Extending the Cycle Life of Na₃V₂(PO₄)₃ Cathode in **Sodium-Ion Batteries through Interdigitated Carbon** Scaffolding

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Space group: R ³ c						
a: 8.71706Å, c: 21.8113Å. $R_f = 3.64\%$, $R_{wp} = 4.57\%$, $R_{exp} = 3.46\%$, $x^2 = 1.758$						
Atom	X	у	Z	Uiso	Occupancy	
Na (1)	0.3333	0.6667	0.1667	0.12195	0.80258	
Na(2)	0.6667	0.97708	0.0833	0.05792	0.73369	
V	0.3333	0.6667	0.0205	0.00657	1.00078	
Р	-0.03496	0.3333	0.0833	0.01005	1.00161	
01	0.15355	0.49524	0.06883	0.01441	0.99968	
O2	0.55702	0.55702	-0.02341	0.02966	0.99934	

Table S1 Lattice para	ameters from the Rietveld refinem	nent of a C8 sample.
\mathbf{D}^{3}		



Figure S1 (a) SEM images of $Na_3V_2(PO_4)_3$ synthesized without sucrose and (b) C2.



Figure S2 1^{st} , 2^{nd} , 5^{th} and 10^{th} cyclic voltammograms of a typical (a) C2 and (b) C8



Figure S3 Charge and discharge curves of C8 at 0.1C



Figure S6 (a) rate capability and (b) Cycling performance of non-carbon-coated $Na_3V_2(PO_4)_3$ under 5C



Figure S7 (a) BET isotherm and (b) Incremental surface area as a function of pore size