

**Production and characterization of lightweight aggregates from municipal solid waste incineration fly-ash through single- and double-step pelletization process**

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## Supplementary material (Figures)

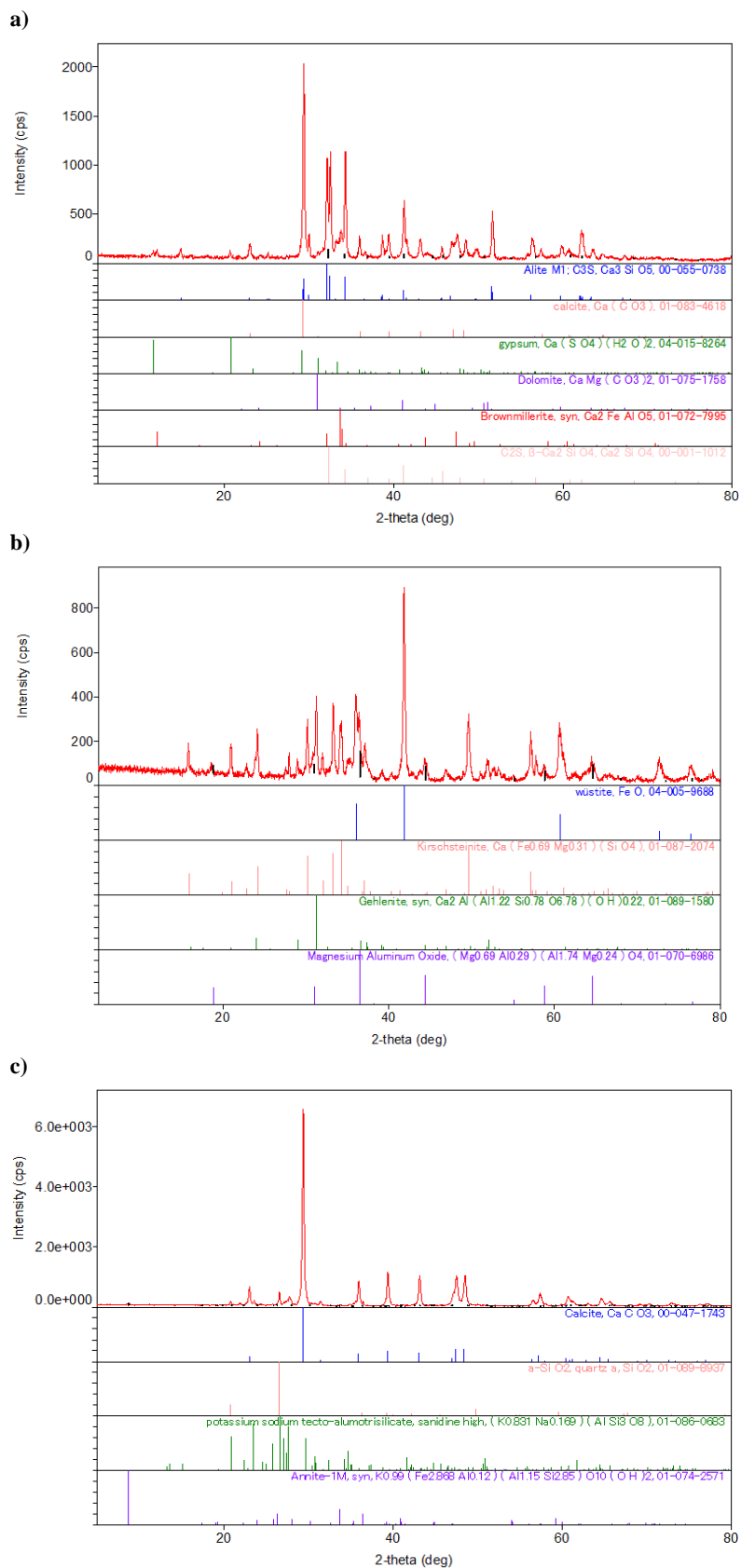
a)



b)



**Figure S1. The involved pilot-scale granulator while running the a) single-step, and b) double-step pelletization tests.**



**Figure S2. XRD analysis of a) cement, b) GBFS, and c) MS.**

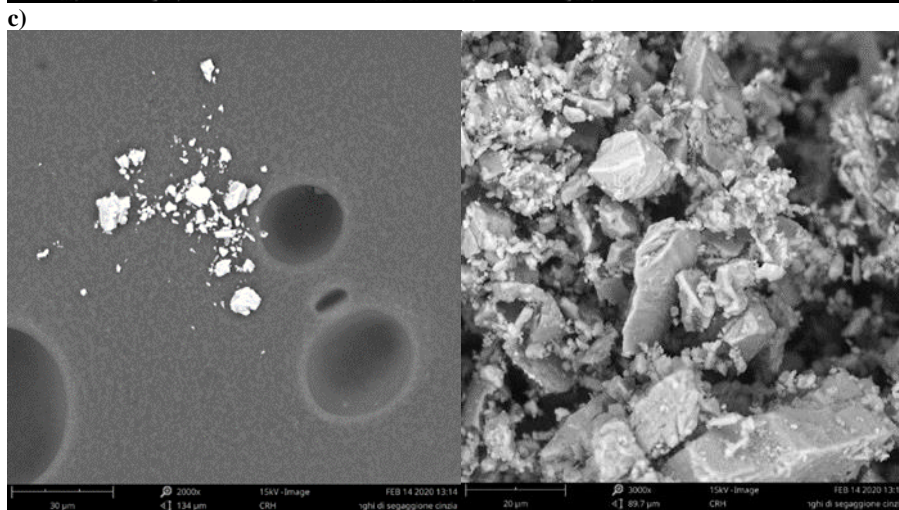
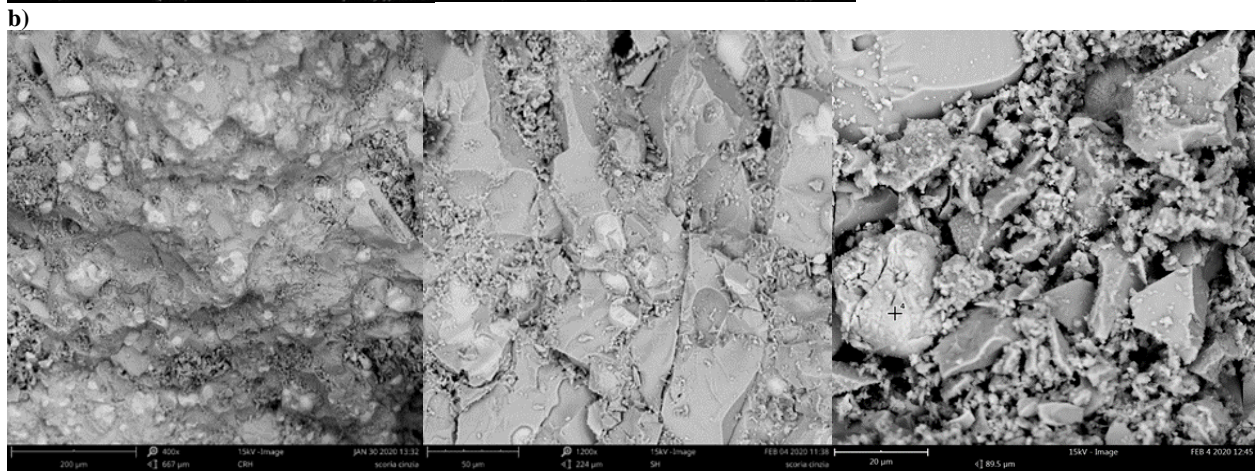
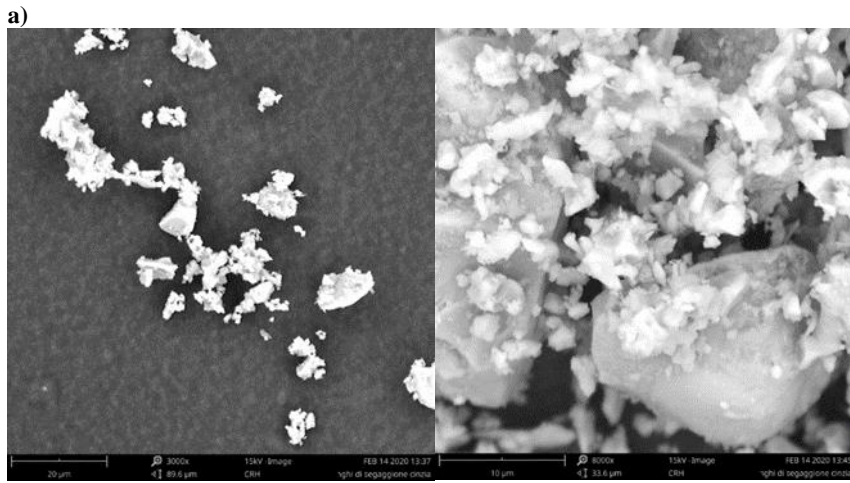
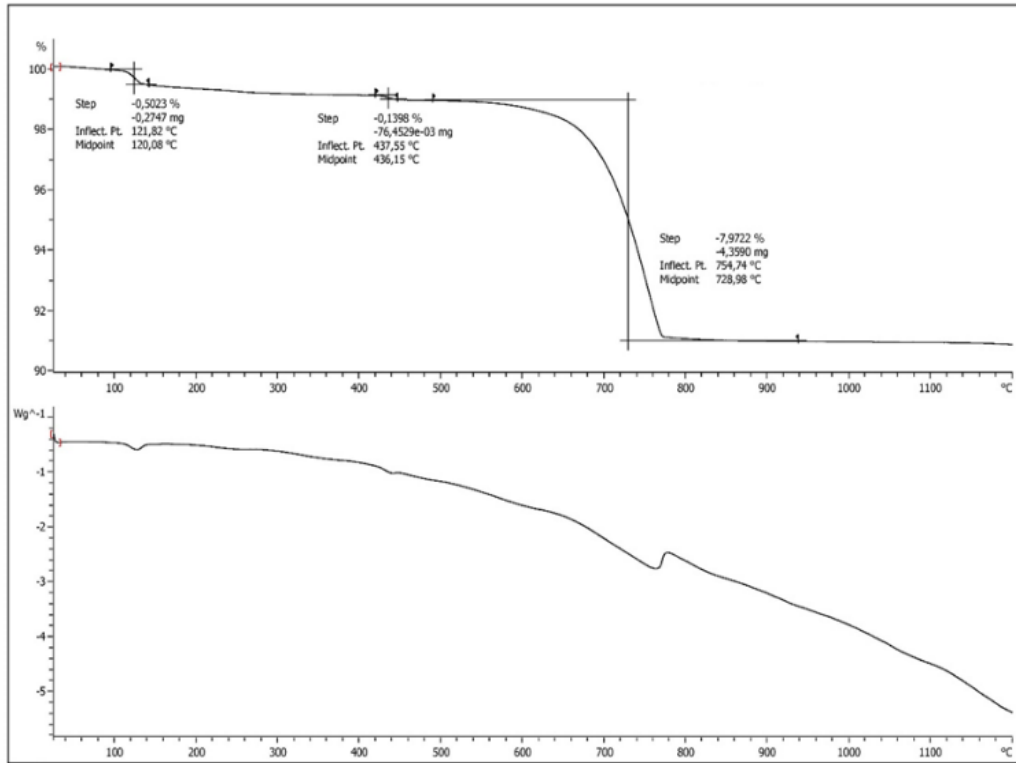


Figure S3. SEM analysis of a) cement, b) GBFS, and c) MS.

a)



b)

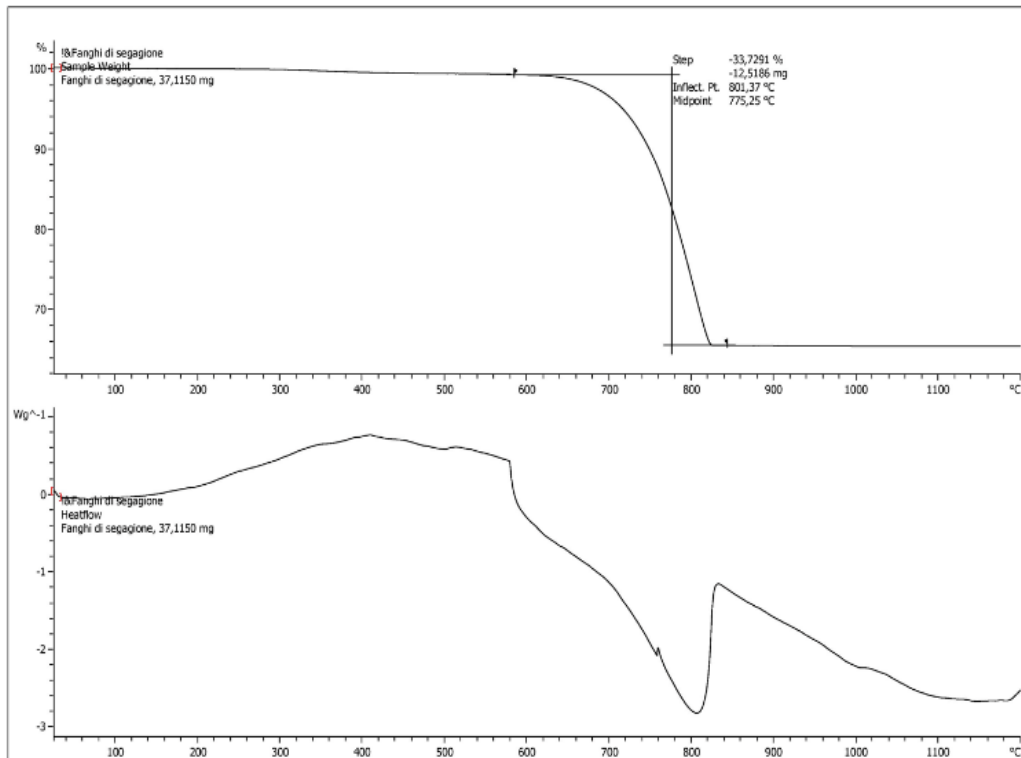
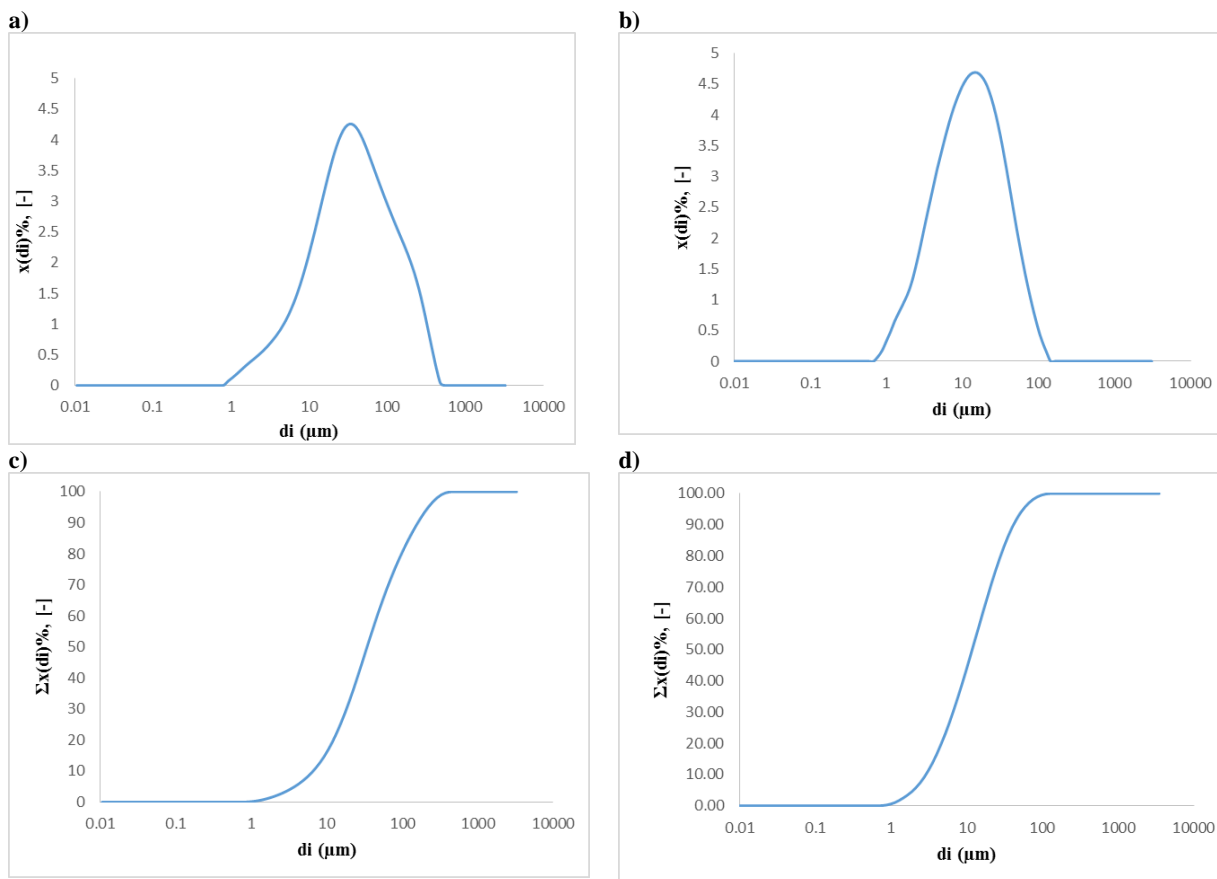


Figure S4. TGA data for a) cement and b) MS.



**Figure S5. Particle size distribution of a) GBFS and b) MS and cumulative particle size distribution of c) GBFS and d) MS.**