,3-dimethylbarbituric acid	Journal of the chemical society. dalton transactions	Articulo	1993
Structure and magnetic-properties of a syn-anti carboxylate bridged linear trinuclear copper(ii) complex with ferromagnetic exchange interaction.	Inorganica chimica acta	Articulo	1993
A novel example of a dinuclear copper(ii) complex bridged by only one pyrazolate ion: preparation, spectroscopic and magnetic-properties, and mnx force-field study	Acta chemica scandinavica (copenhagen. 1989)	Articulo	1992
Conversion of a hydrogen-bonded dinuclear copper(ii) complex into a bridged carboxylate related complex by thermal-treatment	Thermochimica acta	Articulo	1992
Selective activation of carbon-chlorine bonds by the electrophilic fragment $cp^*ru^+$	Journal of organometallic chemistry	Articulo	1992
Structural and magnetic studies of a syn-anti carboxylate-bridged helix-like chain copper(ii) complex	Inorganic chemistry	Articulo	1992
Synthesis, spectroscopic, magnetic properties and mnx force field study of two imidazolate-bridged dinuclear copper(ii) complexes	Transition metal chemistry	Articulo	1992
Carbon-hydrogen, carbon-carbon and carbon-oxygen bond activation by an electrophilic ruthenium complex	Journal of physics and chemistry of solids	Articulo	1991

	<b>Título proyecto</b>	<b>Tipo</b>	<b>Inicio</b>	<b>Fin</b>
1	Nanoquímica con bacterias, biopolímeros y biofibras	Proyecto	12/1/16	12/31/19
2	&#039;nanoquímica con bacterias, biopolímeros y biofibras&#039;	Proyecto	12/1/16	12/31/19
3	Nanopartículas multifuncionales como agentes de diagnóstico multimodal y terapias avanzadas en nanomedicina	Proyecto	12/27/13	9/1/17
4	Nanopartículas multifuncionales como agentes de diagnóstico multimodal y terapias avanzadas en nanomedicina.	Proyecto	12/27/13	6/26/17
5	Nuevas estrategias de innovación tecnológica orientadas a la salud y el bienestar infantil y de la mujer (carmenta).	Proyecto	12/1/15	5/30/17
6	Nuevas estrategias de innovación tecnológica orientadas a la salud y el bienestar infantil y de la mujer	Contrato	12/1/15	5/30/17
7	Nuevas aplicaciones de cepas probióticas y de compuestos derivados con actividad biológica	Contrato	12/2/14	1/31/16
8	Bionanopartículas magnéticas-fluorescentes de metabolismo lento para aplicaciones teragnósticas. ctq2012-32236	Proyecto	12/1/13	12/31/15
9	Bionanopartículas magnéticas-fluorescentes de metabolismo lento para aplicaciones teragnósticas	Proyecto	12/1/13	12/31/15
10	Síntesis de nanopartículas inteligentes: nanotransportadores de fármacos y sensores luminiscentes para imagen médica	Proyecto	12/28/14	12/31/14
11	Hacia un escalado industrial de un suplemento de hierro basado en probióticos.	Proyecto	12/1/14	12/31/14
12	Nuevas aplicaciones de cepas probióticas y de compuestos derivados con actividad biológica	Contrato	12/1/11	12/1/14
13	Nanopartículas magnéticas dopadas con Fe para ser usadas en terapias diana contra el cáncer	Proyecto	12/1/13	12/31/13
14	Nanopartículas metálicas multifuncionales utilizando bioplataformas. aplicaciones nanobiomédicas.	Proyecto	12/1/10	12/31/12
15	Preparación y estudio por microscopía electrónica de nanopartículas magnéticas-fluorescentes. ordenación en superficie de Au modificada y películas Langmuir-Blodgett.	Proyecto	12/1/08	1/31/12
16	Nanoestructuras con aplicaciones biomédicas en diagnóstico y terapia.	Proyecto	12/7/11	12/31/11
17	Nuevos agentes bimodales en resonancia magnética y óptica imagen para el diagnóstico precoz del cáncer	Proyecto	12/1/10	12/31/11
18	Preparación y estudio por microscopía electrónica de nanopartículas magnéticas-fluorescentes. ordenación en superficie de Au modificada y películas Langmuir-Blodgett.	Proyecto	12/25/08	12/30/11
19	Sistemas magnéticos nanoestructurados	Proyecto	12/1/05	10/30/10
20	Nanomagnetismo molecular: preparación de nanopartículas bimetalicas basadas en ferritina	Proyecto	12/1/06	9/30/09
21	Preparación de nanopartículas metálicas encapsuladas en la ferritina	Proyecto	12/31/05	12/31/08
22	Estudio de la interacción entre sustratos naturales con potencial actividad biológica e hierro	Contrato	12/1/00	1/31/02
23	Aprovechamiento de las vinazas por tratamiento con sólidos microporosos.	Proyecto	12/1/97	5/31/98

## Actividades 10

Titulo actividad	Entidad	Tipo	Fecha
Colaboración con el grupo de prof maria prat		Colaboración con centros i+d	Jan 1, 2010
Colaboración con el institute of science and technology for ceramics		Colaboración con centros i+d	Jun 1, 2011
Colaboración con el dipartimento di scienza e alta tecnologia (università dell&#039;insubria)		Colaboración con centros i+d	Jan 1, 2012
Fqm-208 glicoquímica y bioconjugación		Grupos y equipos de investigació	Jul 1, 2012
Miembro del panel de editores de acta biomaterialia		Comités científicos de revista	Jan 1, 2016
Miembro del panel de editores de scientific reports (nature)		Comités científicos de revista	Nov 18, 2016
Miembro del panel de editores de rsc advances		Comités científicos de revista	Nov 11, 2015
Aneca		Experiencia en evaluación	May 1, 2006
Acsucyl		Experiencia en evaluación	May 1, 2010
Anii, apcyt y conicyt		Experiencia en evaluación	May 1, 2012

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