



Fractal network of binary colloidal gels

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When two types of colloidal particles with distinct attraction strengths are mixed to form a colloidal gel, the resulting fractal network shows a uniform distribution of both types of particles. The more strongly attractive particles are dyed green and the more weakly attractive ones are dyed red, as displayed in the confocal fluorescent micrographs on the right. When the two images are merged, the network appears yellow, which corroborates homogeneous mixing. Mixing the two types of particles in different proportions allows us to tune the viscoelasticity of the binary gels.

30 μm