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## 發表論文

14. S. Das, **Y.-H. Lin**, R. M. Vernon, J. D. Forman-Kay, and H. S. Chan (2020) Comparative roles of charge,  $\pi$ , and hydrophobic interactions in sequence-dependent phase separation of intrinsically disordered proteins. *Proc. Natl. Acad. Sci. U.S.A.* **117**, 28795–28805
13. A. N. Amin\*, **Y.-H. Lin**\*, S. Das, and H. S. Chan (2020) Analytical theory for sequence-specific binary fuzzy complexes of charged intrinsically disordered proteins. *J. Phys. Chem. B* **124**, 6709–6720 (\*equal contribution; selected supplementary cover)
12. **Y.-H. Lin**, J. P. Brady, H. S. Chan, and K. Ghosh (2020) A unified analytical theory of heteropolymers for sequence-specific phase behaviors of polyelectrolytes and polyampholytes. *J. Chem. Phys.* **152**, 045102
11. H. Cinar, R. Oliva, **Y.-H. Lin**, X. Chen, M. Zhang, H. S. Chan, and R. H. A. Winter (2020) Pressure sensitivity of SynGAP/PSD-95 condensates as a model for postsynaptic densities and its biophysical and neurological ramifications. *Chem. Eur. J.* **26**, 11024–11031 (cover feature)
10. S. Das, A. N. Amin, **Y.-H. Lin**, and H. S. Chan (2018) Coarse-grained residue-based models of disordered protein condensates: utility and limitations of simple charge pattern parameters, *Phys. Chem. Chem. Phys.* **20**, 28558–28574
9. **Y.-H. Lin**, J. D. Forman-Kay, and H. S. Chan (2018) Theories for sequence-dependent phase behaviors of biomolecular condensates. *Biochemistry* **57**, 2499–2508
8. S. Das, A. Eisen, **Y.-H. Lin**, and H. S. Chan (2018) A lattice model of charge-pattern-dependent polyampholyte phase separation. *J. Phys. Chem. B* **122**, 5418–5431
7. **Y.-H. Lin**, J. P. Brady, J. D. Forman-Kay, and H. S. Chan (2017) Charge pattern matching as a “fuzzy” mode of molecular recognition for the functional phase separations of intrinsically disordered proteins. *New J. Phys.* **19**, 115003
6. J. P. Brady, P. J. Farber, A. Sekhar, **Y.-H. Lin**, R. Huang, A. Bah, T. J. Nott, H. S. Chan, A. J. Baldwin, J. D. Forman-Kay, and L. E. Kay (2017) Structural and hydrodynamic properties of an intrinsically disordered region of a germ-cell specific protein upon phase separation. *Proc. Natl. Acad. Sci. U.S.A.* **114**, E8194–E8203
5. **Y.-H. Lin** and H. S. Chan (2017) Phase separation and single-chain compactness of charged disordered proteins are strongly correlated. *Biophys. J.* **112**, 2043–2046
4. **Y.-H. Lin**, J. Song, J. D. Forman-Kay, and H. S. Chan (2017) Random-phase-approximation theory for sequence-dependent, biologically functional liquid-liquid phase separation of intrinsically disordered proteins. *J. Mol. Liq.* **228**, 176–193
3. **Y.-H. Lin**, J. D. Forman-Kay, and H. S. Chan (2016) Sequence-specific polyampholyte phase separation in membraneless organelles. *Phys. Rev. Lett.* **117**, 178101
2. **Y.-H. Lin** and R. Bundschuh (2015) RNA structure generates natural cooperativity between single-stranded RNA binding proteins targeting 5' and 3'UTRs. *Nucleic Acids Res.* **43**, 1160–1169
1. **Y.-H. Lin** and R. Bundschuh (2013) Interplay between single-stranded binding proteins on RNA secondary structure. *Phys. Rev. E* **88**, 052707

## 論文預印本

- J. Wessén, T. Pal, S. Das, **Y.-H. Lin**, and H. S. Chan (2021) A simple explicit-solvent model of polyampholyte phase behaviors and its ramifications for dielectric effects in biomolecular condensates. Preprint: arXiv: 2102.03687
- J. Gaither, **Y.-H. Lin**, and R. Bundschuh (2016) RBPBind: quantitative prediction of protein-RNA interactions. Preprint: arXiv:1611.01245

## 受邀演講

- |   |                  |
|---|------------------|
| 10. 加拿大曼尼托巴大學物理學系<br>主題：生物非均相聚合物的高分子物理場論                              | 2020 年 11 月 25 日 |
| 9. 美國生物物理學年會無序蛋白組年度學術報告<br>主題：帶電無序蛋白序列特異性的高分子理論與仿真模擬<br>(年度博士後獎項特別演講) | 2019 年 3 月 2 日   |
| 8. 中國科學院化學研究所<br>主題：無序蛋白序列特異性的液--液相分離理論與仿真模擬                          | 2018 年 10 月 15 日 |
| 7. 北京大學定量生物學研究中心<br>主題：無序蛋白序列特異性的液--液相分離理論與仿真模擬                       | 2018 年 10 月 15 日 |
| 6. 武漢華中師範大學生物物理研究所<br>主題：生物體內液--液相分離的理論與仿真模擬                          | 2018 年 10 月 12 日 |
| 5. 多倫多大學生物化學系學術交流會<br>主題：無序蛋白序列特異性的液--液相分離理論                          | 2018 年 10 月 2 日  |
| 4. 蛋白質折疊研究學社 (於美國加州柏克萊大學)<br>主題：帶電無序蛋白在液--液相分離中的序列特異性                 | 2017 年 6 月 3 日   |
| 3. 多倫多兒童醫院分子結構暨功能研究中心<br>主題：RNA 二級結構與單鍊結合蛋白的相互作用                      | 2015 年 3 月 12 日  |
| 2. 理論生物物理中心 (於美國萊斯大學)<br>主題：RNA 二級結構與單鍊結合蛋白的相互作用                      | 2014 年 10 月 27 日 |
| 1. 國立成功大學國家理論物理中心 (台灣)<br>主題：RNA 二級結構與單鍊結合蛋白的相互作用                     | 2014 年 6 月 9 日   |