Please make sure that you did not copy from any source.

**Rule of Thumbs**
- Paper size: A4 or letter
- Font: Times New Roman, Cambria, Calibri
- Font size: 12
- Spacing: 1.5-2 lines
- Margins: 2.54 cm (1 inch) all around unless otherwise noted (i.e. bigger left margin for binding)
- Word counts:
  - Paper: 3500 words (normally not more than 6000 words) ~ 10 pages (double spaced, Times New Roman 12), 7 figures → 6 journal pages.
  - Letter: 2000 words ~ 7 pages (double spaced, Times New Roman 12), 4-5 figures → 3-4 journal pages.
  - Report and thesis have no word limit.

**Preparing Figures**
1. **Think of how the figures will tell the readers your story.**
2. Each Figure is presented to get your point across and to strengthen your argument. **Only relevant figures are included and they have to be mentioned in the result/discussion.**
3. **Font:** Arial
4. **Size:**
   a. The legends and labels need to be readable when you set the view scale in Microsoft Word at 100%.
   b. They have to be relatively the same size between the different figures.
5. **Graph:**
   a. X- and Y- axes must be properly labeled with the corresponding units in parenthesis
      i. E.g. [NaCl] (mM), OD$_{600}$ (AU)
   b. Do not include gridlines
   c. Data points can be connected; curve fitting is performed only when the correlation between the X and Y values is known.
      i. E.g. linear regression between the values of absorbance and concentration (in a standard curve).
      ii. When the data are fitted with an equation, please include the equation and the $R^2$ value. The $R^2$ value gives an indication on how well a given model explains the data or the data points fit a line or a curve (“the goodness of fit”).
      iii. A good $R^2$ value is 0.99
   d. When multiple spectra are presented together, the relative absorbance can be presented without the values on the axis if the difference between the spectra skews the presentation.
Figure 6. Relations between trimer percentages and concentrations of (A) E2-ΔC9, and (B) redistributed trimer fraction based on the integrated signals of SEC profiles in Figures 2 and 7, respectively. [1]

6. Images:
   
a. include scale bar for electron/confocal micrographs (exception, sometimes this is omitted for HR TEM images as the fringes are measured and indicated)

Fig. 2 TEM image of (Mn)AfFtn-AA (A) with negative staining and (B) without staining. The dark centers indicate the presence of Mn nanocores. [2]

7. Captions:
   
a. Should clearly describe the essence of the figure/table.
      i. Figure caption is usually below the figure.
      ii. Table caption is usually above the table.
   
8. Indicate the locations of the expected peaks on the chromatograms with an arrow or elution volume.
Abstract Section
1. The first sentence should be catchy and summarize the most important point of the work.
   a. This is equivalent to the first 2 minutes of a movie!
2. Anatomy of an abstract:
   a. The background of the work.
   b. The problem.
   c. The hypothesis.
   d. The results.
   e. The conclusion (brief – without giving away the ‘ending’).

Introduction Section
1. Include all background that you are planning to use for discussion.
2. For each figure that you copy from a reference, the reference needs to be cited.

Method Section
1. Usually written in past tense.
2. If you are using protocol derived from other paper, try to find the first paper (the oldest) that describe the method and refer to this and include any modification you used from this method.
   a. E.g. The protein was produced following previously described protocol by Sana et al. [ref] with the following modifications:
3. Indicate how many times each experiment was conducted in the method section.
   a. E.g. The optical density of the culture was measured at 600 nm thrice.
   b. E.g. The experiments were conducted in duplicate.

Result/Discussion Section
1. Usually written in present tense; try to use active forms.
2. Never start a section with a figure; describe the experiment briefly and the rationale before presenting any figure.
3. Never use sentences of this format: “XYZ ratio is summarized in the table (or figure) below.”
   a. Use this instead, “XYZ ratio is summarized in Table 1” or “Archaeoflobus fulgidus ferritin exhibits the highest Feroxidase activity compared to other reported ferritins (Table 1)”
4. When referring to a figure in the middle or at the end of a sentence, the most general format is:
   a. E.g. INT binds to MVP domains 3 and 4 (Fig. x)
      i. Depending on the journal, “Fig.” can also be written as “Figure”
5. When referring to a figure in the beginning of a sentence, write it in full and do not abbreviate:
   a. E.g. Figure 3 shows that the iron nanoparticle coelutes with the protein cage.

References
1. Keep consistent format according to journal requirements.
   a. If you are using abbreviated journal name, keep it that way for all references.
2. For the cited reference in the text, please use only number or if you prefer to use the names of the authors (not preferred), please keep them consistent.
3. Try to use only relevant references.
Use of Terms & Notations

1. **Gene is expressed; protein is produced.**

2. **Binomial nomenclature:**
   a. Names of genus and species should be italicized; only the genus name is capitalized.
   b. The full name is only written at first mention. Subsequent mention only requires abbreviated genus name.
   c. The genus of commonly used name, such as *E. coli*, need not be spelled out.
   d. E.g. *Geobacillus stearothermophilus*; subsequent mentions = *G. stearothermophilus*

3. **Gene, protein, and plasmid names:**
   a. Gene names are usually written in lower case and italicized, e.g. *feoB*
   b. Gene products (=proteins): the first letter is usually capitalized and not italicized, e.g. FeoB.
   c. Plasmid name starts with a “p” and is usually kept brief, e.g. *pE2-WT, pAfFtn*
   d. Bacmid name starts with a “b”, e.g. *bMVP, bcpMVP*

4. **Chemical & enzyme names:**
   a. need not be capitalized unless it is a commonly used term
   b. E.g. potassium phosphate, sodium chloride, NdeI, BamHI, IPTG, TRIS

5. **Unit:**
   a. Use **International System of Units** (SI from French *Le Système international d’unités*) or common abbreviations
   b. E.g. meter (m), hour (h), minute (min), liter (l or L)

6. **Concentration:**
   a. can be noted as the compound in square bracket
   b. E.g. [NaCl]

7. **Absorbance:**
   a. is usually abbreviated as Abs and reported in AU unit
   b. E.g. Abs (AU)

8. **Optical density:**
   a. can be abbreviated as OD with wavelength in the subscript;
   b. e.g. OD_{600} (AU)

9. **Abbreviation:**
   a. is a short form of a word; usually followed by a period.
   b. E.g. etcetera \(\rightarrow\) etc., alia \(\rightarrow\) al., Figure \(\rightarrow\) Fig.

10. **Acronym:**
    a. is constructed by the first letter of each word that makes a term; usually in CAPS while the full terms need not be capitalized.
    b. E.g. Bioengineered and Applied Nanomaterials Laboratory (BeANs Lab), transmission electron microscopy (TEM), surface-enhanced Raman spectroscopy (SERS).

11. When referring to a particular section of protein, indicate the source:
    a. E.g. INT (PDB ID xxxx; aa###-aa###).

12. Centrifugation speed should be reported as *xg* (in italics) not rpm.

13. The term “et al.” is derived from the Latin language “et alia” and means “and others”. The period is placed after ‘al’ not ‘et’.

**Things to avoid:**
- Run-on sentences (e.g. each sentence should not exceed 2-3 lines).
- Do not use numbers to start a sentence (e.g. 2 ml of A was added to the solution)
References
