The recipe segments large area Pt-Rh nanoparticles at high resolution. The equivalent diameter of the labeled particles can then be measured easily. This example demonstrates how to make use of an external python library in the recipe.

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| **Step** | **Name** | **Purpose** | **Sensitive to spatial resolution** |
| 1 | Reference | Reference image. |  |
| 2 | Python Script Object | Use Python to access an OpenCV algorithm. Apply a Laplacian of Gaussian to the reference to detect ï¿½blobsï¿½. | Yes |
| 3 | Convert Image Type | Convert output to 16 bits signed for the following step |  |
| 4 | H-Minima | detect local extrema (H-minima, or H-maxima, accordingly) to try to obtain 1 seed per object | Yes |
| 5 | Labeling | Label each detected extrema |  |
| 6 | Reference | Reference image. |  |
| 7 | Median Filter | Smoothes reference |  |
| 8 | Thresholding | Threshold particles |  |
| 9 | Marker based watershed inside mask | Apply watersheding from calculated seeds to separate particles |  |
| 10 | Remove Small Spots | Remove unwanted noise |  |

**Associated blog**:

<https://www.thermofisher.com/blog/microscopy/high-resolution-electron-microscopy-and-powerful-software-solutions-drive-nanotechnology-growth/?trk=public-post_share-video-embed_share-article_title>