

MIPAR

Release Notes

V1.3.0

Auto Updates

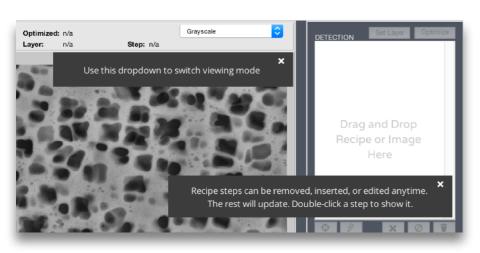




Future updates will be a breeze! Starting in v1.3.0, MIPAR will automatically check for updates on launch. Checks can also be triggered manually from the help menus. Major release announcements will still be made via email for users whose systems are run offline.



Startup Guide



Tips

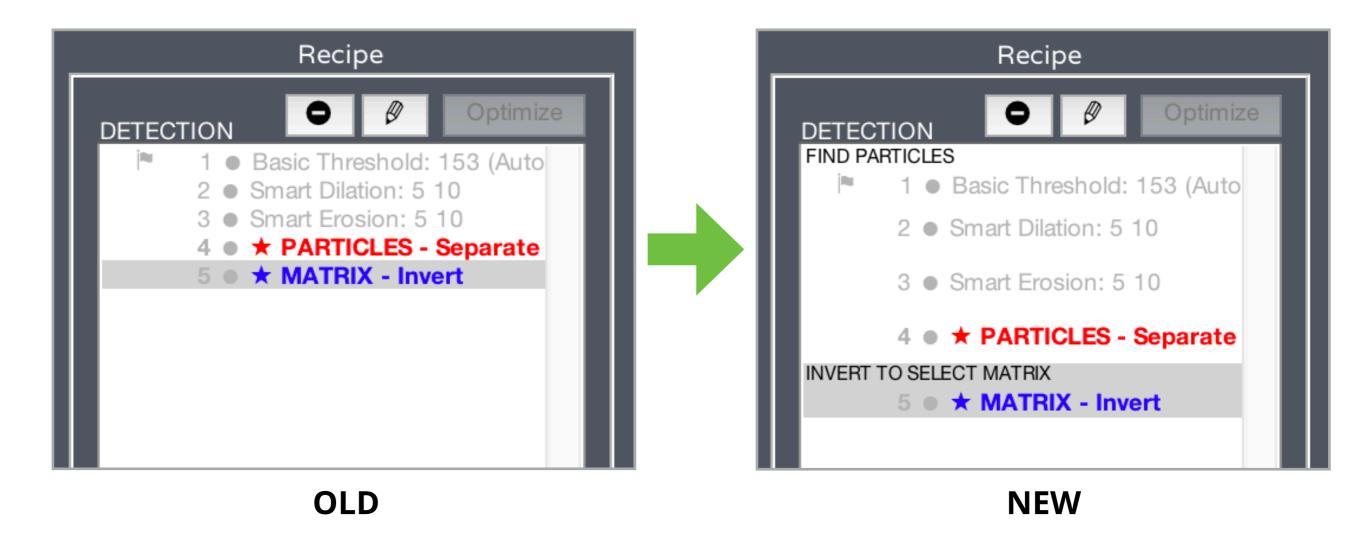
Guides and Tips

Enjoy a more guided MIPAR experience than ever before. From launching, to opening an image, to building a recipe — help is here!



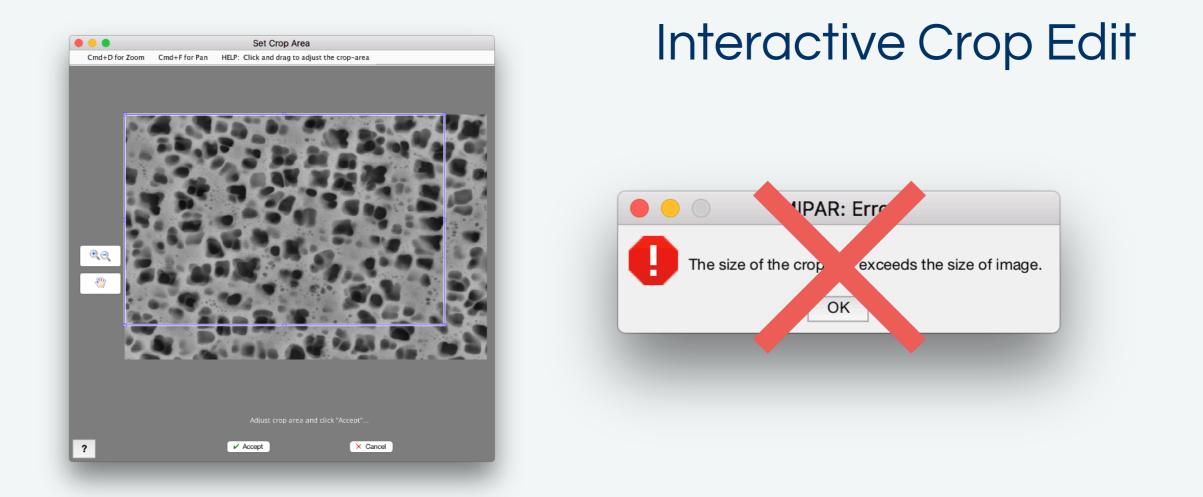
Recipe Guide

Recipe Chapters



This one is big — and has the potential to transform how you read, build, and edit Recipes.

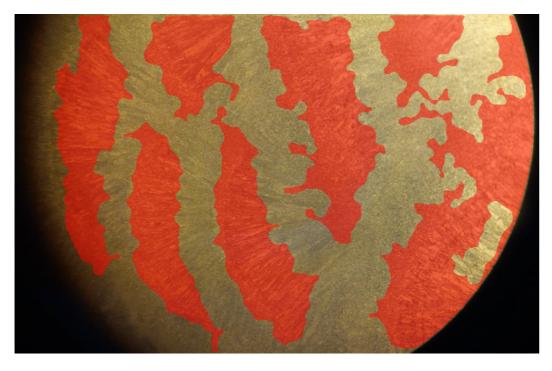
Now you can break them into sections (Chapters), with a intuitive name given to each! Certain steps trigger a new Chapter automatically, and you may add, edit, or remove chapters whenever you wish.

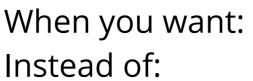


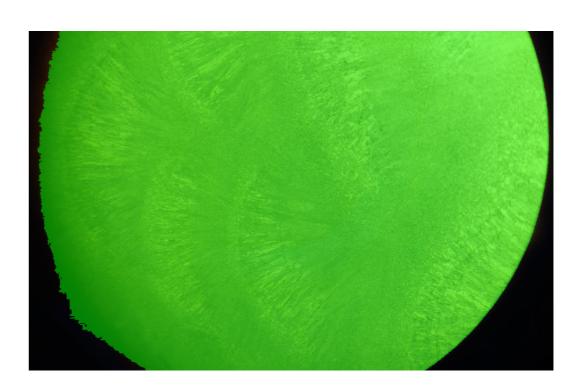
A highly-requested feature — it will have a dramatic impact in two areas:

- 1. Edit a Crop step interactively, rather than typing in new coordinates blind.
- 2. No more "crop box exceeds image" errors! If this occurs during Recipe loading, you can now edit the crop real-time so that the Recipe loads!

Area Fraction Relative to AOI







Red / Green
Red / Entire Image

Just set the area-of-interest (AOI) as a Memory Image. Now the *Area Fraction* measurement lets you choose this:

This works for *Number Density* and *Perimeter Fraction* as well!





Aspect Ratio

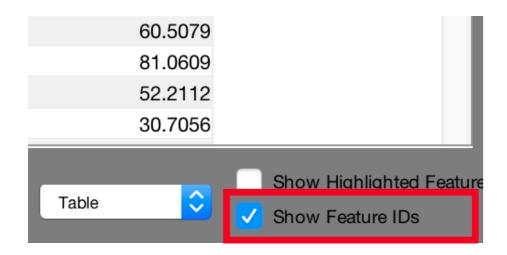
Shape	
Roughness	Ratio of area of convex hull and area of each feature
Eccentricity	Elongation of each feature. 0=circle. 1=straight line.
Aspect Ratio	Ratio of major and minor axis lengths
Perimeter	Length of perimeter of each feature
Perimeter/Area	Perimeter of each feature relative to its area
First Moment of Inertia	Describes how much feature area is away from its centroid
Moment Invariants	Advanced shape descriptors. Can describe trianquarlity. etc.



We have eccentricity, now we have aspect ratio too!

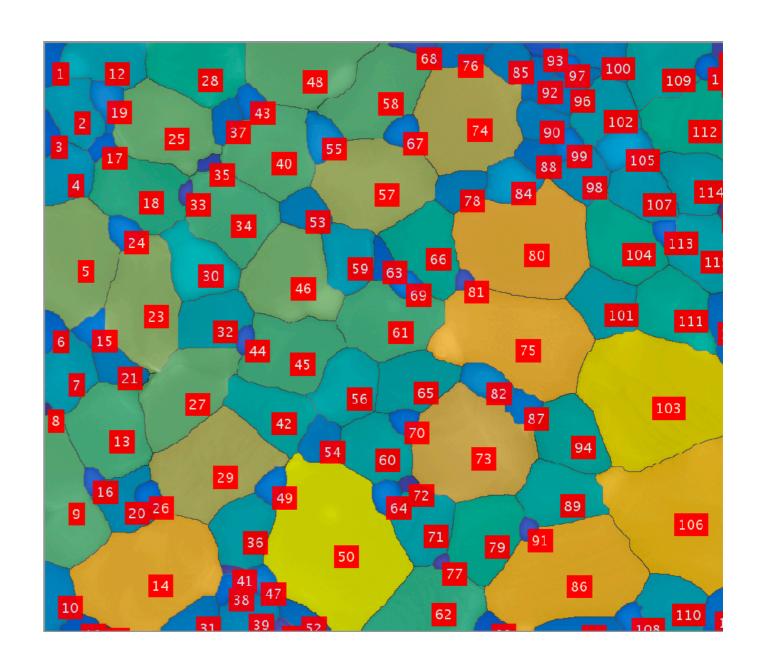
Make direct measurements of the ratios between the major and minor axis lengths of your features. Aspect ratio is now available throughout MIPAR, including *Reject Features*!

Show Feature ID Numbers

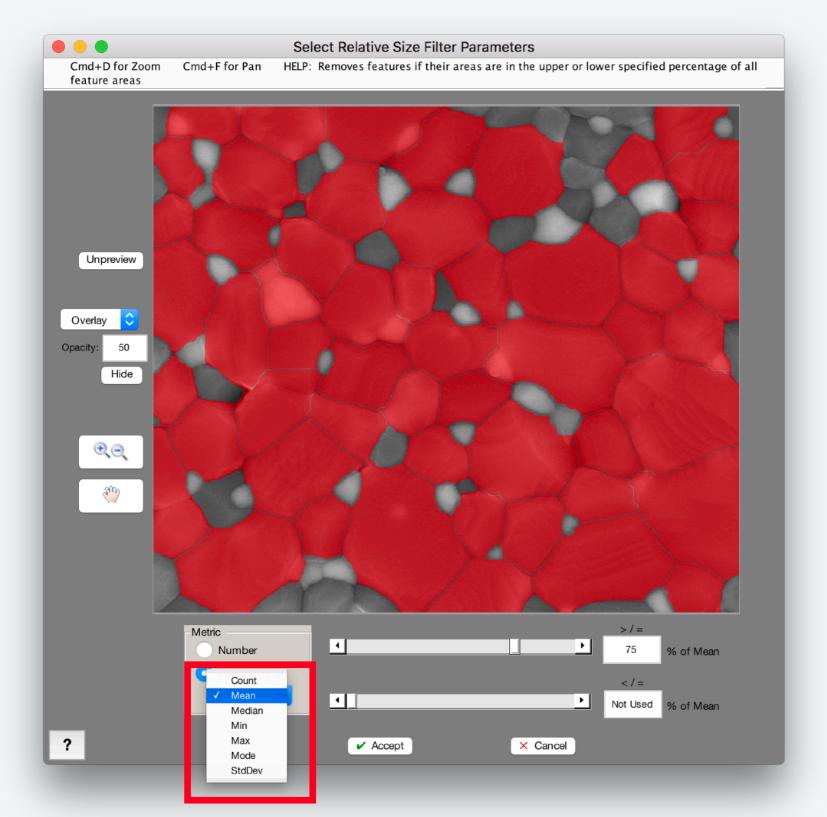


A simple checkbox in the Color By Measure tool displays each feature's ID number at its center.

Now you'll have an easier time sharing your exciting color-coded measurements with colleagues!



More "Percentage" Options



Now perform selections in the *Relative Size Filter* such as:

"Show me features that are larger than 75% of the mean."

OR

"Show me features that are less than 50% of the max size."

Other Changes

- Below/Above was renamed to Dark/Bright in Adaptive Threshold and Basic Threshold
- Renamed Convex Area/Area to Roughness throughout MIPAR
- Improper measurements errors no longer cancel Recipe upon loading

Bugs Fixed

- Fixed bug with Generate Report in Image Processor
- Fixed bug with some Pattern Mapping loading
- Fixed overlay bug in Watershed preview window
- Fixed ellipse tool bug in *FFT Filter* preview window
- Fixed bugs in *Relative Size Filter*
- Fixed case-sensitivity bug in "Channel Op" entry in Reference Image Panel
- Several stability improvements to Processed Image Editor