

PEER-REVIEWED PUBLICATIONS

Publications at MSU since Aug. 2008 (Total 70)

1. Wathudura, P.; Wamsley, M.; Zou, S.; and Zhang, D. “Effects of cascading optical processes: Part III: Impacts on UV-vis, fluorescence, and scattering measurements of photoluminescent samples”. **Anal. Chem. To be submitted**
2. Wathudura, P.; Wamsley, M.; Zou, S.; and Zhang, D. “Effects of cascading optical processes: Part II: Impacts on experimental quantification of sample absorption and scattering properties”. **Anal. Chem. Revision submitted**
3. Nawalage, S.; Wathudura, P.; Wang, A.; Wamsley, M.; Zou, S.; and Zhang, D.* “Effects of cascading optical processes: Part I: Impacts on quantification of sample scattering extinction, intensity, and depolarization”. **Anal. Chem. 2023**.
<https://pubs.acs.org/doi/pdf/10.1021/acs.analchem.2c03917> **Supplementary Cover**
4. Wamsley, M.; Peng, W.; Tan, W.; Wathudura, P.; Cui, C.; Zou, S.; and Zhang, D. * “Total luminescence spectroscopy for quantification of temperature effects on photophysical properties of photoluminescence materials”. **ACS Measurement Science Au. 2022**
<https://pubs.acs.org/doi/pdf/10.1021/acsmesuresciau.2c00047> , **Supplementary Cover**
5. Wamsley, M.; Wathudura, P.; Hu, J.; and Zhang, D. * “Integrating-sphere-assisted resonance synchronous spectroscopy for quantification of materials double-beam UV-vis absorption and scattering extinctions”. **Analytical Chemistry, 2022**,
<https://pubs.acs.org/doi/full/10.1021/acs.analchem.2c02037>
6. Wamsley, M.; Nawalage, S.; Hu, J.; Collier, W.; and Zhang, D. * . “Going back to the drawing board: A unifying first-principle model for correlating sample UV-vis absorption and fluorescence emission.” **2022. Analytical Chemistry**,
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7. Wang, Z.; Wang, W.; Wamsley, M.; Zhang, D.; and Wang, H.; * “Colloidal polydopamine beads: A photothermally active support for noble metal nanocatalysts”. **ACS Applied Materials & Interfaces. 2022**. <https://pubs.acs.org/doi/pdf/10.1021/acsaami.2c03183>
8. Zhao, Y.; Hu Y.; Zhong, Y.; * Wang, J.; Liu, Z.; Bai, F.; and Zhang, D.* “Missing links between the structures and optical properties of porphyrin assemblies”. *Journal of the Physical Chemistry, C.* **2021. 125.** 22318-22327 <https://pubs.acs.org/doi/abs/10.1021/acs.jpcc.1c06795>
9. Peng, W.; Athukorale, S.; Hu, J.; Cui, X.; and Zhang, D* “Kinetic spectroscopic quantification using two-step chromogenic and fluorogenic reactions: from theoretical modeling to experimental quantification of biomarkers in practical samples.” **Analytica Chimica Acta, 2021, 338293**
<https://www.sciencedirect.com/science/article/pii/S0003267021001197>
10. Zhang, W.; Zilevu, D.; Creutz, S.; and Zhang, D. * “Quantification of the optical properties of Perovskite Nanocrystals using Combination of Polarized Resonance Synchronous and Polarized Anti-Stokes, On-Resonance, and Stokes-Shifted Spectroscopy” **J. Phys. Chem. C. 2020. 124, 20388-20397** <https://pubs.acs.org/doi/pdf/10.1021/acs.jpcc.0c05064>
11. Xu, X.J.; Yuan, Y.; Liu, M.; Zou, S.; Chen, O.; and Zhang, D. * “Quantification of the Photon Absorption, Scattering, and On-resonance Emission Properties of CdSe/CdS Core/Shell Quantum Dots: Effect of Shell Geometry and Volumes.” **Analytical Chemistry, 2020, 92, 5346**.
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12. Yang, H.; Zhang, W.; Athukorale, S.; Li, Z.; Zou, S.; Donnadiou, B.; Wang, Z. *; Zhang, D. * . “Dithiosulfene Adsorption and Reaction on Gold Nanoparticles in Water”. **J. Phys. Chem. C. 2020, 124, 686**. <https://pubs.acs.org/doi/10.1021/acs.jpcc.9b09828>
13. Xu, J.; Yuan, Guangle Niu.; Ben Zhong Tang, and Zhang, D. * (2019) “Polarized Resonance Synchronous Spectroscopy as a Powerful Tool for Studying the Kinetics and Optical Properties of

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