

PERSONAL DETAILS:

Name: Francesco Bonaccorso
Date and place of birth: 19/03/1976, Messina (Italy)
Nationality: Italian
Institution: BeDimensional Spa;
Work address: Via Lungotorrente Secca 30R Genova, Italy;
Home address: Via T. M. Canepari 43/9 Genova, Italy
E-mail: f.bonaccorso@bedimensional.it;
Telephone: +39 0102364170
Mobile: +39 339 5040109

EDUCATION

December 2013 “National Scientific Qualification” sector 02/B1, “Experimental Condensed Matter Physics” as **Full Professor**.

December 2013 “National Scientific Qualification” sector 02/B1, “Experimental Condensed Matter Physics” as **Associate Professor**.

21 July 2012 **Master of Art**, Cambridge University, Hughes Hall, Cambridge, UK.

6 March 2009 **PhD in Physics**, University of Messina, Italy.

Jan 2006 - Oct 2008 **PhD student**, University of Messina and National Research Council-Istituto per I processi Chimico-Fisici, Messina. PhD Thesis title: *"Debundling and sorting of Single Wall Carbon Nanotubes for optical applications"*. Supervisors: Prof. U. Giorgianni, Dr P. G. Gucciardi.

Dec 2007 - Mar 2008 **Visiting student**, Department of Engineering, University of Cambridge, Cambridge, UK. Supervisor Prof. A. C. Ferrari.

Jul - Aug 2007 **Visiting student**, Vanderbilt University, USA. Supervisor Prof. T. Hertel.

Feb - Jun 2007 **Visiting student**. Department of Engineering, University of Cambridge, Cambridge, UK. Supervisor Prof. A. C. Ferrari.

26 Oct 2005 **Laurea in Physics** (Equivalent to BSc+MSc), University of Messina, Italy. Final score 110/110 Summa cum Laude.

Dec 2004-Oct 2005 **MSc project** on “*Study of the aggregation properties of β -Cyclodextrin through Fluorescence Near-Field Optical Microscopy*”, University of Messina, supervisors Prof. U. Giorgianni, Dr. P.G. Gucciardi.

Nov 2000 – Oct 2005 **Undergraduate Studies**, University of Messina, Average exams score 92% (27.5/30).

PROFESSIONAL EXPERIENCE

Jan 2025- present	Executive Board member of Innovative Advanced Materials Initiative (IAM-I)
Apr 2018- present	Scientific Director of BeDimensional Spa.
Oct 2017- Sept 2023	Deputy Leader of the Workpackage Innovation (WP16) of the European Graphene Flagship.
Apr 2014-Mar 2020	Principal Investigator at IIT, Genova, Italy.
Oct 2012- Mar2014	Research Scientist at National Research Council (CNR) Institute for Chemical-Physical Processes (IPCF), Messina, Italy.
Jan 2013-present	Fellow , Hughes Hall, Cambridge UK.
May 2012-May 2013	Newton Trust Fellow , Department of Engineering, Cambridge University, Cambridge UK.
Jul 2011- Apr 2012	Research Associate , Department of Engineering, Cambridge University, Cambridge UK.
Jul 2011- Jun 2018	Royal Society Newton International Alumnus , Department of Engineering, Cambridge University, Cambridge UK.
Jun 2011- May 2013	Research Convenor , Hughes Hall, Cambridge UK.
Jun 2009- Jun 2011	Royal Society Newton International Fellow , Department of Engineering, Cambridge University, Cambridge UK.
Feb 2009-Dec2012	Research Fellow , Hughes Hall, Cambridge UK.
Oct 2008-Jun 2009	Research Associate , Department of Engineering, Cambridge University, Cambridge UK.
1994-2000	Manager and Owner, Catering Business , Messina, Italy

TEACHING ACTIVITIESCourses:

Mar 2018	Lecturer , <i>IANUA – ISSUGE LIVELLO MAGISTRALE</i> , Indirizzo in Scienze e Tecnologia per la Sostenibilità -STS- University of Genova, Italy.
Apr 2017	Lecturer , <i>IANUA – ISSUGE LIVELLO MAGISTRALE</i> , Indirizzo in Scienze e Tecnologia per la Sostenibilità -STS- University of Genova, Italy.
Jun 2016-Jul 2016	Lecturer 9th module of the NACH doctoral school University of Genova, Italy.
Jun2015-Jul 2015	Lecturer 8th module of the NACH doctoral school University of Genova, Italy.

Apr 2012- Apr 2013 **Physics, Part 1A-Supervisions for Jesus College, Cambridge UK.**

Apr 2012 **Lecturer Master II Livello “Ricercatore esperto per le energie sostenibili”, Engineering Department, University of Palermo, Italy.**

Supervision of Master Students (12):

Matteo Gentile (2022), Valerio Galli (2021), Luca Bergia Boccardo (2017), Federico Viviani (2016), Marta Chiappini (2016), Nicola Curreli (2016), Eugenio Greco (2016), Luca Gagliani (2016), Manuel Crugliano (2015), Davide Maria Di Paola (2015), Luigi Marasco (2015), Cecilia Masciullo (2014).

Supervision of PhD Students (20):

Afrouz Delavaranshiraz (2025), Samaneh Vaez (2023), Ahmad Bagheri (2020), Marco Piccinni (2019), Silvia Coppi (2019), Eleonora Venezia (2019), Gabriele Bianca (2018), Arcangelo Celeste (2018), Marilena Zappia (2018), Salvatore Polverino (2017), Valentino Romano (2017), Elisa Petroni (2016), Silvia Gentiluomo (2016), Nicola Curreli (2016), Stefano Palumbo (2016), Emanuele Lago (2015), Duc Anh Dinh (2014), Leyla Najafi (2014); Antonio E. Del Rio Castillo (2012), Giulia Privitera (2012).

Supervision of Post Docs (30):

Ndeye Fatou Sylla (2025), Paraskevi Papadopoulou (2023), Valentina Mastronardi (2022), Joka Buha (2022), Cosimo Anichini (2021), Marilena I. Zappia (2021), Hossein Beydaghi (2019), Lorenzo Carbone (2018), Giuseppina Pace (2018), Miguel Angel Garcia (2018), Leyla Najafi (2018), Beatriz Martin-Garzia (2017), Gianluca Longoni (2017), Laura Silvestri (2017), Jaya Kumar Panda (2017), Michele Serri (2016), Sebastiano Bellani (2016), Jie Feng (2016), Sanjay Thorat (2016), Chiara Fasciani (2016), Carlo Di Giovanni (2016), Reza Fathi (2015), Filiberto Ricciardella (2015), Sandra Sansaloni (2015), Andrea Gamucci (2015), Peter Toth (2015), Antonio E. Del Rio Castillo (2014), Haiyan Sun (2014), Andrea Capasso (2014), Alberto Ansaldo (2014).

Scholarships and Fellowships

May 2012-May 2013 **Newton Trust Fellowship, Trinity College, Department of Engineering, Cambridge University, Cambridge UK**

Jun 2009 - Jun 2011 **Royal Society Newton International Fellowship, Department of Engineering, Cambridge University, Cambridge UK**

Feb 2009 – Dec 2012 **Research Fellowship, Hughes Hall, Cambridge UK**
2006 - 2008 **Full PhD scholarship from the Italian Ministry of Education**

Prizes and awards

Nov 2022 **Start up of the year 2022 Premio Mercurio**

Nov 2019 **Magister Peloritanius 2019 by Accademia Peloritana dei Pericolanti**

June 2019 **ExAllievi Eccellenti by ALuMnime of the University of Messina**

June 2019	2019 Emerging Investigator by ChemPlusChem
Nov 2018	2017 Highly cited scientist by Clarivate Analytics
July 2017	2016 Emerging Investigator by J. Mater. Chem. A.
Sept 2016	Gold medal exhibitor prize at GrapChina 2016.
2012	Parmee prize 2011-2012 “Graphene printing technology project”.

Research grants

- **ZeroCarb. April 2025- October 2027.** Funding agency: EIC. **PI. Budget** 205 kEuros.
- **SHINEPV. January 2025-December 2028.** Funding agency: Horizon Europe. **PI. Budget** 650kEuros.
- **FIT4H2. December 2024-December 2027.** Funding agency: MIMIT. **PI. Budget** 297 kEuros.
- **Project ZFU.** Funding agency: Regione Liguria and Camera di Commercio di Genova **PI. Budget** 433kEuros.
- **LAPERITIVO. September 2024-March 2028.** Funding agency: Horizon Europe **PI. Budget** 256kEuros.
- **2D-Printable. October 2023-September 2026.** Funding agency: Horizon Europe **PI. Budget** 500kEuros.
- **Perseus. March 2023-February 2026.** Funding agency: Horizon Europe **PI. Budget** 475kEuros.
- **Greencap. January 2023-December 2025.** Funding agency: Horizon Europe **PI (Coordinator). Budget** 875kEuros.
- **GoPV. September 2023-August 2026.** Funding agency: MITE **PI. Budget** 265kEuros.
- **Diamond. December 2022-November 2025.** Funding agency: Horizon Europe **PI. Budget** 255kEuros.
- **Sensibat. September 2020-August 2023.** Funding agency: Horizon 2020 **PI. Budget** 275kEuros.
- **Marie Curie ITN ULTIMATE. October 2019-March 2024.** **PI. Budget** 261.5kEuros.
- **Graphene FET Flagship. October 2013-October 2024.**
 - **Core 3 Phase PI in WP 11 (Energy generation), WP 13 (Foams & coatings), WP 14 (Composites) and WP16 (Innovation). Role: PI. Budget for 2020-2023** 1320kEuros.
 - **Core 2 Phase PI in WP 11 (Energy generation), WP 13 (Foams & coatings), WP 14 (Composites) and WP16 (Innovation). Role: PI. Budget for 2018-2020** 975kEuros.
 - **Core 1 Phase PI in WP 11 (Energy generation), WP 12 (Energy storage) and WP 14 (Composites). Role: PI. Budget for 2016-2018** 340kEuros.
- **Graphene related Innovative 2D materials for Sustainable ENerGetics and catalysis (GINSENG). 2017-2019.** Funding agency: MAE Italia-China. Role: **Co-Investigator.** 30kEuros.
- **Large-area solar energy harvesting device based on two-dimensional crystals. 2016-2018.** Funding agency: MAE Italia-Corea. Role: **Co-Investigator.** 82.5kEuros.
- **Ultrathin glass membranes for advanced, adjustable and affordable quadruple glazing windows for zero-energy buildings. October 2012- October 2016** Funding agency: EU-FP7. Role: **Co-Investigator.** 575kEuros.
- **Newton International Fellowship. 2009-2011.** Funding agency: Royal Society, Royal Academy of Engineering and The British Academy. 185kEuros.
- **Optical Trapping of Carbon Nanotubes, International Joint Projects 2007/R3 2006-2007.** Funding agency: Royal Society. Role: **Co-Investigator.** 10kEuros.

- **Microrheology by Optical Manipulation of Carbon Nanotubes. 2006-2007.**
Funding agency: **British Council-MIUR**. Role: **Co-Investigator** 4kEuros.

Industry grants

Total funds raised since 2015 from Industry projects ~1.3MEuro

Principal investigator

- Topic: ***Anticorrosion***. Aug. 2019-Dec 2023. Company: **Duferco**.
- Topic: ***Solar cell***. Aug. 2020-Apr 2021. Company: **Enel Green Power**.
- Topic: ***Lubricant***. Jun. 2020-May. 2023. Company: **Eni**.
- Topic: ***Ink technology and composites***. Jan. 2020-Jun 2020. Company: **Tetrapak**.
- Topic: ***Composite***. Apr 2019. Company: **Italcementi**.
- Topic: ***Characterization (service)***. May 2019. Company: **Laminazione Sottile**.
- Topic: ***Ink technology and composites***. Nov. 2017- Nov. 2018. Company: **Eni Versalis**.
- Topic: ***Printing technology***. Jan 2017- Jan. 2018. Company: **Abet Laminati**.
- Topic: ***Solar cell and batteries***. Dec 2016-Dec. 2018. Company: **Enel Green Power**.
- Topic: ***Ink technology and composites***. Feb. 2016- Feb. 2017. Company: **Meccanotecnica Umbra**.
- Topic: ***Foams***. Jan. 2016- Apr. 2016. Company: **Maricell**.
- Topic: ***Ink technology and composites***. Oct. 2015- Oct. 2016. Company: **Eni Versalis**.
- Topic: ***Printing technology***. Sept.2015-Mar.2016. Company: **Palladio-Group**.
- Topic: ***Characterization (service)***. Nov. 2016. Company: **IRCA**.
- Topic: ***Characterization (service)***. Dec. 2016. Company: **Tararà**.

Co-PI

- Topic: ***Composites***. Dec. 2018- Mar 2019. Company: **Luxottica**.
- Topic: ***Composites***. Aug. 2017- Aug 2018. Company: **Pirelli**.
- Topic: ***Composites***. Jul. 2017- Jul 2018. Company: **Toscana Gomme**.
- Topic: ***Composites***. Dec. 2016- Sep 2017. Company: **Luxottica**.
- Topic: ***Printing technology***. May 2016-Nov. 2016. Company: **Vagotex**.
- Topic: ***Composites***. May 2016- Oct 2016. Company: **Fadel**.
- Topic: ***Composites***. Jul. 2015- May 2016. Company: **Luxottica**.
- Topic: ***Composites and coating***. Apr. 2015- Apr. 2016. Company: **MOMO Design**.
- Topic: ***Batteries***. Apr. 2015- Mar. 2017. Company: **Elkem As**.
- Topic: ***Composites and coating***. Mar. 2015- Mar. 2016. Company: **Baldassari Cavi**.

Start up initiatives

- **Co-founder** of BeDimensional SpA, with a double round of funds raising of ~30 MEuro.
- **Co-founder** of Cambridge Graphene Ltd.

Editorial activity

- **Associate Editor:**
 - RSC Advances, The Royal Society of Chemistry.
- **Guest Editor:**
 - “Graphene and Carbon Nanotubes” Volume 1786 - 2015 MRS Spring Meeting - Symposium T –
 - “Thin Film Photovoltaics 2014” International Journal of Photoenergy, Hindawi.
 - “Production of Graphene and other 2D materials” 2D Materials, IOP 2014.

- “Thin Film Photovoltaics 2013” International Journal of Photoenergy, Hindawi.
- **Editorial board Member:**
 - JPhys Materials
 - Graphene Technology, Nature Springer

Referee

Proposals of projects in the field of Physical and Chemical Sciences

- Khalifa University (2022)
- Foundation of Polish Science TEAM programme (2016).
- French National Research Agency ANR (2014).
- City University of New York (CUNY) Collaborative Incentive Research Grant Program (CIRG), USA (2013).
- National Centre for Research and Development, Poland (2012).
- FCT, I.P. - Fundação para a Ciência e Tecnologia, Portugal (2012).

Referee for Science, Nature Materials, Nature Nanotechnology, Nature Physics, Nature Communications, Scientific Reports, Nano Letters, ACS Nano, Energy and Environmental Science, Laser & Photonics Reviews, Advanced Materials, Advanced Energy Materials, Advanced Functional Materials, Advanced Optical Materials, Chemistry of Materials, etc.,

Referee of external PhD theses

- **Member** of a PhD defense jury Barcelona, July 2017
- **Member** of a PhD defense jury Australia, May 2016
- **Member** of a PhD defense jury CHOSE, Italy April 2016
- **Member** of a PhD defense jury Trinity College Dublin, Dublin Ireland, Jan. 2016.
- **Member** of a PhD defense jury CNRS, Institut Néel Grenoble, Nov. 2013.

Conference organization

- **Executive Committee Member:**
 - GrapChina 2020 conference, 16-18 Oct 2020 Shanghai, (China).
 - GrapChina 2019 conference, 19-21 Oct 2019 Xi'an, (China).
 - GrapChina 2018 conference, 19-21 Sept 2018 Xi'an, (China).
 - GrapChina 2017 conference, 24-26 Sept 2017 Nanjin, (China).
 - GrapChina 2016 conference, 22-24 Sept 2016 Qindao, (China).
 - GrapChina 2015 conference, 28-30 Oct 2015 Qindao, (China).
 - GrapChina 2014 conference, 01-03 Sept 2014 Ningbo, (China).
- **Conference Chair:**
 - Solid State Ionics 2017 (symposium on “The Science and Technology of 2D Materials”), 18-23 June 2017 Padova (Italy).
 - GrapChina 2016, 22-24 Sept 2016 Qindao, (China).
 - Graphene 2016, 19-22 April 2016 Genova (Italy).
 - e-MRS 2015 spring meeting, symposium “Science and technology of two dimensional materials” 11-15 May 2015, Lille, (France).
 - MRS 2015 spring meeting, symposium “Graphene and Carbon Nanotubes” 06-10 April 2015, San Francisco, CA (USA).
 - Graphene Workshop at “Industrial Technology 2014” 9-11 April 2014, Athens, (Greece).

- International Workshop “Graphene Spectroscopy” 29 October 2013, Cambridge, (UK).
- **Co-organizer**
 - Graphene 2026, 30 Jun – 3 Jul 2026 Barcelona (Spain)
 - Graphene 2025, 25-28 Jun 2025 San Sebastian (Spain)
 - Graphene 2024, 25-28 Jun 2024 Madrid (Spain)
 - Graphene 2023, 27-30 Jun 2023 Manchester (UK)
 - Graphene 2022, 28 Jun-01 Jul 2022 Achen (Germany)
 - EU Flagship-China Bilateral, 05 Nov. 2021, Online event
 - Graphene 2021, 26-29 Oct 2021 Grenoble (France)
 - Innovative Materials for Energy 2021, 30 Sep-01 Oct 2021, Messina (Italy)
 - Graphene 2020 Online conference
 - Innovative Materials for Energy 2020, 02 Dec 2020 Online event
 - Innovative Materials for Energy 2019, 20-22 Nov. 2019, Messina (Italy)
 - EU Flagship-China Bilateral, 16-18 Oct. 2019, Shanghai, China.
 - Graphene 2019, 25-28 June 2019 Rome (Italy).
 - EU Flagship-China Bilateral, 7-8 Dec. 2018, Dresden (Germany).
 - Graphene 2018, 26-29 June 2018 Dresden (Germany).
 - Graphene 2017, 28-31 March 2017 Barcelona (Spain).
 - Graphene Canada 2016, 18-20 October 2016 Montreal (Canada).
 - China-Italy Workshop on Graphene, 23-24 April 2016, Genova (Italy).
 - NCEM 4.3 meeting, 18 April 2016, IIT, Genova (Italy).
 - Graphene study 2016, 17-22 January 2016, Les Houches, (France).
 - Graphene Canada 2015, 14-16 October 2015 Montreal (Canada).
 - International Workshop on Metrology, Standardization and Industrial Quality of Graphene and Nanotubes (MSIGN11) 15–16 July 2011, Cambridge, (UK).
- **Scientific Committee Member:**
 - Graphene 2023, 27-30 Jun 2023 Manchester (UK)
 - Chem2DMat 2023 15-18 May 2023 Bologna (Italy)
 - Graphene 2022, 28 Jun-01 Jul 2022 Achen (Germany)
 - Graphene 2021, 26-29 Oct 2021 Grenoble (France)
 - Graphene 2020 Online conference
 - Graphene 2019, 25-28 June 2019 Rome (Italy).
 - International Conference on Diamond and Carbon Materials (ICDCM), 8-12 September 2019, Meliá Lebreros, Seville, Spain.
 - International Conference on Diamond and Carbon Materials (ICDCM), 2-6 September 2018, Dubrovnik, Croatia.
 - International Conference on Diamond and Carbon Materials (ICDCM), 3-7 September 2017, Gothenburg, Sweden.
 - Solid State Ionics 2017, 18-23 June 2017 Padova, Italy.
 - International Conference on Diamond and Carbon Materials (ICDCM), 4-8 September 2016, Le Corum, Montpellier, France.
 - Nanotexnology 2016, 2-9 July 2016, Thessaloniki, Greece.
 - Graphene and Other Emerging 2D-layered Nanomaterials: Synthesis, Properties and Potential Applications" CIMTEC, Perugia, Italy, Jun5-10, 2016
 - e-MRS 2016 spring meeting, symposium “Graphene and related materials: from fundamental science to applications” 02-06 May 2016, Lille, (France).
 - Graphene Canada 2015, 14-16 October 2015, Montreal, Canada.
 - International Conference on Diamond and Carbon Materials (ICDCM), 6-10 September 2015, Bad Homburg, Germany.
 - Graphene 2015, 09-13 March 2015, Bilbao, Spain.
 - Graphene 2014, 06-09 May 2014, Toulouse, France.

- ICDMC, 7-11 September 2014, Madrid, Spain.
- **Advisory Board Member:**
 - 15th IEEE International Conference on Nanotechnology 27th-30th July 2015 Rome, Italy.
 - New Diamond and NanoCarbon conference 2012, 20-24 May 2012 San Juan, Puerto Rico (USA).
- **Organizer** of the “Graphene Flagship-CA Pilot Advisory Board Meeting“ 16 July 2011, Pembroke College and Trinity Hall, Cambridge, (UK).
- **Responsible for the definition of the 10 years roadmap** for the technological innovation of graphene. **Graphene-CA, FET Flagship Pilot** (May 2011-Apr 2012).
- **Conference Session Chairman:** >40
- **Moderator:**
 - Graphene Connect Industrial workshop Energy applications, 20-21 Oct 2014, Dresden, Germany.
 - Graphene Connect Industrial workshop “Nanocomposites”, 07 May 2014, Toulouse, France.
 - Graphene nanocomposites workshop 12-13 March 2012, Manchester, United Kingdom.

Membership of Societies

- **Member** of the Global Graphene Alliance since Sept 2016.
- **Member** of “GDI” 2014-present
- **Member** of the “Nano-Carbon Enhanced Materials Consortium” 2012-present
- **Member** of the “Governing Body” (Hughes Hall, Cambridge) 2009-2013
- **Member** of the “Academic committee” (Hughes Hall, Cambridge) 2011-June 2013
- **Member** of the “Learning Research Committee” (Hughes Hall, Cambridge) 2009-2011

Major exhibitions/demonstrations (by invitation)

- **2018:** “MarketPlace Graphene” at Leonardo, 17 October 2018, Milan, Italy.
- **2017:** “MarketPlace Graphene” at Airbus, 04 May 2017, Getafe Madrid, Spain.
- **2017:** “Graphene Pavillon” in Mobile World Congress (MWC2017), 27 Feb. - 02 March 2017, Barcelona, Spain.
- **2016:** “Graphene-based helmets” in Composites Europe, 29 Nov. - 01 Dec. 2016, Dusseldorf, Germany.
- **2016:** “Graphene-based helmets” in GrapChina 2016, 22-14 Sept. 2016, Qingdao, China.
- **2016:** “Graphene Pavillon” in Mobile World Congress (MWC2016), 22-25 Feb. 2016, Barcelona, Spain.
- **2012:** “Graphene inkjet printing and ultrafast laser” in IDTechEx Printed Electronics Europe, 3-4 Apr. 2012, Berlin, Germany.
- **2011:** “Graphene smart window” in FET Flagship Pilots Midterm Conference, 24-25 Nov. 2011, Warsaw, Poland.
- **2011:** “Graphene-based smart window” in Graphene for Future Emerging Technologies, 18 Oct. 2011, Madrid, Spain.
- **2011:** “Graphene-LCD smart window” in Royal Society Summer Science Exhibition, 5-10 Jul. 2011, with Professor Sir Konstantin Novoselov FRS, 2010 Nobel Laureate in Physics, London, United Kingdom.

PUBLICATIONS, CONFERENCE PRESENTATIONS AND SEMINARS

230 publications in peer reviewed international journal (9 invited reviews), 28 conference proceedings/not peer reviewed articles, 2 book chapters, 240 invited presentations: 179 Keynotes and invited talks at conferences, 52 invited seminars and lectures in Universities, Research centres and Industries. ~250 contributed talks and posters at conferences.

19 family patents/filed patent applications.

I have over 49100 citations to my papers and H index 80 (Google Scholar).

[Francesco Bonaccorso - Google Scholar](#)