

Allegato alla domanda di partecipazione
Curriculum formativo, didattico, scientifico e professionale del candidato

Dichiarazione sostitutiva di certificazioni

(Art. 46, D.P.R. 28 dicembre 2000 n. 445)

Dichiarazione sostitutiva dell'atto di notorietà

(da sottoscrivere davanti all'impiegato addetto o da presentare o spedire con la fotocopia di un documento di identità)

(Art. 47, D.P.R. 28 dicembre 2000 n. 445)

Estremi del bando di selezione	Bando di selezione pubblica per il conferimento di n. 1 assegno di ricerca Art. 22 I. 30.12.10 n. 240 (tipo B - assegni su altri fondi). Area 03 - Scienze Chimiche, S.C. 03/B1 fondamenti delle scienze chimiche e sistemi inorganici – S.S.D. CHIM/03. Titolo del progetto: “Sviluppo di sistemi di drug-delivery a base di silice per principi attivi di origine naturale” Responsabile scientifico: Prof. Guido Ennas – codice selezione: 22A_20
Informazioni aggiornate al	07/09/2021
Nome e Cognome	Alessandra Scano
Data di nascita	19/12/1980

Si raccomanda di indicare con precisione tutti gli elementi valutabili ai sensi del bando di selezione (aggiungere o togliere righe secondo necessità).

Esperienza professionale

Periodo	Ente	Principali attività e responsabilità
11/05/2020- Presente	Dip. Scienze Chimiche e Geologiche (UNICA)	Assegnista di ricerca - Preparazione di nanosistemi di drug-delivery a base di silice, project designer e manager
31/07/2019- 31/01/2020	Dip. Scienze della Vita e dell'Ambiente (UNICA)	Preparazione di nanosistemi di drug-delivery
Luglio 2016 – Giugno 2018 (brevi contratti di collaborazione)	Dip. Scienze Chimiche e Geologiche (UNICA)	Preparazione di Metal Organic Frameworks (MOFs) incorporanti enzimi per applicazioni biomedicali, project designer e manager
17/03/2014- 31/12/2015	Prigen srl - Dip. Scienze Chimiche e Geologiche (UNICA)	Borsa di ricerca - Preparazione di nuovi sistemi di drug-delivery per applicazioni topiche, project designer e manager
17/12/2009- 30/11/2014	Asociacion de la Industria Navarra (AIN), Spagna	Ricercatore – Preparazione di nanomateriali per applicazioni biomediche, project designer e manager
01/12/2008 – 01/12/2009	Materials & Surface Science Institute (MSSI), University of Limerick (Irlanda)	Post doc – Preparazione di supporti mesoporosi a base di silice per incorporazione di enzimi da utilizzarsi per applicazioni biomedicali
02/05/2005- 31/10/2005	Promea srl	Collaboratore a progetto - Caratterizzazione di nanocristalli

Istruzione, formazione (es. titoli di studio, certificazioni professionali/linguistiche/informatiche)

Data	Titolo / Principali tematiche	Ente
11/04/2005	Laurea magistrale a ciclo unico in Chimica e Tecnologia Farmaceutiche	Università degli Studi di Cagliari (UNICA)
16/01/2009	Dottorato in Scienze Chimiche	Università degli Studi di Cagliari (UNICA)
23/07/2019	Laurea magistrale in Biologia Cellulare e Molecolare	Università degli Studi di Cagliari (UNICA)

Publicazioni / Convegni

Publicazioni
A. Scano* , V. Cabras, G. Ennas, A New One-Pot Way to Prepare Enzyme-Containing Coordination Polymers by Sonochemistry, <i>Journal of Nanoscience and Nanotechnology</i> (May 2021), 21, 2935–2938 DOI: 10.1166/JNN.2021.19042
A. Scano* , F. Lai, F. Marongiu, G. Ennas, Effect of Manual Grinding on Diclofenac Acid Nanocrystals: A Chemico-Physical Investigation, <i>Journal of Nanoscience and Nanotechnology</i> (May 2021), 21, 2808–2815 DOI: 10.1166/JNN.2021.19060
A. Scano* , F. Ebau, V. Cabras, F. Sini, G. Ennas, G. Ennas, Alternative Silica Sources in the Synthesis of Ordered Mesoporous Silica, <i>Journal of Nanoscience and Nanotechnology</i> (May 2021), 21, 2847–2854 DOI: 10.1166/JNN.2021.19059
A. Scano* , E. Magner, M. Pilloni, D. Peddis, F. Sini, S. Slimani, G. Ennas, High Energy Ball Milling and Liquid Crystal Template Method: A Successful Combination for the Preparation of Magnetic Nano-Platforms, <i>J. Nanosci. Nanotechnol.</i> (May 2021) 21, 2930–2934
E. Podda, C. M. Aragoni, M. Arca, G. Atzeni, S. J. Coles, G. Ennas, F. Isaia, V. Lippolis, G. Orru, A. Scano, J. B. Orton, A. Pintus, A. Scano , Morpholine- and Thiomorpholine-Based Amidodithiophosphonate Nickel Complexes: Synthesis, Characterization, P-N Cleavage, Antibacterial Activity and Silica Nano-Dispersion, <i>Journal of Nanoscience and Nanotechnology</i> (May 2021) DOI: 10.1166/JNN.2021.19058
M. Demurtas, V. Onnis, P. Zucca, A. Rescigno, J. Lachowicz, L. Engelbrecht, M. Nieddu, G. Ennas, A. Scano , F. Mocchi, F. Cesare Marincola, Cholinium—based Ionic Liquids from hydroxycinnamic acids as new promising bioactive agents: a combined experimental and theoretical investigation, <i>ACS Sustainable Chem. Eng</i> (Feb 2021), 9, 7, 2975–2986 DOI: 10.1021/ACSSUSCHEMENG.1C00090
A. Msahel, F. Galiano, M. Pilloni, F. Russo, A. Hafiane, R. Castro-Munoz, V. B. Kumar, A. Gedanken, G. Ennas, Z. Porat, A. Scano , S. Ben Hamouda, A. Figoli, Exploring the Effect of Iron Metal-Organic Framework Particles in Polylactic Acid Membranes for the Azeotropic Separation of Organic/Organic Mixtures by Pervaporation, <i>Membranes</i> (2021), 11, 65 DOI: 10.3390/MEMBRANES11010065
E. Colacino, G. Ennas, I. Halaz, A. Porcheddu, A. Scano , Editors and Authors of <i>Mechanochemistry: from soft matter to hard materials. An Introduction and a Practical Guide</i> , Ed. De Gruyter 2021
Alessandra Scano , Guido Ennas, Francesca Esposito, Enzo Tramontano, Fabrizio Angius, “Coating with Antibacterial Properties”, Brevetto internazionale PCT n P3250PC00 dell’Università degli Studi di Cagliari, sottomesso il 16/06/2020
M. Pilloni, A. Ardu, V. Cabras, S. Columbu, A. Scano , G. Ennas, FeCo/Ppy@C: Pt-free FeCo-Polypyrrole Nanocomposites Supported on Porous Carbon for Electrochemical Application, <i>Adv.</i>

Mater. Lett. (2019), 10 (4), pp 253-258, DOI: 10.5185/amlett.2018.2203
A. Scano , V Cabras, M Pilloni, G Ennas, Microemulsions: The Renaissance of Ferrite Nanoparticle Synthesis, <i>Journal of Nanoscience and Nanotechnology</i> (2019), 19 (8), 4824-4838, doi: https://doi.org/10.1166/jnn.2019.16876
A. Scano , F. Ebau, M.L. Manca, V. Cabras, F. Cesare Marincola, M. Manconi, M. Pilloni, A.M. Fadda, G. Ennas, Novel drug delivery systems for natural extracts: The case study of Vitis Vinifera extract-SiO ₂ nanocomposites, <i>International Journal of Pharmaceutics</i> , 551, p. 84–96 (2018), doi: 10.1016/j.ijpharm.2018.08.057
M. Pilloni, V.B. Kumar, G. Ennas, Z. Porat, A. Scano , V. Cabras, A. Gedanken, Formation of metallic silver and copper in non-aqueous media by ultrasonic radiation, <i>Ultrasonics – Sonochemistry</i> 2018, 47 , 108–113 , doi: 10.1016/j.ultsonch.2018.04.018
V. Cabras, M.C. Aragoni, S.J. Coles, R. Lai, M. Pilloni, E. Podda, A. Scano , G. Ennas, Mechanochemical synthesis of coordination polymers based on dithiophosphato and dithiophosphonato NiII complexes and 1,4-di(3-pyridinyl)buta-1,3-diyne ligand, <i>Supramolecular Chemistry</i> 2017, 29 (11), pp. 865-874. DOI: 10.1080/10610278.2017.1386306
V. Cabras, M. Pilloni, A. Scano , R. Lai, M.C. Aragoni, S. Coles, G. Ennas, Mechanochemical Reactivity of Square-Planar Nickel Complexes and Pyridyl-Based Spacers for the Solid-State Preparation of Coordination Polymers: The Case of Nickel Diethyldithiophosphate and 4,4'-Bipyridine, <i>European Journal of Inorganic Chemistry</i> 2017, doi:10.1002/ejic.201601541
A. Scano , V. Cabras, F. Marongiu, D. Peddis, M. Pilloni and G. Ennas, New Opportunities in the Preparation of Nanocomposites for Biomedical Applications: Revised Mechanochemical Synthesis of Magnetite-Silica Nanocomposites, <i>Materials Research Express</i> , 4, 2017, n° 25004 http://dx.doi.org/10.1088/2053-1591/aa5867
R. Pireddu, C. Caddeo, D. Valenti, F. Marongiu, A. Scano , G. Ennas, F. Lai, A. M. Fadda, C. Sinico, Diclofenac acid nanocrystals as an effective strategy to reduce in vivo skin inflammation by improving dermal drug bioavailability, <i>Colloids and Surfaces B: Biointerfaces</i> in press DOI: http://dx.doi.org/doi:10.1016/j.colsurfb.2016.03.026
A. Scano · F. Ebau · M. L. Manca · V. Cabras · M. Pilloni · A.M. Fadda · G. Ennas, “Centella Asiatica Extract-SiO ₂ Nanocomposites for Keloid Treatment”, Conference Paper: XI National conference on nanophase materials, Rome 26-28 October 2015
G. Ennas, M. Pilloni, V. Cabras, A. Scano , M. Bellusci, F. Padella, M. Pentimalli, C. Delitala, S. Lai, E. Rombi, F. Sini, I. Ferino, “Fe(III) 1,3,5-benzene tricarboxylate Metal Organic Framework”, <i>J Appl Biomater Funct Mater</i> 2016; 14(1): e84-e128, DOI: 10.5301/jabfm.5000272
V. Cabras, M. Pilloni, A. Scano , R. Lai, G. Ennas, M.C. Aragoni, “Mechanochemical Synthesis Study of [Ni((EtO) ₂ PS ₂) ₂ -bipy] layered Coordination Polymer”, <i>J Appl Biomater Funct Mater</i> 2016; 14(1): e84-e128, DOI: 10.5301/jabfm.5000272
M. Pilloni, G. Ennas, V. Cabras, V. Denotti, V. B. Kumar, A. Musinu, Z. Porat, A. Scano , A. Gedanken, “Thermal and structural characterization of ultrasonicated BiSn alloy in the eutectic composition”, <i>Journal of Thermal Analysis and Calorimetry</i> (2015), 120(3), 1543-1551
M. Pilloni, F. Padella, G. Ennas, S. Lai, M. Bellusci, E. Rombi, F. Sini, M. Pentimalli, C. Delitala, A. Scano , V. Cabras, I. Ferino, “Liquid-assisted mechanochemical synthesis of an Iron Carboxylate Metal Organic Framework and its evaluation in diesel fuel desulfurization”, <i>Microporous and Mesoporous Materials</i> (2015), 213, 14-21
A. Scano , M. Pilloni, V. Cabras, C. Vazquez-Vazquez and G. Ennas, Facile Synthesis of SiO ₂ Nanoparticles for Biomedical Applications, <i>AIP Conf. Proc.</i> 1624, 125-129 (2014); http://dx.doi.org/10.1063/1.4900467
F. Frongia, A. Scano , M. Pilloni, A. Ardu, S. Delsante, R. Novakovic, G. Borzone, G. Ennas, “Synthesis and Melting Behaviour of Bi, Sn and Sn-Bi Alloy Nanoparticles”, <i>Journal of Alloys and Compounds</i> (2015), 7-14
A. Floris, C. Sinico, A. M. Fadda, F. Lai, F. Marongiu, A. Scano , M. Pilloni, F. Angius, C. Vazquez-Vazquez, G. Ennas (2014). Characterization and cytotoxicity studies on liposome-

hydrophobic magnetite hybrid colloids. <i>Journal of Colloid and Interface Science</i> , vol. 425, p. 118-127, ISSN: 0021-9797, doi: 10.1016/j.jcis.2014.03.046
D. Peddis, D. Rinaldi, G. Ennas, A. Scano , E. Agostinelli and D. Fiorani, “Superparamagnetic Q1 blocking and superspin-glass freezing in ultra small Q2 d-(Fe _{0.67} Mn _{0.33})OOH particles”, <i>Chem. Phys.</i> (2012), 14
N. Otero, P. Romero, A. Gonzalez, A. Scano , Surface texturing with laser micro cladding to improve tribological properties”, <i>Journal of Laser Micro Nanoengineering</i> (2012), 7, 2, 152-157
A. Scano , G. G. Fuentes, J. Osés, J. Rodrigo, R. Martínez, R.J. Rodríguez, “PVD-coatings for polymer microtube hydroforming dies”, Conference: VI Iberian Congress on Tribology 2011, At Madrid, Volume: Actas del VI Congreso Ibérico de Tribología IBERTRIB 2011 (2011), 289 - 298
M. Pilloni; G. Ennas; M. Casu; A. M. Fadda; F. Frongia; F. Marongiu; R. Sanna; A. Scano ; D. Valenti; C. Sinico; “Drug Silica Nanocomposite: Preparation, Characterization and Skin Permeation Studies”, <i>Pharmaceutical Development and Technology</i> , ISSN 1083-7450 print/ISSN 1097-9867 online, DOI: 10.3109/10837450.2011.653821
A. Scano , G. Ennas, F. Frongia, A. La Barbera, M. A. Lopez-Quintela, G. Marongiu, G. Paschina, D. Peddis, M. Pilloni, C. Vazquez-Vazquez, Mn-ferrite nanoparticles via reverse microemulsions: synthesis and characterization, <i>J Nanopart Res.</i> 13 (2011) 3063-3073
P. Romero, N. Otero, A. González, G. García, A. Scano , “Additive generation of surface microstructures for fluid-dynamic applications by using single-mode fibre laser assisted microcladding”. <i>Physics Procedia</i> (2011), 12, 268-277
M. Pilloni, J. Nicolas, V. Marsaud, K. Bouchemal, F. Frongia, A. Scano , G. Ennas, C. Dubernet, “PEGylation and preliminary biocompatibility evaluation of magnetite-silica nanocomposites obtained by high energy ball milling”, <i>International Journal of Pharmaceutics</i> (2010), 401, 103-112
M. Manconi, F. Marongiu, G. Ennas, A. Scano , C. Sinico, D. Valenti, A. M. Fadda, “Liposome for (Trans)dermal delivery of tretinoin: influence of drug concentration and vesicle composition”, <i>Journal of Drug Delivery Science and Technology</i> (2008), 18, 309-313
G. Ennas, M. F. Casula, S. Marras, G. Navarra, A. Scano , G. Marongiu, “Characterization of FeOOH Nanoparticles and Amorphous Silica Matrix in a FeOOH-SiO ₂ Nanocomposite”, <i>Journal of Nanomaterials</i> (2008), ID 361816, 1-6 DOI: 10.1155/2008/361816
M. Bellusci, S. Canepari, G. Ennas, A. La Barbera, F. Padella, A. Santini, A. Scano , L. Serralesandri, F. Varsano, Phase Evolution in Synthesis of Manganese Ferrite Nanoparticles. <i>J. Am. Ceram. Soc.</i> , 90 (2007) 3977-3983
Convegni
Presentazione orale: A. Scano , E. Magner, M. Pilloni, S. Slimani, D. Peddis, G. Ennas, “Towards mechanochemistry: new perspectives in the synthesis of superparamagnetic ordered mesoporous materials for biomedical applications”, Sardinia Chem, Sassari 21 st June 2019
Presentazione Flash: E. Mereu, V. Cabras, M. Pilloni, A. Scano , G. Ennas, “Ultrasonication of Zn(II) Salts and 4,4'-bipyridine for the Synthesis of 1D-Coordination Polymers”, Green and Unconventional Advanced Inorganic Materials - AIM 2020, Padova 5 th -7 th September 2018
Presentazione orale (Invited Speaker): A. Scano , M. Pilloni, V. Cabras, F. Ebau, M. L. Manca, A. M. Fadda, G. Ennas, “Towards Mechanochemistry: New Perspectives in the Synthesis of Nanocomposites for Biomedical Applications”, European Advanced Materials Congress - EAMC 2018, Stockholm 20 th -23 rd August 2018
Presentazione orale: A. Scano , M. Pilloni, V. Cabras, F. Ebau, M. L. Manca, A. M. Fadda, G. Ennas, “Rediscovering mechanochemistry: new opportunities in the synthesis of nanocomposites by High Energy Ball Milling”, Applied Nanotechnology and Nanoscience International Conference 2017, Roma 18 th -20 th October 2017
Presentazione orale: A. Scano , F. Ebau, M. L. Manca, V. Cabras, M. Pilloni, A. M. Fadda, G. Ennas, “Centella Asiatica Extract-SiO ₂ Nanocomposites for Keloid Treatment”, XI National

Conference on nanophase materials, Roma 26 th -28 th October 2015
Poster: A. Scano, F. Ebau, M. L. Manca, V. Cabras, M. Pilloni, A. M. Fadda, G. Ennas, “New natural extract – SiO ₂ nanocomposites for keloid treatment”, 12th International Conference on Nanoscience & Nanotechnology (NN15), Thessaloniki 7 th -10 th July 2015
Poster and Flash Presentation: A. Scano, G. Ennas, E. Magner, G. G. Fuentes, M. Pastor, C. G. Polo, D. Peddis, M. Pilloni, R. Rodriguez, “Nanomaterial Assortment for Biomedical Applications (part II), 19th International Symposium on Microencapsulation, Pamplona 9 th – 11 th September 2013
Poster: A. Scano, G. Ennas, E. Magner, G. G. Fuentes, M. Pastor, C. G. Polo, D. Peddis, M. Pilloni, “Nanomaterial Assortment for Biomedical Applications, MAGNIFYCO 2013 Workshop, Barcelona 20 th – 22 nd February 2013
Poster: A. Scano, M. Pilloni, G. Ennas, A. Ardu, G. G. Fuentes, M. Pastor, C. G. Polo, “Synthesis and Characterization of Ferrite Nanoparticles by a Water-in-Ionic Liquid Microemulsion, 9th International Conference on Nanoscience & Nanotechnology (NN12), Thessaloniki 3 rd – 7 th July 2012
Presentazione Orale: A. Scano, G. Ennas, D. Peddis, M. Pilloni, E. Magner, “Superparamagnetic Mesoporous Silicates for Enzyme Supports: Synthesis and Characterization”. NANOSMAT 2010, Krakovia 17 th – 20 th October 2011
Poster: A. Scano, G. Ennas, D. Peddis, M. Pilloni, E. Magner, “Superparamagnetic Mesoporous Silicates for Enzyme Supports: Synthesis and Characterization”. NANO 2010, Roma 13 th – 17 th September 2010
Posters: A. Scano, G. Ennas, E. Magner, “Synthesis, Functionalization and Characterization of Magnetic-MPS Nanocomposites as Enzyme Supports”, - A. Scano, F. Frongia, M. Pilloni, G. Marongiu, G. Paschina, G. Ennas, “Nanocrystalline MnFe ₂ O ₄ prepared in Water/Oil Microemulsions: Synthesis and Characterization”, IX Convegno Nazionale Materiali Nanofasici, Cagliari 3 rd -5 th June 2009
Oral presentation and Poster: A. Scano, G. Ennas, G. Marongiu, G. Paschina, M. Pilloni, “Characterization of Nanocrystalline Manganese Ferrite Prepared by Water-in-Oil Microemulsions”, XXXV Congresso della Divisione di Chimica Inorganica della Società Chimica Italiana, Milan 3 rd -7 th September 2007
Posters: - A. Scano, G. Ennas, G. Marongiu, “Meccanosynthesis, Characterization and Functionalization of Fe ₃ O ₄ /SiO ₂ Nanocomposites”, - M. Bellusci, L. Seralessandri, A. La Barbera, F. Varsano, A. Santini, A. Scano, “Synthesis of MnFe ₂ O ₄ in toluene/water reverse micelles nanoreactors”, VIII Convegno Nazionale Materiali Nanofasici, Rome 3 rd -4 th Ottobre 2006
Oral presentation: A. Scano, G. Ennas, G. Marongiu, “Meccanosynthesis, Characterization and Functionalization of Fe ₃ O ₄ /SiO ₂ Nanocomposites”, La Parola ai Giovani 2005, Sassari 28 th June 2005

Altre attività scientifiche

Scuole
3rd IAAASS 2016 - Innovative Approaches for identification of Antiviral Agents Summer School, Pula, September 2016
Caracterización de la Textura Cristalográfica y de las Tensiones Residuales en Materiales Policristalinos por Difracción de Rayos X, AIN, Pamplona, Spain, 20 th -23 rd May, 2013
IV Curso de Caracterización de Partículas, Madrid, Spain, 1 st – 3 rd July 2012
2012 Insubria International Summer School “Crystallography for Health and Biosciences”, Como, Italy, 18 th -23 rd June 2012
5th International Summer School in Nanomedicine (ISSON11), Thessaloniki, Greece 30 th June -7 th

July 2012
Curso de formación nivel básico en la tecnología DLS-NIBS, AIN, Pamplona, Spain, 15 th December 2011
La nanotecnología aplicada a los materiales plasticos, Madrid, Spain, 16 th - 17 th November 2011
5th International Summer Schools “N&N:Organic Electronics & Nanomedicine” (ISSON11), Thessaloniki, Greece 30 th June - 7 th July
Curso de Bioplasticos, plásticos biodegradables y biocomposites - AIN, Pamplona, Spain, 10 th June 2010
Curso de Plasma Polimerization– AIN, Pamplona, Spain, 15 th - 16 th June 2010
Curso de aceros – AIN, Pamplona, Spain, 11 th -12 th May 2010
Curso Corrosion CENIM – AIN, Pamplona, Spain, 27 th -28 th January 2010
Transmission Electron Microscopy by Shohei Nakahara, MSSI, University of Limerick, Ireland, July 2009
Curso de Tecnicas Analiticas en Nanotecnologias, Carlos Vázquez Vázquez - Francisco Rivadulla Fernández, Universidad de Santiago de Compostela, Spain, January-February 2008
XII Scuola Nazionale di Scienza dei Materiali, “Nanostrutture nelle strategie di sviluppo” Bressanone, Università di Padova, Italy, 11 th -16 th , September 2006
IX Scuola Nazionale per Dottorandi della Divisione di Chimica Inorganica, “Chimica dei Materiali Inorganici”, Arcavacata (CS), Italy, 27 th , November – 1 st December 2006

Ulteriori informazioni pertinenti

Master in Europrogettazione, Europroject Manager, Cagliari, Italy, November 2014
Master in Europrogettazione, Europroject Manager, Cagliari, Italy, 7 th - 11 th June 2011

Luogo, data e firma

Cagliari, 07/09/2021

Alessandra Scano