Supplementary material

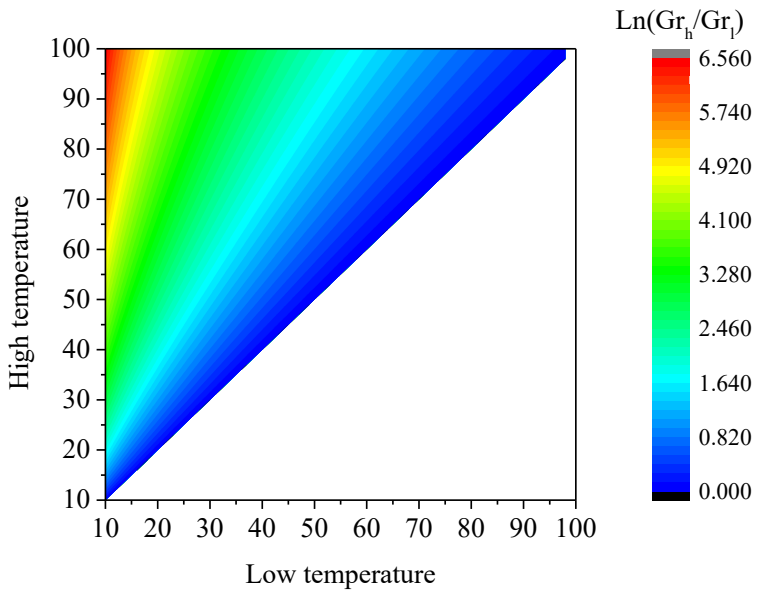


Figure S1. Distribution of the Grashof number term in the characteristic-number condition equation for the Mpemba effect. The color bar indicates the natural logarithm of the ratio of the Grashof number of hot water to that of cold water.

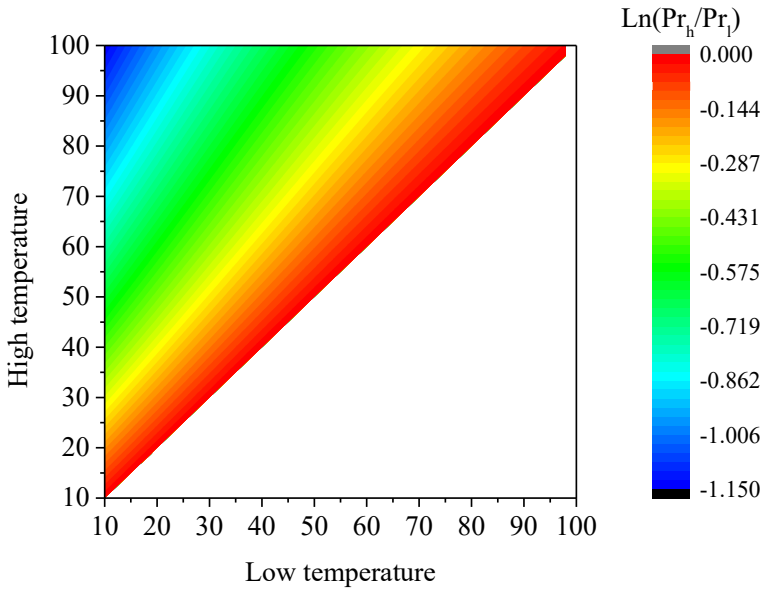


Figure S2. Distribution of the Prandtl number term in the characteristic-number condition equation for the Mpemba effect. The color bar indicates the natural logarithm of the ratio of the Prandtl number of hot water to that of cold water.

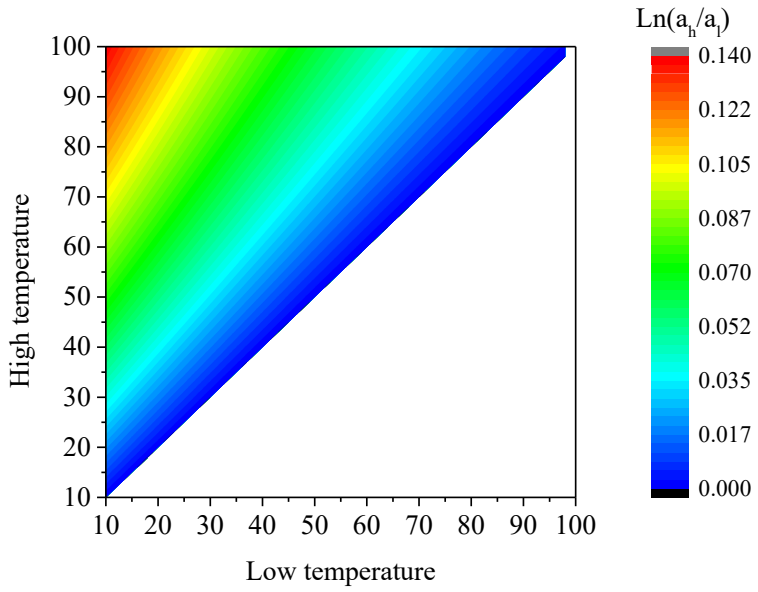


Figure S3. Distribution of the thermal diffusivity term in the characteristic-number condition equation for the Mpemba effect. The color bar indicates the natural logarithm of the ratio of the thermal diffusivity of hot water to that of cold water.

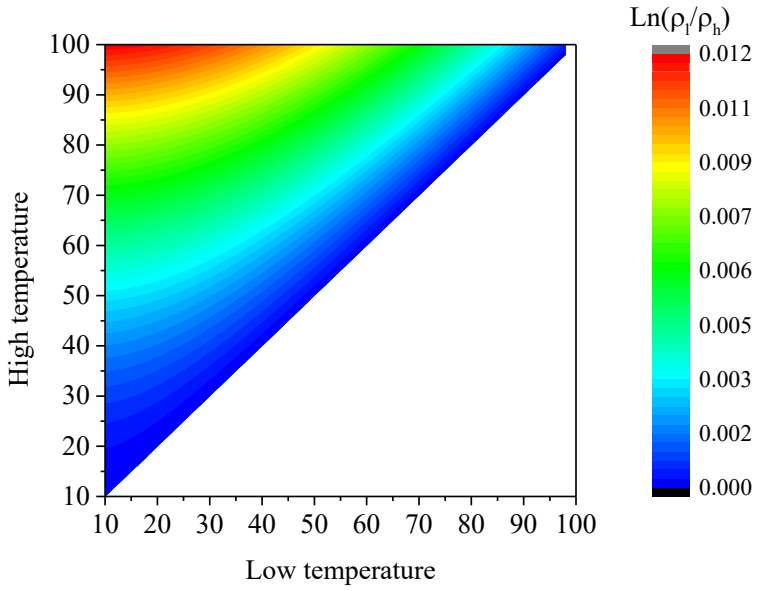


Figure S4. Distribution of the density term in the characteristic-number condition equation for the Mpemba effect. The color bar indicates the natural logarithm of the ratio of the density of cold water to that of hot water.