CURRICULUM VITAE

ALBERTO D'AMORE

ACADEMIC POSITION

Position	Professore Ordinario di Scienza e Tecnologia dei Materiali
SSD	09/D1
Structure	Università degli Studi della Campania "Luigi Vanvitelli" Dipartimento di Ingegneria

COURSES TOUGHT

1) SCIENZA DEI MATERIALI PER LE COSTRUZIONI CIVILI (LAUREA MAGISTRALE IN INGEGNERIA CIVILE)
2) MATERIALI PER L'AEROSPAZIO (LAUREA INGENERIA AROSPAZIALE E MECCANICA INDIRIZZO AEROSPAZIALE)

RESEARCH ACTIVITY

Property-structure-process relationships

In the early years, Prof. D'Amore's research activity was developed in the experimental characterization of polymer-based material systems' chemical-physical and mechanical properties both with commercially available instruments and with home-made equipment. Particular emphasis was given to the study of viscoelastic properties and the modifications of the relative "time scales" undergone by polymer-based materials due to thermal and/or mechanical stresses. Subsequently, the activity was carried out essentially investigating materials with a predominantly structural fate, from techno-polymers (PC, PS, PEI, PEEK, etc.), to polymeric foams, to composite systems both with thermosetting and thermoplastic matrix. In any case, the perspective of the investigations referred to the glassy state of the materials in question and to the related thermodynamic implications involving the kinetic aspects of out-of-equilibrium systems. The topic has a certain universality since inorganic and metallic glass systems share the phenomenologies involved. It represents one of the open chapters of Materials Engineering. A modeling/numerical development completed the experimental activity. The originality of the approach is based on the constitutive link between the theory of linear viscoelasticity written in the reduced time domain, the stress tensor and the hitherto accredited phenomenological theories of structural relaxation (TNM-Tool Narayanaswamy Mohynian and KAHR-Kovacs Aklonis Hutchinson Ramos). The approach allows to simulation of almost all of the time-dependent responses of glassy materials to any entity's simultaneous thermal and mechanical stresses. Furthermore, the parameters of the

phenomenological theories mentioned, previously researched through numerical algorithms, have taken on precise physical meanings and therefore "measured" experimentally, losing the randomness that is attributed to the "fitting" parameters.
With these assumptions, the unusual phenomenologies reported for ultra-confined systems such as thin films (such as the negative coefficient of thermal expansion and the unexpected depression of the Tg) where the transversal dimension is lower than the statistical one of the macromolecule have been addressed and modeled.
Recently, a new modeling approach has been developed to describe the paradox of τ (tau-pardox) and the expansion gap, two phenomenologies of the glassy state that remain unresolved. It has been hypothesized that the relaxation time is a highly non-linear function of the deviation from equilibrium. This deviation is related to the secondary interactions (non-bonded links), which dominate the stiffness of the polymeric materials. It has been shown that the strong non-linearity of the relaxation time near the equilibrium condition originates from the repulsive Weeks-Chandler-Anderson (WCA) and attractive FENE (finitely extensible non linear elastic) potentials. This approach makes it possible to reduce the fitting parameters required in current models. Furthermore, the out-of-equilibrium parameters could be uniquely correlated to the energy characteristics of the secondary potentials.
The aspects relating to the processing of thermosetting and thermoplastic polymer-based materials have been addressed with particular regard to the development of residual stresses originating from chemical shrinkage from the differential thermal contraction associated with thermal gradients and the related distortions in the parts.

Composite materials

In the 1980s, polyester foams reinforced with glass fiber mats were among the progenitors of medium-performance materials used in the yachting sector. The viscoelastic nature of the matrix and the low glass transition temperature required a mechanical and viscoelastic characterization including the micromechanical aspects induced by the simultaneous presence of voids and fibers. It was demonstrated that with appropriate scaling factors, the composite system's time/temperature-dependent mechanical behavior could be traced back to a single master curve regardless of the foam void degree and the amount of fibers. Subsequently, the growing need to predict the reliability of composite systems for structural uses has diverted the research activity on composites to the development of models for fatigue resistance. Experimental investigations have been conducted on a vast range of materials, from those used in the automotive sector to those for the aerospace sector. A phenomenological model has recently been developed, capable of separating the effects of medium and oscillating loads on the degradation of fatigue strength, which can be implemented on a statistical basis and is able to establish the reliability of composite structures based on the distribution curve static strength statistics. The research activity on composites also concerned aspects related to designing and developing composites loaded with nanoparticles. As part of the National Coordination of a PRIN project (2002-2004) the controversial effectiveness of montmorillonite-type clayey nanometric fillers was addressed concerning the "barrier" properties and efficiency as a reinforcement.

Within the framework of the Regional Competence Center - New Technologies, an entirely composite negative swept wing was developed (from technology to lay-up), which by exploiting the flexion-torsional coupling of a symmetrical and unbalanced lamination sequence it was able to be self-adaptive to flight conditions, minimizing the need for flight actuators. As part of the projects relating to the DAC (Campano Aerospace District), the research activities carried out relating to structural composites for aerospace use concern the origin of the damage processes that occur following the penetration of low molecular weight substances (water and CO_2) and/or due to thermal fatigue. In the context of solving inverse problems, a software has

been developed which, installed on a flying airplane, is capable of monitoring the state of damage of the panels in composite material in real time.

ORGANIZATION, MANAGEMENT AND COORDINATION OF RESEARCH

2013-2019 Focal Point for the Second University of Naples of the MATERIALS AND PROCESSES topic in the context of the DAC (CAMPANO AEROSPACE DISTRICT), TABASCO Project

2013-2018 Responsible Unit for the Second University of Naples of the MATERIALS AND PROCESSES topic within the DAC (CAMPANO AEROSPACE DISTRICT), CERVIA Project

2013-2018 Responsible Unit for the Second University of Naples of the MATERIALS AND PROCESSES topic within the DAC (CAMPANO AEROSPACE DISTRICT), IMM Project (2013-2015)

2003-2019 Delegate of the Rector of the University of Campania "Luigi Vanvitelli" as a member of the board of directors of the INSTM (National Institute of Materials Science and Technology)

2004-Today Manager of the research unit at INSTM

2003-Today Head Laboratory of Materials Science and Engineering

ORGANIZATION OF NATIONAL AND INTERNATIONAL CONFERENCES

2008 Co-Chairman International conference on "Times of Polymers and Composites" Ischia-Italy, June 2008 www.topconference.it

2008 Componente del Comitato organizzatore conferenza AIMAT 2008

2010 Co-Chairman International conference on "Times of Polymers and Composites" Ischia-Italy, June2010 www.topconference.it

2010 Member International Scientific Committee The 7th International Conference on Mechanics of Time-Dependent Materials , Portoroz, Slovenia September 5-11, 201

2012 Chairman International conference on "Times of Polymers and Composites" Ischia-Italy, June2012 www.topconference.it

2012 Member International Scientific Committee The 8th International Conference on Mechanics of Time-Dependent Materials September 23- 27, 2012 Kanazawa, Japan http://wwwr.kanazawa-it.ac.jp/MSRL/mtdm8th.html

2013 Member International Scientific Committee ICSAAM- The International Conference on Structural Analysis of Advanced Materials, September 2013 Kos, Greece http://icsaam2013.upatras.gr/committees/international.html

2013 Member International Scientific Committee MODEST The International Conference on Modification, Degradation and Stability August-September 2014, Portoroz, Slovenia http://isit.si/modest2014/committees/

2014 Member International Scientific Committee The 8th International Conference on Mechanics of Time Dependent Materials, MONTREAL-Canada, May 27th-May30th 2014 http://www.polymtl.ca/mtdm/en/conference/commitee.php

2014 Chairman International conference on "Times of Polymers and Composites" Ischia-Italy, June2014 www.topconference.it

2016 Chairman International conference on "Times of Polymers and Composites" Ischia-Italy, June 2016 www.topconference.it

2017 Co-Chairman International Scientific Committee ICSAAM- The International Conference on Structural Analysis of Advanced Materials, September 2017 Bucarest, Romania http://www.icsaam2017.pub.ro/

2018 Chairman International Conference on “Times of Polymers and Composites” June 2018 , Ischia (ITALY) http://www.topconference.it

2019 Chairman International Scientific Committee ICSAAM- The International Conference on Structural Analysis of Advanced Materials, September 2019 Ischia (Italy) https://www.icsaamconference.com/

2021 Chairman International conference on "Times of Polymers and Composites" Ischia-Italy, September 2021 www.topconference.it

2023 Chairman International conference on "Times of Polymers and Composites" Ischia-Italy, June 2023 www.topconference.it

SERVICES PROVIDED IN ITALIAN AND FOREIGN RESEARCH

2007-22 Member of the board of experts of the SUN in support of the CAMPANIA REGION for the release of Integrated Environmental Authorizations AIA

2008-12 Expert Evaluator of Regional Projects POR - Emilia Romagna-Veneto-Piedmont Regions

2012 EXPERT EVALUATOR for The National Authority for Scientific Research (ANCS), based in Bucharest, of two Research Institutions “COMOTI” and “INCAS” “to perform the evaluation work of the units and institutions of the national research and development system for the certification in accordance with the provisions of the methodological norms set in the G.D. no.1062/2011”

2007-2013 Expert evaluator Comunità Europea, VI and VII framework program

2003-2023 Member of the Register of MIUR and MSE experts

SCIENTIFIC RESPONSIBILITY IN RESEARCH ACTIVITIES RELATED TO THE ACQUISITION OF FINANCING

2008 MBDA SpA research agreement: Analysis and characterization of epoxy adhesive film. Aging and fatigue

2008 MBDA SpA: Experimental and numerical characterizations of polyurethane foam and polyester resins reinforced with glass fibers

2010 Industry AMS srl: Development of new high performance and low cost sandwich panels with steel honeycomb core and steel skins

2010 Industry AMS srl: Development of innovative bearing systems in reinforced concrete with hexagonal cell metal grating

2011 TIA SrL "Durability of metallic systems - aspects related to corrosion"

2012 Industry AMS srl: Development of Innovative Load-bearing Systems in metal grating as structures for impact barriers”

2013 Cooperative Society of Sound Operators and Transcribers (OFT), "optimization of materials: keyboards for stenotyping"

2014 CRF.FIAT-Chrisler Automobile “Composite Fatigue”2018

2019 LEONARDO SpA , Development of a method for determining damage in aeronautical structures. Application for Structural Integrity Verification using Neural Networks"

2023 LEONARDO SpA “Development of a diagnostic software for SHM based on reverse FEM Ref. 56687302, document EWPS AA-E-11127

PARTICIPATION IN EDITORIAL COMMITTEES OF MAGAZINES, PUBLISHING SERIES, ENCYCLOPAEDIA AND PRESTIGIOUS TREATISES

Journal ASSOCIATE EDITOR Mechanics of Time Dependent Materials, Springer
http://www.springer.com/materials/mechanics/journal/11043

Journal EDITOR Macromolecular Symposia Volume 247, Issue 1, Pages v-xiii, 1-426 February, 2007 Special Issue: Times of Polymers and Composites,Editor(s): Alberto D'Amore, Domenico Acierno 02/2006 02/2007
http://onlinelibrary.wiley.com/doi/10.1002/masy.v247:1/issuetoc

Journal EDITOR Macromolecular Symposia Volume 286, Issue 1, Pages v-x, 1-230,November 2009 Special Issue: Times of Polymers and Composites - 2008, Editor(s): Domenico Acierno, Alberto D'Amore,04/2008 11/2009
http://onlinelibrary.wiley.com/doi/10.1002/masy.v286:1/issuetoc

Journal EDITOR Macromolecular Symposia Volume 228 Special Issue: Times of Polymers August 2005, Volume 228, Issue 1 Pages 1-313, Editor(s): AlbertoD'Amore, Domenico Acierno 04/2004 08/2005 http://onlinelibrary.wiley.com/doi/10.1002/masy.v228:1/issuetoc

Journal Guest EDITOR Polymer Composites © 2013 Society of Plastics Engineers Special Issue: 6th Conference on the Times of Polymers & Composites (TOP) held at Ischia Italy June 10–14, 2012 September 2013 Volume 34, Issue 9 Pages 1405–1565 Issue edited by: Alberto D'Amore http://onlinelibrary.wiley.com/doi/10.1002/pc.v34.9/issuetoc

REVIEWER OF THE FOLLOWING INTERNATIONAL JOURNALS:

Composite Materials, Journal of Non Crystalline solids, Composites Part A, Composites Part B, Journal of Reinforced Plastics and Composites, International Journal of Fatigue, Fatigue and Fracture of Engineering Materials and Structures, Journal of Applied Polymer Science, Journal of Composite Materials, The Journal of Adhesion, Macromolecular Symposia, Materials Chemistry and Physics, Polymer Engineering and Science, Polymer Composites, Meccanica, Frontiers, Polymers, Materials.

CONSEGUIMENTO DI PREMI E RICONOSCIMENTI PER L'ATTIVITÀ SCIENTIFICA

2009 Invited Speaker 6th IDMSCS "International Discussion Meeting on relaxation of complex systems" http://denali.phys.uniroma1.it/~idmrcs6/

2010 Keynote Speaker "Modest Conference" (http://www.modest2010.gr/) (5-8 Sett.2010)

2010 Keynote Speaker "Duracosys" (Durability of Composite Systems) http://www.mech.upatras.gr/~dur2010/) , 12-15 Sept.

2010 Conference CHAIRMAN and INVITED Speaker at MTDM Conference Portoroz, Slovenia 1-5 September.

2012 The Medal "in Memory of Academician N.M Emanuel" International Scientific Partnership Fundation, Russian Academy of Science and Lomosonov Moscow State University

2013 Plenary Lecture at ICSAAM- The International Conference on Structural Analysis of Advanced Materials, 2013 Kos, Greece http://icsaam2013.upatras.gr

2014 INVITED SPEAKER The 8th International Conference on Mechanics of Time Dependent Materials, MONTREAL-Canada, May 27th-May30th 2014 http://www.polymtl.ca/mtdm/en/conference/commitee.php

2014 Key-note Lecture at International conference on "Times of Polymers and Composites" Ischia-Italy, June 22nd-26th, 2014 www.topconference.it

2014 Key-Note Lecture at 8th MODEST International Conference on Modification, Degradation and Stabilization of Polymers , Portorož, Slovenia , from August 31st to September 4th, 2014. http://isit.si/modest2014

RESULTS OBTAINED IN TECHNOLOGY TRANSFER IN TERMS OF PARTICIPATION IN THE CREATION OF NEW ENTERPRISES (SPIN OFF), DEVELOPMENT, USE AND MARKETING OF PATENTS

PATENT:
EP2392904 - Sensor for measuring an external force applied to said sensor (2011)
ITRM20100304 - Sensore per la misura di una forza esterna applicata a detto sensore (2010)

PUBLICATIONS (2008-2022)

IJ1 Parnian, P., D'Amore, A. Fabrication of high-performance cnt reinforced polymer composite for additive manufacturing by phase inversion technique, Polymers, 2021, 13(22), 4007

IJ2 D'Amore, A., Coppola, L., Grassia, L Modeling the effects of stress ratio and loading frequency on the fatigue behavior of plain concretes Construction and Building Materials, 2021, 306, 124899 https:/ /doi.org/10.1 Ol 6/j.conbuildmat.2021.124899

IJ3 D'Amore, A., Califano, A., & Grassia, L. (2021). Modelling the loading rate effects on the fatigue response of composite materials under constant and variable frequency loadings. International Journal of Fatigue, 150, 106338. doi:10.1016/j.ijfatigue.2021.1063

IJ4 Grassia, L., & D'Amore, A. (2021). Deconvolution of the segmental and chain modes in amorphous polymers: Do the short-chain modes affect the bulk relaxation? Polymer, 225, 123801. doi:10.1016/j.polymer.2021.123801

IJ5 Califano, A., Chandarana, N., Grassia, L., D'Amore, A., & Soutis, C. (2020). Damage Detection in Composites By Artificial Neural Networks Trained By Using in Situ Distributed Strains. Applied Composite Materials. doi:10.1007/s10443-020-09829-z

IJ6 Preface: The 9th International Conference on Structural Analysis of Advanced Materials (ICSAAM 2019). (2019). THE 9TH INTERNATIONAL CONFERENCE ON STRUCTURAL ANALYSIS OF ADVANCED MATERIALS - ICSAAM 2019. doi:10.1063/1.5140273

IJ7 D'Amore, A., Dell'Aversano, R., & Califano, A. (2019). Preliminary approach to the study of flexural fatigue behavior of low Tg carbon/epoxy laminates. THE 9TH

INTERNATIONAL CONFERENCE ON STRUCTURAL ANALYSIS OF ADVANCED MATERIALS - ICSAAM 2019. doi:10.1063/1.5140315

IJ8 Iannone, M., & D'Amore, A. (2019). Processing of PEEK/PEI blends for high performance composites in aerospace. THE 9TH INTERNATIONAL CONFERENCE ON STRUCTURAL ANALYSIS OF ADVANCED MATERIALS - ICSAAM 2019. doi:10.1063/1.5140292

IJ9 Dell'Aversano, R., & D'Amore, A. (2019). Preliminary studies on the application of a phenomenological model for fatigue of cementitious materials. THE 9TH INTERNATIONAL CONFERENCE ON STRUCTURAL ANALYSIS OF ADVANCED MATERIALS - ICSAAM 2019. doi:10.1063/1.5140310

IJ10 Califano A., D'Amore A. Analysis of a phenomenological model for fatigue of composite materials AIP Conference Proceedings 2196, 020044 (2019); https://doi.org/10.1063/1.5140317 Published Online: 12 December 2019

IJ11 Merighi, S., Mazzocchetti, L., Benelli, T., Maccaferri, E., Zucchelli, A., D'Amore, A., & Giorgini, L. (2019). A New Wood Surface Flame-Retardant Based on Poly- m -Aramid Electrospun Nanofibers. Polymer Engineering & Science. doi:10.1002/pen.25235

IJ12 D'Amore, A., & Grassia, L. (2019). A method to predict the fatigue life and the residual strength of composite materials subjected to variable amplitude (va) loadings. Composite Structures, 111338. doi:10.1016/j.compstruct.2019.111

IJ13 Dell'Aversano, R., & D'Amore, A. (2019). Tailoring the Properties of Calcium Aluminate Macro-Defect-Free Cements: From Brittle to Ductile Behavior. Journal of Materials Engineering and Performance, 28(11), 7068–7074. doi:10.1007/s11665-019-04430-3

IJ14 Grassia, L., Iannone, M., Califano, A., & D'Amore, A. (2019). Strain based method for monitoring the health state of composite structures. Composites Part B: Engineering, 176, 107253. doi:10.1016/j.compositesb.2019.10

IJ15 D'Amore, A., & Grassia, L. (2019). Comparative Study of Phenomenological Residual Strength Models for Composite Materials Subjected to Fatigue: Predictions at Constant Amplitude (CA) Loading. Materials, 12(20), 3398. doi:10.3390/ma12203398

IJ16 Califano, A., Grassia, L., & D'Amore, A. (2019). Fatigue of Composite Materials Subjected to Variable Loadings. Journal of Materials Engineering and Performance. doi:10.1007/s11665-019-04373-9

IJ17 D'Amore, A., & Grassia, L. (2019). Principal Features of Fatigue and Residual Strength of Composite Materials Subjected to Constant Amplitude (CA) Loading. Materials, 12(16), 2586. doi:10.3390/ma12162586

IJ18 De Angelis, F., Cancellara, D., Grassia, L., & D'Amore, A. (2018). The influence of loading rates on hardening effects in elasto/viscoplastic strain-hardening materials. Mechanics of Time-Dependent Materials. doi:10.1007/s11043-017-9375-7

IJ19 D'Amore, A., & Grassia, L. (2018). Hierarchical damage mechanisms in composite materials subjected to fatigue loadings. AIP Conference Proceedings 1932, 030010 (2018); doi: 10.1063/1.5024160 doi:10.1063/1.5024160

IJ20 Grassia, L., Iannone, M., Califano, A., & D'Amore, A. (2018). Self-learning health monitoring algorithm in composite structures. AIP Conference Proceedings 1932, 030011 (2018); doi: 10.1063/1.5024161

IJ21 D'Amore, A. (2017). Editorial. Polymer Engineering & Science, 57(7), 643–643. doi:10.1002/pen.24634

IJ22 D'Amore, A. (2017). Editorial. Polymer Engineering & Science, 57(6), 477–477. doi:10.1002/pen.24630

IJ23 D'Amore, A . Grassia, L. Phenomenological approach to the study of hierarchical damage mechanisms in co mposite materials subjected to fatigue loadings(Article) Composite Structures Volume 175 (2017) pp. 1-6

IJ24 Alberto D'Amore, Luigi Grassia "Constitutive law describing the strength degradation kinetics of fibre-reinforced composites subjected to constant amplitude cyclic loading" Mechanics of Time-Dependent Materials Volume 20, Issue 1, February 2016 ISSN, 1 September 2017, Pages 1-6: 1385-2000 (Print) 1573-2738 (Online)

IJ25 Fraldi, M., Cutolo, A., Esposito, L., & D'Amore, A. (2016). Visco-elastic and thermal-induced damaging in time-dependent reshaping of human cornea after conductive keratoplasty. Mechanics of Time-Dependent Materials, 21(1), 45–59. doi:10.1007/s11043-016-9317-9

IJ26 Alberto D'Amore, Luigi Grassia, Angelo Ceparano Correlations Between Damage Accumulation and Strength Degradation of Fiber Reinforced Composites Subjected to Cyclic Loading , Procedia Engineering 167 (2016) 97 – 102

IJ27 Mattia Rosa, Luigi Grassia, Alberto D'Amore, Gabriella D'Escamard Enthalpy relaxation of polystyrene at different molecular weight using fast calorimetry, Procedia Engineering 167 (2016) 97 – 102

IJ28 Rosa, M., Grassia, L., D'Amore, A., Carotenuto, C., & Minale, M. (2016). Rheology and mechanics of polyether(ether)ketone – Polyetherimide blends for composites in aeronautics. doi:10.1063/1.4949752 Sartore, L., Schettini, E., Pandini, S., Bignotti, F., Vox, G., & D'Amore, A. (2016). Biodegradable containers from green waste materials. doi:10.1063/1.4949675

IJ29 D'Amore, A., Grassia, L., & Ceparano, A. (2016). Correlations between Damage Accumulation and Strength Degradation of Fiber Reinforced Composites Subjected to Cyclic Loading. Procedia Engineering, 167, 97–102. doi:10.1016/j.proeng.2016.11.674

IJ30 Rosa, M., Grassia, L., D'Amore, A., & D'Escamard, G. (2016). Enthalpy Relaxation of Polystyrene at Different Molecular Weight Using Fast Calorimetry. Procedia Engineering, 167, 265–269. doi:10.1016/j.proeng.2016.11.696

IJ31 Alberto D'Amore , Massimiliano Giorgio, Luigi Grassia "Modeling the residual strength of carbon fiber reinforced composites subjected to cyclic loading" International Journal of Fatigue 78 (2015) 31–37

IJ32 Luciana Sartore, Alberto D'Amore and Luca Di Landro "Ethylene vinyl acetate blends with cellulosic fillers and reinforcements" Polymer Composites Article first published online: 28 MAR 2015 | DOI: 10.1002/pc.23471

IJ33 Sartore, L., Bignotti, F., Pandini, S., D'Amore, A., & Di Landro, L. (2015). Green composites and blends from leather industry waste. Polymer Composites, 37(12), 3416–3422. doi:10.1002/pc.23541

IJ34 Sartore, L., D'Amore, A., & Di Landro, L. (2015). Ethylene vinyl acetate blends with cellulosic fillers and reinforcements. Polymer Composites, 36(6), 980–986. doi:10.1002/pc.23471

IJ35 D'Amore, A. (2015). Special issue: 7th Conference on the Times of Polymers & Composites (TOP) held at Ischia, Italy june 22-26, 2014. Polymer Composites, 36(6), 979–979. doi:10.1002/pc.23590

IJ36 D'Amore, A. (2014). Preface: International Conference on Times of Polymers (TOP) and Composites. doi:10.1063/1.4876761

IJ37 D'Amore A, Verde P (2013). "Modeling the flexural fatigue behavior of glass-fiber-reinforced thermoplastic matrices". MECHANICS OF TIME-DEPENDENT MATERIALS, ISSN: 1385-2000, Volume 17, Issue 1, February 2013, Pages 15-23

IJ38 Grassia L., D'Amore A. (2013) , "Calculation of the shrinkage-induced residual stress in a viscoelastic dental restorative material" Mechanics of Time-Dependent Materials Volume 17, Issue 1, February 2013, Pages 1-13

IJ39 Luigi Grassia, D'Amore A (2012). Finite element calculation of residual stress in dental restorative material. AIP CONFERENCE PROCEEDINGS, ISSN: 0094-243X doi: 10.1063/1.4745713

IJ40 D'Amore A, Grassia L, Verde P (2012). Modeling the Fatigue Behavior of Glass Fiber Reinforced Thermoplastic and Thermosetting Matrices. AIP CONFERENCE PROCEEDINGS, ISSN: 0094-243X, doi: 10.1063/1.4745713

IJ41 Grassia L, D'Amore A, Verde P (2012). On The Inter-Conversion Between Viscoelastic Material Functions of Polycarbonate. AIP CONFERENCE PROCEEDINGS, ISSN: 0094-243X, doi: http://dx.doi.org/10.1063/1.4745714

IJ42 D'Amore A, Grassia L (2012). PREFACE: 6th International Conference on Times of Polymers (TOP) and Composites. AIP CONFERENCE PROCEEDINGS, ISSN: 0094-243X, doi: 10.1063/1.4738379

IJ43 D'AMORE A, Luigi Grassia (2012). Timescales and properties of PSA (pressure sensitive adhesives). AIP CONFERENCE PROCEEDINGS, vol. 1459, ISSN: 0094-243X

IJ44 Grassia L, D'Amore A (2011). Isobaric and isothermal glass transition of PMMA: Pressure-volume- temperature experiments and modelling predictions . JOURNAL OF NON-CRYSTALLINE SOLIDS, ISSN: 0022-3093

IJ45 Grassia L, Pastore Carbone M.G, Mensitieri G, D'Amore A (2011). Modeling of density evolution of PLA under ultra-high pressure/temperature histories . POLYMER, ISSN: 0032-3861

IJ46 Grassia L, Carbone M.G.P., D'Amore A (2011). Modeling of the isobaric and isothermal glass transitions of polystyrene. JOURNAL OF APPLIED POLYMER SCIENCE, ISSN: 0021-8995

IJ47 D'Amore A, De Maria, G, Grassia L., Natale C, Pirozzi S. (2011). Silicone-rubber-based tactile sensors for the measurement of normal and tangential components of the contact force . JOURNAL OF APPLIED POLYMER SCIENCE, vol. 122 (6) , p. 3758-3770, ISSN: 0021-8995

IJ48 Cosimo Carfagna1, *, Eugenio Amendola2, Marta Giamberini1, D'Amore A, Aldo Priola3, Giulio Malucelli (2011). The effect of prepolymer composition of amino-hardened liquid crystalline epoxy resins on physical properties of cured thermoset. MACROMOLECULAR SYMPOSIA, ISSN: 1022-1360, doi: DOI: 10.1002/masy.19991480116

IJ49 Grassia L, D'Amore A (2010). Isobaric PVT behavior of Poly(Carbonate) (PC). AIP CONFERENCE PROCEEDINGS, ISSN: 0094-243X

IJ50 Grassia L, D'Amore A (2010). Modeling the residual stresses in reactive resins-based materials: A case study of photo-sensitive composites for dental applications . AIP CONFERENCE PROCEEDINGS, ISSN: 0094-243X

IJ51 G. LAMANNA, F. CAPUTO, GRASSIA L, D'AMORE A, A. SOPRANO (2010). NUMERICAL SIMULATION OF A STRETCH BENDING PROCESS. KEY ENGINEERING MATERIALS, vol. 417-418, p. 637-640, ISSN: 1013-9826

IJ52 GRASSIA L., D'AMORE A., SIMON S.L. (2010). On the Viscoelastic Poisson's ratio of Amorphous Polymers. JOURNAL OF RHEOLOGY, vol. 54, p. 1009-1022, ISSN: 0148-6055

IJ53 D'Amore A, Grassia L (2010). The anomalies of glassy polymers at nanoscale from the continuum mechanics perspective . AIP CONFERENCE PROCEEDINGS, ISSN: 0094-243X

IJ54 Grassia L, D'Amore A (2010). Thermal residual stresses in amorphous thermoplastic polymers . AIP CONFERENCE PROCEEDINGS, ISSN: 0094-243X

IJ55 D'Amore A, Grassia L (2010). Toughening the Macro Defect Free (MDF) cements . AIP CONFERENCE PROCEEDINGS, ISSN: 0094-243X

IJ56 Acierno D, D'Amore A (2009). Macromolecular Symposia: Preface . MACROMOLECULAR SYMPOSIA, ISSN: 1022-1360

IJ57 D'AMORE A, LUIGI GRASSIA, DOMENICO ACIERNO (2009). Modelling the yield stress and the Poisson's ratio of glassy polymers. E-POLYMERS, vol. 52, p. 1-9, ISSN: 1618-7229

IJ58 D'AMORE A, L. GRASSIA (2009). Non Linearity of Glassy Polymers. MACROMOLECULAR SYMPOSIA, vol. 286, p. 20-24, ISSN: 1022-1360

IJ59 GRASSIA L., D'AMORE A. (2009). On the interplay between viscoelasticity and structural relaxation in glassy amorphous polymers. JOURNAL OF POLYMER SCIENCE. PART B, POLYMER PHYSICS, vol. 47, p. 724-739, ISSN: 0887-6266

IJ60 GRASSIA L., D'AMORE A. (2009). The Relative Placement of Linear Viscoelastic Functions in Amorphous Glassy Polymers.. JOURNAL OF RHEOLOGY, vol. 53, p. 339-356, ISSN: 0148-6055, doi: 10.1122/1.3056631

IJ61 L.GRASSIA, D'AMORE A (2008). Modelling Strategies to predict the viscoelastic properties of glassy polymers. AIP CONFERENCE PROCEEDINGS, vol. 1042, p. p. 55-57, ISSN: 0094-243X

MONOGRAPH OR SCIENTIFIC TREATY

IV1 Editors: Alberto D'Amore, A. K. Haghi , and Gennady E. Zaikov "Bioscience Methodologies in Physical Chemistry An Engineering and Molecular Approach" ISBN hard: 978-1-926895-54-3. Apple Academic Press, Inc. 9 Spinnaker Way, Waretown, NJ 08758 USA www.appleacademicpress.com

IV2 Editors: Jimsher N. Aneli, DSc, Alfonso Jiménez, PhD, and Stefan Kubica, PhD Editorial Advisory Members: A. K. Haghi, PhD, Gennady E. Zaikov, DSc, and Alberto D'Amore "Chemistry and Physics of Modern Materials" Apple Academic Press Inc. 3333 Mistwell Crescent Oakville, ON L6L 0A2 Canada 13: 978-1-926895-45-1 , 2013

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Signed

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