

Supporting Information

Dimensionality-Regulated Hofmann MOFs Derived 3D Core–Shell CoNi/C Composites for High-Performance Broadband Microwave Absorption

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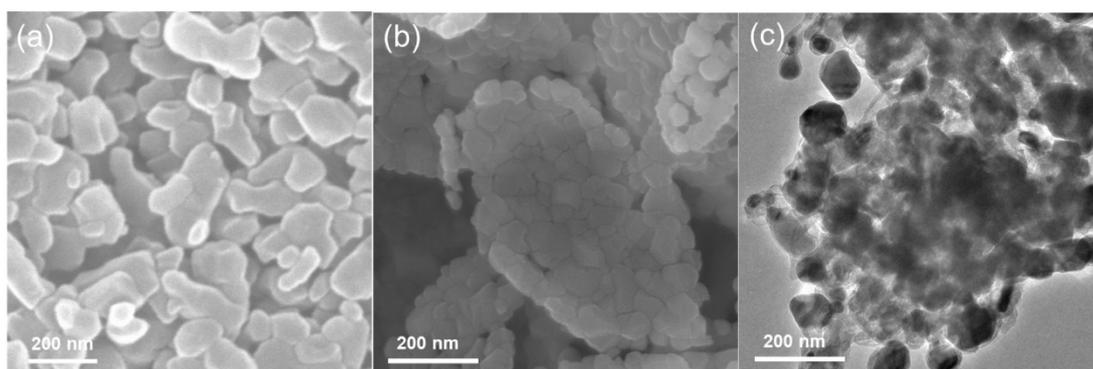


Fig.S1. (a) SEM image of Hofmann MOF; (b) SEM image and (c) TEM images of P-700.

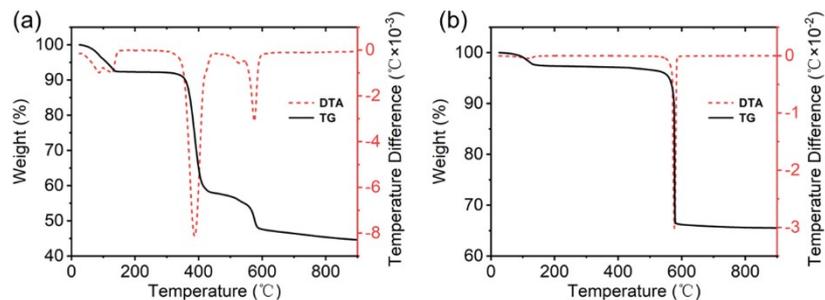


Fig.S2. TG and DTA patterns of (a) Hofmann MOF and (b) Co[Ni(CN)4].

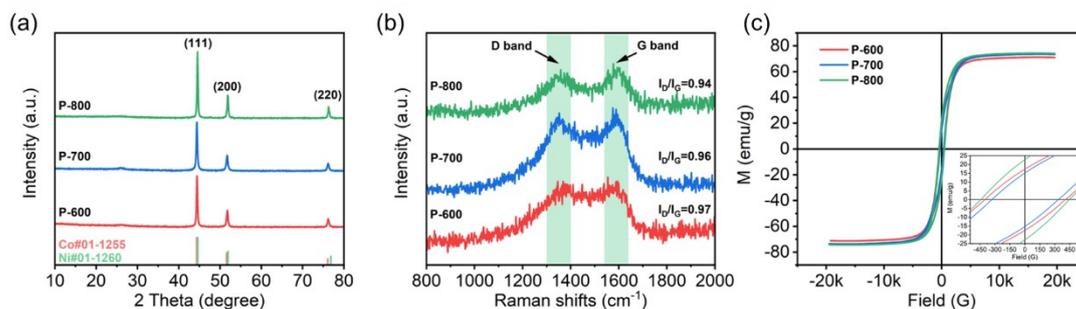


Fig.S3. (a) XRD patterns, (b) Raman patterns and (c) hysteresis loop of P-600, P-700 and P-800.

Table S1. Content of each element of Hofmann-700 and P-600

| Sample | C/wt% | O/wt% | Co/wt% | Ni/wt% |
|-------------|-------|-------|--------|--------|
| Hofmann-700 | 14.9 | 1.1 | 44.9 | 39.1 |
| P-600 | 8.2 | 0.5 | 51.8 | 39.5 |

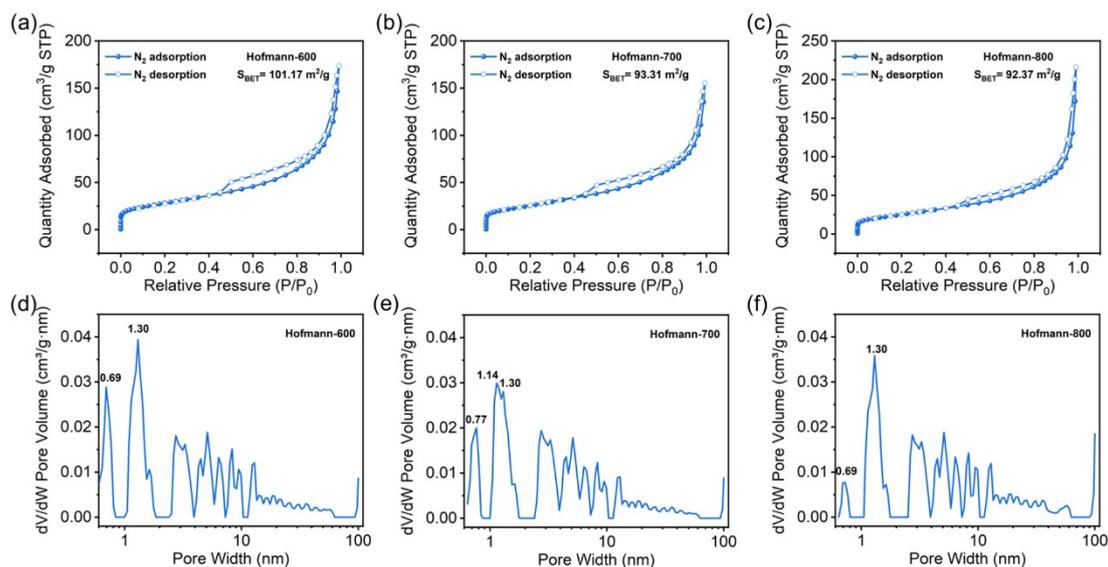


Fig.S4. N₂ absorption-desorption isotherm and pore-size distribution of (a, d) Hofmann-600, (b, e) Hofmann-700 and (c, f) Hofmann-800.

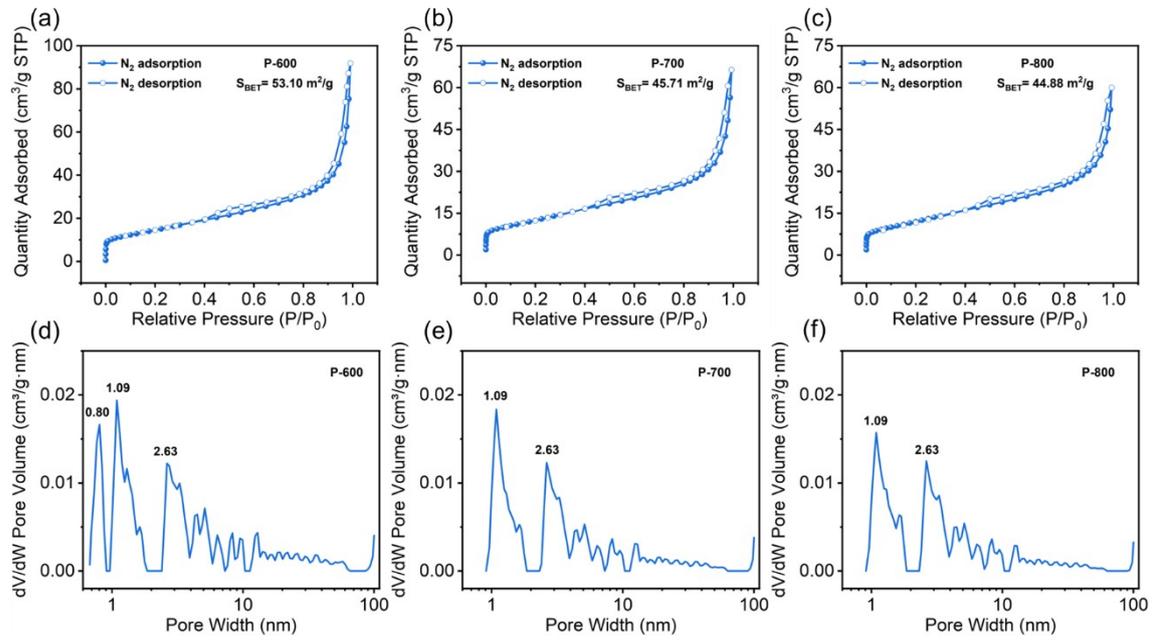


Fig.S5. N_2 absorption-desorption isotherm and pore-size distribution of (a, d) P-600, (b, e) P-700 and (c, f) P-800.

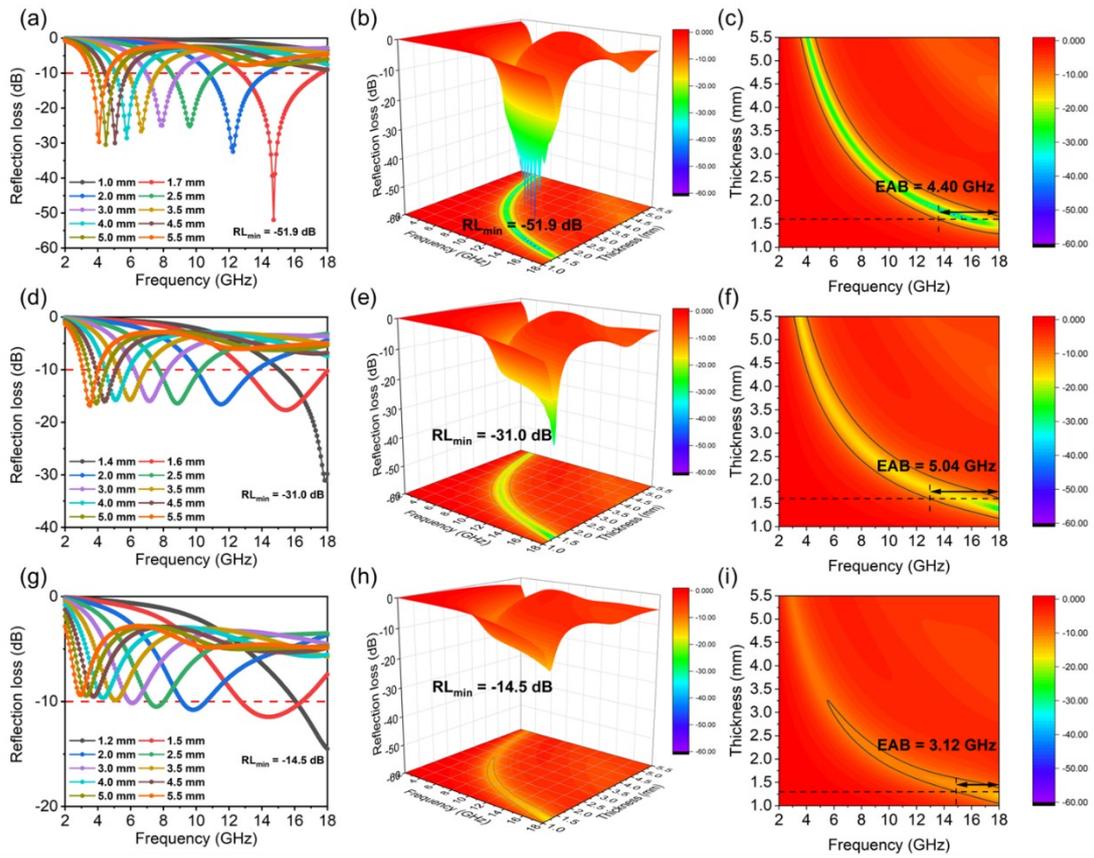


Fig.S6. RL, 3D RL and 2D RL of (a, b, c) P-600, (d, e, f) P-700 and (g, h, i) P-800.

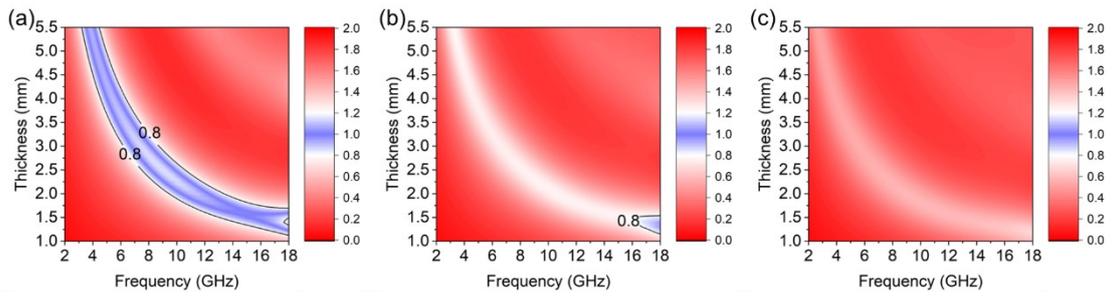


Fig.S7. 2D impedance matching of (a) P-600, (b) P-700 and (c) P-800.

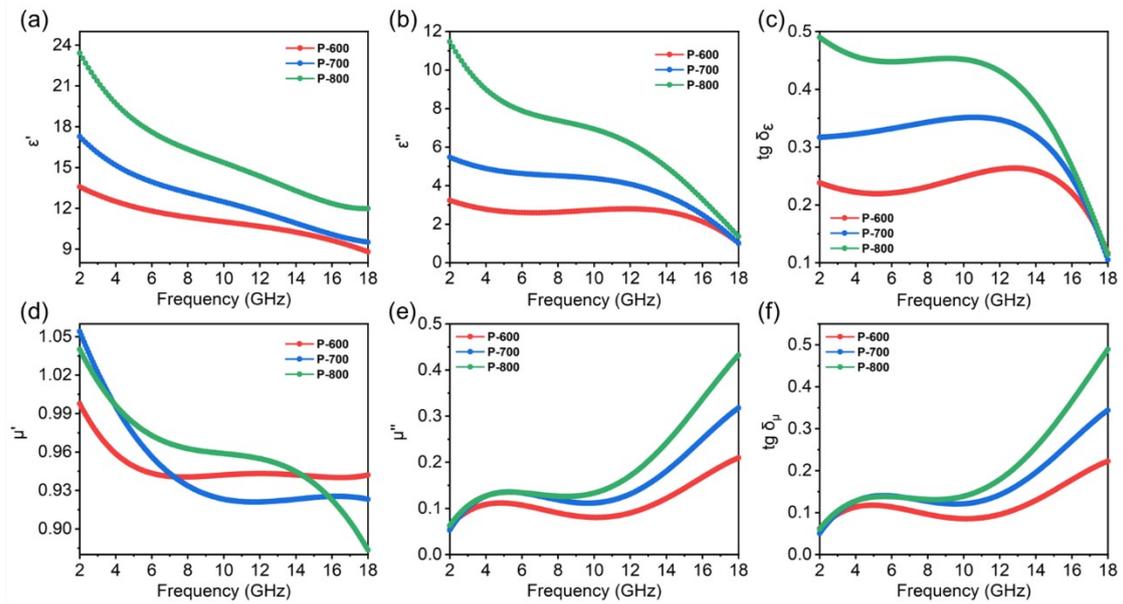


Fig.S8. (a) Permittivity real part ϵ' , (b) permittivity imaginary part ϵ'' , (c) dielectric loss tangent $\tan\delta\epsilon$, (d) permeability real part μ' , (e) permeability imaginary part μ'' , and (f) magnetic loss tangent $\tan\delta\mu$ of P-600, P-700 and P-800.

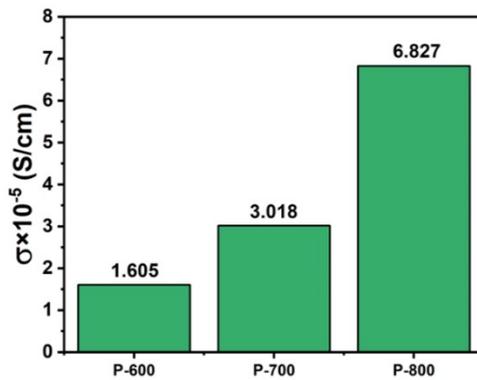


Fig.S9. Conductivity of $\text{Co}[\text{Ni}(\text{CN})_4]$ derivatives P-X.

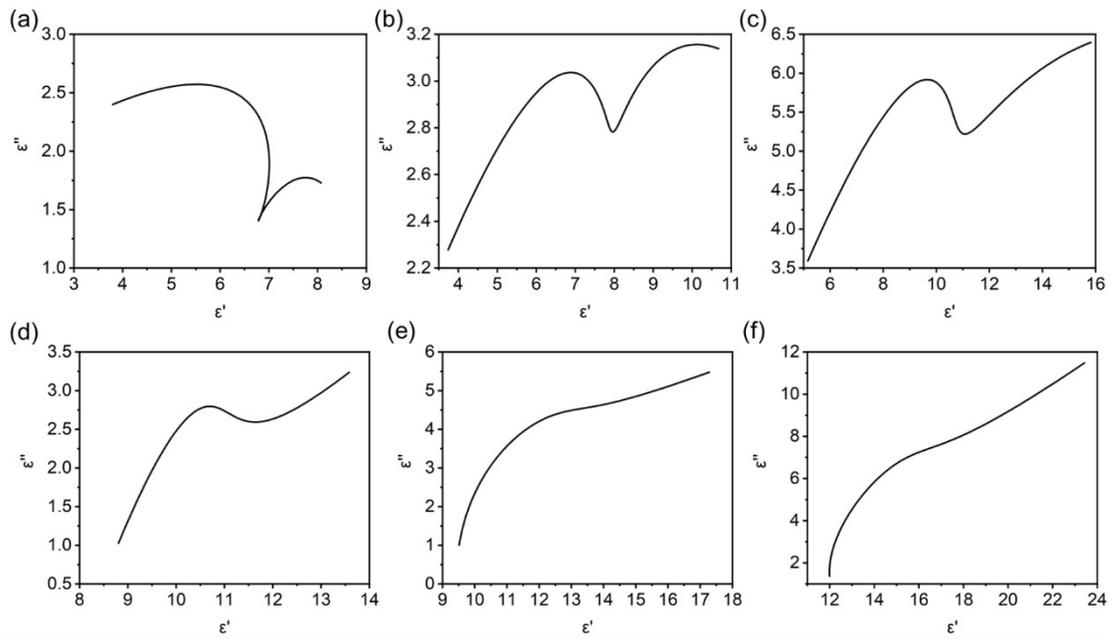


Fig.S10. The Cole-Cole plots of (a) Hofmann-600, (b) Hofmann-700, (c) Hofmann-800, (d) P-600, (e) P-700 and (f) P-800.

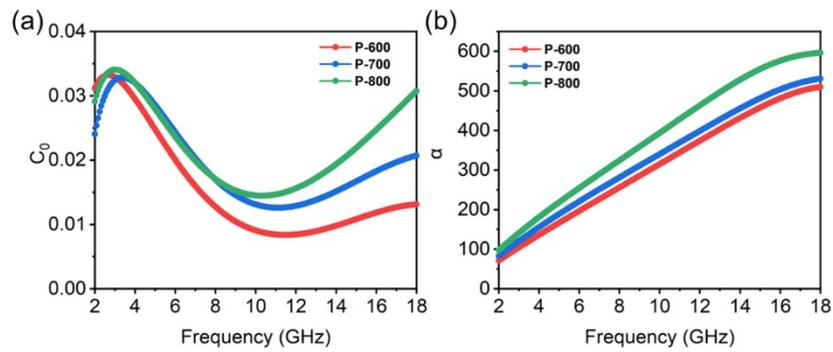


Fig.S11. (a) C_0 curves, (b) attenuation constant of P-600, P-700 and P-800.