Erratum to: Silver tungstate nanostructures: electrochemical synthesis and its statistical optimization

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The original publication of the article has errors that need to be corrected as follows:

1. In Sect. 3.1, the corrected text after “... and particle size of the final product were investigated by SEM images” and before “The analysis of variance (ANOVA) was carried in order to investigate the relative effect of the studied variables...” should be “The Ag_2WO_4 samples were prepared at various experimental conditions of this table and the SEM images of four samples are shown in Fig. 1a–i for comparison. As seen in this figure, the size of electro-synthesized Ag_2WO_4 particles at different conditions

is varied. The average diameter of Ag_2WO_4 nanoparticles obtained at various conditions is presented in the last column of Table 1. Furthermore, the average effect of each level of the studied factors on the diameter of silver tungstate particles was computed and the resulted graphs are presented in Fig. 2. These graphs reveal the presented trend between the diameter of Ag_2WO_4 particles and the levels of the studied factors. As seen in Table 1, influence of Na_2WO_4 concentration on the diameter of resulted Ag_2WO_4 particles was investigated at the triple levels (0. 1, 0.25, and 0.5 mol/L). The results shown in Fig. 2a reveal that 0.5 M as the concentration of tungstate ion solution is the optimal concentration for the synthesis of Ag_2WO_4 particles with smallest size. The effect of triple applied voltage (5, 8, and 11 V) on the diameter of Ag_2WO_4 particles was investigated. As seen in the Fig. 2b, 8 V might be utilized as the best voltage in electrodeposition process for the production of Ag_2WO_4 nanoparticles. The effect of electrolyte stirring rate (i.e., 200, 400, and 600 rpm) on the size of resulted Ag_2WO_4 particles was also studied. Variation of the stirring rate leads to the mild change in the size of precipitated silver tungstate particles (Fig. 2c). Meantime, 60 °C is the optimal temperature for the electrodeposition of the silver tungstate nanoparticles among the triple studied levels of this variable (Fig. 2d).”

2. In Sect. 3.3 “(sample 5, Fig. 6)” should be (sample 8, Fig. 4).
3. In Sect. 4, Conclusions, the first sentence should be replaced with “ Ag_2WO_4 nanostructures in spherical shape were successfully prepared via rapid, simple and cost-effective electrochemical method without utilizing the surfactant, template, and catalyst.”

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Fig. 1 SEM images of Ag_2WO_4 nanostructures in several conditions as: run 1 (a), run 2 (b), run 3 (c), run 4 (d), run 5 (e), run 6 (f), run 7 (g), run 8 (h), run 9 (i)

4. Figures 1, 2 and 3 should be Fig. 1 SEM images of Ag_2WO_4 nanostructures in several conditions as: run 1 (a), run 2 (b), run 3 (c), run 4 (d), run 5 (e), run 6 (f), run 7 (g), run 8 (h), run 9 (i).
5. Figures 4, 5, 6 and 7 should be Fig. 2, 3, 4 and 5, respectively.
6. In Table 1, rows no. 1, 2, 3 should be replaced by row no. 4, 5, 6, respectively.

Fig. 2 Graph of the varying the tungstate ion concentrations, applied voltage, stirring rate, and reactor temperature with the diameter size of Ag_2WO_4 nanostructures

Fig. 3 XRD pattern of Ag_2WO_4 nanostructures (sample 8)

Fig. 4 FT-IR spectrum of silver tungstate nanostructures (sample 8)

Fig. 5 PL spectrum of the as-synthesized Ag_2WO_4 nanostructures (sample 8)

Table 1 The optimizing synthetic parameters of silver tungstate nanostructures

Sample no.	WO_4^{2-} concentration (M)	Voltage (V)	RPM	Temperature (°C)	Particle size (nm)
1	0.1	5	200	20	75
2	0.1	8	400	40	45
3	0.1	11	600	60	34
4	0.25	5	400	60	46
5	0.25	8	600	20	42
6	0.25	11	200	40	35
7	0.5	5	600	40	49
8	0.5	8	200	60	23
9	0.5	11	400	20	43