



PRODUCTION OF POLYMER

Reaction of monomers
 Polymerization
 Copolymerization

Free radical
 Anionic
 Cationic
 Coordination
 Ring-opening
 Living
 Step-growth
 Condensation
 Addition
 Interfacial
 Emulsion

Block copolymer
 Graft copolymer
 Star copolymer
 Hyperbranched polymer
 Dendritic polymer
 Hypercrosslinked polymer
 Hydrogel
 Nanoparticle
 Nanofiber
 Nanowire
 Nanotube
 Nanosheet
 Nanoplate
 Nanorod
 Nanosphere
 Nanocylinder
 Nanocube
 Nanopillar
 Nanopore
 Nanochannel
 Nanowire
 Nanotube
 Nanosheet
 Nanoplate
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 Nanochannel

Monomer	Initiator	Reaction
Styrene	BPO	Free radical
Methyl methacrylate	BPO	Free radical
Acrylonitrile	BPO	Free radical
Styrene	LiAlH ₄	Anionic
Styrene	BF ₃ ·OEt ₂	Cationic
Styrene	ZrCl ₄ ·THF	Coordination
Styrene	LiAlH ₄	Living
Styrene	LiAlH ₄	Step-growth
Styrene	LiAlH ₄	Condensation
Styrene	LiAlH ₄	Addition
Styrene	LiAlH ₄	Interfacial
Styrene	LiAlH ₄	Emulsion

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