

MaterialAI™

New Material Design Engine



Material Performance

Prediction and Optimization



- Mechanical properties prediction (strength, toughness, elasticity, etc.)
- Physical properties prediction (thermal conductivity, electrical conductivity, magnetism, etc.)
- Chemical properties prediction (corrosion resistance, catalytic activity, etc.)
- Material stability evaluation
- Multi-objective performance optimization



Structure Design and Simulation



- Crystal structure prediction
- Defect structure analysis
- Interface structure optimization
- Phase transformation behavior prediction
- Microstructure evolution simulation



Formula and Process Optimization



- Composition ratio optimization
- Preparation process parameter prediction
- Processing technology optimization
- Heat treatment scheme design
- Surface treatment scheme optimization



Intelligent Feature Prediction



- Material cost prediction
- Processing difficulty assessment
- Industrialization feasibility analysis
- Material lifespan prediction
- Environmental impact assessment

Application Scenarios

High-performance alloy development
Functional materials design
Composite material optimization
Nanomaterial design
Energy material development

Why Choose Ainnocence?

1

Full-process digital prediction

2

High-throughput virtual screening

3

Experimental verification support

4

Rapid Turnaround: from a few hours to two weeks