

**Pubblicazioni:**

- 285 articoli su riviste internazionali
- 6 capitoli su libri
- 6 brevetti
- 300 comunicazioni a congressi nazionali ed internazionali
- H-index: 38

**Roberto Paolesse**  
**List of publications (updated March 2014)**

**1) A. Furlani, R. Paolesse, M.V. Russo, A. Camus, N. Marsich**

*Polymerization of N-benzylpropargylamine in the presence of ionic rhodium(I) complexes. A new functionalized polyacetylene: investigation of its conducting properties.*

*Polymer* **28**, 1221 (1987)

**2) A. Furlani, C. Napoletano, R. Paolesse, M.V. Russo**

*Conductivity measurements on doped poly(substituted)acetylenes.*

*Synthetic Metals* **21**, 337 (1987)

**3) G. Ortaggi and R. Paolesse**

*The reduction of bridged carbonyl groups as a new route to  $\mu$ -methylene complexes of iron.*

*J.Organomet. Chem.* **346**, 219 (1988)

**4) T. Boschi, S. Licoccia, R. Paolesse, P. Tagliatesta**

*Synthetic routes to rhodium(III) corrolates.*

*Inorg. Chim. Acta* **141**, 169 (1988)

**5) T. Boschi, S. Licoccia, R. Paolesse, P. Tagliatesta**

*Synthesis and Characterization of Novel Rhodium Porphyrin Derivatives with a Metal-Metal Bond.*

*Inorg. Chim. Acta* **145**, 19 (1988)

**6) R. Zanoni, T. Boschi, S. Licoccia, R. Paolesse, P. Tagliatesta**

*An XPS study of Rh and Co derivatives of tetrapyrrole macrocycles.*

*Inorg. Chim. Acta* **145**, 175 (1988)

**7) A. Camus, V. Faruffini, A. Furlani, N. Marsich, G. Ortaggi, R. Paolesse, M.V. Russo**

*An improved method for the polymerization of ethynylferrocene. Conducting properties of doped polyethynylferrocene.*

*Appl. Organomet. Chem.* **2**, 533 (1988)

**8) T. Boschi, S. Licoccia, R. Paolesse, P. Tagliatesta, G. Pelizzi, F. Vitali**

*Synthesis and reactivity towards nucleophiles of (bis-isocyanide)porphyrinato rhodium(III) complexes. Crystal and molecular structure of a novel carbene complex:*

{TPPRh(*PhCH<sub>2</sub>NC*)[:C(NHCH<sub>2</sub>Ph)]PF<sub>6</sub>}

*Organometallics* **8**, 330 (1989)

**9) M.V. Andreucci, M. Bossa, C. Cauletti, R. Paolesse, G. Ortaggi, T. Vondrak, M.N. Piancastelli, M. Casarin, M. Dal Colle, G. Granozzi**

*Molecular orbital analysis of some ligand-bridged iron binuclear complexes by UV photoelectron spectroscopy and DV-Xa calculations.*

*J. Organomet. Chem.* **366**, 343 (1989)

**10) T. Boschi, S. Licoccia, R. Paolesse, P. Tagliatesta, M.A. Tehran, G. Pelizzi, F. Vitali**

*Synthesis and Characterization of Novel Metal(III) Complexes of corrole. Crystal and molecular Structure of (Triphenylarsine) - 2,3,7,8,12,13,17,18 - octamethylcorrolato Rhodium(III)*

*J. Chem. Soc. Dalton Trans.* 463 (1990)

**11) T. Boschi, S. Licoccia, R. Paolesse, P. Tagliatesta, W. Marconi**

*Novel Rhodium Prophyrin Derivatives IV. A Study of the Interaction between Rhodium Porphyrinates and Amides*

*Inorg. Chim. Acta* **163**, 135 (1990)

**12) T. Boschi, R. Paolesse, P. Tagliatesta**

*Transition Metal Catalyzed Cyclization of [a,c]Biladiene Salts as an Efficient Route to the Synthesis of Alkyl Porphyrins*

*Inorg. Chim. Acta* **168**, 83 (1990)

**13) S. Licoccia, M. Paci, R. Paolesse, T. Boschi**

*An investigations on the coordination properties of (octamethylcorrolato)iron(III)*

*J. Chem. Soc. Dalton Trans.* 461 (1991)

**14) R. Paolesse, S. Licoccia and T. Boschi**

*Towards the periodic table of metallocorrolates: synthesis and characterization of main group metal complexes of octamethylcorrole.*

*Inorg. Chim. Acta* **178**, 9 (1990)

**15) S. Licoccia, M. Paci, P. Tagliatesta, R. Paolesse, S. Antonaroli and T. Boschi**

*<sup>1</sup>H and <sup>13</sup>C NMR characterization of a new chiral porphyrin , meso-tetra( $\alpha,\beta,\alpha,\beta$ -o-camphanyl amidophenyl)porphyrin and its Rh(III) complex*

*Magnetic Res. in Chem.* **29**, 1084 (1991)

**16) K.M.Kadish,W.Koh,P.Tagliatesta,D.Sazou,R.Paolesse,S.Licoccia, T.Boschi**

*Electrochemistry of Rhodium and Cobalt Corroles. Characterization of (OMC)Rh(PPh<sub>3</sub>) and OMC)Co(PPh<sub>3</sub>) where OMC is the trianion of 2,3,7,8,12,13,17,18-octamethylcorrole*

- Inorg.Chem. 31, 2305 (1992)
- 17)** R.Paolesse, M. Fanciullo, S.Licoccia, E. Morgante, T.Boschi  
*Synthesis and characterization of cobalt(III) complexes of meso-phenyl substituted corroles*  
Inorg.Chim.Acta 203, 107 (1993)
- 18)** T. Boschi, S. Licoccia, R. Paolesse  
*Synthesis and Characterization of Dimeric Corrole Complexes*  
Syntheses and Methodologies in Inorganic Chemistry, Ed. S. Daolio, E. Tondello, P.A. Vigato, Padua (1994)
- 19)** R.Paolesse, S.Licoccia, G.Bandoli, A.Dolmella, T.Boschi  
*First direct synthesis of a corrole ring from a monopyrrolic precursor. Crystal and Molecular Structure of (triphenylphosphyne)-(5,10,15-triphenyl-2,3,7,8,12,13,17,18-octamethylcorrolato)cobalt(III)-dichloromethane.*  
Inorg.Chem. 33, 1171 (1994)
- 20)** T.Boschi, S.Licoccia, R.Paolesse, P.Tagliatesta  
*Asymmetric Syntheses.*  
in *Metalloporphyrins Catalyzed Oxidations*, Ed. A.Casella and F.Montanari, Kluwer Academic Publishers, The Netherlands, 1994
- 21)** M.V.Russo, A.Furlani, S.Licoccia, R.Paolesse, A.Chiesi Villa, C.Guastini  
*Synthesis of some bis-triphenylphosphine-ethynylferrocenyl Pt(II) complexes; molecular structure of [PtH(C<sub>6</sub>H<sub>4</sub>FeC<sub>5</sub>H<sub>5</sub>)(PPh<sub>3</sub>)<sub>2</sub>].*  
J.Organomet.Chem., 469, 245 (1994)
- 22)** G.Hernandez, A.Wilks, R.Paolesse, K.M.Smith, P.R.Ortiz de Montellano, G.N.La Mar  
*Proton NMR investigation of substrate-bound Heme Oxygenase: evidence for electronic and steric contributions to stereoselective heme cleavage.*  
Biochemistry, 33, 6631 (1994)
- 23)** Z. Gryczyinski, R.Paolesse, K.M.Smith, E.Bucci  
*Molecular Orientation and electronic structure of the transition moments of porphrin derivatives with different symmetry.*  
J. Phys. Chem., 98, 8813 (1994)
- 24)** V. Adamian, F. D'Souza, S. Licoccia, M. L. Di Vona, E. Tassoni, R. Paolesse, T. Boschi, K. M. Kadish  
*Synthesis, characterization and electrochemical behavior of (5,10,15-tri-X-phenyl-2,3,7,8,12,13,17,18-octamethylcorrolato)cobalt(III)(triphenylphosphine) complexes where X= p-OCH<sub>3</sub>, p-CH<sub>3</sub>, p-Cl, m-Cl, o-Cl, m-F, o-F*  
Inorg. Chem., 34, 532 (1995)
- 25)** S.Licoccia, E.Tassoni, R.Paolesse, T.Boschi  
*The effect of steric hindrance in the synthesis of cobalt corrolates via cyclization of α-hydroxypyrrroles.*  
Inorg. Chim. Acta, 235, 15 (1995)
- 26)** S.Licoccia, R.Paolesse  
*Metal complexes of Corroles and other corrinoids.*  
in *Structure and Bonding. Metal Complexes with Tetrapyrrole Ligands III*, 84, 71 (1995) Ed. J. Buchler, Springer and Verlag
- 27)** S.Licoccia, R.Paolesse, T.Boschi, G.Bandoli, A. Dolmella  
*Trichlorotin (II) - (meso - Tetraphenylporphyrinato) rhodium (III), a Porphyrin Derivative with a Rh-Sn Bond.*  
Acta Crystallographica, C51, 833 (1995)
- 28)** S.Licoccia, R.Paolesse, E.Tassoni, F.Polizio, T.Boschi  
*First-row Transition-metal Complexes of Corrole: Synthesis and Characterization of Oxotitanium (IV) and Oxovanadium (IV) Complexes of β-alkyl Corroles.*  
J. Chem. Soc. Dalton Trans, 3617 (1995)
- 29)** S.Licoccia, M.Paci, R.Paolesse  
*Novel NMR Aspects of Tertiary Phosphine Complexes of Ru(II) Etioporphyrin I.*  
Magn. Res. in Chem., 33, 954 (1995)
- 30)** C. Di Natale, J.A.J. Brunink, F. Bungaro, F. Davide, A. D'Amico, R. Paolesse, T. Boschi, M. Faccio, G. Ferri  
*Fish freshness determination with a metallo-porphyrin coated QMB sensor array*  
Proceedings of Sensors and their Applications VII, 48 (1995) Ed. A. T. Augousti, Institute of Physics Publishing
- 31)** C. Di Natale, J.A.J. Brunink, F. Davide, A. D'Amico, R. Paolesse, T. Boschi, M. Faccio, G. Ferri  
*Metallo-Porphyrin Coated Quartz Micro Balance Sensors*  
Proceedings of Chemical Sensors, 46 (1995), International Academic Publishing
- 32)** R.Paolesse, E.Tassoni, S.Licoccia, M.Paci, T.Boschi  
*One Pot Synthesis of Corrolates By Cobalt Catalyzed Cyclization of Formylpyrroles*  
Inorg. Chim. Acta, 241, 55 (1996)
- 33)** R. Paolesse, R. K. Pandey, T. P. Forsyth, L. Jaquinod, K. R. Gerzevske, M. O. Senge, S. Licoccia, T. Boschi, and K. M. Smith  
*Stepwise Syntheses of Bis-Porphyrins, Bis-Chlorins, Bis-Corroles, and of Porphyrin-Chlorin and Porphyrin-Corrole Heterodimers*

- J. Am. Chem. Soc., 118, 3869 (1996)
- 34)** J.A.J. Brunink, C.Di Natale, F. Bungaro, F.A.M. Davide, A. D'Amico, R. Paolesse, T. Boschi, M. Faccio, G. Ferri  
*The Application of Metalloporphyrins as Coating Material for QMB-based Chemical Sensors*  
Analytica Chimica Acta, 325, 53 (1996)
- 35)** R. Paolesse, P. Tagliatesta and T. Boschi  
*Synthesis of Unsymmetrical Porphyrin Dimers Containing  $\beta$ -Octaalkyl and meso-Tetraphenylporphyrin Subunits*  
Tetrahedron Letters, 37, 2637 (1996)
- 36)** C. Di Natale, J.A.J. Brunink, F. Bungaro, F. Davide, A. D'Amico, R. Paolesse, T. Boschi, M. Faccio, G. Ferri  
*Recognition of fish storage time by a metallo-porphyrin coated QMB sensor array*  
Measurement Science and Technology, 7, 1 (1996)
- 37)** T.Boschi, S.Licoccia, R.Paolesse, P.Tagliatesta, K.M.Smith, A.D'Amico, C.Di Natale, E.Baciocchi, C.Galli, A.Lapi, R.Saladino, R.Bernini, E.Mincione  
*Tetrapyrrolic Macrocycles: Novel Synthetic Processes And Applications.*  
Syntheses and Methodologies in Inorganic Chemistry, Ed. S. Daolio, E. Tondello, P.A. Vigato, Padua (1996)
- 38)** C. Di Natale, G. Repole, A. Macagnano, G. Saggio, F. Davide, A. D'Amico, R. Paolesse, T. Boschi, M. Faccio, G. Ferri  
*The Application of Metalloporphyrins as Basic Materials for Chemical Sensors.*  
Sensors and Microsystems, Ed. C. Di Natale, A. D'Amico, World Scientific, Singapore, 1996
- 39)** S.Licoccia, E.Morgante, R.Paolesse, F.Polizio, M.O.Senge, E.Tondello, T.Boschi  
*Tetracoordinated Manganese(III) alkylcorrolates. Spectroscopic studies and the crystal and molecular structure of (7,13-dimethyl-2,3,8,12,17,18-hexaethylcorrolato)manganese(III).*  
Inorg.Chem., 36, 1564 (1997)
- 40)** R. Paolesse, S. Licoccia, M. Spagnoli, T. Boschi, R.G. Khoury, K.M. Smith  
*A Novel Synthetic Route to Sapphyrins*  
J. Org. Chem., 62, 5133 (1997)
- 41)** R. Paolesse, L. Jaquinod, M.O. Senge, K.M. Smith  
*Functionalization of Corroles: Formylcorroles*  
J. Org. Chem., 62, 6193 (1997)
- 42)** C. Di Natale, A. Macagnano, G. Repole, A. D'Amico, R. Paolesse, T. Boschi  
*The Exploitation of Metalloporphyrins as Chemically Interactive Material in Chemical Sensors*  
Materials Science & Engineering C, 5, 209 (1998)
- 43)** C. Di Natale, A. Macagnano, F. Davide, A. D'Amico, R. Paolesse, T. Boschi, M. Faccio, G. Ferri  
*An Electronic Nose for Food Analysis*  
Sensors and Actuators B, 44, 521 (1997)
- 44)** Z.Gryczyinski, R.Paolesse, K.M.Smith, E.Bucci  
*Effect of Central Metal Substitution on Linear Dichroism of Porphyrins: Evidence of Out-of-plane Transition Moments*  
Biophysical Chem., 69, 71 (1997)
- 45)** C. Di Natale, A. Macagnano, A. Mantini, F. Davide, A. D'Amico, R. Paolesse, T. Boschi, M. Faccio, G. Ferri  
*Advances in Food Analysis by Electronic Nose*  
Proceedings of IEEE, International Symposium of Industrial Electronics, 122 (1997)
- 46)** R. Paolesse, A. Macagnano, D. Monti, P. Tagliatesta, T. Boschi  
*Synthesis and Characterization of meso-Tetraphenylporphyrin-Corrole Unsymmetrical Dimers*  
Journal of Porphyrins and Phthalocyanines, 2, 501 (1998)
- 47)** R. Paolesse, C. Di Natale, A. Macagnano, F. Davide, T. Boschi, A. D'Amico  
*Self-Assembled Monolayers of Mercaptoporphyrins as Sensing Material for Quartz Crystal Microbalance Chemical Sensors.*  
Sensors and Actuators B, 47, 70 (1998)
- 48)** K.M. Kadish, N. Guo, E. Van Caemelbecke, A. Froio, R. Paolesse, D. Monti, P. Tagliatesta, T. Boschi, L. Prodi, F. Bolletta, N. Zaccheroni  
*Synthesis, Electrochemical and Photophysical Study of Covalently Linked Porphyrin Dimers With Two Different Macrocycles*  
Inorg.Chem., 37, 2358 (1998)
- 49)** R. Paolesse, C. Di Natale, A. Macagnano, F. Sagone, T. Boschi, M. A. Scarselli, P. Chiaradia, V. I. Troitsky, T. S. Berzina, A. D'Amico  
*Langmuir-Blodgett films of a manganese corrole derivative*  
Langmuir, 15, 1268 (1999)
- 50)** S. Licoccia, M. L. Di Vona, R.Paolesse  
*The acid-catalyzed cyclization of 1,19-unsubstituted-a,c-biladienes.*  
J. Org. Chem., 63, 3190 (1998)
- 51)** C. Di Natale, A. Macagnano, A. Mantini, E. Tarizzo, A. D'Amico, R. Paolesse, T. Boschi, F. Sinesio, F. M. Bucarelli, E. Moneta, G. B. Quaglia  
*Electronic Nose and Sensorial Analysis: Comparison of Performances in Selected Cases*

- Sensors and Actuators B, 50, 246 (1998)
- 52)** C. Di Natale, R. Paolesse, A. Mantini, A. Macagnano, T. Boschi, A. D'Amico  
*Kelvin Probe Investigation of Self-Assembled Monolayers of Thiol Derivatized Porphyrins Interacting with Volatile Compounds*
- Sensors and Actuators B, 48, 368 (1998)
- 53)** C. Caliendo, P. Verardi, E. Verona, A. D'Amico, C. Di Natale, G. Saggio, M. Serafini, R. Paolesse, S. E. Huq  
*Advances in SAW-based Gas Sensors*
- Smart Materials and Structures, 6 (1997).
- 54)** A. Mantini, C. Di Natale, A. Macagnano, U. Chiarotti, A. D'Amico, R. Paolesse  
*The Kelvin Probe as Chemical Sensor: Detection of Volatile Compounds with Metalloporphyrins*
- Artificial and Natural Perception, Ed. C. Di Natale, A. D'Amico, F. Davide World Scientific, Singapore, 1997
- 55)** C. Di Natale, A. Macagnano, R. Paolesse, T. Boschi, A. D'Amico, F. Davide, M. Faccio, G. Ferri, F. Sinesio, F. M. Bucarelli, E. Moneta, G. B. Quaglia  
*Evaluation of Tomato Paste Quality by Means of Electronic Nose and Human Panel of Tasters*
- Artificial and Natural Perception, Ed. C. Di Natale, A. D'Amico, F. Davide World Scientific, Singapore, 1997
- 56)** R. Paolesse, T. Boschi, S. Licoccia, R.G. Khoury, K.M. Smith  
*Phosphorus Complex of Corrole*
- Chem. Comm., 1119 (1998)
- 57)** C. Di Natale, R. Paolesse, A. Macagnano, V.I. Troitsky, T.S. Berzina, A. D'Amico  
*Pattern Recognition Approach to the Study of the Interactions between Metalloporphyrin Langmuir-Blodgett Films and Volatile Organic Compounds*
- Analytica Chimica Acta, 384, 249 (1999)
- 58)** A. Ferri, G. Polzonetti, S. Licoccia, R. Paolesse, D. Favretto, P. Traldi, M.V. Russo  
*Ethylyn Porphyrrins Bridging bis-Phosphine Pt(II) Centers: Molecular Models for Conjugated Organometallic Porphyrrins Polymers*
- J. Chem. Soc. Dalton Trans, 4063 (1998).
- 59)** C. Di Natale, R. Paolesse, A. Macagnano, A. Mantini, C. Goletti, A. D'Amico  
*Characterization and Design of Porphyrin-Based Broad Selectivity Chemical Sensors for Electronic Nose Applications*
- Sensors and Actuators B, 52, 162 (1998)
- 60)** K.M. Kadish, N. Guo, E. Van Caemelbecke, R. Paolesse, D. Monti, P. Tagliatesta  
*Electrochemistry of Metalloporphyrin Homo- and Heterodimers Containing Co, Ni or Cu Metal Ions*
- Journal of Porphyrins and Phthalocyanines, 2, 439 (1998)
- 61)** R. Paolesse, F. Sagone, A. Macagnano, T. Boschi, L. Prodi, M. Montalti, N. Zaccheroni, F. Bolletta and K.M. Smith  
*Photophysical Behaviour of Corrole and its Symmetrical and Unsymmetrical Dyads*
- Journal of Porphyrins and Phthalocyanines, 3, 364 (1999)
- 62)** R. Paolesse, C. Di Natale, A. Macagnano, D. Salimbeni, L. Lucarini, A. Mantini, A. D'Amico  
*Volatile organic compounds detection with metalloporphyrin thin films-based optical sensors*
- Sensors and Microsystems, Ed. C. Di Natale, A. D'Amico, G. Sberveglieri, World Scientific, Singapore, 1998
- 63)** A. Macagnano, C. Di Natale, R. Paolesse, A. Mantini, A. D'Amico  
*Towards an electronic nose application in medicine: The skin odor analysis*
- Sensors and Microsystems, Ed. C. Di Natale, A. D'Amico, G. Sberveglieri, World Scientific, Singapore, 1998
- 64)** C. Di Natale, A. Macagnano, A. Mantini, R. Paolesse, V. I. Troitsky, T. S. Berzina, A. D'Amico  
*Characterization of Langmuir-Blodgett films of porphyrins as coating for QMB-based broad-selective sensors*
- Sensors and Microsystems, Ed. C. Di Natale, A. D'Amico, G. Sberveglieri, World Scientific, Singapore, 1998
- 65)** F. Sinesio, C. Di Natale, G. Quaglia, F. Bucarelli, E. Moneta, A. Macagnano, R. Paolesse, A. D'Amico  
*Use of electronic nose and trained sensory panel in the evaluation of tomato quality*
- Journal of the Science of Food and Agriculture, 80, 63 (2000)
- 66)** A. D'Amico, C. Di Natale, A. Macagnano, F. Davide, A. Mantini, E. Tarizzo, R. Paolesse, T. Boschi  
*Technology and tools for mimicking olfaction: status of the Rome "Tor Vergata" electronic nose*
- Biosensors & Bioelectronics, 13, 711 (1998)
- 67)** C. Di Natale, A. Macagnano, R. Paolesse, A. Mantini, E. Tarizzo, A. D'Amico  
*Human skin odor analysis by means of an electronic nose*
- Sensors and Actuators B, 65, 216 (2000)
- 68)** C. Di Natale, D. Salimbeni, R. Paolesse, A. Macagnano, A. D'Amico  
*Porphyrins-based opto-electronic nose for the volatile compounds detection*
- Sensors and Actuators B, 65, 220 (2000)
- 69)** C. Di Natale, C. Goletti, R. Paolesse, M. Drago, A. Macagnano, A. Mantini, V. I. Troitsky, T. S. Berzina, A. D'Amico  
*Kelvin Probe Investigation of the Thickness Effects in Langmuir-Blodgett Films of Pyrrolic Macrocycles Sensitive to Volatile Compounds in Gas Phase.*
- Sensors and Actuators B, 57, 183 (1999)

- 70)** R. Paolesse, C. Di Natale, V. Campo Dall'Orto, A. Macagnano, A. Angelaccio, N. Motta, A. Sgarlata, J. Hurst, I. Rezzano, M. Mascini, A. D'Amico  
*Porphyrin thin films coated Quartz Crystal Microbalances prepared by electropolymerization technique.*  
*Thin Solid Films*, 354, 245 (1999)
- 71)** R. G. Khoury, L. Jaquinod, R. Paolesse, K. M. Smith  
*New Chemistry of Oxophlorins (Oxyporphyrins) and Their  $\pi$ -Radicals*  
*Tetrahedron*, 55, 6713 (1999)
- 72)** E. Baciocchi, T. Boschi, L. Cassioli, C. Galli, L. Jaquinod, A. Lapi, R. Paolesse, K. M. Smith, P. Tagliatesta  
*Electronic Effects on the Stereoselectivity of Epoxidation Reactions Catalysed by Manganese Porphyrins*  
*Eur. J. of Org. Chem.*, 3281 (1999)
- 73)** R. Paolesse  
*Syntheses of Corroles*  
In "The Porphyrin Handbook" Eds. K. M. Kadish, K. M. Smith and R. Guilard, Academic Press, vol. II, 201 (2000)
- 74)** A. D'Amico, C. Di Natale, R. Paolesse, A. Macagnano, A. Mantini  
*Metalloporphyrins as basic material for volatile sensitive sensors*  
*Sensors and Actuators B*, 65, 209 (2000)
- 75)** R. Paolesse, R. G. Khoury, F. Della Sala, C. Di Natale, F. Sagone, K. M. Smith  
*Bis-vinylogous Corrole: The First Expanded Corrole*  
*Angew. Chem. Int. Ed. in Engl.*, 38, 2577 (1999)
- 76)** C. Goletti, A. Sgarlata, N. Motta, P. Chiaradia, R. Paolesse, A. Angelaccio, M. Drago, C. Di Natale, A. D'Amico  
*Kelvin probe and Scanning Tunnelling Microscope characterization of Langmuir-Blodgett sapphyrin films.*  
*Appl. Phys. Letters*, 75, 1237 (1999)
- 77)** R. Paolesse, L. Jaquinod, D. J. Nurco, S. Mini, F. Sagone, T. Boschi, K. M. Smith  
*5,10,15-Triphenylcorrole: a product from the modified Rothemund reaction*  
*Chem. Comm.*, 1307 (1999)
- 78)** G. Polzonetti, A. Ferri, M. V. Russo, G. Iucci, S. Licoccia and R. Paolesse  
*Platinum complex/Zn-porphyrin macrosystem assemblies: Electronic structure and conformational investigation by x-ray photoelectron spectroscopy*  
*Journal of Vacuum Science & Technology A*, 17, 832 (1999)
- 79)** C. Di Natale, A. Mantini, A. Macagnano, D. Antuzzi, R. Paolesse and A. D'Amico  
*Electronic Nose Analysis of Urine Samples Containing Blood*  
*Physiological Measurements*, 20, 1 (1999)
- 80)** C. Di Natale, R. Paolesse, A. Macagnano, A. Mantini, P. Mari and A. D'Amico  
*Qualitative Structure-Sensitivity Relationship in Porphyrin-based QMB sensors*  
*Sensors and Actuators B*, 68, 319 (2000)
- 81)** C. Di Natale, R. Paolesse, A. Macagnano, A. Mantini, A. D'Amico, A. Legin, L. Lvova, A. Rudnitskaya, Y. Vlasov  
*Electronic Nose and Electronic Tongue Integration for Improved Classification of Clinical and Food Samples*  
*Sensors and Actuators B*, 64, 15 (2000)
- 82)** R. Paolesse, C. Di Natale  
*Dall'elettronica molecolare ai sensori molecolari*  
*Alta Frequenza*, 12, 1 (2000)
- 83)** C. Di Natale, R. Paolesse, A. Macagnano, A. Mantini, A. D'Amico, M. Ubigli, A. Legin, L. Lvova, A. Rudnitskaya, Y. Vlasov  
*Application of a combined artificial olfaction and taste system to the quantification of relevant compounds in red wine*  
*Sensors and Actuators B*, 69, 342 (2000)
- 84)** A. D'Amico, C. Di Natale, R. Paolesse  
*Portraits of gasses and liquids by array of nonspecific chemical sensors: trends and perspectives*  
*Sensors and Actuators B*, 68, 324 (2000)
- 85)** C. Di Natale, C. Goletti, P. Chiaradia, M. Drago, A. Salvati, R. Paolesse, A. D'Amico  
*Optical anisotropy of Langmuir-Blodgett sapphyrin films.*  
*Appl. Phys. Letters*, 77, 3164 (2000)
- 86)** R. Paolesse, L. Jaquinod, F. Della Sala, D. J. Nurco, L. Prodi, M. Montalti, C. Di Natale, A. D'Amico, A. Di Carlo, P. Lugli, and K. M. Smith  
 *$\beta$ -Fused Oligoporphyrins: A Novel Approach to a New Type of Extended Aromatic System*  
*J. Am. Chem. Soc.*, 122, 11295 (2000)
- 87)** A. Sgarlata, A. Angelaccio, N. Motta, R. Paolesse, C. Di Natale, A. D'Amico  
*STM study of sapphyrin films deposited on gold substrates by Langmuir-Blodgett technique*  
*Surface Science*, 466, 167 (2000)
- 88)** A. M. Caccuri, G. Antonini, P. G. Board, J. Flanagan, M. W. Parker, R. Paolesse, P. Turella, G. Federici, M. Lo Bello, G. Ricci

*Human Glutathione Transferase T2-2 Discloses Some Evolutionary Strategies for Optimization of Substrate Binding to the Active Site of Glutathione Transferase*

J. Biological Chemistry, 276, 5427 (2001)

**89)** A. M. Caccuri, G. Antonini, P. G. Board, J. Flanagan, M. W. Parker, R. Paolesse, P. Turella, G. Chelvanayagam, G. Ricci

*Human Glutathione Transferase T2-2 Discloses Some Evolutionary Strategies for Optimization of the Catalytic Activity of Glutathione Transferase*

J. Biological Chemistry, 276, 5432 (2001)

**90)** R. Paolesse, S. Nardis, F. Sagone, R. G. Khoury

*Synthesis and Functionalization of meso-Aryl-Substituted Corroles*

J. Org. Chem., 66, 550 (2001)

**91)** A. Mantini, C. Di Natale, A. Macagnano, R. Paolesse, A. Finazzi-Agro', A. D'Amico

*Biomedical Application of an Electronic Nose*

Critical Reviews in Biomedical Engineering, 28, 481 (2000)

**92)** L. La Monica, D. Monti, G. Mancini, M. Montalti, L. Prodi, N. Zaccheroni, G. D'Arcangelo, R. Paolesse

*Synthesis, complexation properties and spectroscopic studies of the cation-induced conformational changes of some new oligooxaethylene-spacered diporphyrin arrays*

New J. of Chem., 25, 597 (2001)

**93)** A. D'Amico, C. Di Natale, R. Paolesse, A. Mantini, C. Goletti, F. Davide, G. Filosofi

*Chemical sensing materials characterization by Kelvin probe technique*

Sensors and Actuators B, 70, 254 (2000)

**94)** M. Andersson, M. Holmberg, I. Lundström, A. Lloyd-Spetz, P. Mårtensson, R. Paolesse, C. Falconi, C. Di Natale, A. D'Amico

*Development of a ChemFET sensor with molecular films of Porphyrins as sensitive layer*

Sensors and Actuators B, 77, 567 (2001)

**95)** C. Di Natale, A. Macagnano, S. Nardis, R. Paolesse, C. Falconi, P. Siciliano, R. Rella, A. Taurino, A. D'Amico

*Comparison and Integration of Arrays of Quartz Resonators and Metal-Oxide Semiconductor Chemoresistors in the Quality Evaluation of Olive Oils*

Sensors and Actuators B, 78, 303 (2001)

**96)** M. Andersson, M. Holmberg, I. Lundström, A. Lloyd-Spetz, P. Mårtensson, R. Paolesse, C. Di Natale, A. D'Amico

*MOSFET gas sensors with metalloporphyrins as gas sensitive materials*

Sensors and Microsystems, Ed. C. Di Natale, A. D'Amico, P. Siciliano, World Scientific, Singapore, 2000

**97)** R. Paolesse, C. Goletti, M. Drago, P. Chiaradia, C. Di Natale, A. D'Amico

*Study of the optical anisotropy of Langmuir-Blodgett films of extended pyrrolic macrocycles used in gas sensor devices*

Sensors and Microsystems, Ed. C. Di Natale, A. D'Amico, P. Siciliano, World Scientific, Singapore, 2000

**98)** C. Di Natale, A. Macagnano, S. Nardis, R. Paolesse, A. Mantini, E. Martinelli, A. D'Amico

*Electronic nose evaluation of storage days of fresh and thawed trout fishes*

Sensors and Microsystems, Ed. C. Di Natale, A. D'Amico, P. Siciliano, World Scientific, Singapore, 2000

**99)** C. Di Natale, A. Macagnano, A. Mantini, R. Paolesse, P. Siciliano, A. Taurino, R. Rella, A. D'Amico

*A mixed sensor array for the classification of olive oil*

Sensors and Microsystems, Ed. C. Di Natale, A. D'Amico, P. Siciliano, World Scientific, Singapore, 2000

**100)** A. Legin, A. Rudnitskaya, L. Lvova, Yu. Vlasov, A. D'Amico, C. Di Natale, R. Paolesse

*Application of the electronic tongue to milk quality monitoring*

Sensors and Microsystems, Ed. C. Di Natale, A. D'Amico, P. Siciliano, World Scientific, Singapore, 2000

**101)** C. Di Natale, G. Olafsdottir, S. Einarsson, E. Martinelli, R. Paolesse, A. D'Amico

*Comparison and integration of different electronic noses for freshness evaluation of cod-fish fillets*

Sensors and Actuators B, 77, 572 (2001)

**102)** C. Di Natale, A. Macagnano, E. Martinelli, R. Paolesse, E. Proietti, A. D'Amico

*The evaluation of quality of post-harvest oranges and apples by means of an electronic nose*

Sensors and Actuators B, 78, 26 (2001)

**103)** C. Di Natale, A. Macagnano, R. Paolesse, A. D'Amico

*Artificial olfaction systems: principles and applications to food analysis*

Biotechnol. Agron. Soc. Environ. 5, 159 (2001)

**104)** C. Di Natale, M. Zude, A. Macagnano, E. Martinelli, R. Paolesse, B. Herold, A. D'Amico

*Electronic nose and VIS-Spectra data fusion for the prediction of fruits characteristics*

Sensors and Microsystems, Ed. C. Di Natale, A. D'Amico, P. Dario, World Scientific, Singapore, 2001

**105)** C. Di Natale, M. Zude-Sasse, A. Macagnano, R. Paolesse, B. Herold, A. D'Amico

*Outer Product Analysis of Electronic Nose and Visible Spectra: Application to the Measurement of Peach Fruit Characteristics*

Analytica Chimica Acta, 459, 107 (2002)

**106)** R. Paolesse, D. Monti, L. La Monica, A. Froiio, S. Nardis, M. Venanzi, C. Di Natale, E. Martinelli, A. D'Amico

*Preparation and self-assembling of a chiral porphyrin diad onto the gold electrodes of Quartz Crystal Microbalances: a novel potential approach to the development of enantioselective chemical sensors.*

Chemistry Eur. J., 8, 2476 (2002)

**107)** C. Goletti, R. Paolesse, C. Di Natale, G. Bussetti, P. Chiaradia, A. Froiio, L. Valli, A. D'Amico

*Optical anisotropy of porphyrin Langmuir-Blodgett films by Reflectance Anisotropy Spectroscopy.*

Surface Science, 501, 31 (2002)

**108)** C. Goletti, G. Bussetti, P. Chiaradia, R. Paolesse, A. Froiio, E. Dalcanale T. Berzina, C. Di Natale, A. D'Amico  
*Structure-dependent optical anisotropy of porphyrin Langmuir-Schaefer films* Surface Science, 521, L645 (2002)

**109)** C. Goletti, R. Paolesse, E. Dal Canale, T. Berzina, C. Di Natale, G. Bussetti, P. Chiaradia, A. Froiio, L. Cristofolini, M. Costa, A. D'Amico

*Thickness Dependence of the Optical Anisotropy for Porphyrin Octaester Langmuir-Schaefer Films*

Langmuir, 18, 6881 (2002)

**110)** C. Goletti, G. Bussetti, P. Chiaradia, R. Paolesse, C. Di Natale, E. Mazzone, A. D'Amico

*A Reflectance Anisotropy Spectroscopy Investigation of Porphyrin Langmuir-Blodgett Films*

Physica Status Solidi (a), 188, 1339 (2001).

**111)** C. Goletti, R. Paolesse, C. Di Natale, G. Bussetti, P. Chiaradia, A. Froiio, L. Valli, A. D'Amico

*Langmuir-Blodgett films of a modified tetraphenylporphyrin*

Mater. Sci. Eng. C, 22, 219 (2002)

**112)** S. Chai, S. Licoccia, C. D'Ottavi, R. Paolesse, S. Nardis, V. Bulach, B. Zimmer, T. K. Shokireva, F. A. Walker

*Chloroiron meso-triphenylcorrolates: electronic ground state and spin delocalization*

Inorg. Chim. Acta, 339, 171 (2002)

**113)** P. Bizzarri, A. Macagnano, R. Paolesse, S. Nardis, A. D'Amico, A. Mencaglia, A. G. Mignani, C. Di Natale

*The optical transduction of the sensitive properties of metalloporphyrins films*

Sensors and Microsystems, Ed. C. Di Natale, A. D'Amico, L. Dori, G. C. Cardinali, S. Nicoletti, World Scientific, Singapore, 2002

**114)** Corrado Di Natale, Roberto Paolesse, and Arnaldo D'Amico

*Food and Beverage Quality Assurance*

In "Handbook of Machine Olfaction: Electronic Nose Technology" T. C. Pearce, S. S. Schiffman, H. T. Nagle, J. W. Gardner Eds., Wiley, (2002) (ISBN: 3-527-30358-8)

**115)** Roberto Paolesse, Sara Nardis, Mariano Venanzi, Marco Mastroianni, Michele Russo, Frank R. Fronczek, Maria Graça H. Vicente

*Vilsmeier formylation of 5,10,15-triphenylcorrole: expected and unusual products*

Chemistry Eur. J., 9, 1192 (2003)

**116)** P. Checcoli, G. Conte, S. Salvatori, R. Paolesse, A. Bolognesi, M. Berliocchi, F. Brunetti, A. D'Amico, A. Di Carlo, P. Lugli

*Tetra-phenyl porphyrin based thin film transistor*

Synthetic Metals, 138, 261 (2003)

**117)** C. Calcavento, G. Conte, S. Salvatori, R. Paolesse, M. Berliocchi, A. Di Carlo, P. Lugli, A. Sassella

*Charge injection and transport in tetra-phenyl-porphyrin*

Synthetic Metals, 138, 255 (2003)

**118)** Roberto Paolesse, Alessia Marini, Sara Nardis, Antonella Froiio, Federica Mandoj, Daniel J. Nurco, Luca Prodi, Marco Montalti, and Kevin M. Smith

*Novel routes to substituted 5,10,15-triarylcorroles*

Journal of Porphyrins and Phtalocyanines, 7, 25 (2003)

**119)** Corrado Di Natale, Antonella Macagnano, Eugenio Martinelli, Roberto Paolesse, Giuseppe D'Arcangelo, Claudio Roscioni, Alessandro Finazzi-Agrò, and Arnaldo D'Amico

*Lung Cancer Identification by the Analysis of Breath by means of an array of non-selective gas sensors*

Biosensors and Bioelectronics, 18, 1209 (2003)

**120)** Roberto Paolesse, Corrado Di Natale, Massimiliano Burgio, Eugenio Martinelli, Emiliano Mazzone, Giuseppe Palleschi, Arnaldo D'Amico

*Porphyrin Based Array of Cross-Selective Electrodes for Analysis of Liquid Samples*

Sensors and Actuators B, 95, 400 (2003)

**121)** Chiara Fanti, Donato Monti, Laura La Monica, Francesca Ceccacci, Giovanna Mancini, and Roberto Paolesse  
*Construction and complexation studies of some self-assembled diporphyrin receptors*

Journal of Porphyrins and Phtalocyanines, 7, 112 (2003)

**122)** Roberto Paolesse, Federica Mandoj, Alessia Marini, Corrado Di Natale

*Porphyrin Based Chemical Sensors*

Encyclopedia of Nanoscience and Nanotechnology, H. Nalwa ed., American Science Publishers, vol 9, 21 (2004)  
ISBN: 1-58883-065-9

**123)** Roberto Paolesse, Corrado Di Natale, Sara Nardis, Antonella Macagnano, Arnaldo D'Amico, Roberta Pinalli, Enrico Dalcanale

*Investigation of the Origin of Selectivity in Cavitand-Based Supramolecular Sensors*

- Chem. Eur. J., 9, 5388 (2003).
- 124)** E. Pinotti, A. Sassella, A. Borghesi, R. Paolesse  
*Characterization of organic semiconductors by a large-signal capacitance-voltage method at high and low frequencies*  
Synthetic Metals, 138, 15 (2003)
- 125)** R. Paolesse, A. Froio, S. Nardis, M. Mastroianni, M. Russo, D. J. Nurco and K. M. Smith  
*Novel aspects of the chemistry of 1,19-diunsubstituted a,c-biladienes*  
Journal of Porphyrins and Phtalocyanines, 7, 585 (2003)
- 126)** Corrado Di Natale, Giorgio Pennazza, Antonella Macagnano, Eugenio Martinelli, Roberto Paolesse, Arnaldo D'Amico  
*Thickness shear mode resonator sensors for the detection of androstenone in pork fat*  
Sensors and Actuators B, 91, 169 (2003)
- 127)** Kenyu Tan, Laurent Jaquinod, Roberto Paolesse, Sara Nardis, Corrado Di Natale, Aldo Di Carlo, Luca Prodi, Marco Montalti, Nelsi Zaccheroni, Kevin M. Smith  
*Synthesis and characterization of  $\beta$ -fused porphyrin-BODIPY<sup>®</sup> dyads*  
Tetrahedron, 60, 1099 (2004)
- 128)** G. Polzonetti, C. Battocchio, A. Goldoni, R. Larciprete, V. Carravetta, R. Paolesse, M. V. Russo  
*Interface formation between  $C_{60}$  and diethynyl-Zn-porphyrinato investigated by SR-induced photoelectron and near-edge X-ray absorption (NEXAFS) spectroscopies*  
Chem. Phys. Lett., 397, 307 (2004)
- 129)** M. Berliocchi, M. Manenti, A. Bolognesi, A. Di Carlo, P. Lugli, R. Paolesse, F. Mandoj, C. Di Natale, E. Proietti, G. Petrocco, A. D'Amico  
*Charge transport in pentacene and porphyrin-based organic thin film transistors*  
Semiconductor Science and Technology, 19, S354 (2004)
- 130)** Massimo De Napoli, Sara Nardis, Roberto Paolesse, M. Graciá H. Vicente, Rosaria Lauceri, and Roberto Purrello  
*Hierarchical Porphyrin Self-Assembly in Aqueous Solution*  
J. Am. Chem. Soc., 126, 5934 (2004)
- 131)** S. Nardis, D. Monti, C. Di Natale, A. D'Amico, P. Siciliano, A. Forleo, M. Epifani, A. Taurino, R. Rella and R. Paolesse  
*Preparation and characterization of Cobalt Porphyrin modified Tin Dioxide films for sensor applications*  
Sensors and Actuators B, 103, 339 (2004)
- 132)** R. Pizzoferrato, L. Lagonigro, T. Ziller, A. Di Carlo, R. Paolesse, F. Mandoj, A. Ricci, C. Lo Sterzo  
*Förster energy transfer from poly(arylene–ethynylene)s to an erbium–porphyrin complex*  
Chemical Physics, 300, 217 (2004)
- 133)** C. Di Natale, R. Paolesse, A. Macagnano, S. Nardis, E. Martinelli, E. Dalcanale, M. Costa and A. D'Amico  
*Sensitivity-selectivity balance in mass sensors: the case of metalloporphyrins*  
J. Mater. Chem., 14, 1281 (2004)
- 134)** D. Monti, M. Venanzi, M. Russo, G. Bussetti, C. Goletti, M. Montalti, N. Zaccheroni, L. Prodi, R. Rella, M. G. Manera, G. Mancini, C. Di Natale and R. Paolesse  
*Spontaneous deposition of amphiphilic porphyrin films on glass*  
New. J. of Chem., 28, 1123 (2004)
- 135)** M. Mascini, I. Cozzani, D. Compagnone, A. Macagnano, C. Di Natale, A. D'Amico, D. Monti, R. Paolesse, B. Chen, P. Warner  
*Biomimetic Traps for Dioxins: A Mixed Computational and Experimental Approach*  
Sensors and Microsystems, Ed. C. Di Natale, A. D'Amico, G. Soncini, L. Ferrario, M. Zen, World Scientific, Singapore, 2003, p. 88
- 136)** R. Paolesse, C. Di Natale, D. Monti, A. Macagnano, A. D'Amico, P. Siciliano, M. Epifani, A. Forleo, A. Taurino, R. Rella  
*Preparation of Novel Hybrid Sensing Materials: Porphyrin Doped Tin Dioxide Thin Films*  
Sensors and Microsystems, Ed. C. Di Natale, A. D'Amico, G. Soncini, L. Ferrario, M. Zen, World Scientific, Singapore, 2003, p. 121
- 137)** A. Macagnano, C. Di Natale, R. Paolesse, E. Sgreccia, A. D'Amico  
*Chemical Sensors Based on TMSRs: Effect of Coating Thickness*  
Sensors and Microsystems, Ed. C. Di Natale, A. D'Amico, G. Soncini, L. Ferrario, M. Zen, World Scientific, Singapore, 2003, p. 134
- 138)** R. Paolesse, C. Di Natale, A. Macagnano, S. Nardis, A. D'Amico, A. A. Mencaglia, P. Bizzarri, A. G. Mignani  
*An Optical Fiber Spectroscopic Platform for Multiple Sensor Interrogation*  
Sensors and Microsystems, Ed. C. Di Natale, A. D'Amico, G. Soncini, L. Ferrario, M. Zen, World Scientific, Singapore, 2003, p. 293
- 139)** A. Tibuzzi, G. Soncini, A. D'Amico, C. Di Natale, R. Paolesse, A. Macagnano, M. Zen  
*An Integrated Electro-Optical Nose*  
Sensors and Microsystems, Ed. C. Di Natale, A. D'Amico, G. Soncini, L. Ferrario, M. Zen, World Scientific, Singapore, 2003, p. 300

- 140)** G. Pennazza, A. Macagnano, E. Martinelli, R. Paolesse, C. Di Natale, A. D'Amico  
*Classification of Complex Mixtures with an Electronic Nose: The Case of Pharmaceutical Products Sensors and Microsystems*, Ed. C. Di Natale, A. D'Amico, G. Soncini, L. Ferrario, M. Zen, World Scientific, Singapore, 2003, p. 318
- 141)** R. Paolesse, M. Burgio, G. Palleschi, C. Di Natale, E. Martinelli, E. Mazzone, A. D'Amico  
*An Electronic Tongue Based on Metalloporphyrin Functionalized Electrodes Sensors and Microsystems*, Ed. C. Di Natale, A. D'Amico, G. Soncini, L. Ferrario, M. Zen, World Scientific, Singapore, 2003, p. 323
- 142)** C. Di Natale, R. Paolesse, M. Burgio, E. Martinelli, G. Pennazza, A. D'Amico  
*Applications of metalloporphyrins-based gas and liquid sensor arrays to the analysis of red wine Anal. Chim. Acta*, **513**, 49 (2004)
- 143)** M. Mascini, A. Macagnano, D. Monti, M. Del Carlo, R. Paolesse, B. Chend, P. Warner, A. D'Amico, C. Di Natale, D. Compagnone  
*Piezoelectric sensors for dioxins: a biomimetic approach Biosensors and Bioelectronics* **20**, 1203 (2004)
- 144)** S. Conoci, D. M. Guldi, S. Nardis, R. Paolesse, K. Kordatos, M. Prato, G. Ricciardi, M. G. H. Vicente, I. Zilberman, and L. Valli  
*Langmuir-Shäfer Transfer of Fullerenes and Porphyrins: Formation, Deposition, and Application of Versatile Films Chem. Eur. J.*, **10**, 6523 (2004)
- 145)** A. Scrivanti, V. Beghetto, U. Matteoli, S. Antonaroli, A. Marini, F. Mandoj, R. Paolesse, B. Crociani  
*Iminophosphine-palladium(0) complexes as highly active catalysts for the Suzuki reaction, and their application in the synthesis of undecaaryl substituted corroles Tetrahedron Letters*, **45**, 5861 (2004)
- 146)** A. Tibuzzi, F. Ficarella, R. Paolesse, G.-F. Dalla Betta, M. Boscardin, A. Macagnano, C. Di Natale, G. Soncini, A. D'Amico  
*Gas sensors based on high blue spectral responsivity photodiodes Sensors and Actuators B*, **111-112**, 242 (2005)
- 147)** A. Macagnano, M. Careche, A. Herrero, R. Paolesse, E. Martinelli, G. Pennazza, P. Carmona, A. D'Amico, C. Di Natale  
*A model to predict fish quality from instrumental features Sensors and Actuators B*, **111-112**, 293 (2005)
- 148)** S. Materazzi, S. De Angelis Curtis, F. Sagone, G. B. Quaglia, F. M. Bucarelli, S. Aquili, R. Paolesse, S. Vecchio, R. Curini and G. D'Ascenzo  
*THERMAL ANALYSIS AND FOOD QUALITY The possibility to qualify the pasta processing Journal of Thermal Analysis and Calorimetry*, **80**, 465–467 (2005)
- 149)** M. Lucci, P. Regoliosi, A. Reale, A. Di Carlo, S. Orlanducci, E. Tamburri, M.L. Terranova, P. Lugli, C. Di Natale, A. D'Amico, R. Paolesse  
*Gas sensing using single wall carbon nanotubes ordered with dielectrophoresis Sensors and Actuators B*, **111-112**, 181 (2005)
- 150)** Sara Nardis, Roberto Paolesse, Silvia Licoccia, Frank R. Fronczek, M. Graca H. Vicente, Tatjana K. Shokhireva, Sheng Cai, and F. Ann Walker  
*NMR and Structural Investigations of A Nonplanar Iron Corrole: Modified Patterns of Spin Delocalization and Coupling in A Slightly Saddled Chloroiron(III) Corrole Radical Inorg. Chem.* **44**, 7030-7046 (2005)
- 151)** G. Bussetti, C. Corradini, C. Goletti, P. Chiaradia, M. Russo, R. Paolesse, C. Di Natale, A. D'Amico, and L. Valli  
*Optical anisotropy and gas sensing properties of ordered porphyrin films Phys. stat. sol. (b)* **242**(13), 2714–2719 (2005)
- 152)** Sara Nardis, Donato Monti and Roberto Paolesse  
*Novel Aspects of Corrole Chemistry Mini-Reviews in Organic Chemistry* **2**, 546-564 (2005)
- 153)** Roberto Paolesse, Sara Nardis, Manuela Stefanelli, Frank R. Fronczek, Maria Graca H. Vicente  
*Hemiporphycene from the Expansion of a Corrole Ring Angew. Chem. Int. Ed.* **44**, 3047–3050 (2005)
- 154)** Corrado Di Natale, Roberto Paolesse, Giuseppe D'Arcangelo, Paolo Comandini, Giorgio Pennazza, Eugenio Martinelli, Santo Rullo, Maria Claudia Roscioni, Claudio Roscioni, Alessandro Finazzi-Agrò, Arnaldo D'Amico  
*Identification of schizophrenic patients by examination of body odor using gas chromatography-mass spectrometry and a cross-selective gas sensor array Med Sci Monit*, **11**(8), CR366-375 (2005)
- 155)** Donato Monti, Mariano Venanzi, Giovanna Mancini, Corrado Di Natale and Roberto Paolesse  
*Supramolecular chirality control by solvent changes. Solvodichroic effect on chiral porphyrin aggregation Chem. Comm.* 2471 (2005)
- 156)** Corrado Di Natale, Anna Grazia Mignani, Roberto Paolesse, Antonella Macagnano, Andrea Azelio Mencaglia,

and Arnaldo D'Amico

*Array of Opto-Chemical Sensors Based on Fiber-Optic Spectroscopy*

IEEE Sensors Journal, 5, 1165 (2005)

**157)** Corrado Di Natale, Giorgio Pennazza, Eugenio Martinelli, Marco Santonico, Antonella Macagnano, Roberto Paolesse, Arnaldo D'Amico

*Medical diagnosis with electronic noses*

J. Argent. Chem. Soc., 93, (2005) 81-87. ISSN 0365-0375

**158)** F. Ann Walker, Silvia Licoccia, Roberto Paolesse

*Iron corrolates: Unambiguous chloroiron(III) (corrolate)<sup>2-</sup> π-cation radicals*

Journal of Inorganic Biochemistry, 100, 810–837 (2006)

**159)** Roberto Paolesse, Adriano Alimelli, Eugenio Martinelli, Corrado Di Natale, Arnaldo D'Amico, Maria Grazia D'Egidio, Gabriella Aureli, Alessandra Ricelli, Corrado Fanelli

*Detection of fungal contamination of cereal grain samples by an electronic nose*

Sensors and Actuators B, 119, 425–430 (2006)

**160)** Daniel Filippini, Adriano Alimelli, Corrado Di Natale, Roberto Paolesse, Arnaldo D'Amico, Ingemar Lundström  
*Chemical Sensing with Familiar Devices*

Angew. Chem. Int. Ed. 45, 3800 (2006)

**161)** Roberto Pizzoferrato, Tiffany Ziller, Roberto Paolesse, Federica Mandoj, Alessandra Micozzi, Antonella Ricci, Claudio Lo Sterzo

*Optical properties of novel Er-containing co-polymers with emission at 1530 nm*

Chem. Phys. Lett. 426, 124 (2006)

**162)** Jole Spadavecchia, Roberto Rella, Pietro Siciliano, Maria Grazia Manera, Adriano Alimelli, Roberto Paolesse, Corrado Di Natale, Arnaldo D'Amico

*Optochemical vapour detection using spin coated thin film of ZnTPP*

Sensors and Actuators B, 115 (2006) 12–16

**163)** M. Lucci, A. Reale, A. Di Carlo, S. Orlanducci, E. Tamburri, M.L. Terranova, I. Davoli, C. Di Natale, A. D'Amico, R. Paolesse

*Optimization of a NO<sub>x</sub> gas sensor based on single walled carbon nanotubes*

Sensors and Actuators B 118 (2006) 226–231

**164)** Corrado Di Natale, Daniel Filippini, Giorgio Pennazza, Marco Santonico, Roberto Paolesse, Andrea Bellincontro, Fabio Mencarelli, Arnaldo D'Amico, Ingemar Lundström

*Sorting of apricots with computer screen photoassisted spectral reflectance analysis and electronic nose*

Sensors and Actuators B 119 (2006) 70–77

**165)** Adriano Alimelli, Giorgio Pennazza, Marco Santonico, Roberto Paolesse, Daniel Filippini, Arnaldo D'Amico, Ingemar Lundström, Corrado Di Natale

*Fish freshness detection by a computer screen photoassisted based gas sensor array*

Analytica Chimica Acta 582 (2007) 320–328

**166)** Larisa Lvova, Eugenio Martinelli, Emiliano Mazzzone, Andrea Pede, Roberto Paolesse, Corrado Di Natale, Arnaldo D'Amico

*Electronic tongue based on an array of metallic potentiometric sensors*

Talanta 70 (2006) 833–839

**167)** Luisa S. Dolci, Ettore Marzocchi, Marco Montalti, Luca Prodi, Donato Monti, Corrado Di Natale, Arnaldo D'Amico, Roberto Paolesse

*Amphiphilic porphyrin film on glass as a simple and selective solid-state chemosensor for aqueous Hg<sup>2+</sup>*

Biosensors and Bioelectronics 22 (2006) 399–404

**168)** Giorgio Verrelli, Luca Francioso, Roberto Paolesse, Pietro Siciliano, Corrado Di Natale, Arnaldo D'Amico, Antonio Logrieco

*Development of silicon-based potentiometric sensors: Towards a miniaturized electronic tongue*

Sensors and Actuators B, 123 (2007) 191–197

**169)** Larisa Lvova, Roberto Paolesse, Corrado Di Natale, Eugenio Martinelli, Emiliano Mazzzone, Andrea Orsini, Arnaldo D'Amico

*Chemical Images of Liquids*

NATO Security through Science Series, Imaging for Detection and Identification, J. Byrnes (ed.), 63–95, (2007)  
Springer Berlin.

**170)** M. Scarselli, G. Ercolani, P. Castrucci, D. Monti, G. Bussetti, M. Russo, C. Goletti, P. Chiaradia, R. Paolesse, M. De Crescenzi

*A combined scanning tunneling microscopy and reflectance anisotropy spectroscopy investigation of tetraphenylporphyrin deposited on graphite*

Surface Science 601 (2007) 2607–2610

**171)** Sara Nardis, Federica Mandoj, Roberto Paolesse, Frank R. Fronczek, Kevin M. Smith, Luca Prodi, Marco Montalti, and Gionata Battistini

*Synthesis and Functionalization of Germanium Triphenylcorrole: The First Example of a Partially Brominated Corrole*

Eur. J. Inorg. Chem. (2007) 2345–2352

**172)** Daniel Filippini, Corrado Di Natale, Roberto Paolesse, Arnaldo D'Amico, Ingemar Lundström

*Computer screen photo-assisted techniques for global monitoring of environmental and sanitary parameters*

Sensors and Actuators B 121 (2007) 93–102

**173)** Donato Monti, Mariano Venanzi, Manuela Stefanelli, Alessandro Sorrenti, Giovanna Mancini, Corrado Di Natale, and Roberto Paolesse

*Chiral Amplification of Chiral Porphyrin Derivatives by Templatized Heteroaggregation*

J. Am. Chem. Soc. 129 (2007) 6688

**174)** Manuela Stefanelli, Donato Monti, Mariano Venanzi and Roberto Paolesse

*Kinetic and spectroscopic studies on the self-aggregation of a meso-substituted amphiphilic corrole derivative*

New J. Chem., 31 (2007) 1722–1725

**175)** Antonella Macagnano, Emanuela Sgreccia, Roberto Paolesse, Fabrizio De Cesare, Arnaldo D'Amico, Corrado Di Natale

*Sorption and condensation phenomena of volatile compounds on solid-state metalloporphyrin films*

Sensors and Actuators B 124 (2007) 260–268

**176)** Larisa Lvova, Roberto Paolesse, Corrado Di Natale, Arnaldo D'Amico

*Detection of alcohols in beverages: An application of porphyrin-based Electronic tongue*

Sensors and Actuators B 118 (2006) 439–447

**177)** Corrado Di Natale, Roberto Paolesse, Arnaldo D'Amico

*Metalloporphyrins based artificial olfactory receptors*

Sensors and Actuators B 121 (2007) 238–246

**178)** Adriano Alimelli, Daniel Filippini, Roberto Paolesse, Simonetta Moretti, Gaetano Ciolfi, Arnaldo D'Amico, Ingemar Lundström, Corrado Di Natale

*Direct quantitative evaluation of complex substances using computer screen photo-assisted technology: The case of red wine*

Analytica Chimica Acta 597 (2007) 103–112

**179)** S. Pietrantoni, R. Francini, R. Pizzoferrato, S. Penna, R. Paolesse, and F. Mandoj

*Energy transfer and excitation processes in thin films of rare-earth organic complexes for NIR emission*

phys. stat. sol. (c), 2 (2007) 1048–1051

**180)** Sara Nardis, Giuseppe Pomarico, Frank R. Fronczek, Maria Graça H. Vicente and Roberto Paolesse

*One-step Synthesis of Isocorroles*

Tetrahedron Letters, 48 (2007) 8643–8646

**181)** Manuela Stefanelli, Marco Mastrianni, Sara Nardis, Silvia Licoccia, Frank R. Fronczek, Kevin M. Smith, Weihua Zhu, Zhongping Ou, Karl M. Kadish, Roberto Paolesse

*Functionalization of corroles: the nitration reaction*

Inorg. Chem., 46 (2007) 10791–10799

**182)** Giorgio Verrelli, Larisa Lvova, Roberto Paolesse, Corrado Di Natale and Arnaldo D'Amico

*Metalloporphyrin-Based Electronic Tongue: an Application for the Analysis of Italian White Wines*

Sensors, 7 (2007) 2750–2762

**183)** A. Macagnano, E. Sgreccia, E. Zampetti, S. Pantalei, C. Di Natale, R. Paolesse and A. D'Amico

*Potentials and limitations of a porphyrin based AT-cut resonator for sensing applications*

Sensors and Actuators B, 130 (2008) 411–417

**184)** A. D'Amico, C. Di Natale, R. Paolesse, A. Macagnano, E. Martinelli, G. Pennazza, M. Santonico, M. Bernabei, C. Roscioni, G. Galluccio, R. Bono, E. Finazzi-Agrò, S. Rullo

*Olfactory systems for medical applications*

Sensors and Actuators B, 130 (2008) 458–465

**185)** Eugenio Martinelli, Mario Stabile, Alejandro Catini, Roberto Paolesse, Arnaldo D'Amico and Corrado Di Natale

*An array of capacitive sensors based on a commercial fingerprint detectors*

Sensors and Actuators B, 130 (2008) 264–268

**186)** Emanuela Callone, Giovanni Carturan, Marco Ischia, Mauro Epifani, Angiola Forleo, Pietro Siciliano and Roberto Paolesse

*The hydrolytic route to Co-porphyrin-doped SnO<sub>2</sub> gas-sensing materials: Chemical study of Co-porphyrin versus Sn(IV) oxide interactions*

Inorganica Chimica Acta, 361 (2008) 79–85

**187)** D. Monti, G. Ercolani, R. Paolesse, M. Scarselli, P. Castrucci, M. De Crescenzi

*Self-Organization of Tetraphenylporphyrin on HOPG. Unprecedented Double-Layer Pattern Driven by Adsorption Compression*

Sensors and Microsystems, Ed. P. Siciliano, S. Capone, C. Di Natale, A. D'Amico, World Scientific, Singapore, 2008, p. 6

**188)** E. Sgreccia, A. Macagnano, E. Dalcanale, C. Di Natale, R. Paolesse

*A Study of Mass Effect in a Cavitand Supramolecular Sensor*

Sensors and Microsystems, Ed. P. Siciliano, S. Capone, C. Di Natale, A. D'Amico, World Scientific, Singapore, 2008, p. 18

**189)** A. G. Mignani, L. Ciaccheri, A. A. Mencaglia, R. Paolesse, C. Di Natale, A. Del Nobile, R. Benedetto, A. Mentana

*Quality Monitoring of Extra-Virgin Olive Oil Using an Optical Sensor*

Sensors and Microsystems, Ed. P. Siciliano, S. Capone, C. Di Natale, A. D'Amico, World Scientific, Singapore, 2008, p. 68

**190)** Roberto Paolesse, Adriano Alimelli, Arnaldo D'Amico, Mariano Venanzi, Gionata Battistini, Marco Montalti, Daniel Filippini, Ingemar Lundström and Corrado Di Natale

*Insights on the chemistry of a,c-biladienes from a CSPT investigation*

New J. Chem., 32 (2008) 1162-1166

**191)** Federica Mandoj, Sara Nardis, Giuseppe Pomarico and Roberto Paolesse

*Demetalation of corrole complexes: an old dream turning into reality*

J. Porphyrins Phthalocyanines, 12 (2008) 19-26

**192)** M. Bernabei, G. Pennazza, M. Santonico, C. Corsi, C. Roscioni, R. Paolesse, C. Di Natale, A. D'Amico

*A preliminary study on the possibility to diagnose urinary tract cancers by an electronic nose*

Sensors and Actuators B 131 (2008) 1-4

**193)** A. D'Amico, R. Bono, G. Pennazza, M. Santonico, G. Mantini, M. Bernabei, M. Zarlenga, C. Roscioni, E. Martinelli, R. Paolesse and C. Di Natale

*Identification of melanoma with a gas sensor array*

Skin Research and Technology, 14 (2008) 226-236

**194)** A. Macagnano, E. Zampetti, B. R. Pistillo, S. Pantalei, E. Sgreccia, R. Paolesse, R. d'Agostino

*Double layer sensors mimic olfactory perception: a case study*

Thin Solid Films, 516 (2008) 7857 - 7865

**195)** Emanuela Gatto, Muhammad A. Malik, Corrado Di Natale, Roberto Paolesse, Arnaldo D'Amico, Ingemar Lundström and Daniel Filippini

*Polychromatic Fingerprinting of Excitation Emission Matrices*

Chem. Eur. J., 14 (2008) 6057-6060

**196)** Roberto Paolesse, Larisa Lvova, Sara Nardis, Corrado Di Natale, Arnaldo D'Amico, Fabio Lo Castro

*Chemical images by porphyrin arrays of sensors*

Microchimica Acta, 163 (2008) 103-112

**197)** Giorgio Pennazza, Enrico Marchetti, Marco Santonico, Giulia Mantini, Stefano Mummolo, Giuseppe Marzo, Roberto Paolesse, Arnaldo D'Amico e Corrado Di Natale

*Application of a quartz microbalance based gas sensor array for the study of halitosis*

J. Breath Res. 2 (2008) in stampa doi:10.1088/1752-7155/2/1/017009

**198)** M. Santonico, P. Pittia, G. Pennazza, E. Martinelli, M. Bernabei, R. Paolesse, A. D'Amico, D. Compagnone, C. Di Natale

*Study of the aroma of artificially flavoured custards by chemical sensor array fingerprinting*

Sens. Actuators B: Chem. 133 (2008) 345-351

**199)** A.P. Caricato, M. Lomascolo, A. Luches, F. Mandoj, M.G. Manera, M. Mastroianni, M. Martino, R. Paolesse, R. Rella, F. Romano, T. Tunno, D. Valerini

*MAPLE deposition of methoxy Ge triphenylcorrole thin films*

Appl Phys A, 93 (2008) 651-654

**200)** Roberto Paolesse

*Corrole: the little big porphyrinoid*

Synlett, 15 (2008) 2215-2230

**201)** S. Pantalei, E. Zampetti, E. Sgreccia, E. Martinelli, L. Sandro, J. Mio Bertolo, A. Bearzotti, A. Macagnano, R. Paolesse, C. Di Natale

*Electrical characterization of porphyrin thin film towards humidity concentration*

Sensors and Microsystems, Ed. A. G. Mignani, R. Falciai, C. Di Natale, A. D'Amico, World Scientific, Singapore, 2008, p. 257

**202)** M. Russo, R. Paolesse, G. Bussetti, C. Goletti, P. Chiaradia, C. Di Natale, A. D'Amico, L. Valli

*Exploiting gas-sensing properties of Langmuir-Blodgett/Schaeffer films by reflectance anisotropy spectroscopy*

Sensors and Microsystems, Ed. A. G. Mignani, R. Falciai, C. Di Natale, A. D'Amico, World Scientific, Singapore, 2008, p. 271

**203)** R. Paolesse, S. Nardis, A. Alimelli, E. Martinelli, C. Di Natale, A. D'Amico, M.G. D'Egidio, G. Aureli, M. Epifani, A. Ricelli, C. Fanelli

*Detection of fungal contamination of cereal grain samples by an electronic nose*

Sensors and Microsystems, Ed. A. G. Mignani, R. Falciai, C. Di Natale, A. D'Amico, World Scientific, Singapore, 2008, p. 385

- 204)** A.G. Mignani, A.A. Mencuglia, L. Ciaccheri, R. Rella, J. Spudavecchia, R. Paolesse, C. Di Natale, A. D'Amico  
*Optical sensor array for multi-gas sensing*  
 Sensors and Microsystems, Ed. A. G. Mignani, R. Falciai, C. Di Natale, A. D'Amico, World Scientific, Singapore, 2008, p. 407
- 205)** G.M. Verrelli, L. Lvova, R. Paolesse, C. Di Natale, A. D'Amico  
*Analysis of Italian white wines by a porphyrin-based 'Electronic tongue' system*  
 Sensors and Microsystems, Ed. A. G. Mignani, R. Falciai, C. Di Natale, A. D'Amico, World Scientific, Singapore, 2008, p. 413
- 206)** A. D'Amico, C. Di Natale, M. Santonico, G. Pennazza, G. Mantini, M. Bernabei, E. Martinelli, R. Paolesse, S. Cabassi, A.G. Aronica, A. Calugi  
*Analysis of volatiles in the headspace of breast using a QMB based gas sensor array for breast cancer study: First evidences*  
 Sensors and Microsystems, Ed. G. Di Francia, P. Maddalena, I. Rendina, C. Di Natale, A. D'Amico, World Scientific, Singapore, 2008, p. 93
- 207)** E. Mazzone, M. Mastroianni, C. Di Natale, R. Paolesse, M.I. Pistelli, F. Sintoni, A. D'Amico  
*Development of QMB sensors based on iron porphyrins for carbon monoxide detection: A feasibility study*  
 Sensors and Microsystems, Ed. G. Di Francia, P. Maddalena, I. Rendina, C. Di Natale, A. D'Amico, World Scientific, Singapore, 2008, p. 145
- 208)** D. Monti, M. Stefanelli, M. Venanzi, M. Carbone, R. Paolesse, C. Di Natale, A. D'Amico, S. Turchini, M. Girasole, G. Pompeo  
*Studies on chiral self-organization of amphiphilic porphyrin derivatives. Comparison between morphology in solution and in solid state*  
 Sensors and Microsystems, Ed. G. Di Francia, P. Maddalena, I. Rendina, C. Di Natale, A. D'Amico, World Scientific, Singapore, 2008, p. 151
- 209)** Marco Mastroianni, Weihua Zhu, Manuela Stefanelli, Sara Nardis, Frank R. Fronczek, Kevin M. Smith, Zhongping Ou, Karl M. Kadish and Roberto Paolesse  
 *$\beta$ -Nitro Derivatives of Germanium(IV) Corrolates*  
 Inorg. Chem., 47 (2008) 11680-11687
- 210)** Manuela Stefanelli, Donato Monti, Valeria Van Axel Castelli, Gianfranco Ercolani, Mariano Venanzi, Giuseppe Pomarico and Roberto Paolesse  
*Chiral supramolecular capsule by ligand promoted self-assembly of resorcinarene-Zn porphyrin conjugate*  
 Journal of Porphyrins and Phthalocyanines, 12 (2008) 1279-1288
- 211)** Anna Grazia Mignani, Leonardo Ciaccheri, Costanza Cucci, Andrea Azelio Mencaglia, Antonio Cimato, Cristina Attilio, Heidi Ottevaere, Hugo Thienpont, Roberto Paolesse, Marco Mastroianni, Donato Monti, Marco Gerevini, Giovanna Buonocore, Matteo Alessandro Del Nobile, Annalisa Mentana, Maria Francesca Grimaldi, Chiara Dall'Asta, Andrea Faccini, Gianni Galaverna, and Arnaldo Dossena  
*EAT-by-LIGHT: Fiber-Optic and Micro-Optic Devices for Food Quality and Safety Assessment*  
 IEEE SENSORS JOURNAL, 8 (2008) 1342-1354
- 212)** C. Di Natale, E. Martinelli, R. Paolesse, A. D'Amico, D. Filippini, I. Lundström  
*An experimental biomimetic platform for artificial olfaction*  
 PLoS ONE, 3 (2008), art. no. e3139
- 213)** Stephen Macken, Corrado Di Natale, Roberto Paolesse, Arnaldo D'Amico, Ingemar Lundström, Daniel Filippini  
*Towards integrated devices for computer screen photo-assisted multi-parameter sensing*  
 Analytica Chimica Acta, 632 (2009) 143-147
- 214)** Larisa Lvova, Eugenio Martinelli, Francesca Dini, Alberto Bergamini, Roberto Paolesse, Corrado Di Natale, Arnaldo D'Amico  
*Clinical analysis of human urine by means of potentiometric Electronic tongue*  
 Talanta, 77 (2009) 1097-1104
- 215)** Corrado Di Natale, Kristina Buchholt, Eugenio Martinelli, Roberto Paolesse, Giuseppe Pomarico, Arnaldo D'Amico, Ingemar Lundström, Anita Lloyd Spetz  
*Investigation of quartz microbalance and ChemFET transduction of molecular recognition events in a metalloporphyrin film*  
 Sensors and Actuators B, 135 (2009) 560-567
- 216)** M. Mascini, E. Martinelli, E. Mazzone, D. Monti, R. Paolesse, D. Compagnone, A. D'Amico, C. Di Natale  
*Characterization of aminoacids monolayers as chemical sensors*  
 Sensors and Microsystems, Ed. C. Di Natale, A. D'Amico, E. Martinelli, R. Paolesse World Scientific, Singapore, 2009, p. 113
- 217)** F. Dini, E. Martinelli, G. Pomarico, D. Monti, D. Filippini, A. D'Amico, R. Paolesse, I. Lundström, C. Di Natale  
*Sensitivity amplification in self-assembled tubular structures of porphyrins*  
 Sensors and Microsystems, Ed. C. Di Natale, A. D'Amico, E. Martinelli, R. Paolesse World Scientific, Singapore, 2009, p. 137

- 218)** D. Marzorati, E. Merlone Borla, M. Lattore, G. Carturan, E. Callone, G. Neri, G. Micali, A. Bonavita, E. Roncari, A. Sanson, C. Di Natale, E. Martinelli, G. Pennazza, R. Paolesse, P. Siciliano, A. Forleo, S. Capone, A. M. Taurino, B. Debenedetti, F. Deorsola, S. Iannotta, T. Toccoli, N. Coppedè, R. Licheri, R. Orrù, G. Cao  
*FIRB "square" project: nano-structured sensors for the detection of the polluting ic engine exhaust gases and for indoor air quality monitoring*  
Sensors and Microsystems, Ed. C. Di Natale, A. D'Amico, E. Martinelli, R. Paolesse World Scientific, Singapore, 2009, p. 151
- 219)** N. K. L. Wiziack, F. J. Fonseca, A. Catini, M. Santonico, G. Mantini, A. D'Amico, C. Di Natale, R. Paolesse  
*Detection of gasoline samples adulteration with a capacitance array and quartz microbalances*  
Sensors and Microsystems, Ed. C. Di Natale, A. D'Amico, E. Martinelli, R. Paolesse World Scientific, Singapore, 2009, p. 214
- 220)** A. Catini, A. Berinucci, M. Foffo, A. D'Amico, R. Paolesse, C. Di Natale  
*A computer embedded capacitance sensor array*  
Sensors and Microsystems, Ed. C. Di Natale, A. D'Amico, E. Martinelli, R. Paolesse World Scientific, Singapore, 2009, p. 225
- 221)** Francesca Dini, Eugenio Martinelli, Giuseppe Pomarico, Roberto Paolesse, Donato Monti, Daniel Filippini, Arnaldo D'Amico, Ingemar Lundström and Corrado Di Natale  
*Chemical sensitivity of self-assembled porphyrin nano-aggregates*  
Nanotechnology 20 (2009) 055502 (8pp)
- 222)** Muhammad Ali Malik, Emanuela Gatto, Stephen Macken, Corrado Di Natale, Roberto Paolesse, Arnaldo D'Amico, Ingemar Lundström, Daniel Filippini  
*Imaging fingerprinting of excitation emission matrices*  
Analytica Chimica Acta, 635 (2009) 196–201
- 223)** Federica Mandoj, Manuela Stefanelli, Sara Nardis, Marco Mastroianni, Frank R. Fronczek, Kevin M. Smith, Roberto Paolesse  
*6-Azahemiporphycene: a further example of corrole metamorphosis*  
Chem. Commun., (2009) 1580–1582
- 224)** Daniel Filippini, Emanuela Gatto, Adriano Alimelli, Muhamad Ali Malik, Corrado Di Natale, Roberto Paolesse, Arnaldo D'Amico Ingemar Lundström  
*Spectral fingerprinting of porphyrins for distributed chemical sensing*  
J. Porphyrins Phthalocyanines 13 (2009), 77–83
- 225)** N.K.L. Wiziack, A. Catini, M. Santonico, A. D'Amico, R. Paolesse, L.G. Paterno, F.J. Fonseca, C. Di Natale  
*A sensor array based on mass and capacitance transducers for the detection of adulterated gasolines*  
Sensors and Actuators B, 140 (2009), 508–513
- 226)** Manuela Stefanelli, Jing Shen, Weihua Zhu, Marco Mastroianni, Federica Mandoj, Sara Nardis, Zhongping Ou, Karl M. Kadish, Frank R. Fronczek, Kevin M. Smith and Roberto Paolesse  
*Demetalation of Silver(III) Corrolates*  
Inorg. Chem. 48 (2009), 6879–6887
- 227)** Roberto Paolesse, Donato Monti, Sara Nardis, Manuela Stefanelli, Corrado Di Natale, Arnaldo D'Amico  
*Porphyrin-based nanostructures for sensing applications*  
J. of Sensors (2009), p. 856053
- 228)** Larisa Lvova, Corrado Di Natale, Arnaldo D'Amico, Roberto Paolesse  
*Corrole-based ion-selective electrodes*  
J. Porphyrins Phthalocyanines 13 (2009), 1168–1178
- 229)** Luca Tortora, Manuela Stefanelli, Marco Mastroianni, Larisa Lvova, Corrado Di Natale, Arnaldo D'Amico, Daniel Filippini, Ingemar Lundström, Roberto Paolesse  
*The hyphenated CSPT-potentiometric analytical system: An application for vegetable oil quality control*  
Sensors and Actuators B, 142 (2009), 457–463
- 230)** G. Bussetti, S. Cirilli, A. Violante, P. Chiaradia, C. Goletti, L. Tortora, R. Paolesse, E. Martinelli, A. D'Amico, C. Di Natale, G. Giancane, L. Valli  
*Optical anisotropy readout in solid-state porphyrins for the detection of volatile compounds*  
Appl. Phys. Lett. 95 (2009), 091906-1-091906-3
- 231)** Federica Mandoj, Sara Nardis, Giuseppe Pomarico, Manuela Stefanelli, Luca Schiaffino, Gianfranco Ercolani, Luca Prodi, Damiano Genovese, Nelsi Zaccheroni, Frank R. Fronczek, Kevin M. Smith, Xiao Xiao, Jing Shen, Karl M. Kadish, Roberto Paolesse  
*6-Azahemiporphycene: A New Member of the Porphyrinoid Family*  
Inorg. Chem. 48 (2009), 10346–10357
- 232)** Corrado Di Natale, Roberto Paolesse, Arnaldo D'Amico, Ingemar Lundström, Anita Lloyd-Spetz  
*Multi-transduction of molecular recognition events in metalloporphyrin layers*  
J. Porphyrins Phthalocyanines 13 (2009), 1123–1128
- 233)** Daniel Filippini, Emanuela Gatto, Adriano Alimelli, Muhamad Ali Malik, Corrado Di Natale, Roberto Paolesse, Arnaldo D'Amico, Ingemar Lundström

*Spectral fingerprinting of porphyrins for distributed chemical sensing*

J. Porphyrins Phthalocyanines 13 (2009), 77–83

**234)** Roberto Pizzoferrato, Roberto Francini, Serena Pietrantoni, Roberto Paolesse, Federica Mandoj, Angelo Monguzzi, Francesco Meinardi

*Effects of Progressive Halogen Substitution on the Photoluminescence Properties of an Erbium-Porphyrin Complex*  
J. Phys. Chem. A 114 (2010), 4163–4168

**235)** M. Penza, R. Rossi, M. Alvisi, M.A. Signore, E. Serra, R. Paolesse, A. D'Amico, C. Di Natale

*Metalloporphyrins-modified carbon nanotubes networked films-based chemical sensors for enhanced gas sensitivity*  
Sensors and Actuators B, 144 (2010), 387-394

**236)** Donato Monti, Massimo De Rossi, Alessandro Sorrenti, Giuseppe Laguzzi, Emanuela Gatto, Manuela Stefanelli, Mariano Venanzi, Loredana Luvidi, Giovanna Mancini, Roberto Paolesse

*Supramolecular Chirality in Solvent-Promoted Aggregation of Amphiphilic Porphyrin Derivatives: Kinetic Studies and Comparison between Solution Behavior and Solid-State Morphology by AFM Topography*

Chem. Eur. J. 16 (2010), 860 – 870

**237)** Arnaldo D'Amico, Giorgio Pennazza, Marco Santonico, Eugenio Martinelli, Claudio Roscioni, Giovanni Galluccio, Roberto Paolesse, Corrado Di Natale

*An investigation on electronic nose diagnosis of lung cancer*

Lung Cancer 68 (2010), 170–176

**238)** A. D'Amico, A. De Marcellis, C. Di Carlo, C. Di Natale, G. Ferri, E. Martinelli, R. Paolesse, V. Stornelli  
*Low-voltage low-power integrated analog lock-in amplifier for gas sensor applications*

Sensors and Actuators B, 144 (2010), 400-406

**239)** Corrado Di Natale, Marco Santonico, Roberto Paolesse, Daniel Filippini, Arnaldo D'Amico, Ingemar Lundström  
*Evaluation of the performance of sensors based on optical imaging of a chemically sensitive layer*

Anal Bioanal Chem 397 (2010), 613-621

**240)** M. Santonico, G. Pennazza, A. Bartolazzi, E. Martinelli, R. Paolesse, A. D'Amico, C. Di Natale  
*A sensor array and GC study about VOCs and cancer cells*

Sensors and Actuators B, 146, (2010), 483-488

**241)** Paolo Montuschi, Marco Santonico, Giorgio Pennazza, Chiara Mondino, Giulia Mantini, Eugenio Martinelli, Rosamaria Capuano, Giovanni Ciabattoni, Roberto Paolesse, Corrado Di Natale, Peter J. Barnes, Arnaldo D'Amico  
*Diagnostic performance of an electronic nose, fractional exhaled nitric oxide and lung function testing in asthma*

Chest 137, (2010) 790-796, doi: 10.1378/chest.09-1836

**242)** G. Pennazza, M. Santonico, E. Martinelli, R. Paolesse, V. Tamburrelli, S. Cristina, A. D'Amico, C. Di Natale, A. Bartolazzi

*Monitoring of melanoma released volatile compounds by a gas sensors array: From in vitro to in vivo experiments*  
Sensors and Actuators B, (2010), in stampa, doi:10.1016/j.snb.2009.12.041

**243)** F. Dini, D. Filippini, R. Paolesse, A. D'Amico, I. Lundstrom, C. Di Natale  
*Polymers with embedded chemical indicators as an artificial olfactory mucosa*

Analyst 135 (2010), 1245-1252

**244)** G. Pomarico, X. Xiao, S. Nardis, R. Paolesse, F. R. Fronczek, K. M. Smith, Y. Fang, Z. Ou, K. M. Kadish  
*Synthesis and Characterization of Free-Base, Copper, and Nickel Isocorroles*

Inorg. Chem., 49 (2010), 5766–5774

**245)** S. Nardis, G. Pomarico, F. Mandoj, F. R. Fronczek, K. M. Smith, R. Paolesse  
*One-pot synthesis of meso-alkyl substituted isocorroles: The reaction of a triarylcorrole with Grignard reagent*

J. Porphyrins Phthalocyanines 14 (2010), 752–757

**246)** C. Di Natale, D. Monti, R. Paolesse

*Chemical sensitivity of porphyrin assemblies*

Materials Today, 13 (2010) 46-52

**247)** M. Penza, M. Alvisi, R. Rossi, E. Serra, R. Paolesse, A. D'Amico, and C. Di Natale

*Carbon nanotube films as a platform to transduce molecular recognition events in metalloporphyrins*

Nanotechnology, 22 (2011)

**248)** M. Penza, R. Rossi, M. Alvisi, D. Valermi, E. Serra, R. Paolesse, E. Martinelli, A. D'Amico, and C. Di Natale

*Metalloporphyrin-modified carbon nanotube layers for gas microsensors*

Sensor Letters, 9 (2011), 913-919

**249)** M. Stefanelli, S. Nardis, L. Tortora, F. R. Fronczek, K. M. Smith, S. Licoccia, and R. Paolesse

*Nitration of iron corrolates: Further evidence for non-innocence of the corrole ligand*

Chemical Communications, 47 (2011), 4255-4257

**250)** L. Tortora, S. Nardis, F. R. Fronczek, K. M. Smith, and R. Paolesse

*Functionalization of the corrole ring: The role of isocorrole intermediates*

Chemical Communications, 47 (2011), 4243-4245

**251)** G. Bussetti, A. Violante, R. Yivlialin, S. Cirilli, B. Bonanni, P. Chiaradia, C. Goletti, L. Tortora, R. Paolesse, E. Martinelli, A. D'Amico, C. Di Natale, G. Giancane, and L. Valli

*Site-sensitive gas sensing and analyte discrimination in Langmuir-Blodgett porphyrin films*

Journal of Physical Chemistry C, 115 (2011), 8189-8194

**252)** P. Sbardella, D. Monti, A. D'Epifanio, M. Stefanelli, M. L. Naitana, M. Venanzi, C. Di Natale, and R. Paolesse, *Preparation and spectroscopic studies of silica nanoparticle-porphyrin hybrids held by noncovalent interactions* Journal of Porphyrins and Phthalocyanines, 15 (2011), 382-390

**253)** R. Paolesse, D. Monti, F. Dini, and C. Di Natale,

*Fluorescence based sensor arrays*

Topics in Current Chemistry, 300 (2011), 139-174

**254)** G. Pomarico, S. Nardis, R. Paolesse, O. C. Ongayi, B. H. Courtney, F. R. Fronczek, and M. G. H. Vicente, *Synthetic routes to 5,10,15-triaryl-tetrabenzocorroles* Journal of Organic Chemistry, 76 (2011), 3765-3773

**255)** M. Stefanelli, F. Mandoj, M. Mastrianni, S. Nardis, P. Mohite, F. R. Fronczek, K. M. Smith, K. M. Kadish, X. Xiao, Z. Ou, P. Chen, and R. Paolesse, *Amination reaction on copper and germanium  $\beta$ -nitrocorrolates* Inorg. Chem., 50 (2011), 8281-8292

**256)** E. Martinelli, M. Santonico, G. Pennazza, R. Paolesse, A. D'Amico, and C. Di Natale

*Short time gas delivery pattern improves long-term sensor reproducibility* Sensors and Actuators, B, 156 (2011), 753-759

**257)** F. Dini, E. Martinelli, R. Paolesse, D. Filippini, A. D'Amico, I. Lundstrom, and C. Di Natale, *Polymer matrices effects on the sensitivity and the selectivity of optical chemical sensors* Sensors and Actuators, B, 154 (2011), 220-225

**258)** G. Pennazza, M. Santonico, E. Martinelli, R. Paolesse, V. Tamburrelli, S. Cristina, A. D'Amico, C. Di Natale, and A. Bartolazzi, *Monitoring of melanoma released volatile compounds by a gas sensors array: From in vitro to in vivo experiments* Sensors and Actuators, B, 154 (2011), 288-294

**259)** 16. Nardis, S., Pomarico, G., Tortora, L., Capuano, R., D'Amico, A., Di Natale, C., Paolesse, R. Sensing mechanisms of supramolecular porphyrin aggregates: A teamwork task for the detection of gaseous analytes (2011) Journal of Materials Chemistry, 21 (46), pp. 18638-18644.

**260)** Lvova, L., Verrelli, G., Stefanelli, M., Nardis, S., Di Natale, C., D'Amico, A., Makarychev-Mikhailov, S., Paolesse, R.

Platinum porphyrins as ionophores in polymeric membrane electrodes

(2011) Analyst, 136 (23), pp. 4966-4976.

**261)** Martinelli, E., Santonico, M., Pennazza, G., Paolesse, R., D'Amico, A., Di Natale, C. Short time gas delivery pattern improves long-term sensor reproducibility

(2011) Sensors and Actuators, B: Chemical, 156 (2), pp. 753-759.

**262)** Dini, F., Martinelli, E., Paolesse, R., Filippini, D., D'Amico, A., Lundström, I., Di Natale, C. Polymer matrices effects on the sensitivity and the selectivity of optical chemical sensors

(2011) Sensors and Actuators, B: Chemical, 154 (2), pp. 220-225.

**263)** Pennazza, G., Santonico, M., Martinelli, E., Paolesse, R., Tamburrelli, V., Cristina, S., D'Amico, A., Di Natale, C., Bartolazzi, A.

Monitoring of melanoma released volatile compounds by a gas sensors array: From in vitro to in vivo experiments

(2011) Sensors and Actuators, B: Chemical, 154 (2), pp. 288-294.

**264)** Sivalingam, Y., Magna, G., Pomarico, G., Catini, A., Martinelli, E., Paolesse, R., Di Natale, C. The influence of gas adsorption on photovoltage in porphyrin coated ZnO nanorods

(2012) Journal of Materials Chemistry, 22 (37), pp. 20032-20037.

**265)** Cauzzi, D., Pattacini, R., Delferro, M., Dini, F., Di Natale, C., Paolesse, R., Bonacchi, S., Montalti, M., Zaccheroni, N., Calvaresi, M., Zerbetto, F., Prodi, L.

Temperature-dependent fluorescence of Cu 5 metal clusters: A molecular thermometer

(2012) Angewandte Chemie - International Edition, 51 (38), pp. 9662-9665.

**266)** Lvova, L., Denis, S., Barra, A., Mielle, P., Salles, C., Vergoignan, C., Di Natale, C., Paolesse, R., Temple-Boyer, P., Feron, G.

Salt release monitoring with specific sensors in in vitro oral and digestive environments from soft cheeses

(2012) Talanta, 97, pp. 171-180.

**267)** Santonico, M., Lucantoni, G., Pennazza, G., Capuano, R., Galluccio, G., Roscioni, C., La Delfa, G., Consoli, D., Martinelli, E., Paolesse, R., Di Natale, C., D'Amico, A.

In situ detection of lung cancer volatile fingerprints using bronchoscopic air-sampling

(2012) Lung Cancer, 77 (1), pp. 46-50. Cited 1 time.

**268)** D'Amico, A., Di Natale, C., Falconi, C., Martinelli, E., Paolesse, R., Pennazza, G., Santonico, M., Sterk, P.J. Detection and identification of cancers by the electronic nose

(2012) Expert Opinion on Medical Diagnostics, 6 (3), pp. 175-185.

**269)** Sivalingam, Y., Martinelli, E., Catini, A., Magna, G., Pomarico, G., Basoli, F., Paolesse, R., Di Natale, C. Gas-sensitive photoconductivity of porphyrin-functionalized ZnO nanorods

(2012) Journal of Physical Chemistry C, 116 (16), pp. 9151-9157.

- 270)** Lvova, L., Mastroianni, M., DiNatale, C., Lundström, I., Paolesse, R.  
Towards Hyphenated Sensors Development: Design and Application of Porphyrin Electropolymer Materials  
(2012) *Electroanalysis*, 24 (4), pp. 776-789.
- 271)** Dini, F., Martinelli, E., Paolesse, R., Filippini, D., Schild, D., Lundström, I., Di Natale, C.  
Data processing for image-based chemical sensors: Unsupervised region of interest selection and background noise compensation  
(2012) *Analytical and Bioanalytical Chemistry*, 402 (2), pp. 823-832.
- 272)** Compagnone, D., Fusella, G.C., Del Carlo, M., Pittia, P., Martinelli, E., Tortora, L., Paolesse, R., Di Natale, C.  
Gold nanoparticles-peptide based gas sensor arrays for the detection of food aromas  
(2013) *Biosensors and Bioelectronics*, 42 (1), pp. 618-625.
- 273)** Pomarico, G., Nardis, S., Naitana, M.L., Vicente, M.G.H., Kadish, K.M., Chen, P., Prodi, L., Genovese, D., Paolesse, R.  
Aluminum, gallium, germanium, copper, and phosphorus complexes of meso -triaryltetrabenzocorrole  
(2013) *Inorganic Chemistry*, 52 (7), pp. 4061-4070.
- 274)** Sivalingam, Y., Magna, G., Pomarico, G., Martinelli, E., Paolesse, R., D'Amico, A., Di Natale, C.  
Gas effect on the surface photovoltage of porphyrin functionalized ZnO nanorods  
(2012) *Advanced Materials Letters*, 3 (6), pp. 442-448.
- 275)** Dini, F., Filippini, D., Paolesse, R., Lundström, I., Di Natale, C.  
Computer screen assisted digital photography  
(2013) *Sensors and Actuators, B: Chemical*, 179, pp. 46-53
- 276)** Polese, D., Martinelli, E., Magna, G., Dini, F., Catini, A., Paolesse, R., Lundstrom, I., Di Natale, C.  
Sharing data processing among replicated optical sensor arrays  
(2013) *Sensors and Actuators, B: Chemical*, 179, pp. 252-258.
- 277)** Lvova, L., Di Natale, C., Paolesse, R.  
Porphyrin-based chemical sensors and multisensor arrays operating in the liquid phase  
(2013) *Sensors and Actuators, B: Chemical*, 179, pp. 21-31.
- 278)** Tortora, L., Pomarico, G., Nardis, S., Martinelli, E., Catini, A., D'Amico, A., Di Natale, C., Paolesse, R.  
Supramolecular sensing mechanism of corrole thin films  
(2013) *Sensors and Actuators, B: Chemical*, 187, pp. 72-77
- 279)** Francesca Dini, Rosamaria Capuano; Tillan Strand; Anna-Christina Ek; Margareta Lindgren; Roberto Paolesse; Corrado Di Natale; Ingemar Lundström  
Volatile Emissions from Compressed Tissue  
(2013) *Plos ONE*, 8, e69271
- 280)** Alessandro D'Urso, Sara Nardis, Giuseppe Pomarico, Maria Elena Fragala, Roberto Paolesse, and Roberto Purrello  
Interaction of Tricationic Corroles with Single/Double Helix of Homopolymeric Nucleic Acids and DNA  
(2013) *Journal of the American Chemical Society*, 135, 8632-8638.
- 281)** Lvova, L., Galloni, P., Floris, B., Lundström, I., Paolesse, R., Di Natale, C.  
A Ferrocene-porphyrin ligand for multi-transduction chemical sensor development  
(2013) *Sensors (Switzerland)*, 13, 5841-5856
- 282)** Mandoj, F., Nardis, S., Pudi, R., Lvova, L., Fronczek, F.R., Smith, K.M., Prodi, L., Genovese, D., Paolesse, R.  
β-Pyrazino-fused tetrarylporphyrins  
(2013) *Dyes and Pigments*, 99, 136-143
- 283)** Stefanelli, M., Nardis, S., Fronczek, F.R., Smith, K.M., Paolesse, R.  
Copper β-trinitrocorrolates  
(2013) *Journal of Porphyrins and Phthalocyanines*, 17, 440-446
- 284)** Pomarico, G., Nardis, S., Stefanelli, M., Cicero, D.O., Vicente, M.G.H., Fang, Y., Chen, P., Kadish, K.M., Paolesse, R.  
Synthesis and characterization of functionalized meso - triaryltetrabenzocorroles  
(2013) *Inorganic Chemistry*, 52, 8834-8844
- 285)** Sivalingam, Y., Magna, G., Pomarico, G., Catini, A., Martinelli, E., Paolesse, R., Di Natale, C.  
The light enhanced gas selectivity of one-pot grown porphyrins coated ZnO nanorods  
(2013) *Sensors and Actuators, B: Chemical*, 188, 475-481
- 286)** Bazzicalupi, C., Caltagirone, C., Cao, Z., Chen, Q., Dinatale, C., Garau, A., Lippolis, V., Lvova, L., Liu, H., Lundström, I., Mostallino, M.C., Nieddu, M., Paolesse, R., Prodi, L., Sgarzi, M., Zaccheroni, N.  
Multimodal use of new coumarin-based fluorescent chemosensors: Towards highly selective optical sensors for Hg<sup>2+</sup> probing  
(2013) *Chemistry - A European Journal*, 19, 14639-14653
- 287)** Strauch, M., Lüdke, A., Münch, D., Laudes, T., Giovanni Galizia, C., Martinelli, E., Lavra, L., Paolesse, R., Olivieri, A., Catini, A., Capuano, R., Di Natale, C.  
More than apples and oranges - Detecting cancer with a fruit fly's antenna  
(2014) *Scientific Reports*, 4 (SREP03576), art. no. 3576

- 288)** Magna, G., Sivalingam, Y., Martinelli, E., Pomarico, G., Basoli, F., Paolesse, R., Di Natale, C.  
The influence of film morphology and illumination conditions on the sensitivity of porphyrins-coated ZnO nanorods  
(2014) Analytica Chimica Acta, 810, 86-93
- 289)** Pomarico, G., Vecchi, A., Mandoj, F., Bortolini, O., Cicero, D. O., Galloni, P., Paolesse, R.  
The corrole and ferrocene marriage: 5,10,15-triferrocenylcorrolato Cu  
(2014) Chemical Communications, DOI:10.1039/c3cc49416k.
- 290)** Di Natale, C., Paolesse, R., Martinelli, E., Capuano, R.  
Solid-state gas sensors for breath analysis: A review  
(2014) Analytica Chimica Acta, DOI: 10.1016/j.aca.2014.03.014
- 291)** Nardis, S., Cicero, D.O., Licoccia, S., Pomarico, G., Berionni Berna, B., Sette, M., Ricciardi, G., Rosa, A., Fronczek, F.R., Smith, K.M., Paolesse, R.  
Phenyl Derivative of Iron 5,10,15-Tritolylcorrole  
(2014) Inorganic Chemistry, DOI: 10.1021/ic5003572

### Patents

- 1)** A. Furlani, R. Paolesse, M.V. Russo, A. Camus, N. Marsich  
*Polimeri di N-propargilamina drogati con alogenri o loro derivati aventi proprieta' conduttrici e relativo procedimento di produzione*  
Brevetto n. 48719A85 depositato il 25/10/1985
- 2)** T. Boschi, P. Tagliatesta, R. Paolesse  
*Procedimento per preparare l'acido 2- amino-(4- trimetilamino, 3-acetilossi) butirril 2'(tiobisacetico)*  
Brevetto n. 47782A89 depositato il 24/3/1989
- 3)** A. D'Amico, C. Di Natale, R. Paolesse  
*Apparato olfattometrico basato su sensori a quarzo oscillante funzionalizzati con macrocicli tetrapirrolici e dotato di elettronica di condizionamento e lettura dei segnali, di comunicazione con un PC, di gestione via software e della analisi e presentazione dei dati*  
Brevetto n. RM2001A000455 depositato il 26/7/2001
- 4)** R. Paolesse, A. D'Amico, C. Di Natale, B. Crociani, S. Antonaroli  
*Complessi metallici con leganti azotati, loro preparazione ed impiego come elementi attivi in sensori chimici*  
Brevetto n. RM2005A000409 depositato il 2/08/2005
- 5)** A. D'Amico, A. Di Carlo, C. Di Natale, M. Lucci, R. Paolesse, A. Reale, M. L. Terranova  
*Method for the control of the response time of a sensor for chemical substances*  
Brevetto WO2006/070420 A1 (europeo) depositato il 6/07/2006
- 6)** E. Martinelli, M. De Luca, A. D'Amico, C. Di Natale, R. Paolesse, A. Macagnano  
*Apparatus for automatic material deposition by means of an airbrush*  
Brevetto BO2006A000397 (Italia) depositato il 24/05/2006, WO2007/138424 A3 (europeo) depositato il 6/12/2007