

Description of Additional Supplementary Files

- 1. Supplementary data 1** - Source Code of the software running the device and its graphics user interface.
- 2. Supplementary data 2** 3D CAD model of the microfluidics chip for mixing and 10 milliseconds incubation.
- 3. Supplementary data 3** 3D CAD model of the microfluidics chip for mixing and 20 milliseconds incubation.
- 4. Supplementary data 4** 3D CAD model of the microfluidics chip for mixing and 80 milliseconds incubation.
- 5. Supplementary data 5** 3D CAD model of the microfluidics chip for mixing and 200 milliseconds incubation.
- 6. Supplementary data 6** 3D CAD model of the microfluidics chip for mixing and 400 milliseconds incubation.
- 7. Supplementary data 7** 3D CAD model of the microfluidics chip for mixing and 480 milliseconds incubation.
- 8. Supplementary data 8** 3D CAD model of the microfluidics chip for mixing and 800 milliseconds incubation.
- 9. Supplementary data 9** 3D CAD model of the microfluidics chip for mixing and 1330 milliseconds incubation.
- 10. Supplementary data 10** Technical drawing for workshop production of the motor and gear mechanism mount.
- 11. Supplementary data 11** Detailed view of the technical drawing for workshop production of the motor and gear mechanism mount.
- 12. Supplementary movie 1** High-speed camera video of the sprayed sample at 0.8 Bar hitting the grid while plunging.
- 13. Supplementary movie 2** High-speed camera video of the sprayed sample at 0.1 Bar hitting the grid while plunging.