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## Correction: Collective motion of chiral Brownian particles controlled by a circularly-polarized laser beam

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Correction for 'Collective motion of chiral Brownian particles controlled by a circularly-polarized laser beam' by Raúl Josué Hernández *et al.*, *Soft Matter*, 2020, **16**, 7704–7714, DOI: 10.1039/C9SM02404B.

The authors regret that the rotation sense of the  $\mathcal{L}$ -type and  $\mathcal{R}$ -type particles has been reversed in the video, figures and text, due to an artefact introduced by the video processing. Therefore, they would like to correct the following errors:

- At the beginning of Section 3, the sentence “When three  $\mathcal{L}$ -type particles are illuminated with LCP light, they exhibit an intermittent **counterclockwise (ccw)** circular motion...” should instead read as follows: “When three  $\mathcal{L}$ -type particles are illuminated with LCP light, they exhibit an intermittent **clockwise (cw)** circular motion...”
- On page 7706, right column, line 10, the sentence “while RCP light now induces a collective vortex rotation in the **cw** sense...” should instead read as follows: “while RCP light now induces a collective vortex rotation in the **ccw** sense...”
- In the Fig. 3 caption, the sentence “...**counterclockwise** rotation (**ccw**)...” should instead read as follows: “...**clockwise** rotation (**cw**)...”
- In the Fig. 4 caption, the sentence “... **clockwise** rotation (**cw**)...” should instead read as follows: “...**counterclockwise** rotation (**ccw**)...”
- In the paragraph 3.1 “Angular Momentum”, the sentence “... in agreement with the **clockwise (cw)** cooperative vortical motion...” should instead read as follows: “...in agreement with the **counterclockwise (ccw)** cooperative vortical motion...”
- Videos 1–4 in the ESI have been corrected.

Corrections to Fig. 3, 4 and 6 are minimal as shown below:

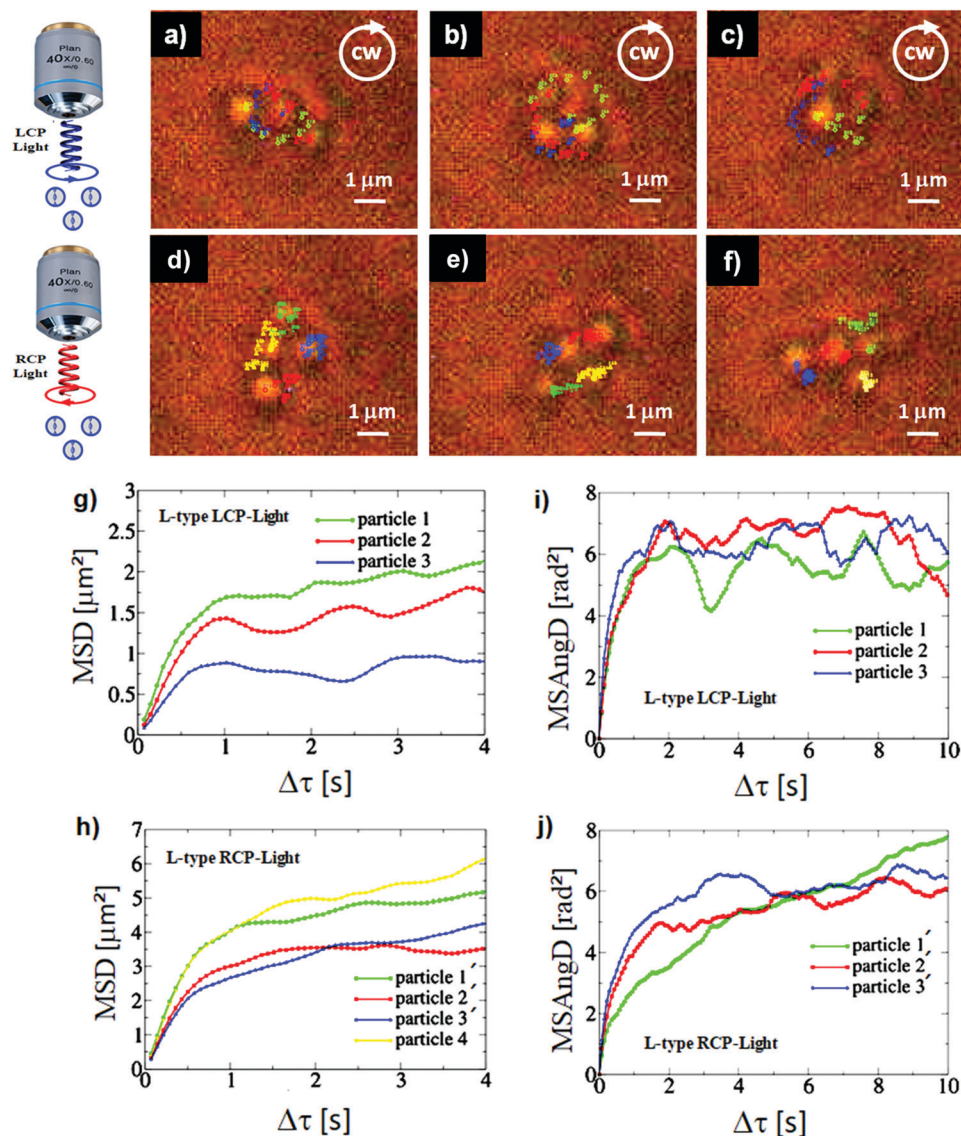
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**Fig. 3** Three types of chiral particles; each frame shows the last 15 steps in time ( $\Delta t = 0.071$  s), indicating the position of each particle by color: green (particle 1), red (particle 2) and blue (particle 3). (a)–(c) Image sequence for LCP light at  $t_a = 10.2$  s;  $t_b = 21.8$  s, and  $t_c = 31.1$  s, clockwise rotation (cw) and mean orbital radius  $r = 1.15 \pm 0.18 \mu\text{m}$  (see Video 1, ESI†). (d)–(f) Mean square displacement graphic for each particle; image sequence for the same particles now illuminated by RCP light at  $t_d = 10.2$  s,  $t_e = 21.3$  s, and  $t_f = 31.0$  s (see Video 2, ESI†). Mean square displacement graphics for each particle with (g) LCP and (h) RCP light and their corresponding mean square angular displacement graphics (i) and (j).



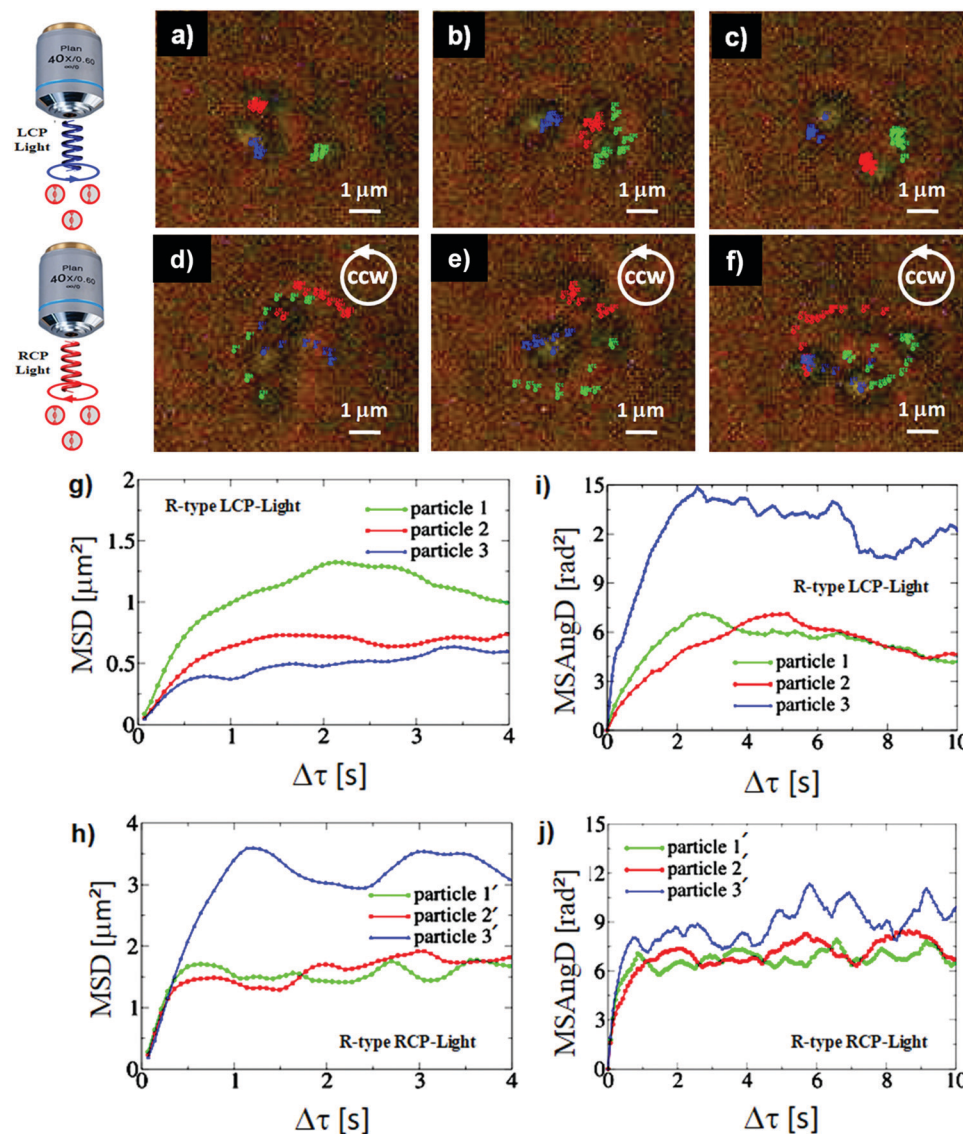


Fig. 4 Three *R*-type chiral particles; each frame shows the last 15 steps in time ( $\Delta t = 0.071$  s), indicating the position of each particle by color: green (particle 1), red (particle 2) and blue (particle 3). (a)–(c) Image sequence for LCP light at  $t_a = 10.1$  s;  $t_b = 19.7$  s, and  $t_c = 26.6$  s (see Video 3, ESI†). (d)–(f) Mean square displacement graphic for each particle; image sequence for the same particles now illuminated by RCP light at  $t_d = 10.8$  s,  $t_e = 19.6$  s, and  $t_f = 26.8$  s, counterclockwise rotation (ccw) and mean orbital radius  $r = 1.47 \pm 0.28$  μm (see Video 4, ESI†). Mean square displacement graphics for each particle with (g) LCP and (h) RCP light and their corresponding mean square angular displacement graphics (i) and (j).



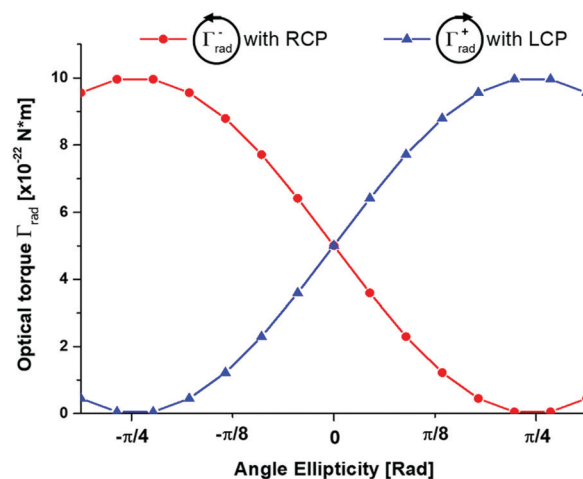


Fig. 6 Optical torque on a single particle  $\vec{\Gamma}_{\text{rad}}$  with opposite reflectivities  $R^+$ ,  $R^-$  versus ellipticity angle  $\varphi$ . With radius  $a = 500$  nm and pitch  $p = 330$  nm at  $\lambda = 488$  nm,  $P = 20$   $\mu\text{W}$  and  $R^\pm = 0.10$ .

The Royal Society of Chemistry apologises for these errors and any consequent inconvenience to authors and readers.

