GanJiang User Manual

Powder X ray diffraction analysis and crystal structure operations

Scope

This manual covers task creation, single and multiple phase identification, refinement, PDF card calculation, XRD simulation and crystal viewing. Each procedure explains the entry point, required inputs, confirmation, execution and saving.

Contents

01 Function navigation 2

02 Files and measurement conditions 3

03 Create a task and confirm settings 4

04 Single phase identification 5

05 Multiphase identification 6

06 Identification and refinement 7

07 Known phase refinement 8

08 PDF card calculation 9

09 XRD simulation 10

10 Crystal viewer 11

11 Status and task records 12

Official Website and Software Downloads

Software downloads, version updates, installation instructions and related information are available on the official website.

https://memento.run/release.com

01 Function navigation

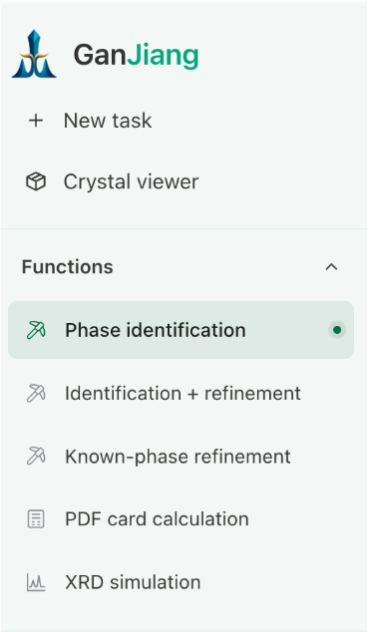


Figure 1 Function navigation in the English interface.

Select the required function on the left. Use identification or refinement to analyse an observed pattern. Use XRD simulation to calculate diffraction from a structure. Crystal viewer displays the atomic arrangement in a CIF.

PDF card calculation compares theoretical reflections from supplied structures with observed peaks. Here PDF means powder diffraction card, not a PDF document or pair distribution function analysis.

02 Files and measurement conditions

Prepare attachments by function

Function	Required input
Phase identification	One observed pattern; optional elements or formula hints
Identification + refinement	One observed pattern; subsequent refinement confirmation
Known-phase refinement	One observed pattern and a CIF for each phase
PDF card calculation	One observed pattern and at least one CIF
XRD simulation	One or more CIF/MCIF files; no observed pattern required
Crystal viewer	One CIF file

Pattern format

The identification workflow accepts CSV, DAT, RAW, TXT, XRDML and XY. Submit one observed pattern per task. If an instrument file cannot be parsed, export a two-column CSV or XY file from the instrument software; changing its extension does not convert it.

A two-column text pattern normally contains 2θ in degrees and intensity, with one point per row. Preserve the row pairing and state the header and any background subtraction, smoothing or normalization.

Measurement conditions

Record the sample ID, radiation source or wavelength, axis units, scan range and available instrument file. The current identification/refinement test interface is fixed to Cu Kα. Do not relabel non-Cu data as Cu data, and do not treat a software default as a measured condition.

03 Create a task and confirm settings

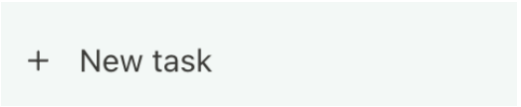


Figure 2 Use New task for an independent sample.

Submission procedure

1. Click New task and select the function on the left.

2. Use “+” in the bottom task input area to attach the individual files. Check their names; do not upload a whole test archive as one pattern.

3. Enter the objective, sample ID and known conditions in the same input area. Add to the prefilled request as needed. The chat model selector is not the identification engine or radiation setting.

4. Send the request using the lower-right button. When the parameter form appears, review the visible task, phase mode, retrieval models, elements and formula fields.

5. The submitted form values control the calculation. Submit the completed form; closing or cancelling it does not start computation.

6. Read the task execution messages. If the plan is awaiting confirmation, complete that form before uploading the same inputs again.

Request text and confirmation forms

The request expresses intent; the form saves the final calculation settings. Even if the request says multiphase, verify the phase mode in the form. Naming two models does not establish that both services ran successfully; check the execution record.

Continue the existing task when supplying missing information for the same sample. Create a separate task for another sample or an independent setting comparison, and include the sample ID and conditions in its name.

04 Single phase identification

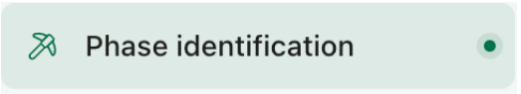


Figure 3 Phase identification entry.

Purpose and input

Search for candidate crystalline phases from one observed pattern without refinement. A CIF is not required for unknown-phase identification. Leave formula hints empty when testing identification without formulas.

Single phase settings

Option	Role
Single phase	Search under a single-phase assumption; retain unexplained peaks.
XMatcher	Pattern-based candidate matching; can be used without element constraints.
XQueryer-LW	Candidate retrieval using valid user-supplied element constraints.
Both models	Select both in the single-phase form, then verify actual execution.
Unknown phase count	Try a single phase first; fall back to multiphase analysis if quality is insufficient.

Example request

Identify a single phase in the attached pattern without refinement.

Known elements: Ca Fe Si O

No formula hints are provided. Use XMatcher and XQueryer-LW in the single-phase configuration.

Radiation: [actual conditions]. Preprocessing: [actual processing or none].

Completion checks

Check retrieval success before candidate ranking and validation. Top 1 means the first ranked candidate, not an automatically confirmed phase. If no candidate list was generated, there is no Top 1 to select.

05 Multiphase identification

Multiphase configuration

Multiphase means multiple crystalline phases in one sample pattern, not multiple uploaded patterns. Select Phase identification, attach one mixed pattern and choose the multiphase mode in the confirmation form. Use unknown phase count when the count is not established.

The multiphase form offers XMatcher-AutoMix and XDecomposer. Keep both default channels or select one for a controlled test. Candidates from both are pooled for validation. The single-phase XQueryer-LW and XMatcher choices do not replace the multiphase settings.

Enter elements separately from formulas

Field	How to enter it
Elements	Enter unique known symbols, e.g. Ca Al Si O Ni S. Do not guess unknown elements; identify a partial list as incomplete.
Formula hints	Leave empty if unavailable. For known phases, enter one formula per phase, separated by ASCII commas, semicolons or newlines.
CIF files	For an element-constrained identification test without structure hints, upload the pattern only and retain CIFs as reference answers. Attach them for known-phase refinement.

Example request

Identify multiple phases in the attached pattern without refinement or formula hints.

Known elements: Ca Al Si O Ni S

Use XMatcher-AutoMix and XDecomposer in the multiphase configuration.

Radiation: [actual conditions]. Phase count: [unknown or established count].

Before submission, check: one pattern, multiphase mode, correct elements and an empty formula field. “Not reviewed” means validation is pending or missing; it does not mean the candidates have been rejected.

06 Identification and refinement

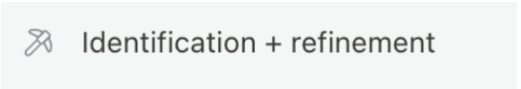


Figure 4 Identification + refinement entry.

Purpose and workflow

Use this function to find phases and then test their structural models against the observed pattern. Provide one pattern and measurement conditions; known elements constrain identification. Identification and refinement are separate stages and must be assessed separately.

1. Select Identification + refinement, attach the pattern and specify single, multiple or unknown phase count.

2. Submit the identification form after checking elements, formula hints and channels.

3. Review the identification candidates and evidence. In the refinement form, check the selected phases or structural files.

4. Select an available engine and provide any instrument file, fit range, constraints and round settings. Do not release all atomic parameters simply to improve a fit.

5. Submit refinement confirmation and keep the task session available. After a transport interruption, check the existing job before submitting another calculation.

6. Review observed/calculated profiles, differences, fit metrics, structure files and validation status; download this task's outputs.

Example request

Identify phases in the attached pattern and refine supported candidates.

Sample: [ID]. Elements: [known elements or unknown]. Radiation: [actual conditions].

Start with scale, background and cell-related parameters; fix atomic occupancies.

Provide the whole-pattern fit, difference profile, fit metrics and final validation status.

07 Known phase refinement

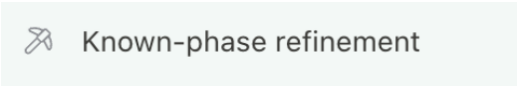


Figure 5 Known-phase refinement entry.

Purpose and input

Use supplied structural models directly, skipping phase retrieval. Attach one CIF for a single phase, or a CIF for every phase in a mixture, together with one complete observed pattern.

1. Select Known-phase refinement and attach the pattern and all CIFs using “+”.

2. Check each CIF’s formula, cell and atom information. Avoid duplicate structures and missing phases.

3. Confirm phase mode, structure list, engine and instrument configuration in the refinement form. Use the corresponding IRF file when supplying a FullProf instrument profile.

Parameter	Role and check
Scale factors	Control phase intensity; not themselves mass fractions.
Background and profile	Fit baseline and peak shape; do not absorb missing phases into the background.
Zero offset and cell	Affect peak positions; consider parameter correlations.
Coordinates and occupancies	Affect structure factors; vary only when supported by data and chemistry.

For phase fractions, check the definition, included phases and normalization. Display scales, candidate scores and refined mass fractions are different quantities.

08 PDF card calculation

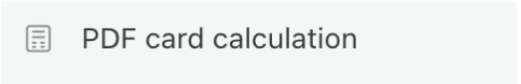


Figure 6 PDF card calculation entry.

Supply one observed pattern and one or more known CIF structures to calculate theoretical reflections and compare them with observed peaks. This function does not perform unknown-phase identification or Rietveld refinement.

1. Select PDF card calculation and attach the pattern and all phase CIFs.

2. Check filenames, wavelength and peak detection/matching parameters in the form.

3. Submit. Review the theoretical reflection table and observed peak table separately, including assignments and unmatched peaks.

4. When changing visibility, colours or annotations, retain phase names and sources. After editing assignments, export the current version using the report controls.

Parameter	Initial value	Meaning
Wavelength	1.5406 Å	Radiation used for theoretical positions; match the experiment.
Matching tolerance	0.20° 2θ	Allowed observed-to-theoretical position difference.
Intensity threshold	10%	Relative intensity threshold for observed peaks.
Minimum distance	0.08° 2θ	Minimum separation between detected peaks.
Prominence	0%	Required prominence above the surrounding baseline.

Initial values are software defaults and must be checked for the dataset. Download theory.csv, peaks.csv, observed.csv, parameters.json or the result bundle. Initial files contain automatic assignments; later manual edits require a new export.

A missing match does not by itself prove a phase is absent. CIF-derived reflections do not establish a commercial database card number.

09 XRD simulation

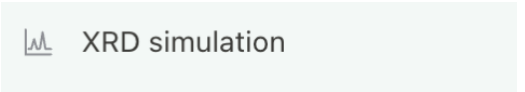


Figure 7 XRD simulation entry.

Calculate theoretical powder diffraction from CIF or MCIF files without an observed pattern. Upload one or more structures to compare component patterns and their total.

1. Select XRD simulation and attach the structures; separate files represent separate phases.
2. Check wavelength, 2θ range, sampling step, peak shape, width and mixing parameter in the form.
3. Submit and inspect parsing status for every file. If some files fail, only the successful phases are completed.
4. In the panel, adjust visibility, colour, relative display scale and width. Choose total, overlay or stacked views and inspect the HKL peak table.
5. Use the panel CSV or SVG export for the current view. A wavelength, range or sampling-step change requires a newly confirmed calculation.

Setting	Initial value	Purpose
Wavelength	1.5406 Å	Cu $K\alpha_1$ theoretical calculation
2θ range	10–90°	Simulation interval
Step	0.02°	Angular interval for sampled curves
Shape	pseudo-Voigt	Peak profile function
FWHM	0.18°	Initial peak broadening
Lorentzian fraction η	0.5	Profile mixing parameter

Initial downloads include peaks.csv, pattern.csv, parameters.json and a ZIP, using the confirmed settings. Relative display scale is not mass fraction; simulation does not replace experimental identification or quantitative refinement.

10 Crystal viewer



Figure 8 Crystal viewer entry.

Open a structure

1. Click Crystal viewer to open the structure page.
2. Choose one .cif using the CIF file control, or drop it into the upload area if shown.
3. Wait for parsing and check the active filename and structure information. Load the new CIF when changing samples so the previous model is not mistaken for the current one.
4. Use the available view controls to inspect the atomic arrangement. Return to XRD simulation when a theoretical diffraction pattern is required.

Read elements from a CIF

Open the CIF in a text editor and search for _chemical_formula_structural, _chemical_formula_sum or _atom_site_type_symbol. Element symbols identify the species; numbers describe stoichiometry. An expanded cell formula may have larger numbers than a reduced structural formula while listing the same elements.

Example formula	Elements
Ca3Al2(SiO4)3	Ca Al Si O
NiS	Ni S
Union for the two phases	Ca Al Si O Ni S

If parsing fails

Confirm the file is extracted and is a genuine CIF, with complete cell and atom-site information. Renaming a CSV or image cannot create a structural file. A displayed model establishes that it was parsed, not that the phase was detected in the sample.

11 Status and task records

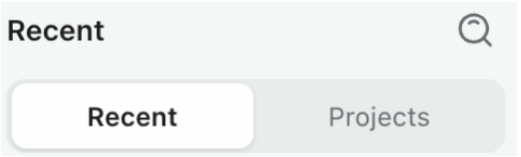


Figure 9 Recent and Projects provide access to tasks.

Check execution status first

Status or message	Meaning and next action
Awaiting confirmation	Computation has not started; submit the current parameter form.
Running or awaiting analysis	Not a final conclusion; inspect execution messages and progress.
Reviewed 0; not reviewed > 0	Candidates exist without validation verdicts. If this persists after completion, preserve records and investigate validation.
XMatcher call failed	Retrieval failed technically; inspect the error. This is not evidence that the sample has no matching phase.
No reliable phase match found	No reliable conclusion is released. Examine channel status, validation and input conditions to determine why.
invalid formula_hint	Check formulas and separators; clear the field when no formulas are intended.
incomplete chunked read	The response ended during transfer. Check whether the original job is still running before recovery or retry.

Save and review

Return through Recent and verify the sample ID, attachments, settings and time. Retain inputs, confirmed settings, outputs and error records. Download the result attachments; screenshots capture visible content and do not replace full CSV tables or bundles.

A transport message alone cannot locate the fault in the network, model or compute service. For persistent failures, provide the task name, full error and execution record; repeated new tasks can obscure the original failure.

13 Reading Results and Assigning Conclusions

Interpretation rule

The software organizes evidence. A phase must not be accepted from one score, coverage value, or low residual alone. Data conditions, peak positions, intensity trends, chemistry, and review status must agree.

Recommended reading order

1. **Verify inputs**
   Confirm wavelength, 2θ range, background, elemental constraints, and sample metadata.
2. **Review candidates**
   Read phase name, formula, space group, and database ID before the ranking score.
3. **Inspect the pattern**
   Check principal peak positions and investigate unexplained peaks or systematic intensity errors.
4. **Read validation**
   Inspect Inspector, peak-position check, and coverage. “Passed” still requires verification.
5. **Audit refinement**
   Compare observed/calculated curves, difference curve, fit indices, and parameter plausibility.
6. **Report the result**
   State only conclusions supported by consistent evidence; retain inputs, CIFs, task ID, and exports.

Reportable conclusion

Distinguish candidate, software-reviewed result, and manually confirmed identification/refinement.

14 Interpreting Multiphase Identification

Rank	Candidate combination	Score	Explained
1	C2Li4O6 51.1% + ClNa 19.5% + C2LiO5 29.4%	63.15	58.1%
2	C2Li4O6 52.1% + ClNa 39.2% + CLi4O4 8.8%	54.68	53.5%
3	C2Li4O6 62.1% + ClNa 37.9%	55.71	51.4%
4	C2Li4O6 51.8% + ClNa 39.2% + Cl6Na6 9.0%	53.84	54.2%

Current preview: candidate 3

Review score 8.95; review not passed. The first three combinations are not Inspector-trusted. They may be compared but must not be reported as final material conclusions.

Interpretation of this example

- C2Li4O6 is a doubled-formula representation of Li2CO3; ClNa represents NaCl. Candidate 3 therefore matches the known two-phase composition.
- The candidate is scientifically plausible but not validated. Report it as a candidate only because the review failed and explained intensity is 51.4%.
- Additional third phases in combinations 1, 2, and 4 may be over-decomposition. Require diagnostic peaks and chemically credible sample origin before acceptance.

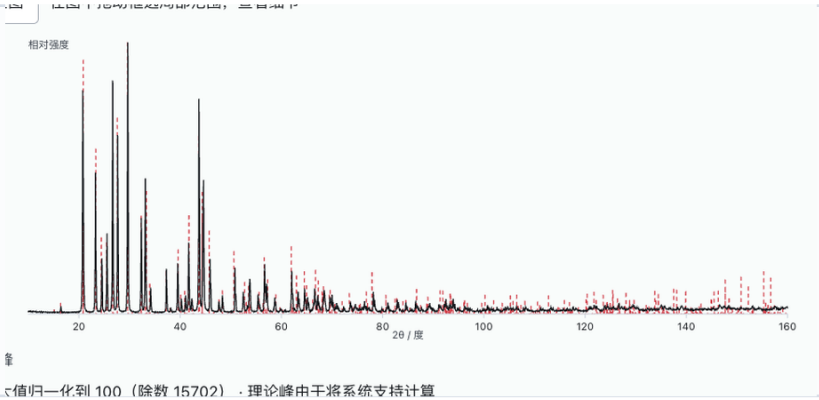
Metric boundaries

Relative diffraction contribution is not weight fraction. Explained intensity is a peak-coverage measure, not purity. Scores rank combinations within this run and are not probabilities or confidence values.

RESULT INTERPRETATION

15 Single-Phase Candidates and Inspector Review

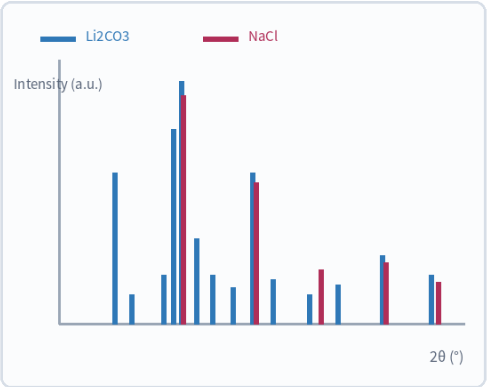
Rank	Formula / ID	Review	Coverage	Engine
1	Pb3S2O12 / mp-1220658	61.31 · passed*	0.939	XMatcher + XQueryer-LW
2	BaPb2S3O12 / mp-1228326	33.17 · peak check failed	0.756	XMatcher
3	Pb4SSi3Zn2O15 / mp-559184	31.88 · not passed	0.938	XMatcher



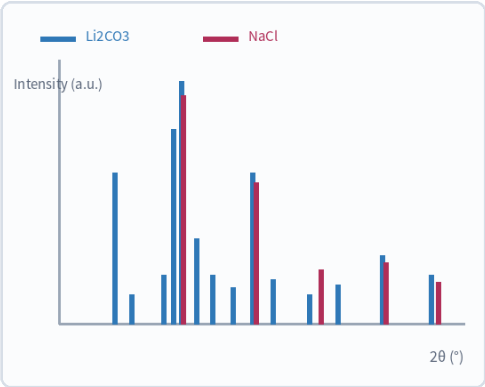
Result interpretation

- Candidate 1 is the leading result and passed software review; it may proceed to manual confirmation. The asterisk means that verification remains mandatory.
- Candidate 2 failed the peak-position check. Candidate 3 has high coverage but did not pass review; coverage alone must not override the validation result.
- Confirm allowed elements, radiation/wavelength, diagnostic peaks, material ID, space group, and the downloaded CIF before reporting the phase.

16 XRD Simulation and PDF Card Interpretation



Simulated subpatterns



Experimental peak assignment

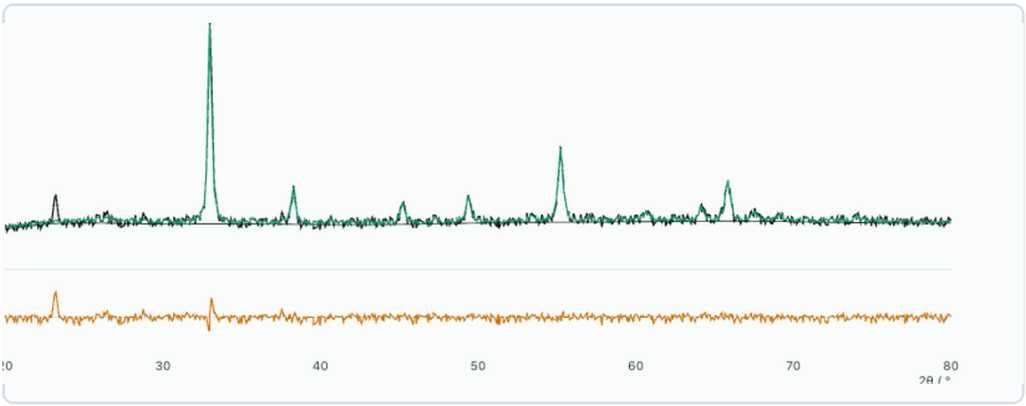
Setting	Value in this example
Phases	Li2CO3.cif and NaCl.cif
Radiation / range	λ 1.5406 Å; 10–90° 2θ
Profile	Pseudo-Voigt; FWHM 0.18°; η 0.50
PDF tolerance	±0.2°

Interpretation boundaries

- Intensity factors change display contribution; global/independent FWHM controls broadening. Neither value is a phase fraction.
- PDF-card markers support phase assignment through peak positions and HKL indices. The displayed curve is normalized and cannot be converted directly to content.
- Intensity mismatch may arise from preferred orientation, crystallite size/strain, background treatment, or instrument conditions. Use refinement for quantitative evaluation.

RESULT INTERPRETATION

17 Interpreting PyXplore Refinement



Black: observed • Green: calculated • Gray: background • Orange: difference (observed − calculated)

Parameter	Before	After	Change
a=b=c	9.410000 Å	9.410690 Å	+0.000690 Å (+0.0073%)
V	833.237621 Å³	833.420929 Å³	+0.183308 Å³ (+0.0220%)

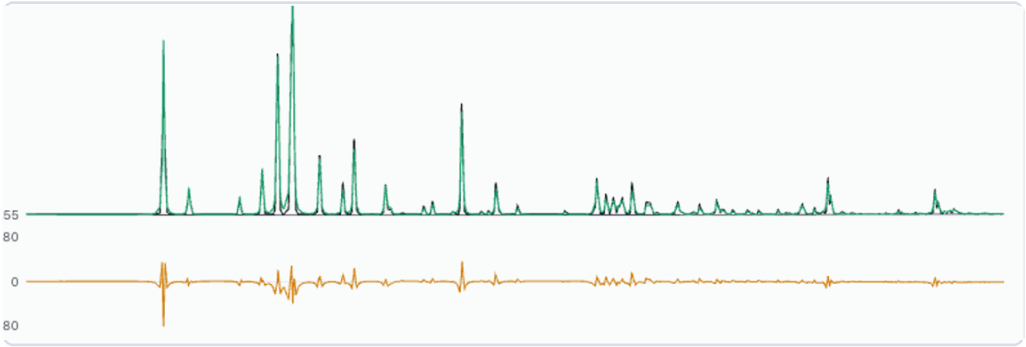
Interpretation of this result

- The starting model is the user-supplied Mn2O3.cif (80 atoms). Lattice and volume changes are below 0.03%, indicating only a small unit-cell adjustment.
- Observed and calculated principal peaks mostly overlap; the difference curve remains near zero over most of the range. Local residuals at strong peaks still require profile, background, and preferred-orientation checks.
- Small cell changes do not prove acceptance. Record Rwp, Rp, χ^2, and confirm that refined parameters are physically plausible and not pathologically correlated.

Record with the result

Task ID, software/engine version, starting CIF, wavelength, refinement strategy, constraints, fit indices, final CIF, and difference plot.

18 GSAS-II Refinement and Result Acceptance



Sharp residuals remain at several intense peaks; review the model, profile, background, or preferred orientation.

Phase / parameter	Before	After	Interpretation
Phase 1: V	237.053556 Å^3	237.027549 Å^3	Different space-group setting; delta withheld
Phase 2: a=b=c	5.620000 Å	5.620648 Å	+0.0115%
Phase 2: V	177.504328 Å^3	177.565760 Å^3	+0.0346%

Acceptance checklist

- Confirm matching space group, cell setting, and CIF identity. A dash does not mean zero change.
- Principal peak positions and intensity trends agree; the difference curve has no structured or intense residuals.
- Rwp, Rp, and χ^2 are comparable under the same data quality and strategy. A low Rwp alone is insufficient.
- Cell, profile, background, preferred-orientation, and atomic parameters remain physically plausible.
- For quantitative analysis, phase fractions sum to approximately 100%; report uncertainty, constraints, and unmodelled phases.

19 Software Overview and Standard Workflow

Purpose

GanJiang organizes XRD processing, phase search, candidate review, PDF-card matching, theoretical-pattern simulation, and structure refinement. Outputs support an evidence chain; final conclusions still require sample context and manual verification.

Core modules

Phase identification

Single/multiphase candidates, elemental or formula constraints, ranking, and Inspector review.

Patterns and cards

Observed patterns, theoretical peaks, HKL labels, PDF-card matching, and unexplained peaks.

Structure and refinement

CIF viewing, XRD simulation, PyXplore/GSAS-II refinement, and cell comparison.

Tasks and exports

Task status, record retrieval, and CSV/SVG/PNG/CIF exports.

Standard workflow

1. **Prepare XRD/CIF**
2. **Create task**
3. **Review candidates**
4. **Run validation**
5. **Refine if needed**
6. **Export and archive**

ACCOUNT

20 Account Top-up and Quota Check

Before you begin

Confirm the signed-in account and determine the amount, payment method, and invoice requirement. Balance, plans, pricing, and payment channels follow the current in-app display.

1. **Open the account page**

   Use the account/avatar entry to open the account, quota, or top-up page.

2. **Select an item**

   Choose an available plan or amount; verify currency, validity, scope, and refund terms.

3. **Confirm the order**

   Verify account, item, amount, and payment channel. Never expose payment data in chats or screenshots.

4. **Complete payment**

   Follow the payment page and wait for a successful order status. Do not resubmit an unconfirmed order.

5. **Refresh quota**

   Return to the account page and refresh the balance/quota. If missing, check order and payment status first.

6. **Retain records**

   Keep the order number, payment receipt, and invoice information as required by your organization.

If a top-up is missing

Keep a masked order number, time, amount, and status capture; contact support. Do not pay again merely to test.

21 LLM Setup: Prerequisites and Add Model

Item	Source and entry rule
Model ID	Copy the exact request identifier from the model-service console.
API Key	Use a valid key authorized for the model; key, model, and URL must belong to the same service.
Base URL	Use the API base address supplied by the provider. Do not enter a console webpage or append a full chat endpoint.

Open the configuration page

1. Click the gear-shaped Settings entry at the lower left.
2. Select Large Model in the left navigation.
3. Click + Add Model in the Custom Models area.

Security requirement

Also confirm network access, account permission, and quota. Enter the API key only in the application; never place it in shared guides or public screenshots.

URL rule

Whether the Base URL includes a version path (for example /v1) must follow provider instructions.

22 LLM Setup: Field-by-Field Instructions

Field	What to enter	Check
Configuration name *	Recognizable display name	Separate from Model ID; avoid duplicate custom names.
Model name *	Exact provider Model ID	Do not use a nickname or screenshot placeholder.
Provider	Auto-detect or select	For gateways, verify the actual protocol and supported provider.
API Key *	Valid model credential	Copy completely; remove spaces/newlines; never put it in the name.
Base URL *	API base address	Protocol, domain, and path must match the key service.
Context window	Input context capacity in tokens	A larger entry does not extend capability; tokens are not words.
Max output tokens	Single-response output budget	Do not exceed the service limit; distinct from context.
Temperature	Sampling randomness	Keep 0.7 initially if supported; follow provider limits.

Required-field example

Field	Example
Configuration name	Team model - daily
Model name	[exact Model ID]
API Key	[valid key]
Base URL	[API base address]

Bracketed values must be replaced and cannot be used directly.

23 LLM Setup: Save, Select, and Verify

1 Save

Click Save. Confirm the display name under Saved Models; use Refresh if the list does not update.

2 Return to chat

Close Settings and click the current model name near the send button.

3 Select

Choose the new entry under Custom. Distinguish it from identically named System entries.

4 Confirm

Verify that the target configuration is displayed below the input box.

5 Test

Start a normal chat and send: “Reply only: configuration successful.” Confirm a normal response.

Demonstration configuration - not callable

Display-only example: configuration “Tutorial demo - daily assistant”; Model ID “demo-chat-model”; API key “DEMO_ONLY_NOT_A_REAL_KEY”; Base URL “https://api.example.com/v1”. Replace every field.

Validation criteria

Completion criteria: the configuration appears in Saved Models, is selected in chat, and an actual request returns normally. Minor instruction-following differences do not imply a connection failure.

If the page says the workflow selects models automatically, perform the first test in a normal chat that allows manual selection.

24 LLM Setup: Edit, Switch, and Delete

Operation	Procedure
Edit	Settings → Large Model → Configure on the target card → edit → Save. Switch away first if currently in use.
Switch	Open the model selector below the chat input; choose System or Custom and confirm the display name/check mark.
Delete	Switch to another model, open the target configuration, then click Delete Configuration and confirm.
System model	Provided through signed-in service discovery and normally not user-editable. Use a custom configuration for independent connection parameters.

Capability-validation boundaries

- After the basic text test, separately validate tool use, image understanding, or other required capabilities.
- A successful text response does not prove that every advanced capability is available.
- Retain original advanced values; on parameter errors, remove nonessential fields first.

Important limitation

A custom configuration currently in use cannot be deleted directly; system models cannot be edited like custom entries.

25 FAQ and Troubleshooting

Symptom	Check first	Action
Required field missing	Name, Model ID, key, URL	Complete all * fields and save again.
Chat still shows old model	New entry selected?	Choose it under Custom; test automatic workflows in normal chat.
Authentication/permission	Key, URL, permission, quota	Verify in the provider console; saving does not validate a key.
Model not found/routing	Model ID case/path/provider	Match the service identifier; verify gateway protocol/provider.
Unsupported parameter	Output, temperature, reasoning, body	Remove nonessential fields and use supported parameters.
Length exceeded	Conversation and actual limits	Use a short chat, reduce output, and enter real model limits.
Network failure/no result	Base URL, reachability, status	Retry a short request; retain a masked error for support.
Cannot edit/delete	In use or system model?	Switch away first; system models follow system controls.
transport error	Network/service interrupted	Check whether task still runs; resume/retry later without duplicating tasks.

Information for support

Provide task name, time, masked error, model display name, and steps. Never provide a complete API key.

26 LLM Not Configured or Temporarily Unavailable

Messages to identify

“LLM is not configured” or “LLM configuration is temporarily unavailable.”

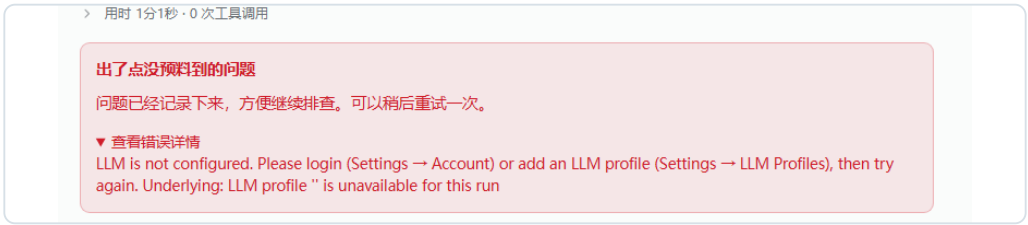
Method 1: Use a system model provided with the account

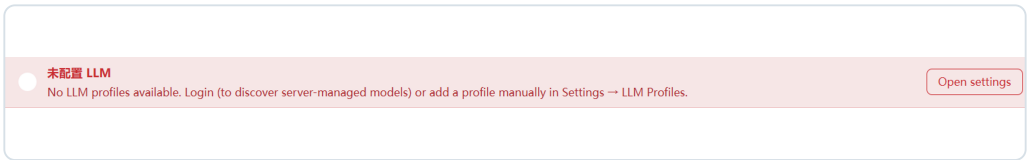
1. Check sign-in status: If Go to Sign In is shown, sign in first. If already signed in, confirm network access.
2. Restore model discovery: Select Rediscover when available. If no model appears, sign out and sign in again. Restart the application if the backend cannot be reached.
3. Select a model: In a normal chat, open the model selector below the input box and choose an entry under System.
4. Verify: Send a short message and confirm that a normal response is returned.

Method 2: Configure a personal model service (optional)

1. Open Settings → Large Model and select Add Model.
2. Enter the configuration name, Model ID, API Key, and Base URL. Set other fields according to the provider, then save.
3. Return to chat, choose the entry under Custom, and send a test message.

Example error messages





27 Environment Dependencies Required at First Launch

Description

This is the normal environment-preparation process. The application checks required dependencies and starts installation when any are missing.

Standard procedure

1. Review installation status: Check which dependency is being processed and wait for completion. Follow the prompts if a system terminal opens.
2. Enter the computer password only when requested: Use the administrator password, not the GanJiang account password. Terminal password input may remain invisible; press Enter after typing.
3. Run detection again: Return to the application, open Settings → Environment Variables, and select Detect Again.
4. Verify the result: Required dependencies must be detected. Install optional dependencies only when their functions are needed.

If installation fails

- Expand View Detailed Output on the preparation page and record the failure message.
- Open Settings → Environment Variables and retry Install for supported missing dependencies.
- If no terminal is found, run the command shown by the application in the system terminal, then select Detect Again.

Important

Skip and Continue or Continue Using only opens the application. It does not install missing dependencies, and affected functions may remain unavailable.

28 Installer Download Blocked by Browser or System

Checks before proceeding

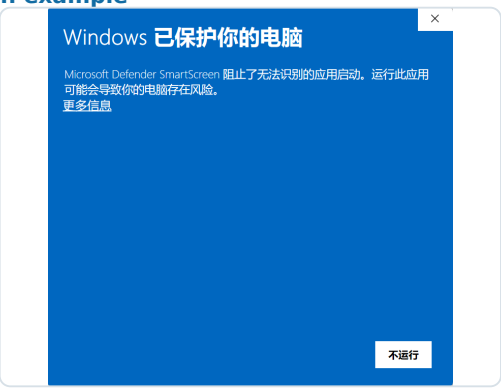
1. Use the download entry provided by the project and select the correct operating system and processor architecture.
2. Open the browser download panel and read the complete message shown for the file.

Message or symptom	Action
Interrupted or incomplete	Check the network and download the complete installer again.
Uncommon file or risk warning	Verify the source and version with project support before following the browser prompt.
Blocked by organization policy	Contact the device or network administrator.
Downloaded but blocked at launch	Record the system message and contact project support.

Completion check

The download panel shows completion and the full installer is available locally.

Windows SmartScreen example



29 Verification Code Not Received

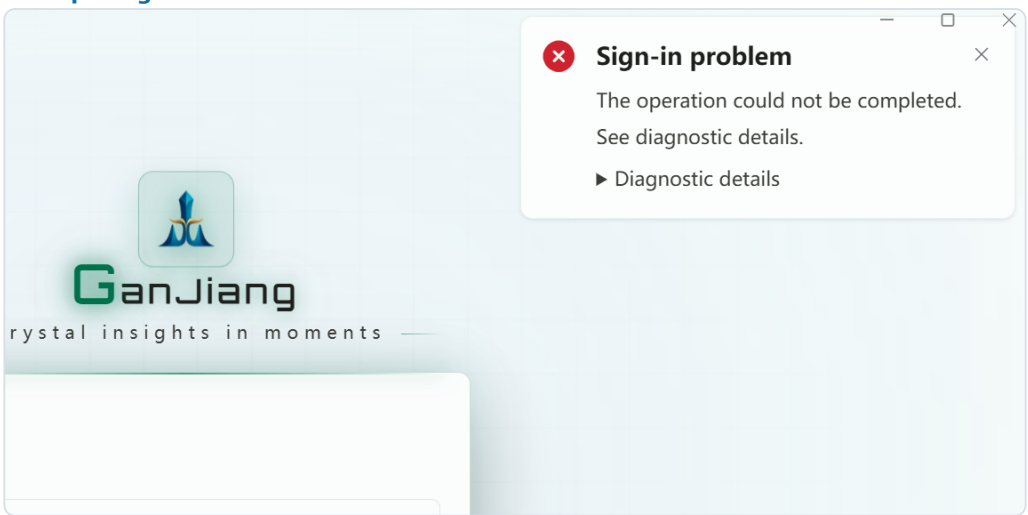
Procedure

1. Confirm the account: Check the email address or phone number, then select Get Code.
2. Distinguish sending failure from non-delivery: If sending fails, check the network and record the error. If the code was sent, check the inbox, SMS messages, spam folder, and blocking rules.
3. Wait for the countdown: After a successful request, the button shows a 60-second countdown. Do not submit repeated requests during this period.
4. Restart the application: Reopen GanJiang, enter the account again, and request a new code.

Completion check

Enter the received code before it expires and complete sign-in. Contact project support if no code is received.

Example sign-in error



30 Contact Project Support

Provide the following information in one report so that the issue can be reproduced and diagnosed.

Basic information

Application version, operating system, device model, and time of occurrence.

Problem sequence

Identify the page, the action performed, the message displayed, and all troubleshooting steps already attempted.

Supporting material

- Model issue: screenshot, displayed model name, and reproduction steps.
- Environment issue: dependency name, detection result, and error output.
- Download issue: browser name, installer filename, and blocking message.
- Verification-code issue: request time and the success or failure message.

Information security

Before submitting screenshots, mask API keys, verification codes, access tokens, complete email addresses, phone numbers, and other sensitive information. Provide only redacted account information.