

Alessandro Pegoretti, *curriculum vitae* (updated May 1st 2023)

- Personal



Nationality Italian
Marital status Married, two daughters

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Work
University of Trento
Department of Industrial Engineering
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- Education

1988 **Graduated in Materials Engineering** at the University of Trento with a dissertation entitled “Mechanical behaviour of sol-gel coated soda-lime glass”, tutor prof G.Carturan (summa cum laude).

- Current position: **Full Professor**
Department of Industrial Engineering
University of Trento, Trento, Italy

- Professional experiences

2021 – present **Director of the Department of Industrial Engineering**
University of Trento, Trento, Italy

2012 – 2018 **Coordinator of the Doctoral School in Materials, Mechatronics and Systems Engineering**
University of Trento, Trento, Italy

2015 – 2018 **Special Visiting Researcher, CNPq position**
Department of Mechanical Engineering
Federal University of Santa Catarina – UFSC, Florianópolis, SC, Brazil

2011 – 2015 **Graduate Faculty Associate**
Department of Mechanical & Materials Engineering
University of Nebraska - Lincoln, USA

2006 **Visiting Professor**
Universidad Nacional del Sur, Dept. of Chemical Engineering
PLAPIQUI (UNS-CONICET) Bahía Blanca, Argentina.

2002 – 2012 **Associate Professor**
Dept. of Materials Engineering and Industrial Technology
University of Trento, Trento, Italy

1998 – 2001 **Adjunct Professor**
Dept. of Materials Engineering and Environment
University of Modena and Reggio Emilia, Modena, Italy

- 1997 **Research scientist**
Institute of Materials Science, University of Connecticut, Storrs, USA
- 1995 **Postdoctoral Fellow**
Institute of Materials Science, University of Connecticut, Storrs, USA
- 1992 – 2001 **Assistant Professor**
Dept. of Materials Engineering and Industrial Technology,
University of Trento, Trento, Italy

- General research expertise and interests

The main aim of the research activity is to investigate the structure-properties relationships in polymer, polymer blends composite and nanocomposites, with particular attention to their mechanical behaviour.

Main fields of interests are:

- Deformation, yield and fracture mechanics of polymers and composites.
- Processing and characterization of multiphase polymeric materials (micro- and nanocomposites, blends).
- Durability of polymeric and composite materials.
- Environmentally sustainable polymers and composites (biodegradable, from renewable resources, fully recyclable).
- Polymers and composites with functional properties (electrical conductivity, shape memory, strain and damage monitoring, self-healing, etc..).

- Publications

<i>Original papers in international scientific journals:</i>	318
<i>Books</i>	2
<i>Book chapters:</i>	14
<i>Papers in national journals:</i>	4
<i>Patents:</i>	3

- Impact of research: databases consulted on May 14th 2023

Source	H-Index	Number of products	Number of citations
ISI Web of Science	43	317	8060
Scopus	48	352	9013
Google Scholar	55	395	11847

- Main national and international research grants as principal investigator

- 2000-2002 PRIN MM09012922_005 - Analysis of the thermomechanical behaviour of materials based on recycled PET for a usage in building constructions. Local coordinator.
- 2003-2005 PRIN 2003093440_002 – Physico-mechanical characterization of new functional hybrid materials based on carbon nanotubes and polymer matrix for photovoltaic devices. Local coordinator.
- 2006-2010 FP6 European Project Network of Excellence on Nanostructured and Functional Polymer-based Materials and Nanocomposites (NANOFUN-POLY) - Local coordinator.
- 2007-2009 PRIN 20075939JY_003 - Continuous fibre composites with a nanocomposite matrix: preparation, microstructure and thermo-mechanical properties (NanoCompStrut). Local coordinator.
- 2006-2008 Executive programme for scientific and technological co-operation between Italy and Argentina for the years 2006-2007 – Improvements of interfacial adhesion in multiphase systems. Project coordinator.
- 2011-2013 Executive programme for scientific and technological co-operation between Italy and Hungary for the years 2011-2013 – On the toughness of thermoplastic nanocomposites as studied by the essential work of fracture (EWF) approach. Project coordinator.

- 2012-2014 Fondazione Cassa di Risparmio di Trento e Rovereto. Project "Preparation and characterization of wood-based degradable composite laminates". Project coordinator.
- 2014-2018 Science Without Borders program financed by CNPq Brazil, "Development of polymer nanocomposites for electromagnetic shielding applications". Project coordinator
- 2015-2017 Fondazione Cassa di Risparmio di Trento e Rovereto. Project "Development and characterization of multifunctional nanocomposite filters for automotive applications". Project coordinator.
- 2016-2018 Fondazione Cassa di Risparmio di Trento e Rovereto. Project "Phase change elastomeric compounds for thermal energy storage-release". Project coordinator.
- 2017-2018 Horizon 2020 SMEInst-09-2016-2017. Project AEROPCM "Elastomeric compound with phase change materials integrated to state of art thermal insulation panel (Aeropan) to improve energy saving and CO2 emission reduction in civil and industrial buildings. Local coordinator.
- 2020 – 2022 Fondazione Cariverona. Project "Sviluppo di un processo per il riciclo di schiume rigide a base PVC provenienti da scarti di produzione e da manufatti (RE-FOAMS). Principal investigator.
- 2020 H2020-RUR-2018-2020 Topic: LC-RUR-11-2019-2020. Project ONEforest. A Multi-Criteria Decision Support System For A Common Forest Management to Strengthen Forest Resilience, Harmonise Stakeholder Interests and Ensure Sustainable Wood Flows. Participant.
- Erasmus+ Cooperation Partnerships - Project FutureBIO "Let's use biopolymers for the future" - Principal investigator.

- Main industrial contracts as principal investigator

- 2005 (Eurostandard spa) – Development of electrical conductive polyethylenes.
- 2006 (Iveco spa) – Impact properties of PP based composites.
- 2007 (Tozzi Nord srl) – Wind blades: materials selection and design.
- 2008 (Elantas Camattini spa) – Fatigue behaviour of composite adhesive joints.
- 2009 (Luxottica spa) – Static and fatigue mechanical behaviour of titanium adhesive joints.
- 2010 (UFI Filters spa) - Development of new nanocomposite polymer nets for liquids filtration.
- 2011 (IHP Composite srl) - Novel composite-reinforced gas storage tanks.
- 2014 (UFI Filters spa) - Development of electrically conductive polymer fibers for multifunctional filters.
- 2017 (Iveco Spa) – Composites for protective barriers.
- 2018 (Novurania Spa) – Elastomeric composites for thermal energy storage and release.
- 2020 (CMS Spa) – 3D printing with engineering plastics and composites.
- 2021 (Aquafil Spa) – Polyamide-based fully recyclable composites.

- Prizes awarded and other relevant international scientific recognition

- 1996 Fulbright scholarship for a one year stage at the University of Connecticut (USA).
- 1998 Research prize by the Italian Association of Materials Engineering for the paper "Fiber/matrix adhesion in nylon-6/glass fiber composites" presented at the IV AIMAT Conference, Cagliari (Italy), June 8-11 1998.
- 2010 Borealis Student Innovation Award - for an innovative research with a clear potential of practical applications (student M. D'Amato, tutor: A.Pegoretti) for the thesis « Polymeric Nanocomposite Fibres».
- 2017 Best paper presented at the Italian Nordic Polymer Future 2017, Pisa, Italy, September 14-15 2017

- Memberships of Editorial Boards of international scientific journals

as an editor:

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| 2014 - 2021 | Specialty Chief Editor "Frontiers in Materials: Polymeric and Composite Materials" |
| 2014 - present | Associate Editor of the "Journal of Reinforced Plastics and Composites" |
| 2020 - present | Editor-in-Chief of the "Advanced Composites" section of "Materials". |
| 2021 – 2022 | Editor, "Polymer Composites" |
| 2021 – present | Editor-in-Chief, "Polymer Composites" |

as a member:

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| 2006 - present | Member of the Editorial Board of "eXPRESS Polymer Letters" |
| 2008 - present | Member of the Editorial Board of "Composite Interfaces" |
| 2010 - 2014 | Member of the Editorial Board of "The Open Textile Journal" |
| 2010 - present | Member of the Editorial Board of "Materials Sciences and Applications" |
| 2011 - present | Member of the Editorial Board of "Soft Nanoscience Letters" |
| 2012 - 2017 | Member of the Editorial Board of "Dataset Papers in Materials Science" |

2014 - present	Member of the Editorial Board of "International Journal of Polymer Science"
2015 - present	Member of the Editorial Board of "Journal of Advanced Material Sciences"
2015 - present	Member of the Editorial Board of "Journal of Nanomaterials"
2016 - present	Member of the Editorial Board of "Polymer Materials Science & Engineering"
2016 - present	Member of the Editorial Board of "Journal of Composites Science"
2018 - present	Member of the Editorial Board of "Journal of Applied Biomaterials and Functional Materials"
2018 - 2022	Member of the Editorial Board of "Advances in Materials Science and Engineering"
2018 - present	Member of the Editorial Board of "Applied Sciences"
2018 - present	Member of the Editorial Board of "Science and Engineering of Composite Materials"

- International scientific committees of conferences

- Trento Innovation Conferences in Materials Engineering: 1st Meeting: Advances in Polymers, Composites and Biomaterials, TICME2007, Trento, Italy 16-19/12 2007.
- 9th International Conference on Experimental techniques and design in composite materials, ETDCM, Vicenza, Italy 30/9-2/10 2009.
- 15th European Conference on Composite Materials, ECCM15, Venezia, Italy, 24-28/6 2012 (Executive Committee).
- A New International Conference on Composite Interfaces, Interface 21, Kyoto, Japan 6-8/8 2012.
- 19th International Conference on Composite Materials, ICCM19, Montreal, Canada, 28/7-2/9 2013.
- 16th European Conference on Composite Materials, ECCM16, Seville, Spain, 22-26/6 2014
- 20th International Conference on Composite Materials, ICCM20, Copenhagen, Denmark, 19-24/7 2015.
- 4th International Conference on Nanomechanics and Nanocomposites, ICNN4, Vicenza, Italy 14-17/9/2016
- 5th International Conference on Recent Advances in Composite Materials, KL University, Vijayawada, Guntur, India 15-18/12/2016
- 21st International Conference on Composite Materials, ICCM-21, Xi'an, China, 20-25/8/2017
- International Conference on Building Materials and Materials Engineering, ICBMM 2017, Lyon, France, 21-23/9/2017
- Milan Polymer Days MIPOL2018, Milano, Italy, February 14-16th 2018
- 18th European Conference on Composite Materials, ECCM18, Athens, Greece, 24-28/6 2018
- 11th International Conference on Mechanics of Time-Dependent Materials (MTDM 2018), Milano, Italy September 4th-7th 2018
- 5th International Conference on Nanomechanics and Nanocomposites, ICNN5, Fukuoka, Japan 22-25/5/2018
- Sixth International Conference on Recent Advances in Composite Materials ICRAACM-2019 Varanasi, India 25-28/2/2019
- First International Conference on Basalt Fibers and Composites (ICBFC-2019) Nanjing, China 16-18/11/2019
- 6th International Conference on Nanomechanics and Nanocomposites, ICNN6, Hamburg, Germany 1-4/9/2020
- 19th European Conference on Composite Materials, ECCM19, Nantes, France, 22-26/6 2020 (cancelled)
- 20th European Conference on Composite Materials, ECCM19, Lausanne, Switzerland, 26-30/6 2022

- Review activity

Reviewer for various archival journals, among them:

ACS Nano, Acta Biomaterialia; Advances in Polymer Technologies; Biomaterials; Composites Part A: Applied Science and Manufacturing; Composites Part B: Engineering; Composites Science and Technology; Diamond & Related Materials; Express Polymer Letters; International Journal of Fatigue; European Polymer Journal; International Journal of Polymer Science; International Journal of Solids; Journal of Applied Polymer Science; Journal of Biomaterials Science: Polymer Edition; Journal of Cleaner Production; Journal of Intelligent Material Systems and Structures; Journal of Materials Chemistry C; Journal of Materials Processing Technology; Macromolecular Bioscience; Macromolecular Materials and Engineering; Macromolecular Rapid Communications; Materials and Design; Materials; Materials Science and Engineering: A; Nanomaterials; Nature Communications; Polymer, Polymers; Polymer Bulletin; Polymer Composites; Polymer Degradation and Stability; Polymer Engineering and Science; Polymer International; Polymer Testing; Science and Engineering of Composite Materials; Scientific Reports; Scripta Materialia; Sensors & Actuators: A. Physical; Synthetic Metals; Waste Management.

- Teaching activity

1997 – 2001	“Science and Technology of Composite Materials” (Master program, University of Modena and Reggio Emilia)
2001 – 2019	“Properties and Characterization of Materials” (Master program, University of Trento)
2005 – 2017	“Laboratory of Mechanics of Materials” (Master program, University of Trento)
2005 – 2011	“Wind Turbines Design” (Master program, University of Trento)
2004 – present	“Experimental Mechanics of Materials” (PhD School, University of Trento)
2017 – present	“Recycling and Sustainable Materials”
2020 – present	“Composite Materials Engineering”

- Research Advisor: Postdocs (8), Ph.D. Students (10), Master Students (115) (list not reported)

- Evaluation Panels

- Austrian Science Fund (FWF), Austria
- Deutsche Forschungsgemeinschaft (German Research Foundation), Germany
- Executive Agency for Higher Education, Research, Development and Innovation Funding, Romania
- Fund for Scientific Research (F.R.S.-FNRS), Belgium
- Grant Agency of the Czech Republic (GACR), Czech Republic
- Hungarian Scientific Research Fund (OTKA), Hungary
- Israel Science Foundation (ISF)
- Italian Ministry for University and Research (MIUR), Italy
- Member of the Commission for the National Scientific Habilitation in Materials Science and Technology for the Italian Ministry for University and Research (MIUR), Italy 2018 – 2021.
- National Center of Science and Technology Evaluation, Republic of Kazakhstan
- Swiss National Science Foundation (SNSF)

- Associations

1993 – present	Italian Association of Materials Engineering (AIMAT)
1999 – present	Society for the Advancement of Material and Process Engineering (SAMPE)
1999 – present	Italian Interuniversity Consortium of Materials Science and Technology (INSTM)
2010 – present	European Society for Composite Materials (ESCM)
2010 – 2014	Member of the Council of the European Society for Composite Materials (ESCM)
2011 – present	Society of Plastic Engineers (SPE)
1998- present	Italian Association of Macromolecules (AIM)

Sincerely

Prof. Alessandro Pegoretti



- LIST OF PUBLICATIONS (in reverse chronological order)

PUBLICATION TYPE	PAGE
1) ARTICLES IN INTERNATIONAL SCIENTIFIC JOURNALS.....	6
2) BOOKS	35
3) BOOK CHAPTERS.....	35
4) ARTICLES IN NATIONAL JOURNALS	36
5) PATENTS	37

1) ARTICLES IN INTERNATIONAL SCIENTIFIC JOURNALS

2023

318. Perin D, Mahmood H, Rigotti D, Dorigato A, Pegoretti A. Novel epoxy/cyclic olefin copolymer/carbon structural composites with electro-activated self-healing properties. *Polymer Composites*. In press.
317. Simonini L, Mahmood H, Dorigato A, Pegoretti A. Tailoring the physical properties of poly(lactic acid) through the addition of thermoplastic polyurethane and functionalized short carbon fibers. *Polymer Composites*. In press. (<http://doi.org/10.1002/pc.27435>)
316. Barera G, Pegoretti A. Screw extrusion additive manufacturing of carbon fiber reinforced PA6 tools. *Journal of Materials Engineering and Performance*. In press.
315. Rigotti D, Dorigato A, Valentini F, Pegoretti A. Investigation of the de-vulcanization process parameters on the mechanical properties of EPDM/ground tyre rubber compounds. *Rubber Chemistry and Technology*. In press.
314. Bertolini MC, Zamperlin N, Barra GMO, Pegoretti A. Development of poly(vinylidene fluoride)/thermoplastic polyurethane/carbon black-polypyrrole composites with enhanced piezoelectric properties. *SPE Polymers*. In press.
313. Bianchi M, Fredi G, Valentini F, Dorigato A, Pegoretti A. Shape memory behavior of novel EPDM/paraffin foams. *Polymer Engineering and Science*. 2023; 63(5) 1633–1647.
312. Joseph L, Madhavan M K, Jayanarayanan K, Pegoretti A. Evaluation of hybrid fiber multiscale polymer composites for structural confinement under cyclic axial compressive loading. *Journal of Composites Science. Journal of Composites Science*. 2023; 7(4) 152.
311. Simonini L, Mahmood H, Dorigato A, Pegoretti A. Evaluation of self-healing capability of a polycaprolactone interphase in epoxy/glass composites. *Composites Part A*. 2023; 169 107539.

310. Bianchi M, Pegoretti A, Fredi G. An overview of poly(vinyl alcohol) and poly(vinyl pyrrolidone) in pharmaceutical additive manufacturing. *Journal of Vinyl and Additive Technology*. 2023; 29(2) 223-239.
309. Perin D, Dorigato A, Pegoretti A. Thermoplastic self-healing polymer blends for structural composites: development of polyamide 6 and cyclic olefinic copolymer blends. *Journal of Applied Polymer Science*. 2023; 140 e53751.
308. Sorze A, Valentini F, Dorigato A, Pegoretti A. Development of Xanthan gum based superabsorbent and water retaining composites for agricultural and forestry applications. *Molecules*. 2023; 28(4) 1952.
307. Bianchi M, Dorigato A, Morreale M, Pegoretti A. Evaluation of the physical and shape memory properties of fully biodegradable poly(lactic acid) (PLA) / poly(butylene adipate terephthalate) (PBAT) blends. *Polymers*. 2023; 15(4) 881.
306. Pegoretti A. Material circularity in rubber products. *Express Polymer Letters*. 2023;17(4) 352.
305. Valentini F, Roux J-C, Lopez-Cuesta J-M, Fambri L, Dorigato A, Pegoretti A. Fire behaviour of EPDM/NBR panels with paraffin for thermal energy storage applications. Part 1: fire behaviour. *Polymer Degradation and Stability*, 2023; 207 110240.

2022

304. Joseph L, Madhavan M K, Jayanarayanan K, Pegoretti A. High temperature performance of concrete confinement by MWCNT modified epoxy based fiber reinforced composites. *Materials*. 2022; 15(24) 9051.
303. Rigotti D, Fambri L, Pegoretti A. Bio-composites for filament fabrication modeling. Effects of maleic anhydride grafting on poly(lactic acid) and microcellulose. *Progress in Additive Manufacturing*. 2022; 7(4) 765-783.
302. Perin D, Odorizzi G, Dorigato A, Pegoretti A. Development of polyamide 6 (PA6) / polycaprolactone (PCL) thermoplastic self-healing polymer blends for multifunctional structural composites. *Applied Sciences*. 2022; 12(23), 12357.
301. Galvagnini F, Dorigato A, Fambri L, Pegoretti A. Development of novel polypropylene syntactic foams containing paraffin microcapsules for thermal energy storage applications. *Molecules*. 2022; 27(23) 8520.
300. Fredi G, Favaro M, Da Ros D, Pegoretti A, Dorigato A. Thermotropic optical response of silicone-paraffin flexible blends. *Polymers*. 2022; 14(23) 5117.

299. Fredi G, Dorigato A, Bikiaris DN, Checchetto R, Pegoretti A. Furanoate polyesters/poly lactide/reduced graphene oxide nanocomposite films: thermomechanical and gas permeation properties. *Macromolecular Symposia*. 2022; 405(1) 2100208.
298. Valentini F, Pegoretti A. End-of-life options of tyres. A review. *Advanced Industrial and Engineering Polymer Research*. 2022; 5(4) 203-213.
297. Rasana N, Jayanarayanan K, Pegoretti A, Rammanoj G, ArunKumar K, Hariprasanth T. Mechanical , viscoelastic and sorption behaviour of acrylonitrile butadiene styrene composites with nanosilica and MWCNT fillers. *Polymer Bulletin*. 2022; 79(10) 8369-8395.
296. Zamperlin N, Bottacini A, Callone E, Pegoretti A, Fontana M, Dirè S. Barium Titanate Functionalization with Organosilanes: Effect on Particle Compatibility and Permittivity in Nanocomposites. *Molecules*, 2022; 27(19) 6499.
295. Fredi G, Dorigato A, Dussin A, Xanthopoulou E, Bikiaris DN, Botta L, Fiore V, Pegoretti A. Compatibilization of poly lactide/poly(ethylene 2,5-furanoate) (PLA/PEF) blends for sustainable and bioderived packaging. *Molecules*, 2022; 27(19) 6371.
294. Bianchi M, Valentini F, Fredi G, Dorigato A, Pegoretti A. Thermo-mechanical behavior of novel EPDM foams containing a phase change material for thermal energy storage applications. *Polymers*, 2022; 14(19) 4058.
293. Mahmood H, Nart F, Pegoretti A. Effective recycling of end-of-life polyvinyl chloride foams in ethylene-propylene diene monomers rubber. *Journal of Vinyl and Additive Technology*. 2022; 28(3) 494-501.
292. Fabris C, Perin D, Fredi G, Rigotti D, Bortolotti M, Pegoretti A, Xanthopoulou E, Bikiaris DN, Dorigato A. Improving the wet-spinning and drawing processes of poly(lactide)/poly(ethylene furanoate) and poly lactide/poly(dodecamethylene furanoate) fibers blends. *Polymers*, 2022; 14(14) 2910.
291. Residori S, Dul S, Pegoretti A, Fambri L, Pugno NM. Three dimensional printing of multiscale carbon fiber-reinforced polymer composites containing graphene or carbon nanotubes. *Nanomaterials*. 2022; 12(12) 2064.
290. Mahmood H, Nart F, Pegoretti A. Thermomechanical evaluation of expanded ethylene-propylene diene monomers rubber filled with recycled polyvinyl chloride foams. *Cleaner Materials*. 2022; 4 100091.
289. Valentini F, Dorigato A, Fambri L, Bersani M, Grigante G, Pegoretti A. Production and characterization of novel EPDM/NBR panels with paraffin for potential thermal energy storage applications. *Thermal Science and Engineering Progress*. 2022; 32 101309.

288. Sorze A, Valentini F, Dorigato A, Pegoretti A. Salt leaching as a green method for the production of polyethylene foams for thermal energy storage applications. *Polymer Engineering and Science*. 2022; 62(5) 1650-1663.
287. Dul S, Alonso Gutierrez BJ, Pegoretti A, Alvarez-Quintana J, Fambri L. 3D printing of ABS Nanocomposites. Comparison of processing and effects of multi-wall and single-wall carbon nanotubes on thermal, mechanical and electrical properties. *Journal of Materials Science & Technology*. 2022; 121 52-66.
286. Fredi G, Karimi Jafari M, Dorigato A, Bikiaris DN, Pegoretti A. Improving the thermomechanical properties of poly(lactic acid) via reduced graphene oxide and bioderived poly(decamethylene 2,5-furandicarboxylate), *Materials*. 2022; 15(4) 1316.
285. Rigotti D, Fredi G, Perin D, Bikiaris DN, Pegoretti A, Dorigato A. Statistical modeling and optimization of the drawing process of bioderived polylactide/poly(dodecylene furanoate) wet-spun fibers, *Polymers*. 2022; 14(3) 396.
284. Galvagnini F, Dorigato A, Valentini F, Fiore V, La Gennusa M, Pegoretti A. Multifunctional polyurethane foams with thermal energy storage/release capability. *Journal of Thermal Analysis and Calorimetry*. 2022; 147 297–313.
283. Di Michele A, Fredi G, Pagano C, Dorigato A, Calarco P, Primavilla S, Marmottini F, Ricci M, Pegoretti A, Perioli L. Bioadhesive patches based on carboxymethyl cellulose/ polyvinylpyrrolidone/bentonite composites and Soluplus® _for skin administration of poorly soluble molecules. *Applied Clay Science*. 2022; 216 106377.
282. Zambotti A, Valentini F, Lodi E, Pegoretti A, Tyrpekl V, Kohúteková S, Sorarù GD, Kloda M, Biesuz M. Thermochemical heat storage performances of magnesium sulphate confined in polymer-derived SiOC aerogels. *Journal of Alloys and Compounds*. 2022; 895(1) 162592.

2021

281. Bucciarelli A, Janigro V, Yang Y, Fredi G, Pegoretti A, Motta A, Maniglio D. A genipin crosslinked silk fibroin monolith by compression molding with recovering mechanical properties in physiological conditions. *Cell Reports Physical Science*. 2021; 2(10) 100605.
280. Bertolini MC, Dul S, Lopes E, Soares BG, Barra GMO, Pegoretti A. Fabrication and characterization of piezoresistive flexible pressure sensors based on poly(vinylidene fluoride)/thermoplastic polyurethane filled with carbon black-polypyrrole. *Polymer Composites*. 2021; 12 6621-6634.

279. Valentini F, Dorigato A, Fambri L, Pegoretti A. Novel EPDM/paraffin foams for thermal energy storage applications. *Rubber Chemistry and Technology*. 2021; 94(3) 432-448.
278. Fredi G, Dorigato A, Fambri L, Pegoretti A. Evaluating the Multifunctional Performance of Structural Composites for Thermal Energy Storage. *Polymers*. 2021; 13(18) 3108.
277. Zambotti A, Caldesi E, Pelizzari M, Valentini F, Pegoretti A, Dorigato A, Speranza G, Chen K, Sorarù GD, Biesuz M. Polymer-derived silicon nitride aerogels as shape stabilizers for low and high-temperature thermal energy storage. *Journal of the European Ceramic Society*. 2021; 41(11) 5484-5494.
276. Fredi G, Kianfar P, Dalle Vacche S, Pegoretti A, Vitale A. Electrospun shape-stabilized phase change materials based on photo-crosslinked polyethylene oxide. *Polymers*. 2021; 13(17) 2979.
275. Galvagnini F, Fredi G, Dorigato A, Fambri L, Pegoretti A. Mechanical behavior of multifunctional epoxy/hollow glass microspheres/paraffin microcapsules syntactic foams for thermal management. *Polymers*. 2021; 13(17) 2896.
274. Cescato R, Rigotti D, Mahmood H, Dorigato A, Pegoretti A. Thermal mending of electroactive carbon/epoxy laminates using a porous poly(ϵ -caprolactone) electrospun mesh. *Polymers*, 2021; 13(16) 2723.
273. Zamperlin, Ceccato R, Fontana M, Pegoretti A, Dirè S. Effect of hydrothermal treatment and doping on the microstructural features of sol-gel derived BaTiO₃ nanoparticles. *Materials*, 2021; 14(15) 4345.
272. Dul S, Fambri L, Pegoretti A. High-performance polyamide/carbon fibre composites for fused filament fabrication: mechanical and functional performances. *Journal of Materials Engineering and Performance*. In press.
271. Valentini F, Dorigato A, Fambri L, Pegoretti A. Novel EPDM/paraffin foams for thermal energy storage applications. *Rubber Chemistry and Technology*. In press.
270. Galvagnini F, Dorigato A, Valentini F, Fiore V, La Gennusa M, Pegoretti A. Multifunctional polyurethane foams with thermal energy storage/release capability. *Journal of Thermal Analysis and Calorimetry*. In press.
269. Galvagnini F, Dorigato A, Fambri L, Fredi G, Pegoretti A. Thermophysical properties of multifunctional syntactic foams containing phase change microcapsules for thermal energy storage. *Polymers*. 2021; 13(11), 1790.

268. Zambotti A, Caldesi E, Pellizzari M, Valentini F, Pegoretti A, Dorigato A, Speranza G, Chen K, Bortolotti M, Sorarù GD, Biesuz M. Polymer-derived silicon nitride aerogels as shape stabilizers for low and high temperature thermal energy storage. *Journal of the European Ceramic Society*. 2021; 41(11) 5484-5494.
267. Fredi G, Karimi Jafari M, Dorigato A, Bikiaris DN, Checchetto R, Favaro M, Brusa RS, Pegoretti A. Multifunctionality of reduced graphene oxide in bioderived polylactide/poly(dodecylene furanoate) nanocomposite films. *Molecules*. 2021; (26) 2938.
266. Pegoretti A. Towards sustainable structural composites: a review on the recycling of continuous-fiber-reinforced thermoplastics. *Advanced Industrial and Engineering Polymer Research*. 2021; 4(2) 105-115.
265. Pegoretti A. Recycling concepts for short-fiber-reinforced and particle-filled thermoplastic composites: a review. *Advanced Industrial and Engineering Polymer Research*. 2021; 4(2) 93-104.
264. Pegoretti A. When polymers meet metals: the changing shape of magnetostrictive polymer composites. *Express Polymer Letters*. 2021; 15(7) 581.
263. Valentini F, Fambri L, Dorigato A, Pegoretti A. Production and characterization of TES-EPDM foams with paraffin for thermal management applications. *Frontiers in Materials*. 2021; 8 660656.
262. Mahmood H, Simonini L, Dorigato A, Pegoretti A. Graphene deposition on glass fibers by triboelectrification. *Applied Sciences*. 2021; 11(7) 3123.
261. Alonso Gutierrez BJ, Dul S, Pegoretti A, Alvarez-Quintana J, Fambri L. Investigation of the effects of multi-wall and single-wall carbon nanotubes concentration on the properties of ABS nanocomposites. *C Journal of Carbon Research*. 2021; 7(2) 33.
260. Schmitz DP, Dul S, Ramoa SDAS, Soares BG, Barra GMO, Pegoretti A. Effect of printing parameters on electromagnetic shielding efficiency of ABS/carbonaceous-filler composites manufactured via filament fused fabrication. *Journal of Manufacturing Processes*. 2021; 65, 12-19.
259. Valentini F, Dorigato A, Rigotti D, Pegoretti A. Evaluation of the role of devulcanized rubber on the thermo-mechanical properties of expanded ethylene-propylene diene monomers composites. *Polymer Engineering and Science*. 2021; 61, 767–779.
258. Bertolini MC, Dul S, Barra GMO, Pegoretti A. Poly(vinylidene fluoride)/thermoplastic polyurethane flexible and 3D printable conductive composites. *Journal of Applied Polymer Science*. 2021; 138(17) e50305.

257. Zonta E, Valentini F, Dorigato A, Fambri L, Pegoretti A Evaluation of the salt leaching method for the production of EPDM rubber foams. *Polymer Engineering and Science*. 2021; 61, 136-153.
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