## JPA Figure Requirements

#### 1. Figure format:

Please upload figures as separate TIFF files (not WORD/PDF format) in the system. Each figure, including the graphical abstract, must be a TIFF file of at least 300 dpi at the final printing size. The high resolution images you upload will automatically be converted to PDF and HTML for reviewers, editors, and readers to download. Avoid using different shades of grey or colors that are close in hue to identify different symbols or columns in a bar chart. Color should be used sparingly to identify different categories of data, and red and green should not be used together in graphs. Avoid shadows and unnecessary 3D effects. Please kindly check figures for color-blind compatibility.

#### 2. Figures in the text:

Figures shall not be embedded in the text, which shall be uploaded as separate TIFF files in the system. Please label and number your figures and figure captions clearly. In the text, please refer to figures as Fig. 1, Fig. 2A, Fig. 2B, Figs. 3A and B, Figs. 4A–C, Figs. 1–5, etc. For figures in the Supplementary data files, please refer it as Fig. S1, Figs. S1A and B, Figs. S1 and S2, Figs. S1–S3, etc.

#### 3. Figure captions:

Figure captions should be listed at the end of the main text. All figure captions should have a short figure heading. The figure panels shall be marked with uppercase letters, with both left- and right-half brackets, e.g., (A), (B), (C), etc. Abbreviations, numbers, and symbols used in a figure must be defined in the figure caption regardless whether they have been used/defined in the previous mentioned figures or not. The commonly-known abbreviations, such as DNA and RNA, does NOT need to be defined. For all figures, if the abbreviation is only once, the abbreviation is not necessary and the full-spelling definition shall be used.

The format is shown below:

**Fig. 1.** Physical characterizations of nanomagnets. (A) Transmission electron microscopy (TEM) depicting their morphological distributions. (B) Dark-field microscopy showing hyperspectral reflectance from the particles. (C) Elemental analysis revealing the presence of iron and other elementals. The peak for Cu is from

the copper grid on which the sample was prepared. (D) X-ray diffractometry confirming the crystalline nature of the nanomagnets.

**Fig. 2.** Extracted ion chromatograms obtained by HPLC-FT-ICR MS for *Flos Puerariae* and reference standards. (A) Extracted ion chromatograms of *Flos Puerariae* in negative-ion mode. (B) Extracted ion chromatograms of reference standards in negative-ion mode. (C) Extracted ion chromatograms of Flos Puerariae in positive-ion mode. (D) Extracted ion chromatograms of reference standards in positive-ion mode. (D) Extracted ion chromatograms of reference standards in positive-ion mode. (Peaks 3, 6, 9, 12, 14, 15, 16, 22, 24, 25, 26, 27, 30, 31, 32, and 35 are puerarin, daidzin, glycitin, rutin, genistin, tectoridin, nicotiflorin, ononin, daidzein, glycitein, luteolin, quercetin, genistein, tectorigenin, formononetin, and biochanin A, respectively.

**Fig. 3.** (A) Electrochemical impedance spectroscopy of different modified electrodes in solution containing 0.1 M KCl and 5 mM  $[Fe(CN)_6]^{3-/4-}$ . (B) Differential pulse voltammetry (DPV) of different modified electrodes after enrichment for the same time in phosphate-buffered saline (PBS) solution containing 50 ng/mL rutin. (a) Bare gold electrode (230 U, 0.12); (b) PC-modified electrode (400 U, 2.02); (c) PC/CoWO<sub>4</sub>modified electrode (880 U, 4.03); and (d) CoWO<sub>4</sub>-modified electrode (26,000 U, 1.32).

#### 4. Figures requirements:

- For half-column figures, the length shall be no more than 90 mm; for two-column figures, the length shall be no more than 160 mm. Half-column figures are preferred and highly recommended.
- In the figure itself, panels should be arranged reading left to right, top to bottom.
- In figures, the font and size of all words, numbers, and punctuations shall be Arial and 7.5 pt respectively. No character spacing shall be used and the line spacing should be 100%. The font and size of each panel numbers (i.e., A, B, C, D, etc.) shall be Arial and 10.5 pt, respectively.
- If the titles of each panel are described in the figure caption, they should be deleted within the panel, as shown in the original figure Fig. 12 ("GO: biological process", "GO: cellular component", "GO: molecular function", and "KEGG: signaling pathway") listed below.
- Coordinate axis: The line width of axes should be 0.2 mm. The scale mark of axes should be 0.8 mm and outward. Both x- and y-axes shall be retained. The titles and units shall be provided for both x- and y-axes, e.g., Time (min). The distance between the axis titles and scale values (e.g., the numbers on scale marks) shall be 2 mm. The scale mark and the values shall be center-aligned. Generally, the axes

shall be sealed (i.e., axes should not extend beyond the range of the data). Scientific notation shall be used. For example, if the scale values in y-axis "Intensity (a.u.)" are "4000, 3000, 2000, and 1000", the title and values shall be corrected to "Intensity (a.u.,  $\times 10^3$ )" and "4, 3, 2, and 1", respectively.

- The frame of annotations in each panel shall be deleted. If there are several annotations within one panel, they can be arranged to 2–3 lines above the panel.
- The first letter of a sentence shall be capitalized and other words shall be in lowercase, except certain terminologies and nomenclatures.
- Use leading zeros on decimals (e.g. 0.1 instead of .1).
- Use long hyphen "-" as the negative sign and the connector of two numbers, e.g., "-200" instead of "-200" and "Compounds 1–10" instead of "Compounds 1-10".
- The "*I*" (current), "*V*" (volume), "*E*" (energy), and "m/z" shall be in italics when used as axis title. The "*c*" (concentration), "*m*" (mass), "*v*" (velocity) shall be lowercase and in italics. The "*x*" and "*y*" in the equations shall also be lowercase and in italics.
- All arrows shall be small solid arrows (arrow type: triangle).
- All micrographs must carry a magnification bar/scale bar, which shall be at the bottom right corner of each panel. The words/numbers (above the scale bar) and the scale bar shall be center-aligned.
- Avoid unnecessary empty space or clutter.
- Keys to symbols should be simple.
- Continuously distributed data should be displayed either by showing all data-points or by using box-and-whisker plots, with all elements defined in the figure captions.
- Solid symbols are preferable to open symbols except to indicate data overlap. Circles, squares, diamonds, and triangles are preferable to crosses. Symbols and lines should be distinguishable when the figure is reduced, and no smaller than 5 and 0.5 pt, respectively at the final size.
- Bar charts with a single bar or with a bar indicating 100% should be avoided. Keep bar width to the minimum required for legibility.
- Tables are not allowed in figures. Please provide tables as separate display items.

### 5. Examples for corrections before and after figure modifications:

1) Original Fig. 1:



Modified final-version Fig. 1:



2) Original Fig. 2:



Modified final-version Fig. 2:



3) Original Fig. 3:



Modified final-version Fig. 3:



4) Original Fig. 4:



Modified final-version Fig. 4:



# 5) Original Fig. 5:



## Modified final-version Fig. 5:



6) Original Fig. 6:



Modified final-version Fig. 6:



7) Original Fig. 7:



Modified final-version Fig. 7:



8) Original Fig. 8:



Modified final-version Fig. 8:



9) Original Fig. 9:



Modified final-version Fig. 9:



10) Original Fig. 10:



Modified final-version Fig. 10:



## 11) Original Fig. 11:



Modified final-version Fig. 11:



12) Original Fig. 12:



Modified final-version Fig. 12:

