

Limitations in the Grain Boundary Processing of the Recycled HDDR Nd-Fe-B System

Awais Ikram ^{1,2,3,*}, Muhammad Awais ⁴, Richard Sheridan ⁴, Allan Walton ⁴, Spomenka Kobe ^{2,3}, Franci Pušavec ¹ and Kristina Žužek Rožman ^{2,3}

¹ Faculty of Mechanical Engineering, University of Ljubljana, Aškerčeva cesta 6, SI-1000 Ljubljana, Slovenia; franci.pusavec@fs.uni-lj.si

² Department for Nanostructured Materials, Jožef Stefan Institute, Jamova 39, SI-1000 Ljubljana, Slovenia; spomenka.kobe@ijs.si (S.K.); tina.zuzek@ijs.si (Z.R.)

³ Jožef Stefan International Postgraduate School, Jamova 39, SI-1000 Ljubljana, Slovenia

⁴ School of Metallurgy and Materials, University of Birmingham, Edgbaston, Birmingham B15 2TT, UK; m.awais@bham.ac.uk (M.A.); r.s.sheridan.1@bham.ac.uk (R.S.); a.walton@bham.ac.uk (A.W.)

* Correspondence: rana.awaisikram@yahoo.com

Received: 26 June 2020; Accepted: 5 August 2020; Published: date

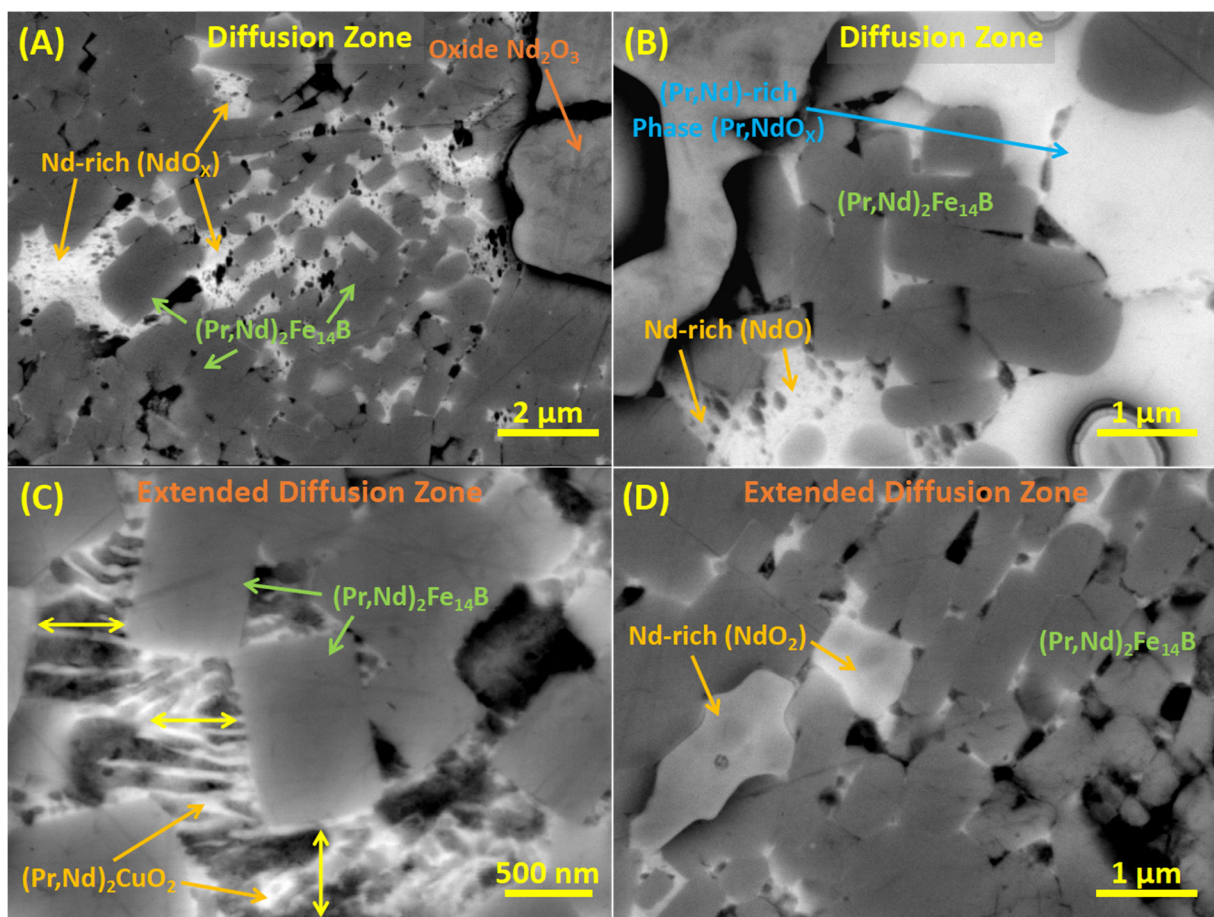


Figure S1. Supplementary backscattered electron microscopy images of (A) diffusion zone at 10000 X magnification showing the particle boundary on the right side and Nd-rich pool (lamellar morphology of NdO_x composition) and in the vicinity (Pr,Nd)₂Fe₁₄B phases, (B) alternate higher magnification (20 kX) image of the diffusion zone with solidified liquid phase (Pr,Nd)O_x diffused with the addition of 2 wt. % Pr-Cu alloy and the presence of Pr-containing matrix phase and lamellar

NdO_x phase (bright contrast), (C) high magnification (30000 X) image of diffusion zone extended beyond ~250 µm and indicating presence of complex cuprates in the thick intergranular phase, and (D) 20 kX magnification of the extended zone with non-uniform distribution of liquid phase along the hard matrix phase.



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