Supplementary information 2: High-throughput discovery of novel cubic crystal materials using deep generative neural networks Here, we show 100 exemplary stable materials generated by our CubicGAN. We show 25 structures for each prototype and 10 exemplary phonon dispersions. You can visit Carolina Materials Database for more details (www.carolinamatdb.org).

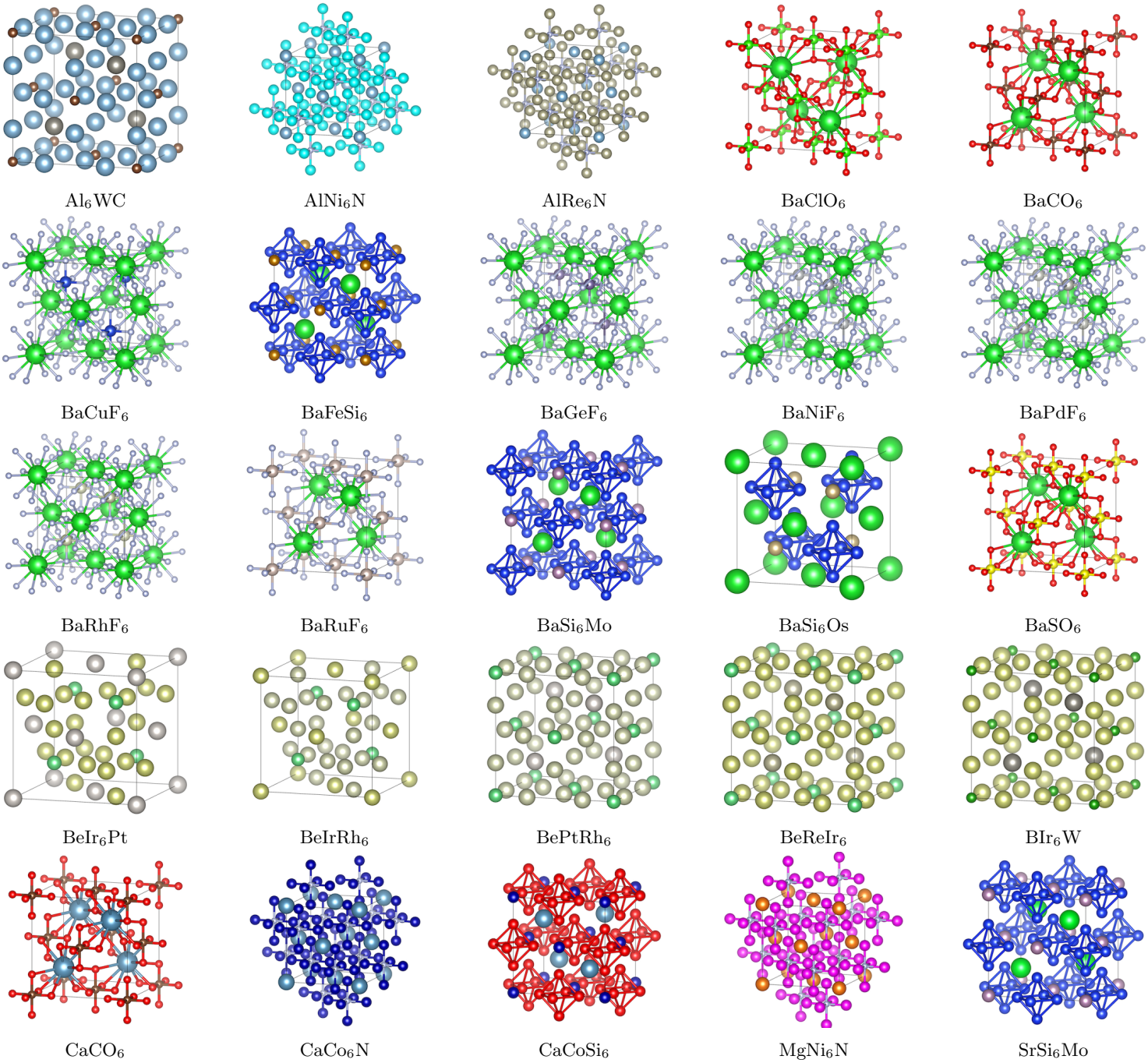
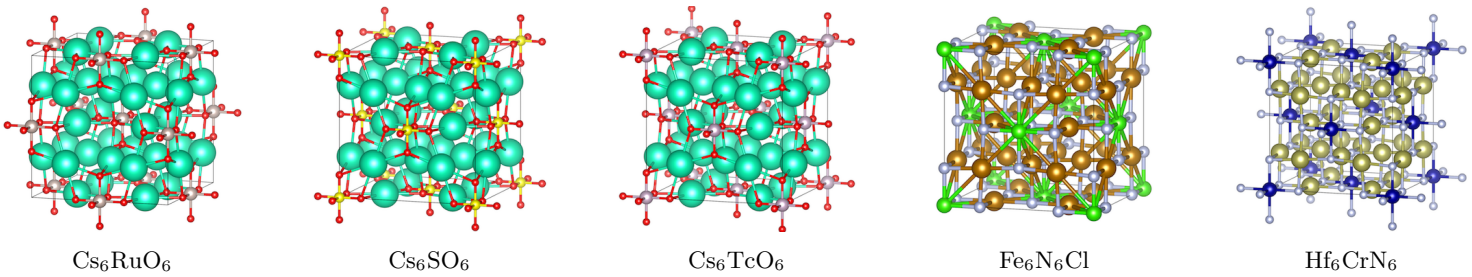


Figure 1: 25 exemplary stable materials belonging to ABC_6-216



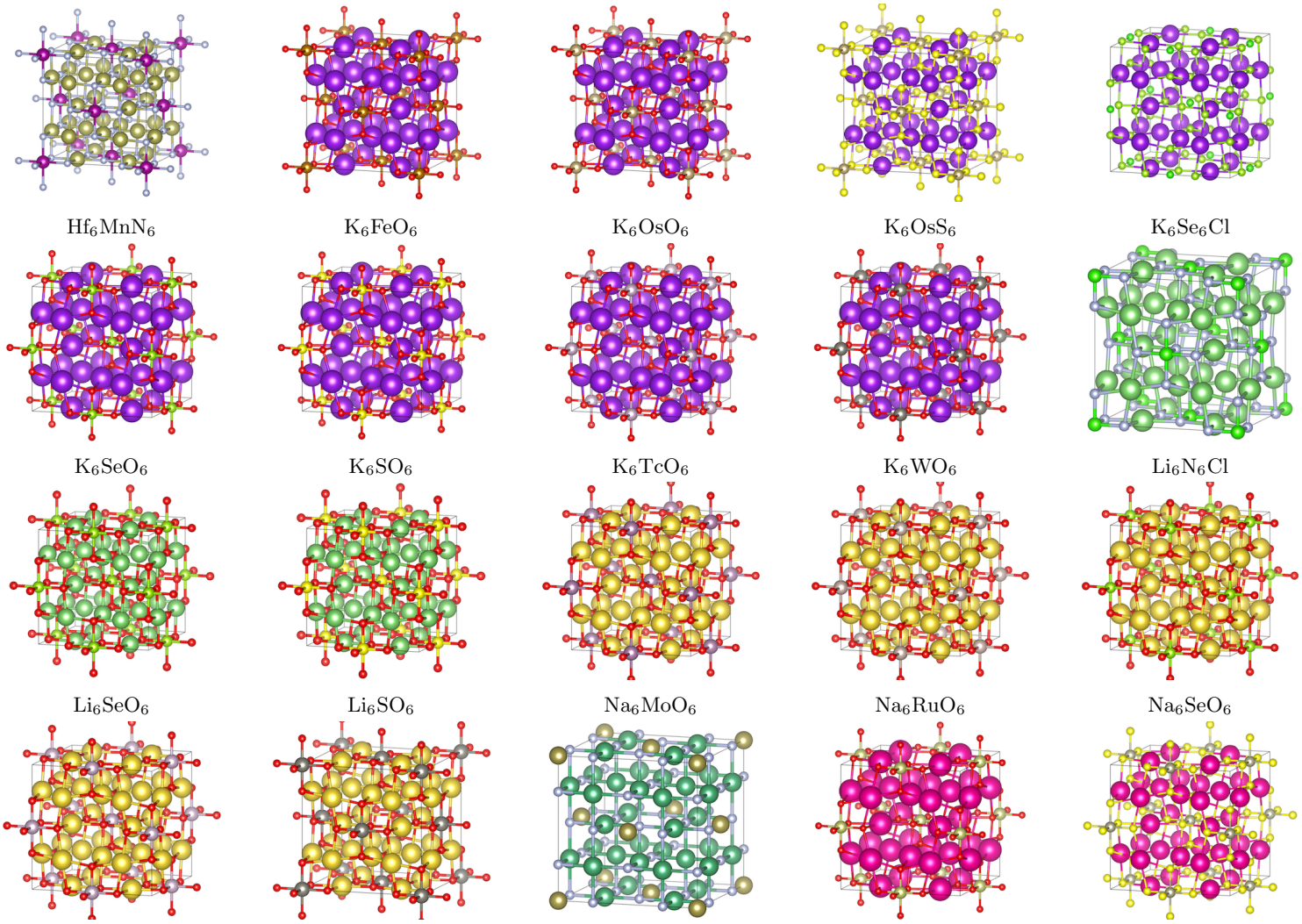
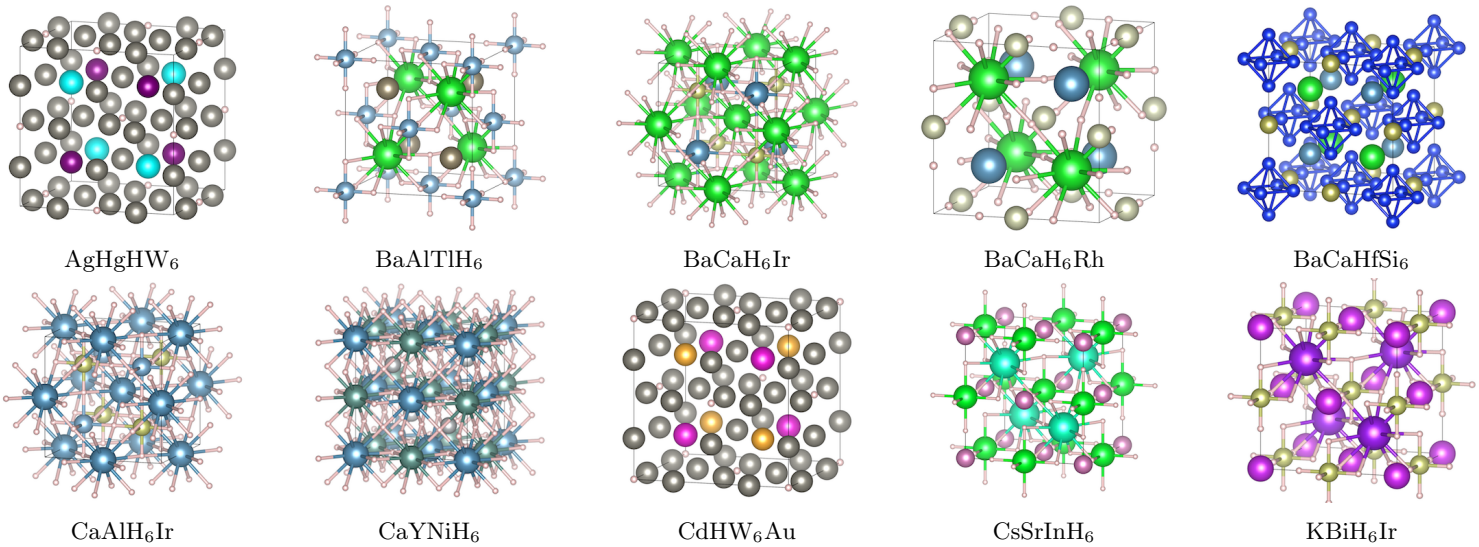


Figure 2: 25 exemplary stable materials belonging to AB_6C_6-225



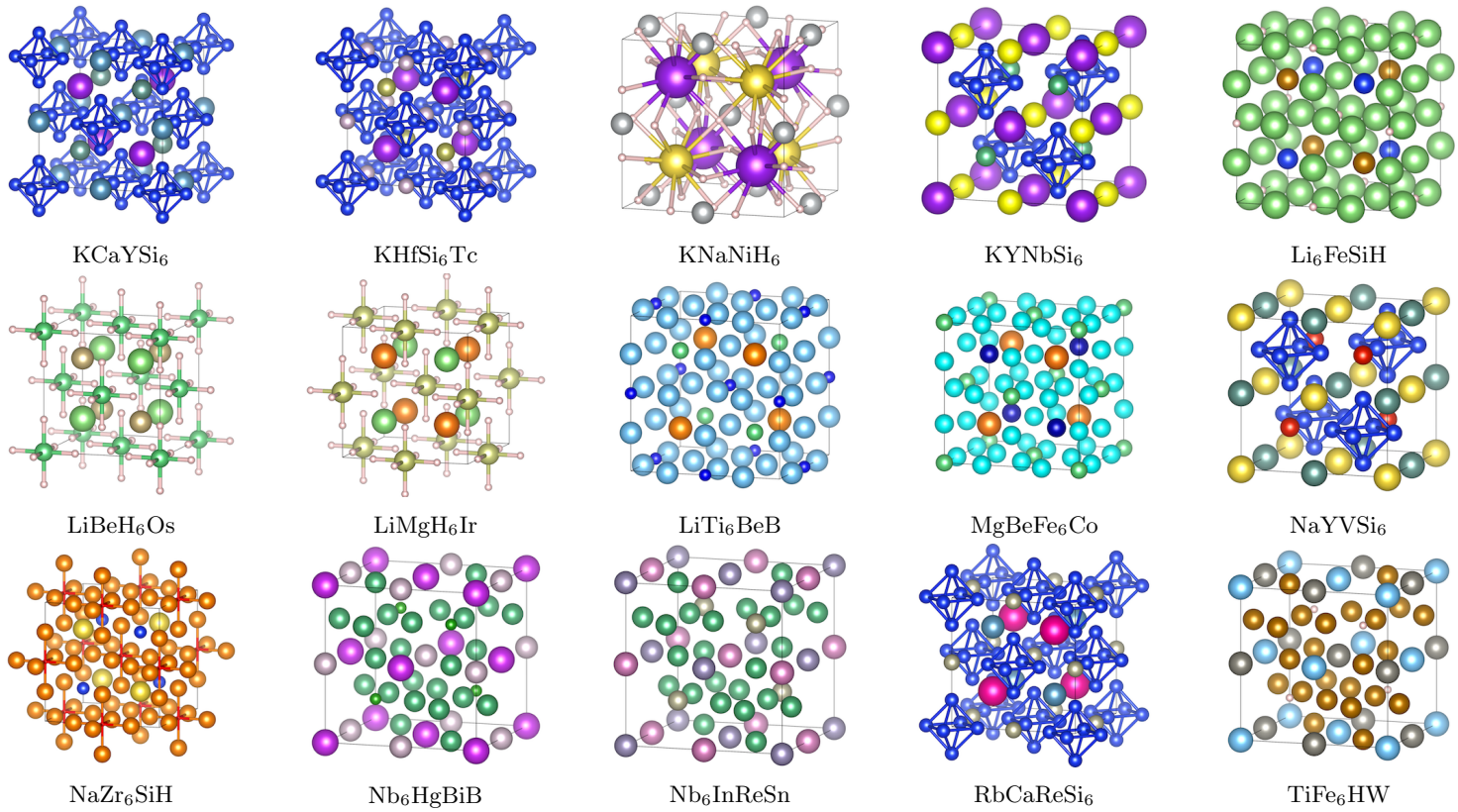
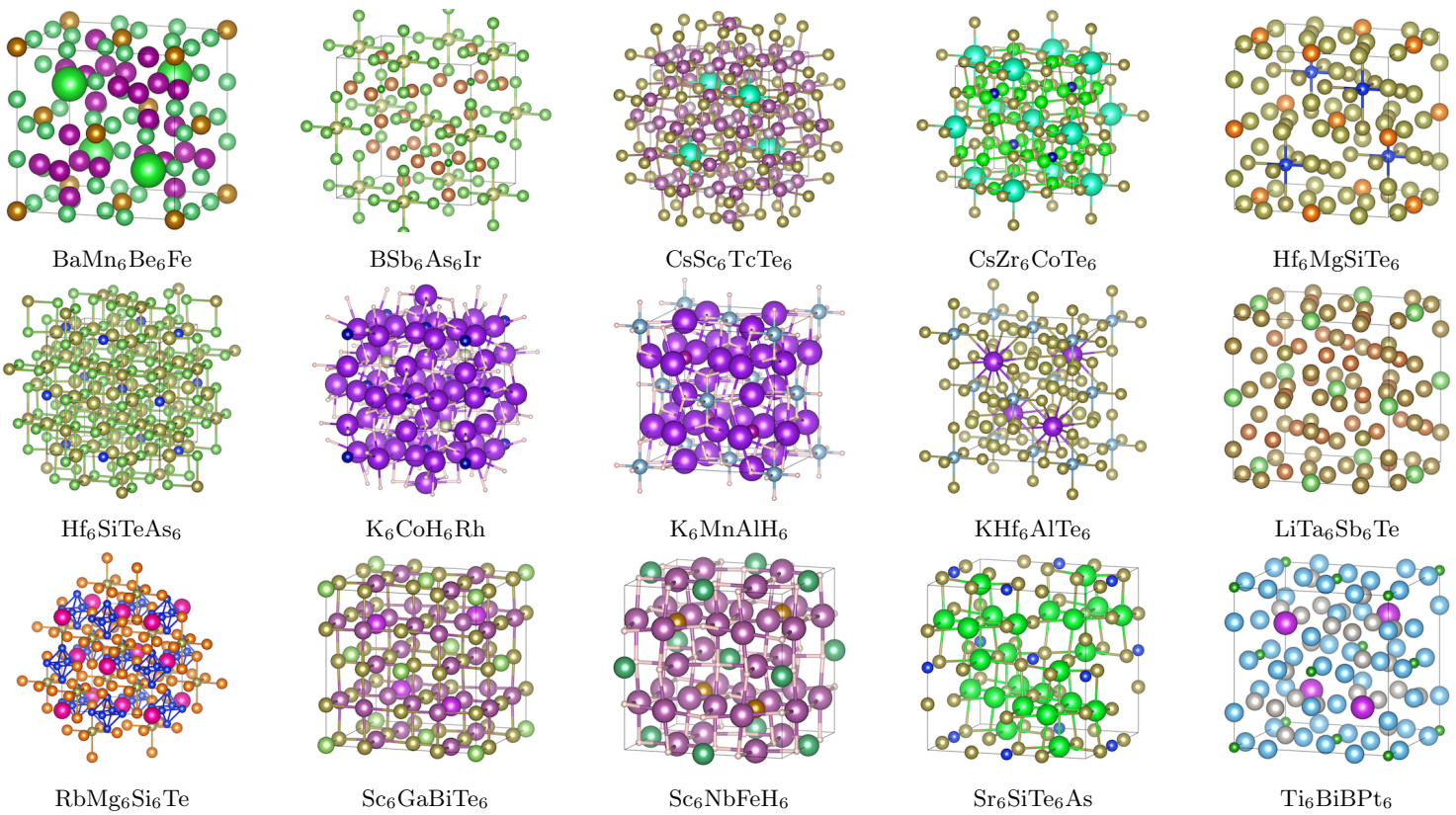


Figure 3: 25 exemplary stable materials belonging to $ABDC_6$-216



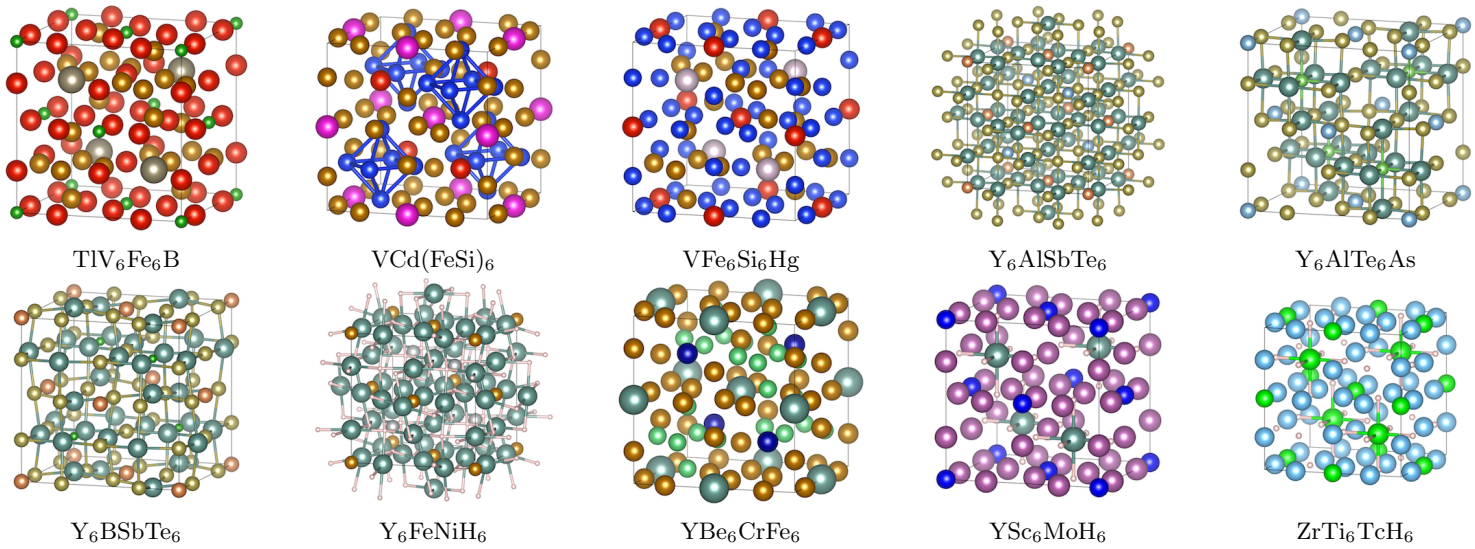


Figure 4: 25 exemplary stable materials belonging to ABC_6D_6-216

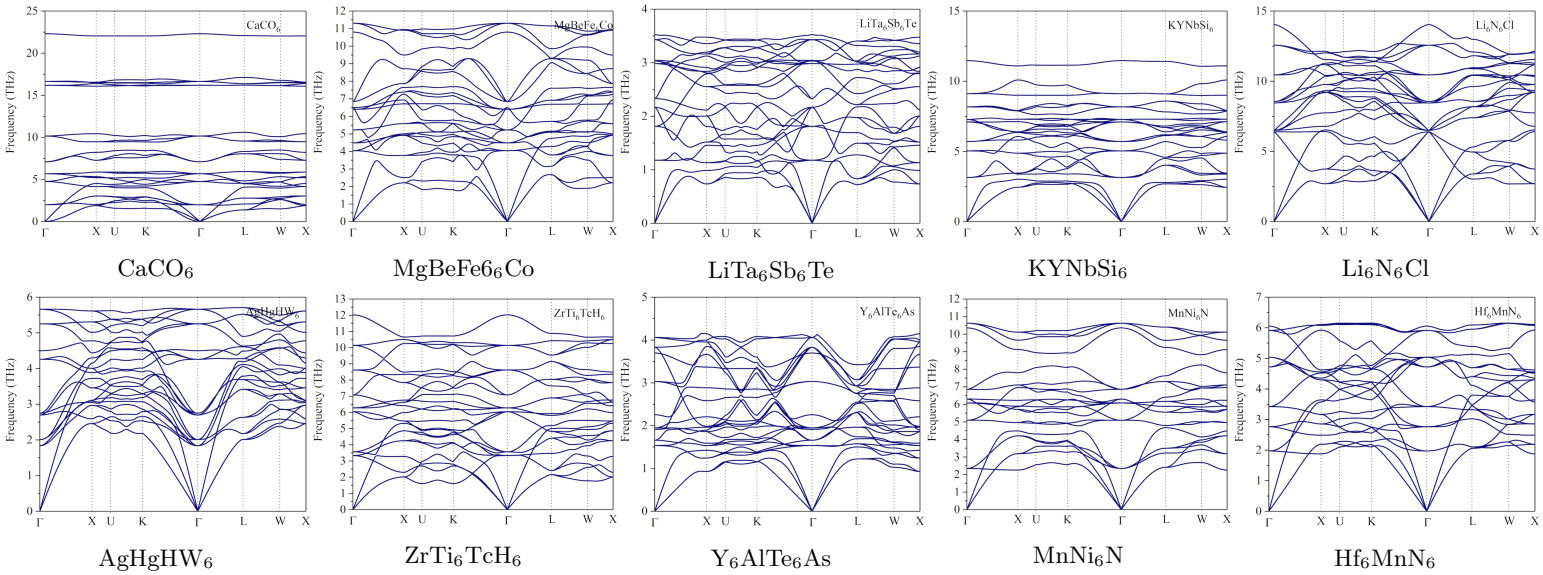


Figure 5: phonon dispersion of 10 generated materials