

Publications
Jhih-Sheng Wu

List of Publications ([my Google Scholar link](#)) h-index: 10

- [1] **Jhih-Sheng Wu**, Vadym Apalkov, Mark I. Stockman, *Topological Spaser*, Phys. Rev. Lett. 124, 017701 (2020) **Impact Factor: 9.227**
- [2] Rupesh Ghimire, **Jhih-Sheng Wu**, Vadym Apalkov, Mark I. Stockman, *Topological Nanospaser*, arXiv:1911.03523 (2019)
- [3] Fatemeh Nematollahi, S Motlagh, **Jhih-Sheng Wu**, Vadym Apalkov, Mark Stockman *Topological properties of Weyl semimetals in circularly-polarized ultrafast laser field*, arXiv:1903.01657 (2019)
- [4] **Jhih-Sheng Wu**, Yen-Cheng Lin, Yae-Lin Sheu, Liang-Yan Hsu, *Characteristic Distance of Resonance Energy Transfer Coupled with Surface Plasmon Polaritons*, J. Phy. Chem. Lett. 9 (24), 7032-7039 (2018) **Impact Factor: 7.329**
- [5] S. Azar Oliaei Motlagh, **Jhih-Sheng Wu**, Vadym Apalkov, and Mark I. Stockman, *Fundamentally fastest optical processes at the surface of a topological insulator* Phys. Rev. B 98 (12), 125410 (2018) **Impact Factor: 3.736**
- [6] S. Azar Oliaei Motlagh, **Jhih-Sheng Wu**, Vadym Apalkov, and Mark I. Stockman, *Femtosecond valley polarization and topological resonances in transition metal dichalcogenides* Phys. Rev. B 98, 081406(R) (2018) **Impact Factor: 3.736**
- [7] S. Azar Oliaei Motlagh, **Jhih-Sheng Wu**, Vadym Apalkov, and Mark I. Stockman, *Ultrafast Control of Electron Dynamics in 3D Topological Insulator* Journal of Physics: Conference Series 906 (1), 012012 (2017)
- [8] Fengrui Hu, Yilong Luan, Zhe Fei, Igor Palubski, Michael Goldflam, Siyuan Dai, **Jhih-Sheng Wu**, Kirk W Post, Guido Janssen, Michael M Fogler, DN Basov, *Imaging the localized plasmon resonance modes in graphene nanoribbons*, Nano Lett., 2017, 17 (9), pp 5423-5428 **Impact Factor: 12.08**
- [9] Achim Woessner, Romain Parret, Diana Davydovskaya, Yuanda Gao, **Jhih-Sheng Wu**, Mark B Lundberg, Sébastien Nanot, Pablo Alonso-González, Kenji Watanabe, Takashi Taniguchi, Rainer Hillenbrand, Michael M Fogler, James Hone, Frank HL Koppens, *Electrical detection of hyperbolic phonon-polaritons in heterostructures of graphene and boron nitride*, npj 2D Materials and Applications 1, Article number: 25 (2017)
- [10] Yinming Shao, Kirk W Post, **Jhih-Sheng Wu**, Siyuan Dai, Alex J Frenzel, Anthony R Richardella, Joon Sue Lee, Nitin Samarth, Michael M Fogler, Alexander V Balatsky, Dmitri E Kharzeev, Dimitri N Basov, *Faraday Rotation Due to Surface States in the Topological Insulator $(Bi_{1-x}Sb_x)_2Te_3$* , Nano Lett., 2017, 17 (2), pp 980–984 **Impact Factor: 12.08**
- [11] Fei, Zhe; Goldflam, Michael; **Wu, Jhih-Sheng**; Dai, Siyuan; Wagner, Martin; McLeod, Alex; Liu, Mengkun; Post, Kirk; Zhu, Shou-En; Janssen, Guido; Fogler, Michael; Basov, Dimitri, *Edge plasmons and plane plasmons in graphene nanoribbons*”, Nano Lett., 2015, 15 (12), pp 8271–8276 **Impact Factor: 12.08**
- [12] **Jhih-Sheng Wu**, D. N. Basov, and M. M. Fogler, *Topological insulators are tunable waveguides for hyperbolic polaritons*, Phys. Rev. B 92, 205430 (2015) **Impact Factor: 3.736**
- [13] G. X. Ni, H. Wang, **J. S. Wu**, Z. Fei, M. D. Goldflam, F. Keilmann, B. Özyilmaz, A. H. Castro Neto, X. Xie, M. M. Fogler, D. N. Basov, *Plasmons in Graphene Moiré Superlattices*, Nature Materials 14, 1217–1222 (2015) **Impact Factor: 38.887**
I did the main theoretical analysis.

- [14] K. W. Post, B. C. Chapler, M. K. Liu, **J. S. Wu**, H. T. Stinson, M. D. Goldflam, A. R. Richardella, J. S. Lee, A. A. Reijnders, K. S. Burch, M. M. Fogler, N. Samarth, and D. N. Basov, *Sum-rule constraints on the surface state conductance of topological insulators*, Phys. Rev. Lett. 115, 116804 (2015) **Impact Factor: 9.227**
- [15] **Jhih-Sheng Wu** and Michael M. Fogler, *Scattering of two-dimensional massless Dirac electrons by a circular potential barrier*, Phys. Rev. B 90, 235402 (2014) **Impact Factor: 3.736**
- [16] H. T. Stinson, **J. S. Wu**, B. Y. Jiang, Z. Fei, A. S. Rodin, B. C. Chapler, A. S. McLeod, A. Castro Neto, Y. S. Lee, M. M. Fogler, and D. N. Basov, *Infraorange nanospectroscopy and imaging of collective superfluid excitations in anisotropic superconductors*, Phys. Rev. B 90, 014502 (2014) **Impact Factor: 3.736**
- [17] Jian-Yuan Chang, **Jhih-Sheng Wu**, and Ching-Ray Chang, *Exact Hamiltonians with Rashba and cubic Dresselhaus spin-orbit couplings on a curved surface*, Phys. Rev. B 87, 174413, (2013) **Impact Factor: 3.736**
- [18] Ming-Hao Liu, **Jhih-Sheng Wu**, Son-Hsien Chen, and Ching-Ray Chang, *Spin and charge transport in U-shaped one-dimensional channels with spin-orbit couplings*, Phys. Rev. B 84, 085307 (2011) **Impact Factor: 3.736**