

## ALLEGATO B

Curriculum formative, didattico, scientifico e professionale del candidato

### Dichiarazione sostitutiva di certificazioni

(Art. 46, D.P.R. 28 dicembre 2000 n. 445)

### Dichiarazione sostitutiva dell'atto di notorietà

(da sottoscrivere davanti all'impiegato addetto o da presentare o spedire con la fotocopia di un documento di identità)

(Art. 47, D.P.R. 28 dicembre 2000 n. 445)

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|--------------------------------|---|
| Estremi del bando di selezione | Borsa di Ricerca, Bando nr. 1/2023 del 10/01/2023 |
| Informazioni aggiornate al     | 24/01/2023  |
| Nome e cognome                 | Ke Zuo  |
| Data di nascita                | .   |

Si raccomanda di indicare con precisione tutti gli elementi valutabili ai sensi del bando di selezione (aggiungere o togliere righe secondo necessità).

#### Esperienza professionale

| Periodo         | Ente   | Principali attività e responsabilità |
|-----------------|--|--------------------------------------|
| 07/2018-06/2019 | College of Chemistry, Fuzhou University, China | Research assistant of Prof. Li       |

#### Istruzione, formazione (es. titoli di studio, certificazioni professionali/linguistiche/informatiche)

| Data    | Titolo/principali tematiche   | Ente  |
|---------|---|---|
| 06/2015 | Bachelor in Pharmaceutical Engineering  | College of Bioengineering, Chengdu University, China  |
| 07/2018 | Master in Medicinal Chemistry   | Sichuan Industrial Institute of Antibiotics, Chengdu University, China  |
| Ongoing | PhD Research on <i>Molecular interactions between human NEET proteins and their ligands</i> | The Hebrew University of Jerusalem, Israel<br>RWTH Aachen University, Germany<br>University of Ferrara, Italy |

#### Pubblicazioni/Convegni

Pubblicazioni (# primo autore, autore con uguale contributo)

1. Marjault H-B., Karmi O., **Zuo K.** Michaeli D., Eisenberg-Domovich Y., Rossetti G., de Chassey B., Vonderscher J., Cabantchik I., Carloni P., Mittler R., Livnah O., Meldrum E., Nechushtai R. An anti-diabetic drug targets NEET (CISD) proteins through destabilization of their [2Fe–2S] clusters. Commun. Biol. 2022, 5, 437.
2. Hoang L.G., Goßen J., Capelli R., Nguyen T.T., Sun Z., **Zuo K.**, Schulz J.B., Rossetti G., Carloni P. Multiple poses and thermodynamics of ligands targeting protein surfaces: The case of furosemide binding to mitoNEET in aqueous solution. Front. Cell Dev. Biol. 2022, 10, 886568.



3. **Zuo K.#**, Marjault H-B., Bren KL., Rossetti G., Nechushtai R., Carloni P. The two redox states of the human NEET proteins' [2Fe–2S] clusters. *JBIC J. Biol. Inorg. Chem.* 2021, 26, 763–774.
4. Marjault H-B.#, **Zuo K.#**, Mittler R., Carloni P., Nechushtai R. Chapter 21 - NEET proteins as novel drug targets for mitochondrial dysfunction. In Ostoic S., *Clinical Bioenergetics*, 2021, 477-488, Amsterdam: Elsevier. #These authors contributed equally to this work.
5. Nechushtai R., Karmi O., **Zuo K.**, Marjault H-B., Darash-Yahana M., Sohn Y-S., King SD., Zandalinas SI., Carloni P., Mittler R. The balancing act of NEET proteins: Iron, ROS, calcium and metabolism. *BBA Mol. Cell Biol.* 2020, 11, 118805.
6. **Zuo K.#**, Qi Y., Yuan C., Jiang L., Xu P., Hu J., Huang M., Li J. Specifically targeting cancer proliferation and metastasis processes: The development of matriptase inhibitors. *Cancer Metast. Rev.* 2019, 38, 507-524.
7. Lin H.#, Zhang D.#, **Zuo K.#**, Yuan C., Huang M., Li J., Lin Z. Two-metal-ion assisted sequence-specific Holliday junction recognition and cleavage by the chloroplast resolvase Moc1. *Nat. Chem. Biol.* 2019, 15, 1241–1248. #These authors contributed equally to this work.
8. Yan X., Luo Y., Sun X., Zhuo W., Gu J., **Zuo K.**, Gou X., Tang D., Shi H., Liu W., Hu J. Potential strategy used for controlling the phosphorescent properties in tetradeятate Pt(II) complex: the effect of azole ligand. *Appl. Organometal. Chem.* 2019, 33, e5125.
9. Duan H., Liu X., Zhuo W., Meng J., Gu J., Sun X., **Zuo K.**, Luo Q., Luo Y., Tang D., Shi H., Cao S., Hu J. 3D-QSAR and molecular recognition of Klebsiella pneumoniae NDM-1 inhibitors. *Mol. Simulat.* 2019, 45, 694-705.
10. Wu Z., Xie T., Luo Y., Zuo W., Gu J., Yan X., Sun X., **Zuo K.**, Liu X., Gan Y., Liang L., He G., Liu W., Gou X., Tang D., Shi H., Hu J. Theoretical insight into the photodeactivation pathway of the tetradeятate Pt(II) complex with different inductive substituents. *Appl. Organometal. Chem.* 2019, 33, e4879.
11. Zhao X., Huang Y., Yuan G., **Zuo K.**, Huang Y., Chen J., Li J., Xue J. A novel tumor and mitochondria dual-targeted photosensitizer showing ultra-efficient photodynamic anticancer activities. *Chem. Commun.*, 2019, 55, 866-869.
12. **Zuo K.#**, Luo Y., Sun X., Shen W., Tang D., Hu J. A potential strategy used for controlling the phosphorescence quantum yield of cyclometalated (C<sup>+</sup>C<sup>\*</sup>) platinum (II) NHC complexes: The theoretical insight. *Org. Electron.* 2018, 57, 367-376.
13. **Zuo K.#**, Luo Y., Sun X., Shen W., Tang D., Hu J. Theoretical insight into the photodeactivation pathway of the tetradeятate Pt(II) complex: the π-conjugation effect. *Appl. Organometal. Chem.* 2018, 32, e4220.
14. Sun X., Yan X., Zhuo W., Gu J., **Zuo K.**, Liu W., Liang L., Gan Y., He G., Wan H., Gou X., Shi H., Hu J. PD-L1 nanobody competitively inhibits the formation of the PD-1/PD-L1 complex: comparative molecular dynamics simulations. *Int. J. Mol. Sci.* 2018, 19, 1984.
15. **Zuo K.#**, Liang L., Du W., Sun X., Liu W., Gou X., Wan H., Hu J. 3D-QSAR, molecular docking and molecular dynamics simulation of *Pseudomonas aeruginosa* LpxC inhibitors. *Int. J. Mol. Sci.* 2017, 18, 761.
16. Du W., **Zuo K.**, Sun X., Liu W., Yan X., Liang L., Wan H., Chen F., Hu J. An effective HIV-1 integrase inhibitor screening platform: Rationality validation of drug screening, conformational mobility and molecular recognition analysis for PFV integrase complex with viral DNA. *J. Mol. Graph. Model.* 2017, 78, 96-109.



**Altre attività scientifiche****Ulteriori informazioni pertinenti**

- National Scholarship for Postgraduate, 2017-2018
- Sichuan Province, Excellent Graduate Award, 2018
- Sichuan Province, Postgraduate Scholarship, 2015-2016 and 2017-2018

Luogo, data

Amburgo (D), 25/01/2023

