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# Expanding particle size distribution and morphology of aluminium-silicon powders for Laser Beam Melting by dry coating with silica nanoparticles

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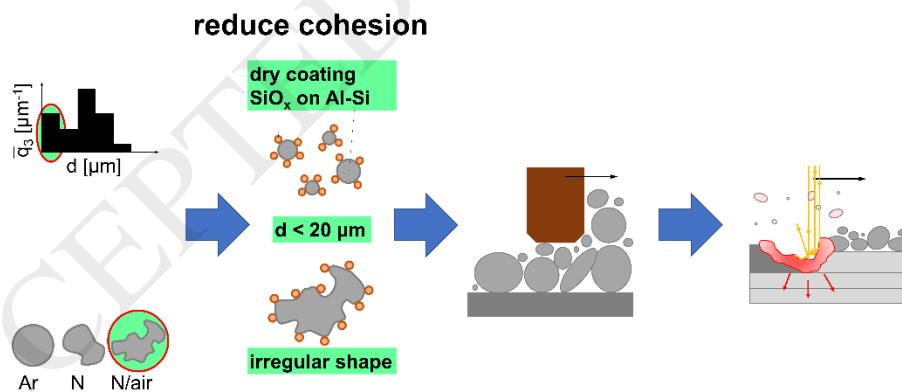
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## Graphical Abstract



## Abstract

Current requirements for metal powder in Additive Manufacturing via Laser Beam Melting in powder bed (LBM) that ensure repeatably homogeneous thin layers can be spread and LBM products with high relative density  $\rho_{rel}$  can be built are high sphericity and particle size distributions (PSD) with limited share of fine particles. The most established LBM powder production method today is delicate and costly inert gas

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