Electromagnetic Property Modulation of Flaky Ferromagnetic 304 Stainless-Steel Powders for Microwave Absorption at Elevated Temperatures

Bolin Yang [1], Yifan Xu [2], Zhihong Chen [3,*], Hang Yang [1], Yuchen Hu [3], Haoqin Wu [4], Mingfeng Xing [1], Jianguo Guan [2] and Wei Li [5,*]

1 School of Materials Science and Engineering, Wuhan University of Technology, Wuhan 430070, China; 308481@whut.edu.cn (B.Y.); 308483@whut.edu.cn (H.Y.); xingmf@whut.edu.cn (M.X.)
2 School of Materials and Microelectronics, Wuhan University of Technology, Wuhan 430070, China; 268690@whut.edu.cn (Y.X.); guanjg@whut.edu.cn (J.G.)
3 School of Science, Wuhan University of Technology, Wuhan 430070, China; hyc349152@whut.edu.cn
4 Leicester International Institute, Dalian University of Technology, Dalian 116024, China; whq17872999616@mail.dlut.edu.cn
5 State Key Laboratory of Advanced Technology for Materials Synthesis and Processing, Wuhan University of Technology, Wuhan 430070, China
* Correspondence: z_chen@whut.edu.cn (Z.C.); wellee@whut.edu.cn (W.L.)

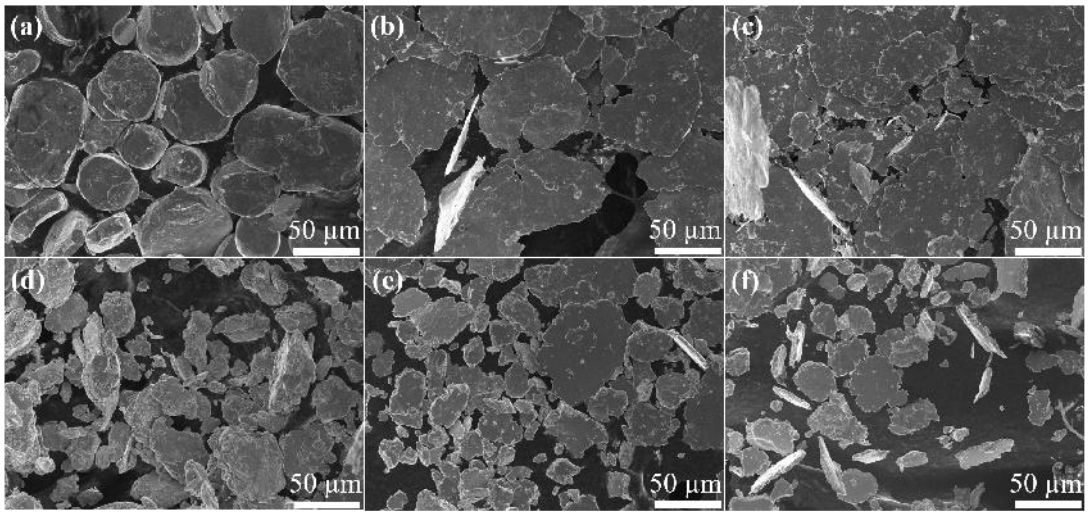

Figure **S1**. (**a-f**) SEM images of 304 stainless steel powders after ball milling for 0,2,6,12,20,30 and 40 h

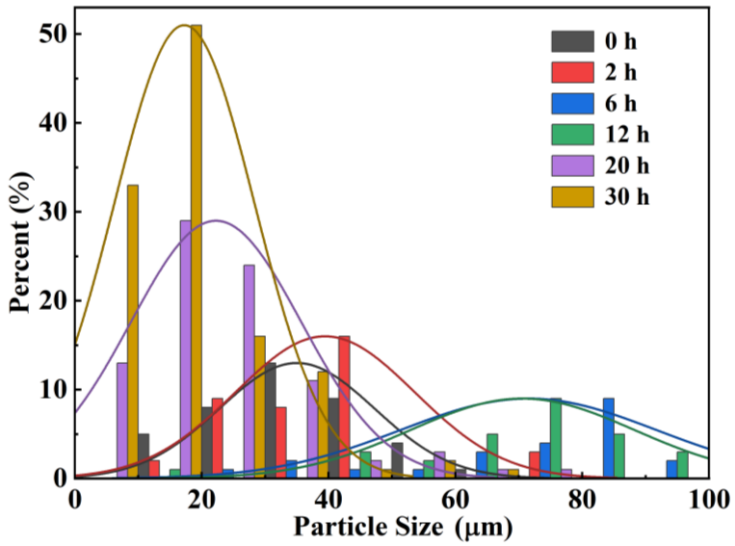

Figure **S2**. Particle size distribution of 304 stainless steel powders during ball milling

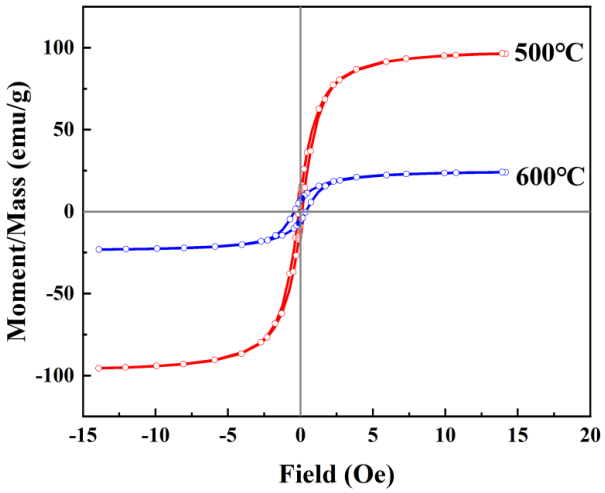

Figure **S3**. Hysteresis loop of air after heat treatment at 500℃ and 600℃ for 1 h

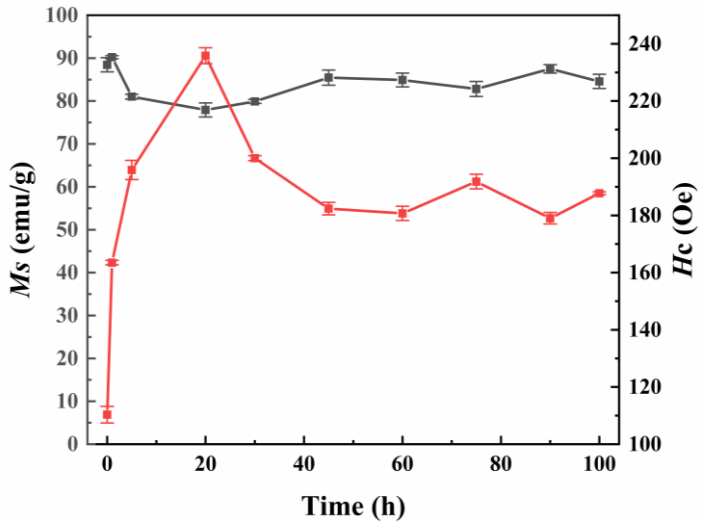

Figure **S4**. The changes of Ms and HC after heat treatment at 500℃ for different time

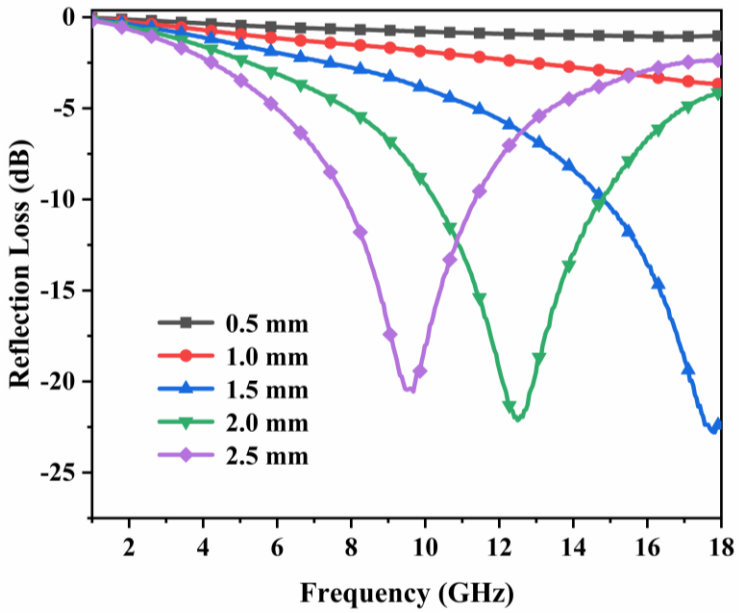

Figure **S5**. Simulated reflection loss after heat treatment at 500℃ for 100h