

| Sample | Mass density/ g cm ⁻³ | Absorption coefficient, β , at $\lambda_0 = 460 \text{ nm}/\text{cm}^{-1}$ | k_o | Abs ₀ | α |
|---|-------------------------------------|--|-----------------------------------|------------------|---------------|
| Pure woodsmoke extract <i>B</i> | 1.64 | 3033 | 0.0111 ± 0.0010 | – | 9.0 ± 0.1 |
| Woodsmoke extract <i>B</i> in isopropanol (Fig. 3a) | 6.60×10^{-5} | 0.122 | $(4.47 \pm 0.40) \times 10^{-7}$ | 0.122 | 9.0 ± 0.1 |
| Aqueous humic acid (Fig. 3a) | 7.00×10^{-5} | 1.513 | $(4.214 \pm 0.38) \times 10^{-6}$ | 0.499 | 4.2 ± 0.1 |
| Pure humic acid | 1.52 | 25 000 | 0.092 ± 0.046 | – | 4.2 ± 0.1 |
| Optically trapped aqueous humic acid droplet | 0.016 | 273.2 | $(1.00 \pm 0.50) \times 10^{-3}$ | – | 4.2 ± 0.1 |