

# Multi-material distributed recycling via Fused granular fabrication: rHDPE and rPET case of study

## **List of Figures**

## **List of Tables**

## Acronyms

Acronym	Definition
<b>ABS</b>	Poly(acrylonitrile butadiene styrene)
<b>AM</b>	Additive Manufacturing
<b>DRAM</b>	Distributed recycling via additive manufacturing
<b>DSC</b>	Melt flow index
<b>FDM</b>	Fused deposition modeling
<b>FFF</b>	Fused filament fabrication
<b>FGF</b>	Fused granular fabrication
<b>FPF</b>	Fused particle fabrication
<b>FTIR</b>	Differential scanning calorimetry
<b>HDPE</b>	High-density polyethylene
<b>MFI</b>	Virgin or commercial Poly(ethylene terephthalate)
<b>PC</b>	Polycarbonate
<b>PET</b>	Poly(ethylene terephthalate)
<b>PLA</b>	Poly(lactic acid)
<b>PP</b>	Polypropylene
<b>PSO</b>	Particle swarm optimization
<b>PS</b>	Polystyrene
<b>SEBS</b>	Poly (styrene-block-ethene-co-butene-block-styrene)
<b>Tg</b>	Degree of crystallization
<b>pBC</b>	Glass temperature
<b>rHDPE</b>	Recycled High-density Polyethylene
<b>rPET90//rHDPE10</b>	Recycled Bottle-Cap (Cristaline bottle shredded without separation)
<b>rPET</b>	Recycled Poly(ethylene) terephthalate
<b>vPET</b>	Printed Bottle-Cap
<b>NA</b>	Fourier-transform infrared spectroscopy

## Introduction