

Article

# Supplementary Materials: Interactions of Fe–N–S Co-Doped Porous Carbons with Bacteria: Sorption Effect and Enzyme-Like Properties

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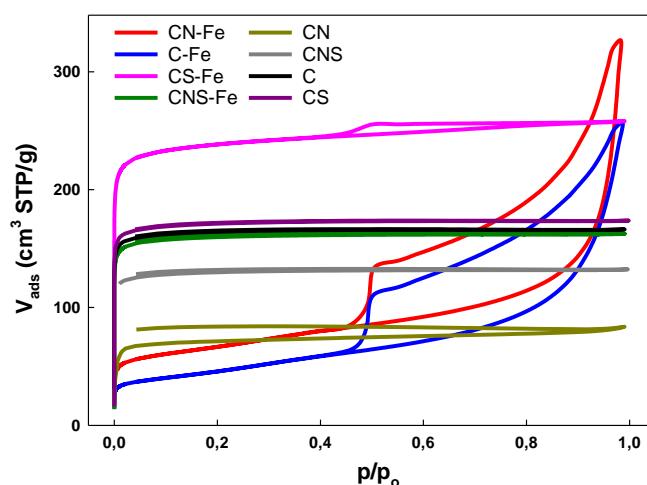
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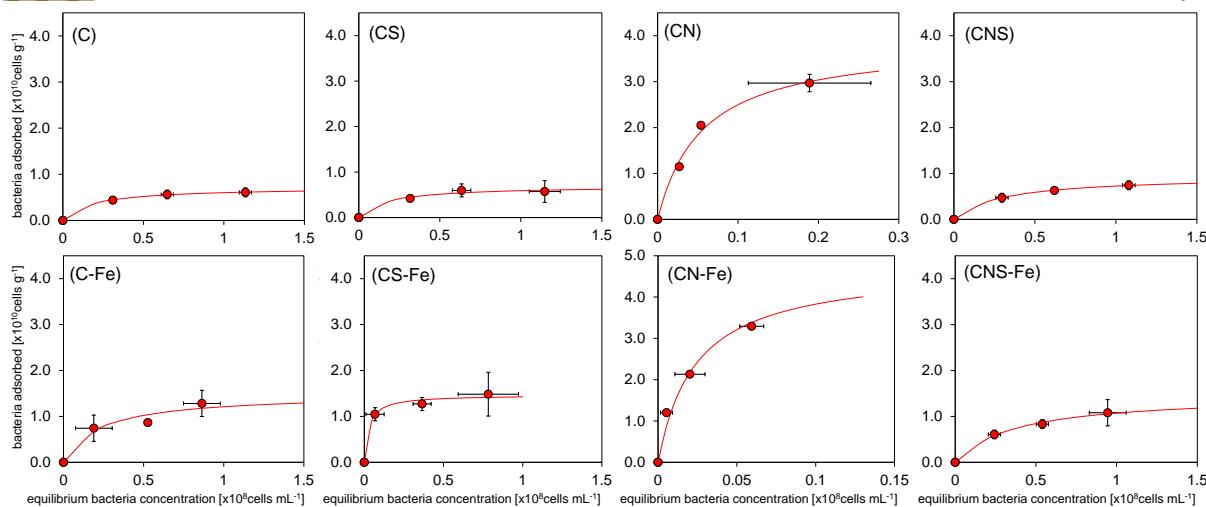
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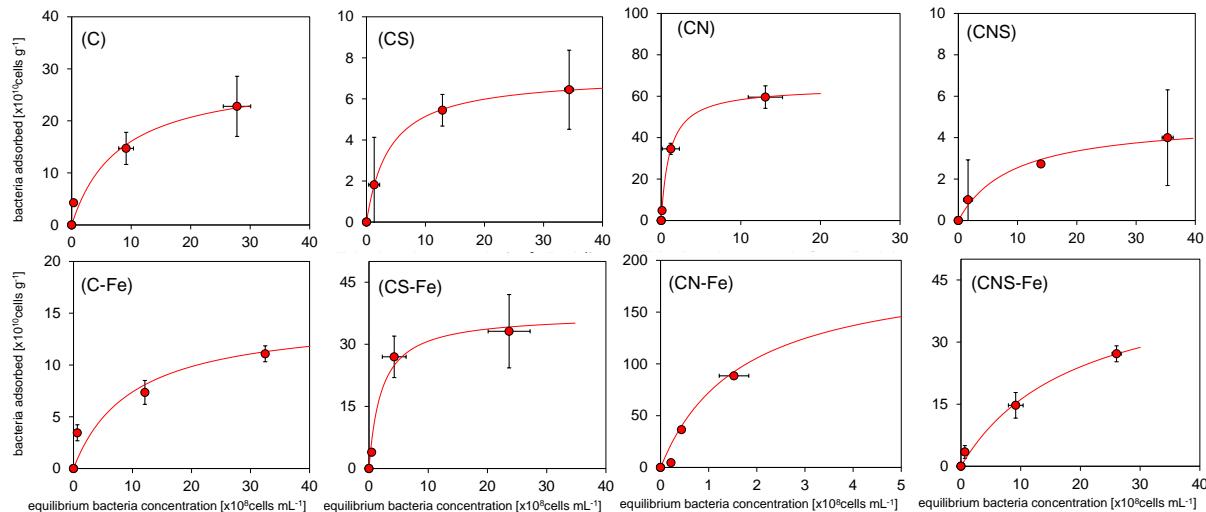
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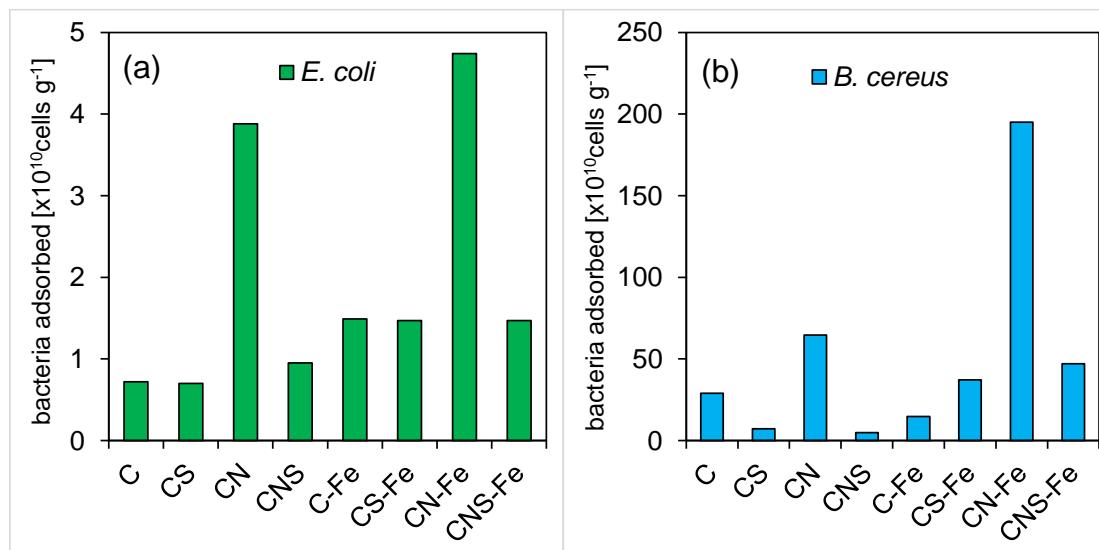
**Figure S1.**  $\text{N}_2$  adsorption-desorption isotherms of the studied doped carbons.



**Figure S2.** Adsorption isotherms of bacteria *E. coli* on the doped carbons.



**Figure S3.** Adsorption isotherms of bacteria *B. cereus* on the doped carbons.



**Figure S4.** The maximum sorption capacity of *E. coli* (a) and *B. cereus* (b) according to Langmuir isotherms.

**Table S1.** The chemical composition ( $\text{mg L}^{-1}$ ) of the aqueous suspensions of the studied carbons.

	<b>Ag</b>	<b>Al</b>	<b>As</b>	<b>B</b>	<b>Ba</b>	<b>Be</b>	<b>Bi</b>	<b>Ca</b>
C	<0.001	<0.005	0.0094	<0.01	0.0011	<0.0005	<0.0005	0.054
CN	<0.001	<0.005	0.0098	<0.01	0.0009	<0.0005	<0.0005	<0.05
CS	<0.001	<0.005	0.0097	<0.01	0.0013	<0.0005	<0.0005	<0.05
CNS	<0.001	<0.005	0.0096	<0.01	<0.0005	<0.0005	<0.0005	<0.05
CN-Fe	<0.001	<0.005	0.0097	<0.01	<0.0005	<0.0005	<0.0005	<0.05
C-Fe	<0.001	<0.005	0.0096	<0.01	0.0025	<0.0005	<0.0005	<0.05
CS-Fe	<0.001	<0.005	0.0094	<0.01	<0.0005	<0.0005	<0.0005	<0.05
CNS-Fe	<0.001	<0.005	0.0092	<0.01	<0.0005	<0.0005	<0.0005	<0.05
	<b>Cd</b>	<b>Co</b>	<b>Cr</b>	<b>Cu</b>	<b>Fe</b>	<b>Hg</b>	<b>K</b>	<b>Li</b>
C	<0.0003	<0.0002	0.068	0.0399	<0.02	<0.0001	0.75	<0.001
CN	<0.0003	<0.0002	0.070	0.0477	<0.02	<0.0001	0.71	<0.001
CS	<0.0003	<0.0002	0.072	0.052	<0.02	<0.0001	0.70	<0.001
CNS	<0.0003	<0.0002	0.068	0.0556	<0.02	<0.0001	0.67	<0.001
CN-Fe	<0.0003	0.0014	0.078	0.0587	<0.02	<0.0001	0.64	<0.001
C-Fe	<0.0003	0.00026	0.068	0.0595	<0.02	<0.0001	0.63	<0.001
CS-Fe	<0.0003	0.00093	0.069	0.0602	<0.02	<0.0001	0.63	<0.001
CNS-Fe	<0.0003	<0.0002	0.071	0.0607	<0.02	<0.0001	0.62	<0.001
	<b>Mg</b>	<b>Mn</b>	<b>Mo</b>	<b>Ni</b>	<b>PO4</b>	<b>Pb</b>	<b>Sb</b>	<b>Se</b>
C	0.015	<0.003	<0.0003	0.0016	<0.0061	<0.0001	<0.0002	<0.01
CN	<0.001	<0.003	<0.0003	0.0016	<0.0061	<0.0001	<0.0002	<0.01
CS	0.0011	<0.003	<0.0003	0.0016	<0.0061	<0.0001	<0.0002	<0.01
CNS	<0.001	<0.003	<0.0003	0.0016	<0.0061	<0.0001	<0.0002	<0.01
CN-Fe	<0.001	0.0032	<0.0003	0.0017	<0.0061	<0.0001	<0.0002	<0.01
C-Fe	0.0056	<0.003	0.00045	0.0017	<0.0061	<0.0001	<0.0002	<0.01
CS-Fe	<0.001	<0.003	<0.0003	0.0017	<0.0061	<0.0001	<0.0002	<0.01
CNS-Fe	<0.001	0.0060	<0.0003	0.0017	<0.0061	<0.0001	<0.0002	<0.01
	<b>SiO<sub>2</sub></b>	<b>Sr</b>	<b>Te</b>	<b>Ti</b>	<b>Tl</b>	<b>V</b>	<b>W</b>	<b>Zn</b>
C	0.032	0.0020	<0.01	<0.02	<0.0001	0.0184	<0.0003	<0.001
CN	0.024	0.0012	<0.01	<0.02	<0.0001	0.0186	<0.0003	<0.001
CS	0.023	0.00078	<0.01	<0.02	<0.0001	0.0189	<0.0003	<0.001
CNS	<0.02	0.0013	<0.01	<0.02	<0.0001	0.0185	<0.0003	<0.001
CN-Fe	<0.02	0.00030	<0.01	<0.02	<0.0001	0.0190	<0.0003	<0.001
C-Fe	<0.02	0.00064	<0.01	<0.02	<0.0001	0.0189	<0.0003	<0.001
CS-Fe	<0.02	0.00062	<0.01	<0.02	<0.0001	0.0189	<0.0003	<0.001
CNS-Fe	<0.02	0.00052	<0.01	<0.02	<0.0001	0.0188	<0.0003	<0.001