

Supporting Information for “Rapid Crystallization of L-Alanine on Engineered Surfaces using Metal-Assisted and Microwave-Accelerated Evaporative Crystallization” Alabanza et. al.

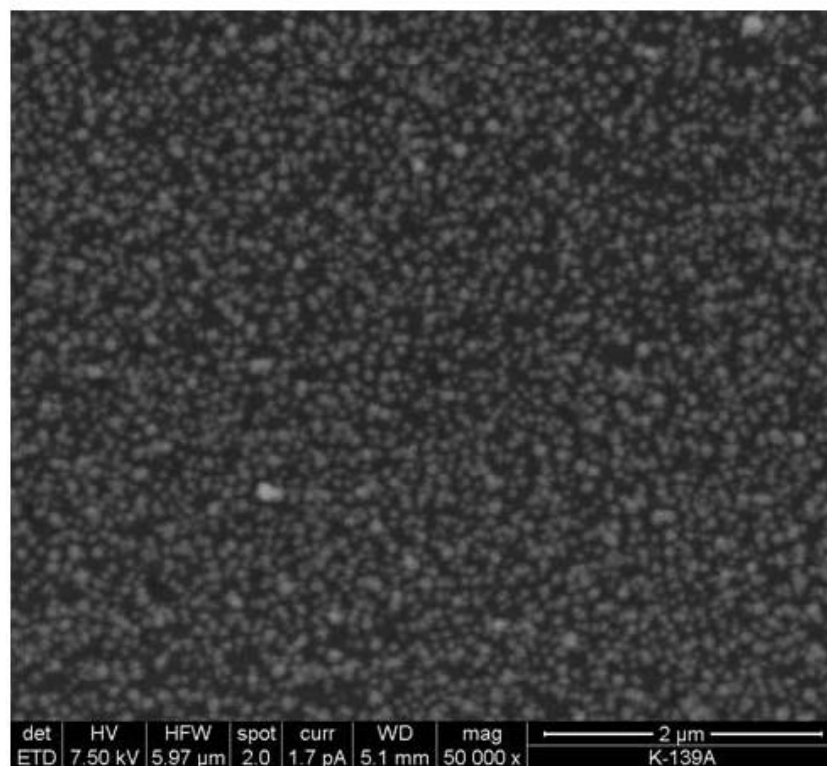


Figure S1. Time progression of the growth of L-alanine crystals on blank glass slides using MAEC technique at microwave power level 5. Actual length of the crystals are x4 of the lengths shown here.

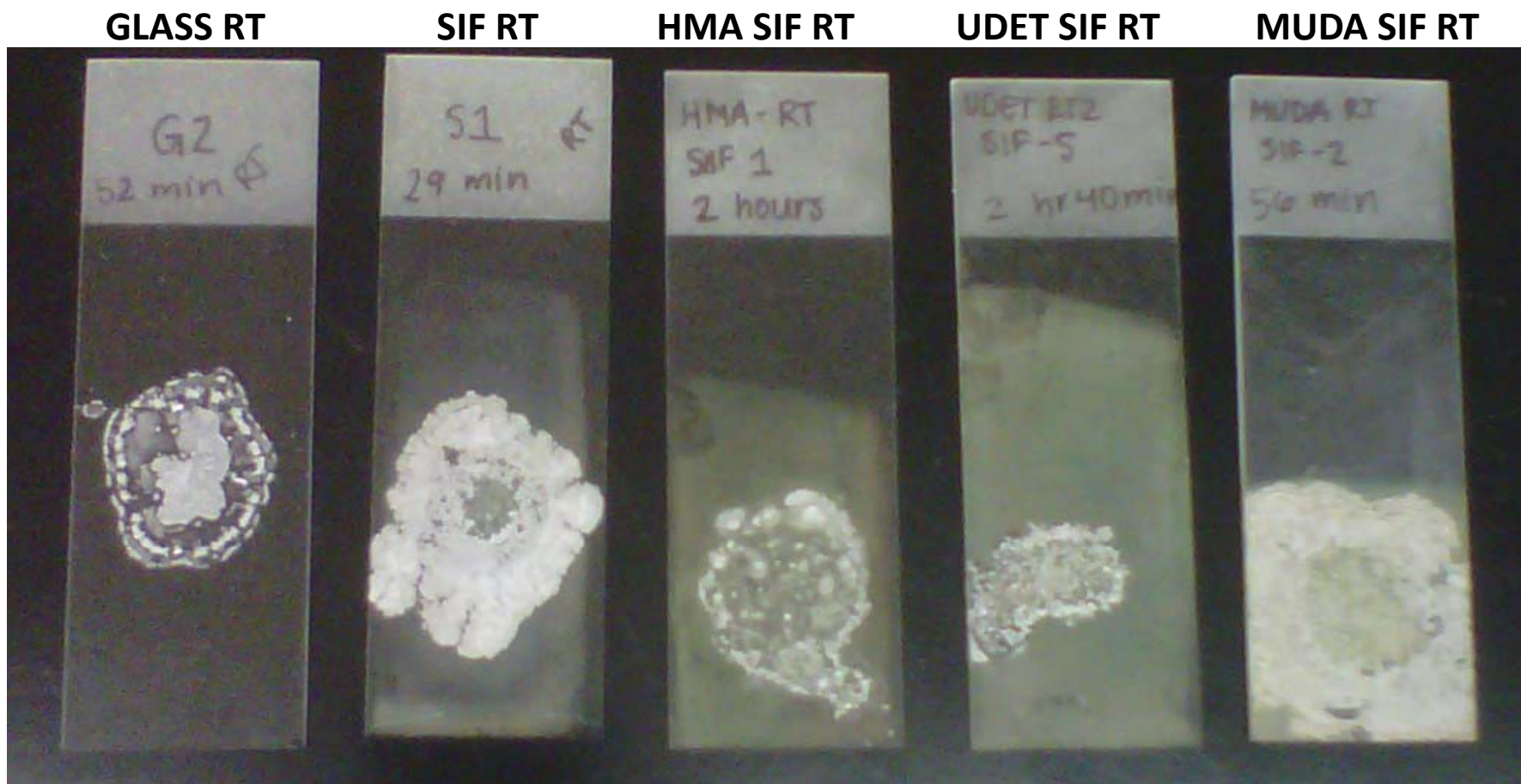


Figure S2. Time progression of the growth of L-alanine crystals on blank glass slides using MAEC technique at microwave power level 5. Actual length of the crystals are x4 of the lengths shown here.

HMA_SIFs_MW_PL5

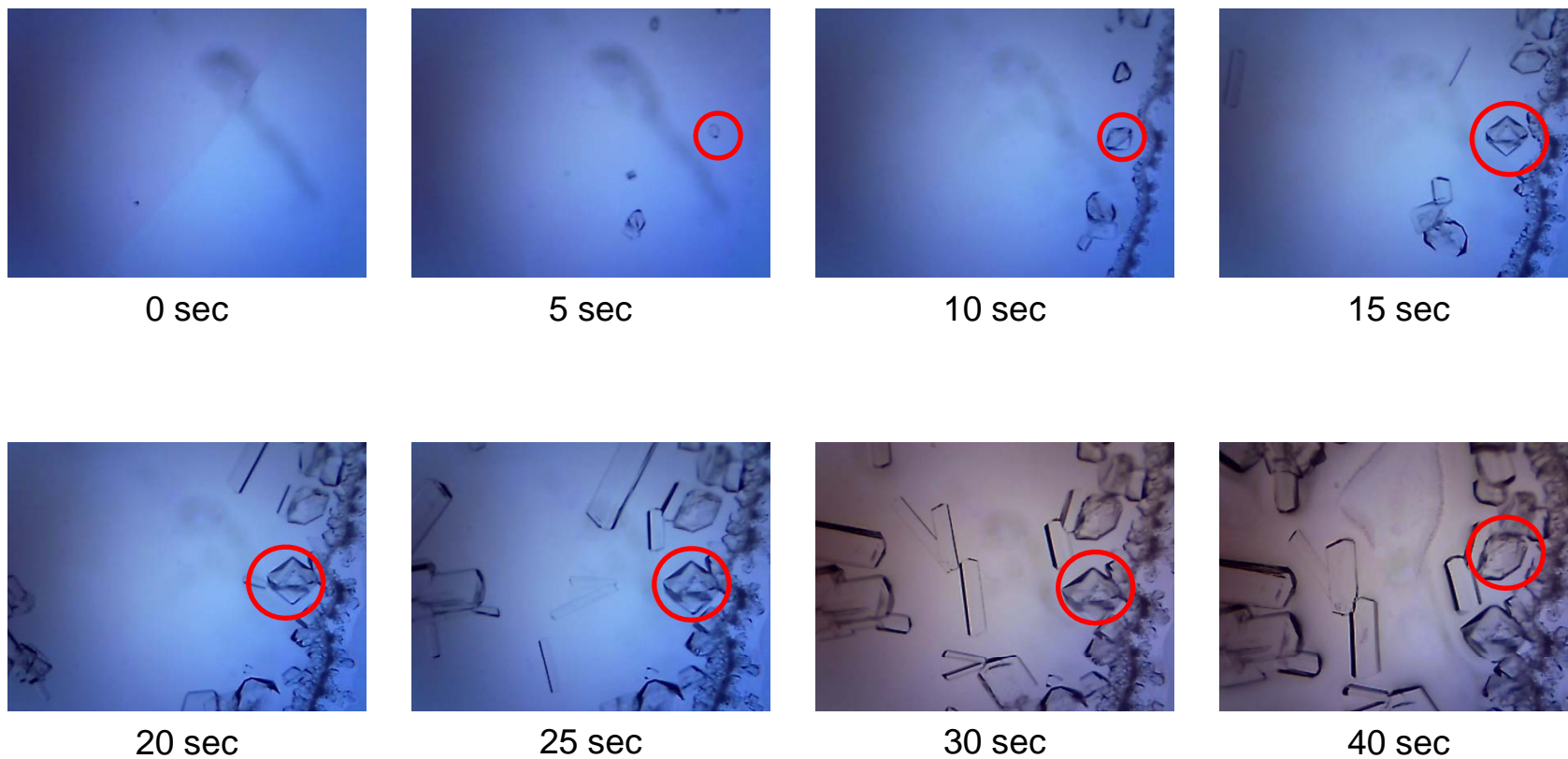


Figure S3. Time progression of the growth of L-alanine crystals on SIFs with HMA surface modification using MA-MAEC technique at microwave power level 5.

HMA_SIFs_MW_PL10

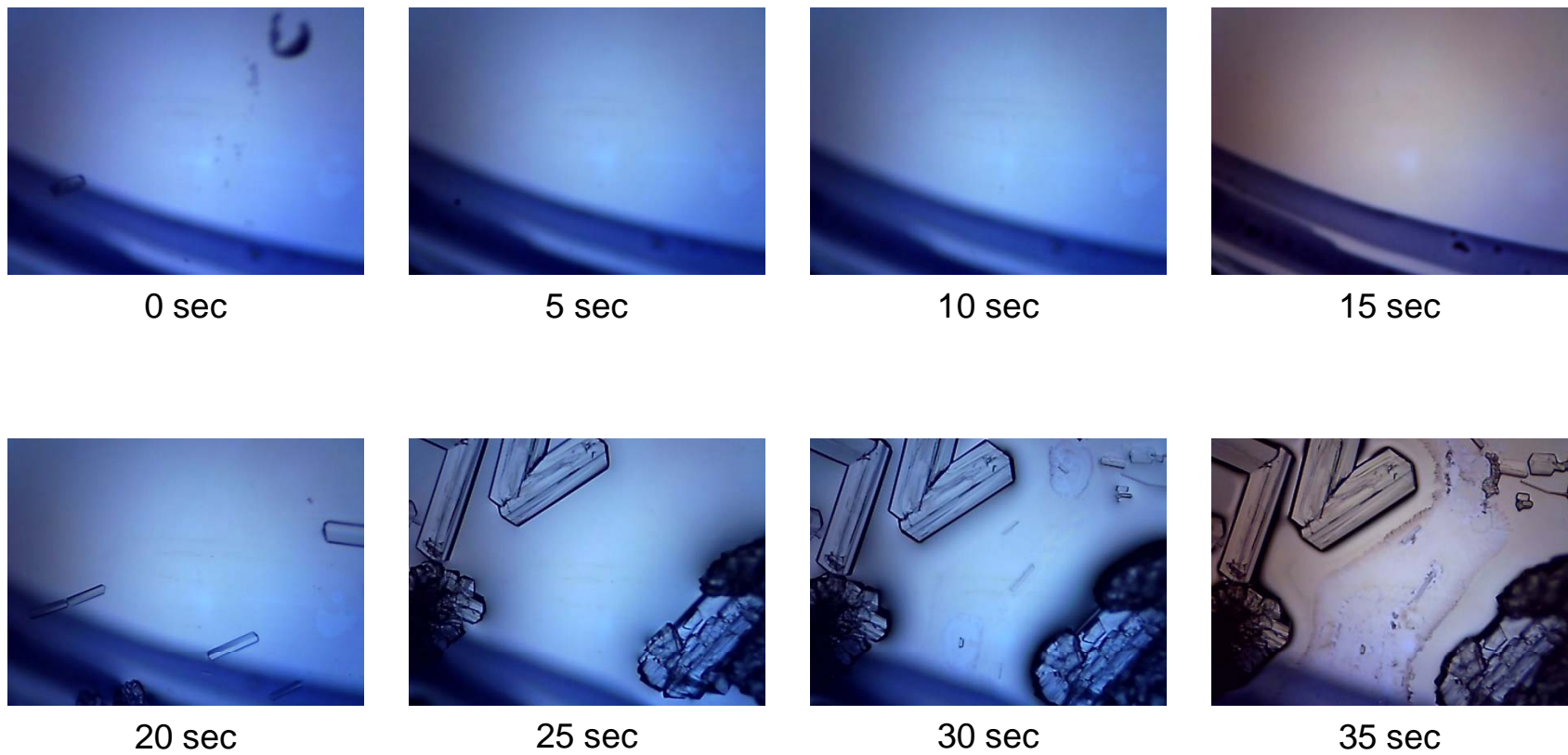
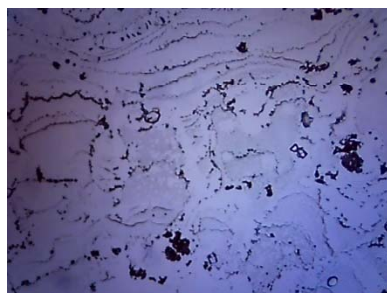


Figure S4. Time progression of the growth of L-alanine crystals on SIFs with HMA surface modification using MA-MAEC technique at microwave power level 10.

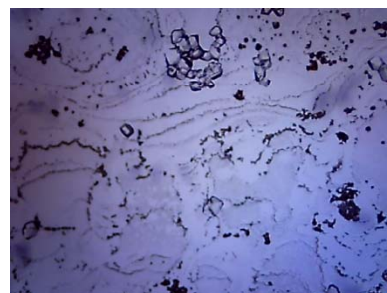
UDET_SIFs_MW_PL5



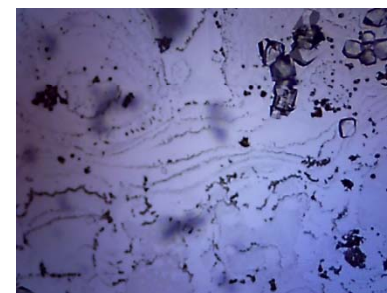
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5 sec



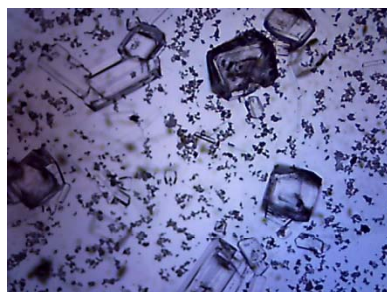
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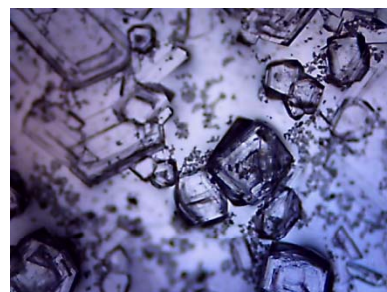
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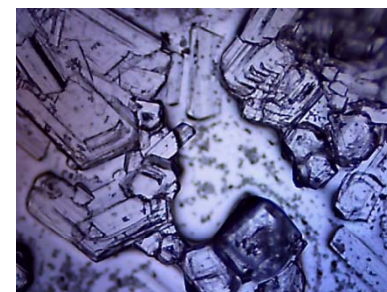
20 sec



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Figure S5. Time progression of the growth of L-alanine crystals on SIFs with UDET surface modification using MA-MAEC technique at microwave power level 5.

UDET_SIFs _ MW_PL10



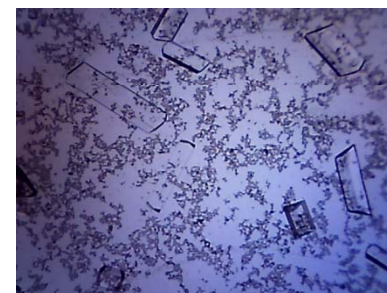
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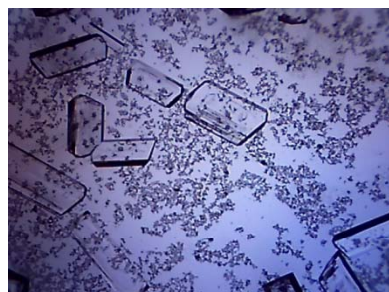
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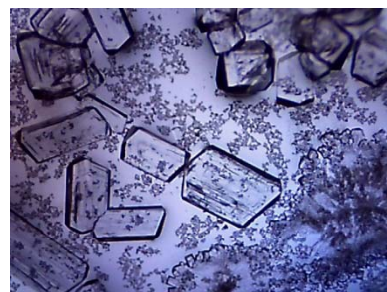
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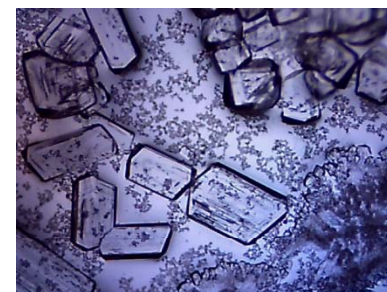
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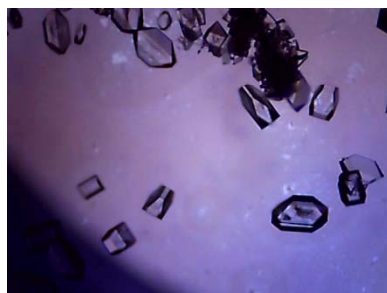
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Figure S6. Time progression of the growth of L-alanine crystals on SIFs with UDET surface modification using MA-MAEC technique at microwave power level 10.

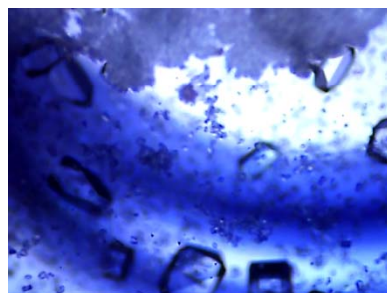
MUDA_SIFs_RT



0 min



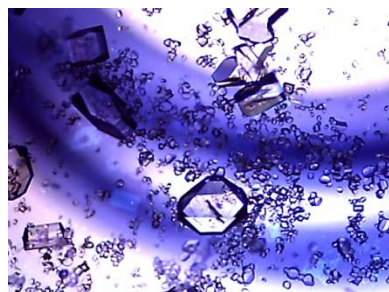
5 min



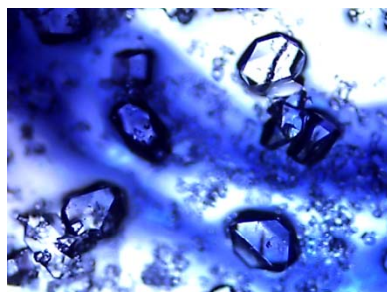
10 min



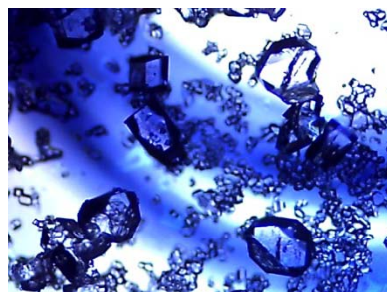
15 min



20 min



30 min



35 min



40 min

Figure S7. Time progression of the growth of L-alanine crystals on SIFs with MUDA surface modification at room temperature.

MUDA_SIFs_MW_PL1

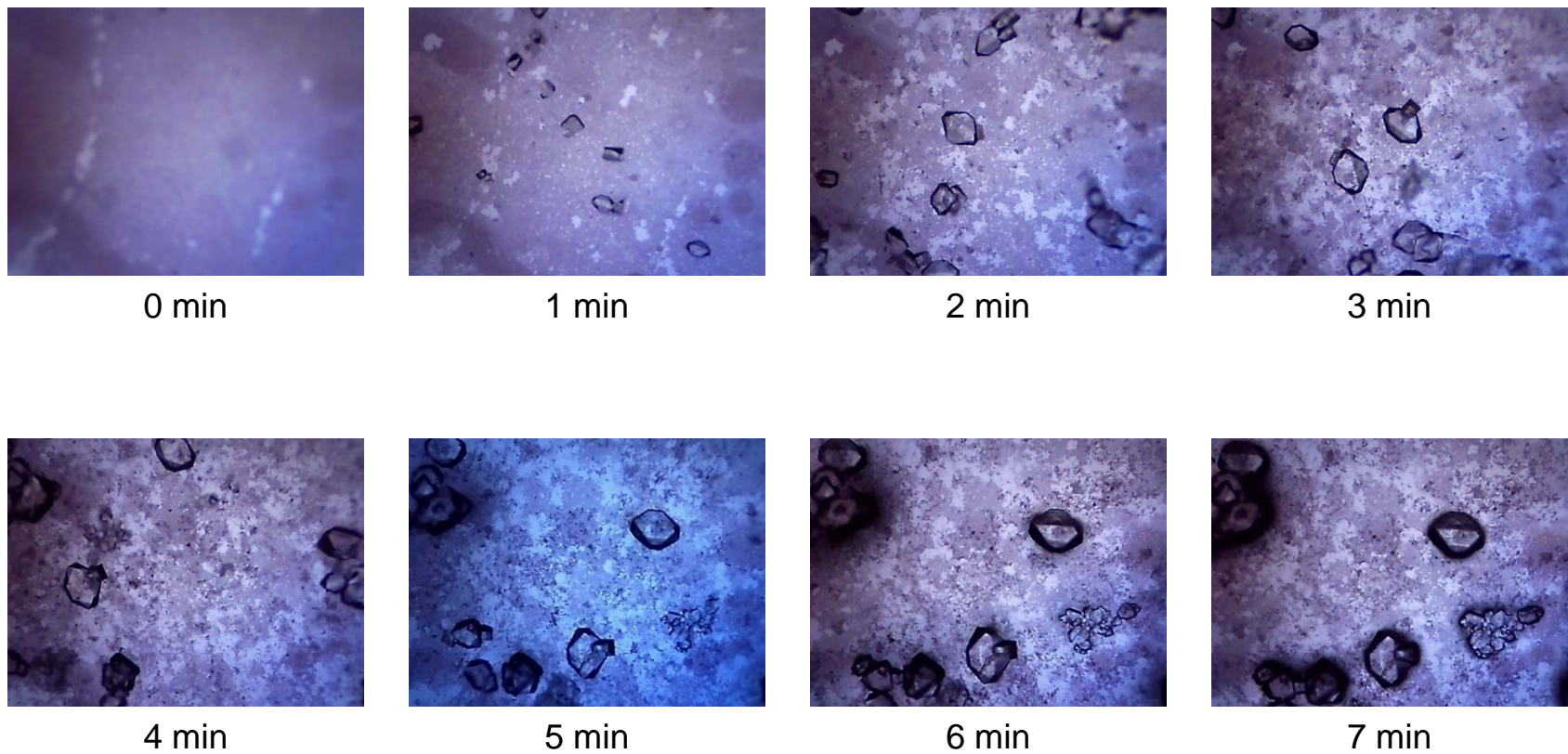


Figure S8. Time progression of the growth of L-alanine crystals on SIFs with MUDA surface modification using MA-MAEC technique at microwave power level 1.

MUDA_SIFs_MW_PL5

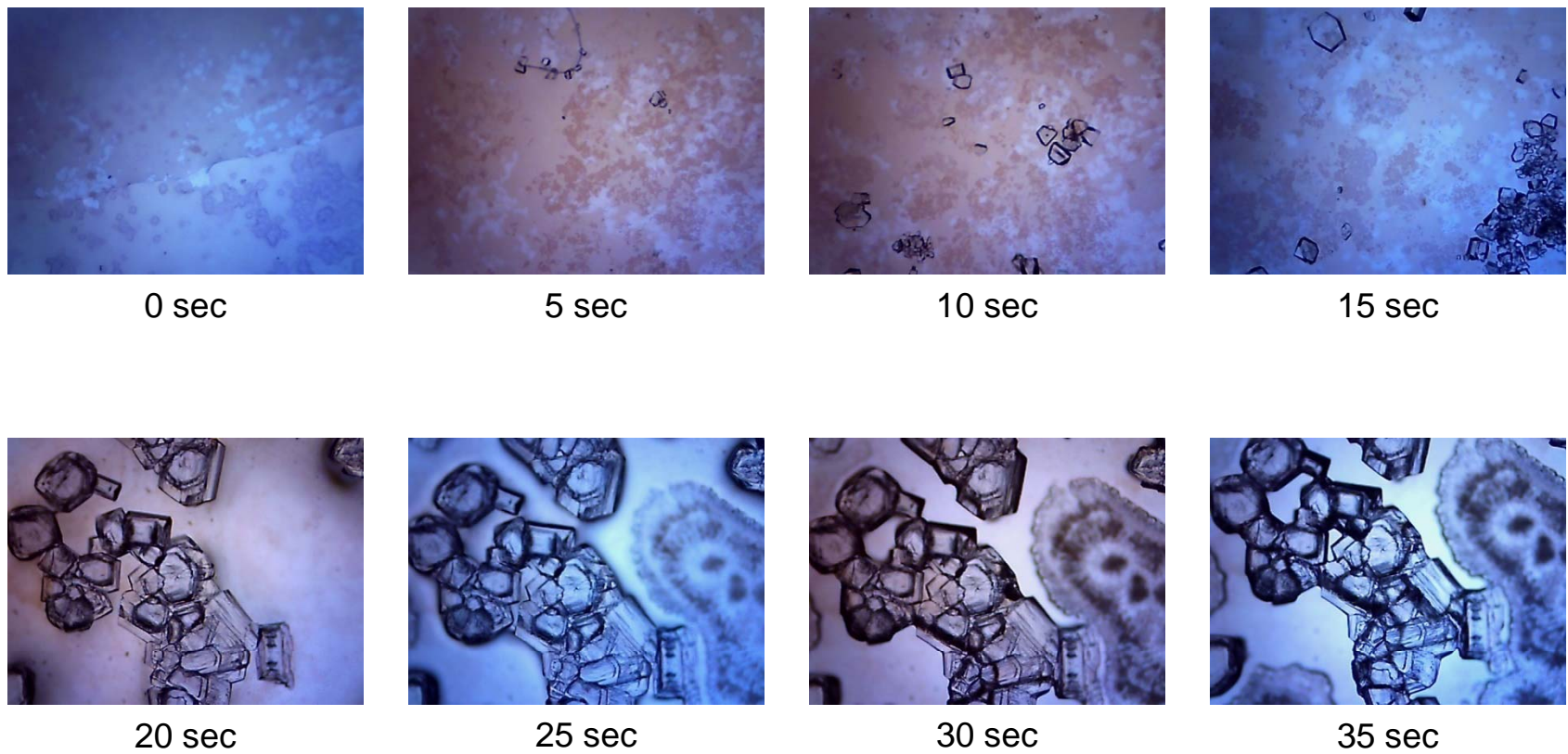


Figure S9. Time progression of the growth of L-alanine crystals on SIFs with MUDA surface modification using MA-MAEC technique at microwave power level 5.

MUDA_SIFs _ MW_PL10



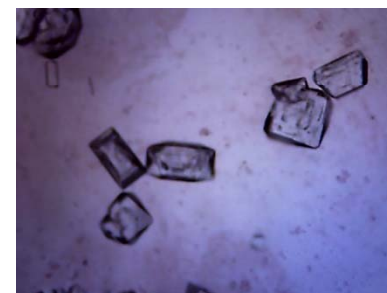
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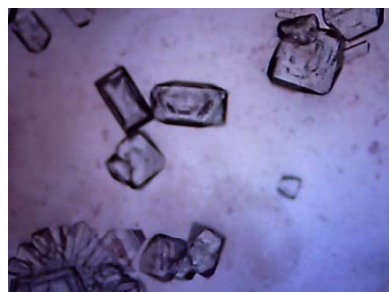
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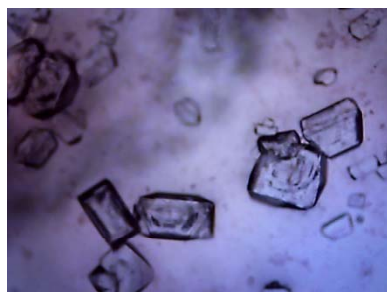
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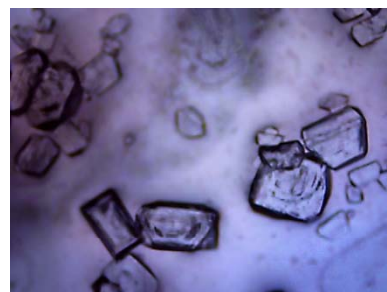
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Figure S10. Time progression of the growth of L-alanine crystals on SIFs with MUDA surface modification using MA-MAEC technique at microwave power level 10.

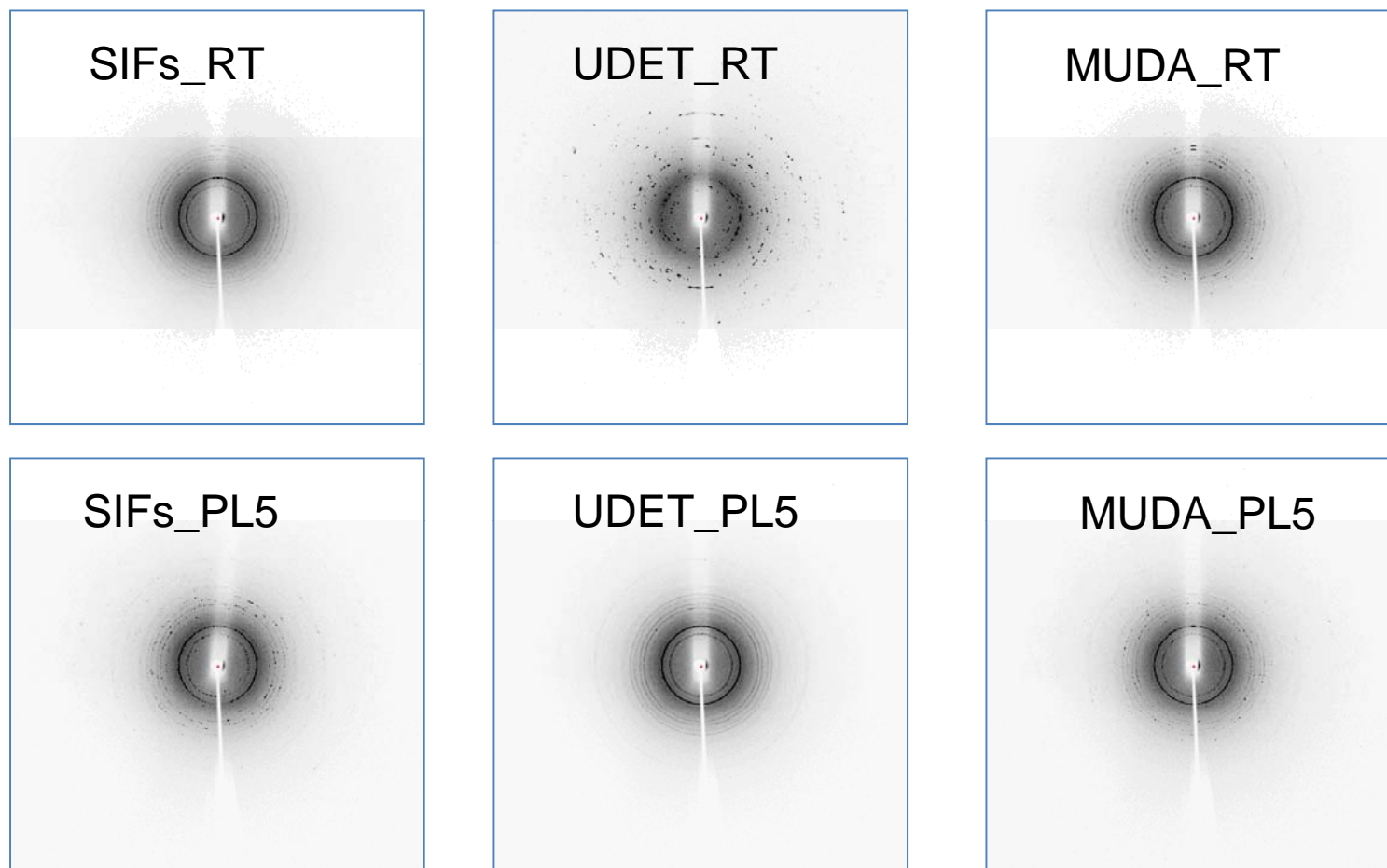


Figure S11. Experimental 2-D Powder X-Ray Diffraction patterns of L-alanine crystals grown on blank SIFs, UDET and MUDA-modified surfaces from L-alanine solutions 2.7 M pH= 5.3 on glass at room temperature (RT) and using microwave heating (PL5).