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Microstructural and core loss behaviors of additive Fe-17□at% P based on Fe-3.5□
Si alloys in powder injection molding

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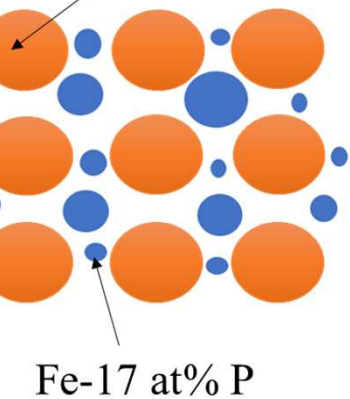
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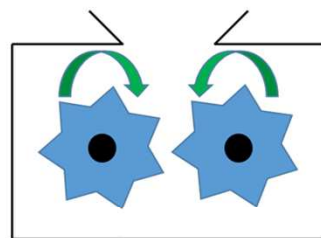
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Fe-3.5 wt% Si

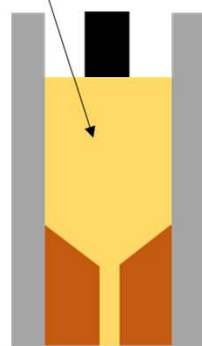


Fe-17 at% P



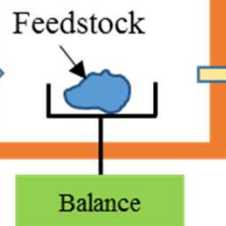
Critical solids loading

Feedstock



Homogeneity test

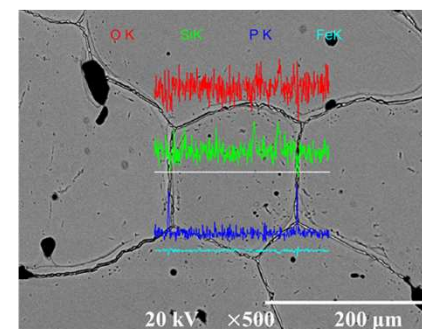
Furnace



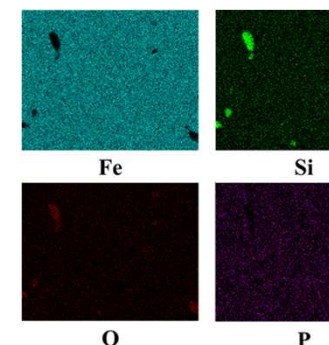
Carrier gas

Balance

Thermal decomposition



SEM Image, EDS analysis (Line, dot mapping), XRD

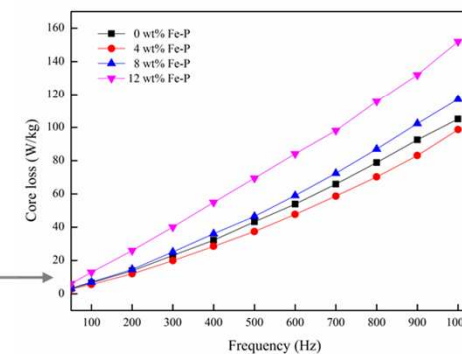


Fe

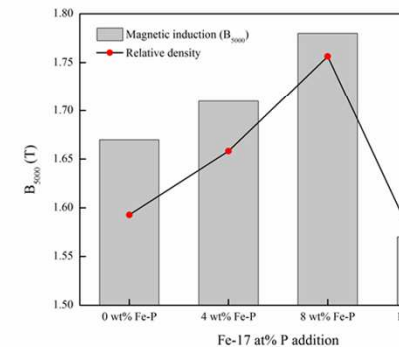
Si

O

P



Core loss, Magnetic induction, Maximum permeability, Coercivity, Resistivity



< Hard phase of Fe-17at% P >

< Processing optimization of powder injection molding >

< Microstructural and core loss behavior of sintered soft magnetic alloys >

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