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## Find Particles

Wed, 03/27/2019 - 12:22

#1



rddey80

## Find Particles

Dear Members,

If I don't have any information about the structure of my target molecule, what values i should choose for 'Maximum particle radius' and 'Characteristic particle radius'? So, I built a model from sequence using Itasser. Based on the model the large dimension is around 120A. Should I choose Characteristic particle radius less than Maximum particle radius (if yes, how much)? Giving some values for these parameters, I can read the number of particles selected for the image in the terminal where I launched cistem. The number of particles found varies a lot by changing those parameters. what criteria I should apply to optimize the values for those two parameters(keeping other parameters fixed)?

Thanks for your time,

Raj





niko

There is no fixed rule for

There is no fixed rule for what radius works best. You will have to try different values and check the picking results visually. If you do not know what to pick in your images, you should choose parameters that produce a large number of picks and then use 2D classification to identify consistent shapes that may represent your particle.



Sat, 03/30/2019 - 17:05 (Reply to #2)



rddey80

Hi Niko,

Hi Niko,

Thanks for your suggestion and that's exactly I am doing. Could you please tell a little more detail how the maximum particle radius and characteristic radius are related?

Best regards,

Raj

Sat, 03/30/2019 - 19:05 (Reply to #3)



niko

I recommend consulting the

I recommend consulting the documentation page and reading the paper on *cisTEM* if you would like to understand in more detail what the different parameters mean.



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