

# Luigi Balzano

## List of Publications by Citations

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

31  
papers

1,594  
citations

24  
h-index

31  
g-index

31  
ext. papers

1,710  
ext. citations

4.7  
avg, IF

4.47  
L-index

| #  | Paper  | IF  | Citations |
|----|--|-----|-----------|
| 31 | Crystallization and dissolution of flow-induced precursors. <i>Physical Review Letters</i> , <b>2008</b> , 100, 048302   | 7.4 | 161       |
| 30 | Flow Memory and Stability of Shear-Induced Nucleation Precursors in Isotactic Polypropylene. <i>Macromolecules</i> , <b>2010</b> , 43, 9394-9400   | 5.5 | 115       |
| 29 | Polymer crystallization studies under processing-relevant conditions at the SAXS/WAXS DUBBLE beamline at the ESRF. <i>Journal of Applied Crystallography</i> , <b>2013</b> , 46, 1681-1689                             | 3.8 | 102       |
| 28 | Crystallization and Precursors during Fast Short-Term Shear. <i>Macromolecules</i> , <b>2009</b> , 42, 2088-2092   | 5.5 | 101       |
| 27 | Flow Induced Crystallization in Isotactic Polypropylene/3:2,4-Bis(3,4-dimethylbenzylidene)sorbitol Blends: Implications on Morphology of Shear and Phase Separation. <i>Macromolecules</i> , <b>2008</b> , 41, 399-408 | 5.5 | 86        |
| 26 | Effects of the degree of undercooling on flow induced crystallization in polymer melts. <i>Polymer</i> , <b>2004</b> , 45, 3249-3256   | 3.9 | 75        |
| 25 | Effect of cooling rate on the crystal/mesophase polymorphism of polyamide 6. <i>Colloid and Polymer Science</i> , <b>2011</b> , 289, 1073-1079   | 2.4 | 73        |
| 24 | Continuous Cooling Curves Diagrams of Propene/Ethylene Random Copolymers. The Role of Ethylene Counts in Mesophase Development. <i>Macromolecules</i> , <b>2010</b> , 43, 2890-2896                                    | 5.5 | 69        |
| 23 | Self-Nucleation of Polymers with Flow: The Case of Bimodal Polyethylene. <i>Macromolecules</i> , <b>2011</b> , 44, 2926-2933   | 5.5 | 69        |
| 22 | Real-Time WAXD Detection of Mesophase Development during Quenching of Propene/Ethylene Copolymers. <i>Macromolecules</i> , <b>2010</b> , 43, 10208-10212   | 5.5 | 65        |
| 21 | Short-Term Flow Induced Crystallization in Isotactic Polypropylene: How Short Is Short?. <i>Macromolecules</i> , <b>2013</b> , 46, 9249-9258   | 5.5 | 57        |
| 20 | Quantification of non-isothermal, multi-phase crystallization of isotactic polypropylene: The influence of shear and pressure. <i>Polymer</i> , <b>2012</b> , 53, 5896-5908  | 3.9 | 51        |
| 19 | A Study on the Chain-Particle Interaction and Aspect Ratio of Nanoparticles on Structure Development of a Linear Polymer. <i>Macromolecules</i> , <b>2010</b> , 43, 6749-6759  | 5.5 | 51        |
| 18 | Pressure Quench of Flow-Induced Crystallization Precursors. <i>Macromolecules</i> , <b>2012</b> , 45, 4216-4224  | 5.5 | 50        |
| 17 | Oriented Gamma Phase in Isotactic Polypropylene Homopolymer. <i>ACS Macro Letters</i> , <b>2012</b> , 1, 618-622   | 6.6 | 42        |
| 16 | Mesophase-Mediated Crystallization of Poly(butylene-2,6-naphthalate): An Example of Ostwald's Rule of Stages. <i>ACS Macro Letters</i> , <b>2012</b> , 1, 1051-1055  | 6.6 | 41        |
| 15 | Thermoreversible DMDBS Phase Separation in iPP: The Effects of Flow on the Morphology. <i>Macromolecules</i> , <b>2008</b> , 41, 5350-5355   | 5.5 | 41        |

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|----|---|------|----|
| 14 | Flow induced crystallization in isotactic polypropylene during and after flow. <i>Polymer</i> , <b>2014</b> , 55, 6140-6151   | 5.1  | 40 |
| 13 | Molecular Aspects of the Formation of Shish-Kebab in Isotactic Polypropylene. <i>Macromolecules</i> , <b>2016</b> , 49, 3799-3809   | 5.5  | 40 |
| 12 | Dissolution and Re-emergence of Flow-Induced Shish in Polyethylene with a Broad Molecular Weight Distribution. <i>Macromolecules</i> , <b>2016</b> , 49, 2724-2730  | 5.5  | 35 |
| 11 | Characteristics of Bimodal Polyethylene Prepared via Co-Immobilization of Chromium and Iron Catalysts on an MgCl <sub>2</sub> -Based Support. <i>Macromolecular Reaction Engineering</i> , <b>2009</b> , 3, 448-454 | 1.5  | 33 |
| 10 | Influence of shear in the crystallization of polyethylene in the presence of SWCNTs. <i>Carbon</i> , <b>2010</b> , 48, 4116-4128  | 10.4 | 33 |
| 9  | Flow-Induced Crystallization <b>2013</b> , 399-432  |      | 24 |
| 8  | Structure Development of Low-Density Polyethylenes During Film Blowing: A Real-Time Wide-Angle X-ray Diffraction Study. <i>Macromolecular Materials and Engineering</i> , <b>2014</b> , 299, 1494-1512              | 3.9  | 24 |
| 7  | The chemical structure of the amorphous phase of propylene-ethylene random copolymers in relation to their stress-strain properties. <i>Polymer</i> , <b>2014</b> , 55, 896-905                                     | 3.9  | 22 |
| 6  | Flow-Induced Morphology of iPP Solidified in a Shear Device. <i>Macromolecular Materials and Engineering</i> , <b>2012</b> , 297, 60-67   | 3.9  | 21 |
| 5  | In situ X-ray analysis of mesophase formation in random copolymers of propylene and 1-butene. <i>Polymer Bulletin</i> , <b>2011</b> , 67, 497-510   | 2.4  | 21 |
| 4  | Influence of Nanoparticles on the Rheological Behaviour and Initial Stages of Crystal Growth in Linear Polyethylene. <i>Macromolecular Chemistry and Physics</i> , <b>2009</b> , 210, 2174-2187                     | 2.6  | 17 |
| 3  | Multiscale Structure and Microscopic Deformation Mechanisms of Gel-Spun Ultrahigh-Molecular-Weight Polyethylene Fibers. <i>Macromolecules</i> , <b>2019</b> , 52, 5207-5216   | 5.5  | 14 |
| 2  | Dynamics of fibrillar precursors of shishes as a function of stress. <i>IOP Conference Series: Materials Science and Engineering</i> , <b>2010</b> , 14, 012005   | 0.4  | 12 |
| 1  | Dilatometry: A Tool to Measure the Influence of Cooling Rate and Pressure on the Phase Behavior of Nucleated Polypropylene. <i>Macromolecular Materials and Engineering</i> , <b>2009</b> , 294, 231-243            | 3.9  | 9  |