Table 1: Reference works justifying our combinatory description of chain cross-reactions. Application field: 1: polymerization, 2: electron transfer, 3: oxidation.

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| **Cross-reactions** | **Species** | **Conditions** | **Analogous reaction at scale 2** | **Field** |
| Propagation by peroxyl radicals | FAMEs | 100°C-180°C  Oxygen excess, oxygen limiting |  | 3 ([Navaneeth et al., 2017](#_ENREF_52)) |
| Propagation by alkoxyl radical | t-butoxyl radical and FAMEs | 30°C |  | 3 ([Small Jr., Scaiano, & Patterson, 1979](#_ENREF_83)) |
| Propagation, termination by peroxyl radicals | Styrene, methyl methacrylate, methyl acrylate, vinyl acetate | 60°C under vacuum and 2-azo-bis-isobutyronitrile as initiator |  | 1 ([Walling, 1949](#_ENREF_99)) |
| Propagation, termination by peroxyl radicals | Theoretical | Review |  | 1 ([Melville, Noble, & Watson, 1947](#_ENREF_49)) |
| Propagation, termination by peroxyl radicals | Various alkenes and ethers. | 90°C  Oxygen in excess |  | 3 ([Russell, 1955](#_ENREF_71)) |
| Propagation, termination by peroxyl radicals | Various alkenes and ethers | 60°C  Oxygen excess |  | 3 ([Russell & Williamson, 1964a](#_ENREF_72)) |
| Propagation, termination by peroxyl radicals | FAMEs | 28°C |  | 3 ([Fatemi & Hammond, 1980](#_ENREF_20)) |
| Propagation, termination by peroxyl radicals | Ethylene, propylene | 25°C- 45°C  γ-Irradiation=390-1050 Gγ·h-1  Oxygen in excess |  | 3 ([Colin et al., 2010](#_ENREF_11)) |
| Propagation, termination by peroxyl radicals | FAMEs, polyethylene | 80°C-150°C  Oxygen in excess |  | 3 ([Richaud et al., 2013](#_ENREF_67)) |
| Termination | Theoretical | Hypothesis only |  | 2 ([Marcus, 1960](#_ENREF_46)) |
| Termination | Various ions | Review |  | 2 ([Marcus, 1993](#_ENREF_47)) |