

Supporting Information

Assessing the Release of Microplastics and Nanoplastics from Plastic Containers and Reusable Food Pouches: Implications for Human Health

In preparation for

Environmental Science & Technology
2023

Kazi Albab Hussain,^a Svetlana Romanova,^b Ilhami Okur,^c Dong Zhang,^a Jesse Kuebler,^e Xi Huang,^d Bing Wang,^c Lucia Fernandez-Ballester,^e Yongfeng Lu,^d Mathias Schubert,^d and Yusong Li^{*a}

^aDepartment of Civil and Environmental Engineering, University of Nebraska-Lincoln, Lincoln, Nebraska 68588-053, United States

^bNanomaterials Characterization Core, University of Nebraska Medical Center, Omaha, Nebraska 68198, United States

^cDepartment of Food Science & Technology, University of Nebraska-Lincoln, Lincoln, Nebraska 68588-6205, United States

^dDepartment of Electrical & Computer Engineering, University of Nebraska-Lincoln, Lincoln, Nebraska 68588-0511, United States

^eDepartment of Mechanical & Materials Engineering, University of Nebraska-Lincoln, Lincoln, Nebraska 68588-0526, United States

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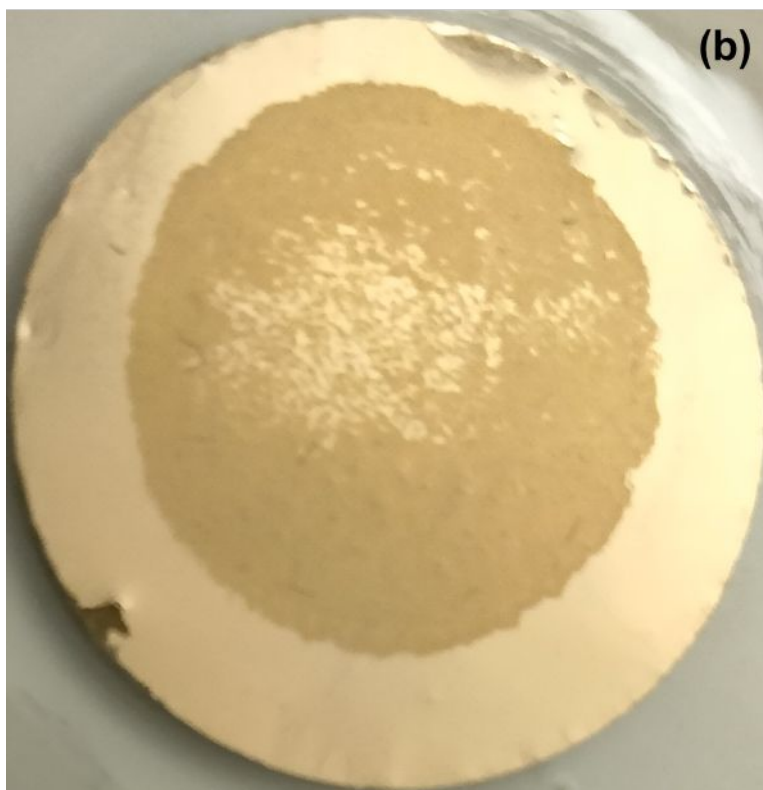
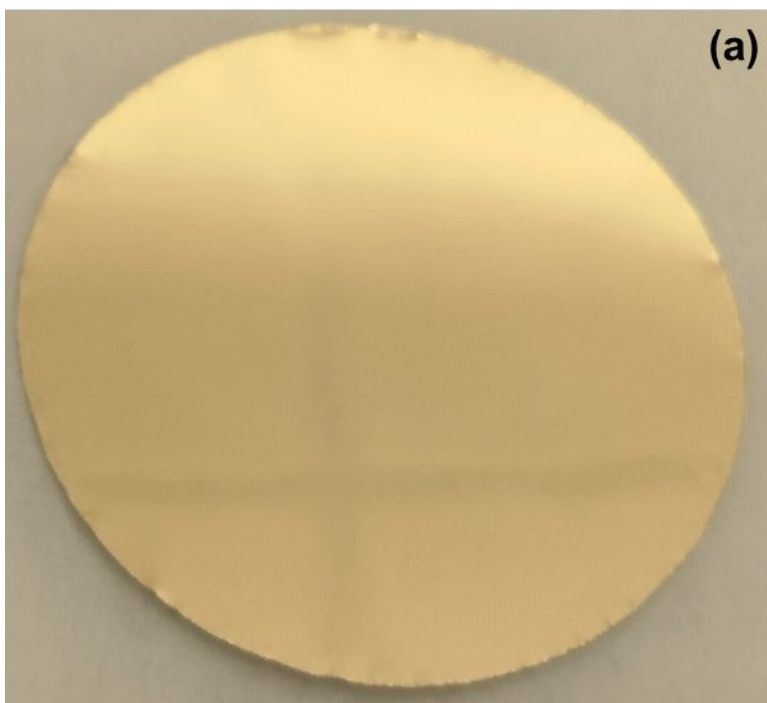
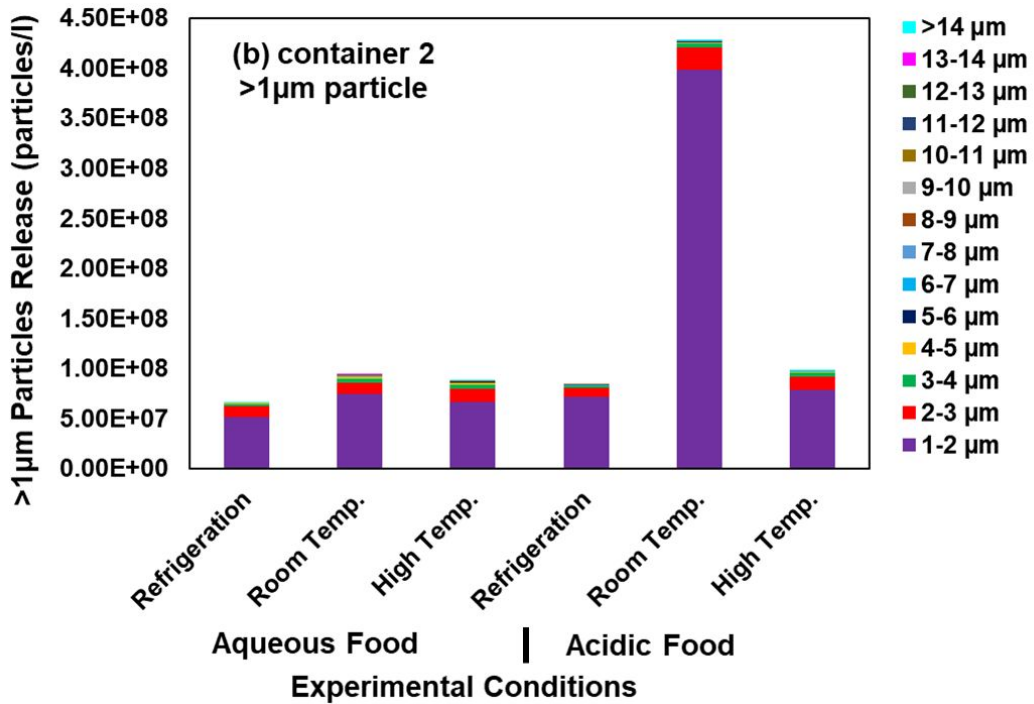
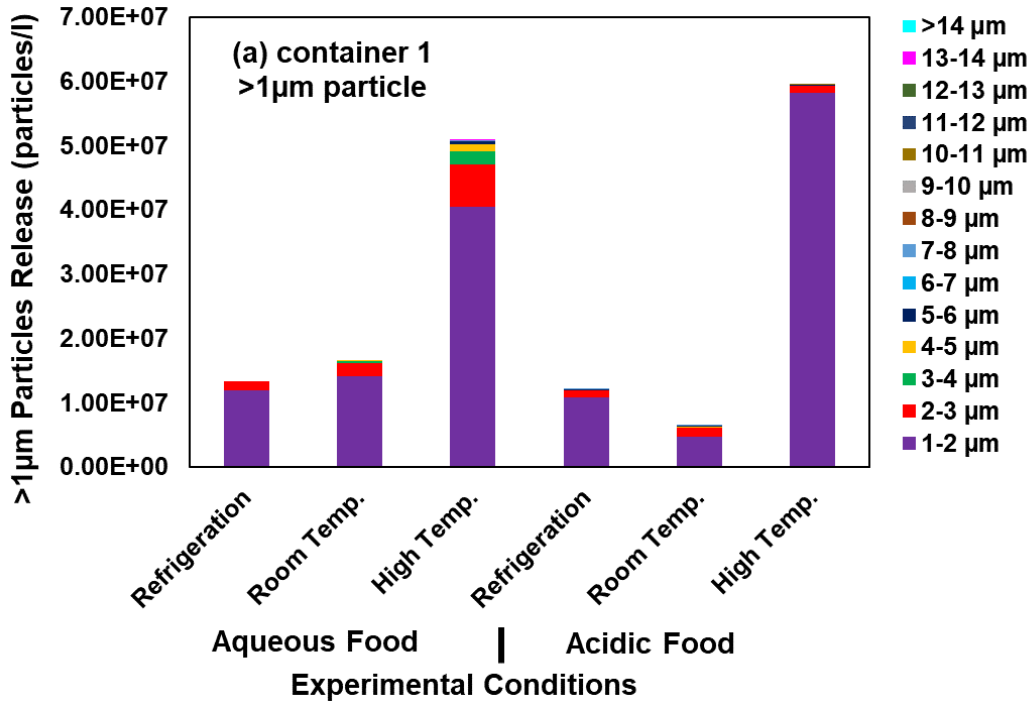


Figure S1. Gold-coated track-etched filter. **(a)** Clean filter, **(b)** after filtering 300 ml of effluent generated from the microwave heating of 3 minutes for container 2.



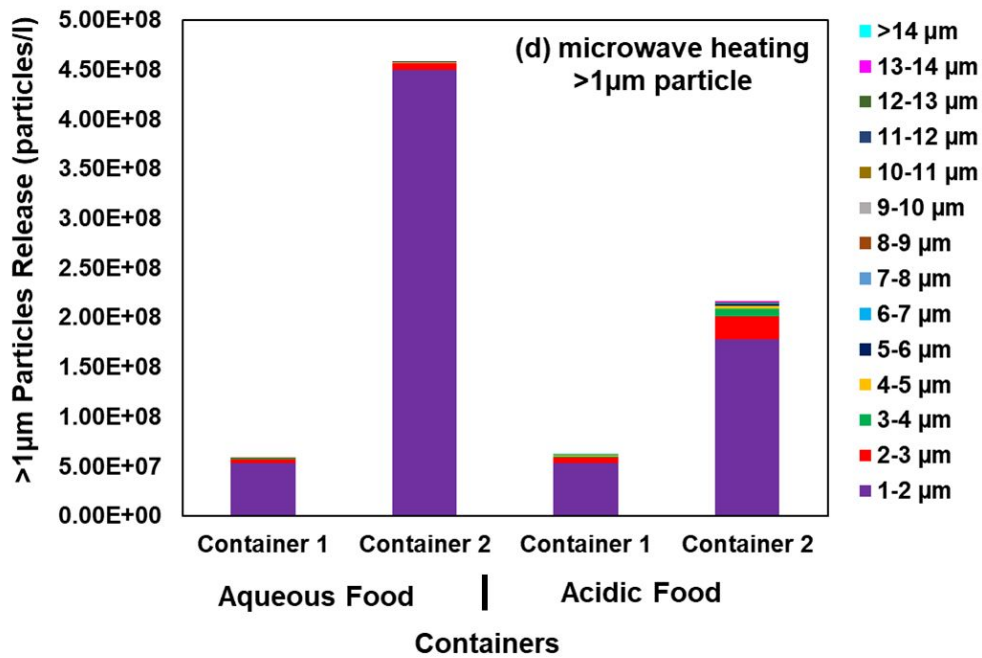
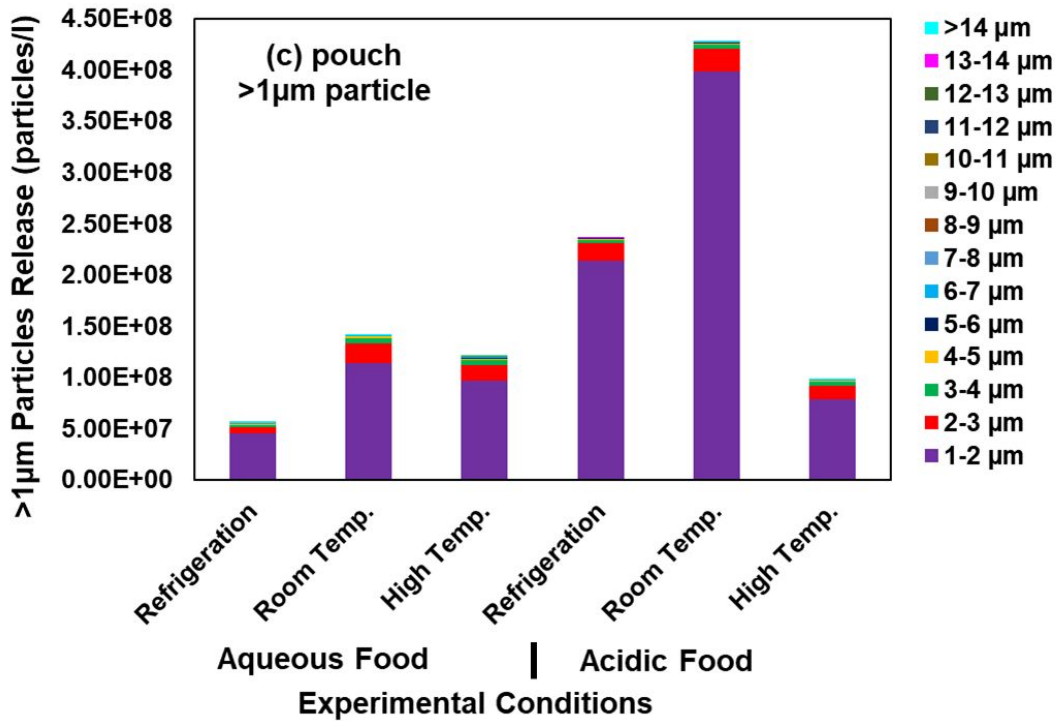
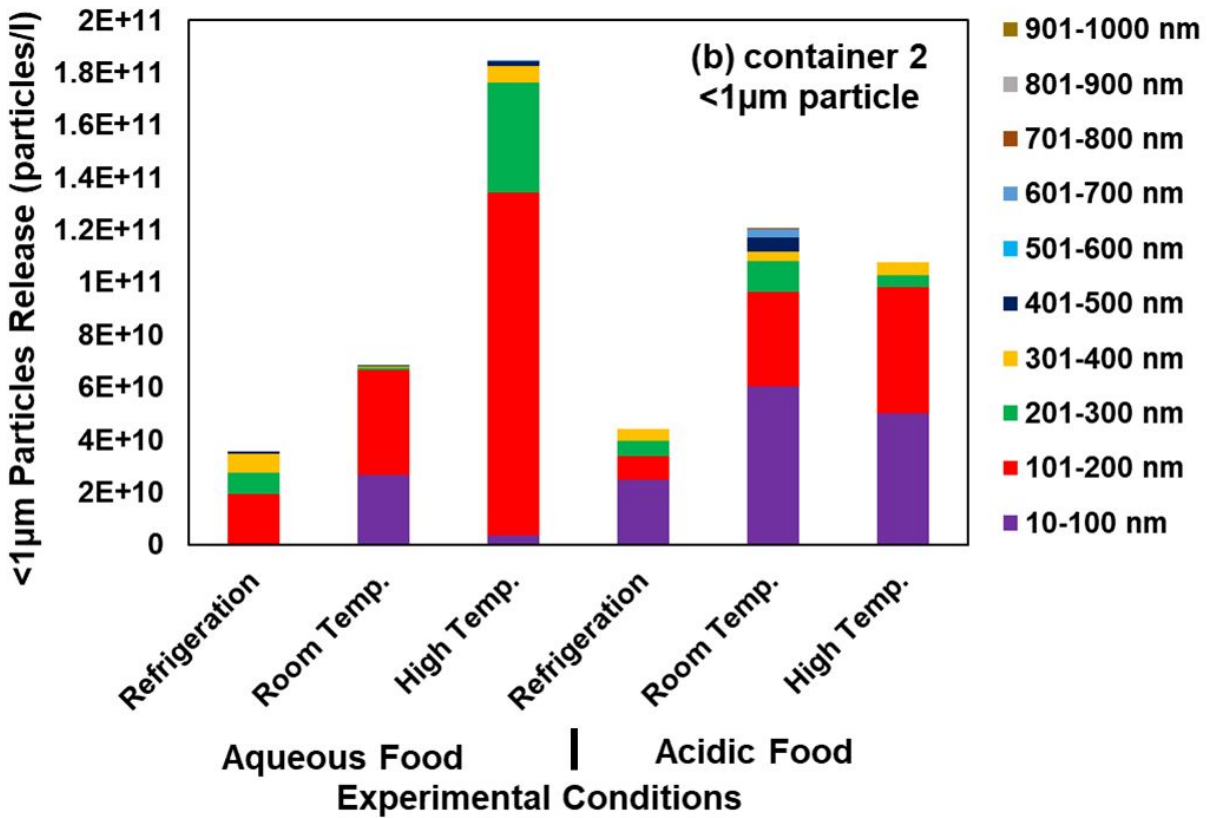
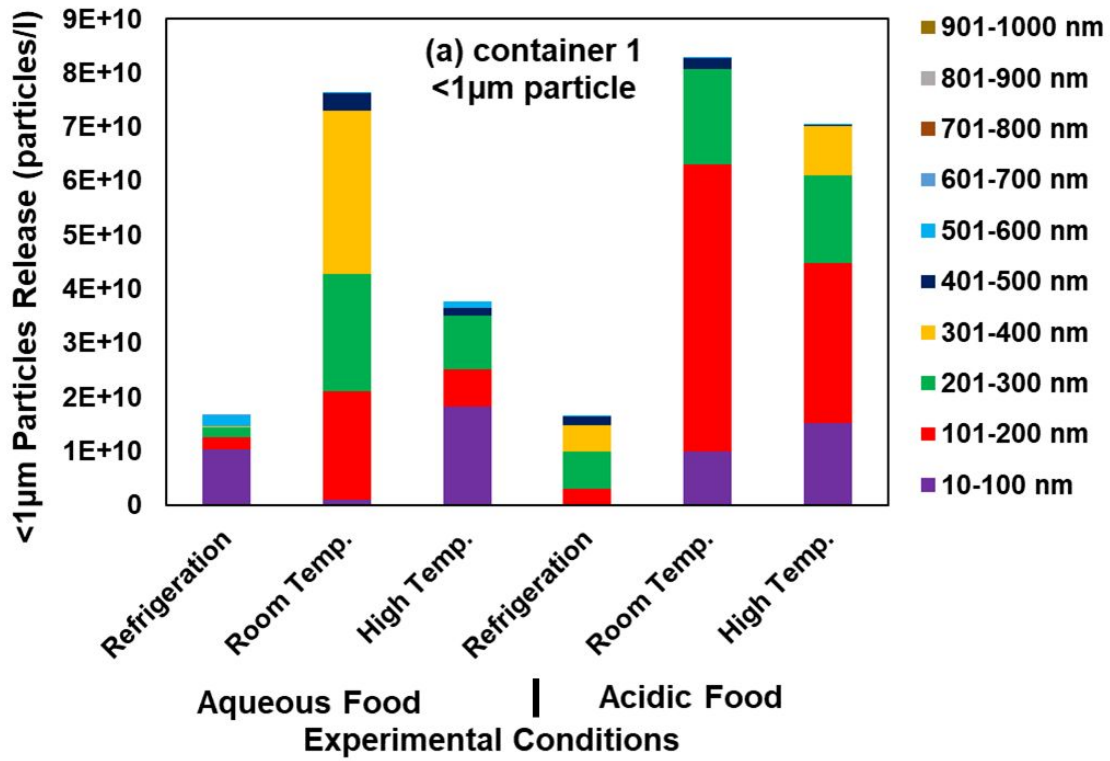


Figure S2. Size distribution of the microplastics released under different experimental conditions, (a) container 1, (b) container 2, (c) pouch. (d) Microplastics released from container 1 and container 2 under microwave heating for 3 minutes.



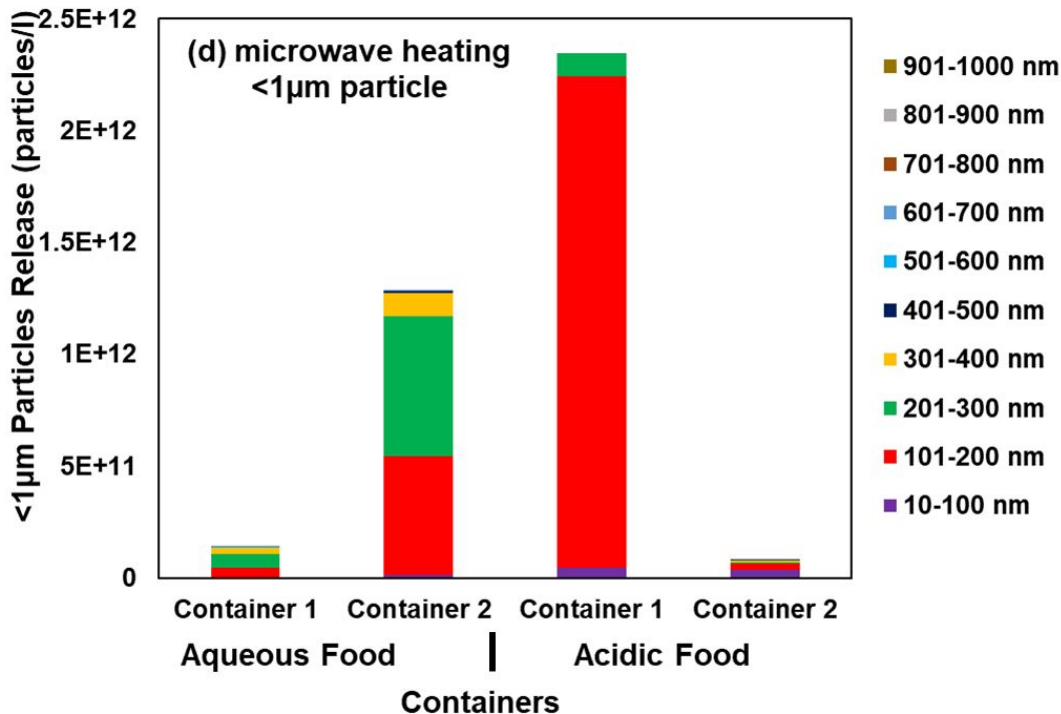
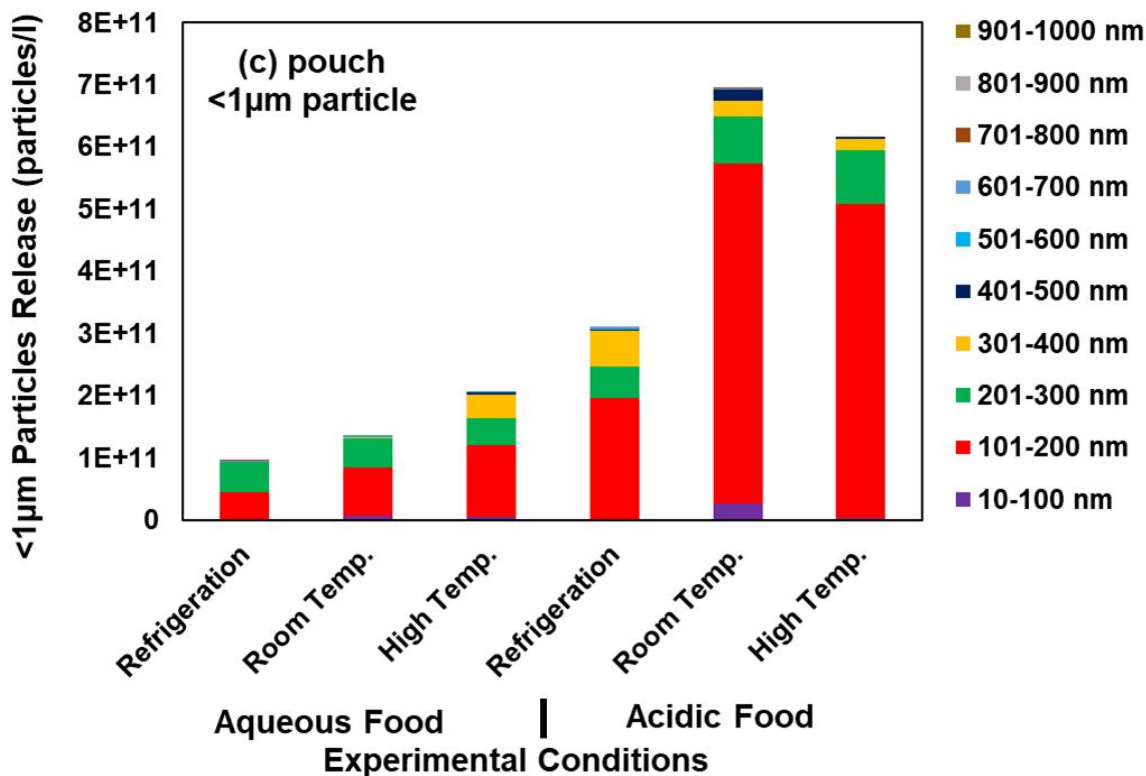


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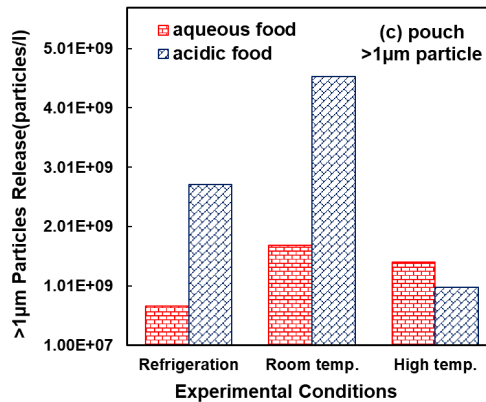
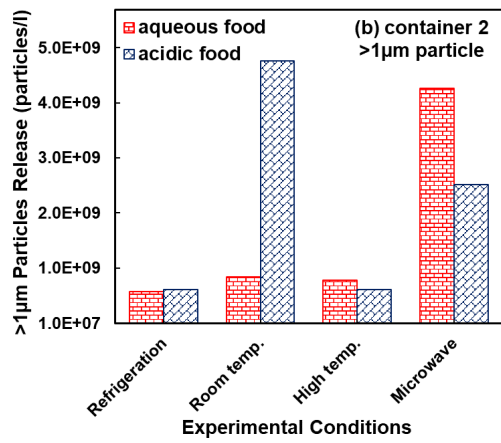
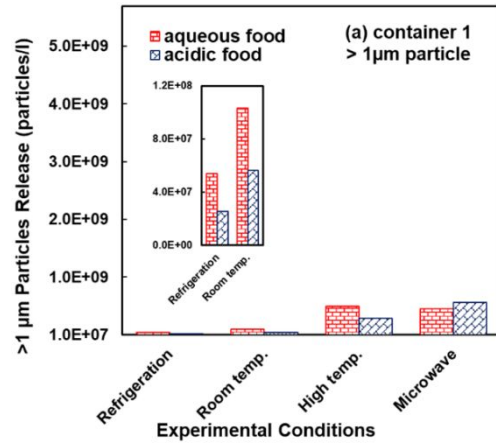


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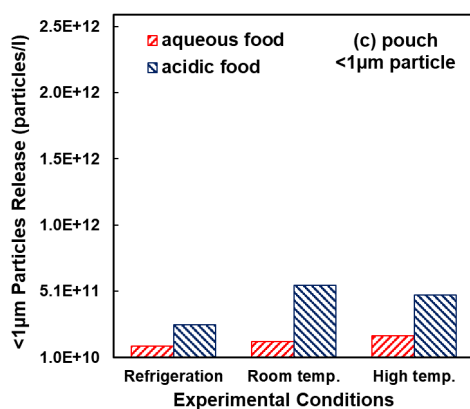
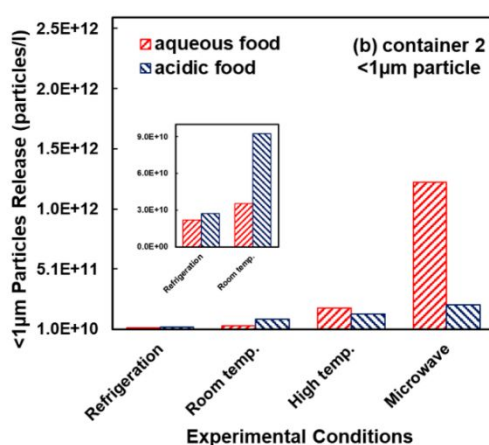
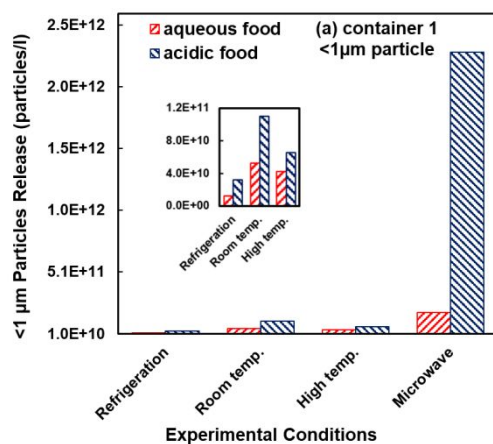


Figure S5. Nanoplastics released in contact with aqueous food (simulated by DI water) and acidic food (simulated by 3% acetic acid) under different usage scenarios such as refrigeration storage (replicated by experiment at 20°C for 10 days), room temperature storage (replicated by experiment at 40°C for 10 days), and high temperature condition (replicated by experiment at 2 hours at 70°C followed by 20°C for 10 days), and microwave heating for 3 minutes, (a) container 1; (b) container 2; (c) reusable food pouch.