

Francesco Branda is the co-author of 132 papers published on international scientific journals that received 2041 citations with an H-index equal to 25

His research activity was initially devoted to the structure, durability and crystallization behavior of inorganic glasses. Successively he exploited the Sol-Gel technique to produce bioactive glasses. The interest in the Sol-Gel was extended, recently, to the synthesis of functionalized nanoparticles and nanostructured composites. He also used the electrospinning technique to produce soundproofing materials and had significative experiences in the field of flame retardancy

In the following a few papers recently published:

- 1) F. Branda, G. Malucelli, M. Durante, A. Piccolo, P. Mazzei, A. Costantini, B. Silvestri, M. Pennetta and A. Bifulco, Silica Treatments: A Fire Retardant Strategy for Hemp Fabric/Epoxy Composites, *Polymers* 2016, 8, 313
- 2) A. Bifulco, F. Tescione, A. Capasso, P. Mazzei, A. Piccolo, M. Durante, M. Lavorgna, G. Malucelli, F. Branda, Effects of post cure treatment in the glass transformation range on the structure and fire behavior of in situ generated silica/epoxy Hybrids, *Journal of Sol-Gel Science and Technology* (2018) 87:156–169
- 3) J. Avossa, A. Bifulco, E. Amendola, F. Gesuele, S. L. Oscurato, Y. Gizaw, G. Mensitieri, F. Branda, Forming nanostructured surfaces through Janus colloidal silica particles with nanowrinkled: A new strategy to superhydrophobicity, *Applied Surface Science* 465 (2019) 73–81
- 4) G.R. Del Sorbo, G. Truda, A. Bifulco, J. Passaro, G. Petrone, B. Vitolo, G. Ausanio, A. Vergara, F. Marulo and F. Branda, Non Monotonous Effects of Noncovalently Functionalized Graphene Addition on the Structure and Sound Absorption Properties of Polyvinylpyrrolidone (1300 kDa) Electrospun Mats, *Materials* 2019, 12, 108; doi:10.3390/ma12010108
- 5) J. Passaro, P. Russo, A. Bifulco, M. T. De Martino, V. Granata, B. Vitolo, G. Iannace, A. Vecchione, F. Marulo and F. Branda, Water Resistant Self-Extinguishing Low Frequency Soundproofing Polyvinylpyrrolidone Based Electrospun Blankets, *Polymers* 2019, 11, 1205; doi:10.3390/polym11071205
- 6) Bifulco, A., Parida, D., Salmeia, K. A., Nazir, R., Lehner, S., Stämpfli, R., Markus H., Malucelli G., Branda F. & Gaan, S. (2020). Fire and mechanical properties of DGEBA-based epoxy resin cured with a cycloaliphatic hardener: Combined action of silica, melamine and DOPO-derivative. *Materials & Design*, 108862
- 7) Bifulco, A., Parida, D., Salmeia K.A., Lehner, S., Stämpfli R., Markus H., Malucelli G., Branda F. & Gaan, S. (2020). Improving Flame Retardancy of in-situ Silica-Epoxy Nanocomposites cured with Aliphatic Hardener: Combined effect of DOPO-based flame-retardant and Melamine. *Composites Part C: Open Access (JCOMC)*, 100022.
- 8) Bifulco, A., Marotta, A., Passaro, J., Costantini, A., Cerruti, P., Gentile, G., Ambrogio V., Malucelli G. & Branda, F. (2020). Thermal and fire behavior of a bio-based epoxy/silica hybrid cured with methyl nadic anhydride. *Polymers*, 12(8), 1661.
- 9) Branda, F., Bifulco, A., Jehnichen, D., Parida, D., Pauer, R., Passaro, J., S. Gaan, D. Pospiech & Durante, M. (2021). Structure and Bottom-up Formation Mechanism of Multisheet Silica-Based Nanoparticles Formed in an Epoxy Matrix through an In Situ Process. *Langmuir*, 37(29), 8886-8893.
- 10) Branda, F., Passaro, J., Pauer, R., Gaan, S., & Bifulco, A. (2022). Solvent-Free One-Pot Synthesis of Epoxy Nanocomposites Containing Mg (OH) 2 Nanocrystal–Nanoparticle Formation Mechanism. *Langmuir*
- 11) Branda, F., Parida, D., Pauer, R., Durante, M., Gaan, S., Malucelli, G., & Bifulco, A. (2022). Effect of the Coupling Agent (3-Aminopropyl) Triethoxysilane on the Structure and Fire Behavior of Solvent-Free One-Pot Synthesized Silica-Epoxy Nanocomposites. *Polymers*, 14(18), 3853.