Systematic screening and deep analysis of CoPt binding peptides leads to enhanced CoPt nanoparticles using designed peptides.

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Supplementary Information



Figure S 1 – Alanine scanning data for LS1, screened against CoPt NPs. Dotted purple line represents background noise.



Figure S 2 – Alanine scanning data for LS2, screened against CoPt NPs. Dotted purple line represents background noise.



Figure S 3 – Alanine scanning data for LS3, screened against CoPt NPs. Dotted purple line represents background noise.



Signal to Noise Ratio

Figure S 4 – Alanine scanning data for LS4, screened against CoPt NPs. Dotted purple line represents background noise.



Figure S 5 – Alanine scanning data for LS5, screened against CoPt NPs. Dotted purple line represents background noise.



Figure S 6 – Truncation data for LS4, screened against CoPt NPs. Dark green – LS4, teal – increased SNR, grey – similar SNR and white – decreased SNR. Dotted purple line is background noise.



Figure S 7 – Truncation data for LS2, screened against CoPt NPs. Dark green – LS2, grey – similar SNR to LS2 and white – reduced SNR values. Dotted purple line represents background noise.



Figure S 8 – Truncation data for LS3, screened against CoPt NPs. Dark green – LS3, teal – increased SNR values, grey – similar SNR values and white – decreased SNR values. Dotted purple line represents background noise.



Figure S 9 – Truncation data for LS5, screened against CoPt NPs. Dark green – LS5, teal – increased SNR, grey – similar SNR and white – decreased SNR. Dotted purple line represents background noise.



Figure S 10 – Alanine scanning data for LS1, screened against Pt²⁺.



Figure S 11 – Alanine scanning data for LS2, screened against Pt²⁺.



Figure S 12 – Alanine scanning data for LS3, screened against Pt²⁺.







Figure S 14 – Alanine scanning data for LS5, screened against Pt²⁺.



Figure S 15 – Truncation data for LS1, screened against Pt²⁺.



Figure S 16 – Truncation data for LS2, screened against Pt²⁺.



Figure S 17 – Truncation data for LS3, screened against Pt²⁺.



Figure S 18 – Truncation data for LS4, screened against Pt²⁺.



Figure S 19 – Truncation data for LS5, screened against Pt²⁺.



Figure S 20 – Alanine scanning data for LS1, collected from screening against a synthesis reaction. Dotted purple line represents background noise.







Figure S 22 – Alanine scanning data for LS3, collected from screening against a synthesis reaction. Dotted purple line represents background noise.



Figure S 23 – Alanine scanning data for LS4, collected from screening against a synthesis reaction. Dotted purple line represents background noise.







Figure S 25 – Truncation data for LS1, collected from screening against a synthesis reaction. Dotted purple line represents background noise.



Figure S 26 – Truncation data for LS2, collected from screening against a synthesis reaction. Dotted purple line represents background noise.



Figure S 27 – Truncation data for LS4, collected from screening against a synthesis reaction. Dotted purple line represents background noise.



Figure S 28 – Truncation data for LS5, collected from screening against a synthesis reaction. Dotted purple line represents background noise.



Figure S 29 – Graph to show the ratio of cobalt to platinum (left y-axis shows % of cobalt (teal circles)) compared to magnetic coercivity (right y-axis (purple diamonds) data duplicated from figure 10 in manuscript).