

Supplementary Information

Na₆MCl₈ Rock-Salt Compounds with M = Mg, Ca, Ba, Zn and Sr

as Components for Sodium Ion Batteries

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Table S1. Elastic constants elements of Na_6MCl_8 ($\text{M}^{2+} = \text{Ca}, \text{Ba}, \text{Zn}$ and Sr) structures

Na_6ZnCl_8						
C_{ij} Indices	1	2	3	4	5	6
1	51.258	15.509	15.509	0	0	0
2	15.509	51.258	15.509	0	0	0
3	15.509	15.509	51.258	0	0	0
4	0	0	0	13.918	0	0
5	0	0	0	0	13.918	0
6	0	0	0	0	0	13.918
Na_6CaCl_8						
C_{ij} Indices	1	2	3	4	5	6
1	36.681	11.519	11.519	0	0	0
2	11.519	36.681	11.519	0	0	0
3	11.519	11.519	36.681	0	0	0
4	0	0	0	12.430	0.000	0.000
5	0	0	0	0	12.430	0.000
6	0	0	0	0	0.000	12.430
Na_6SrCl_8						
C_{ij} Indices	1	2	3	4	5	6
1	35.866	11.399	11.399	0	0	0
2	11.399	35.866	11.399	0	0	0
3	11.399	11.399	35.866	0	0	0
4	0	0	0	12.363	0	0
5	0	0	0	0	12.363	0
6	0	0	0	0	0	12.363
Na_6BaCl_8						
C_{ij} Indices	1	2	3	4	5	6
1	37.968	15.133	15.133	0	0	0
2	15.133	37.968	15.133	0	0	0
3	15.133	15.133	37.968	0	0	0
4	0	0	0	14.045	0	0
5	0	0	0	0	14.045	0
6	0	0	0	0	0	14.045