

Synthetic Analogue Approach for the Functional Domains of Copper(II)- Bleomycins and Its DNA Cleavage Activity

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Supplementary Material

Table S1 Magnetic susceptibilities (per copper) at various temperatures for **1**

| T (K) | $\chi_M T$ (cm ³ M ⁻¹ K) | T | $\chi_M T$ |
|----------|--|----------|------------|
| 304.9372 | 0.5076 | 262.3832 | 0.48157 |
| 304.5652 | 0.50831 | 261.0794 | 0.47837 |
| 304.1172 | 0.50404 | 259.7579 | 0.4797 |
| 303.6163 | 0.50465 | 258.4077 | 0.47925 |
| 303.0258 | 0.50204 | 257.0608 | 0.47779 |
| 302.3688 | 0.50095 | 255.7137 | 0.47686 |
| 301.6748 | 0.49927 | 254.3484 | 0.47664 |
| 300.9801 | 0.49647 | 252.9791 | 0.47398 |
| 300.2648 | 0.49908 | 251.6022 | 0.4753 |
| 299.4325 | 0.4977 | 250.2649 | 0.47415 |
| 298.5959 | 0.49796 | 248.8763 | 0.4715 |
| 297.7283 | 0.49824 | 247.4945 | 0.47188 |
| 296.8395 | 0.49485 | 246.1232 | 0.46995 |
| 295.9128 | 0.4923 | 244.7147 | 0.4682 |
| 294.9246 | 0.49342 | 243.3239 | 0.46845 |
| 293.9548 | 0.4916 | 241.9178 | 0.4694 |
| 292.9802 | 0.49402 | 240.5147 | 0.46748 |
| 291.9806 | 0.49044 | 239.1073 | 0.46958 |
| 290.9355 | 0.49196 | 237.673 | 0.46705 |
| 289.9257 | 0.48923 | 236.2566 | 0.46979 |
| 288.9715 | 0.48513 | 234.8206 | 0.46863 |
| 288.0023 | 0.48761 | 233.3875 | 0.4686 |
| 287.0179 | 0.48463 | 231.927 | 0.4684 |
| 285.9096 | 0.48432 | 230.5073 | 0.46716 |
| 284.7789 | 0.48359 | 229.0621 | 0.46727 |
| 283.6016 | 0.48393 | 227.5719 | 0.46456 |
| 282.3979 | 0.48576 | 226.1495 | 0.46572 |
| 281.1985 | 0.48447 | 224.6821 | 0.4649 |
| 279.9725 | 0.48626 | 223.2096 | 0.46515 |
| 278.7368 | 0.48387 | 221.738 | 0.46343 |
| 277.5258 | 0.48264 | 220.277 | 0.4644 |
| 276.3156 | 0.48492 | 218.7973 | 0.46408 |
| 275.0783 | 0.48601 | 217.3479 | 0.46257 |
| 273.8624 | 0.48431 | 215.8581 | 0.46266 |
| 272.6194 | 0.48287 | 214.3809 | 0.46209 |
| 271.3629 | 0.48519 | 212.9204 | 0.46101 |
| 270.1137 | 0.48293 | 211.4291 | 0.46115 |
| 268.8406 | 0.48268 | 209.9405 | 0.46024 |
| 267.5888 | 0.48284 | 208.4488 | 0.46116 |
| 266.3092 | 0.48183 | 206.9538 | 0.45999 |
| 264.9875 | 0.4812 | 205.4636 | 0.45924 |
| 263.68 | 0.48041 | 203.9043 | 0.46038 |

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| 202.4112 | 0.45865 | 135.4148 | 0.4408 |
| 200.9052 | 0.45763 | 133.9763 | 0.44001 |
| 199.406 | 0.45738 | 132.5309 | 0.44098 |
| 197.929 | 0.45659 | 131.0301 | 0.43756 |
| 196.4057 | 0.45552 | 129.5777 | 0.43841 |
| 194.9135 | 0.45727 | 128.0958 | 0.43798 |
| 193.4003 | 0.45687 | 126.6658 | 0.43763 |
| 191.8986 | 0.4545 | 125.2059 | 0.4378 |
| 190.3894 | 0.45569 | 123.7124 | 0.43796 |
| 188.8572 | 0.45404 | 122.2292 | 0.4382 |
| 187.3462 | 0.45427 | 120.7536 | 0.43694 |
| 185.8372 | 0.45403 | 119.2427 | 0.43559 |
| 184.3085 | 0.45332 | 117.7615 | 0.43546 |
| 182.7662 | 0.45326 | 116.2353 | 0.43481 |
| 181.2121 | 0.45339 | 114.6919 | 0.43459 |
| 179.714 | 0.45194 | 113.169 | 0.43363 |
| 178.1781 | 0.44997 | 111.6372 | 0.43307 |
| 176.648 | 0.45163 | 110.0628 | 0.43276 |
| 175.1418 | 0.45087 | 108.4748 | 0.43272 |
| 173.6197 | 0.44963 | 106.8788 | 0.43313 |
| 172.0903 | 0.44878 | 105.268 | 0.43307 |
| 170.565 | 0.45073 | 103.6039 | 0.43188 |
| 169.0372 | 0.44988 | 101.9164 | 0.43046 |
| 167.5001 | 0.45097 | 100.2077 | 0.43047 |
| 165.9813 | 0.45589 | 98.44734 | 0.42962 |
| 164.4907 | 0.44506 | 96.75623 | 0.42996 |
| 163.0007 | 0.4443 | 94.99219 | 0.429 |
| 161.5327 | 0.44577 | 93.15894 | 0.42839 |
| 160.1015 | 0.44734 | 91.24302 | 0.42793 |
| 158.7243 | 0.44252 | 89.33935 | 0.42698 |
| 157.371 | 0.44579 | 87.39486 | 0.42687 |
| 156.0443 | 0.44694 | 85.36035 | 0.42545 |
| 154.7641 | 0.44402 | 83.26105 | 0.42517 |
| 153.4459 | 0.44495 | 81.07485 | 0.42435 |
| 152.0989 | 0.44454 | 78.80109 | 0.42298 |
| 150.7694 | 0.44534 | 76.52352 | 0.42357 |
| 149.4032 | 0.44333 | 73.97924 | 0.42248 |
| 148.052 | 0.44411 | 71.42128 | 0.42234 |
| 146.6835 | 0.44379 | 68.66427 | 0.42172 |
| 145.3176 | 0.44272 | 65.60815 | 0.42047 |
| 143.9112 | 0.44058 | 62.23225 | 0.41786 |
| 142.5399 | 0.44015 | 58.34161 | 0.4095 |
| 141.1352 | 0.44096 | 54.13036 | 0.41045 |
| 139.6964 | 0.44135 | 49.44511 | 0.41703 |
| 138.2928 | 0.44076 | 44.04317 | 0.41537 |
| 136.8336 | 0.44146 | 42.20851 | 0.42999 |

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| 41.00587 | 0.42967 |
| 39.77706 | 0.43031 |
| 38.61408 | 0.43008 |
| 37.41167 | 0.42988 |
| 37.32558 | 0.40798 |
| 36.01581 | 0.42946 |
| 34.55149 | 0.42969 |
| 32.85503 | 0.42918 |
| 31.02279 | 0.4306 |
| 29.37218 | 0.4095 |
| 28.87441 | 0.43344 |
| 25.95456 | 0.4343 |
| 22.14638 | 0.46202 |
| 22.07177 | 0.43594 |
| 18.81545 | 0.47207 |
| 17.64652 | 0.47123 |
| 17.23671 | 0.60383 |
| 17.16497 | 0.47259 |
| 17.10732 | 0.47859 |
| 17.09288 | 0.48977 |
| 17.00594 | 0.48466 |
| 16.99141 | 0.48088 |
| 16.87462 | 0.48545 |
| 16.84528 | 0.48617 |

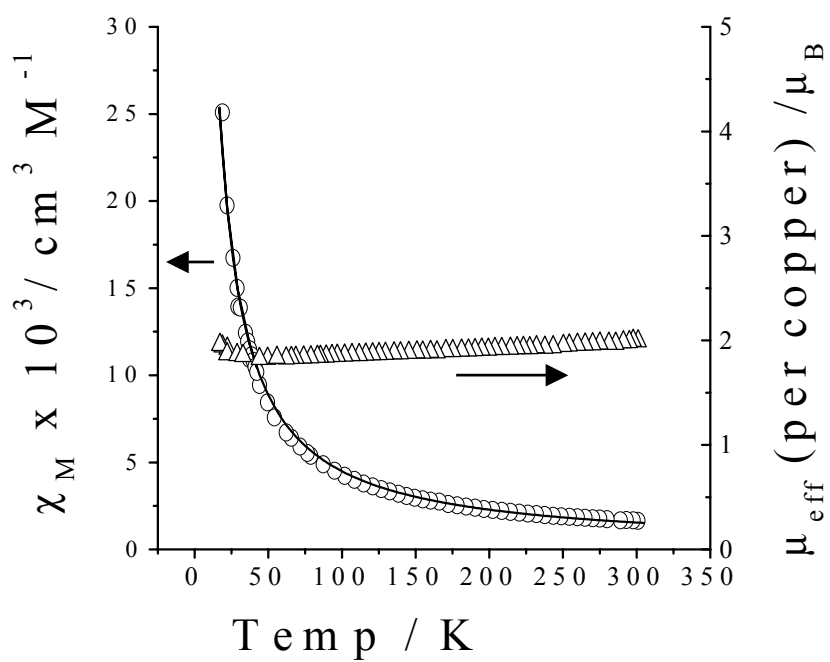


Fig. S3 Temperature dependence of magnetic susceptibility (o, per copper) and the magnetic moment (Δ , per copper) for $[\text{Cu}_2(\text{R}'\text{SSR})_2(\text{SO}_4)_2]$ (**1**). Theoretical fitting of the experimental data is shown by solid line.

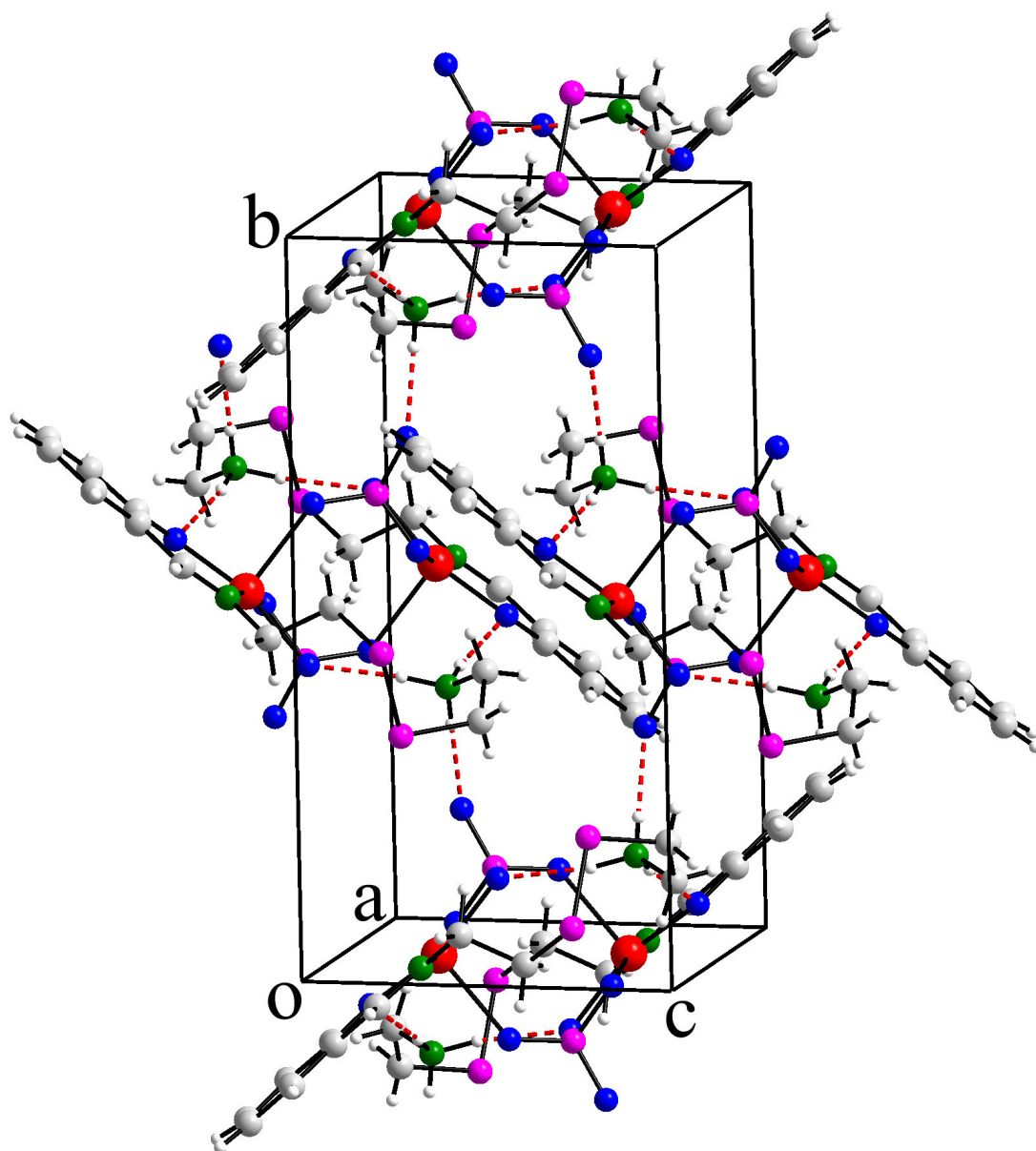


Fig. S2 Unit cell packing diagram of $[\text{Cu}_2(\text{R}'\text{SSR})_2(\text{SO}_4)_2]$ (**1**)