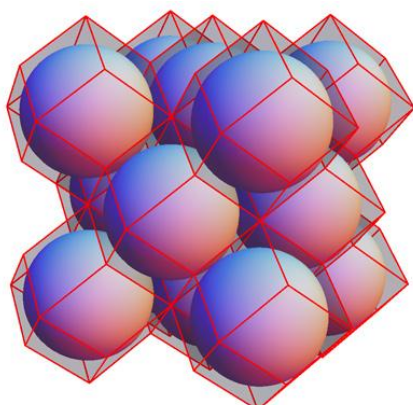


3D Crystal Jigsaw Puzzles

Many of [crystal](#) structures are visualized by unit cell representations noting the lattice sites denoted by spheres. However, we think the sphere unit cell model may not be enough to describe the important characteristics of crystal structures. Rather, crystal structures represented by [Wigner-Seitz cells](#), representing net domains of lattice sites, can be very helpful to understand interesting features. We prepared various 3D crystal jigsaw puzzles made of [Wigner-Seitz cell](#) polyhedra and base frames. The library of printable 3D jigsaw crystal structure puzzles is expanding. Please visit our webpage frequently to check new 3D jigsaw puzzles. You can download and use the STL files to prepare crystal puzzles for learning, teaching, and fun.



Face-Centered Cubic (Fm-3m)



Wigner-Seitz Cell

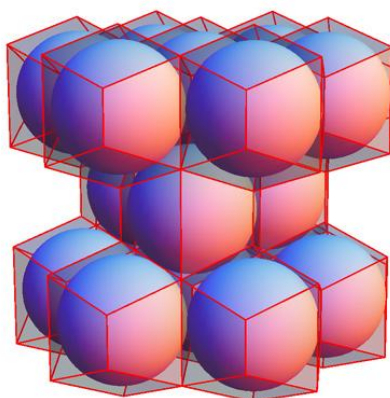
Rhombic
Dodecahedron (black)

[STL file](#)

Frame (clear)

[STL file](#)

Hexagonally Close-Packed (P6/mmm)



Wigner-Seitz Cell

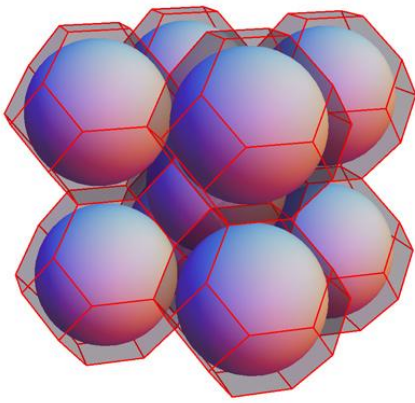
Trapezo-rhombic
Dodecahedron (Grey)

[STL file](#)

Frame (clear)

[STL file](#)

Body-Centered Cubic (Im-3m)



Wigner-Seitz Cell

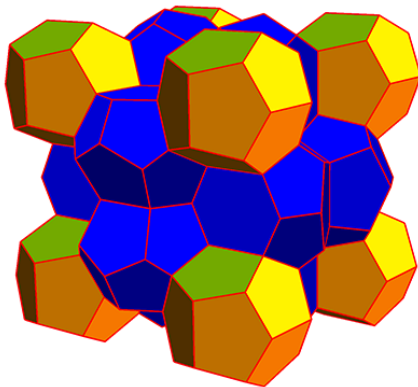
Truncated
Octahedron (white)

[STL file](#)

Frame (clear)

[STL file](#)

A15 (Pm-3n)



Wigner-Seitz Cells

Dodecahedron (2a,
Yellow / Black)

[STL file](#)

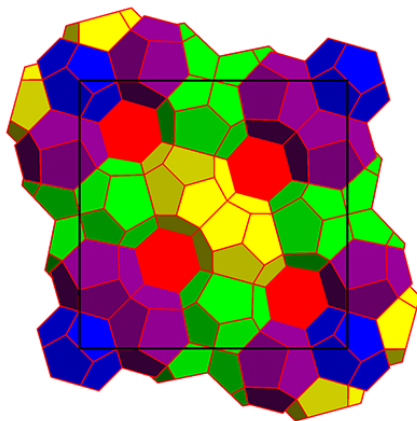
Tetraikaidecahedron
(6c, Blue / White)

[STL file](#)

Frame (clear)

[STL file](#)

Frank-Kasper σ -phase (P4₂/mnm)



Wigner-Seitz Cells

Dodecahedron (2b,
Blue / Black)

[STL file](#)

Pentakaidecahedron
(4f, Yellow / Grey)

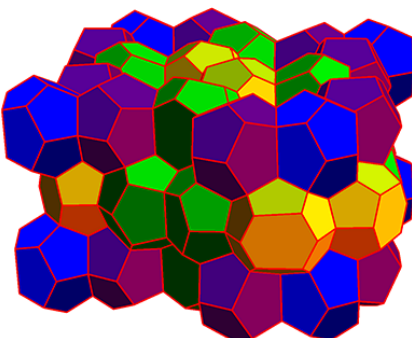
[STL file](#)

Dodecahedron (8i,
Purple / White)

[STL file](#)

Tetraikaidecahedron
(8i', Green / Clear)

[STL file](#)



Tetraikaidecahedron
(8j, Red / Clear)

[STL file](#)

Frame (clear)

[STL file](#)

