Supporting information

Building High Power Density of Sodium-Ion Batteries: Importance of Multidimensional Diffusion Pathways in Cathode Materials

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Table S1 Summary of kinetics parameters of reported 3D sodium diffusion cathodes for SIB devices.

Materials	Average Operation Voltage	Achievable Capacity (mAh g^{-1})	Rate Performance (mAh g^{-1})	Initial Coulombic Efficiency	Na^+ Diffusion - (cm^2 s^{-1})	Highest Activation barrier	Volume Expansion	Reference
$Fe_4[Fe(CN)_6]_3$	3.4 V	68 (10 mA g^{-1})	59 (480 mA g^{-1})	-	-	-	0.72 %	(Ji et al., 2016)
$Na_2FeFe(CN)_6$	2.9 V	170 (0.1 C)	120 (6 C)	90 %	10^{-10}–10^{-11}	0.64 eV	-	(You et al., 2016)
$Na_2Mn[Mn(CN)_6]$	2.6 V	209 (40 mA g^{-1})	157 (1 A g^{-1})	99.5 %	-	-	1.36 %	(Lee et al., 2014)
$Na_2Mn[Fe(CN)_6]\cdot zH_2O$	3.4 V	150 (14.3 mA g^{-1})	122 (2.86 A g^{-1})	87 %	-	-	-	(Song et al., 2015)
$Na_{1.68}Ni_{0.3}Co_{0.7}[Fe(CN)_6]$	3.3 V	143 (30 mA g^{-1})	88 (1.5 A g^{-1})	97 %	-	0.57 eV	3 %	(Peng et al., 2018)
$Na_4Fe_3(PO_4)_2(P_2O_7)$	3.2 V	113 (12 mA g^{-1})	80 (2.4 A g^{-1})	99 %	10^{-10}–10^{-13}	0.82 eV	4.0 %	(Chen et al., 2019)

$Na_3V(PO_3)_3N$	4.0 V	73 (14.6 mA g^{-1})	62 (0.73 A g^{-1})	-	-	0.8 eV	0.24 %	(Kim et al., 2017)
$Na_4Mn_3(PO_4)_2(P_2O_7)$	3.8 V	109 (0.05 C)	55 (20 C)	88 %	-	0.56 eV	7.0 %	(Kim et al., 2015)
$Na_3V_2(PO_4)_3$	-	-	-	-	10^{-10}–10^{-12}	0.6 eV	-	(Bui et al., 2015)
$Na_3V_2(PO_4)_3$	3.3 V	113 (0.5 C)	90 (10 C)	-	10^{-11}–10^{-12}	0.395 eV	7.6 %	(Li et al., 2018)
$Na_3MnZr(PO_4)_3$	3.8 V	107 (0.1 C)	50 (20 C)	87 %	-	-	5.5 %	(Gao et al., 2018)
$Na_3MnTi(PO_4)_3$	2.5 V	162 (0.2 C)	130 (2 C)	155 %	10^{-11}–10^{-13}	-	-	(Zhu et al., 2019)

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