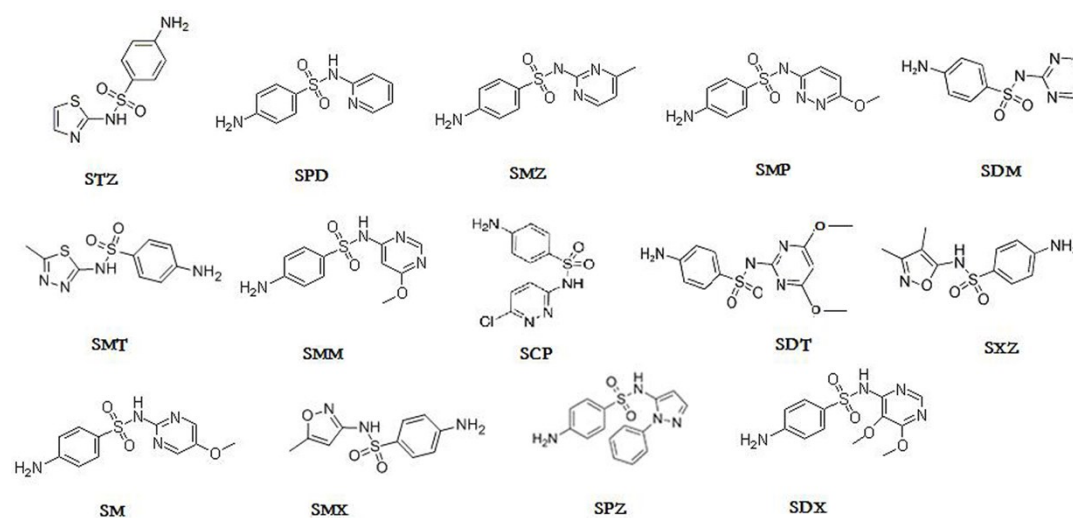


## Fabrication of Covalent Triazine-based Organic Framework for Solid-Phase Extraction of Fourteen Kinds of Sulfonamides from Meat Samples

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F.g.S1 The structures of fourteen SAs

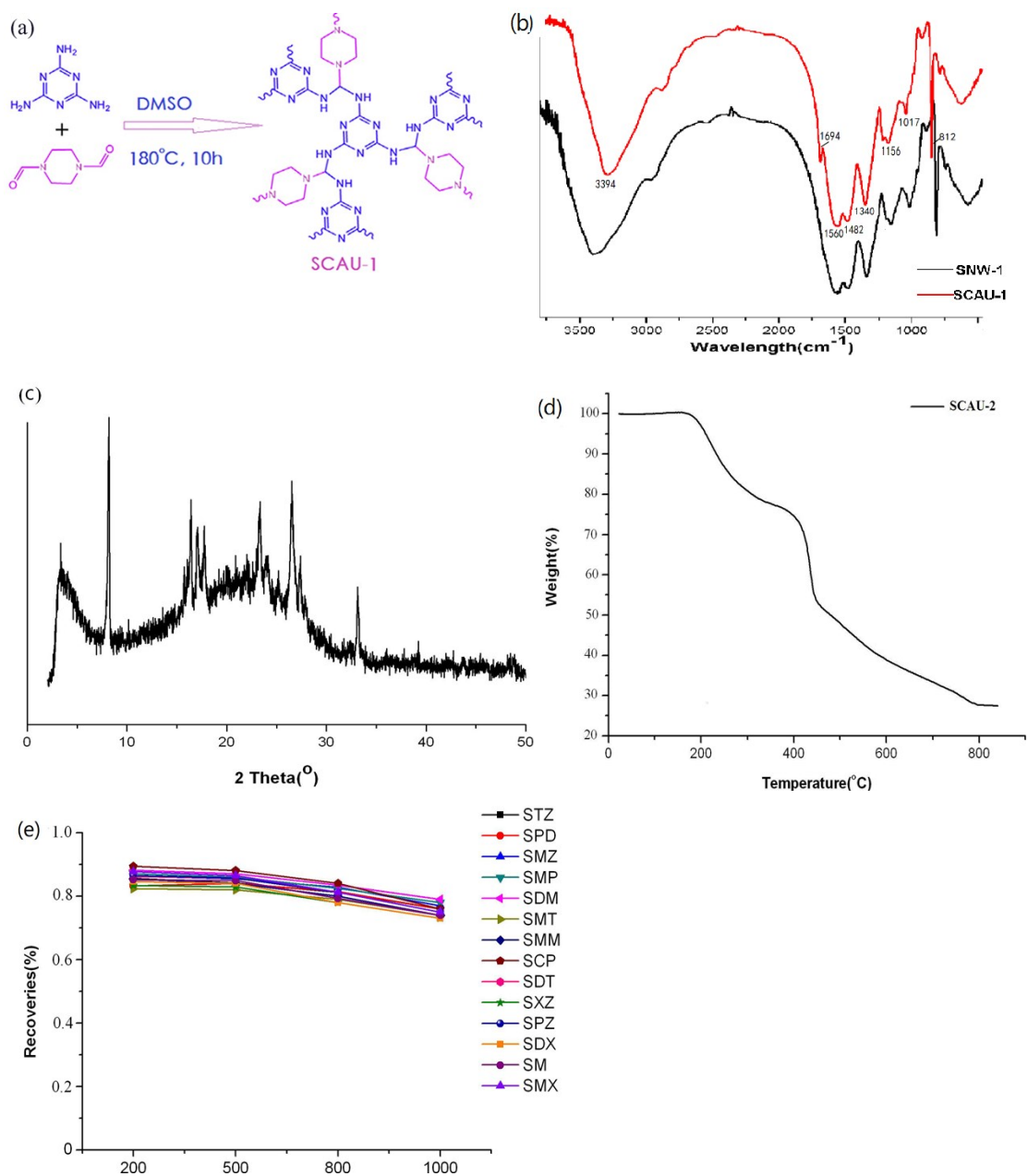


Fig.S2 (a) design scheme of SCAU-1; (b) IR pattern of SCAU-1 and SNW-1; (c) XRPD of SCAU-2; (d)TGA curve of SCAU-2; (e) Adsorption capacity of SCAU-1 with the amount of 40mg.

Table S1 Monitored LC-MS/MS transitions, sample cone voltages, collision energies and retention time of the fourteen SAs.

| Antibiotics | precursor ion- product ion(m/z) | Cone(V) | CE(eV) | RT(min) |
|-------------|---------------------------------|---------|--------|---------|
| STZ         | 256.33-156.0*/92.1              | 34      | 26     | 1.37    |
| SPD         | 250.3-92.5*/65.1                | 38      | 24     | 1.68    |
| SMZ         | 265.3-91.9*/65.1                | 36      | 30     | 2.01    |
| SMP         | 281.2-155.9*/108.2              | 40      | 30     | 3.30    |
| SDM         | 279.1-123.9*/185.8              | 42      | 24     | 2.68    |
| SMT         | 271.0-91.8*/155.9               | 32      | 26     | 3.09    |
| SMM         | 281.0-91.8*/155.9               | 35      | 30     | 3.61    |
| SCP         | 285.0-108.1*/155.9              | 30      | 26     | 4.17    |
| SDT         | 311.1-107.9*/91.9               | 30      | 30     | 5.76    |
| SXZ         | 268.1-64.9*/91.9                | 30      | 28     | 6.85    |
| SPZ         | 315.0-158.0*91.9                | 44      | 30     | 7.42    |
| SDX         | 311.3-92.1*/108.1               | 20      | 28     | 7.86    |
| SM          | 281.0-91.9*/155.9               | 20      | 45     | 4.60    |
| SMX         | 254.0-64.9*/155.9               | 25      | 40     | 5.70    |

\*stands for quantification ions.

Table S2 The recoveries and RSDs of two spiked levels for the two CTFs.

| Antibiotics | SCAU-1                |                                      |                        |                                      | SCAU-2                |                                      |                        |                                      | within-lab reproducibility<br>RSD(% <sub>n=5</sub> ) <sup>a</sup> |
|-------------|-----------------------|--------------------------------------|------------------------|--------------------------------------|-----------------------|--------------------------------------|------------------------|--------------------------------------|---|
|             | 10 ng.g <sup>-1</sup> |                                      | 100 ng.g <sup>-1</sup> |                                      | 10 ng.g <sup>-1</sup> |                                      | 100 ng.g <sup>-1</sup> |                                      |   |
|             | Recoveries %          | Repeatability RSD(% <sub>n=6</sub> ) | Recoveries %           | Repeatability RSD(% <sub>n=6</sub> ) | Recoveries %          | Repeatability RSD(% <sub>n=6</sub> ) | Recoveries %           | Repeatability RSD(% <sub>n=6</sub> ) |   |
|             |                       |                                      |                        |                                      |                       |                                      |                        |                                      |   |
| STZ         | 86.2                  | 3.5                                  | 84.3                   | 4.3                                  | 89.1                  | 3.7                                  | 87.9                   | 4.3                                  | 4.5   |
| SPD         | 83.5                  | 3.7                                  | 83.7                   | 3.6                                  | 85.2                  | 3.1                                  | 83.1                   | 3.7                                  | 4.3   |
| SMZ         | 86.0                  | 3.5                                  | 85.3                   | 3.2                                  | 90.3                  | 4.2                                  | 91.0                   | 3.6                                  | 4.1   |
| SMP         | 88.0                  | 3.3                                  | 87.8                   | 3.9                                  | 91.0                  | 4.4                                  | 89.4                   | 4.2                                  | 6.0   |
| SDM         | 87.2                  | 3.4                                  | 88.2                   | 4.3                                  | 91.1                  | 3.3                                  | 90.1                   | 3.5                                  | 5.5   |
| SMT         | 83.1                  | 3.1                                  | 83.4                   | 3.8                                  | 86.3                  | 4.9                                  | 87.1                   | 4.5                                  | 6.6   |
| SMM         | 86.1                  | 3.6                                  | 84.8                   | 3.9                                  | 88.4                  | 4.6                                  | 86.7                   | 4.4                                  | 5.9   |
| SCP         | 88.5                  | 3.6                                  | 87.3                   | 3.6                                  | 91.1                  | 4.9                                  | 90.2                   | 4.0                                  | 6.3   |
| SDT         | 85.3                  | 3.5                                  | 86.8                   | 4.2                                  | 90.2                  | 4.5                                  | 88.6                   | 3.7                                  | 6.2   |
| SXZ         | 84.0                  | 3.6                                  | 84.2                   | 3.7                                  | 87.4                  | 3.9                                  | 86.6                   | 4.2                                  | 5.5   |
| SPZ         | 85.7                  | 3.4                                  | 85.4                   | 4.2                                  | 88.5                  | 3.5                                  | 86.7                   | 3.7                                  | 5.6   |
| SDX         | 84.1                  | 3.8                                  | 83.8                   | 3.3                                  | 88.6                  | 4.3                                  | 86.7                   | 4.1                                  | 5.9   |
| SM          | 85.5                  | 3.5                                  | 84.3                   | 3.2                                  | 89.2                  | 3.9                                  | 87.3                   | 3.9                                  | 5.6   |
| SMX         | 86.7                  | 3.8                                  | 86.3                   | 3.4                                  | 88.6                  | 4.8                                  | 87.2                   | 4.3                                  | 6.0   |

a: spiked level at 50ng.g<sup>-1</sup>

Table S3 Analytical results for the determination of SAs in chicken, pork, and beef samples with SCAU-2.

| Antibiotics                          | Analytes( $\text{ng}\cdot\text{g}^{-1}$ ) |      |                   |      |      |      |      |      |      |      |      |      |      |                    |
|--------------------------------------|---|------|-------------------|------|------|------|------|------|------|------|------|------|------|--------------------|
|                                      | STZ                                       | SPD  | SMZ               | SMP  | SDM  | SMT  | SMM  | SCP  | SDT  | SXZ  | SPZ  | SDX  | SM   | SMX                |
| Chicken(mean<br>$\pm\text{SD},n=3$ ) | 10.8 $\pm$ 0.2                            | N.D. | 68.6 $\pm$<br>0.6 | N.D. | N.D. | N.D. | N.D. | N.D. | N.D. | N.D. | N.D. | N.D. | N.D. | 70.2 $\pm$ 0.<br>5 |
| Pork(mean $\pm$ S<br>D, $n=3$ )      | 30.3 $\pm$ 0.3                            | N.D. | 47.2 $\pm$<br>0.5 | N.D. | N.D. | N.D. | N.D. | N.D. | N.D. | N.D. | N.D. | N.D. | N.D. | 80.6 $\pm$ 0.<br>7 |
| Beef(mean $\pm$ S<br>D, $n=3$ )      | N.D.                                      | N.D. | N.D.              | N.D. | N.D. | N.D. | N.D. | N.D. | N.D. | N.D. | N.D. | N.D. | N.D. | N.D.               |