

LUCIA CARLUCCI



Associate Professor

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Birth	1 th January 1963 – Italy
March 1989	Five –year degree in Industrial Chemistry, University of Bologna - Italy
March –June 1989	Erasmus scholarship, University of Liverpool, UK
September 1993	PhD in Chemical Sciences, University of Bologna – Italy
April 1993-2003	Assistant Professor of General and Inorganic Chemistry, Università dell’Insubria – Varese - Italy
2003-2010	Assistant Professor of General and Inorganic Chemistry, Università degli Studi di Milano - Italy
November 2010	Associate Professor of General and Inorganic Chemistry, Università degli Studi di Milano - Italy
2013	National habilitation to Full Professor of General and Inorganic Chemistry.

Research

Research interests are strongly oriented towards the synthesis, characterization and application of porous coordination polymers (Metal-Organic Frameworks) and supramolecular architectures. In particular, the scientific activity in the field is focused to: - The development of new designed ligands and synthetic strategies to control and modulate the crystal structures/properties of the new materials; - X-ray diffraction analysis; -Topological and entanglements analysis of complex metal-organic coordination frameworks.

More recently, she became interested in the development of Metal-Organic Frameworks/graphene composites for efficient storage of methane. A research activity developed in collaboration with prof. Katsumi Kaneko from the Shinshu University (Nagano – Japan).

She is co-author of **85** publications on peer-reviewed international journals, including invited papers and two book chapters, and of several communications to conferences. She gave several invited lectures and in 2013 was awarded of the Young Plenary Lecture to the 20th EuCheMS Conference on Organometallic Chemistry (St Andrews, Scotland, July 2013). She presents a h-index of 46 and her publications have had a total number of citations of 8679 (ISI WOS, July 2014).

Teaching

General Chemistry for first year student of Geological Sciences (2009-2014 - UniMi), and Environmental Sciences (2000 – Insubria, Como); Laboratory of Chemistry for Biology (1999-2003 Insubria Varese, and 2010 UniMi); Inorganic Chemistry for Chemistry (2006-2009 UniMi); Supramolecular Chemistry for Chemistry (from 2003, UniMi).

Advisor or co-advisor of many Bachelor and Master degree theses, advisor of one PhD thesis (Marco Visconti, 2010 “New Metal-Organic polymeric materials: from design to synthesis, structural characterization and properties”).

Academic Committee Membership

- Joint Commission of the Department of Chemistry of UniMi (Commissione Paritetica) (2013 -)
- Instrumentations and technical gases Committee (Commissione strumentazione e gas tecnici) (2012 -)
- Member of the Doctoral School in Industrial Chemistry (2013 -)
- High Schools Orientation Committee (Commissione orientamento) (2006-2012)
- Member of the Committee of the Doctoral School in Chemical Sciences (2008-2009)

Reviewer for:

CrystEngComm, CrystalGrowth&Design, Chemical Communications, Dalton, Angewandte Chemie, Advanced Functional Materials, Nature Chemistry, Coordination Chemistry Review, New Journal of Chemistry, European Journal of Chemistry, Inorganica Chimica Acta.

Funding

2013-2015 - European project leader, “NASEMS: Nanoradiator-Equipped Adsorbents for Safe and Energy Saving Methane Storage” – (Concert-Japan joint Call)

2013-2015 – Co-investigator, “Highly Absorptive Microporous Materials for Gas Storage and Separation” (Cariplo2012)

2010-2012 - Co-investigator, “CRYSFORMS: Progettazione, proprietà e preparazione di cristalli molecolari e co-cristalli - dalla nucleazione in soluzione allo stato solido” (Project of relevant national importance PRIN2008, Ministry of Education, IT)

2007-2008 Co-investigator “Metodi Innovativi Sperimentali e Teorici per lo Studio del Polimorfismo Cristallino: un Approccio Multidisciplinare” (Project of relevant national importance PRIN2006, Ministry of Education, IT)

2004-2006 Co-investigator “Ingegneria cristallina di materiali a base molecolare e loro utilizzo per assorbimento di gas e per reazioni solvent-free” (Project of relevant national importance PRIN2004, Ministry of Education, IT)

2000-2002 Research Unit Principal Investigator “Costruzione di supermolecole solide quali nuovi materiali funzionali” (Project of relevant national importance PRIN2000, Ministry of Education, IT)

Publications

85) L. Carlucci, G. Ciani, D.M. Proserpio, T.G. Mitina, V.A. Blatov “*Entangled 2D Coordination Networks: A General Survey*” Chem. Rev. **2014**, in the press. DOI: 10.1021/cr500150m

84) V. Nobakht, A. Beheshti, D. M. Proserpio, L. Carlucci, C. T. Abrahams “*Influence of the counter anion and steric hindrance of pyrazolyl and imidazolyl flexible ligands on the structure of zinc-based coordination polymers*” Inorg. Chim. Acta **2014**, *414*, 217-225.
DOI: 10.1016/j.ica.2014.02.005

83) A. Beheshti, V. Nobakht, **L. Carlucci**, D. M. Proserpio, C. Abrahams “*Influence of the counter ion on the structure of two new copper (I) coordination polymers: Synthesis, structural characterization and thermal analysis*” J. Mol. Structure **2013**, *1037*, 236-241. (cit. 4)

82) **L. Carlucci**, G. Ciani, S. Maggini, D.M. Proserpio, R. Sessoli, F. Totti “*Synthesis and characterization of new oligomeric and polymeric complexes based on the $[Cu^{II}(bpca)]^+$ unit [*Hbpca* = bis(2-pyridylcarbonyl)amine]*” Inorg. Chim. Acta **2011**, *376*, 538–548. (cit. 4)

81) **Lucia Carlucci**, Gianfranco Ciani, Davide M. Proserpio and Marco Visconti “*The novel metalloligand $[Fe(bppd)3]$ (*bppd* = 1,3-bis(4-pyridyl)-1,3-propanedionate) for the crystal engineering of heterometallic coordination networks with different silver salts. Anionic control of the structures*” CrystEngComm **2011**, *13*, 5891-5902. (cit. 13)

80) A. Kondo, H. Kajiro, H. Noguchi, **L. Carlucci**, D. M. Proserpio, G. Ciani, K. Kato, M. Takata, H. Seki, M. Sakamoto, Y. Hattori, F. Okino, K. Maeda, T. Ohba, K. Kaneko, H. Kanoh “*Super Flexibility of a 2D Cu-Based Porous Coordination Framework on Gas Adsorption in Comparison with a 3D Framework of Identical Composition: Framework Dimensionality-Dependent Gas Adsorptivities*” J. Am. Chem. Soc. **2011**, *133*, 10512-10522. (cit. 31)

79) **L. Carlucci**, G. Ciani, S. Maggini, D. M. Proserpio, F. Ragaini, E. Gallo, M. Ranocchiaro, A. Caselli “*Synthesis and characterization of new tetra-substituted porphyrins with exo-donor carboxylic groups as building blocks for supramolecular architectures. Catalytic and structural studies of their metalated derivatives*” Journal of Porphyrins and Phthalocyanines **2010**, *14*, 804–814. (cit. 3)

78) **L. Carlucci**, G. Ciani, S. Maggini, D. M. Proserpio, M. Visconti “*Heterometallic Modular Metal–Organic 3D Frameworks Assembled via New Tris-b-Diketonate Metalloligands: Nanoporous Materials for Anion Exchange and Scaffolding of Selected Anionic Guests*” Chemistry–a European Journal **2010**, *16*, 12328-12341. (cit. 43)

77) **L. Carlucci**, G. Ciani, J. M. García-Ruiz, M. Moret, D. M. Proserpio, S. Rizzato “*Crystallization Behavior of Coordination Polymers. 1. Kinetic and Thermodynamic Features of 1,3-Bis(4-pyridyl)propane/ MCl_2 Systems*” Crystal Growth & Design, **2009**, *9*, 5024-5034. (cit. 8)

- 76) Z.-G. Kong, X.-Y. Wang, **L. Carlucci** “*A polythreaded three-dimensional architecture of undulated layers originated by the contribution of different supramolecular interactions*” *Inorg. Chem. Commun.* **2009**, *12*, 691-694. (cit. 22)
- 75) C. Dragonetti, **L. Carlucci**, G. D’Alfonso, E. Lucenti, P. Macchi, D. Roberto, A. Sironi, R. Ugo “*Synthesis, Spectroscopic, and X-ray Characterization of Rhenium Carbonyl Complexes with Different Silsesquioxanes, as Models That Mimic the Chemical Behavior and the Topology of the Silica Surface*” *Organometallics* **2009**, *28*, 2668-2676. (cit. 4)
- 74) I. A. Baburin, V. A. Blatov, **L. Carlucci**, G. Ciani, D.M. Proserpio “*Interpenetrated three-dimensional hydrogen-bonded networks from metal–organic molecular and one- or two-dimensional polymeric motifs*” *CrystEngComm* **2008**, *10*, 1822-1838. (cit. 92)
- 73) **L. Carlucci**, G. Ciani, S. Maggini, D. M. Proserpio “*Metal-organic coordination frameworks assembled with the long flexible ligand 4,4’-bis(imidazol-1-ylmethyl)biphenyl*” *CrystEngComm* **2008**, *10*, 1191-1203. (cit. 21)
- 72) I. A. Baburin, V. A. Blatov, **L. Carlucci**, G. Ciani, D.M. Proserpio “*Interpenetrated Three-Dimensional Networks of Hydrogen-Bonded Organic Species: A Systematic Analysis of the Cambridge Structural Database*” *Crystal Growth & Design*, **2008**, *8*, 519-539. (cit. 140)
- 71) **L. Carlucci**, G. Ciani, S. Maggini, D. M. Proserpio “*A New Polycatenated 3D Array of Interlaced 2D Brickwall Layers and 1D Molecular Ladders in [Mn₂(bix)₃(NO₃)₄] · 2CHCl₃ [bix) 1,4-bis(imidazol-1-ylmethyl)benzene] that Undergoes Supramolecular Isomerization upon Guest Removal*” *Crystal Growth & Design* **2008**, *8*, 162-164. (cit. 69)
- 70) A. Kondo, H. Noguchi, **L. Carlucci**, D. M. Proserpio, G. Ciani, H. Kajiro, T. Ohba, H. Kanoh, K. Kaneko “*Double-Step Gas Sorption of a Two-Dimensional Metal-Organic Framework*” *J. Am. Chem. Soc.* **2007**, *129*, 12362-12363. (cit. 90)
- 69) L. Carlucci, G. Ciani, D.M. Proserpio "Networks, Topologies, and Entanglements" in *Making Crystals by Design*. Edited by D. Braga, F. Grepioni. Wiley, 2007.
- 68) A. Kondo, H. Noguchi, H. Kajiro, L. Carlucci, P. Mercandelli, D. M. Proserpio, H. Tanaka, K. Kaneko, H. Kanoh “*Coordination Symmetry-Dependent Structure Restoration Function of One-Dimensional MOFs by Molecular Respiration*” *J. Chem. Phys.* **2006**, *110*, 25565. (cit. 18)
- 67) **L. Carlucci**, G. Ciani, D.N. Proserpio, F. Porta “*New metal-organic frameworks and supramolecular arrays assembled with the bent ditopic ligand 4,4-diaminodiphenylmethane*” *CrystEngComm* **2006**, *8*, 696-706. (cit. 32)
- 66) X.-L. Wang, C. Qin, E.-B. Wang, Y.-G. Li, Z.-M. Su, L. Xu, **L. Carlucci** “*Entangled Coordination Networks with Inherent Features of Polycatenation, Polythreading, and Polyknotting*” *Angew. Chem. Int. Ed. Engl.* **2005**, *44*, 5824-5827. (cit. 320)
- 65) I.A. Baburin, V. A. Blatov, **L. Carlucci**, G. Ciani and D. M. Proserpio “*Interpenetrating metal-organic and inorganic 3D networks: a computer-aided systematic investigation. Part II. Analysis of the Inorganic Crystal Structure Database (ICSD)*” *J. Solid State Chem.* **2005**, *178*, 2452 - 2474. (cit. 184)

- 64) **L. Carlucci**, G. Ciani, D.M. Proserpio, F. Porta “*Four new 2D porous polymeric frames from the self-assembly of silver triflate and silver tosylate with free-base and Zn-metallated 5,10,15,20-tetra(4-pyridyl)porphyrin*” *CrystEngComm* **2005**, 7, 78-86. (cit. 37)
- 63) **L. Carlucci** and A. Gavezzotti “*Molecular recognition and crystal energy landscape: an X-ray and computational study of caffeine and other methylxanthines*” *Chem. Eur. J.* **2005**, 11, 271-279. (cit. 32)
- 62) **L. Carlucci**, G. Ciani and D.M. Proserpio “*Parallel and Inclined (1D → 2D) Interlacing Modes in New Polyrotaxane Frameworks [M₂(bix)₃SO₄]₂ [M =Zn(II), Cd(II); Bix = 1,4-Bis(imidazol-1-ylmethyl)benzene]*” *Cryst. Growth Des.* **2005**, 5, 37-39. (cit. 101)
- 61) V. A. Blatov, **L. Carlucci**, G. Ciani and D.M. Proserpio “*Interpenetrating metal–organic and inorganic 3D networks: a computer-aided systematic investigation. Part I. Analysis of the Cambridge structural database*” *CrystEngComm* **2004**, 6, 377-395. (cit. 472)
- 60) C. Qin, X. Wang, **L. Carlucci**, M. Tong, E. Wang, C. Hu and L. Xu “*From arm-shaped layers to a new type of polythreaded array: a two fold interpenetrated three-dimensional network with a rutile topology*” *Chem. Commun.* **2004**, 1876-1877. (cit. 107)
- 59) **L. Carlucci**, G. Ciani, D.M. Proserpio and L. Spadacini “*Supramolecular isomers in the same crystal: a new case involving two different types of layers polycatenated in the 3D architecture of [Cu(bix)₂(SO₄)]·7.5H₂O [bix=1,4-bis(imidazol-1-ylmethyl)benzene]*” *CrystEngComm* **2004**, 6, 96-101. (cit. 94)
- 58) **L. Carlucci**, G. Ciani and D.M. Proserpio “*A new type of entanglement involving one-dimensional ribbons of rings catenated to a three-dimensional network in the nanoporous structure of [Co(bix)₂(H₂O)₂](SO₄)·7H₂O [bix = 1,4-bis(imidazol-1-ylmethyl)benzene]*” *Chem. Commun.* **2004**, 380-381. (cit. 214)
- 57) S. Banfi, **L. Carlucci**, E. Caruso, G. Ciani, and D.M. Proserpio “*An unusual three-dimensional coordination network formed by parallel catenation of two-fold interpenetrated (6,3) layers based a novel three-connecting ligand*” *Cryst. Growth Des.* **2004**, 4, 29-32. (cit. 28)
- 56) **L. Carlucci**, G. Ciani and D.M. Proserpio “*Polycatenation, polythreading and polyknotting in coordination networks*” *Coord. Chem. Rev.* **2003**, 246, 247-289. (cit. 1385)
- 55) **L. Carlucci**, G. Ciani and D.M. Proserpio “*Borromean links and other non-conventional links in ‘polycatenated’ coordination polymers: re-examination of some puzzling networks*” *CrystEngComm* **2003**, 5(47), 269-279. (cit. 285)
- 54) **L. Carlucci**, G. Ciani, D.M. Proserpio and S. Rizzato “*New architecture from the self-assembly of M^{II}SO₄ salt with bis(4-pyridil)ligands. The first case of polycatenation involving three distinct sets of 2D polymeric (4,4)-layers parallel to a common axis*” *CrystEngComm* **2003**, 5(34), 190-199. (cit. 66)
- 53) G. D'Alfonso, V. Formaggio, D. Roberto, R. Ugo, E. Lucenti and **L. Carlucci** “*Surface organometallic chemistry: synthesis and X-ray characterization of novel silanolate surface models [Re₂(CO)₈(μ-H)(μ -OSi₂R')] and of the first models with two homo and hetero metal carbonyl fragments linked to vicinal or germinal silanols*” *Organometallics* **2003**, 22, 3271. (cit. 9)

- 52) **L. Carlucci**, G. Ciani, D. M. Proserpio and S. Rizzato “*Silver(I) polymeric coordination frameworks assembled with the new multimodal ligand 2,2'-azobispyrazine*” *New J. Chem.* **2003**, 27, 483-489. (cit. 46)
- 51) **L. Carlucci**, G. Ciani, D. M. Proserpio and F. Porta ”*New open network architectures from the self-assembly of AgNO₃ and 5,10,15,20-tetra(4-pyridyl)porphyrin building blocks: the exceptional self-penetrating topology of the 3D network of [Ag₈(Zn^{II}tpyp)₇(H₂O)₂](NO₃)₈*” *Angew. Chem. Int. Ed. Engl.* **2003**, 42, 317-322. (cit. 132)
- 50) **L. Carlucci**, G. Ciani, D. M. Proserpio and S. Rizzato “*Coordination networks from the self-assembly of silver salts and linear chain dinitriles NC(CH₂)_nCN (n = 2 to 7): A systematic investigation of the role of counterions and of the increasing length of the spacers*” *CrystEngComm* **2002**, 19, 413-425. (cit. 64)
- 49) S. Banfi, **L. Carlucci**, E. Caruso, G. Ciani and D. M. Proserpio ”*Using long bis(4-pyridyl)ligands designed for the self-assembly of coordination frameworks and architectures*” *J. Chem. Soc., Dalton Trans.* **2002**, 2714-2721. (cit. 101)
- 48) **L. Carlucci**, N. Cozzi, G. Ciani, M. Moret, D. M. Proserpio and S. Rizzato “*A three-dimensional nanoporous flexible network of ‘square-planar’ copper(II) centres with an unusual topology*” *Chem. Commun.* **2002**, 1354-1355. (cit. 95)
- 47) **L. Carlucci**, G. Ciani, F. Porta, D. M. Proserpio and L. Santagostini “*Crystal engineering of mixed-metal Ru-Ag coordination networks using the trans-[RuCl₂(pyz)₄] (pyz = pyrazine) building-block*” *Angew. Chem. Int. Ed. Engl.* **2002**, 41,107-1911. (cit. 50)
- 46) **L. Carlucci**, G. Ciani, D. M. Proserpio and S. Rizzato “*New polymeric networks from the self-assembly of silver(I) salts and the flexible ligand 1,3-bis(4-pyridyl)propane (bpp). A systematic investigation of the effects of the counterions and a survey of the coordination polymers based on bpp*” *CrystEngComm* **2002**, 4, 121-129. (cit. 179)
- 45) **L. Carlucci**, G. Ciani, M. Moret, D. M. Proserpio and S. Rizzato “*Monitoring the Crystal Growth and Interconversion of New Coordination Networks in the Self-assembly of MCl₂ Salts (M) Co, Ni, Cu, Cd) and 1,3-Bis(4-pyridyl)propane*” *Chem. Mater.*, **2002**, 14, 12-16. (cit. 63)
- 44) **L. Carlucci**, G. Ciani, D. M. Proserpio and S. Rizzato “*Three Novel Interpenetrating Diamondoid Networks from Self-Assembly of 1,12-Dodecanedinitrile with Silver(I) Salts*” *Chem.Eur.J.* **2002** , 8, 1519-1526. (cit. 74)
- 43) **L. Carlucci**, G. Ciani, D. M. Proserpio and S. Rizzato “*Interlinked molecular squares with [Cu(2,2'-bipy)]²⁺ corners generating a three-dimensional network of unprecedented topological type*” *Chem. Commun.* **2001**, 1198-1199. (cit. 39)
- 42) **L. Carlucci**, G. Ciani, D. M. Proserpio and S. Rizzato “*New examples of self-catenation in two three-dimensional polymeric co-ordination networks*” *J. Chem. Soc., Dalton Trans.* **2000**, 3821-3827. (cit. 77)
- 41) **L. Carlucci**, G. Ciani, A. Gramaccioli, D. M. Proserpio and S. Rizzato “*Crystal engineering of coordination polymers and architectures using the [Cu(2,2'-bipy)]_{2z} molecular corner as building block (bipy = 2,2'-bipyridyl)*” *CrystEngComm* **2000**, 29, 1-10. (cit. 18)

- 40) **L. Carlucci**, G. Ciani, D. M. Proserpio and S. Rizzato “*Chiral packing of chiral quintuple layers polycatenated to give a three-dimensional network in the coordination polymer [Co₅(bpe)₉(H₂O)₈(SO₄)₄](SO₄)·14H₂O [bpe = 1,2-bis(4-pyridyl)ethane]*” Chem. Commun. **2000**, 1319–1320. (cit. 150)
- 39) **L. Carlucci**, G. Ciani, D. M. Proserpio and S. Rizzato “*Structural Properties and Topological Diversity of Polymeric Ag(I)-hexamethylenetetramine Complexes: Self-Assembly of Three Novel Two-Dimensional Coordination Networks and Their Supramolecular Interactions*” J. Sol. State Chem. **2000**, 152, 211-220. (cit. 47)
- 38) **Carlucci**, G. Ciani, M. Moret, D. M. Proserpio and S. Rizzato “*Polymeric layers catenated by ribbons of rings in a three-dimensional self-assembled architecture: a nanoporous network with spongelike behavior*” Angew. Chem. Int. Ed. Engl. **2000**, 39, 1506-1510. (cit. 323)
- 37) **L. Carlucci**, G. Ciani, and D. M. Proserpio “*Interpenetrated and non interpenetrated 3D networks in the polymeric species Ag(tta) and 2 Ag(tta).AgNO₃ (tta = tetrazolate). The first examples of the $\mu_4\text{-}\eta^1:\eta^1:\eta^1:\eta^1$ bonding mode for tetrazolate*” Angew. Chem. Int. Ed. Engl. **1999**, 38, 3488-3492. (cit. 92)
- 36) **L. Carlucci**, G. Ciani and D. M. Proserpio “*Self-assembly of novel co-ordination polymers containing polycatenated molecular ladders and intertwined two-dimensional tilings*” J. Chem. Soc., Dalton Trans. **1999**, 1799-1804. (cit. 124)
- 35) **L. Carlucci**, D. M. Proserpio and G D'Alfonso “*1,2-*eq,eq*-[Re₂(CO)₈(THF)₂]: A Reactive Re₂(CO)₈ Fragment That Easily Activates H-H and C-H Bonds*” Organometallics **1999**, 18, 2091-2098. (cit. 16)
- 34) **L. Carlucci**, G. Ciani, D. W.v. Gudenberg and D.M. Proserpio “*Nanoporous three-dimensional networks topologically related to Cooperite from the self-assembly of copper(I) centres and the ‘square-planar’ building block 1,2,4,5-tetracyanobenzene*” New J. Chem. **1999**, 23, 397-401. (cit. 39)
- 33) **L. Carlucci**, G. Ciani and D.M. Proserpio “*A new type of supramolecular entanglement in the silver(I) coordination polymer [Ag₂(bpethy)₅](BF₄)₂ [bpethy = 1,2-bis(4-pyridyl)ethyne]*” Chem. Commun. **1999**, 449-450. (cit. 154)
- 32) **L. Carlucci**, G. Ciani, P. Macchi, D.M. Proserpio and S. Rizzato “*Complex Interwoven Polymeric Frames from the Self-Assembly of Silver(I) Cations and Sebaconitrile*” Chem. Eur. J. **1999**, 5, 237-243. (cit. 240)
- 31) **L. Carlucci**, G. Ciani, D.M. Proserpio “*Three-dimensional architectures of intertwined planar coordination polymers: the first case of interpenetration involving two different bidimensional polymeric motifs*” New J. Chem., **1998**, 1319-1321. (cit. 37)
- 30) **L. Carlucci**, G. Ciani, D.M. Proserpio and A. Sironi “*Polymeric Helical Motifs from the Self-Assembly of Silver Salts and Pyridazine*” Inorg. Chem. **1998**, 37, 5941-5943. (cit. 135)

- 29) **L. Carlucci**, G. Ciani, P. Macchi and D.M. Proserpio “*An unprecedented triply interpenetrated chiral network of ‘square-planar’ metal centres from the self-assembly of copper(II) nitrate and 1,2-bis(4-pyridyl)ethyne*” *Chem. Commun.* **1998**, 1837-1838. (cit. 227)
- 28) **L. Carlucci**, G. Ciani, D. W. v. Gudenberg and D.M. Proserpio “*Self-Assembly of Infinite Double Helical and Tubular Coordination Polymers from $Ag(CF_3SO_3)$ and 1,3-Bis(4-pyridyl)propane*” *Inorg. Chem.* **1997**, 36, 3812-3813. (cit. 274)
- 27) M. Bertelli, **L. Carlucci**, G. Ciani, D.M. Proserpio and A. Sironi “*Structural studies of molecular-based nanoporous materials. Novel networks of silver(I) cations assembled with the polydentate N-donor bases hexamethylenetetramine and 1,3,5-triazine*” *J. Mater. Chem.* **1997**, 7, 1271-1276. (cit. 83)
- 26) **L. Carlucci**, G. Ciani, D. W. v. Gudenberg and G. D'Alfonso “*Insertion reactions of diazoalkanes into an Re-H-Re of $[Re_2(\mu-H)_2(CO)_8]$. Synthesis and characterization of $[Re_2(\mu-H)(CO)_8(\mu-\eta^1-N(H)NCPH_2)]$ and of $[Re_2(\mu-H)(CO)_8(\mu-\eta^2-CH_2CO_2Et)]$ ” *J. Organomet. Chem.* **1997**, 534, 233-235. (cit. 5)*
- 25) **L. Carlucci**, G. Ciani, D.M. Proserpio and A. Sironi “*Extended networks via hydrogen bond cross-linkages of $[M(bipy)]$ ($M = Zn^{2+}$ or Fe^{2+} ; $bipy = 4,4'$ -bipyridyl) linear co-ordination polymers” *J. Chem. Soc. Dalton Trans.* **1997**, 1801-1803. (cit. 219)*
- 24) **L. Carlucci**, G. Ciani, D.M. Proserpio and A. Sironi “*A Novel 3D Three-Connected Cubic Network Containing $[Ag_6(hmt)_6]^{6+}$ Hexagonal Units ($hmt =$ Hexamethylenetetramine)” *Inorg. Chem.* **1997**, 36, 1736-1737. (cit. 72)*
- 23) **L. Carlucci**, G. Ciani, D. W. v. Gudenberg, D.M. Proserpio and A. Sironi “*Self-assembly of a three-dimensional network from two-dimensional layers via metallic spacers: the (3,4)-connected frame of $[Ag_3(hmt)_2][ClO_4]_3 \cdot 2H_2O$ ($hmt =$ hexamethylenetetramine “*Chem. Commun.* **1997**, 631-632. (cit. 120)*
- 22) N. Masciocchi, P. Cairati, **L. Carlucci**, G. Mezza, G. Ciani, A. Sironi “*Ab-initio X-ray powder diffraction structural characterization of coordination compounds: crystal structures of polymeric $[MX_2(bipy)]_n$ complexes ($M = Ni, Cu$; $X = Cl, Br$; $bipy = 4,4'$ -bipyridyl)” *J. Chem. Soc., Dalton Trans.* **1996**, 2739-2746. (cit. 79)*
- 21) **L. Carlucci**, G. Ciani, D.M. Proserpio, A. Sironi “*A three-dimensional ‘racemate’. Interpenetration of two enantiomeric networks of the $SrSi_2$ topological type in the polymeric complex $[Ag_2(2,3-Me_2pyz)_3](SbF_6)_2$ ($2,3-Me_2pyz = 2,3$ -dimethylpyrazine” *Chem. Comm.* **1996**, 1393-1394. (cit. 70)*
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