

Coordinatore GEV-03

Gaetano Guerra



Curriculum del prof. Gaetano Guerra

Il prof. Gaetano Guerra ha fornito, a partire dalla metà degli anni settanta, importanti contributi alla scuola napoletana di polimeri diretta dal prof. Paolo Corradini ed ha poi guidato a partire dal 1995 una Scuola brillante di Chimica Macromolecolare presso l'Università di Salerno.

La maggior parte dell'attività del prof. Gaetano Guerra ha avuto per oggetto lo studio di materiali polimerici, affrontato sia da un punto di vista teorico che sperimentale, con rilevanti risultati anche in campo applicativo, come testimoniato da numerosi brevetti, alcuni dei quali anche ceduti ad aziende nazionali ed internazionali.

In particolare, è stato attivo nel campo della catalisi eterogenea di polimerizzazione di olefine e nell'area dei catalizzatori omogenei a base di metalloceni. Molto rilevanti sono risultate pubblicazioni sulla struttura, sul polimorfismo e sui fenomeni di ordine-disordine che hanno luogo nei polimeri semicristallini.

Negli ultimi venti anni, una attività di ricerca da lui promossa, che ha dato eccellenti risultati e di cui è ritenuto "leader" a livello internazionale, ha riguardato polimeri caratterizzati da fasi co-cristalline con molecole ospitate ("guest") di bassa massa molecolare, di cui sono state evidenziate proprietà foto-reattive, fluorescenti, magnetiche e piezoelettriche. Particolarmente interessanti sono i risultati relativi a due polimeri di produzione industriale (il polistirene sindiotattico ed il polifenilenossido) per i quali la rimozione delle molecole guest porta alla formazione di fasi cristalline-nanoporose. Tali nuovi materiali hanno importanti applicazioni in separazioni molecolari, immagazzinamento di gas ed in sensoristica.

Negli ultimi tre anni a tale attività si sono affiancate attività su grafeni e su grafeni chimicamente modificati, quali catalizzatori e quali componenti di materiali in tre dimensioni.

Il Prof. Guerra ha pubblicato circa trecento lavori su riviste internazionali ed il suo “h-index factor” dell’attività scientifica è pari a 56 mentre lo stesso fattore valutato per gli ultimi dieci anni è pari a 32. L’alto livello del lavoro scientifico del prof. Guerra è anche testimoniato dal fatto che oltre cento suoi lavori sono pubblicati su importanti riviste della American Chemical Society. In particolare 81 lavori sono stati pubblicati su *Macromolecules*, la più importante rivista di scienza dei polimeri, 15 lavori su *Chemistry of Materials*, la più rilevante rivista di chimica dei materiali, ed 11 lavori sul *Journal of the American Chemical Society*. Ha tenuto conferenze su invito in rilevanti convegni nazionali ed internazionali, tra cui alcuni convegni MACRO IUPAC, della European Polymer Federation e della Polymer Processing Society.

E’ stato responsabile di svariati progetti di ricerca ministeriali e della Unione Europea e di attività di ricerca in collaborazione con importanti società internazionali operanti in tecnologie dei polimeri quali ad esempio la Pirelli, la Basell, la Freudenberg, la Prismatic e la Treofan.

E’ risultato vincitore nel 1986 di un premio conferito dall’Accademia Napoletana di Scienze Lettere ed Arti per il miglior gruppo di lavori nel settore della Chimica Macromolecolare, e nel 1992 del Premio Nazionale Federchimica (sezione riservata a docenti e ricercatori accademici). Dal 1998 al 2000 è stato Presidente della Associazione Italiana di Scienza e Tecnologia delle Macromolecole. Nel 2003 è stato insignito dal Presidente della Repubblica del Premio Linneo. Nel 2009 il suo gruppo di ricerca ha vinto due “business plan competitions”: il terzo premio del “Premio Nazionale Innovazione” (per le migliori idee imprenditoriali ad alto contenuto tecnologico) ed il “Premio Made NEW in Italy 2009 -I materiali innovativi dall’università all’impresa”. Nel 2010 il suo gruppo di ricerca è stato insignito, dal Presidente della Repubblica presso la sede del Quirinale, del “Premio Nazionale Innovazione” (per le migliori idee imprenditoriali ad alto contenuto tecnologico).

List of publications of prof. Gaetano Guerra

(August 2015)

The list is divided in three sections

A) Papers on international journals

B) Patents

C) Contributions to books

A) Articoli pubblicati su riviste a diffusione internazionale.

A1) P.Corradini, G.Guerra

On the chain conformation of poly(tetrafluoroethylene) in the crystalline modification above 30°C.
Macromolecules, 1977, 10, 1410.

A2) P.Corradini, V.Barone, R.Fusco, G.Guerra

Analysis of models for the Ziegler-Natta stereospecific polymerization on the basis of the non-bonded interactions at the catalytic site- I- The Cossee model.
Eur.Polym.J., 1979, 15, 1133.

A3) P.Corradini, G.Guerra, V.Barone, R.Fusco

Analysis of models for the Ziegler-Natta stereospecific polymerization on the basis of the non-bonded interactions at the catalytic site- II- Edges, steps and exposed cuts.
Eur.Polym.J., 1980, 16, 835.

A4) P.Corradini, G.Guerra, V.Petraccone, B.Pirozzi

Geometrical and energetical feasibility of a highly extended chain conformation for isotactic polystyrene.
Eur.Polym.J., 1980, 16, 1089.

A5) L.Nicolais, G.Guerra, C.Migliaresi, L.Nicodemo, A.T.Di Benedetto

Mechanical properties of polystyrene/glass beads composites.
Composites, 1981, 12, 33.

A6) L.Nicolais, G.Guerra, C.Migliaresi, L.Nicodemo, A.T.Di Benedetto

Viscoelastic behaviour of glass-reinforced epoxy resin.
Polym. Composites, 1981, 2, 116.

A7) G.Guerra, M.Ilavsky, J.Biros, K.Dusek

The viscoelastic and equilibrium rheoptical behaviour of crosslinked ethylene-propylene copolymers.
Colloid & Polym.Sci., 1981, 259, 1190.

A8) P.Corradini, V.Barone, R.Fusco, G.Guerra

Steric control in Ziegler-Natta catalysts, an analysis of non-bonded interactions at model catalytic sites.
J. Catal., 1982, 77, 32.

A9) P.Corradini, V.Barone, G.Guerra

Steric control in the first step of the isospecific Ziegler-Natta polymerization of propene.
Macromolecules, 1982, 15, 1242.

- A10) P.Corradini, R.Napolitano, L.Oliva, V.Petraccone, B.Pirozzi, G.Guerra
A possible structural interpretation of the two DSC melting peaks of isotactic polypropylene in the α -modification.
Makromol.Chem., Rapid Commun., 1982, 3, 753.
- A11) A.Addeo, V.Bonadies, C.Carfagna, G.Guerra, A.Moschetti, L.Nicolais
Use of polymeric materials in the assembly of solar cells.
Solar Energy, 1983, 30, 421.
- A12) G.Guerra, C.Paolone, L.Nicolais
Surface colouring of glassy polymers by solvent diffusion.
J. Coating Tech., 1983, 55, 53.
- A13) C.Carfagna, G.Guerra, L.Nicolais, S.Tartaro
Effects of postcuring and water sorption on the mechanical properties of composite dental restorative materials.
Biomaterials, 1983, 4, 228.
- A14) P.Corradini, V.Barone, R.Fusco, G.Guerra
A possible model of catalytic sites for the stereospecific polymerization of α -olefins on first generation and supported Ziegler-Natta catalysts.
Gazz. Chim.It., 1983, 113, 601.
- A15) G.Guerra, A.Moschetti, C.Carfagna, U.Mandara, A.Cutolo, S.Solimeno
Additives in transparent glassy polymers: concentration profiles obtained by solvent diffusion technique.
J.Appl.Polym.Sci., 1984, 29, 2271.
- A16) C.Carfagna, C.De Rosa, G.Guerra, V.Petraccone
Recrystallization kinetics of isotactic polypropylene (α -form).
Polymer, 1984, 25, 1462.
- A17) G.Guerra, V.Petraccone, P.Corradini, C.De Rosa, R.Napolitano, B.Pirozzi, G.Giunchi
Crystalline order and melting behaviour of isotactic polypropylene (α form).
J.Polym.Sci., Polym.Phys.Ed., 1984, 22, 1029.
- A18) C.De Rosa, G.Guerra, R.Napolitano, V.Petraccone, B.Pirozzi
Conditions for the α_1 - α_2 transition in isotactic polypropylene samples.
Eur.Polym.J., 1984, 29, 937.
- A19) G.Guerra, V.Riccio, L.Nicolais
Surface addition of flame retardants in acrylic cast sheets.
J.Fire Sci., 1984, 2, 60.

- A20) P.Corradini, G.Guerra, V.Barone
Conformational analysis of polypropylene chains bound to model catalytic sites.
Eur.Polym.J., 1984, 20, 1177.
- A21) V.Petraccone, C.De Rosa, G.Guerra, A.Tuzi
On the double peak shape of melting endotherms of isothermally crystallized isotactic polypropylene samples.
Makromol.Chem., Rapid Commun., 1984, 5, 631.
- A22) P.Ammendola, G.Guerra, V.Villani
Conformational analysis and reactivity in isotactic specific polymerization of C-3 branched α -olefins.
Makromol.Chem., 1984, 185, 2599.
- A23) V.Petraccone, G.Guerra, C.De Rosa, A. Tuzi
Extrapolation to the equilibrium melting temperature for isotactic polypropylene.
Macromolecules, 1985, 18, 813.
- A24) P.Corradini, G.Guerra, V.Villani
Stereoselectivity of the model catalytic site proposed for the isospecific Ziegler-Natta polymerization of the α -olefins.
Macromolecules, 1985, 18, 1401.
- A25) V.Busico, P.Corradini, G.Guerra, P.Severino
Polymorphic and mesomorphic behaviour of ionic amphiphilic compounds : a simple electrostatic model.
Gazz.Chim.It., 1985, 115, 17.
- A26) G.Guerra, C.De Rosa, V.Petraccone, A.Tuzi
Unusual recrystallization and melting behaviour in DSC scans of isotactic polypropylene samples.
J.Thermal Anal., 1985, 30, 1337.
- A27) C.De Rosa, G.Guerra, R.Napolitano, V.Petraccone, B.Pirozzi
Crystalline order and melting behaviour of isotactic polypropylene (α -form).
III. Isothermally crystallized samples.
J.Thermal Anal., 1985, 30, 1331.
- A28) G.Guerra, V.Petraccone, C.De Rosa, P.Corradini
X-ray analysis on unoriented and orientes samples of the quenched form of isotactic polypropylene.
Makromol.Chem.,Rapid Commun., 1985, 6, 573.
- A29) P.Corradini, G.Guerra, M.A.Jama, G.Zhi, A.Tuzi
Configurational and conformational requirements for an eventual 'back-biting' of the propagating species in the diolefin polymerization.
Polym.Comm., 1985, 26, 175.

- A30) P.Corradini, G.Guerra, R.Pucciariello
New model of the origin of the stereospecificity in the synthesis of syndiotactic polypropylene.
Macromolecules, 1985, 18, 2030-4.
- A31) G.Guerra, C.De Rosa, V.Petraccone
Manufacturing of polypropylene laminates and related structural reorganization in the crystalline phase.
J.Appl.Polym.Sci., 1986, 19, 1935.
- A32) G.Guerra, F.E.Karasz, W.J.MacKnight
On the blends of poly(vinylidene fluoride) and poly(vinylfluoride).
Macromolecules, 1986, 19, 1935.
- A33) P.Corradini, V.Petraccone, C.De Rosa, G.Guerra
On the structure of the quenched mesomorphic phase of isotactic polypropylene.
Macromolecules, 1986, 19, 2699.
- A34) G.Guerra, R.Pucciariello, V.Villani, P.Corradini
Model catalytic sites for Ziegler-Natta polymerization and relative reactivities of ethylene and propylene.
Polym.Commun., 1987, 28, 100.
- A35) C.De Rosa, G.Guerra, V.Petraccone, A.Tuzi
Comments on the melting behaviour of isotactic polypropylene isothermally crystallized from the melt.
Polym.Commun., 1987, 28, 143.
- A36) P.Corradini, C.De Rosa, G.Guerra, V.Petraccone
Fourier transform analysis of models for the disordered phases (IV and I) of poly(tetrafluoroethylene).
Macromolecules, 1987, 20, 3043.
- A37) C.De Rosa, G.Guerra, V.Petraccone, R.Centore, P.Corradini
Temperature dependence of the intramolecular disorder in the high-temperature phase of poly(tetrafluoroethylene) (phase I).
Macromolecules, 1988, 21, 1174.
- A38) R.Centore, C.De Rosa, G.Guerra, V.Petraccone, P.Corradini, V.Villani
Melting and solid phase transitions of isothermally crystallized copolymers of tetrafluoroethylene and hexafluoropropene.
Eur.Polym.J., 1988, 24, 445.
- A39) G.Guerra, S.Choe, D.J.Williams, F.E.Karasz, W.J.MacKnight
Fourier transform infrared spectroscopy of some miscible polybenzimidazole/polyimide blend.
Macromolecules, 1988, 21, 231.

- A40) G.Guerra, D.J.Williams, F.E.Karasz, W.J.MacKnight
Miscible polybenzimidazole blends with a benzophenone-based polyimide.
J.Polym.Sci., Polym.Phys.Ed., 1988, 26, 301.
- A41) S.Stankovic, G.Guerra, D.J.Williams, F.E.Karasz, W.J.MacKnight
Miscible blends of polybenzimidazole and a diisocyanate-based polyimide.
Polym.Comm., 1988, 29, 14.
- A42) A.Nelson, G.Guerra, D.J.Williams, F.E.Karasz, W.J.MacKnight
Catalytic activity of benzimidazole in the imidization of polyamic acids.
J.Appl.Polym.Sci., 1988, 36, 243.
- A43) C.K.Sham, G.Guerra, F.E.Karasz, W.J.MacKnight
Blends of two poly(aryl ether ketones).
Polymer, 1988, 29, 1016.
- A44) P.Corradini, G.Guerra, M.Vacatello, V.Villani
A possible model for site control of stereoregularity of isotactic specific homogeneous Ziegler-Natta polymerization.
Gazz. Chim. Ital., 1988, 118, 173.
- A45) M.Iuliano, C.De Rosa, G.Guerra, V.Petraccone, P.Corradini
Structural variations in ethylene-tetrafluoroethylene copolymers as a function of composition and temperature.
Makromol.Chem., 1989, 190, 827
- A46) L.Cavallo, G.Guerra, L.Oliva, M.Vacatello, P.Corradini
Steric control in the initiation step of the isospecific homogeneous Ziegler-Natta polymerization of propene and 1-butene.
Polym. Commun., 1989, 30, 16.
- A47) P.Corradini, C.De Rosa, G.Guerra, V.Petraccone
Comments on the possibility that the mesomorphic form of isotactic polypropylene is composed of small crystals of the β crystalline form.
Polym.Comm., 1989, 30, 281.
- A48) G.Guerra, G.Di Dino, R.Centore, V.Petraccone, J.Obrzut, F.E.Karasz, W.J.MacKnight
Structural characterization of vinylidene fluoride/vinyl fluoride copolymers.
Makromol.Chem., 1989, 190, 2203.
- A49) A.Grassi, P.Longo, G.Guerra
Solid-state high-resolution ^{13}C NMR spectra of syndiotactic polystyrene.
Makromol. Chem., Rapid Commun., 1989, 10, 687.

- A50) V.Venditto, G.Guerra, P.Corradini , R.Fusco
Possible model for chain end control of stereoregularity in the isospecific homogeneous Ziegler-Natta polymerization.
Polymer, 1990, 31, 530.
- A51) G.Guerra, V.M.Vitagliano, C.De Rosa, V.Petraccone, P.Corradini
Polymorphism in melt crystallized syndiotactic polystyrene samples.
Macromolecules, 1990, 23, 1539.
- A52) G.Guerra, P.Musto, F.E.Karasz, W.J.MacKnight
Fourier transform spectroscopy of the polymorphic forms of syndiotactic polystyrene.
Makromol.Chem., 1990, 191, 2111.
- A53) V.Venditto, G.Guerra, P.Corradini, R.Fusco
Mechanism of monomer insertion for heterogeneous isospecific Ziegler-Natta catalytic models.
Eur.Polym.J., 1991, 27,45.
- A54) G.Guerra, C.De Rosa, V.M.Vitagliano, V.Petraccone, P.Corradini
Effects of blending on the polymorphic behaviour of melt-crystallized syndiotactic polystyrene.
J.Polym.Sci., Polym.Phys.Ed., 1991, 23, 265.
- A55) G.Guerra, C.De Rosa, V.M.Vitagliano, V.Petraccone, P.Corradini, F.E.Karasz
Blending effects in the polymorphism of syndiotactic polystyrene crystallized from the quenched amorphous phase.
Polym.Commun., 1991, 32, 30.
- A56) L.Cavallo, G.Guerra, M.Vacatello, P.Corradini
A possible model for the stereospecificity in the syndiospecific polymerization of propene with group 4A metallocenes.
Macromolecules, 1991, 24, 1784.
- A57) L.Cavallo, P.Corradini, G.Guerra, M.Vacatello
On the effect of methyl substituents on chelating ligands in models for homogeneous isospecific Ziegler-Natta catalysis.
Polymer, 1991, 32, 1329.
- A58) M.Rapacciuolo, C.De Rosa, G.Guerra, G.Mensitieri, A.Apicella, M.A. Del Nobile
Different solvent stability of the crystalline polymorphic forms of syndiotactic polystyrene.
J.Mat.Sci.,Lett., 1991, 10, 1084
- A59) C.De Rosa, V.Venditto, G.Guerra, B.Pirozzi, P.Corradini
Polymorphism and chain conformations in the crystalline forms of syndiotactic poly(1-butene).
Macromolecules, 1991, 24, 5645.

- A60) P.Corradini, G.Guerra
 Models for the stereospecificity in homogeneous and heterogeneous Ziegler-Natta polymerizations
Progr.Polym.Sci., 1991, 16, 239.
- A61) C.De Rosa, G.Guerra, P.Corradini
 Fenomeni di ordine-disordine nelle forme polimorfe cristalline α e β del polistirene sindiotattico.
Rend.Fis.Acc.Lincei, 1991, s.9,v.2, 227.
- A62) G.Guerra, M.Iuliano, A.Grassi, D.M.Rice, F.E.Karasz, W.J.MacKnight
 Solid-state high-resolution ^{13}C NMR spectra of syndiotactic poly(p-methyl-styrene).
Polym.Commun., 1991, 32, 430.
- A63) R.Bianchi, P.Chiavacci, R.Vosa, G.Guerra
 Effect of moisture on the crystallization behavior of PET from the quenched amorphous phase.
J.Appl.Polym.Sci., 1991, 43, 1087.
- A64) C.De Rosa, G.Guerra, V.Petraccone, P.Corradini
 Crystal structure of the α -form of syndiotactic polystyrene.
Polym. J., 1991, 23, 1435.
- A65) L.Cavallo, G.Guerra, M.Vacatello, P.Corradini
 A model for the homogeneous isospecific Ziegler-Natta polymerization of olefins :
 enantioselectivity in the deuteration and deuteriooligomerization of 1-alkenes
Chirality, 1991, 3, 299.
- A66) V.Petraccone, C.De Rosa, G.Guerra, M.Iuliano, P.Corradini
 Fourier-transform analysis of models for the orthorhombic crystal phase of the alternating
 ethylene-tetrafluoroethylene copolymer.
Polymer, 1992, 33, 22.
- A67) M.Iuliano, G.Guerra, V.Petraccone, P.Corradini, C.Pellecchia
 Polymorphism in syndiotactic poly(p-methyl-styrene) unoriented samples.
New Polym.Mat., 1992, 3, 133.
- A68) P.Corradini, G.Guerra
 Polymorphism in polymers.
Adv.Polym.Sci., 1992, 100, 183.
- A69) G.Guerra, C.De Rosa, M.Iuliano V.Petraccone, P.Corradini, R.Pucciariello, V.Villani,
 G.Ajroldi
 On the conformation and the crystalline structure of an ethylene-chlorotrifluoroethylene
 alternating copolymer.
Makromol.Chem., 1992, 193, 549.

- A70) C.De Rosa, M.Rapacciuolo, G.Guerra, V.Petraccone, P.Corradini
On the crystal structure of the orthorhombic form of syndiotactic polystyrene.
Polymer, 1992, 33, 1423.
- A71) F.Auriemma, P.Corradini, C.De Rosa, G.Guerra, V.Petraccone, R.Bianchi, G.Di Dino
On the mesomorphic form of poly(ethylene terephthalate).
Macromolecules, 1992, 25, 2490.
- A72) C.De Rosa, V.Venditto, G.Guerra, P.Corradini
Crystal structure of the form I of syndiotactic poly(1-butene).
Makromol.Chem., 1992, 193, 1351.
- A73) V.Venditto, C.De Rosa, G.Guerra, R.Napolitano
X-ray diffraction, conformational analysis and stereo-regularity of a crystalline poly(3-methyl-1,3-pentadiene).
Polymer, 1992, 33, 3547.
- A74) G.Guerra, C.De Rosa, V.Petraccone
Novel crystalline syndiotactic polystyrene/polyphenyleneoxide blends.
Polym.Network & Blends, 1992, 2, 145.
- A75) G.Guerra, F.Dal Poggetto, M.Iuliano, C.Manfredi
FTIR spectra and chain conformation in the crystalline forms and clathrates of syndiotactic poly(p-methyl-styrene).
Makromol.Chem., 1992, 193, 2413.
- A76) P.Corradini, V.Busico, L.Cavallo, G.Guerra, M.Vacatello, V.Venditto
Structural analogies between homogeneous and heterogeneous catalysts for the stereospecific polymerization of 1-alkenes.
J.Mol.Cat., 1992, 74, 433.
- A77) P.Corradini, C.De Rosa, G.Guerra, B.Pirozzi, V.Venditto
On the chain conformation of the syndiotactic vinyl polymers.
Gazz.Chim.It., 1992, 122, 305.
- A78) V.Petraccone, F.Auriemma, F.Dal Poggetto, C.De Rosa, G.Guerra, P.Corradini
On the structure of the mesomorphic form of syndiotactic polystyrene.
Makromol.Chem., 1993, 194, 1335.
- A79) G.Guerra, C.De Rosa, M.Iuliano, V.Petraccone, P.Corradini, G.Ajroldi
Structural variations as a function of temperature and dynamic-mechanical relaxations for ethylene-tetrafluoroethylene alternating copolymers.
Makromol.Chem., 1993, 194, 389.

- A80) C.De Rosa, V.Venditto, G.Guerra, P.Corradini
Chain conformation and unit cell in the crystalline phase of syndiotactic poly(4-methyl-1-pentene).
Macromolecules, 1992, 25, 6938.
- A81) G.Guerra, L.Cavallo, V.Venditto, M.Vacatello, P.Corradini
Molecular mechanics and the polymerization mechanism of homogeneous and heterogeneous Ziegler-Natta catalysts
Makromol.Chem., Macromol.Sym., 1993, 69, 237.
- A82) L.Cavallo, G.Guerra, P.Corradini, L.Resconi, R.M.Waymouth
Model catalytic sites for olefin polymerization and diastereoselectivity in the cyclopolymerization of 1,5-hexadiene.
Macromolecules, 1993, 26, 260.
- A83) C.Di Fiore, B.Leone, C.De Rosa, G.Guerra, V.Petraccone, G.Di Dino, R.Bianchi, R.Vosa
Influence of the antimony catalyst remnants on the melt crystallization of PET.
J.Appl.Polym.Sci., 1993, 48, 1997.
- A84) F.Auriemma, V.Petraccone, F.Dal Poggetto, C.De Rosa, G.Guerra, C.Manfredi, P.Corradini
Mesomorphic form of syndiotactic polystyrene as composed of small imperfect crystals of the hexagonal (α) crystalline form.
Macromolecules, 1993, 26, 3772.
- A85) G.Guerra, L.Cavallo, G.Moscardi, M.Vacatello, P.Corradini
Enantioselectivity in the regioirregular placements and regiospecificity in the isospecific polymerization of propene with homogeneous Ziegler-Natta catalysts.
J.Am.Chem.Soc., 1994, 116, 2988.
- A86) L.Parravicini, B.Leone, F.Auriemma, G.Guerra, V.Petraccone, G.Di Dino, R.Bianchi, R.Vosa
Crystallization of poly(ethylene terephthalate)(PET) from the oriented mesomorphic form.
J.Appl.Polym.Sci., 1994, 52, 875.
- A87) L.Mascia, Z.Fekkai, G.Guerra, L.Parravicini, F.Auriemma
Effects of distortional components in biaxial stretching of poly(ethylene terephthalate) sheets on dimensional stability and structure.
J.Mat.Sci., 1994, 29, 3151.
- A88) P.Corradini, C.De Rosa, G.Guerra, R.Napolitano, V.Petraccone, B.Pirozzi
Conformational and packing energy of the crystalline α modification of syndiotactic polystyrene
Eur.Polym.J., 1994, 30, 1173.

- A89) R.Ziegler, L.Resconi, G.Balbontin, G.Guerra, V.Venditto, C.De Rosa
Allyltrimethylsilane polymers from metallocene catalysts:
tacticity and structural characterization
Polymer, 1994, 35, 4648.
- A90) P.Corradini, G.Guerra
Stereospecific polymerization processes and stereoregular polymers:
Our present understanding of mechanisms and structure at forty years from the discovery
Polymer Science, Ser.A, 1994, 36, 1324; *Vysokomol. Soedin., Ser.A*, 1994, 36, 1587.
- A91) F.Auriemma, P.Corradini, G.Guerra, M.Vacatello
Conformational analysis of highly extended poly(ethyleneterephthalate) chains by Monte
Carlo calculations
Macromol.Theory Simul., 1995, 4, 165.
- A92) O. Ruiz de Ballesteros, V.Venditto, F.Auriemma, G.Guerra, L.Resconi, R.Waymouth, A.
Mogstad
Thermal and structural characterization of poly(methylene-1,3-cyclopentane) samples of different
microstructures
Macromolecules, 1995, 28, 2383.
- A93) G.Mensitieri, M.A.Del Nobile, G.Guerra, A.Apicella, H.Al Ghatta
Low temperature melting behavior of CO₂ crystallized modified PETs
Polym.Eng.Sci., 1995, 35, 506.
- A94) G.Guerra, P.Corradini, L.Cavallo, M.Vacatello
Molecular mechanics and mechanisms of regulation of the stereospecificity in Ziegler-Natta
catalysis
Macromol.Symp., 1995, 89, 307.
- A95) C.D'Aniello, C.De Rosa, G.Guerra, V.Petraccone, P.Corradini, G.Ajroldi
Influence of constitutional defects on polymorphic behaviour and properties of
alternating ethylene-tetrafluoroethylene copolymer
Polymer, 1995, 36, 967.
- A96) C.De Rosa, V.Petraccone, F.Dal Poggetto, G.Guerra, B.Pirozzi, M.L. De Lorenzo, P.Corradini
Crystal structure of form III of syndiotactic poly(*p*methylstyrene)
Macromolecules, 1995, 28, 5507.
- A97) C.De Rosa, V.Venditto, G.Guerra, P.Corradini
Crystal structure of syndiotactic poly(4-methyl-pentene)
Polymer, 1995, 36, 3619.
- A98) F.Auriemma, G.Guerra, L.Parravicini, V.Petraccone, G.Russo
Evaluation of the orientation coefficient for the *c* axis in poly(ethylene terephthalate) fibers
J.Polym.Sci., Polym.Phys. 1995, 33, 1917.

- A99) C.Manfredi, G.Guerra, C.De Rosa, V.Busico, P.Corradini
Effects of *p*-methylstyrene comonomeric units on the polymorphic behavior of syndiotactic polystyrene
Macromolecules, 1995, 28, 6508.
- A100) C.Manfredi, C.De Rosa, G.Guerra, M.Rapacciuolo, F.Auriemma, P.Corradini
Structural changes induced by thermal treatments on emptied and filled clathrates of syndiotactic polystyrene
Macromol.Chem.Phys., 1995, 196, 2795.
- A101) C.De Rosa, G.Guerra, C.D'Aniello, V.Petraccone, P.Corradini, G.Ajroldi
Evaluation of the amount of defects in the comonomer alternation included in the crystal phase for ethylene-tetrafluoroethylene and ethylene-chlorotrifluoroethylene alternating copolymers
J.Appl.Polym.Sci., 1995, 56, 271.
- A102) O.Ruiz de Ballesteros, L.Cavallo, F.Auriemma, G.Guerra
Conformational analysis of poly(methylene-1,3-cyclopentane) and chain conformation in the crystalline phase
Macromolecules, 1995, 28, 7355.
- A103) C.De Rosa, G.Guerra, A Grassi
High-resolution solid state ¹³C Nuclear Magnetic Resonance Spectrum of form I of syndiotactic poly(1-butene)
Macromolecules, 1996, 29, 471.
- A104) P.Rizzo, G.Guerra, F.Auriemma
Thermal transitions of polyacrylonitrile fibers
Macromolecules, 1996, 29, 1830.
- A105) L.Cavallo, G.Guerra, P.Corradini
Molecular mechanics analysis and oscillating stereocontrol for the propene polymerization with metallocene-based catalysts
Gazz.Chim.It., 1996, 126, 463.
- A106) L.Cavallo, G.Guerra
A density functional and molecular mechanics study of β-hydrogen transfer in homogeneous Ziegler-Natta catalysis
Macromolecules, 1996, 29, 2729.
- A107) L.Cavallo, P.Corradini, G.Guerra, L.Resconi
Doubly bridged *ansa*-zirconocenes based on the norbornadiene skeleton: a quantum mechanics and molecular mechanics study
Organometallics, 1996, 15, 2254.

- A108) G.Guerra, L.Cavallo, G.Moscardi, M.Vacatello, P.Corradini
Back skip of the growing chain at model complexes for the metallocene polymerization catalysis
Macromolecules, 1996, 29, 4834.
- A109) O.Ruiz de Ballesteros, F.Auriemma, G.Guerra, P.Corradini
Molecular organization in the pseudo-hexagonal crystalline phase of ethylene-propylene copolymers.
Macromolecules, 1996, 29, 7141-7148.
- A110) C.De Rosa, V.Petraccone, G.Guerra, C.Manfredi
Polymorphism of syndiotactic poly(*p*-methylstyrene): oriented samples.
Polymer, 1996, 37, 5247.
- A111) P.Rizzo, F.Auriemma, G.Guerra, V.Petraccone, P.Corradini
Conformational disorder in the pseudohexagonal form of atactic polyacrylonitrile
Macromolecules, 1997, 30, 8852.
- A112) G.Guerra, L.Cavallo, P.Corradini, R.Fusco
Molecular mechanics and stereospecificity in Ziegler-Natta 1,2 and *cis*-1,4 polymerizations of conjugated dienes
Macromolecules 1997, 30, 677.
- A113) C.Manfredi, M.A.Del Nobile, G.Mensitieri, G.Guerra, M.Rapacciuolo
Vapor sorption in emptied clathrate samples of syndiotactic polystyrene
J.Polym.Sci., Polym.Phys.Ed., 1997, 35, 133-140.
- A114) G.Russo, L.Parravicini, F.Auriemma, V.Petraccone, G.Guerra, R.Bianchi, G.Di Dino, V.M.Vitagliano
Structure-properties relationship in spun fibers of poly(ethylene terephthalate): Comparisons between samples obtained by terephthalic acid or dimethyl terephthalate processes
J.Polym.Sci., Polym.Phys.Ed., 1997, 35, 889.
- A115) G.Guerra, P.Longo, L.Cavallo, P.Corradini, L.Resconi
Relationship between regiospecificity and type of stereospecificity in propene polymerization with zirconocene-based catalysts
J.Am.Chem.Soc., 1997, 119, 4394.
- A116) C. De Rosa, G.Guerra, V.Petraccone, B.Pirozzi
Crystal structure of the emptied clathrate form (δ_e form) of syndiotactic polystyrene.
Macromolecules, 1997, 30, 4147-4152.
- A117) P.Musto, S.Tavone, G.Guerra, C.De Rosa
Evaluation by Fourier transform infrared spectroscopy of the different crystalline forms in syndiotactic polystyrene samples.

J.Polym.Sci.,Polym.Phys.Ed., 1997, 35, 1055.

- A118) G.Guerra, C.Manfredi, P.Musto, S.Tavone,
Guest conformation and diffusion into amorphous and emptied clathrate phases of syndiotactic polystyrene.
Macromolecules, 1998, 31, 1329-1334.
- A119) L.Cavallo, G.Guerra, P.Corradini
Mechanism of propagation and termination reactions in classical heterogeneous Ziegler-Natta catalytic system: A nonlocal density functional study.
J.Am.Chem.Soc., 1998, 120, 2428.
- A120) P.Longo, G.Guerra, F.Grisi, S.Pizzuti, A.Zambelli
Chemoselective mechanism of (Z)-1,3-pentadiene in the presence of cyclopentadienyl-titaniumtrichloride and methylalumoxane.
Makromol.Chem.Phys., 1998, 199, 149.
- A121) G.Guerra, V.Venditto, C.Natale, P.Rizzo, C.De Rosa
Structural variations in random copolymers of tetrafluoroethylene with kind and content of comonomer units.
Polymer, 1998, 39, 3205.
- A122) M.Toto, L.Cavallo, P.Corradini, G.Moscardi, L.Resconi, G.Guerra
Influence of π -ligand substitutions on the regiospecificity and stereospecificity in isospecific zirconocenes for propene polymerization. A molecular mechanics analysis.
Macromolecules, 1998, 31, 3431.
- A123) G.Milano, G.Guerra, L.Cavallo
A preliminary study of host-guest interactions in polymeric clathrates. An ab initio study of the model complexes benzene/ X_2 ($X= F, Cl, Br, I$).
Eur. J.Inorg.Chem., 1998, 1, 1513.
- A124) L.Guadagno, P.Baldi, V.Vittoria, G.Guerra
Sub- T_g annealing of the clathrate δ form of syndiotactic polystyrene
Macromol.Chem.Phys., 1998, 199, 2671.
- A125) C.De Rosa, P.Rizzo, O.Ruiz de Ballesteros, V.Petraccone, G.Guerra
Crystal structure of the clathrate δ form of syndiotactic polystyrene containing 1,2-dichloroethane.
Polymer, 1999, 40, 2103-2110.
- A126) A.Fait, L.Resconi, G.Guerra, P.Corradini
A possible interpretation of the nonlinear propagation rate laws for insertion polymerizations: A kinetic model based on a single-center, two-state catalyst
Macromolecules, 1999, 32, 2104.

- A127) G.Guerra, G.Milano, V.Venditto, F.Loffredo, O.Ruiz de Ballesteros, L.Cavallo, C.De Rosa
Chemical separations by nanoporous crystalline samples of syndiotactic polystyrene
Makromol.Chem.Phys., Makromol.Symp., 1999, 138, 131-137.
- A128) G.Guerra, O.Ruiz de Ballesteros, V.Venditto, M.Galimberti, F.Sartori, R.Pucciariello
Pseudohexagonal crystallinity and thermal and tensile properties of ethene-propene copolymers
J.Polym.Sci., Polym.Phys.Ed., 1999, 37, 1095.
- A129) P.Musto, M.Manzari, G.Guerra
Isothermal guest desorption from crystalline and amorphous phases of syndiotactic polystyrene
Macromolecules, 1999, 32, 2770.
- A130) G.Guerra, P.Longo, P.Corradini, L.Cavallo
(E)-(Z) Selectivity in 2-butene copolymerization by group 4 metallocenes. A combined density functional theory and molecular mechanics study
J.Am.Chem.Soc., 1999, 121, 8651.
- A131) E.Reverchon, G.Guerra, V.Venditto
Regeneration of nanoporous crystalline syndiotactic polystyrene by supercritical CO₂
J.Appl.Polym.Sci., 1999, 74, 2077-2082.
- A132) P.Musto, M.Manzari, G.Guerra
Spectroscopic investigation of host-guest interactions into clathrate phases of syndiotactic polystyrene containing chlorinated compounds
Macromolecules, 2000, 33, 143-149.
- A133) G.Guerra, G.Milano, V.Venditto, P.Musto, C.De Rosa, L.Cavallo
Thermoplastic molecular sieves
Chem.Mater., 2000, 12, 363-368.
- A134) M.Toto, G.Morini, G.Guerra, P.Corradini, L.Cavallo
Influence of 1,3-diethers on the stereospecificity of propene polymerization by supported Ziegler-Natta catalysts. A theoretical investigation on their adsorption on (110) and (100) lateral Cuts of MgCl₂ platelets
Macromolecules, 2000, 33, 1134.
- A135) G.Milano, G.Guerra, C.Pellecchia, L.Cavallo
Mechanism of unlike stereoselectivity in 1-alkene primary insertions: syndiospecific propene polymerization by Brookhart-type nickel (II) catalysts
Organometallics, 2000, 19, 1343.
- A136) P.Longo, F.Grisi, G.Guerra, L.Cavallo
Reactivity of Z and E isomers, growing chain isomerization and chain transfer reactions in ethene/2-butene copolymerisation by metallocene-based catalysts

Macromolecules, 2000, 33, 4647.

- A137) G.Monaco, M.Toto, G.Guerra, P.Corradini, L.Cavallo
Geometry and stability of titanium chloride species adsorbed on the (100) and (110)
Cuts of the MgCl₂ support of the heterogeneous Ziegler-Natta catalysts
Macromolecules, 2000, 33, 8953.
- A138) S.Antinucci, G.Guerra, L.Oliva, O.Ruiz de Ballesteros, V.Venditto
Pseudo-hexagonal crystallinity in ethene-styrene random copolymers
Macromol.Chem.Phys., 2001, 202, 382-387.
- A139) C. Daniel, A. Mandanis, G. Guerra, P.Musto
1,2-dichloroethane conformation and molecular organization in syndiotactic polystyrene gels
Macromol. Symp. 2001, 166 , 109.
- A140) F. Loffredo, A. Pranzo, G. Guerra, V. Venditto, P. Longo
Clathrates with tetrahydrofuran of styrene-p-methyl styrene co-syndiotactic copolymers
Macromol. Symp. 2001, 166 , 165.
- A141) G. Milano, G. Guerra, L. Cavallo
Ab initio and molecular mechanics study of conformational selectivity of chlorinated
compounds
adsorbed in the clathrate phase of syndiotactic polystyrene. The role of electrostatic host-guest
interactions.
*Macromol.Theory Simul.*2001, 10, 349.
- A142) G. Minieri, P. Corradini, A. Zambelli, G. Guerra, L. Cavallo
Theoretical Study of Syndiospecific Styrene Polymerization with Cp-Based and Cp-Free
Titanium
Catalysts. 1. Mechanism of Chain Propagation
Macromolecules 2001, 34, 2459.
- A143) G. Milano, V. Venditto, G. Guerra, L. Cavallo, P. Ciambelli, D. Sannino
Shape and Volume of Cavities in Thermoplastic Molecular Sieves Based on Syndiotactic
Polystyrene
Chem. Mater. 2001, 13, 1506-1511.
- A144) P.Rizzo, F.Baione, G.Guerra, L.Martinotto, E.Albizzati
Polyethylene unit cell and crystallinity variations as a consequence of different cross-linking
processes
Macromolecules 2001, 34, 5175.
- A145) G.Minieri, P.Corradini, G.Guerra, A.Zambelli, L.Cavallo
A Theoretical Study of Syndiospecific Styrene Polymerization with Cp-based and
Cp-free Titanium Catalysts. 2. Mechanism of Chain-End Stereocontrol

Macromolecules 2001, 34, 5379.

- A146) C. Costabile, G. Milano, L. Cavallo, G. Guerra
Stereoselectivity and chemoselectivity in Ziegler-Natta polymerizations of conjugated dienes.
1. Monomers with low-energy *s-cis* η^4 coordination
Macromolecules 2001, 34, 7952.
- A147) G. Guerra, M. Galimberti, F. Piemontesi, O. Ruiz de Ballesteros
Influence of regio- and stereoregularity of propene insertion on crystallization behavior and
elasticity of ethene-propene copolymers
J. Am. Chem. Soc., 2002, 124, 1566-1567.
- A148) C. Daniel, G. Guerra, P. Musto
Clathrate Phase in Syndiotactic Polystyrene Gels
Macromolecules, 2002, 35, 2243-2251.
- A149) P. Musto, G. Mensitieri, S. Cotugno, G. Guerra, V. Venditto
Probing by time-resolved FTIR spectroscopy mass transport, molecular interactions, and
conformational ordering in the system chloroform-syndiotactic polystyrene
Macromolecules, 2002, 35, 2296-2304.
- A150) S. Pragliola, G. Milano, G. Guerra, P. Longo
Stereoselective Cyclopropanation by Cyclocopolymerization of Butadiene
J. Am. Chem. Soc., 2002, 124, 3502.
- A151) P. Rizzo, M. Lamberti, A.R. Albuja, O. Ruiz de Ballesteros, G. Guerra
Crystalline orientation in syndiotactic polystyrene cast films
Macromolecules, 2002, 35, 5854.
- A152) G. Milano, G. Guerra, F. Müller-Plathe
Anisotropic diffusion of small penetrants in the δ crystalline phase of syndiotactic
Polystyrene: a molecular dynamics simulation study
Chem. Mater. 2002, 14, 2977.
- A153) G. Milano, G. Fiorello, G. Guerra, L. Cavallo
A possible unified mechanism of like and unlike chain-end stereocontrol for primary
propene-coordinated polymerizations.
Macromolecular Chemistry and Physics, 2002, 203, 1564.
- A154) P. Rizzo, A.R. Albuja, G. Milano, V. Venditto, G. Guerra, G. Mensitieri, L. Di Maio
Crystalline orientation and molecular transport properties in nanoporous syndiotactic
polystyrene films.
Macromolecular Symposia 2002, 185(Flow-Induced Crystallization of Polymers), 65.

- A155) P. Rizzo, V. Venditto, G. Guerra, A. Vecchione
Crystalline phase orientation in biaxially stretched isotactic polypropylene films.
Macromolecular Symposia 2002, 185(Flow-Induced Crystallization of Polymers), 53.
- A156) G.Milano, L. Cavallo, G. Guerra
Site Chirality as a Messenger in Chain-End Stereocontrolled Propene Polymerization.
Journal of the American Chemical Society 2002, 124, 13368.
- A157) P. Arpaia, G.Guerra, G.Mensitieri, R.Schiano Lo Moriello
A chloroform transducer based sPS- δ e-coated crystal microbalance.
IMtc/2002, Proceedings of the IEEE Instrumentation and Measurement Technology Conference: The Frontier of Instrumentation and Measurement, 19th, Anchorage, AK, United States, May 21-23, 2002, 2, 1093.
- A158) C.Daniel, D.Alfano, G.Guerra, P.Musto
Physical gelation of syndiotactic polystyrene in the presence of large molar volume solvents induced by volatile guests of clathrate phases.
Macromolecules, 2003, 36, 1713-1716.
- A159) P.Longo, S.Pragliola, G.Milano, G.Guerra
E Stereoregular 1,1 and 1,3 Constitutional Units from 1,3-Butadiene in Copolymerizations Catalyzed by a Highly Hindered C2 Symmetric Metallocene.
Journal of the American Chemical Society, 2003, 125, 4799.
- A160) F.Loffredo, A.Pranzo, V.Venditto, P.Longo, G.Guerra
Clathrate phases of styrene/p-methylstyrene co-syndiotactic copolymers.
Macromolecular Chemistry and Physics, 2003, 204, 859-867.
- A161) G.Mensitieri, V. Venditto, G. Guerra
Polymeric sensing films absorbing organic guests into a nanoporous host crystalline phase
Sensors and Actuators B, 2003, 92, 255–261.
- A162) C.Daniel, D.Alfano, G.Guerra, P.Musto
Evaluation of the amount and composition of the polymer-rich and polymer-poor phases of syndiotactic polystyrene gels with binary solvent mixtures.
Macromolecules, 2003, 36, 5742-5750.
- A163) P.Corradini, L.Cavallo, G.Guerra
Stereoselettività nella catalisi Ziegler-Natta
La Chimica e l'Industria, 2003, 85, 41-44.
- A164) A.De Girolamo Del Mauro, F.Loffredo, V.Venditto, P.Longo, G.Guerra
Polymorphic behavior of syndiotactic poly(p-chlorostyrene) and styrene/p-chlorostyrene cosyndiotactic random copolymers
Macromolecules, 2003, 36, 7577-7584.

- A165) G.Guerra, L.Cavallo, P.Corradini
Chirality of catalysts for stereospecific polymerizations
Topics in Stereochemistry, 2003, 24, 1-65
- A166) A.R.Albunia, S.Di Masi, P.Rizzo, G.Milano, P.Musto, G.Guerra
Chlorinated guest orientation and mobility in clathrate structures formed
with syndiotactic polystyrene
Macromolecules, 2003, 36, 8695-8703.
- A167) P.Longo, M.Napoli, S.Pragliola, C.Costabile, G.Milano, G.Guerra
Butadiene Insertion and Constitutional Units in Ethene Copolymerizations by C2-Symmetric
Metallocenes.
Macromolecules, 2003, 36, 9067-9074.
- A168) D. Larobina, L.Sanguigno, V.Venditto, G.Guerra, G.Mensitieri
Gas sorption and transport in syndiotactic polystyrene with nanoporous crystalline phase
Polymer, 2004, 45, 429-436.
- A169) C.Costabile, G.Milano, L.Cavallo, P.Longo, G.Guerra, A.Zambelli
Stereoselectivity and chemoselectivity in Ziegler-Natta polymerization of conjugated dienes.
2. Mechanism for 1,2 syndiotactic polymerization of diene monomers with high energy s-cis η^4
coordination
Polymer, 2004, 45, 467-485.
- A170) C.Costabile, G. Guerra, P. Longo, S. Pragliola
High selectivity in polymerization of (Z)-1,3-pentadiene, with the CpTiCl₃-MAO catalytic
system, generated by backbiting coordinations of the growing polydienyl chain.
Macromolecules 2004, 37, 2016-2020.
- A171) P.Corradini, G.Guerra, L.Cavallo
Do New Century Catalysts Unravel the Mechanism of Stereocontrol of Old Ziegler-Natta
Catalysts?
Acc.Chem.Res. 2004, 37, 231-241.
- A172) P.Rizzo, A.Costabile, G.Guerra
Perpendicular Orientation of Host Polymer Chains in Clathrate Thick Films.
Macromolecules 2004, 37, 3071-3076.
- A173) C. Daniel, G. Guerra
Thermal Behavior of Syndiotactic Polystyrene/1,2-Dichloroethane Gels and Stoichiometry of
Polymer-Solvent Compounds.
Soft Materials **2004**, 2, 47-56.

- A174) P. Rizzo, S. Della Guardia, G. Guerra
Perpendicular Chain Axis Orientation in s-PS Films: Achievement by Guest-Induced Clathrate Formation and Maintenance after Transitions toward Helical and Trans-Planar Polymorphic Forms.
Macromolecules **2004**, *37*, 8043-8049.
- A175) P.Arpaia, G.Guerra, G.Mensitieri, R.Schiano Lo Morello
A Chloroform Transducer Based on sPS- δ -Coated Quartz-Crystal Microbalance for Gaseous Environment
IEEE Trans.Instrum.Meas., **2005**, *54*, 31-37.
- A176) G.Cavallo, V.Venditto, L. Annunziata, S. Pragliola, P. Longo, G.Guerra
Thermal crosslinking of ethene copolymers containing 1,2-cyclopropane units
Polymer, **2005**, *46*, 2847–2853.
- A177) A.R.Albunia, R.Graf, G.Guerra, H.W. Spiess
²H NMR Study of Aromatic Guest Dynamics in Clathrate Phases of Syndiotactic Polystyrene
Macromol.Chem. Phys. **2005**, *206*, 715–724.
- A178) G.Milano, G. Guerra, M.Mazzeo, C.Pellecchia, L.Cavallo
(E)-(Z) Selectivity in the Polymerization of 2-Butene Promoted by Ni(II) Brookhart-Type Catalysts
Macromolecules, **2005**, *38*, 2072-2075.
- A179) P.Stegmaier, A.De Girolamo Del Mauro, V.Venditto, G.Guerra
Optical recording materials based on photoisomerization of guest molecules of a polymeric crystalline host phase
Adv.Mater., **2005**, *17*, 1166-1168.
- A180) V. Venditto, G. Milano, A. De Girolamo Del Mauro, G. Guerra, J. Mochizuki, H. Itagaki
Orientation and Microenvironment of Naphthalene Guest in the Host Nanoporous Phase of Syndiotactic Polystyrene
Macromolecules **2005**, *38*, 3696-3702.
- A181) G. Guerra, P. Corradini, L. Cavallo
Molecular Modeling of Stereo- and Regioselectivity of Group 4 Heterocenes in the Polymerization of Propene
Macromolecules, **2005**, *38*, 3973-3976.
- A182) C. Daniel, G. Guerra
Crystalline organization in syndiotactic polystyrene gels and aerogels
Macromol. Symp., **2005**, *222* (*Polymer-Solvent Complexes and Intercalates V*), 247-252.
- A183) C.Daniel, D.Alfano, V.Venditto, S.Cardea, E.Reverchon, D.Larobina, G.Mensitieri, G.Guerra
Aerogels with microporous crystalline host phase
Adv.Mater., **2005**, *17*, 1515-1518.

- A184) P.Musto, P.Rizzo, G.Guerra
Host-Guest Interactions and Crystalline Structure Evolution in Clathrate Phases Formed by Syndiotactic Polystyrene and 1,2-Dichloroethane: A Two-Dimensional FTIR Spectroscopy Investigation
Macromolecules, **2005**, *38*, 6079-6089.
- A185) C.Costabile, G. Guerra, P.Longo, S.Pragliola
Activity and Microstructure Variations with Temperature in Conjugated Diene Polymerizations Catalyzed by CpTiCl₃-MAO
Macromolecules, **2005**, *38*, 6327-6335.
- A186) M.Giordano, Russo, M., A.Cusano, G.Mensitieri, G. Guerra
Syndiotactic polystyrene thin film as sensitive layer for an optoelectronic chemical sensing device. *Sensors and Actuators, B: Chemical*, **2005**, *109*, 177-184.
- A187) V.Petraccone, O.Tarallo, V.Venditto, G.Guerra
An Intercalate Molecular Complex of Syndiotactic Polystyrene.
Macromolecules, **2005**, *38*, 6965-6971.
- A188) P.Pilla, A.Iadicicco, L.Contessa, S.Campopiano, A.Cutolo, M.Giordano, G.Guerra, A.Cusano
Optical chemo-sensor based on long period gratings coated with δ form syndiotactic polystyrene.
IEEE Photonics Technology Letters **2005**, *17*, 1713-1715.
- A189) A.R. Alburnia, G. Milano, V. Venditto, G. Guerra
A Clear-Cut Experimental Method to Discriminate between In-Plane and Out-of-Plane Molecular Transition Moments.
J. Am. Chem. Soc. **2005**, *127*, 13114-13115.
- A190) P.Rizzo. A.R.Alburnia, G.Guerra
Polymorphism of syndiotactic polystyrene: γ phase crystallization induced by bulky non-guest solvents
Polymer **2005**, *46*, 9549-9554.
- A191) P. Rizzo, A. Spatola, A. De Girolamo Del Mauro, G. Guerra
Polymeric Films with Three Different Uniplanar Crystalline Phase Orientations
Macromolecules **2005**, *38*, 10089-10094.
- A192) C. D'Aniello, P. Rizzo, G.Guerra
Polymorphism and mechanical properties of syndiotactic polystyrene films
Polymer **2005**, *46*, 11435-11441.
- A193) A. Cusano, P. Pilla, L. Contessa, A. Iadicicco, S. Campopiano, A. Cutolo, M. Giordano, G. Guerra
High-sensitivity optical chemosensor based on coated long-period gratings for sub-ppm chemical detection in water. *Appl.Phys.Lett.* **2005**, *87*, 234105/1-234105/3.

- A194) A.R. Alburnia, P. Musto, G. Guerra
FTIR spectra of pure helical crystalline phases of syndiotactic polystyrene
Polymer **2006**, *47*, 234-242.
- A195) A. R. Alburnia, A. Grassi, G. Milano, P. Rizzo, V. Venditto, P. Musto, G. Guerra
Oriented Nanoporous Host δ Phases of Syndiotactic Polystyrene as a Tool for Spectroscopic Investigation of Guest Molecules
Macromol. Symp. **2006**, *234*, 102–110.
- A196) S. Pragliola, C. Costabile, M. Napoli, G. Guerra, P. Longo
rac-[CH₂(3-tert-butyl-1-indenyl)₂]ZrCl₂/MAO in the Copolymerization of Olefins and Dienes
Macromol. Symp. **2006**, *234*, 128–138.
- A197) G. Cavallo, V. Venditto, S. Pragliola, P. Longo, G. Guerra
Infrared spectra and thermal reactivity of ethene copolymers containing 1,2-cyclopropane units
Polymer **2006**, *47*, 2274–2279.
- A198) O. Tarallo, V. Petraccone, V. Venditto, G. Guerra
Crystalline structures of intercalate molecular complexes of syndiotactic polystyrene with two fluorescent guests: 1,3,5-trimethyl-benzene and 1,4-dimethyl-naphthalene.
Polymer **2006**, *47*, 2402-2410.
- A199) A. Cusano, A. Iadicicco, P. Pilla, L. Contessa, S. Campopiano, A. Cutolo, M. Giordano, G. Guerra
Coated long-period fiber gratings as high-sensitivity optochemical sensors
J. Lightwave Tech. **2006**, *24*, 1776-1786.
- A200) V. Venditto, A. De Girolamo Del Mauro, G. Mensitieri, G. Milano, P. Musto, P. Rizzo, G. Guerra
Anisotropic Guest Diffusion in the δ Crystalline Host Phase of Syndiotactic Polystyrene: Transport Kinetics in Films with Three Different Uniplanar Orientations of the Host Phase
Chem. Mater. **2006**, *18*, 2205-2210.
- A201) C. Daniel, A. Avallone, P. Rizzo, G. Guerra
Control of Crystal Size and Orientation in Polymer Films by Host-Guest Interactions
Macromolecules **2006**, *39*, 4820-4823.
- A202) C. Daniel, A. Avallone, G. Guerra
Syndiotactic Polystyrene Physical Gels: Guest Influence on Structural Order in Molecular Complex Domains and Gel Transparency
Macromolecules **2006**, *39*, 7578-7582.
- A203) L. Annunziata, A.R. Alburnia, V. Venditto, G. Mensitieri, G. Guerra
Polymer/Gas Clathrates for Gas Storage and Controlled Release
Macromolecules **2006**, *39*, 9166-9170.

- A204) N.Galdi, A.R.Albunia, L.Oliva, G.Guerra
Selective Molecular-Complex Phase Formation of Syndiotactic Polystyrene with a Styrene Dimer
Macromolecules **2006**, *39*, 9171-9176.
- A205) C.D'Aniello, P.Musto, V.Venditto, G.Guerra
Photoisomerization patterns based on molecular complex phases of syndiotactic polystyrene
J.Mater.Chem. **2007**, *17*, 531-535.
- A206) Galimberti, Maurizio; Lostritto, Angela; Spatola, Anna; Guerra, Gaetano
Clay Delamination in Hydrocarbon Rubbers.
Chem. Mater. **2007**, *19*, 2495-2499.
- A207) Albunia, Alexandra R.; Rizzo, Paola; Guerra, Gaetano; Torres, F. Javier; Civalleri, Bartolomeo; Zicovich-Wilson, Claudio M.
Uniplanar Orientations as a Tool To Assign Vibrational Modes of Polymer Chain.
Macromolecules **2007**, *40*, 3895-3897.
- A208) Torres, F. Javier; Civalleri, Bartolomeo; Pisani, Cesare; Musto, Pellegrino; Albunia, Alexandra R.; Guerra, Gaetano.
Normal Vibrational Analysis of a trans-Planar Syndiotactic Polystyrene Chain.
Journal of Physical Chemistry B (2007), *111*, 6327-6335.
- A209) Daniel, Christophe; Galdi, Nunzia; Montefusco, Tommaso; Guerra, Gaetano.
Syndiotactic Polystyrene Clathrates with Polar Guest Molecules.
Chemistry of Materials (2007), *19*, 3302-3308.
- A210) Rizzo, Paola; Daniel, Christophe; De Girolamo Del Mauro, Anna; Guerra, Gaetano.
New Host Polymeric Framework and Related Polar Guest Cocrystals.
Chemistry of Materials (2007), *19*, 3864-3866.
- A211) Buono, Anna Maria; Immediata, Ivano; Rizzo, Paola; Guerra, Gaetano.
Detection and Memory of Nonracemic Molecules by a Racemic Host Polymer Film.
Journal of the American Chemical Society (2007), *129*, 10992-10993.
- A212) De Girolamo Del Mauro, Anna; Carotenuto, Maurizio; Venditto, Vincenzo; Petraccone, Vittorio; Scoponi, Marco; Guerra, Gaetano. **Fluorescence of Syndiotactic Polystyrene /Trimethylbenzene Clathrate and Intercalate Co-Crystals.**
Chemistry of Materials (2007), *19*, 6041-6046.
- A213) Rizzo, Paola; D'Aniello, Concetta; De Girolamo Del Mauro, Anna; Guerra, Gaetano.
Thermal Transitions of ϵ Crystalline Phases of Syndiotactic Polystyrene.
Macromolecules (2007), *40*, 9470-9474.
- A214) Mensitieri, Giuseppe; Larobina, Domenico; Guerra, Gaetano; Venditto, Vincenzo; Fermeglia, Maurizio; Pricl, Sabrina. **Chloroform sorption in nanoporous crystalline and amorphous phases of syndiotactic polystyrene.**

Journal of Polymer Science, Part B: Polymer Physics (2008), 46, 8-15.

A215) Daniel, Christophe; Sannino, Diana; Guerra, Gaetano. **Syndiotactic Polystyrene Aerogels: Adsorption in Amorphous Pores and Absorption in Crystalline Nanocavities.**
Chemistry of Materials (2008), 20, 577-582.

A216) Guadagno, Liberata; Raimondo, Marialuigia; Silvestre, Clara; Immediata, Ivano; Rizzo, Paola; Guerra, Gaetano. **Processing, thermal stability and morphology of chiral sensing syndiotactic polystyrene films.**
Journal of Materials Chemistry (2008), 18, 567-572.

A217) Albulia, Alexandra R.; Minucci, Tiziana; Guerra, Gaetano. **Ethylene removal by sorption from polymeric crystalline frameworks**
Journal of Materials Chemistry (2008), 18, 1046-1050.

A218) Albulia, Alexandra R.; Annunziata, Loredana; Guerra, Gaetano.
Guest-Induced Syndiotactic Polystyrene Cocrystal Formation from γ and α Phases.
Macromolecules (2008), 41, 2683-2688.

A219) Petraccone, Vittorio; Ruiz de Ballesteros, Odda; Tarallo, Oreste; Rizzo, Paola; Guerra, Gaetano.
Nanoporous Polymer Crystals with Cavities and Channels.
Chemistry of Materials (2008), 20, 3663-3668.

A220) Albulia, Alexandra R.; Rizzo, Paola; Tarallo, Oreste; Petraccone, Vittorio; Guerra, Gaetano.
Layers of Close-Packed Alternated Enantiomorphous Helices and the Three Different Uniplanar Orientations of Syndiotactic Polystyrene.
Macromolecules (2008), 41, 8632-8642.

A221) Itagaki, Hideyuki; Sago, Tomohiro; Uematsu, Miho; Yoshioka, Genki; Correa, Andrea; Venditto, Vincenzo; Guerra, Gaetano. **Guest Orientation in Uniplanar-Axial Polymer Host Films and in Co-Crystal Unit-Cell, Determined by Angular Distributions of Polarized Guest Fluorescence.**
Macromolecules (2008), 41, 9156-9164.

A222) Daniel, Christophe; Giudice, Simona; Guerra, Gaetano. **Influence of supercritical carbon dioxide extraction temperature on the crystalline structure and the morphology of syndiotactic polystyrene aerogels.**
Macromolecular Symposia (2008), 273(Polymer-Solvent Complexes and Intercalates), 135-138.

A223) Milano, Giuseppe; Guerra, Gaetano. **Understanding at molecular level of nanoporous and co-crystalline materials based on syndiotactic polystyrene.**
Progress in Materials Science (2009), 54, 68-88.

A224) Galimberti, Maurizio; Senatore, Stanislao; Conzatti, Lucia; Costa, Giovanna; Giuliano, Gaetano; Guerra, Gaetano. **Formation of clay intercalates with organic bilayers in hydrocarbon polymers.**
Polymers for Advanced Technologies (2009), 20, 135-142.

- A 225) Daniel, Christophe; Giudice, Simona; Guerra, Gaetano. **Syndiotactic Polystyrene Aerogels with β , γ and ϵ Crystalline Phases.**
Chemistry of Materials (2009), 21, 1028-1034.
- A226) Galdi, Nunzia; Alburnia, Alexandra R.; Oliva, Leone; Guerra, Gaetano. **Polymorphism of syndiotactic poly(p-fluoro-styrene).**
Polymer (2009), 50, 1901-1907.
- A227) Torres, F. Javier; Civalleri, Bartolomeo; Meyer, Alessio; Musto, Pellegrino; Alburnia, Alexandra R.; Rizzo, Paola; Guerra, Gaetano. **Normal Vibrational Analysis of the Syndiotactic Polystyrene s(2/1)2 Helix.**
Journal of Physical Chemistry B (2009), 113, 5059-5071.
- A228) Galimberti, Maurizio; Senatore, Stanislao; Lostritto, Angela; Giannini, Luca; Conzatti, Lucia; Costa, Giovanna; Guerra, Gaetano. **Reinforcement of diene elastomers by organically modified layered silicates.**
e-Polymers (2009) no.057.
- A229) Borriello, Anna; Agoretti, Pasquale; Ambrosio, Luigi; Fasano, Gianluca; Pellegrino, Marina; Venditto, Vincenzo; Guerra, Gaetano. **Syndiotactic Polystyrene Films with Sulfonated Amorphous Phase and Nanoporous Crystalline Phase.**
Chemistry of Materials (2009), 21, 3191-3196.
- A230) Alburnia, Alexandra R.; Rizzo, Paola; Guerra, Gaetano. **Polymeric Films with Three Different Orientations of Crystalline-Phase Empty Channels.**
Chemistry of Materials (2009), 21, 3370-3375.
- A231) Alburnia, Alexandra R.; Graf, Robert; Grassi, Alfonso; Guerra, Gaetano; Spiess, Hans W. **Geometry of Complex Molecular Motions of Guest Molecules in Polymers from Solid State 2H NMR.**
Macromolecules (2009), 42, 4929-4931.
- A232) Napoli, Mariagrazia; Daniel, Christophe; Immediata, Ivano; Longo, Pasquale; Guerra, Gaetano. **Nanoporous Crystalline and Cross-Linked Polymeric Materials.**
Macromolecules (2009), 42, 5566-5571.
- A233) Alburnia, Alexandra R.; D'Aniello, Concetta; Guerra, Gaetano; Gatteschi, Dante; Mannini, Matteo; Sorace, Lorenzo. **Ordering Magnetic Molecules within Nanoporous Crystalline Polymers.**
Chemistry of Materials (2009), 21, 4750-4752.
- A234) Tarallo, Oreste; Petraccone, Vittorio; Daniel, Christophe; Guerra, Gaetano. **Dipolar guest orientation in polymer co-crystals and macroscopic films.**
CrystEngComm (2009), 11, 2381-2390.

- A235) Pilla, Pierluigi; Cusano, Andrea; Cutolo, Antonello; Giordano, Michele; Mensitieri, Giuseppe; Rizzo, Paola; Sanguigno, Luigi; Venditto, Vincenzo; Guerra, Gaetano. **Molecular sensing by nanoporous crystalline polymers.** *Sensors* (2009), 9, 9816-9857.
- A236) Daniel, Christophe; Albulia, Alexandra R.; D'Aniello, Concetta; Rizzo, Paola; Venditto, Vincenzo; Guerra, Gaetano **Polymer co-crystalline films for photonics.** *Journal of the European Optical Society-Rapid Publications* (2009), 4 Article Number: **09037**
- A237) Rizzo, Paola; Albulia, Alexandra R.; Guerra, Gaetano. **Negatively Birefringent Polymer Films.** *Macromolecular Chemistry and Physics* (2009), 210, 2148-2152.
- A238) Tarallo, Oreste; Schiavone, Maria Maddalena; Petraccone, Vittorio; Daniel, Christophe; Rizzo, Paola; Guerra, Gaetano. **Channel Clathrate of Syndiotactic Polystyrene with p-nitroaniline.** *Macromolecules* (2010), 43, 1455-1466.
- A239) Rizzo, Paola; Daniel, Christophe; Guerra, Gaetano. **Chiro-optical Materials Based on a Racemic Polymer.** *Macromolecules* (2010), 43, 1882-1887.
- A240) Figueroa-Gerstenmaier, Susana; Daniel, Christophe; Milano, Giuseppe; Guerra, Gaetano; Zavorotynska, Olena; Vitillo, Jenny G.; Zecchina, Adriano; Spoto, Giuseppe. **Storage of hydrogen as a guest of a nanoporous polymeric crystalline phase.** *Physical Chemistry Chemical Physics* (2010), 12, 5369-5374.
- A241) Galimberti, Maurizio; Giudice, Simona; Cipolletti, Valeria; Guerra, Gaetano. **Control of organoclay structure in hydrocarbon polymers.** *Polymers for Advanced Technologies* (2010), 21, 679-684.
- A242) Daniel, C.; Montefusco, T.; Rizzo, P.; Musto, P.; Guerra, G.. **Crystallization from the amorphous form of the nanoporous epsilon form of syndiotactic polystyrene.** *Polymer* (2010), 51, 4599-4605.
- A243) Tarallo, Oreste; Petraccone, Vittorio; Albulia, Alexandra R.; Daniel, Christophe; Guerra, Gaetano. **Monoclinic and Triclinic δ -Clathrates of Syndiotactic Polystyrene.** *Macromolecules* (2010), 43, 8549-8558.
- A244) Figueroa-Gerstenmaier, Susana; Daniel, Christophe; Milano, Giuseppe; Vitillo, Jenny G.; Zavorotynska, Olena; Spoto, Giuseppe; Guerra, Gaetano. **Hydrogen Adsorption by δ and ϵ Crystalline Phases of Syndiotactic Polystyrene Aerogels.** *Macromolecules* (2010), 43, 8594-8601.
- A245) Rizzo, Paola; Beltrani, Michela; Guerra, Gaetano. **Induced vibrational circular dichroism and polymorphism of syndiotactic polystyrene.** *Chirality* (2010), 22, E67-E73.

- A246) Albulnia, Alexandra R.; D'Aniello, Concetta; Guerra, Gaetano. **Three different co-crystalline phases of syndiotactic polystyrene with a nitroxide radical.**
CrystEngComm (2010), 12, 3942-3949.
- A247) D'Aniello, Concetta; Dondi, Daniele; Faucitano, Antonio; Guerra, Gaetano. **Intercalate Co-Crystals of Syndiotactic Polystyrene with Benzyl methacrylate and Radiation-Induced Guest Polymerization.**
Macromolecules (2010), 43, 10560-10567.
- A248) Napoli, Mariagrazia; De Vita, Rosanna; Immediata, Ivano; Longo, Pasquale; Guerra, Gaetano. **Polyethylene waxes by metallocenes.**
Polymers for Advanced Technologies (2011), 22, 458-462.
- A249) Daniel, Christophe; Vitillo, Jenny G.; Fasano, Gianluca; Guerra, Gaetano. **Aerogels and Polymorphism of Isotactic Poly(4-methyl-pentene-1).**
ACS Applied Materials & Interfaces (2011), 3, 969-977.
- A250) Gianluca, Fasano; Califano, Rosa; Pellegrino, Marina; Venditto, Vincenzo; Guerra, Gaetano; Borriello, Anna; Ambrosio, Luigi; Sansone, Lucia. **Semicrystalline proton-conductive membranes with sulfonated amorphous phases.**
International Journal of Hydrogen Energy (2011), 36, 8038-8044.
- A251) Rizzo, Paola; Montefusco, Tommaso; Guerra, Gaetano. **Chiral Optical Films Based on Achiral Chromophore Guests.**
Journal of the American Chemical Society (2011), 133, 9872-9877.
- A252) Albulnia, Alexandra R.; Rizzo, Paola; Guerra, Gaetano. **Two Different Uniplanar-Axial Orientations of Syndiotactic Polystyrene Films.**
Macromolecules (2011), 44, 5671-5681.
- A253) Daniel, Christophe; Longo, Simona; Fasano, Gianluca; Vitillo, Jenny G.; Guerra, Gaetano. **Nanoporous Crystalline Phases of Poly(2,6-Dimethyl-1,4-phenylene)oxide.**
Chemistry of Materials (2011), 23, 3195-3200.
- A254) Daniel, Christophe; Rufolo, Claudia; Bobba, Fabrizio; Scarfato, Alessandro; Cucolo, Anna Maria; Guerra, Gaetano **Ferroelectric co-crystalline polymers.**
Journal of Materials Chemistry (2011), 21, 19074-19079.
- A255) Gaetano, Guerra; Daniel, Christophe; Rizzo, Paola; Tarallo, Oreste. **Advanced materials based on polymer cocrystalline forms.**
Journal of Polymer Science, Part B: Polymer Physics (2012) 50, 305-322.

A256) Galizia, Michele; Daniel, Christophe; Fasano, Gianluca; Guerra, Gaetano; Mensitieri, Giuseppe. **Gas Sorption and Diffusion in Amorphous and Semicrystalline Nanoporous Poly(2,6-dimethyl-1,4-phenylene)oxide.**

Macromolecules (2012), 45, 3604-3615.

A257) Albunia, Alexandra R.; Rizzo, Paola; Coppola, Maria; De Pascale, Martina; Guerra, Gaetano **Azobenzene isomerization in polymer co-crystalline phases.**

Polymer (2012), 53, 2727-2735.

A258) Tarallo, Oreste; Petraccone, Vittorio; Daniel, Christophe; Fasano, Gianluca; Rizzo, Paola; Guerra, Gaetano. **A chiral co-crystalline form of poly(2,6-dimethyl-1,4-phenylene)oxide (PPO).**

Journal of Materials Chemistry (2012) 22, 11672-11680.

A259) Albunia, Alexandra R.; Venditto, Vincenzo; Guerra, Gaetano. **Infrared linear dichroism as a tool to evaluate volatile guest partition between amorphous and nanoporous-crystalline polymer phases.**

Journal of Polymer Science, Part B: Polymer Physics (2012), 50, 1474-1479.

A260) Mauro, Marco; Cipolletti, Valeria; Galimberti, Maurizio; Longo, Pasquale; Guerra, Gaetano **Chemically Reduced Graphite Oxide with Improved Shape Anisotropy**

Journal of Physical Chemistry C (2012), 116(46), 24809-24813.

A261) Daniel, Christophe; Longo, Simona; Cardea, Stefano; Vitillo, Jenny G.; Guerra, Gaetano **Monolithic nanoporous-crystalline aerogels based on PPO**

RSC Advances (2012), 2(31), 12011-12018.

A262) Dembna, Agata; Venditto, Vincenzo; Albunia, Alexandra R.; Califano, Rosa; Guerra, Gaetano **Sulfonated syndiotactic polystyrene: sorption of ionic liquid in the amorphous phase and of organic guests in the crystalline phase.**

Polymers for Advanced Technologies (2013), 24(1), 56-61.

A263) Rizzo, Paola; Albunia, Alexandra R.; Guerra, Gaetano **Syndiotactic Polystyrene Films with Different Uniplanar Orientations: Additional Information on Crystal Phase Transitions.**

Macromolecular Chemistry and Physics (2013), 214(1), 41-45.

A264) Giannini, Luca; Lostritto, Angela; Cipolletti, Valeria; Mauro, Marco; Pasquale, Longo; Guerra, Gaetano. **Layered double hydroxides with low Al content and new intercalate structures**

Applied Clay Science (2013), 71, 27-31.

A265) Daniel, Christophe; Zhovner, Daria; Guerra, Gaetano **Thermal Stability of Nanoporous Crystalline and Amorphous Phases of Poly(2,6-dimethyl-1,4-phenylene) Oxide**

Macromolecules (2013), 46(2), 449-454.

- A266) Alburnia, Alexandra R.; Rizzo, Paola; Guerra, Gaetano
Control of guest transport in polymer films by structure and orientation of nanoporous-crystalline phases
Polymer (2013), 54(6), 1671-1678.
- A267) Rizzo, Paola; Ianniello, Graziella; Longo, Simona; Guerra, Gaetano
Uniplanar Orientations and Guest Exchange in PPO Cocrystalline Films
Macromolecules (2013), 46(10), 3995-4001.
- A268) Longo, Simona; Vitillo, Jenny G.; Daniel, Christophe; Guerra, Gaetano
Monolithic Aerogels Based on Poly(2,6-diphenyl-1,4-phenylene oxide) and Syndiotactic Polystyrene
ACS Applied Materials & Interfaces (2013), 5(12), 5493-5499.
- A269) Mauro, Marco; Maggio, Mario; Cipolletti, Valeria; Galimberti, Maurizio; Longo, Pasquale; Guerra, Gaetano
Graphite oxide intercalation compounds with rotator hexagonal order in the intercalated layers
Carbon (2013), 61, 395-403.
- A270) Galizia, Michele; Daniel, Christophe; Guerra, Gaetano; Mensitieri, Giuseppe
Solubility and diffusivity of low molecular weight compounds in semi-crystalline poly-(2,6-dimethyl-1,4-phenylene)oxide: The role of the crystalline phase
Journal of Membrane Science (2013), 443, 100-106.
- A271) Daniel, Christophe; Longo, Simona; Ricciardi, Rosa; Reverchon, Ernesto; Guerra, Gaetano
Monolithic Nanoporous Crystalline Aerogels
Macromolecular Rapid Communications (2013), 34, 1194-1207.
- A272) Annunziata, Liana; Monasse, Bernard; Rizzo, Paola; **Guerra, Gaetano**; Duc, Michel; Carpentier, Jean-Francois
On the crystallization behavior of syndiotactic-b-atactic polystyrene stereodiblock copolymers, atactic/syndiotactic polystyrene blends, and aPS/sPS blends modified with sPS-b-aPS
Materials Chemistry and Physics (2013), 141, 891-902.
- A273) Guerra, Gaetano; Rizzo, Paola
Racemic synthetic polymers and chirality
Rendiconti Lincei (2013), 24, 217-226.
- A274) Longo, S.; Mauro, M.; Daniel, C.; Galimberti, M.; Guerra, G.
Clay exfoliation and polymer/clay aerogels by supercritical carbon dioxide
Frontiers in Chemistry (2013), 1, Article 28; doi: 10.3389/fchem.2013.00028
- A275) Rizzo, Paola; Ianniello, Graziella; Alburnia, Alexandra R.; Acocella, Maria Rosaria; Guerra, Gaetano
Disordered Nanoporous Crystalline Modifications of Syndiotactic Polystyrene
Journal of Solution Chemistry (2014), 43(1), 158-171.

A276) Cipolletti, Valeria; Galimberti, Maurizio; Mauro, Marco; Guerra, Gaetano
Organoclays with hexagonal rotator order for the paraffinic chains of the compensating cation. Implications on the structure of clay polymer nanocomposites
Applied Clay Science (2014), 87, 179-188.

A277) Acocella, Maria Rosaria; Mauro, Marco; Falivene, Laura; Cavallo, Luigi; Guerra, Gaetano
Inverting the Diastereoselectivity of the Mukaiyama-Michael Addition with Graphite-Based Catalysts
ACS Catalysis (2014), 4(2), 492-496.

A278) Alexandra R. Albunia, Paola Rizzo, Graziella Ianniello, Claudia Rufolo and Gaetano Guerra
Syndiotactic polystyrene films with a cocrystalline phase including carvacrol guest molecules.
J. Polym. Sci. Part B: Polym. Phys. (2014) 52(9), 657–665.

A279) Paola Rizzo, Eugenia Lepera, Graziella Ianniello, and Gaetano Guerra
Melt-Extruded Films of a Commercial Polymer with Intense Chiral Optical Response of Achiral Guests
Macromolecules (2014), 47 (8), 2616–2624.

A280) Albunia, Alexandra R.; Guerra, Gaetano
Spectroscopic Investigation of Guest-Guest Interactions in the Nanoporous-Crystalline δ and ϵ Forms of Syndiotactic Polystyrene
Journal of Physical Chemistry C (2014), 118(22), 11774-11783.

A281) Vaiano, Vincenzo; Sacco, Olga; Sannino, Diana; Ciambelli, Paolo; Longo, Simona; Venditto, Vincenzo; Guerra, Gaetano
N-doped TiO₂/s-PS aerogels for photocatalytic degradation of organic dyes in wastewater under visible light irradiation
Journal of Chemical Technology and Biotechnology (2014), 89 (8), 1175-1181.

A282) Rizzo, Paola; Lepera, Eugenia; Guerra, Gaetano
Enantiomeric guests with the same signs of chiral optical responses
Chemical Communications (2014), 50(60), 8185-8188.

A283) Longo, Simona; Mauro, Marco; Daniel, Christophe; Musto, Pellegrino; Guerra, Gaetano
Rayleigh scattering by graphene-oxide in syndiotactic polystyrene aerogels
Carbon (2014), 77, 896-905.

A284) Galimberti, Maurizio; Coombs, Michele; Cipolletti, Valeria; Spatola, Anna; Guerra, Gaetano; Lostritto, Angela; Giannini, Luca; Pandini, Stefano; Ricco, Theonis
Delaminated and intercalated organically modified montmorillonite in poly(1,4-cis-isoprene) matrix. Indications of counterintuitive dynamic-mechanical behavior
Applied Clay Science (2014), 97-98, 8-16.

A285) Mauro, Marco; Acocella, Maria Rosaria; Esposito Corcione, Carola; Maffezzoli, Alfonso; Guerra, Gaetano

Catalytic activity of graphite-based nanofillers on cure reaction of epoxy resins

Polymer (2014), 55, 5612-5615.

A286) Acocella, Maria Rosaria; Mauro, Marco; Guerra, Gaetano

Regio- and Enantioselective Friedel-Crafts Reactions of Indoles to Epoxides Catalyzed by Graphene Oxide: A Green Approach

ChemSusChem (2014), 7(12), 3279-3283.

A287) Galimberti, Maurizio; Cipolletti, Valeria; Musto, Sara; Cioppa, Serena; Peli, Giulia; Mauro, Marco; Gaetano, Guerra; Agnelli, Silvia; Theonis, Ricco; Kumar, Vineet

Recent advancements in rubber nanocomposites

Rubber Chemistry and Technology (2014), 87(3), 417-442.

A288) Daniel, Christophe; Longo, Simona; Guerra, Gaetano

High porosity polyethylene aerogels

Polyolefins Journal (2015), 2(1), 49-55.

A289) Galimberti, Maurizio; Coombs, Michele; Pandini, Stefano; Ricco, Theonis; Cipolletti, Valeria; Conzatti, Lucia; Guerra, Gaetano

Delamination of organically modified montmorillonite for reducing the filler networking with carbon black in poly(1,4-cis-isoprene) based nanocomposites

Applied Clay Science (2015), 104, 8-17.

A290) Venditto, Vincenzo; Pellegrino, Marina; Califano, Rosa; Guerra, Gaetano; Daniel, Christophe; Ambrosio, Luigi; Borriello, Anna

Monolithic Polymeric Aerogels with VOCs Sorbent Nanoporous Crystalline and Water Sorbent Amorphous Phases

ACS Applied Materials & Interfaces (2015), 7(2), 1318-1326.

A291) D'Aniello, Concetta; Daniel, Christophe; Guerra, Gaetano

ϵ Form Gels and Aerogels of Syndiotactic Polystyrene

Macromolecules (2015), 48(4), 1187-1193.

A292) Mauro, Marco; Maggio, Mario; Antonelli, Angela; Acocella, Maria Rosaria; Guerra, Gaetano

Intercalation and Exfoliation Compounds of Graphite Oxide with Quaternary Phosphonium Ions

Chemistry of Materials (2015), 27(5), 1590-1596.

A293) Acocella, Maria Rosaria; Rizzo, Paola; Daniel, Christophe; Tarallo, Oreste; Guerra, Gaetano

Nanoporous triclinic δ modification of syndiotactic polystyrene

Polymer (2015), 63, 230-236.

A294) Rella, Simona; Giuri, Antonella; Corcione, Carola Esposito; Acocella, Maria Rosaria; Colella, Silvia; Guerra, Gaetano; Listorti, Andrea; Rizzo, Aurora; Malitesta, Cosimino

X-ray photoelectron spectroscopy of reduced graphene oxide prepared by a novel green method

Vacuum (2015), 119, 159-162

B) Brevetti industriali

- B1) G.Guerra, U.Mandara, A.Moschetti
Processo di fabbricazione di manufatti conduttori di luce. Brev.It. n. 23947/82 (27/10/82)
Light-guiding articles. Eur.Pat. n. 109586.A2 (30/5/84); U.S.A. Pat. n.4581252 (8/4/86)
- B2) P.Corradini, C.De Rosa, G.Guerra, L.Nicolais, V.Petraccone, G.Attalla
Manufatti a base di polipropilene isotattico a struttura altamente orientata.
Brev.It. n. 22885/86 (30/12/86)
Laminates of highly oriented isotactic polypropylene.
Eur.Pat. n. 273459.A2 (30/12/87); U.S.A. Pat. n. 4931325 (5/6/90)
- B3) G.Guerra, V.M.Vitagliano, P.Corradini, E.Albizzati
Manufatti in una nuova forma cristallina del polistirene sindiotattico. Brev. It. n. 19588/89 (28/2/89)
Articles of syndiotactic styrene polymers having a new crystalline phase
Eur.Pat. n. EP0387608 (3/4/90); U.S. Pat. n.5183853 (2/2/93)
- B4) G.Guerra, P.Corradini, C.De Rosa, M.Iuliano, L.Oliva, V.Petraccone
Manufatti semicristallini a base di poli(p-metil-stirene) sindiotattico.
Brev.It. n. 2102/91 (29/7/1991)
Semicrystalline manufactured articles made of syndiotactic poly(p-methylstyrene).
PCT Int. Appl. WO 9303211 (18/2/93)
- B5) G.Guerra, C.Manfredi, M.Rapacciuolo, P.Corradini, G.Mensitieri, M.A.Del Nobile
Manufatti in una nuova modificazione cristallina del polistirene sindiotattico in grado
di formare clatrati con solventi e procedimenti per detti
Brev.It. n. IT1228915 (RM94A00030, 21/1/94)
- B6) G.Guerra, E.Reverchon, V.Venditto
Processo per l'ottenimento di materiali polimerici semicristallini nanoporosi a base di polistirene
sindiotattico in forma completamente vuota mediante l'uso di anidride carbonica liquida o
supercritica.
Brev.It. n. IT1306004 (SA98A8 del 16/6/98)
- B7) L.Oliva, G.Guerra, L.Caporaso, L.Izzo, L.Resconi
Copolimeri a base di propilene contenenti unità stireni che. Brev. It. n. SA99A5;
Isotactic polypropylene-based copolymers containing styrene units.
Int. Publ. n. WO 00/47643 (2000) ; U.S.Pat. 6.617.410
- B8) L.Izzo, G.Guerra, L.Oliva, L.Caporaso, F.De Riccardis
Polietilene a bassa densità con elevata resistenza alla degradazione
Brev.It. n. SA00A14
- B9) G.Guerra, V.Venditto, G.Mensitieri
Film a base di polistirene sindiotattico in forma cristallina nanoporosa quali elementi sensibili
Per la rilevazione di inquinanti organici. Brev. It. N.SA00A23 (29/12/00)

Method for the detection of organic pollutants using syndiotactic polystyrene polymers as sensing elements. Eur.Pat. Appl. 01830779.3; U.S.Pat.Appl. 2002/0073764

B10) P.Longo, S.Pragliola, G.Guerra

Copolimeri a base di etilene contenenti anelli ciclopropanici nella catena principale

Dom.Brev. It. N.SA01A16 (5/6/01); Brev.It. 1331010

Olefin copolymers containing cyclopropane rings in the main chain

PCT WO 02/098936 A1; Eur.Pat.1392742 ; USA Pat.7022771

B11) L.Oliva, G.Guerra, L.Caporaso, L. Izzo

Processo catalitico per la copolimerizzazione a blocchi di monomeri stirenici e monomeri olefinici e copolimeri a blocchi polistirene isotattico- poliolefine.

Dom.Brev. It. N.SA01A22 (7/8/01); Brev.It. 1331012

B12) G.Guerra, E.Reverchon, C.Daniel, V.Venditto, G.Mensitieri

Manufatti microporosi e nanoporosi a base di polistirene sindiotattico e processi per il loro ottenimento. Brev.It. N.SA2003A13 (12/7/03)

Nanoporous and microporous manufacts based on syndiotactic polystyrene and processes for their preparation. PCT Int. Appl. (2005), WO 2005012402, EP1646687, US2006/0229373A1

B13) G.Guerra, P.Rizzo, G.Mensitieri, V.Venditto

Film a base di polistirene sindiotattico con nuovi tipi di orientazione preferenziale della fase Cristallina. Brev.It. N.SA2003A14 (12/7/03)

Films based on syndiotactic polystyrene with new kinds of preferential orientation of the crystalline phase. PCT Int. Appl. (2005), WO 2005/012401.

B14) G.Guerra, P.Rizzo, A.Buono

Materiali polimerici solidi utilizzabili per rilevazione, trasferimento, amplificazione e memoria di Chiralità di composti otticamente attivi. Brev.It. N.SA2006A14 (21/3/06)

Solid polymeric materials for detection, transfer, amplification and memory of chirality of optically active compounds. PCT Int. Appl. (2007), WO 2007/107897.

B15) P.Rizzo, C.Daniel, A.De Girolamo Del Mauro, G.Guerra

Nuova forma cristallina nanoporosa del polistirene sindiotattico e forme cristalline a complesso molecolare derivate. Brev.It. N.SA2006A22 (22/8/06)

New nanoporous crystalline form of syndiotactic polystyrene , processes for its preparation and related molecular-complex crystalline forms. PCT Int. Appl. (2008), WO 2008023331 A2

B16) Galimberti, Maurizio; Guerra, Gaetano; Lostritto, Angela.

Crosslinkable elastomeric compositions comprising rubber and layered material for use in making tires. PCT Int. Appl. (2007), 46pp. WO 2007144012 A1

B17) Galimberti, Maurizio; Guerra, Gaetano; Lostritto, Angela; Giannini, Luca.

Tire and crosslinkable elastomeric composition.

PCT Int. Appl. (2008), 62pp. WO 2008009304 A1

B18) Anna Borriello, Luigi Ambrosio, Vincenzo Venditto, Gaetano Guerra.
Manufatti semicristallini a base di polistirene sindiotattico con fase amorfa solfonata e processi per il loro ottenimento. SA2009A000002 (dep. 4.02.2009).

B19) Alexandra Romina Alburnia, Riccardo Bianchi, Luciano Di Maio, Maurizio Galimberti, Gaetano Guerra, Roberto Pantani, Stanislao Senatore
Disordered nanoporous crystalline form of syndiotactic polystyrene, process for its preparation and articles comprising the same
ITMI20102460 (A1) (Dec.30, 2010);
PCTInt.Appl. (2012): WO 2012089805 A1, JP2014504659 (A), EP2658904 (A1), N103384693 (B), US2013280534 (A1).

B20) Paolo Ciambelli, Christophe Daniel, Gaetano Guerra, Simona Longo, Olga Sacco, Diana Sannino, Vincenzo Vaiano, Vincenzo Venditto
Aerogeli polimerici foto catalitici e processi per il loro ottenimento.
IT SA2013 0011 (A1); (Deposito 31 ottobre 2013; Data di Pubblicazione 01 maggio 2015).

C) Capitoli di libri a diffusione internazionale

C1) P.Corradini, G.Guerra, B.Pirozzi

Present status of the configurational and conformational analysis of stereoregular polymers.

In "Advances in Preparation and Properties of Stereoregular Polymers"

(Ed. R.W.Lenz, F.Ciardelli)

D.Reidel Publishing Company, Dordrecht, pp.317-352 (1979)

C2) P.Corradini, G.Guerra, B.Pirozzi

The crystalline structure of addition polymers. Recent research results.

In "Advances in Preparation and Properties of Stereoregular Polymers"

(Ed. R.W.Lenz, F.Ciardelli)

D.Reidel Publishing Company, Dordrecht, pp.387-405 (1979)

C3) C.Migliaresi, G.Guerra, L.Nicodemo, L.Nicolais

Stress-relaxation of glass bead composites.

In "Polymer Blends" (Ed.E.Martuscelli, R.Palumbo, M.Kryszewsky)

Plenum Press, New York, pp.407-420 (1980)

C4) P.Corradini, G.Guerra

Steric control in Ziegler-Natta catalysts : model catalytic sites for isospecific and syndiospecific polymerization.

In "Transition Metal Catalyzed Polymerization : Ziegler-Natta and Metathesis Polymerization".

(Ed. R.P.Quirk) Cambridge University Press, New York, pp.533-550 (1988).

C5) P.Corradini, V.Busico, G.Guerra

Possible models for steric control in the heterogeneous high-yield and homogeneous Ziegler-Natta polymerizations of 1-alkenes.

In "Transition Metals and Organometallics as catalysts for olefin polymerization"

(Ed. W.Kaminsky, H.Sinn) Springer-Verlag, Berlin, pp.337-348 (1988).

C6) P.Corradini, V.Busico, G.Guerra

Monoalkene Polymerization: Stereospecificity.

In "Comprehensive Polymer Science" Volume 4

(Ed. G.C.Eastmond, A.Ledwith, S.Russo, P.Sigwalt)

Pergamon Press, Oxford, pp. 29-50 (1989).

C7) P.Corradini, G.Guerra, L.Cavallo, G.Moscardi, M.Vacatello

Models for the explanation of the stereospecific behavior of Ziegler-Natta catalysts

In "Ziegler Catalysts"

(Ed. G.Fink, R.Mülhaupt, H.H.Brintzinger) Springer-Verlag, Berlin, pp 237-249 (1995).

- C8) G.Guerra
Stereospecificità ed interazioni non-covalenti
In “Recenti Aspetti dei Processi Stereoselettivi”
(Ed. V.Caglioti, P.Corradini, F.Montanari) Accademia Nazionale dei Lincei, Roma,
pp 91-103 (1996)
- C9) P.Corradini, G.Guerra
Ziegler-Natta reactions
In “Macmillan Encyclopedia of Chemistry” (Ed. J.J.Lagowski) Volume 3;
Macmillan Reference USA, Simon & Schuster Macmillan: New York, pp. 1538-1543 (1997).
- C10) P.Corradini, L.Cavallo, G.Guerra
Molecular modeling studies on stereospecificity and regiospecificity of propene polymerisation by metallocenes
In “Metallocene-based Polyolefins”
(Ed. J.Scheirs, W.Kaminsky) Volume 2;
Wiley & Sons Ltd, Chichester, UK , Chapter 1, pp 1-36 (2000).
- C11) L.Cavallo, G.Minieri, P.Corradini, A.Zambelli, G.Guerra
A density functional theory study of the syndiotactic-specific polymerisation of styrene
In “Organometallic Catalysts and Olefin Polymerization. Catalysts for a New Millennium”
(Ed. R.Bloom, A.Follestad, E.Rytter, M.Tilset, M.Ystenes)
Springer, Berlin, pp.299-306 (2001)
- C12) G.Guerra
Impact of Natta’s discoveries on industry and uses of PP in every day’s life
In “Giulo Natta”
(Ed. F.Calderazzo, P.Corradini, F.Minisci) Accademia Nazionale dei Lincei, Roma,
Vol.33, pp 27-36 (2004)
- C13) G. Guerra, A. Alburnia, C. Daniel, G. Milano, P. Rizzo, V. Venditto
Host-Guest Interactions, Guest Dynamics and Morphology in Syndiotactic Polystyrene Nanoporous and Clathrate Crystalline Phases
In “Structure and Dynamics in Macromolecular Systems with Specific Interactions”
(Ed. K.Adachi, T.Sato) Osaka University Press, Osaka, Japan, pp 91-100 (2005).
- C14) G.Milano, C.Daniel, V.Venditto, P.Rizzo, G.Guerra, P.Musto, G.Mensitieri
Thermoplastic molecular sieves; new polymeric materials for molecular packaging
In “New Polymeric Materials” (Ed.L.S.Korugic-Karasz, W.J.MacKnight, R.Martuscelli)
ACS symposium series; 916, American Chemical Society,
Washington, DC, ch.13, pp 171-186 (2005).

- C15) G. Guerra
Polymeric frameworks for molecular packaging.
In: "Corradini Memorial Day".
(Ed. G.Allegra, A.Ballio, H.Brintzinger, S.Califano, S.Carrà, G.Chiusoli, L.Maffei, L.Porri, R.Ugo, G.Volpi, G. Zerbi) Accademia Nazionale dei Lincei, Roma, Vol. 40, pp. 119-135 (2007).
- C16) Galimberti, Maurizio; Guerra, Gaetano.
Influence of tacticity of propylene placement on structure and properties of ethylene/propylene copolymers.
In: "Stereoselective Polymerization with Single-Site Catalysts"
(Ed. Baugh, Lisa S.; Canich, Jo Ann M) CRC Press LLC, Boca Raton, Fla, pp313-341 (2008).
- C17) Guerra, Gaetano; Alburnia, Alexandra Romina; D'Aniello, Concetta.
Preparation, structure, properties, and applications of co-crystals and nanoporous crystalline phases of syndiotactic polystyrene.
In "Syndiotactic Polystyrene"
(Ed. Schellenberg, Juergen.) John Wiley & Sons, Inc., Hoboken, N. J., pp 194-237 (2010).
- C18) Daniel, Christophe; Guerra, Gaetano.
Structure and sorption properties of syndiotactic polystyrene aerogels.
ACS Symposium Series, 1061(Contemporary Science of Polymeric Materials), 131-147 (2010).
- C19) Guerra, Gaetano; Petraccone, Vittorio; Editors.
Co-Crystalline and Nanoporous-Crystalline Polymers.
[In: *Soft Mater.*, 2011; 9(2-3)]. 207 pp. (Prefazione e lavoro editoriale) (2011).