

# Novel calibration approach for particle size analysis of microplastics by Laser Ablation Single Particle-ICP-MS

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Table S1: LA and ICP-MS measurement parameters

ImageGEO193		Nexion5000	
Laser Fluence (J/cm <sup>2</sup> )	1.4	RF power (W)	1600
Spot size (square shape) (μm)	15 x 15 for MPs 10 x 10 , 12 x 12, 14 x 14, 16 x 16, 18 x 18, 20 x 20 for standards	Ar make-up gas (L/min)	1.25
Chamber He flow (ml/min)	200	Cool-gas flow (L/min)	16
Sniffer He flow (ml/min)	250	Detected Isotopes	<sup>13</sup> C <sup>+</sup>
Shots per position	1	Dwell time (μs)	500



Figure S1: PS 4.5 μm particles on the substrate



Figure S2: PS 3  $\mu\text{m}$  particles on the substrate

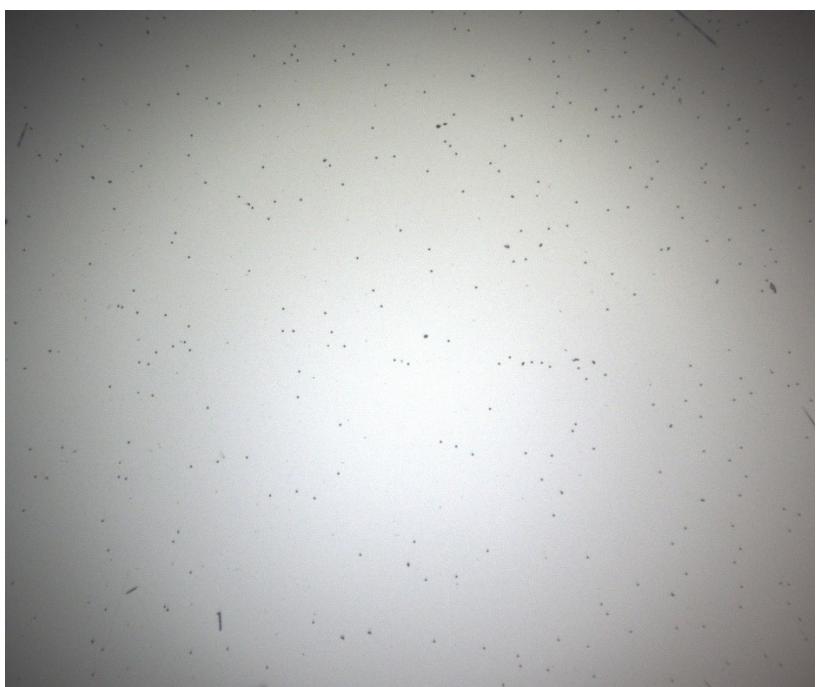


Figure S3: PS 2  $\mu\text{m}$  particles on the substrate