Publication List (Chronologically)

**85 peer reviewed publications**

**4 Reviews**

**h-index 39** Citation: 5857 without self-citation

**bold:** Key publications

**\***24 publications - first author **\*\*** 11 publications - corresponding author **\*\*\*** 2book chapter

1. **\*\* Hammel, M., and Tainer, J. A. (2021) X-ray scattering reveals disordered linkers and dynamic interfaces in complexes and mechanisms for DNA double-strand break repair impacting cell and cancer biology. *Protein Sci* in print**
2. Rashid, I., **Hammel, M.\*,** Sverzhinsky, A., Tsai, M. D., Pascal, J., Tainer, J. A., and Tomkinson, A. E. (2021) Direct interaction of tyrosyl DNA phosphodiesterase 1 with DNA ligase III catalytic domain is regulated by phosphorylation of its flexible N-terminus. *Journal of Biological Chemistry* **in print**
3. Wilamowski, M., **Hammel, M.** **\***, Leite, W., Zhang, Q., Kim,Y., Weiss, K., Jedrzejczak, R., Rosenberg, D. J., Fan,Y., Bierma, J., Sarker,A. H., Tsutakawa, S.E., Pingali, S. V., O’Neill, H. M., Joachimiak, A., Hura, G. L.,(2021) Transient and stabilized complexation of Nsp7, Nsp8 and Nsp12 in the SARS-CoV-2 replication-transcription complex (RTC)**.** *Biophysical Journal* **in print**
4. **\*\* Hammel, M**., Rosenberg, D. J., Bierma, J., Hura, G. L., Thapar, R., Lees-Miller, S. P., and Tainer, J. A. (2021) Visualizing functional dynamicity in the DNA-dependent protein kinase holoenzyme DNA-PK complex by integrating SAXS with cryo-EM. *Progress in biophysics and molecular biology* **163**, 74-86
5. **Hodge, C. D., Rosenberg, D. J., Grob, P., Wilamowski, M., Joachimiak, A., Hura, G. L., and Hammel, M. \*\* (2021) Rigid monoclonal antibodies improve detection of SARS-CoV-2 nucleocapsid protein. *MAbs* 13, 1905978**
6. Walker, R. G., Kattamuri, C., Goebel, E. J., Zhang, F., **Hammel, M.,** Tainer, J. A., Linhardt, R. J., and Thompson, T. B. (2021) Heparin-mediated dimerization of follistatin. *Exp Biol Med (Maywood)* **246**, 467-482
7. Thapar, R., Wang, J. L., **Hammel, M.,** Ye, R., Liang, K., Sun, C., Hnizda, A., Liang, S., Maw, S. S., Lee, L., Villarreal, H., Forrester, I., Fang, S., Tsai, M. S., Blundell, T. L., Davis, A. J., Lin, C., Lees-Miller, S. P., Strick, T. R., and Tainer, J. A. (2021) Mechanism of efficient double-strand break repair by a long non-coding RNA. *Nucleic acids research* **49**, 1199-1200
8. Lees-Miller, J. P., Cobban, A., Katsonis, P., Bacolla, A., Tsutakawa, S. E., **Hammel, M.,** Meek, K., Anderson, D. W., Lichtarge, O., Tainer, J. A., and Lees-Miller, S. P. (2021) Uncovering DNA-PKcs ancient phylogeny, unique sequence motifs and insights for human disease. *Progress in biophysics and molecular biology* **163**, 87-108
9. **Hammel, M**., Rashid, I., Sverzhinsky, A., Pourfarjam, Y., Tsai, M. S., Ellenberger, T., Pascal, J. M., Kim, I. K., Tainer, J. A., and Tomkinson, A. E. (2021) An atypical BRCT-BRCT interaction with the XRCC1 scaffold protein compacts human DNA Ligase IIIalpha within a flexible DNA repair complex. *Nucleic acids research* **49**, 306-321
10. Tsutakawa, S. E., Sarker, A. H., Ng, C., Arvai, A. S., Shin, D. S., Shih, B., Jiang, S., Thwin, A. C., Tsai, M. S., Willcox, A., Her, M. Z., Trego, K. S., Raetz, A. G., Rosenberg, D., Bacolla, A., **Hammel, M**., Griffith, J. D., Cooper, P. K., and Tainer, J. A. (2020) Human XPG nuclease structure, assembly, and activities with insights for neurodegeneration and cancer from pathogenic mutations. *Proc Natl Acad Sci U S A* **117**, 14127-14138
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13. Topolska-Wos, A. M., Sugitani, N., Cordoba, J. J., Le Meur, K. V., Le Meur, R. A., Kim, H. S., Yeo, J. E., Rosenberg, D., **Hammel, M**., Scharer, O. D., and Chazin, W. J. (2020) A key interaction with RPA orients XPA in NER complexes. *Nucleic acids research* **48**, 2173-2188
14. Dominguez-Martin, M. A., **Hammel, M.,** Gupta, S., Lechno-Yossef, S., Sutter, M., Rosenberg, D. J., Chen, Y., Petzold, C. J., Ralston, C. Y., Polivka, T., and Kerfeld, C. A. (2020) Structural analysis of a new carotenoid-binding protein: the C-terminal domain homolog of the OCP. *Sci Rep* **10**, 15564
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19. Horst, B. G., Yokom, A. L., Rosenberg, D. J., Morris, K. L., **Hammel, M.,** Hurley, J. H., and Marletta, M. A. (2019) Allosteric activation of the nitric oxide receptor soluble guanylate cyclase mapped by cryo-electron microscopy. *Elife* **8**
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