Synthesis and characterization of rhombic dodecahedral YAG microcrystals with good dispersity, high crystallinity and controllable crystals size.

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Supporting information

This supporting information shows the SEM images selected for the analysis of particle size distribution, average particle size and median particle size (D50), and the SEM images of the relatively large YAG crystal observed for sample 1 to 12.

These two short names will be used in the figure below:

Mean: the mean grain size of particles.

D50: the median particle size of particles.

Sample 1:

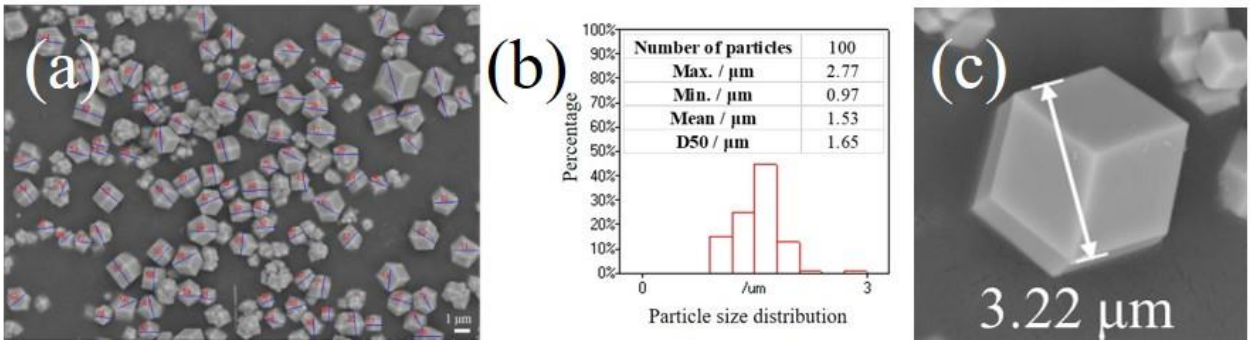

Figure S1. For sample 1, the SEM image (a) is selected for statistical analysis of particle size, and the results are shown in (b), including the number of selected particles, maximum and minimum particle size, average particle size, median particle size and particle size distribution. (c) is the SEM image of the relatively large YAG crystal found in this sample.

Sample 2:

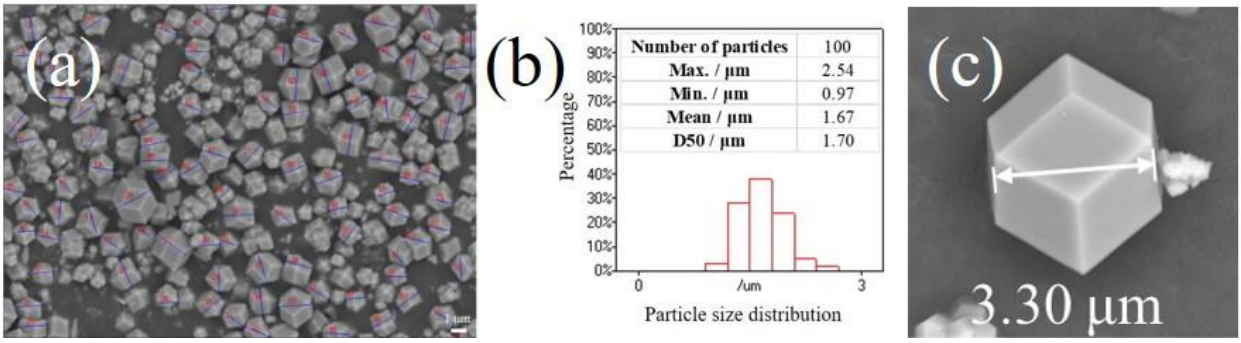

Figure S2. For sample 2, the SEM image (a) is selected for statistical analysis of particle size, and the results are shown in (b), including the number of selected particles, maximum and minimum particle size, average particle size, median particle size and particle size distribution. (c) is the SEM image of the relatively large YAG crystal found in this sample.

Sample 3:

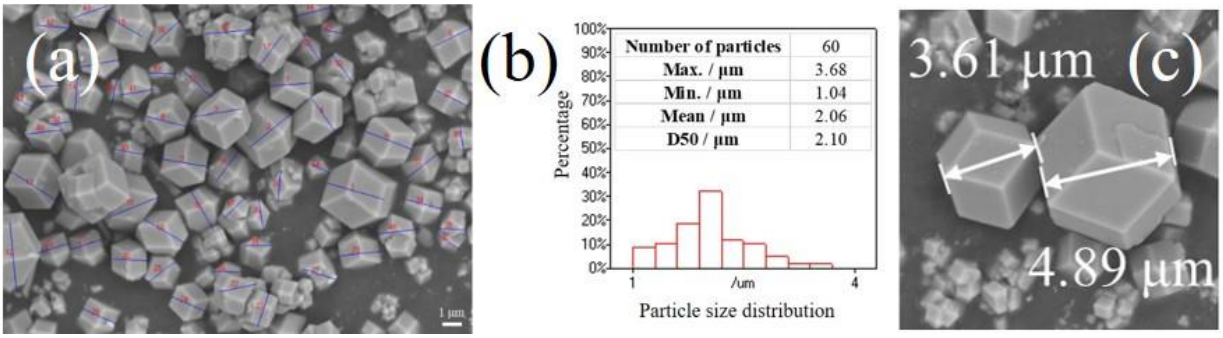

Figure S3. For sample 3, the SEM image (a) is selected for statistical analysis of particle size, and the results are shown in (b), including the number of selected particles, maximum and minimum particle size, average particle size, median particle size and particle size distribution. (c) is the SEM image of the relatively large YAG crystal found in this sample.

Sample 4:

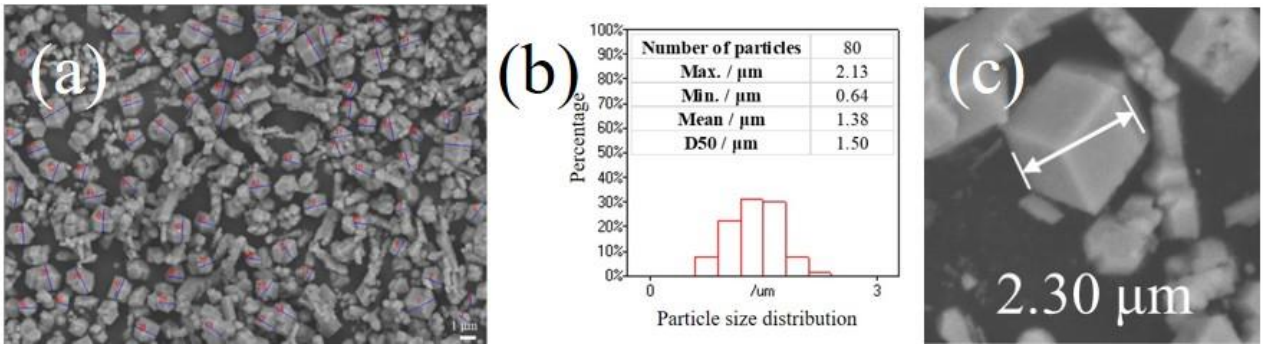

Figure S4. For sample 4, the SEM image (a) is selected for statistical analysis of particle size, and the results are shown in (b), including the number of selected particles, maximum and minimum particle size, average particle size, median particle size and particle size distribution. (c) is the SEM image of the relatively large YAG crystal found in this sample.

Sample 5:

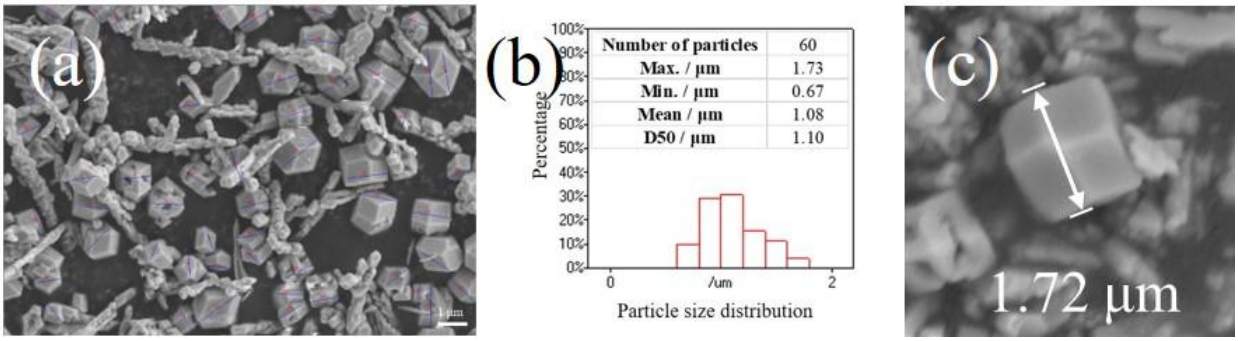

Figure S5. For sample 5, the SEM image (a) is selected for statistical analysis of particle size, and the results are shown in (b), including the number of selected particles, maximum and minimum particle size, average particle size, median particle size and particle size distribution. (c) is the SEM image of the relatively large YAG crystal found in this sample.

Sample 6:

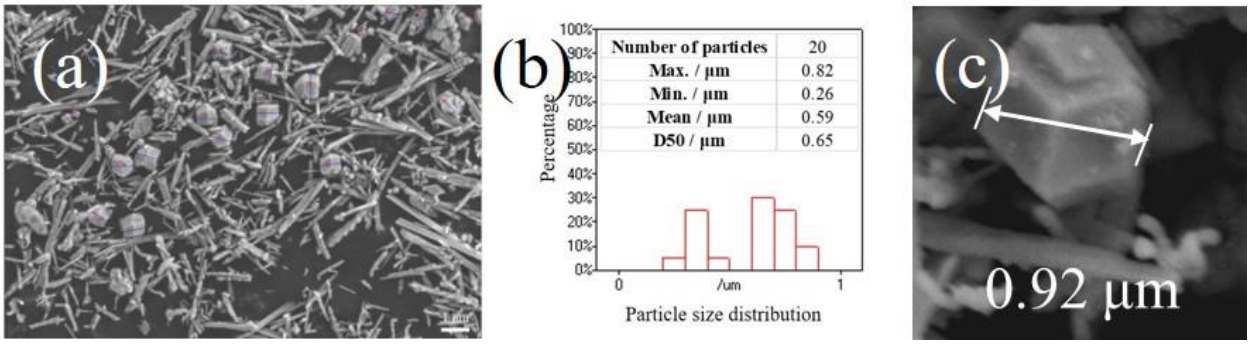

Figure S6. For sample 6, the SEM image (a) is selected for statistical analysis of particle size, and the results are shown in (b), including the number of selected particles, maximum and minimum particle size, average particle size, median particle size and particle size distribution. (c) is the SEM image of the relatively large YAG crystal found in this sample.

Sample 7:

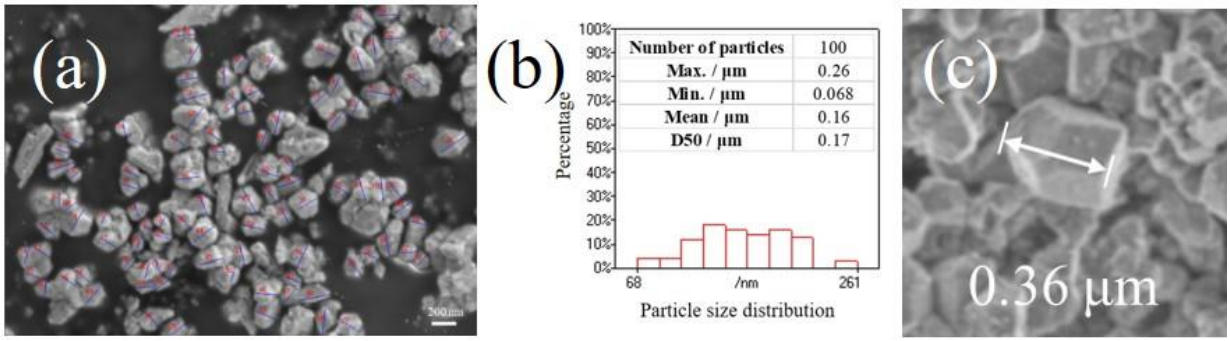

Figure S7. For sample 7, the SEM image (a) is selected for statistical analysis of particle size, and the results are shown in (b), including the number of selected particles, maximum and minimum particle size, average particle size, median particle size and particle size distribution. (c) is the SEM image of the relatively large YAG crystal found in this sample.

Sample 8:

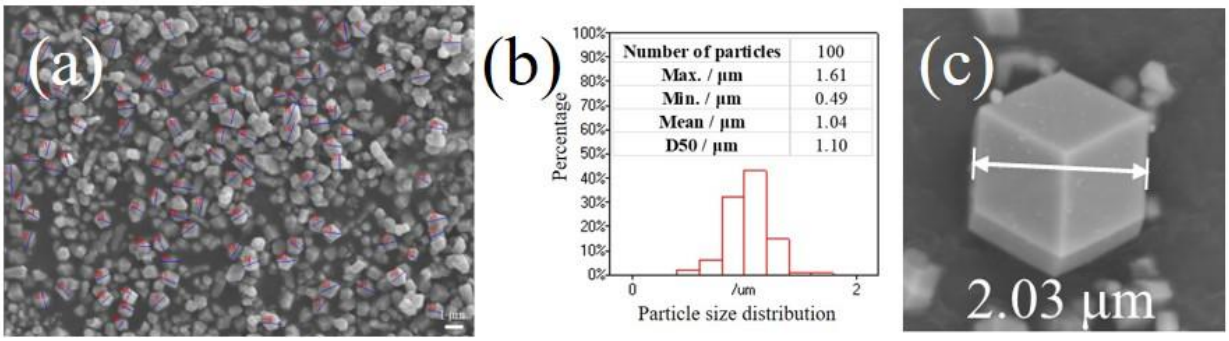

Figure S8. For sample 8, the SEM image (a) is selected for statistical analysis of particle size, and the results are shown in (b), including the number of selected particles, maximum and minimum particle size, average particle size, median particle size and particle size distribution. (c) is the SEM image of the relatively large YAG crystal found in this sample.

Sample 9:

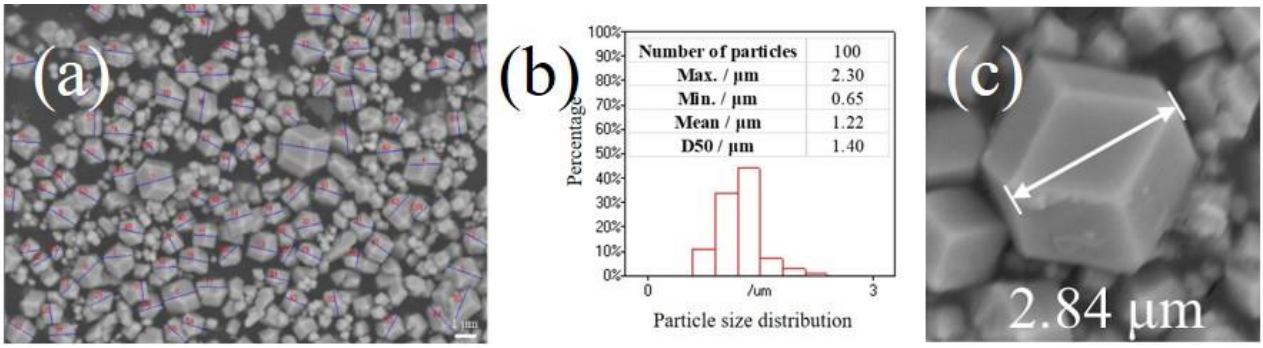

Figure S9. For sample 9, the SEM image (a) is selected for statistical analysis of particle size, and the results are shown in (b), including the number of selected particles, maximum and minimum particle size, average particle size, median particle size and particle size distribution. (c) is the SEM image of the relatively large YAG crystal found in this sample.

Sample 10:

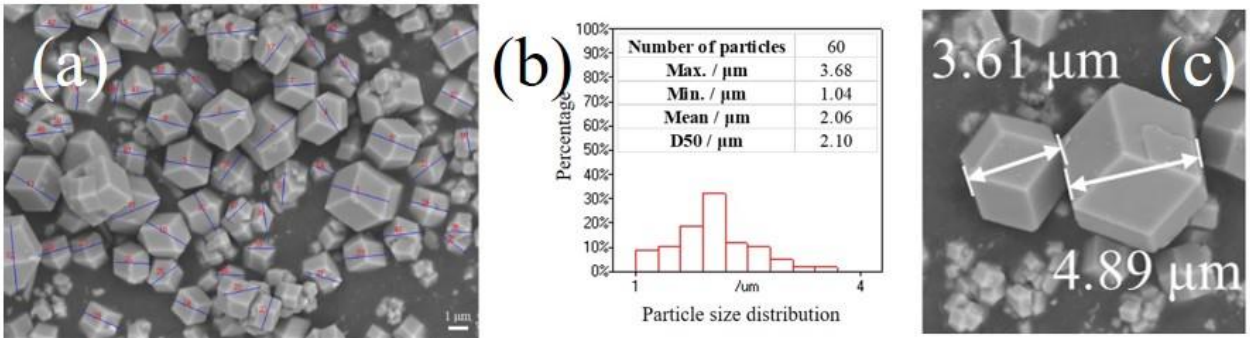

Figure S10. For sample 10, the SEM image (a) is selected for statistical analysis of particle size, and the results are shown in (b), including the number of selected particles, maximum and minimum particle size, average particle size, median particle size and particle size distribution. (c) is the SEM image of the relatively large YAG crystal found in this sample.

Sample 11:

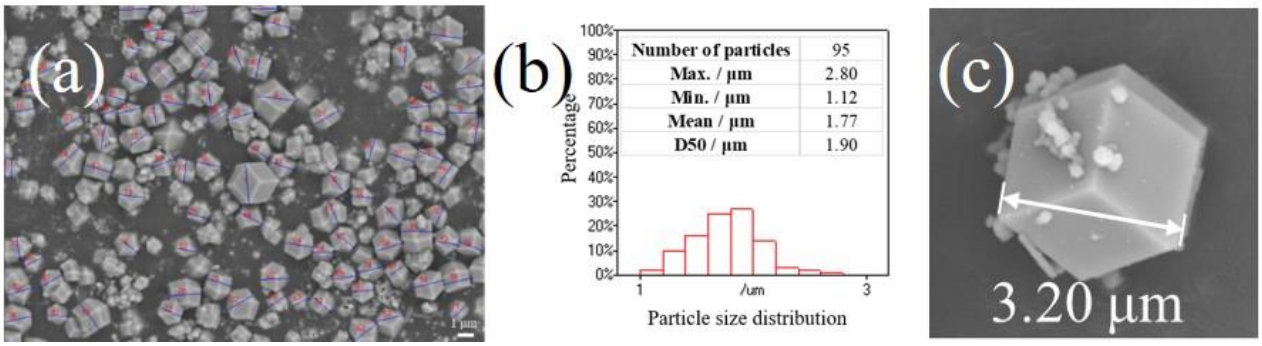

Figure S11. For sample 11, the SEM image (a) is selected for statistical analysis of particle size, and the results are shown in (b), including the number of selected particles, maximum and minimum particle size, average particle size, median particle size and particle size distribution. (c) is the SEM image of the relatively large YAG crystal found in this sample.

Sample 12:

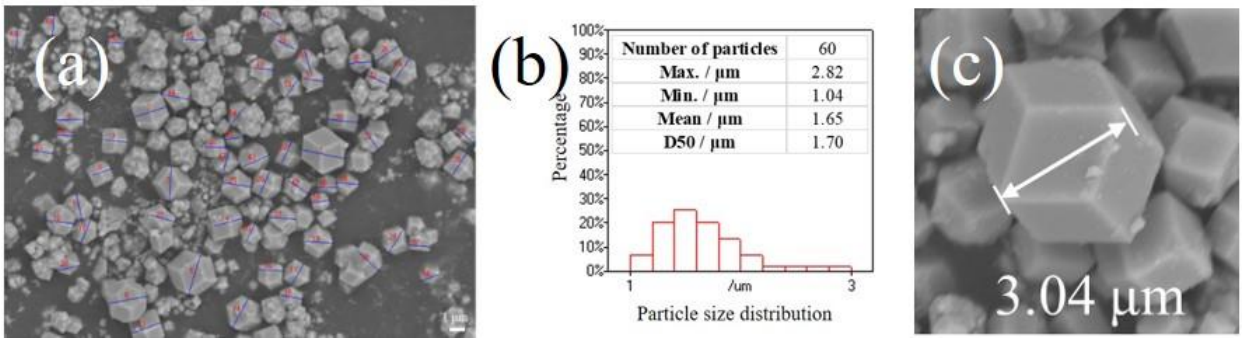

Figure S12. For sample 12, the SEM image (a) is selected for statistical analysis of particle size, and the results are shown in (b), including the number of selected particles, maximum and minimum particle size, average particle size, median particle size and particle size distribution. (c) is the SEM image of the relatively large YAG crystal found in this sample.