

# Supporting Information File 4

for

## Real-time monitoring of calcium carbonate and cationic peptide deposition on carboxylate-SAM using a microfluidic SAW biosensor

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**Monitoring cationic peptides ES9 and AS8 on COO-SAM,  
experimental values, Table S6**

Comparative evaluation of the gradient of the phase signal [°] for the two peptides for the time of injections of the peptides ES9 and AS8. The phase signal was continuously recorded for each measurement (3 replicates for each peptide at 3 pH values) and the slope of the linear fit of the phase value at the beginning of the peptide injection. Calculations were performed using the Origin 8.6 software package.

**Table S6:** Slope of the linear fit of the phase signal in [deg/s] (3 measurements, see e.g. Figure 6).

| Measurement | Peptide | pH 7.75           | pH 8.2        | pH 9.0            |
|-------------|---------|-------------------|---------------|-------------------|
| 1           | AS8     | 0.053             | 0.106         | 0.072             |
| 2           | AS8     | 0.044             | 0.074         | 0.047             |
| 3           | AS8     | 0.041             | 0.075         | 0.056             |
| Average     | AS8     | 0.046 ± 0.006     | 0.085 ± 0.018 | 0.058 ± 0.013     |
| 1           | ES9     | 0.01248           | 0.0723        | 0.0151            |
| 2           | ES9     | 0.01308           | 0.01552       | 0.01348           |
| 3           | ES9     | 0.01384           | 0.01439       | 0.01441           |
| Average     | ES9     | 0.01313 ± 0.00068 | 0.034 ± 0.033 | 0.01433 ± 0.00081 |