

## Ilaria Fratoddi Publication list (1997-2023)

1.	1997	<i>Synthesis and XPS Characterisation of Organometallic Pd Containing Polymers from Monosubstituted Acetylenes</i> , Russo, M. V.; Furlani, A.; Altamura, P.; <b>Fratoddi, I.</b> ; Polzonetti, G. <i>Polymer</i> , <b>1997</b> , 38(14), 3677-3690. doi:10.1016/S0032-3861(96)00925-1
2.	1998	<i>X-ray photoelectron spectroscopy and scanning electron microscopy characterization of novel poly(monosubstituted) acetylenes containing doping species</i> , Russo, M. V.; Polzonetti, G.; Furlani, A.; Bearzotti, A.; <b>Fratoddi, I.</b> ; Altamura, P. <i>J. Vac. Sci. Technol. A-Vac. Surf. Films</i> , <b>1998</b> , 16(1), 35-44. doi:10.1116/1.581006
3.	1998	<i>Electrical and morphological characterization of new <math>\pi</math>-conjugated polymer films as gas sensors</i> , Altamura, P.; Bearzotti, A.; D'Amico, A.; Foglietti, V.; <b>Fratoddi, I.</b> ; Furlani, A.; Padeletti, G.; Russo, M. V.; Scavia, G. <i>Mater. Sci. Eng. C-Biomimetic Mater. Sens. Syst.</i> , <b>1998</b> , C5(3,4),217-221. doi: 10.1016/S0928-4931(97)00046-5
4.	2000	<i>Investigation by Impedance Spectroscopy on the behaviour of Poly-(N,N dimethylpropargylamine) as Humidity Sensor</i> , Quartarone, E.; Mustarelli, P.; Magistris, A.; Russo, M. V.; <b>Fratoddi, I.</b> ; Furlani, A. <i>Solid State Ion.</i> , <b>2000</b> , 136-137, 667-670. doi: 10.1016/S0167-2738(00)00334-9
5.	2001	<i>Higly Ethynylated Polymers: Synthesis and Applications for Humidity Sensors</i> , Bearzotti, A.; <b>Fratoddi, I.</b> ; Palummo, L.; Petrocco, S.; Furlani, A.; Lo Sterzo, C.; Russo, M. V. <i>Sens. Actuator B-Chem.</i> , <b>2001</b> , B76(1-3), 316-321 doi:10.1016/S0925-4005(01)00607-4
6.	2002	<i>Organometallic Polymers: Synthesis and Electro-Optical Properties</i> , <b>Fratoddi, I.*</b> ; Altamura, P.; Lo Sterzo, C.; Furlani, A.; Galassi, E.; D'Amico, A.; Russo, M.V. <i>Polym. Adv. Technol.</i> <b>2002</b> , 13(3-4) 269-274. doi: 10.1002/pat.185
7.	2002	<i>Sensitivity of a platinum-polyyne-based sensor to low relative humidity and chemical vapors</i> , Caliendo, C.; <b>Fratoddi, I.</b> ; Russo, M. V. <i>Appl. Phys. Lett.</i> <b>2002</b> , 80(25), 4849-4851 doi:10.1063/1.1489095
8.	2003	<i>Study of chemical structure and conjugation length in organometallic Pt(II) oligomers and polymers containing 1,4-diethynylbenzene derivatives as bridging units</i> , <b>Fratoddi, I.*</b> ; Battocchio, C.; Furlani, A.; Mataloni, P.; Polzonetti, G.; Russo, M. V. <i>J. Organomet. Chem.</i> <b>2003</b> , 674(1-2), 10-23. doi:10.1016/S0022-328X(03)00156-6
9.	2003	<i>Response of a Pt-Polyyne membrane in surface acoustic wave sensors: experimental and theoretical approach</i> Caliendo, C.; <b>Fratoddi, I.</b> ; Russo, M. V.; Lo Sterzo, C. <i>J. Appl. Phys.</i> <b>2003</b> , 93(12), 10071-10077 doi:10.1063/1.1574176
10.	2003	<i>Diethynyl-Zn-Porphyrin based assemblies: optical and morphological studies of nanostructured thin films</i> <b>Fratoddi, I.</b> ; Battocchio, C.; D'Amato, R.; Di Egidio, G. P.; Ugo, L.; Polzonetti, G.; Russo, M. V. <i>Mater. Sci. Eng. C.</i> <b>2003</b> , C23(6-8), 867-871. doi:10.1016/j.msec.2003.09.152

11.	2004	<p>Structure of a monolayer of Pd-Diethynylbiphenyl deposited on chromium studied by Total Reflection Exafs</p> <p>D'Acapito, F.; <b>Fratoddi, I.</b>; D'Amato, R.; Russo, M. V.; Contini, G.; Davoli, I.; Mobilio, S.; Polzonetti, G.</p> <p><i>Sens. Actuator B-Chem.</i>, <b>2004</b>, B100 (1-2), 131-134. doi:10.1016/j.snb.2003.12.032</p>
12.	2004	<p>Organometallic Platinum(II) and Palladium(II) polymers containing 2,6-diethynyl-4-nitroaniline bridging spacer and related dinuclear model complexes</p> <p>D'Amato, R.; <b>Fratoddi, I.*</b>; Cappotto, A.; Altamura, P.; Delfini, M.; Bianchetti, C.; Bolasco, A.; Polzonetti, G.; Russo, M. V.</p> <p><i>Organometallics</i> <b>2004</b>, 23(12), 2860-2869 doi: 10.1021/om049972w</p>
13.	2004	<p>Electrical and Morphological Characterization of Poly(Monosubstituted)Acetylene Based Membranes: Application as Humidity and Organic Vapours Sensors</p> <p><b>Fratoddi, I.*</b>; Altamura, P.; Bearzotti, A.; Furlani, A.; Russo, M. V.</p> <p><i>Thin Solid Films</i>, <b>2004</b>, 458(1-2), 292-298 doi:10.1016/j.tsf.2003.12.065</p>
14.	2004	<p>Resistive type sensor for Humidity and short alcohols detection</p> <p>Palummo, L.; <b>Fratoddi, I.</b>; Russo, M.V.; Bearzotti, A.</p> <p><i>Sensor Letters</i> 2004, 2(3, 4), 205-210. doi: 10.1166/sl.2004.058</p>
15.	2004	<p>NEXAFS study of a Pt-containing rod-like organometallic polymer (Pt-DEBP). Molecular orientation onto hopg, Au/Si(111), Cr/Si(111) and Si(111) surfaces</p> <p>Battocchio, C.; <b>Fratoddi, I.</b>; Russo, M. V.; Polzonetti, G.</p> <p><i>Chem. Phys. Lett.</i> <b>2004</b>, 400(4-6), 290-295. doi:10.1016/j.cplett.2004.10.126</p>
16.	2005	<p>Preparation of Nanostructured Organometallic Polymer/Palladium Hybrids by Metal Vapor Synthesis: Structure and Morphology</p> <p>Belotti, F.; <b>Fratoddi, I.</b>; La Groia, A.; Martra, G.; Mustarelli, P.; Panziera, N.; Pertici, P.; Russo, M. V.</p> <p><i>Nanotechnology</i> <b>2005</b>, 16(11), 2575-2581 doi: 10.1088/0957-4484/16/11/018</p>
17.	2006	<p>Local structure parameters through the fitting of XANES spectra using a multidimensional interpolation: application to the Pd K-edge of Pd-diethynylbiphenyl polymer</p> <p>Smolentsev, G.; Soldatov, A. V.; D'Acapito, F.; Polzonetti, G.; <b>Fratoddi, I.</b></p> <p><i>J. Phys.-Condes. Matter</i> <b>2006</b>, 18(3), 759-766. doi: <b>10.1088/0953-8984/18/3/001</b></p>
18.	2006	<p>Synthesis and characterization of new difunctional alkynylated (<math>\eta^6</math>-arene)(<math>\eta^4</math>-cycloocta-1,5-diene)Ru(0) complexes as molecular models for organometallic polymers</p> <p>Panziera, N.; Pertici, P.; <b>Fratoddi, I.</b>; La Groia, A.; Russo, M. V.</p> <p><i>J. Organomet. Chem.</i> <b>2006</b>, 691(12), 2648-2656. doi: 10.1016/j.jorganchem.2006.01.058</p>
19.	2006	<p>XAS Study of a Pt-Containing Rod-like Organometallic Polymer</p> <p>Battocchio, C.; D'Acapito, F.; Smolentsev, G.; Soldatov, A. V.; <b>Fratoddi, I.</b>; Contini, G.; Davoli, I.; Polzonetti, G.; Mobilio, S.</p> <p><i>Chem. Phys.</i> <b>2006</b>, 325(2-3), 422-428 doi:10.1016/j.chemphys.2006.01.014</p>
20.	2006	<p>Platinum (II) dialkynyl bridged binuclear complex and related multinuclear oligomer: comparison of EXAFS and X-ray Crystal Structure Studies</p> <p>Battocchio, C.; D'Acapito, F.; <b>Fratoddi, I.</b>; La Groia, A.; Polzonetti, G.; Roviello, G.; Russo, M.V.</p> <p><i>Chem. Phys.</i> <b>2006</b>, 328(1-3), 269-274.</p>

		doi: 10.1016/j.chemphys.2006.07.011
21.	2006	<i>Intermolecular stacking of a tetranuclear cyclic Pt(II) complex: NMR characterization and X-ray crystal structure of cis–trans–cis–trans tetra[μ-2,6-diethynyl-4-nitroaniline- bis(tri(p-tolyl)phosphine)platinum(II)]</i> <b>Fratoddi, I.*</b> ; Delfini, M.; Sciubba, F.; Hursthouse, M. B.; Ogilvie, H. R.; Russo, M. V. <i>J. Organomet. Chem.</i> <b>2006</b> , 691(26), 5920-5926 doi:10.1016/j.jorganchem.2006.09.059
22.	2007	<i>Nanostructured organometallic polymer and palladium/polymer hybrid: surface investigation and sensitivity to relative humidity and hydrogen in Surface Acoustic Wave sensors</i> Caliendo, C.; Contini, G.; <b>Fratoddi, I.*</b> ; Irrera, S.; Pertici, P.; Scavia, G.; Russo, M.V. <i>Nanotechnology</i> <b>2007</b> , 18 (12) 125504(1-7) doi: 10.1088/0957-4484/18/12/125504
23.	2007	<i>Nanostructured polymetalaynes of controlled length: synthesis and characterization of oligomers and polymers from 1,1'-bis-(ethynyl)4,4'-biphenyl bridging Pt(II) or Pd(II) centres</i> <b>Fratoddi, I.*</b> ; Battocchio, C.; Groia, A.L.; Russo, M.V. <i>J. Polym. Sci. Pol. Chem.</i> <b>2007</b> , 45(15), 3311-3329 doi: 10.1002/pola.22081
24.	2007	<i>Dinuclear Pt and Pd Complexes with Metalloporphyrin Bridges: a NEXAFS Study of the Electronic Structure and Self Assembling Properties</i> Battocchio, C.; <b>Fratoddi, I.</b> ; Iucci, G.; Russo, M. V.; Goldoni, A.; Parent, Ph.; Polzonetti, G. <i>Mater. Sci. Eng. C-Biomimetic Supramol. Syst.</i> <b>2007</b> , 27(5-8) 1338–1342 doi:10.1016/j.msec.2006.06.014
25.	2007	<i>Gold nanoclusters - organometallic polymer nanocomposites: synthesis and characterization</i> Vitale, F.; Mirengi, L.; Piscopiello, E.; Pellegrini, G.; Trave, E.; Mattei, G.; <b>Fratoddi, I.</b> ; Russo, M. V.; Tapfer, L.; Mazzoldi, P. <i>Mater. Sci. Eng. C-Biomimetic Supramol. Syst</i> <b>2007</b> , 27(5-8), 1300–1304 doi:10.1016/j.msec.2006.06.041
26.	2007	<i>Nanostructured Gold/Conjugated Polymer Hybrids by Metal Vapor Synthesis: Preparation, Chemical Structure and Morphology</i> <b>Fratoddi, I.*</b> ; Panziera, N.; Pertici, P.; Martra, G.; Bertinetti, L.; Russo, M. V. <i>Mater. Sci. Eng. C-Biomimetic Supramol. Syst.</i> <b>2007</b> , 27(5-8) 1305–1308 doi:10.1016/j.msec.2006.09.039
27.	2007	<i>Binuclear Transition-Metal complexes on Gold: Molecular Orientation by Angular Dependent NEXAFS Spectroscopy</i> Battocchio, C.; <b>Fratoddi, I.</b> ; Russo, M. V.; Carravetta, V.; Monti, S.; Iucci, G.; Borgatti, F.; Polzonetti, G. <i>Surf. Sci.</i> <b>2007</b> , 601(18) 3943–3947 doi:10.1016/j.susc.2007.04.154
28.	2007	<i>Lipolytic enzymes with improved activity and selectivity upon adsorption on polymeric nanoparticles</i> Palocci, C.; Chronopoulou, L.; Venditti, I.; Cernia, E.; Diociaiuti, M.; <b>Fratoddi, I.</b> ; Russo, M. V. <i>Biomacromolecules</i> , <b>2007</b> , 8(10), 3047-3053. doi: 10.1021/bm070374l
29.	2008	<i>Synthesis and characterization of gold nanoparticles stabilized by Palladium(II) phosphine thiol</i> Vitale, F.; Vitaliano, R.; Battocchio, C.; <b>Fratoddi, I.*</b> ; Piscopiello, E.; Tapfer, L.; Russo, M. V. <i>J. Organomet. Chem.</i> <b>2008</b> , 693(6), 1043-1048. doi:10.1016/j.jorganchem.2007.12.024
30.	2008	<i>One Step Synthesis of Low Molecular Weight Poly(p-phenylene ethynylene vinylene)s via Polyaddition of Aromatic Diynes, by Catalysis of the [Ru(p-cymene)Cl<sub>2</sub>]<sub>2</sub>/AcOH System</i> Pasquini, C.; <b>Fratoddi, I.</b> ; Capitani, D.; Mannina, L.; Bassetti, M. <i>J. Org. Chem.</i> <b>2008</b> , 73(10), 3892-3899.

		<b>doi:</b> 10.1021/jo800471p
31.	2008	<i>Self-assembly of nanostructured polymetallaynes</i> <b>Fratoddi, I.*</b> ; Gohlke, C.; Cametti, C.; Diociaiuti, M.; Russo, M. V. <i>Polymer</i> <b>2008</b> , 49(15), 3211-3216 doi:10.1016/j.polymer.2008.05.022
32.	2008	<i>H<sub>2</sub>S gas interaction with Pt(II) containing polymetallaynes of selected chain length: an Xps and Exafs study</i> Battocchio, C; <b>Fratoddi, I.</b> ; Russo, M.V.; Polzonetti, G. <i>J. Phys. Chem. A</i> <b>2008</b> , 112(32); 7365-7373 <b>DOI:</b> 10.1021/jp803119j
33.	2008	<i>Synthesis and microstructural investigations of organometallic Pd(II) thiol-gold nanoparticles hybrids</i> Vitale, F.; Vitaliano, R.; Battocchio, C.; <b>Fratoddi, I.*</b> ; Giannini, C.; Piscopiello, E.; Guagliardi, A.; Cervellino, A.; Polzonetti, G.; Russo, M. V.; Tapfer, L. <i>Nanoscale Res. Lett.</i> <b>2008</b> , 3(11), 461-467 doi: 10.1007/s11671-008-9181-x
34.	2008	<i>Alcohol vapor sensory properties of nanostructured conjugated polymers</i> Bearzotti, A.; Macagnano, A.; Pantalei, S.; Zampetti, E.; Venditti, I.; <b>Fratoddi, I.</b> ; Russo, M. V. <i>J. Phys.: Condens. Matter</i> <b>2008</b> , 20(47), 474207(1-6). doi: 10.1088/0953-8984/20/47/474207
35.	2008	<i>Nanobeads-based Assays. The case of gluten detection</i> Venditti, I.; <b>Fratoddi, I.</b> ; Russo, M. V.; Bellucci, S.; Crescenzo, R.; Iozzino, L.; Staiano, M.; Aurilia, V.; Varriale, A.; Rossi, M.; D'Auria, S. <i>J. Phys.: Condens. Matter</i> <b>2008</b> , 20(47), 474202(1-4) doi: 10.1088/0953-8984/20/47/474202
36.	2009	<i>Osmosis Based Method Drives the Self-Assembly of Polymeric Chains into Micro- and Nanostructures</i> Chronopoulou, L.; <b>Fratoddi, I.</b> ; Palocci, C.; Venditti, I.; Russo, M. V. <i>Langmuir</i> <b>2009</b> , 25(19), 11940-11946 doi: 10.1021/la9016382
37.	2009	<i>Homo- and Copolymerization of Aromatic Diynes by Ruthenium/Acid-Promoted (RAP) Catalysis</i> Pasquini, C.; <b>Fratoddi, I.</b> ; Bassetti, M. <i>Eur. J. Org. Chem.</i> <b>2009</b> , 30, 5224-5231 doi: 10.1002/ejoc.200900748
38.	2009	<i>Self-Assembled Monolayers Based on Pd-Containing Organometallic Thiols: Preparation and Structural Characterization</i> Vitaliano, R.; <b>Fratoddi, I.</b> ; Venditti, I.; Roviello, G.; Battocchio, C.; Polzonetti, G.; Russo, M. V. <i>J. Phys. Chem. A</i> <b>2009</b> , 113 (52), 14730–14740 doi: 10.1021/jp904865k
39.	2010	<i>Organometallic Oligomer Resolved by Radial Distribution Function of X-ray Diffraction Analysis</i> Matassa, R.; Carbone, M.; <b>Fratoddi, I.</b> ; Caminiti, R. <i>J. Phys. Chem. B</i> <b>2010</b> , 114(7), 2359-2364 doi: 10.1021/jp9099896
40.	2010	<i>Self-assembled copolymeric nanoparticles as chemically interactive materials for humidity sensors</i> Venditti, I.; <b>Fratoddi, I.</b> ; Bearzotti, A. <i>Nanotechnology</i> <b>2010</b> , 21 (35), 355502(1-8) doi: 10.1088/0957-4484/21/35/355502
41.	2010	<i>Self-assembled nanoparticles of functional copolymers for photonic applications</i>

		Venditti, I.; <b>Fratoddi, I.</b> ; Palazzesi, C.; Proposito, P.; Casalboni, M.; Cametti, C.; Battocchio, C.; Polzonetti, G.; Russo, M. V. <i>J. Colloid Interface Sci.</i> , <b>2010</b> , 348(2), 424–430 doi: 10.1016/j.jcis.2010.04.061
42.	2010	<i>Quantum-chemical modeling of interaction between gold nanoclusters and thiols</i> Yarzhemsky, V. G.; Norov, Yu. V.; Murashov, S. V.; Battocchio, C.; <b>Fratoddi, I.</b> ; Venditti, I.; Polzonetti, G. <i>Inorg. Mater.</i> <b>2010</b> , 46 (9), 924-930. doi: 10.1134/S0020168510090025
43.	2010	<i>Binuclear Pd(II) complexes with alkynyl ligands and functionalised tail-groups: Molecular and electronic structure studied by XPS and EXAFS</i> Battocchio, C.; <b>Fratoddi, I.</b> ; Vitaliano, R.; Russo, M.V.; Polzonetti, G. <i>Solid State Sci.</i> , <b>2010</b> , 12(11), 1881-1885 doi:10.1016/j.solidstatesciences.2010.02.021
44.	2011	<i>Mono and bifunctional arenethiols as surfactants for gold nanoparticles: synthesis and characterization</i> Vitale, F.; <b>Fratoddi, I.</b> ; Battocchio, C.; Piscopiello, E.; Tapfer, L.; Russo, M.V.; Polzonetti, G.; Giannini, C. <i>Nanoscale Res. Lett.</i> <b>2011</b> , 6, 103 (9) doi: 10.1186/1556-276X-6-98
45.	2011	<i>Core shell hybrids based on noble metal nanoparticles and conjugated polymers: synthesis and characterization</i> <b>Fratoddi, I.</b> ; Venditti, I.; Battocchio, C.; Polzonetti, G.; Cametti, C.; Russo, M.V. <i>Nanoscale Res. Lett.</i> <b>2011</b> , 6, 98(8) doi: 10.1186/1556-276X-6-103
46.	2011	<i>EXAFS in total reflection (reflEXAFS) for the study of organometallic Pd(II) thiol complexes based self-assembled monolayers on gold</i> Battocchio, C.; <b>Fratoddi, I.</b> ; Venditti, I.; Yarzhemsky, V. G.; Norov, Yu. V.; Russo, M. V.; Polzonetti, G. <i>Chem. Phys.</i> <b>2011</b> , 379 (1-3), 92-98 doi: 10.1016/j.chemphys.2010.11.010
47.	2011	<i>Dielectric Relaxations of Ionic Thiol-Coated Noble Metal Nanoparticles in Aqueous Solutions: Electrical Characterization of the Interface</i> Cametti, C.; <b>Fratoddi, I.</b> ; Venditti, I.; Russo, M.V. <i>Langmuir</i> , <b>2011</b> , 27 (11), 7084–7090 doi: 10.1021/la2007827
48.	2011	<i>Optical Behavior of Conjugated Pt-Containing Polymetallaynes Exposed to Gamma-Ray Radiation Doses</i> Batagin-Neto, A.; Bronze-Uhle, E. S.; Fernandes, D. M.; <b>Fratoddi, I.*</b> ; Venditti, I.; Decker, F.; Bodo, E.; Russo, M.V.; Graeff, C. F. O. <i>J. Phys. Chem. B</i> , <b>2011</b> , 115 (25), 8047–8053 doi: 10.1021/jp200831z
49.	2011	<i>Soluble polymers of monosubstituted acetylenes with quaternary ammonium pendant groups: structure and morphology</i> Venditti, I.; <b>Fratoddi, I.*</b> ; Battocchio, C.; Polzonetti, G.; Cametti, C.; Russo, M.V. <i>Polym. Int.</i> <b>2011</b> , 60 (8), 1222–1229 doi: 10.1002/pi.3066
50.	2011	<i>Gold Nanoparticles Dyads Stabilized with Binuclear Pt(II) Dithiol Bridges</i> <b>Fratoddi, I.</b> ; Venditti, I.; Battocchio, C.; Polzonetti, G.; Bondino, F.; Malvestuto, M.; Piscopiello, E.; Tapfer, L.; Russo, M.V. <i>J. Phys. Chem. C</i> , <b>2011</b> , 115 (31), 15198–15204 doi: 10.1021/jp202717t

51.	2011	<i>Nanostructured functional co-polymers bioconjugate integrin inhibitors</i> Laganà, A.; Venditti, I.; <b>Fratoddi, I.*</b> ; Capriotti, A. L.; Caruso, G.; Battocchio, C.; Polzonetti, G.; Acconcia, F.; Marino, M.; Russo, M. V. <i>J. Colloid Interface Sci.</i> <b>2011</b> , 361, 465–471 doi: 10.1016/j.jcis.2011.05.041
52.	2011	<i>A Porphyrin Bridged Pd Dimer Complex Stabilizes Gold Nanoparticles</i> <b>Fratoddi, I.*</b> ; Battocchio, C.; Polzonetti, G.; Sciubba, F.; Delfini, M.; Russo, M.V. <i>Eur. J. Inorg. Chem.</i> <b>2011</b> , 31, 4906–4913 doi: 10.1002/ejic.201100339
53.	2012	<i>Self-Assembling Monolayers of dialkynyl bridged Pd(II) thiols obtained by thermally induced multilayer desorption: thermal and chemical stability investigated by SR-XPS</i> Battocchio, C.; <b>Fratoddi, I.</b> ; Bondino, F.; Malvestuto, M.; Russo, M.V.; Polzonetti, G. <i>Chem. Phys. Lett.</i> <b>2012</b> , 527, 57-62 doi: 10.1016/j.cplett.2012.01.012
54.	2012	<i>Functional polymeric nanoparticles for dexamethasone loading and release</i> <b>Fratoddi, I.</b> ; Venditti, I.; Cametti, C.; Palocci, C.; Chronopoulou, L.; Marino, M.; Acconcia, F.; Russo, M.V. <i>Colloid Surf. B-Biointerfaces</i> , <b>2012</b> , 93, 59– 66 doi: 10.1016/j.colsurfb.2011.12.008
55.	2012	<i>Two-Dimensional Networks of Ag Nanoparticles Bridged by Organometallic Ligand</i> Matassa, R.; <b>Fratoddi, I.*</b> ; Rossi, M.; Battocchio, C.; Caminiti, R.; Russo, M.V. <i>J. Phys. Chem. C</i> , <b>2012</b> , 116, 15795–15800 doi: 10.1021/jp304407p
56.	2012	<i>Structural Changes of Conjugated Pt-Containing Polymetallaynes Exposed to Gamma Ray Radiation Doses</i> <b>Fratoddi, I.</b> ; Bronze-Uhle, E.S.; Batagin-Neto, A.; Fernandes, D.M.; Bodo, E.; Battocchio, C.; Venditti, I.; Decker, F.; Russo, M.V.; Polzonetti, G.; Graeff, C.F.O. <i>J. Phys. Chem. A</i> , <b>2012</b> , 116, 8768–8774 doi: 10.1021/jp3060747
57.	2012	<i>Silver nanoparticles stabilized with thiols: a close look to the local chemistry and atomic structure.</i> Battocchio, C.; Meneghini, C.; <b>Fratoddi, I.</b> ; Venditti, I.; Russo, M.V.; Aquilanti, G.; Maurizio, C.; Bondino, F.; Matassa, R.; Rossi, M.; Mobilio, S.; Polzonetti, G. <i>J. Phys. Chem. C</i> , <b>2012</b> , 116 (36), 19571–19578 doi: 10.1021/jp305748a
58.	2012	<i>Synthesis of Polyarylacetylenes by gamma-Ray Induced Polymerization of Terminal Alkynes. Nanostructures of ortho-Substituted Derivatives</i> Bassetti, M.; <b>Fratoddi, I.*</b> ; Lilla, L.; Pasquini, C.; Russo, M.V.; Ursini, O. <i>J. Polym. Sci. Pol. Chem.</i> <b>2012</b> , 50, 5097–5106 doi: 10.1002/pola.26329
59.	2013	<i>Organometallic Pt(II) Containing Polymer as Silver Protection against Sulfide Tarnishing</i> <b>Fratoddi, I.</b> ; Marghella, G.; Venditti, I.; Ferro, D.; Russo, M.V. <i>J. Appl. Polym. Sci.</i> <b>2013</b> , 128, 304-309 doi: 10.1002/APP.38189
60.	2013	<i>A Nanostructured composite based on polyaniline and gold nanoparticles: synthesis and gas sensing properties.</i> Venditti, I.; <b>Fratoddi, I.*</b> ; Russo, M.V.; Bearzotti, A. <i>Nanotechnology</i> <b>2013</b> , 24, 155503 doi: 10.1088/0957-4484/24/15/155503

61.	2013	<p><i>Poly [1,1'-bis(ethynyl)-4,4'-biphenyl(bis-tributylphosphine)Pt(II)] solutions used as low dose ionizing radiation dosimeter</i></p> <p>Bronze-Uhle, E. S.; Batagin-Neto, A.; Fernandes, D. M.; <b>Fratoddi, I.</b>; Russo, M. V., O. Graeff, C. F.</p> <p><i>Appl. Phys. Lett.</i> <b>2013</b>, 102, 241917 4 doi: 10.1063/1.4812186</p>
62.	2014	<p><i>From nanospheres to microribbons: self-assembled Eosin Y doped PMMA nanoparticles as photonic crystals</i></p> <p>De Angelis, R.; Venditti, I.; <b>Fratoddi, I.</b>; De Matteis, F.; Proposito, P.; Cacciotti, I.; D'Amico, L.; Nanni, F.; Yadav, A.; Casalboni, M.; Russo, M. V.</p> <p><i>J. Colloid Interface Sci.</i>, <b>2014</b>, 414, 24-32 doi: 10.1016/j.jcis.2013.09.045</p>
63.	2014	<p><i>Electrodeposited ZnO with squaraine sensitizers as photoactive anode of DSCs</i></p> <p>Venditti, I.; Barbero, N.; Russo, M.V.; Di Carlo, A.; Decker, F.; <b>Fratoddi, I.*</b>; Barolo, C.; Dini, D.</p> <p><i>Mater. Res. Express</i> <b>2014</b>, 1, 015040 doi:10.1088/2053-1591/1/1/015040</p>
64.	2014	<p><i>Direct interaction of hydrophilic gold nanoparticles with dexamethasone drug: Loading and release study</i></p> <p>Venditti, I.; Fontana, L.; <b>Fratoddi, I.*</b>; Battocchio, C.; Cametti, C. Sennato, S.; Mura, F.; Sciubba, F.; Delfini, M.; Russo, M.V.</p> <p><i>J. Colloid Interface Sci.</i> <b>2014</b>, 418, 52-60 doi: 10.1016/j.jcis.2013.11.063</p>
65.	2014	<p><i>Network assembly of gold nanoparticles linked through fluorenyl dithiol bridge</i></p> <p>Quintiliani, M.; Bassetti, M.; Pasquini, C.; Battocchio, C.; Rossi, M.; Mura, F.; Matassa, R.; Fontana, L.; Russo, M.V.; <b>Fratoddi, I.*</b></p> <p><i>J. Mater. Chem. C</i>, <b>2014</b>, 2, 2517 – 2527 doi: 10.1039/c3tc32567a</p>
66.	2014	<p><i>Gold nanoparticles stabilized with aromatic thiols: interaction at the molecule-metal interface and structure of the molecular shell investigated by SR-XPS and NEXAFS</i></p> <p>Battocchio, C.; Porcaro, F.; Mukherjee, S.; Magnano, E.; Nappini, S.; <b>Fratoddi, I.</b>; Quintiliani, M.; Russo, M.V.; Polzonetti, G.</p> <p><i>J. Phys. Chem. C</i>, <b>2014</b>, 118, 8159 - 8168 doi: 10.1021/jp4126057</p>
67.	2014	<p><i>Silver nanoparticles linked by Pt-containing organometallic dithiol bridge: study on local structure and interface by XAFS and SR-XPS</i></p> <p>Battocchio, C.; <b>Fratoddi, I.</b>; Fontana, L.; Bodo, E.; Porcaro, F.; Meneghini, C.; Pis, I.; Nappini S.; Mobilio, S.; Russo, M.V.; Polzonetti, G.</p> <p><i>Phys. Chem. Chem. Phys.</i> <b>2014</b>, 16, 11719-11728. doi: 10.1039/c4cp01264j</p>
68.	2014	<p><i>Gold nanoparticles and gold nanoparticle-conjugates as drug delivery vehicles. Progress and challenges.</i></p> <p><b>Fratoddi, I.*</b>; Venditti, I.; Cametti, C.; Russo, M.V.</p> <p><i>J. Mat. Chem. B</i>, <b>2014</b>, 2, 4204-4220. doi: 10.1039/c4tb00383g</p>
69.	2014	<p><i>Platinum nanoparticles on electrospun titania nanofibers as hydrogen sensing material working at room temperature</i></p> <p><b>Fratoddi, I.</b>; Macagnano, A.; Battocchio, C.; Zampetti, E.; Venditti, I.; Russo, M.V.; Bearzotti, A.</p> <p><i>Nanoscale</i>, <b>2014</b>, 6, 9177-9184. doi: 10.1039/c4nr01400f</p>

70.	2015	<i>Local structure of semicrystalline P3HT films probed by nanofocused coherent x-rays</i> Kurta, R.P.; Grodd, L.; Mikayelyan, E.; Gorobtsov, O.Y.; Zaluzhnyy, I.A.; <b>Fratoddi, I.</b> ; Venditti, I.; Russo, M.V.; Sprung, M.; Vartanyants, I.A.; Grigorian, S. <i>Phys. Chem. Chem. Phys.</i> <b>2015</b> , 17, 7404-7410 doi: 10.1039/c5cp00426h
71.	2015	<i>How toxic are gold nanoparticles? The state-of-the-art</i> <b>Fratoddi, I.*</b> ; Venditti, I.; Cametti, C.; Russo, M.V. <i>Nano Research</i> , <b>2015</b> , 8, 1771-1799 doi: 10.1007/s12274-014-0696-
72.	2015	<i>Chemiresistive Polyaniline-based Gas Sensors. A Mini Review</i> <b>Fratoddi, I.*</b> ; Venditti, I.; Cametti, C.; Russo, M.V. <i>Sens. Actuator B-Chem.</i> <b>2015</b> , 220, 534-548 doi: 10.1016/j.snb.2015.05.107
73.	2015	<i>The puzzle of toxicity of gold nanoparticles. The case-study of HeLa cells</i> <b>Fratoddi, I.*</b> ; Venditti, I.; Cametti, C.; Russo, M.V. <i>Toxicol. Res.</i> <b>2015</b> , 4, 796 – 800 doi: 10.1039/c4tx00168k
74.	2015	<i>Candida rugosa lipase immobilization on hydrophilic charged gold nanoparticles as promising biocatalysts: activity and stability investigations</i> Venditti, I.; Palocci, C.; Chronopoulou, L.; <b>Fratoddi, I.*</b> ; Fontana, L.; Diociaiuti, M.; Russo, M.V. <i>Colloid Surf. B-Biointerfaces</i> , <b>2015</b> , 131, 96-101 doi:10.1016/j.colsurfb.2015.04.046
75.	2015	<i>Bioconjugation of Gold-Polymer Core-Shell Nanoparticles with Bovine Serum Amino Oxidase for Biomedical Applications</i> Venditti, I.; Hassanein, T. F.; <b>Fratoddi, I.*</b> ; Fontana, F.; Battocchio, C.; Rinaldi, F.; Carafa, I.; Marianecchi, C.; Diociaiuti, M.; Agostinelli, E.; Cametti, C.; Russo, M. V. <i>Colloid Surf. B-Biointerfaces</i> <b>2015</b> , 134, 314-321 doi 10.1016/j.colsurfb.2015.06.052
76.	2015	<i>Photoelectrochemical characterization of squaraine-sensitized nickel oxide cathodes deposited via screen-printing for p-type dye-sensitized solar cells</i> Naponiello, G.; Venditti, I.; Zardetto, V.; Saccone, V.; Di Carlo, A.; <b>Fratoddi, I.</b> ; Barolo, C.; Dini, D. <i>Appl. Surf. Sci.</i> <b>2015</b> , 356, 911-920 doi: 10.1016/j.apsusc.2015.08.171
77.	2016	<i>Functionalized Platinum Nanoparticles with surface charge triggered by pH: Synthesis, characterization and stability studies</i> Testa, G.; Fontana, L.; Venditti, I.; <b>Fratoddi, I.*</b> <i>Beilstein J. Nanotechnol.</i> <b>2016</b> , 7, 1822-1828 doi: 10.3762/bjnano.7.175
78.	2016	<i>Synthesis and Structural Characterization of Silver Nanoparticles Stabilized with 3-Mercapto-1-Propansulfonate and 1-Thiogluucose Mixed Thiols for Antibacterial Applications</i> Porcaro, F.; Carlini, L.; Ugolini, A.; Visaggio, D., Visca, P.; <b>Fratoddi, I.</b> ; Venditti, I.; Meneghini, C.; Simonelli, L. Marini, C.; Olszewski, W.; Ramanan, N.; Luisetto, I.; Battocchio, C. <i>Materials</i> <b>2016</b> , 9, 1028 (15 pp); doi:10.3390/ma9121028
79.	2016	<i>Hydrophilic silver nanoparticles with tunable optical properties: application for the detection of heavy metals in water</i> Proposito, P.; Mochi, F.; Ciotta, E.; Casalboni, M.; Venditti, I.; Fontana, L.; Testa G.; <b>Fratoddi, I.</b> <i>Beilstein J. Nanotechnol.</i> <b>2016</b> , 1654-1661 doi:10.3762/bjnano.7.157



80.	2016	<p><i>Negatively charged gold nanoparticles as dexamethasone carrier: stability in biological media and bioactivity assessment in vitro</i></p> <p>Rossi, A.; Donati, S.; Fontana, L.; Porcaro, F.; Battocchio, C.; Proietti, E.; Venditti, I.; Bracci, L.; <b>Fratoddi, I.</b></p> <p><i>RSC Adv.</i> <b>2016</b>, 6, 99016–99022 doi: 10.1039/C6RA19561J</p>
81.	2016	<p><i>Role of nanostructured polymers on the improvement of electrical response-based relative humidity sensors</i></p> <p><b>Fratoddi, I.*</b>; Bearzotti, A.; Venditti, I.; Cametti, C.; Russo, M.V.</p> <p><i>Sens. Actuator B-Chem.</i>, <b>2016</b>, 225, 96-108 doi: 10.1016/j.snb.2015.11.001</p>
82.	2016	<p><i>Structural studies on drop-cast film based on functionalized gold nanoparticles network: the effect of heating treatment</i></p> <p>Fontana, L.; <b>Fratoddi, I.*</b>; Venditti, I.; Ksenzov, D.; Russo, M.V.; Grigorian, S.</p> <p><i>Applied Surface Science</i> <b>2016</b>, 369, 115-119 doi: 10.1016/j.apsusc.2016.02.029</p>
83.	2016	<p><i>Functionalized gold nanoparticles for topical delivery of methotrexate for the treatment of psoriasis</i></p> <p>Bessar, H.; Venditti, I.; Benassi, L.; Vaschieri, C.; Azzoni, P.; Pellacani, G.; Magnoni, C.; Botti, E.; Casagrande, V.; Federici, M.; Costanzo, A.; Fontana, L.; Testa, G.; Mostafa, F. F.; S. A. Ibraim; Russo, M.V.; <b>Fratoddi, I.*</b>;</p> <p><i>Colloid Surf. B-Biointerfaces</i>, <b>2016</b>, 141, 141–147 doi: 10.1016/j.colsurfb.2016.01.021</p>
84.	2016	<p><i>Synthesis of Functionalized Gold Nanoparticles Capped with 1-Thiolglucose and “in Vitro” Bioresponse</i></p> <p>Porcaro, F.; Battocchio, C.; Antoccia, A.; <b>Fratoddi, I.*</b>; Venditti, I.; Fracassi, A.; Moreno, S.; Luisetto, I.; Russo, M.V.; Polzonetti, G.</p> <p><i>Colloid Surf. B-Biointerfaces</i>, <b>2016</b>, 142, 408-416 doi: 10.1016/j.colsurfb.2016.03.016</p>
85.	2016	<p><i>Electron Microscopy Reveals Soluble Hybrid Network of Individual Nanocrystal Self-Anchored by Bifunctional Thiol Fluorescent Bridges</i></p> <p>Matassa, R., Familiari, G.; Battaglione, E.; Sibilia, C.; Lehau, G.; Belardini, A.; Venditti, I.; Fontana, L.; <b>Fratoddi, I.</b></p> <p><i>Nanoscale</i> <b>2016</b>, 8, 18161-18169 doi: 10.1039/c6nr06260a</p>
86.	2017	<p><i>Nanocomposite Based on Functionalized Gold Nanoparticles and Sulfonated Poly(ether ether ketone) Membranes: Synthesis and Characterization</i></p> <p>Venditti, I.; Fontana, L.; Scaramuzzo, A.F.; Russo, M.V.; Battocchio, C.; Carlini, L.; Gonon, L.; Mareau, V.H.; <b>Fratoddi, I.*</b></p> <p><i>Materials</i> <b>2017</b>, 10, 258; doi:10.3390/ma1003025</p>
87.	2017	<p><i>Hydrophilic Metal Nanoparticles Functionalized by 2-Diethylaminoethanethiol: A Close Look at the Metal–Ligand Interaction and Interface Chemical Structure</i></p> <p>Venditti, I.; Testa, G.; Sciubba, F.; Carlini, L.; Porcaro, F.; Meneghini, C.; Mobilio, S.; Battocchio, C.; <b>Fratoddi, I.*</b>,</p> <p><i>J. Phys. Chem. C</i>, <b>2017</b>, 121, 8002-8013. doi: 10.1021/acs.jpcc.7b01424</p>
88.	2017	<p><i>Electronic Properties of a Functionalized Noble Metal Nanoparticles Covalent Network</i></p> <p><b>Fratoddi, I.*</b>; Matassa, R. Fontana, L., Venditti, I.; Familiari, G.; Battocchio, C.; Magnano, E.; Nappini, S.; Leahu, G.; Belardini, A.; Li Voti, R.; Sibilia, C.</p> <p><i>J. Phys. Chem. C</i>, <b>2017</b>, 121, 18110-18119 doi: 10.1021/acs.jpcc.7b07176</p>

89.	2017	<p><i>Feasibility of <math>\beta</math>-particle Radio Guided Surgery for a variety of "nuclear medicine" Radionuclides</i> Mancini-Terracciano, C.; Donnarumma, R.; Bencivenga, G.; Bocci, V.; Cartoni, A.; Collamati, F.; <b>Fratoddi, I.</b>; Giordano, A.; Indovina, L.; Maccora, D.; Marafini, M.; Mirabelli, R.; Morganti, S.; Rotili, D.; Russomando, A.; Scotognella, T.; Solfaroli Camillocci, E.; Toppi, M.; Traini, G.; Venditti, I.; Faccini, F.</p> <p><i>Phys. Medica</i>, <b>2017</b>, 43, 127–133 doi: 10.1016/j.ejmp.2017.10.012</p>
90.	2017	<p><i><math>Y^{3+}</math> embedded in polymeric nanoparticles: morphology, dimension and stability of composite colloidal system</i> Venditti, I.; Cartoni, A.; Fontana, I.; Testa, G.; Scaramuzzo, F. A.; Faccini, R.; Mancini Terracciano, C.; Solfaroli Camillocci, E.; Morganti, S.; Giordano, A.; Scotognella, T.; Rotili, D.; Dini, V.; Marini, F.; <b>Fratoddi, I.</b></p> <p><i>Colloid Surf. A-Physicochem. Eng. Asp.</i> <b>2017</b>, 532, 125-131 doi: 10.1016/j.colsurfa.2017.05.082</p>
91.	2017	<p><i>Comparison between Silver and Gold Nanoparticles Stabilized with Negatively Charged Hydrophilic Thiols: SR-XPS and SERS as Probes for Structural Differences and Similarities.</i> Carlini, L.; Fasolato, C.; Postorino, P.; <b>Fratoddi, I.</b>; Venditti, I.; Testa, G.; Battocchio, C.</p> <p><i>Colloid Surf. A-Physicochem. Eng. Asp.</i> <b>2017</b>, 532, 183-188 doi: 10.1016/j.colsurfa.2017.05.045</p>
92.	2017	<p><i>Synthesis of gold and silver nanoparticles functionalized with organic dithiols</i> Fontana, L.; Bassetti, M.; Battocchio, C.; Venditti, I.; <b>Fratoddi, I.*</b>.</p> <p><i>Colloid Surf. A-Physicochem. Eng. Asp.</i> <b>2017</b>, 532, 282-289 doi: 10.1016/j.colsurfa.2017.05.005</p>
93.	2017	<p><i>Sensitivity to Heavy-Metal Ions of Unfolded Fullerene Quantum Dots</i> Ciotta, E.; Paoloni, S.; Richetta, M.; Proposito, P.; Tagliatesta, P.; Lorecchio, C.; Venditti, I.; <b>Fratoddi, I.</b>, Casciardi, S.; Pizzoferrato, R.</p> <p><i>Sensors</i> 2017, 17, 2614 (15) doi:10.3390/s17112614</p>
94.	2018	<p><i>Hydrophobic and hydrophilic noble metal Au and Ag nanoparticles. Breakthroughs and perspectives.</i> <b>Fratoddi, I.*</b></p> <p><i>Nanomaterials</i> <b>2018</b>, 8(1), 11 doi:10.3390/nano8010011</p>
95.	2018	<p><i>Gold nanoparticles functionalized by Rhodamine B Isothiocyanate: a new tool to control Plasmonic Effects</i> <b>Fratoddi, I.</b>; Cartoni, A.; Venditti, I.; Catone, D.; O'Keeffe, P.; Paladini, A.; Toschi, F.; Turchini, S.; Sciubba, F.; Testa, G.; Battocchio, C.; Carlini, L.; Proietti Zaccaria, R.; Magnano, E.; Pis, I.; Avaldi, L.</p> <p><i>J. Colloid Interface Sci.</i> <b>2018</b>, 513, 10-19. doi: 10.1016/j.jcis.2017.11.010</p>
96.	2018	<p><i>Nucleobases functionalized quantum dots and gold nanoparticles bioconjugates as a FRET system -synthesis, characterization and potential applications</i> Lewandowska-Lancucka, J.; Rodzik-Czałka, Ł.; Gatta, V.; Venditti, I.; <b>Fratoddi, I.*</b>; Szuwarzyński, M.; Romek, M.; Nowakowska, M.</p> <p><i>J. Colloid Interface Sci.</i> <b>2018</b>, 479-490 Doi: 10.1016/j.jcis.2017.12.060</p>
97.	2018	<p><i>Response surface methodology for the optimization of phenolic compounds extraction from extra virgin olive oil with functionalized gold nanoparticles</i> <b>Fratoddi, I.*</b>; Rapa, M.; Testa, G.; Venditti, I.; Scaramuzzo, F.A.; Vinci, G.</p> <p><i>Microchemical J.</i> <b>2018</b>, 138, 430-437 doi: https://doi.org/10.1016/j.microc.2018.01.043</p>

98.	2018	<i>Plasmonic Sensor Based on Interaction between Silver Nanoparticles and Ni<sup>2+</sup> or Co<sup>2+</sup> in Water</i> Mochi, F.; Burratti, L.; <b>Fratoddi, I.</b> ; Venditti, I.; Battocchio, C.; Carlini, L.; Iucci, G.; Casalboni, M.; De Matteis, F.; Casciardi, S.; Nappini, S.; Pis, I.; Proposito, P. <i>Nanomaterials</i> <b>2018</b> , 8, 488; doi:10.3390/nano8070488
99.	2018	<i>Mass spectrometry characterization of DOTA-Nimotuzumab conjugate as precursor of an innovative <math>\beta</math>- tracer suitable in radio-guided surgery</i> Martelli, C.; Marzano, V.; Marini, F.; Scotognella, T.; <b>Fratoddi, I.</b> ; Venditti, I.; Rotili, D.; Solfaroli Camillocci, E.; Collamati, F.; Mancini-Terracciano, C.; Morganti, S.; Maccora, D.; Faccini, R.; Cartoni, A., Giordano, A.; Castagnola, M <i>J. Pharm. Biomed. Anal.</i> <b>2018</b> , 156, 8-15 doi.org/10.1016/j.jpba.2018.03.018
100.	2018	<i>The effect of post-mastectomy radiation therapy on breast implants: material analysis on silicone and polyurethane prosthesis</i> Lo Torto, F.; Relucenti, M.; Familiari, G.; Vaia, N.; Casella, D.; Matassa, R.; Miglietta, S.; Marinozzi, F.; Bini, F.; <b>Fratoddi, I.</b> ; Sciubba, F.; Cassese, R.; Tombolini, V.; Ribuffo, D. <i>Ann. Plast. Surg.</i> <b>2018</b> , 6, 4706-4713 doi: 10.1097/SAP.0000000000001461
101.	2018	<i>Environmental Hg vapours absorption and detection by using functionalized gold nanoparticles network.</i> Bearzotti, A.; Papa, P.; Macagnano, A.; Zampetti, E.; Venditti, I.; Fioravanti, R.; Fontana, L.; Matassa, R.; Familiari, G.; <b>Fratoddi, I.*</b> . <i>J. Environ. Chem. Eng.</i> <b>2018</b> , 6, 4706-4713 doi 10.1016/j.jece.2018.07.013
102.	2018	<i>Plasmon Controlled Shaping of Metal Nanoparticle Aggregates by Femtosecond Laser Induced Melting</i> Catone, D.; Ciavardini, A.; Di Mario, L.; Paladini, A.; Toschi, F.; Cartoni, A.; <b>Fratoddi, I.</b> ; Venditti, I.; Alabastri, A.; Proietti Zaccaria, R.; O'Keeffe, P. <i>J. Phys. Chem. Lett.</i> , <b>2018</b> , 9, pp 5002–5008 doi: 10.1021/acs.jpcclett.8b02117
103.	2018	<i>Use of Gold Nanoparticles as Substrate for Diffusive Monitoring of Gaseous Mercury</i> Papa, P.; <b>Fratoddi, I.</b> ; Venditti, I.; Vichi, F.; Macagnano, A.; Zampetti, E.; Bearzotti, A. <i>Materials</i> , <b>2018</b> , 11, 2119 doi: 10.3390/ma11112119
104.	2019	<i>Effects of topical methotrexate loaded gold nanoparticle in cutaneous inflammatory mouse model</i> <b>Fratoddi, I.</b> ; Benassi, L.; Botti, E.; Vaschieri, C.; Venditti, I.; Bessar, H.; Mai, S. A.; Azzoni, P.; Magnoni, C.; Costanzo, A.; Casagrande, V.; Federici, M.; Bianchi, L.; Pellacani, G. <i>Nanomed.-Nanotechnol. Biol. Med.</i> <b>2019</b> , 17, 276-286 Doi: 10.1016/j.nano.2019.01.006
105.	2019	<i>Gallium- and Iron-Pyoverdine coordination compounds investigated by SR-XPS and XAS</i> Nicolafrancesco, C.; Porcaro, F.; Piš, I.; Nappini, S.; Simonelli, L.; Marini, C.; Frangipani, E.; Visaggio, D.; Visca, P.; Mobilio, S.; Meneghini, C.; <b>Fratoddi, I.</b> ; Iucci, G.; Battocchio, C. <i>Inorg. Chem.</i> <b>2019</b> , 58, 4935-4944 Doi: 10.1021/acs.inorgchem.8b03574
106.	2019	<i>Highly Hydrophilic Gold Nanoparticles as Carrier for Anticancer Copper(I) Complexes: Loading and Release Studies for Biomedical Applications</i> <b>Fratoddi, I.</b> ; Venditti, I.; Battocchio, C.; Carlini, L.; Amatori, S.; Porchia, M.; Tisato, F.; Bondino, F.; Magnano, E.; Pellei, M.; Santini, M. <i>Nanomaterials</i> <b>2019</b> , 9, 772; doi:10.3390/nano9050772

107.	2019	<p><i>Hydrophilic silver nanoparticles loaded into niosomes: physical-chemical characterization in view of biological applications</i></p> <p>Rinaldi, F.; Del Favero, E.; Moeller, J.; Hanieh, P.N.; Passeri, D.; Rossi, M.; Angeloni, L.; Venditti, I.; Marianecci, C.; Carafa, M.; <b>Fratoddi, I.</b></p> <p><i>Nanomaterials</i> <b>2019</b>, 9, 1177; doi:10.3390/nano9081177</p>
108.	2019	<p><i>Gold nanoparticles and nanorods in nuclear medicine: a mini review</i></p> <p>Maccora, D.; Dini, V.; Battocchio, C.; <b>Fratoddi, I.</b>; Cartoni, A.; Rotili, D.; Castagnola, M.; Faccini, R.; Bruno, I.; Scotognella, T.; Giordano, A.; Venditti, I.</p> <p><i>Appl. Sci.</i> <b>2019</b>, 9, 3232; doi:10.3390/app9163232</p>
109.	2020	<p><i>Noble metal nanoparticle-based networks as a new platform for lipase immobilization</i></p> <p>Chronopoulou, L.; Scaramuzzo, F.A.; Fioravanti, R., Di Nitto, A., Cerra, S.; Palocci, C.; <b>Fratoddi, I.</b></p> <p><i>Int. J. Biol. Macromol.</i> <b>2020</b>, 146, 790-797 doi 10.1016/j.ijbiomac.2019.10.047</p>
110.	2020	<p><i>Gold nanoparticles functionalized with 4,4'-dithiobiphenyl blended with CuS in PMMA for switching memory devices</i></p> <p>Cerra, S.; Pica, P. Congiu, M.; Boratto, M.H.; Graeff, C.F.O.; <b>Fratoddi, I.</b></p> <p><i>J. Mater. Sci.-Mater. Electron.</i> <b>2020</b>, 31, 12083-12088 <a href="https://doi.org/10.1007/s10854-020-03753-5">https://doi.org/10.1007/s10854-020-03753-5</a></p>
111.	2020	<p><i>Direct Conjugation of Resveratrol on Hydrophilic Gold Nanoparticles: Structural and Cytotoxic Studies for Biomedical Applications</i></p> <p>Venditti, I.; Iucci, G.; <b>Fratoddi, I.</b>; Cipolletti, M.; Montalesi, E.; Marino, M.; Secchi, V.; Battocchio, C.</p> <p><i>Nanomaterials</i>, <b>2020</b>, 10, 1898 Doi 10.3390/nano10101898</p>
112.	2020	<p><i>Synthesis and characterization of stereoregular p-conjugated polyarylenynes, (- Ar-(E)-CH=CHCC-)<sub>n</sub>, decorated with branched bis-alkoxy side chains</i></p> <p>Cruciani, F.; Pasquini, C.; D'Acunzo, F.; D'Annibale, A.; <b>Fratoddi, I.</b>; Cerra, S.; Pulci, G.; Bassetti, M.</p> <p><i>Synth. Met.</i> <b>2020</b>, 269, 116538. doi <a href="https://doi.org/10.1016/j.synthmet.2020.116538">https://doi.org/10.1016/j.synthmet.2020.116538</a></p>
113.	2020	<p><i>Hydrophilic Silver Nanoparticles for Hg(II) Detection in Water: direct evidence for Mercury-Silver Interaction</i></p> <p>Schiesaro, I. Burratti, L. Meneghini, C. <b>Fratoddi, I.</b> Proposito, P. Lim, J. Scheu, C. Venditti, I. Iucci, G. Battocchio, C.</p> <p><i>J. Phys. Chem. C</i>, <b>2020</b>, 124, 47, 25975-25983 doi:10.1021/acs.jpcc.0c06951</p>
114.	2020	<p><i>Development of New and Efficient Copper(II) Complexes of Hexyl bis(pyrazolyl)acetate Ligands as Catalyst for Allylic Oxidation</i></p> <p>Gabrielli, S.; Pellei, M.; Venditti, I.; <b>Fratoddi, I.</b>; Battocchio, C.; Iucci, G.; Schiesaro, I.; Meneghini, C.; Palmieri, A.; Marcantoni, E.; Bagnarelli, L.; Vallesi, R.; Santini, C.</p> <p><i>Dalton Trans.</i> <b>2020</b>, 49, 15622(11) doi : 10.1039/D0DT02952A</p>
115.	2020	<p><i>Insights about the interaction of methotrexate loaded hydrophilic gold nanoparticles: spectroscopic, morphological and structural characterizations.</i></p> <p>Cerra, S.; Matassa, R.; Beltrán, A.M.; Familiari, G.; Battocchio, C.; Pis, I.; Sciubba, F.; Scaramuzzo, F.A.; Del Giudice, A.; <b>Fratoddi, I.*</b></p> <p><i>Mater. Sci. Eng. C-Mater. Biol. Appl.</i> <b>2020</b>, 117, 111337 <a href="https://doi.org/10.1016/j.msec.2020.111337">https://doi.org/10.1016/j.msec.2020.111337</a></p>
116.	2020	<p><i>Adaptive tuning of infrared emission using VO<sub>2</sub> thin films</i></p> <p>Larciprete, M.C.; Centini, M.; Paoloni, S.; <b>Fratoddi, I.</b>; Dereshgi, S.A.; Tang, K.; Wu, J.; Aydin, K.</p> <p><i>Sci. Rep.</i> <b>2020</b>, 10, art number 11544. doi: <a href="https://doi.org/10.1038/s41598-020-68334-2">https://doi.org/10.1038/s41598-020-68334-2</a></p>

117.	2020	<i>Radioguided surgery with beta- radiation in pancreatic Neuroendocrine Tumors: a feasibility study</i> Collamati, F.; Maccora, D.; Alfieri, S.; Bocci, V.; Cartoni, A.; Collarino, A.; De Simoni, M.; Fischetti, M.; <b>Fratoddi, I.</b> ; Giordano, A.; Mancini-Terracciano, C.; Mirabelli, R.; Morganti, S.; Quero, G.; Rotili, D.; Scotognella, T.; Solfaroli Camillocci, E.; Traini, G. Venditti, I.; Faccini, R. <i>Sci. Rep.</i> , <b>2020</b> , 10, art. number 4015 doi: 10.1038/s41598-020-61075-2
118.	2021	<i>Binuclear organometallic Pt(II) complexes as stabilizing ligands for gold and silver metal nanoparticles</i> Cerra, S.; Fontana, L.; Rossi, E.; Bassetti, M.; Battocchio, C.; Venditti, I.; Carlini, L.; Matassa, R.; Familiari, G.; <b>Fratoddi, I.</b> <i>Inorg. Chim. Acta</i> <b>2021</b> , 516, 120170 DOI: <a href="https://doi.org/10.1016/j.ica.2020.120170">https://doi.org/10.1016/j.ica.2020.120170</a> [IF 2020 2.304]
119.	2021	<i>Silver nanoparticles functionalized by Fluorescein isothiocyanate or Rhodamine B isothiocyanate: fluorescent and plasmonic materials.</i> <b>Fratoddi, I.</b> ; Battocchio, C.; Iucci, G.; Catone, D.; Cartoni, A.; Paladini, A.; O'Keeffe, P.; Nappini, S.; Cerra, S.; Venditti, I. <i>Appl. Sci.</i> <b>2021</b> , 11, 2472 (12) doi: 10.3390/app1106247
120.	2021	<i>Functionalized Gold Nanoparticles as an Active Layer for Mercury Vapor Detection at Room Temperature</i> <b>Fratoddi, I.*</b> ; Cerra, S.; Salamone, T.A.; Fioravanti, R.; Sciubba, F.; Zampetti, E.; Macagnano, A.; Generosi, A.; Paci, B.; Scaramuzzo, F.A.; Matassa, R.; Familiari, G.; Battocchio, C.; Marsotto, M.; Papa, P.; Bearzotti, A.* <i>ACS Appl. Nano Mater.</i> <b>2021</b> , 4, 2930–2940 doi: 10.1021/acsnm.1c00074
121.	2021	<i>Study of the interaction mechanism between hydrophilic thiol capped gold nanoparticles and melamine in aqueous medium</i> Cerra, S.; Salamone, T.A.; Sciubba, F.; Marsotto, M.; Battocchio, C.; Nappini, S.; Scaramuzzo, F.A.; Li Voti, R.; Sibilia, C.; Matassa, R.; Beltrán, A.M.; Familiari, G.; <b>Fratoddi, I.*</b> <i>Colloid Surf. B-Biointerfaces</i> , <b>2021</b> , 203, 111727 Doi: <a href="https://doi.org/10.1016/j.colsurfb.2021.111727">https://doi.org/10.1016/j.colsurfb.2021.111727</a>
122.	2021	<i>Photoacoustics for listening to metal nanoparticle super-aggregates</i> Li Voti, R.; Leahu, G.; Sibilia, C.; Matassa, R.; Familiari, G.; Cerra, S.; Salamone, T.A.; <b>Fratoddi, I.*</b> <i>Nanoscale Adv.</i> <b>2021</b> , 3, 4692–4701 Doi: 10.1039/d1na00333j
123.	2022	<i>Superior transport behavior of gold nanoparticles/P3HT blends by tuning optical and structural properties.</i> Grigorian S.; Fontana L.; Cerra S.; Pietsch U.; Scaramuzzo F.A.; <b>Fratoddi I.*</b> <i>Synth. Met.</i> , <b>2022</b> , 283, 116973 Doi: 10.1016/j.synthmet.2021.116973
124.	2022	<i><sup>90</sup>Y-DOTA-Nimotuzumab: synthesis of a promising <math>\beta^-</math> radiopharmaceutical</i> Scotognella, T.; Maccora, D.; Bruno, I.; Chinol, M.; Castagnola, M.; Collamati, F.; Mancini-Terracciano, C.; Morganti, S.; Bocci, V.; Solfaroli Camillocci, E.; Rotili, D.; Cartoni, A.; <b>Fratoddi, I.</b> ; Marini, F.; Venditti, I.; Faccini, R.; Giordano, A. <i>Curr. Radiopharm.</i> <b>2022</b> , 15, 32-39 Doi 10.2174/1874471013999210104220031
125.	2022	<i>Hydrophilic Gold Nanoparticles as Anti-PD-L1 Antibody Carriers: Synthesis and Interface Properties</i> Venditti, I.; Cartoni, A.; Cerra, S.; Fioravanti, R.; Salamone, T.A.; Sciubba, F.; Tabocchini, M.A.; Dini, V.; Battocchio, C.; Iucci, G.; Carlini, L.; Faccini, R.; Collamati, F.; Mancini Terracciano, C.; Solfaroli Camillocci, E.; Morganti, S.; Giordano, A.; Scotognella, T.; Maccora, D.; Rotili, D.; Marchese, C.; Anastasiadou, E.; Trivedi, P.; <b>Fratoddi, I.*</b> <i>Part. Part. Syst. Charact.</i> <b>2022</b> , 2100282

		DOI: 10.1002/ppsc.202100282
126.	2022	<i>Antimicrobial effectiveness of innovative photocatalysts: a review</i> Lofrano, G.; Ubaldi, F.; Albarano, L.; Carotenuto, M.; Vaiano, V.; Valeriani, F.; Libralato, G.; Gianfranceschi, G.; <b>Fratoddi, I.</b> ; Meric, S.; Guida, M; Spica, V.R. <i>Nanomaterials</i> , <b>2022</b> , 12(16), 2831 Doi. 10.3390/nano12162831
127.	2022	<i>Peptide-based hydrogels: new materials for biosensing and biomedical applications</i> Binaymotlagh, R.; Chronopoulou, L.; Hajareh Haghghi, F.; <b>Fratoddi, I.</b> ; Palocci, C. <i>Materials</i> , <b>2022</b> , 15(17), 5871 Doi: 10.3390/ma15175871
128.	2022	<i>Effect of ceramic nano-particles on the properties of a carbon-phenolic ablator</i> Paglia, L.; Mapelli, C.; Genova, V.; Bracciale, M.F.; Marra, F.; Bartuli, C.; <b>Fratoddi, I.</b> ; Pulci, G. <i>Polym. Compos.</i> <b>2022</b> 43(10), pp. 7345–7359 doi <a href="https://doi.org/10.1002/pc.26811">https://doi.org/10.1002/pc.26811</a>
129.	2022	<i>Organoselenium compounds as functionalizing agents for gold nanoparticles in cancer therapy</i> Lorenzoni, S.; Cerra, S.; Angulo-Elizari, E.; Salamone, T.A.; Battocchio, C.; Marsotto, M.; Scaramuzzo, F.A.; Sanmartin, C.; Plano, D.; <b>Fratoddi, I.</b> <i>Colloid Surf. B-Biointerfaces</i> , <b>2022</b> , 219, 112828 Doi: 10.1016/j.colsurfb.2022.112828
130.	2023	<i>Surface modification of TiO<sub>2</sub> nanoparticles with organic molecules and their biological applications</i> Haghghi, F.H.; Mercurio, M.; Cerra, S.; Salamone, T.A.; Binaymotlagh, R.; Palocci, C.; Romano Spica, V.; <b>Fratoddi, I.</b> * <i>J. Mat. Chem. B</i> , <b>2023</b> , 11, 2334 Doi: 10.1039/d2tb02576k
131.	2023	<i>Thiol-Functionalized Palladium Nanoparticles Networks: Synthesis, Characterization, and Room Temperature (Toxic) Vapor Detection</i> Cerra, S.; Salamone, T.A.; Bearzotti, A.; Haghghi, F.H.; Mercurio, M.; Marsotto, M.; Battocchio, C.; Fioravanti, R.; Diociaiuti, M.; <b>Fratoddi, I.</b> * <i>Part. Part. Syst. Charact.</i> <b>2023</b> , 2200189 <a href="https://doi.org/10.1002/ppsc.202200189">https://doi.org/10.1002/ppsc.202200189</a>

## Conference Proceedings/Book chapters on Scopus

1.	1999	<i>Second Harmonic Generation in PMMA films doped with Organometallic Complexes</i> , Casalboni, M.; D'Amato, R.; <b>Fratoddi, I.</b> ; Furlani, A.; Pizzoferrato, R.; Sarcineli, F.; Senesi, R.; Vannucci, A.; Varasi, M. <i>Radiat. Eff. Defects Solids</i> , <b>1999</b> , 150(1-4),629-634. doi: 10.1080/10420159908226236 <i>Conference proceedings</i>
2.	2008	<i>Nanostructured Polymers: development and trends, highlights and shadows</i> . Russo, M.V.; <b>Fratoddi, I.</b> <i>Expert Commentary, in Nanotechnology Research Developments, (2008), Editor: R. Jiménez-Contreras, (Nova Science Publishers, Inc NY) ISBN 1-60021-899-7, pp 1-5.</i> <i>Expert Commentary, in Encyclopedia of Nanotechnology (2 Volume Set) Authors / Editors: Elwood D. Carlson (pp 1-5), ISBN: 978-1-60692-079-4 (2009)</i> <i>Expert Commentary, in Nanomaterials: New Research Developments Editors: Egor I. Pertsov (pp. 13-17) ISBN: 978-1-60456-300-9 (2008)</i> <i>Expert Commentary, Book chapter</i>
3.	2010	Chapter 1 –“Nanostructured macromolecules” in <i>Advances in macromolecules: perspectives and applications</i> <b>Fratoddi, I.</b> ; Venditti, I.; Russo, M.V. Ed. MV Russo, Springer <b>2010</b> pp.1-100 ISBN 978-90-481-3191-4 DOI: 10.1007/978-90-481-3192-1_1 <i>Book chapter, in Advances in Macromolecules: Perspectives and Application</i>
4.	2010	<i>Breakthroughs for gold nanoparticles: perspectives and applications</i> <b>Fratoddi, I.*.</b> ; Venditti, I.; Russo, M.V. Expert Commentary, in “Gold Nanoparticles: Properties, Characterization and Fabrication.”, <b>2010</b> , Editor: P. Chow (Nova Science Publishers, Inc NY) chapter 13, 299-306 ISBN: 978-1-61668-009-1 <i>Expert Commentary, Book chapter</i>
5.	2011	<i>New developments in X-ray Photoelectron Spectroscopy applied to nanostructured materials</i> . <b>Fratoddi, I.*.</b> ; Battocchio, C.; Polzonetti G. Expert Commentary, in “X-ray Photoelectron Spectroscopy”, 2011, Editor: Johanna M. Wagner, (Nova Science Publishers, Inc NY) ISBN 978-1-61668-915-5, <b>2011</b> , chapter 8, 201-207 <i>Expert Commentary, Book chapter</i>
6.	2014	<i>Semiconductor-metal phase transition of vanadium dioxide nanostructures on silicon substrate: Applications for thermal control of spacecraft</i> Leahu G.; Li Voti, R.; Larciprete M.C.; Belardini A.; Mura F.; <b>Fratoddi I.</b> ; Sibilia C.; Bertolotti M. <i>AIP Conference Proceedings</i> <b>2014</b> , 1603, Pages 62 – 70 Doi: 10.1063/1.4883043
7.	2014	<i>Structural properties of <math>\pi</math>-<math>\pi</math> Conjugated network in polymer thin films studied by x-ray cross-correlation analysis</i> . Kurta, R. P.; Grodd, L.; Mikayelyan, E.; Gorobtsov, O.Y.; <b>Fratoddi, I.</b> ; Venditti, I.; Sprung, M.; Grigorian, S.; Vartanyants, I.A. <i>Journal of Physics: Conference Series</i> , <b>2014</b> , 499 (1), art. no. 012021, DOI: 10.1088/1742-6596/499/1/012021 <i>Conference proceedings 22nd International Congress on X-Ray Optics and Microanalysis</i>
8.	2015	<i>Hydrophobic Noble metal nanoparticles: Synthesis, characterization and perspectives as gas sensing materials</i> Bearzotti, A., Fontana, L., <b>Fratoddi, I.</b> , Venditti, I.; Testa, G.; Rasi, S.; Gatta, V.; Russo, M.V.; Zampetti, E.; Papa, P., Macagnano, A.

		<i>Procedia Engineering</i> , <b>2015</b> , 120, 781–786 Doi: 10.1016/j.proeng.2015.08.822 <i>Conference proceedings Euroensors 2015</i>
9.	2015	<i>Gold and silver nanoparticles-based networks as advanced materials for optoelectronic devices</i> Fontana, L.; Venditti, I.; <b>Fratoddi, I.</b> ; Leahu, G.; Belardini, A.; Li Voti, R.; Sibilia, C.; Matassa, R.; Familiari, G. IET Conference Publications, <b>2016</b> , 2016(CP704) <i>Conference paper: 18th Italian National Conference on Photonic Technologies (Fotonica 2016) ISBN: 978-1-78561-268-8</i> Contributo premiato
10.	2020	<i>Gold nanoparticles-based extraction of phenolic compounds from olive mill wastewater: A rapid and sustainable method</i> Rapa, M.; Vinci, G.; Ciano, S. Cerra, S.; <b>Fratoddi, I.</b> AIP Conference Proceedings, <b>2020</b> , 2257, 020010 Doi: 10.1063/5.0023606 <i>Conference Proceedings</i>

## Patents

1.	2006	Method for controlling the dimensions and the morphology of nanostructural polymeric materials, materials thereby obtained and uses thereof Palocci, C.; Russo, M. V.; Belsito, C.M.A.; Cernia, E.; D'Amato, R.; <b>Fratoddi, I.</b> ; Panzavolta, F.; Soro, S.; Venditti, I. Brevetto depositato in data 9 novembre 2004 n° RM2004A000555. PCT/IT20057000653 International Publication Number <b>WO 2006051572</b>
2.	2014	<i>Ionizing radiation dosimeter for measuring doses of ionizing radiation, comprises a sealed holder that houses an organometallic polymer formulation dissolved in a halogenated organic solvent in different concentrations.</i> Graeff, C.F. O.; Bronze Uhle, E. S.; Fernandes, D.M.; Russo, M.V.; <b>Fratoddi, I.</b> ; Brevetto internazionale <b>2014</b> Patent Number: <b>WO2014201536-A1</b> . Patent Assignee: UNIV ESTADUAL PAULISTA DE MESQUITA FILHO. <b>PCT/BR2014/000234</b>
3.	2020	<i>New benzylguanidine compound for use as radio-tracer, for diagnosis and/or treatment of tumors, and for radio-guided surgery or tumor surgery radio-guided by beta-particle detection</i> Faccini, R.; Solfaroli Camillocci, E.; Rotili, D.; Ciogli, A.; Cartoni, A.; <b>Fratoddi, I.</b> ; Venditti, I. Patent number WO2020144586-A1 (Main IPC A61K-051/04) PCT/IB2020/050105 WO/2020/144586 <a href="https://youtu.be/Cu3NxO6DiS8">https://youtu.be/Cu3NxO6DiS8</a>
4.	2020	Propulsore ionico ad alta efficienza Di Lellis, A.M.; <b>Fratoddi, I.</b> ; Venditti, I.; Leoni, R.; Gaggero, A.; Mattioli, F.; Selci, S. Brevetto italiano 102018000004683 data di concessione 02/09/2020