



Fig. S1 Energy dispersive spectrometry (EDS) of Cu-TC@monolithic column

Table S1 List of element contents of Cu-TC@monolithic column

Cu-TC@monolithic column	<i>C</i>	<i>N</i>	<i>O</i>	<i>Cu</i>
Weight %	66.97	13.51	17.28	2.24
Atom %	72.71	12.38	13.86	1.05

**Table S2 Reports on chiral separation system of monolithic capillary electrochromatography based on metal-organic framework**

CMOF	chiral selectors	Analyte	Rs	Analysis time	Advantage	Disadvantage	Ref.
MOF-5	pepsin	Nefopam, chlorpheniramine; clenbuterol; Hydroxyzine; Chloroquine Hydroxychloroquine Chloroquine; Hydroxychloroquine;	0.65~2.41	<12 min	/	Low Rs; Sample peak tailing; Chiral selectors are required and bonding steps are cumbersome;	[1]
ZIF-8	pepsin	Clenbuterol; nefopam; amlodipine; Hydroxyzine	0.72~2.50	<12 min	/	Low Rs; Sample peak tailing; Chiral selectors are required and bonding steps are cumbersome;	[2]
MIL-100(Fe)	Lipase	Leucine; Isoleucine; Norleucine; Histidine; Alanine; Valine; Norvaline; Serine; Carnitine;	2.02~4.81	<14 min	Baseline separation is achieved and peak shape is symmetrical;	Chiral selectors are required and bonding steps are cumbersome;	[3]
Cu-TC	/	Propranolol; amlodipine; naproxen; histidine; tryptophan; phenylalanine	3.75~6.75	<18 min	Satisfactory resolution; peak shape is symmetrical; no additional bonded chiral selector required	/	This work

## Reference

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2. W. Ding, T. Yu, Y.X. Du, X.D. Sun, Z.J. Feng, S.Y. Zhao, X.F. Ma, M.X. Ma, C. Chen, *Microchimica Acta* (2020) 187: 51.
3. G.L. Sun, D.M. Choi, H.L. Xu, S.H. Baeck, K.H. Row, W.Y. Tang, *Microchimica Acta* (2023) 190:84.