

Peer-reviewed journal articles

1)-Dynamic light scattering study of temperature and pH sensitive colloidal microgels

Nigro V.; Angelini R.; Bertoldo M.; Castelvetro V.; Ruocco G.; Ruzicka B.subjectColloidal dispersionssubjectDynamic light scatteringsubjectMicrogelssubjectRelaxation dynamics
Journal of non-crystalline solids 407 (2015): 361–366.
<https://dx.doi.org/10.1016/j.jnoncrysol.2014.08.039>

2)-Split Quartz Tuning Fork Sensors for Enhanced Sensitivity Force Detection

Labardi M; Lucchesi M
Measurement science & technology (Print) 26 (2015): 035101.
<https://dx.doi.org/10.1088/0957-0233/26/3/035101>

3)-Thermodynamic study of heptane+amine mixtures. V. Excess and solvation Gibbs energies

Lepori L.; Matteoli E.; Gianni P.; Righetti M.C.subjectActivity coefficientsubjectAminessubjectExcess gibbs energysubjectGibbs energy of solvationsubjectGroup contributionsubjectHeptanesubjectVapour-liquid equilibrium
Fluid phase equilibria 387 (2015): 198–208.
<https://dx.doi.org/10.1016/j.fluid.2014.12.017>

4)-Evidences of Transesterification, Chain Branching and Cross-Linking in a Biopolyester Commercial Blend upon Reaction with Dicumyl Peroxide in the Melt

Francesca Signori; Alessia Boggioni; Maria Cristina Righetti; Consuelo Escrig Rondan; Simona Bronco; Francesco CiardellisubjectBiodegradable polyester blendsubjectBiodegradable thermoplasticsubjectECOVIOsubjectReactive blendingsubjectPoly(lactic acid)
Macromolecular materials and engineering (Print) 300 (2015): 153–160.
<https://dx.doi.org/10.1002/mame.201400187>

5)-Applicability of medium-size basis sets in calculations of molecular dynamic polarisabilities

A. Baranowska-Laczowska; B. Fernández; A. Rizzo; F. Pawlowskisubjectproperty-oriented basis set; electric dipole polarisability; CC2subjectCC2subjectCCSD and CC3 model; reduction of computational cost; non-interacting molecules
Molecular physics (Online) 113 (2015): 1786–1793.
<https://dx.doi.org/10.1080/00268976.2015.1014004>

6)-Two-Photon Absorption and Two-Photon Circular Dichroism of Hexahelicene Derivatives: A Study of the Effect of the Nature of Intramolecular Charge Transfer.

C. Díaz; Y. Vesga; L. Echevarria; I. G. Stará; I. Starý; E. Anger; C. Shen; M. El Sayed Moussa; N. Vanthuyne; J. Crassous; A. Rizzo; F. E. HernándezsubjectTPCD
RSC advances 5 (2015): 17429–17437.
<https://dx.doi.org/10.1039/c4ra16732e>

7)-Low frequency noise impact from road traffic according to different noise prediction methods

Ascari E.; Licitra G.; Teti L.; Cerchiai M.subjectAnnoyancesubjectLow frequencysubjectNoise mappingsubjectStandard method comparison

Science of the total environment 505 (2015): 658–669.

<https://dx.doi.org/10.1016/j.scitotenv.2014.10.052>

8)-Performance Assessment of Low-Noise Road Surfaces in the Leopoldo Project: Comparison and Validation of Different Measurement Methods

Gaetano Licitra 1; 2; *; Mauro Cerchiai 3; Luca Teti 2; 4; Elena Ascari 4; 5; Francesco Bianco 4; Marco Chetoni 2

Coatings (Basel) 5 (2015): 3–25.

<https://dx.doi.org/10.3390>

9)-Analogy between homogeneous and heterogeneous catalysis by subnanometer metal clusters: Ethylene oxidation on Ag trimers supported on MgO(1 0 0)

Sementa L.; Barcaro G.; Alessandro Fortunelli A.

Inorganica Chimica Acta (Testo stamp.) (2015).

<https://dx.doi.org/10.1016/j.ica.2014.10.022>

10)-Comment on "(Au-Ag)₁₄₄(SR)₆₀ alloy nanomolecules" by C. Kumara and A. Dass, Nanoscale, 2011, 3, 3064

Barcaro G.; Luca Sementa L.; Fortunelli A.; Stener M.

Nanoscale (Print) (2015).

<https://dx.doi.org/10.1039/C4NR00514G>

11)-ESEEM of industrial silica-bearing powders: reactivity of defects during wet processing in the ceramics production.

Romanelli M. [1]; Di Benedetto F.[1]; Fornaciai G.[2]; Innocenti M.[2]; Montegrossi G.[3]; Pardi L.[4]; Zoleo A.[5]; Capacci F.[6]subjectQuartzsubjecthole centressubjectAl centressubjectEPRsubjectESEEMsubjecthealth effects

Physics and chemistry of minerals 42 (2015): 363–372.

<https://dx.doi.org/10.1007/s00269-014-0726-5>

12)-Unprecedented Comonomer Dependence of the Stereochemistry Control in Pd-Catalyzed CO/Vinyl Arene Polyketone Synthesis

Giovanni Canil; [a] Vera Rosar; [a] Silvia Dalla Marta; [b] Simona Bronco; [c] Francesco Fini; [d] Carla Carfagna; [e] Jrme Durand; *[f]; Barbara Milani*[a]subjectN ligandssubjectpalladiumsubjectpolyketonessubjectpolymerizationsubjectstereochemistry

ChemCatChem (Internet) (2015).

<https://dx.doi.org/10.1002/cctc.20150>

13)-Enthalpy of melting of α' - and α -crystals of poly (L-lactic acid)

Maria Cristina Righetti; Massimo Gazzano; Maria Laura Di Lorenzo; René AndroschsubjectPoly (L-lactic acid); Enthalpy of melting; α' - and α -crystals
European Polymer Journal 70 (2015): 221–220.

<https://dx.doi.org/10.1016/j.eurpolymj.2015.07.024>

14)-Local structure of temperature and pH-sensitive colloidal microgels

Valentina Nigro (1); Roberta Angelini (2); Monica Bertoldo (3); Fabio Bruni (1); Valter Castelvetro (4); Maria Antonietta Ricci (1); Sarah Rogers (5); Barbara Ruzicka (2)subjectMicrogelssubjectpolymer structuresubjectcolloidal systems
The Journal of chemical physics 143 (2015): 114904.

<https://dx.doi.org/10.1063/1.4930885>

15)-Photophysical Processes Occurring in a Zn-phthalocyanine in Ethanol Solution and on TiO₂ Nanostructures

Iagatti, Alessandro; Doria, Sandra; Marcelli, Agnese; Angelini, Nicola; Notarantonio, Sara; Paoletti, Anna Maria; Pennesi, Giovanna; Rossi, Gentilina; Zanotti, Gloria; Calogero, Giuseppe; Foggi, Paolosubjectphotophysic propertiessubjectphthalocyanine
Journal of physical chemistry. C 119 (2015): 20256–20264.

<https://dx.doi.org/10.1021/acs.jpcc.5b04978>

16)-Dynamics of Hyperbranched Polymers under Confinement: A Dielectric Relaxation Study

Androulaki, Krystalenia; Chrissopoulou, Kiriaki; Prevosto, Daniele; Labardi, Massimiliano; Anastasiadis, Spiros H.subjectdynamicssubjectdielectric spectroscopysubjectglass transitionsubjecthyperbranched polymerssubjectintercalationsubjectconfinement
ACS applied materials & interfaces (Print) 7 (2015): 12387–12398.

<https://dx.doi.org/10.1021/am507571y>

17)-Enthalpy and entropy changes during physical ageing of 20% polystyrene - 80% poly(α -methylstyrene) blend and the cooling rate effects

M.C. Righetti; G.P. JoharisubjectAgingsubjectEnthalpy and entropy relaxationsubjectPolymeric Blends

Thermochimica Acta 307 (2015): 19–29.

<https://dx.doi.org/10.1016/j.tca.2015.03.012>

18)-Polycarbonate-based composites reinforced by in situ polytetrafluoroethylene fibrillation: Preparation, thermal and rheological behavior

Antonoli, Diego; Sparnacci, Katia; Laus, Michele; Boarino, Luca; Righetti, Maria Cristinasubjectcompositessubjectrheologysubjectthermal properties

Journal of applied polymer science (Print) 132 (2015): 42401.

<https://dx.doi.org/10.1002/app.42401>

19)-Effect of Interface Interaction on the Segmental Dynamics of Poly(vinylacetate) Investigated by Local Dielectric Spectroscopy

Casalini, R.; Prevosto, D.; Labardi, M.; Roland, C.M.subjectlocal dielectric spectroscopysubjectsegmental dynamicssubjectpolyvinylacetate

ACS macro letters 4 (2015): 1022–1026.

<https://dx.doi.org/10.1021/acsmacrolett.5b00488>

20)-Dropping a Droplet of Cysteine Molecules on a Rutile (110) Interface: Reactive versus Nonreactive Classical Molecular Dynamics Simulations

Monti, Susanna; Li, Cui; Agren, Hans; Carravetta, Vincenzosubjectbiocompatible materialssubjecttitanium dioxidesubjectsurface functionalizationsubjectinterface modelingsubjectcomputational modeling

Journal of physical chemistry. C 119 (2015): 6703–6712.

<https://dx.doi.org/10.1021/acs.jpcc.5b00932>

21)-A Combined Experimental-Computational Investigation to Uncover the Puzzling (Chiro-)optical Response of Pyridocyclophanes: One- and Two-Photon Spectra

Padula, Daniele; Lahoz, Inmaculada R.; Diaz, Carlos; Hernandez, Florencio E.; Di Bari, Lorenzo; Rizzo, Antonio; Santoro, Fabrizio; Cid, M. Magdalenasubjectchiralitysubjectconformation analysissubjectcircular dichroismsubjectdensity functional calculationssubjectquantum chemistry

Chemistry (Weinh., Print) 21 (2015): 12136–12147.

<https://dx.doi.org/10.1002/chem.201500557>

22)-Optical properties of nanoalloys

Barcaro, Giovanni; Sementa, Luca; Fortunelli, Alessandro; Stener, Maurosubjectoptics ; alloy nanoparticles ; time-dependent density-functional theory

PCCP. Physical chemistry chemical physics (Print) 17 (2015): 27952–27967.

<https://dx.doi.org/10.1039/c5cp00498e>

23)-Organosoluble Au-102(SPh)(44) Nanomolecules: Synthesis, Isolation, Compositional Assignment, Core Conversion, Optical Spectroscopy, Electrochemistry, and Theoretical Analysis

Rambukwella, Milan; Sementa, Luca; Barcaro, Giovanni; Fortunelli, Alessandro; Dass, Amalassubjectab initio molecular dynamics simulations ; monolayer protected clusters

Journal of physical chemistry. C 119 (2015): 25077–25084.

<https://dx.doi.org/10.1021/acs.jpcc.5b07520>

24)-Chemical properties of two-dimensional oxide systems: Adsorption of (WO₃)₃ clusters on CuWO₄

Ma, Liying; Denk, Martin; Kuhness, David; Surnev, Svetlozar; Mankad, Venu; Barcaro, Giovanni; Fortunelli, Alessandro; Netzer, Falko P.subjectTwo-dimensional oxidesubjectCu-

tungstatesubjectTungsten trioxidesubjectOxide clustersubjectScanning tunneling
microscopysubjectDensity functional theory
Surface science 640 (2015): 96–103.
<https://dx.doi.org/10.1016/j.susc.2015.03.006>

25)-Transformation of Au-144(SCH₂CH₂Ph)(60) to Au-133(SPh-tBu)(52) Nanomolecules: Theoretical and Experimental Study

Nimmala, Praneeth Reddy; Theivendran, Shevanuja; Barcaro, Giovanni; Sementa, Luca; Kumara, Chanaka; Jupally, Vijay Reddy; Apra, Edoardo; Stener, Mauro; Fortunelli, Alessandro; Dass, Amal subjectAb initio molecular dynamics simulations ; monolayer-protected clusters
The journal of physical chemistry letters 6 (2015): 2134–2139.
<https://dx.doi.org/10.1021/acs.jpcllett.5b00780>

26)-Au-133(SPh-tBu)(52) Nanomolecules: X-ray Crystallography, Optical, Electrochemical, and Theoretical Analysis

Dass, Amala; Theivendran, Shevanuja; Nimmala, Praneeth Reddy; Kumara, Chanaka; Jupally, Vijay Reddy; Fortunelli, Alessandro; Sementa, Luca; Barcaro, Giovanni; Zuo, Xiaobing; Noll, Bruce C. subjectmonolayer protected clusters ; geometric shells
Journal of the American Chemical Society (Print) 137 (2015): 4610–4613.
<https://dx.doi.org/10.1021/ja513152h>

27)-The atomistic origin of the extraordinary oxygen reduction activity of Pt₃Ni₇ fuel cell catalysts

Fortunelli, Alessandro; Goddard, William A., III; Sementa, Luca; Barcaro, Giovanni; Negreiros, Fabio R.; Jaramillo-Botero, Andres subjectoxygen reduction reaction : electrocatalysis ; hydrogen fuel cells
Chemical science (Camb. 2010. Print) 6 (2015): 3915–3925.
<https://dx.doi.org/10.1039/c5sc00840a>

28)-Optimizing the oxygen evolution reaction for electrochemical water oxidation by tuning solvent properties

Fortunelli, Alessandro; Goddard, William A., III; Sementa, Luca; Barcaro, Giovanni subjectoxygen reduction reaction : electrocatalysis ; hydrogen fuel cells ; water splitting
Nanoscale (Print) 7 (2015): 4514–4521.
<https://dx.doi.org/10.1039/c4nr07277d>

29)-Designing ligand-enhanced optical absorption of thiolated gold nanoclusters

Sementa, L.; Barcaro, G.; Dass, A.; Stener, M.; Fortunelli, A. subjectoptical response ; monolayer-protected clusters
Chemical communications (Lond., 1996, Print) 51 (2015): 7935–7938.
<https://dx.doi.org/10.1039/c5cc01951f>

30)-NEXAFS and XPS studies of nitrosyl chloride

Luca Schio a; Cui Li bc; Susanna Monti db; Peter Salén e; Vasyl Yatsyna f; Raimund Feifel f; Michele Alagia g; Robert Richter h; Stefano Falcinelli i; Stefano Stranges jg; Vitali Zhaunerchyk *f; Vincenzo Carravetta csubjectNEXAFS XPS nitrosyl chloride theory experiment computational spectroscopy

PCCP. Physical chemistry chemical physics (Print) 17 (2015): 9040–9048.

<https://dx.doi.org/10.1039/c4cp05896h>

31)-Comment on "(Au-Ag)₁₄₄(SR)₆₀ alloy nanomolecules" by C. Kumara and A. Dass, *Nanoscale*, 2011, 3, 3064

Barcaro, Giovanni; Sementa, Luca; Fortunelli, Alessandro; Stener, Mauro; Stener, Maurosubjectmonolayer protected clusters - optical properties - theoretical modeling

Nanoscale (Print) 7 (2015): 8166–8167.

<https://dx.doi.org/10.1039/c4nr00514g>

32)-Rhodium-Catalyzed Hydroformylation of Ketal-Masked beta-Isophorone: Computational Explanation for the Unexpected Reaction Evolution of the Tertiary Rh-Alkyl via an Exocyclic beta-Elimination Derivative

Alagona, Giuliano; Ghio, CaterinasubjectDensity functional calculations -B3P86/6-31G* - CEP/LanL2DZ - Deuterioformylation - NBO - BHEsubjectRh-catalyzed hydroformylation

The journal of physical chemistry. A 119 (2015): 5117–5133.

<https://dx.doi.org/10.1021/jp508294z>

33)-Reactive silicon infiltration of carbon bonded preforms embedded in powder field modifiers heated by microwaves

Bianchi, Giovanni; Vavassori, Paolo; Vila, Brais; Annino, Giuseppe; Nagliati, Marco; Mallah, Marcel; Gianella, Sandro; Valle, Massimiliano; Orlandi, Marco; Ortona, AlbertosubjectReactive silicon infiltrationsubjectMicrowave heatingsubjectSi-SiC ceramicssubjectCeramic matrix compositessubjectCeramic foams

Ceramics international 41 (2015): 12439–12446.

<https://dx.doi.org/10.1016/j.ceramint.2015.06.087>

34)-Two-Photon Lithography of 3D Nanocomposite Piezoelectric Scaffolds for Cell Stimulation.

Marino, Attilio; Barsotti, Jonathan; de Vito, Giuseppe; Filippeschi, Carlo; Mazzolai, Barbara; Piazza, Vincenzo; Labardi, Massimiliano; Mattoli, Virgilio; Ciofani, Giannisubjecttwo-photon lithographysubjectbarium titanate nanoparticlessubjectdirect laser writingsubjectpiezoelectric stimulationsubjectbone tissue engineering

ACS applied materials & interfaces (Print) 7 (2015): 25574–9.

<https://dx.doi.org/10.1021/acsami.5b08764>

35)-The Irreversible Tetragonal to Trigonal Transformation in Random Butene-1/Ethylene Copolymers

Di Lorenzo, Maria Laura; Androsch, Rene; Righetti, Maria Cristina
subjectRIGID AMORPHOUS FRACTIONsubjectPOLYMORPHIC TRANSFORMATIONsubjectISOTACTIC POLYBUTENE-1subjectPOLY(ETHYLENE-TEREPHTHALATE)subjectCRYSTALLIZATION BEHAVIOR

AIP conference proceedings 1695 (2015).

<https://dx.doi.org/10.1063/1.4937318>

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Other publications (journals without peer review, book reviews, etc.)

1)-Irreversibly Adsorbed Layer in Supported Ultrathin Polymer Film Investigated by Local Dielectric Spectroscopy

Nguyen, H.K.; Prevosto, D.; Labardi, M.; Capaccioli, S.; Lucchesi, M. subjectadsorptionsubjectinterfacessubjectrelaxation dynamicsubjectinterfacial energysubjectultrathin filmsubjectdensity

Non-equilibrium Phenomena in Confined Soft Matter, 2015

[urn:isbn:978-3-319-21948-6](http://www.isbn.org/978-3-319-21948-6)

info:cnr-pdr/source/autori:Nguyen, H.K.; Prevosto, D.; Labardi, M.; Capaccioli, S.; Lucchesi, M./titolo:Irreversibly Adsorbed Layer in Supported Ultrathin Polymer Film Investigated by Local Dielectric Spectroscopy/titolo_volume:Non-equilibrium Phenomena in Confined Soft Matter/curatori_volume:/editore:/anno:2015

2)-Investigation of polymer dynamics in PVB-ATO nanocomposites by NMR relaxometry and dielectric relaxation spectroscopy

Silvia Pizzanelli; Claudia Forte; Simona Bronco; Chiara Serraglini; Tommaso Guazzini; Massimiliano Labardi; Lucia Calucci subjectNanocompositessubjectpolymerssubjectglass transitionsubjectnmrsubjectdielectric spectroscopy

Fast Field Cycling 2015, Aberdeen, 27-30 Luglio 2015

<http://www.cnr.it/prodotto/i/338338>

info:cnr-pdr/source/autori:Silvia Pizzanelli, Claudia Forte, Simona Bronco, Chiara Serraglini, Tommaso Guazzini, Massimiliano Labardi, Lucia Calucci/congresso_nome:Fast Field Cycling 2015/congresso_luogo:Aberdeen/congresso_data:27-30 Luglio 2015/anno:2015/pagina_da:/pagina_a:/intervallo_pagine:

3)-Polymer dynamics in nanocomposites by NMR relaxometry and dielectric relaxation spectroscopy

Silvia Pizzanelli; Lucia Calucci; Claudia Forte; Simona Bronco; Chiara Serraglini; Tommaso Guazzini; Massimiliano

LabardisubjectNMRsubjectnanocompositessubjectrelaxometrysubjectdielectric spectroscopy

Multiscale phenomena in molecular matter, Cracovia, 6-10 Luglio 2015

<http://www.cnr.it/prodotto/i/338304>

info:cnr-pdr/source/autori:Silvia Pizzanelli, Lucia Calucci, Claudia Forte, Simona Bronco, Chiara Serraglini, Tommaso Guazzini, Massimiliano Labardi/congresso_nome:Multiscale phenomena in molecular matter/congresso_luogo:Cracovia/congresso_data:6-10 Luglio 2015/anno:2015/pagina_da:/pagina_a:/intervallo_pagine:

4)-CCDC 993929: Experimental Crystal Structure Determination - X-ray Crystal structure

Dass, Amala; Theivendran, Shevanuja; Nimmala, Praneeth Reddy; Kumara, Chanaka; Jupally, Vijay Reddy; Fortunelli, Alessandro; Sementa, Luca; Barcaro, Giovanni; Zuo, Xiaobing; Noll, Bruce CsubjectCrystal structuressubjectExperimental 3D CoordinatessubjectCrystal SystemssubjectSpace GroupssubjectCell Parameters
2015

<http://www.cnr.it/prodotto/i/370552>

5)-COD ID: 4123543 - X-ray Crystal structure

Dass, Amala; Theivendran, Shevanuja; Nimmala, Praneeth Reddy; Kumara, Chanaka; Jupally, Vijay Reddy; Fortunelli, Alessandro; Sementa, Luca; Barcaro, Giovanni; Zuo, Xiaobing; Noll, Bruce CsubjectX-ray Crystal structure
2015

<http://www.cnr.it/prodotto/i/370553>

6)-Melting behaviour and rigid amorphous fraction in semi-crystalline polymers

M. C. Righetti; M. L. Di LorenzsubjectPolymer meltingsubjectRigid amorphous fraction
Frontiers in Polymer Science, pp. 91, Riva del Garda, 20/05/2015, 22/05/2015

<http://www.cnr.it/prodotto/i/388041>

info:cnr-pdr/source/autori:M. C. Righetti, M. L. Di Lorenzo/congresso_nome:Frontiers in Polymer Science/congresso_luogo:Riva del Garda/congresso_data:20/05/2015, 22/05/2015/anno:2015/pagina_da:91/pagina_a:/intervallo_pagine:91