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## Recent developments on scintillator materials for calorimetry

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Since many decades scintillating crystals have been used for high resolution electromagnetic calorimeters and significant progress has been made since 30 years in the field of inorganic scintillators in the understanding of their scintillation properties, radiation hardness and production methods. In recent years many studies have been carried out in the framework of the Crystal Clear Collaboration on the investigation, improvement and exploitation of different processes for new fast light emission such as wideband semiconductor nanomaterials, hot intraband luminescence, cross luminescence and Cerenkov light, as well as on the production and the assembly of such material: crystal fibers, 3D printing, Ceramic, hybrid structure combining materials with different properties.

Selected results of the recent research efforts and developments on scintillators for future detectors will be presented.

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