Luigi Balzano

List of Publications by Year
in descending order

30 papers	1,807 citations	293460 24 h-index	511568 30 g-index
31 all docs	31 docs citations	31 times ranked	1349 citing authors

#	Article	IF	Citations
1	Multiscale Structure and Microscopic Deformation Mechanisms of Gel-Spun Ultrahigh-Molecular-Weight Polyethylene Fibers. Macromolecules, 2019, 52, 5207-5216.	2.2	22
2	Molecular Aspects of the Formation of Shish-Kebab in Isotactic Polypropylene. Macromolecules, 2016, 49, 3799-3809.	2.2	54
3	Dissolution and Re-emergence of Flow-Induced Shish in Polyethylene with a Broad Molecular Weight Distribution. Macromolecules, 2016, 49, 2724-2730.	2.2	43
4	Structure Development of Low-Density Polyethylenes During Film Blowing: A Real-Time Wide-Angle X-ray Diffraction Study. Macromolecular Materials and Engineering, 2014, 299, 1494-1512.	1.7	32
5	The chemical structure of the amorphous phase of propyleneâ€“ethylene random copolymers in relation to their stressâ€“strain properties. Polymer, 2014, 55, 896-905.	1.8	24
6	Flow induced crystallization in isotactic polypropylene during and after flow. Polymer, 2014, 55, 6140-6151.	1.8	45
7	Short-Term Flow Induced Crystallization in Isotactic Polypropylene: How Short Is Short?. Macromolecules, 2013, 46, 9249-9258.	2.2	64
8	Polymer crystallization studies under processing-relevant conditions at the SAXS/WAXS DUBBLE beamline at the ESRF. Journal of Applied Crystallography, 2013, 46, 1681-1689.	1.9	111
9	Mesophase-Mediated Crystallization of Poly(butylene-2,6-naphthalate): An Example of Ostwaldâ€™s Rule of Stages. ACS Macro Letters, 2012, 1, 1051-1055.	2.3	47
10	Quantification of non-isothermal, multi-phase crystallization of isotactic polypropylene: The influence of shear and pressure. Polymer, 2012, 53, 5896-5908.	1.8	66
11	Pressure Quench of Flow-Induced Crystallization Precursors. Macromolecules, 2012, 45, 4216-4224.	2.2	56
12	Oriented Gamma Phase in Isotactic Polypropylene Homopolymer. ACS Macro Letters, 2012, 1, 618-622.	2.3	54
13	Flowâ€Induced Morphology of iPP Solidified in a Shear Device. Macromolecular Materials and Engineering, 2012, 297, 60-67.	1.7	25
14	Self-Nucleation of Polymers with Flow: The Case of Bimodal Polyethylene. Macromolecules, 2011, 44, 2926-2933.	2.2	81
15	Effect of cooling rate on the crystal/mesophase polymorphism of polyamide 6. Colloid and Polymer Science, 2011, 289, 1073-1079.	1.0	83
16	In situ X-ray analysis of mesophase formation in random copolymers of propylene and 1-butene. Polymer Bulletin, 2011, 67, 497-510.	1.7	24
17	Dynamics of fibrillar precursors of shishes as a function of stress. IOP Conference Series: Materials Science and Engineering, 2010, 14, 012005.	0.3	13
18	Influence of shear in the crystallization of polyethylene in the presence of SWCNTs. Carbon, 2010, 48, 4116-4128.	5.4	35

#	Article	IF	Citations
19	A Study on the Chainâ^'Particle Interaction and Aspect Ratio of Nanoparticles on Structure Development of a Linear Polymer. Macromolecules, 2010, 43, 6749-6759.	2.2	57
20	Flow Memory and Stability of Shear-Induced Nucleation Precursors in Isotactic Polypropylene. Macromolecules, 2010, 43, 9394-9400.	2.2	124
21	Real-Time WAXD Detection of Mesophase Development during Quenching of Propene/Ethylene Copolymers. Macromolecules, 2010, 43, 10208-10212.	2.2	73
22	Continuous Cooling Curves Diagrams of Propene/Ethylene Random Copolymers. The Role of Ethylene Counits in Mesophase Development. Macromolecules, 2010, 43, 2890-2896.	2.2	74
23	Influence of Nanoparticles on the Rheological Behaviour and Initial Stages of Crystal Growth in Linear Polyethylene. Macromolecular Chemistry and Physics, 2009, 210, 2174-2187.	1.1	18
24	Dilatometry: A Tool to Measure the Influence of Cooling Rate and Pressure on the Phase Behavior of Nucleated Polypropylene. Macromolecular Materials and Engineering, 2009, 294, 231-243.	1.7	10
25	Characteristics of Bimodal Polyethylene Prepared via Coâ€Immobilization of Chromium and Iron Catalysts on an MgCl₂â€Based Support. Macromolecular Reaction Engineering, 2009, 3, 448-454.	0.9	37
26	Crystallization and Precursors during Fast Short-Term Shear. Macromolecules, 2009, 42, 2088-2092.	2.2	104
27	Thermoreversible DMDBS Phase Separation in iPP: The Effects of Flow on the Morphology. Macromolecules, 2008, 41, 5350-5355.	2.2	45
28	Flow Induced Crystallization in Isotactic Polypropyleneâ^'1,3:2,4-Bis(3,4-dimethylbenzylidene)sorbitol Blends:â€‰ Implications on Morphology of Shear and Phase Separation. Macromolecules, 2008, 41, 399-408.	2.2	94
29	Crystallization and Dissolution of Flow-Induced Precursors. Physical Review Letters, 2008, 100, 048302.	2.9	181
30	Effects of the degree of undercooling on flow induced crystallization in polymer melts. Polymer, 2004, 45, 3249-3256.	1.8	83