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LIST OF SYMBOLS

Angle of contact between solid metal and substrate…………………………………………………...θ

Interface strain…………………………………………………………………………………….ε

Lattice constant…………………………………………………………………………………...a

Interface…………………………………………………………………………………………...I

Phases ……………………………………………………………………………………..α, β

Lattice mismatch……………………………………………………….…………………………δ

Interface energy due to the matching in the coherent region………………………………………ε_E

Interface energy due to the matching in the dislocation……………………………………………ε_S

Growth restricting factor...GRF

Micron……………………………………………...…………………………………………….μm

Grain refiners prepared in electric resistance furnace……………...……………………………Elec

Grain refiners prepared in induction furnace……………………………………………… ……..Ind

Grain refiners prepared in arc button furnace…………………………………………………….Arc