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with too many ends; 7. Open Questions and Future Directions; 7.1. The nature of entanglement and con ning tube; 7.2. Constraint release revisited; 7.3. Asymptopia; Acknowledgments; References; P. G. de Gennes, J. Phys. France 36, 1199-1203 (1975) Reptation of Stars; 1. Introduction.; 2. Queriching of reptation.; 3. Mechanical relaxation.; 4. Comparison with polymer melts.; 5. Conclusions.; Acknowledgments.; APPENDIX A; References; Polyelectrolytes: The de Gennes Legacy Philip Pincus and Omar A. Saleh; 1. Introduction
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II. KIRKWOOD CALCULATION OF THE CHAIN MOBILITY

Sommario/riassunto

This publication, in two volumes, is devoted to the scientific impact of the work of Nobel Laureate, Pierre-Gilles de Gennes, one of the greatest scientists of the 20th century. It covers the important fields for which de Gennes was renowned: solid state (magnetism and superconductivity), macroscopic random media and percolation, supersolids, liquid crystals, polymers, adhesion and friction, and biophysics. The book brings together internationally renowned experts to contribute their perspectives on the significance of de Gennes' works. They have each selected a definitive paper, which gives th