

1 Supplementary Material

2 Table. S1 Details of reagents.

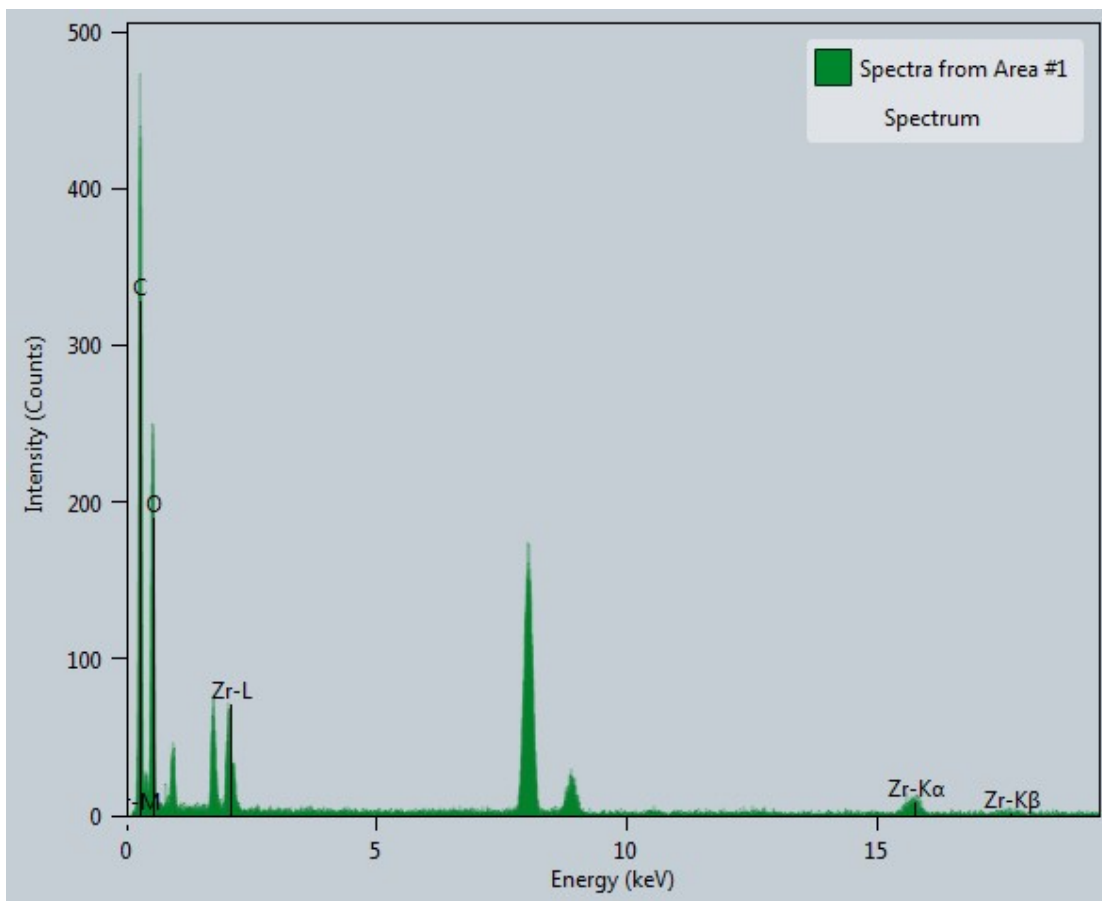
Regent	Formula	Manufacturers
Pyromellitic Acid	$C_{10}H_6O_8$	Macklin Reagent Co.
Zirconium tetrachloride	$ZrCl_4$	Macklin Reagent Co.
Terbium(III) nitrate pentahydrate	$Tb(NO_3)_3 \cdot 5H_2O$	Macklin Reagent Co.
Europium nitrate hexahydrate	$Eu(NO_3)_3 \cdot 6H_2O$	Macklin Reagent Co.
Acetone	C_3H_6O	Macklin Reagent Co.
N, N-dimethylformamide	C_3H_7NO	Macklin Reagent Co.
Caproic acid	$C_6H_{12}O_2$	Shanghai Aladdin Biochemical Technology Co.
Lactic acid	$C_3H_6O_3$	Shanghai Aladdin Biochemical Technology Co.
Acetaldehyde	C_2H_4O	Shanghai Titan Technology Co., Ltd.
Acetal	$C_6H_{14}O_2$	Shanghai Titan Technology Co., Ltd.
Ethyl lactate	$C_5H_{10}O_3$	Shanghai Aladdin Biochemical Technology Co.
Ethyl acetate	$C_4H_8O_2$	Shanghai Titan Technology Co., Ltd.
Ethyl caproate	$C_8H_{16}O_2$	Shanghai Aladdin Biochemical Technology Co.
Isoamyl alcohol	$C_5H_{12}O$	Shanghai Titan Technology Co., Ltd.
N-butanol	$C_4H_{10}O$	Shanghai Aladdin Biochemical Technology Co.
Guaiacol	$C_7H_8O_2$	Shanghai Titan Technology Co., Ltd.
Ferulic acid	$C_{10}H_{10}O_4$	Shanghai Civi Chemical Technology Co., Ltd.

3

Table. S2 Information of 16 kinds Baijiu.

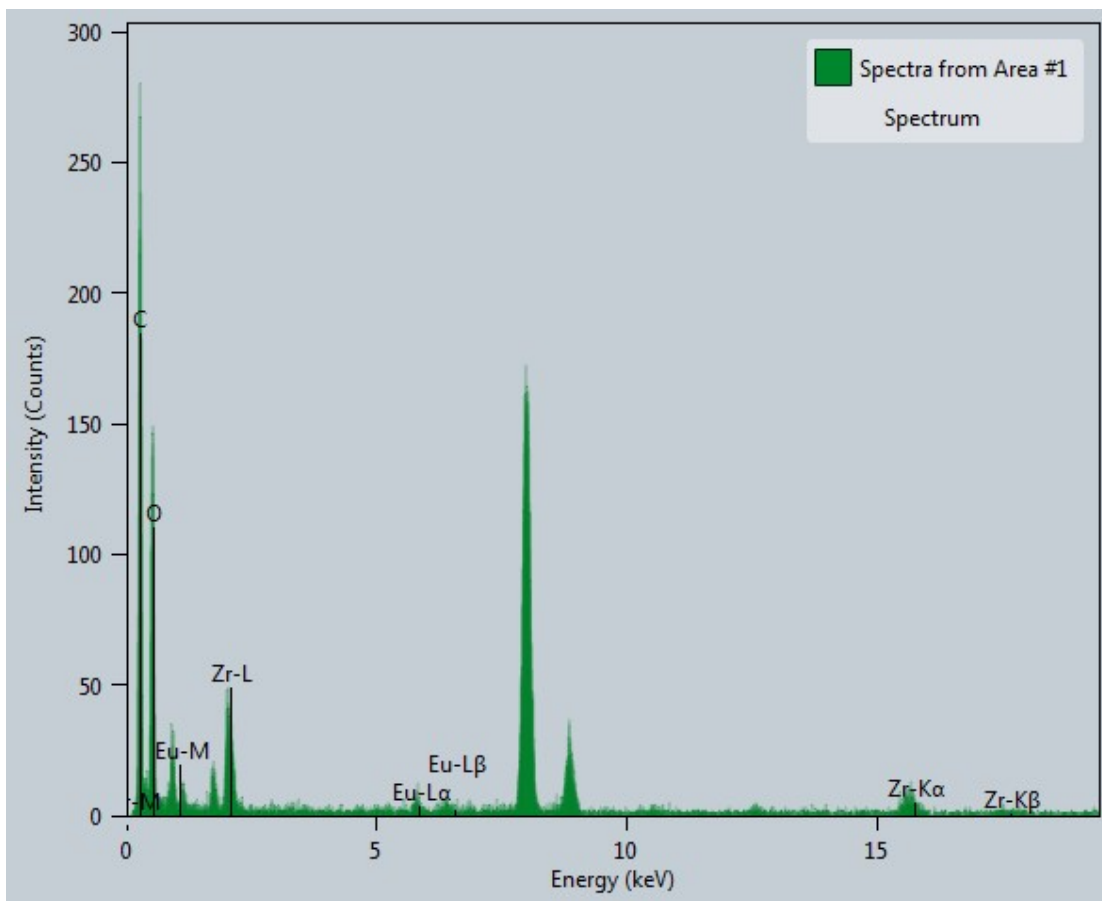
Baijiu	Flavor	pH	Alcoholic Strength (%)	Mark
Yubingshao Jiu	Soybean-flavour	4.51	45	1
Sanhua Jiu	Rice-flavour	3.87	52	2
Baiyunbian Jiu	Miscellaneous-flavour	3.68	42	3
Dong Jiu	Dong-flavour	3.69	54	4
Yanghe Daqu	Strong-flavour	3.98	55	5
Jiangjing Jiu	Light-flavour	4.36	50	6
Red Star Erguotou	Light-flavour	4.97	52	7
Fen Jiu	Light-flavour	3.53	53	8
Luzhou Laojiao	Strong-flavour	3.50	52	9
Hengshui Laobaigan	Laobaigan-flavour	3.92	67	10
Jingzhi Jiu	Sesame-flavour	3.41	42	11
Maotai Jiu	Moutai-flavour	3.71	53	12
Jiugui Jiu	Heavy-flavour	3.44	52	13
Lang Jiu (Red Flower)	Miscellaneous-flavour	3.50	53	14
Site Jiu	Special-flavour	3.75	52	15
Feng Jiu	Feng-flavour	3.90	52	16

Equipment	Type/Specification	Manufacturers
Electronic scales	AL-204-IC	Mettler Toledo Instruments Co., Ltd.
Fluorescence spectroscopic scanner	FL970	Shanghai Tianmei Scientific Instrument
Magnetic stirring apparatus	RO-5-P-S25	IKA Co.
Ultrapure water machine	Milli-Q Academic	USA Millibeu Co.
Centrifugal machine	TG-16W	Hunan Xiangyi Laboratory Instrument Co.
Field emission transmission electron microscope	FEI Talos F200S G2	Thermo Fisher Scientific Inc.



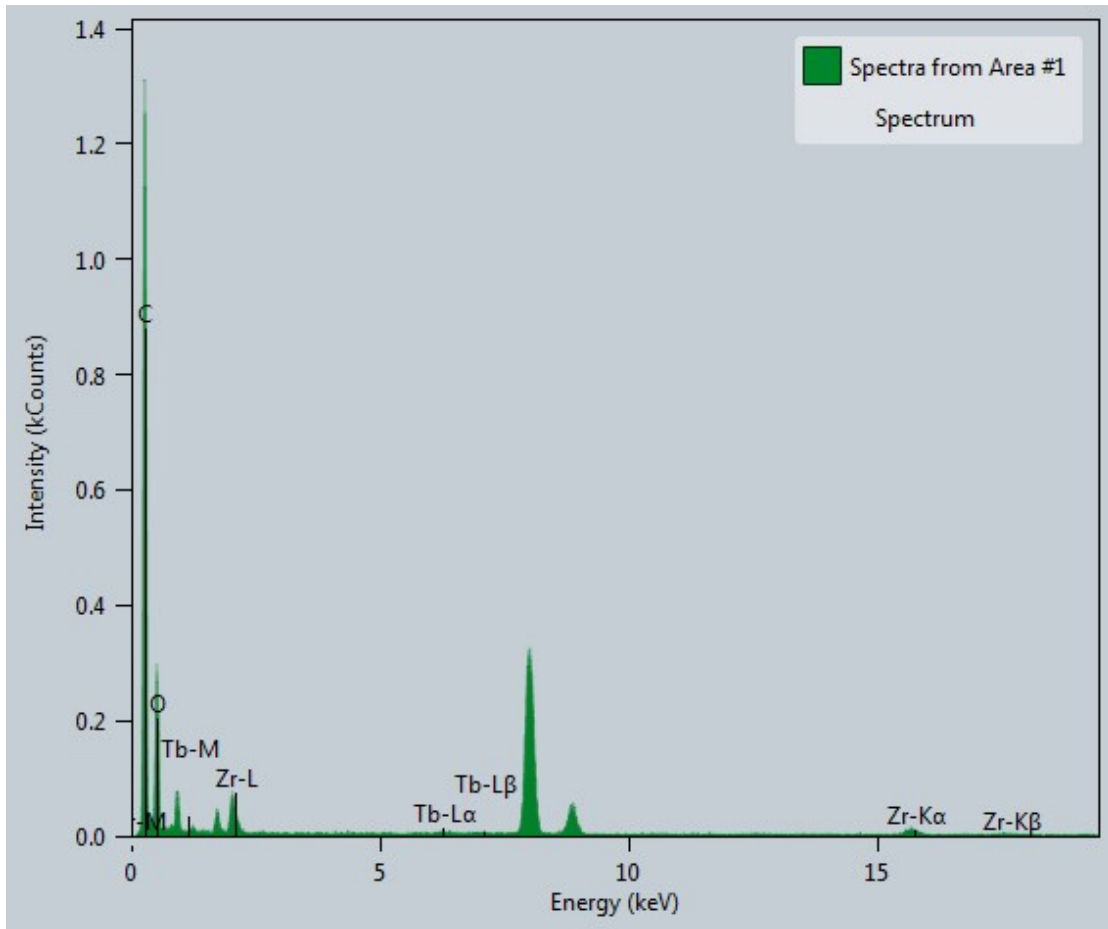
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Fig. S1 Elemental Analysis Report of UiO-66-(COOH)₂.



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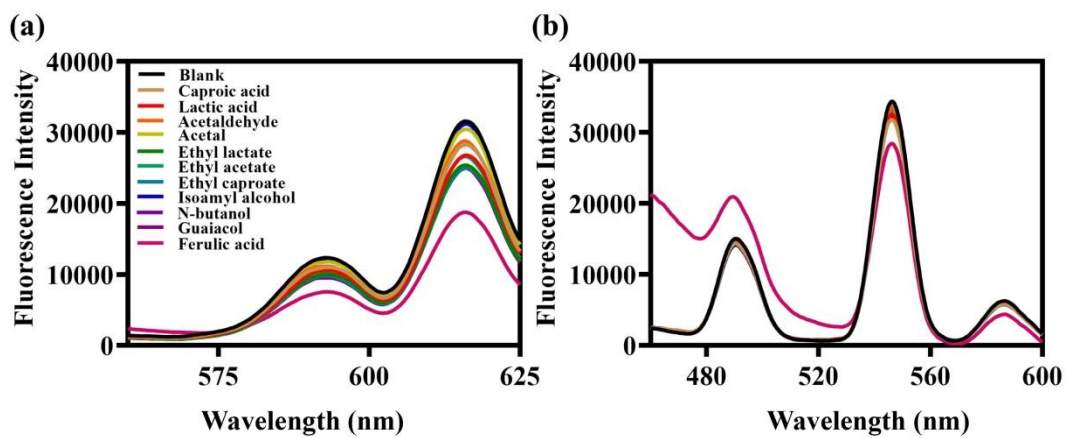
Fig. S2 Elemental Analysis Report of Eu-MOF.



13

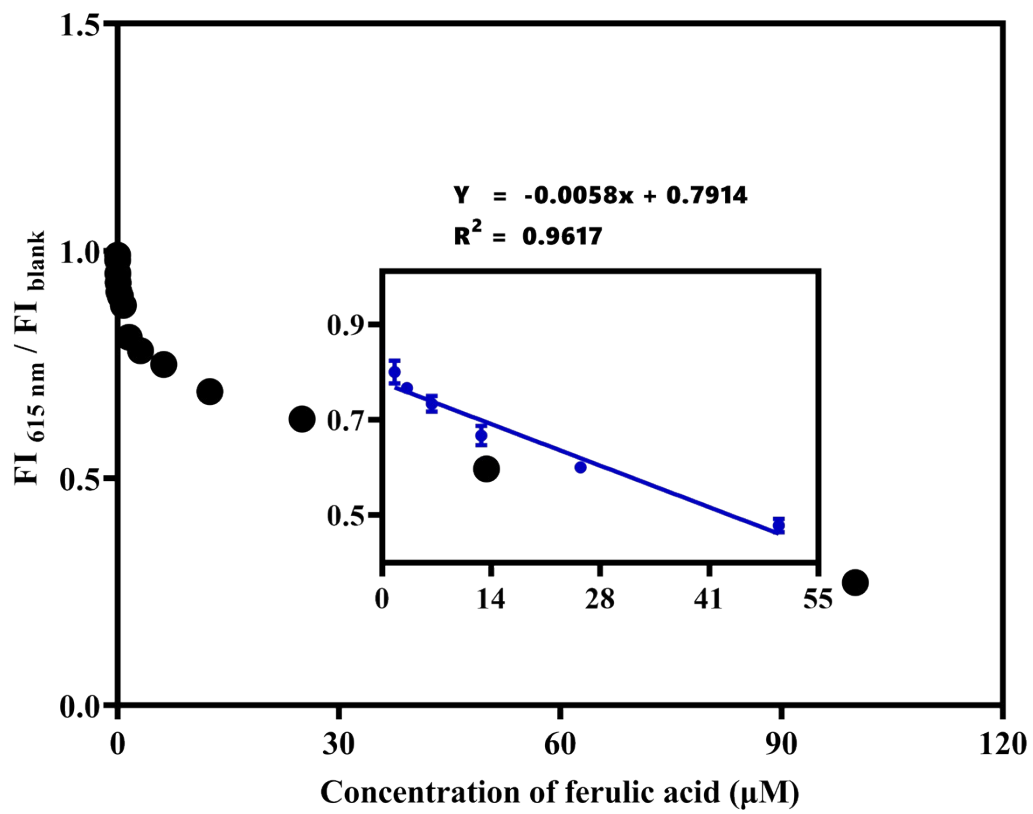
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Fig. S3 Elemental Analysis Report of Tb-MOF.



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16 Fig. S4 Fluorescence spectra of (a) Eu-MOF and (b) Tb-MOF recognize organic molecules.

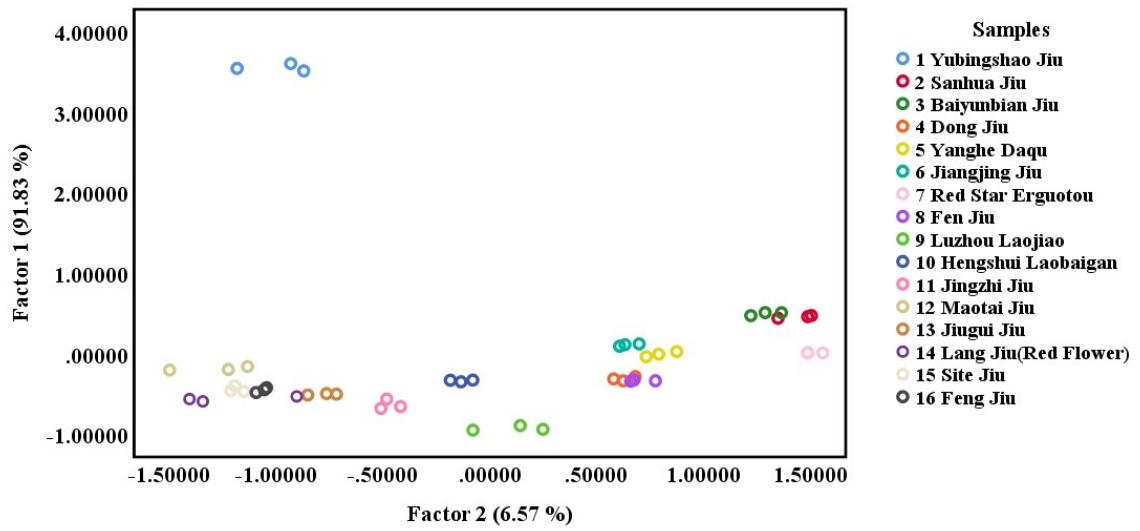


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Fig. S5 Quantitative detection of ferulic acid by Tb-MOF.



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Fig. S6 Baijiu(16 different brands) were discriminated by principal component analysis.