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Supporting Information

## Magnetocaloric properties of DyN, TbN and HoN nanopowders prepared by the

## plasma arc discharge

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Fig.S1 SEM image of DyN nanopowder



Fig.S2 SEM image of TbN nanopowder



Fig.S3 Magnetization isotherms (M-H) measured at various applied fields from 0-5 T at different temperatures around  $T_C$  for DyN.



Fig.S4 Magnetization isotherms (M-H) measured at various applied fields from 0-5 T at different temperatures around T<sub>C</sub> for DyN.



Fig. S5 Arrott plots of  $M^2$  vs H/M at the various temperatures for DyN.



Fig. S6 Arrott plots of  $M^2$  vs H/M at the various temperatures for TbN.