

This read me file describes the research data for

Integrated terahertz generator-manipulators using epsilon-near-zero-hybrid nonlinear metasurfaces

Yongchang Lu^{1,5}, Xi Feng^{1,5}, Qingwei Wang^{1,5}, Xueqian Zhang¹, Ming Fang², Wei E.I. Sha³, Zhixiang Huang², Quan Xu¹, Li Niu¹, Xieyu Chen¹, Chunmei Ouyang¹, Yuanmu Yang⁴, Xixiang Zhang⁵, Eric Plum⁶, Shuang Zhang⁷, Jiaguang Han¹, Weili Zhang⁸

¹*Center for Terahertz waves and College of Precision Instrument and Optoelectronics Engineering, Tianjin University and the Key Laboratory of Optoelectronics Information and Technology (Ministry of Education), Tianjin 300072, China.*

²*Key Laboratory of Intelligent Computing and Signal Processing, Ministry of Education, Anhui University, Hefei 230039, China*

³*Key Laboratory of Micro-nano Electronic Devices and Smart Systems of Zhejiang Province, College of Information Science & Electronic Engineering, Zhejiang University, Hangzhou 310027, China*

⁴*State Key Laboratory of Precision Measurement Technology and Instruments, Department of Precision Instrument, Tsinghua University, Beijing 100084, China*

⁵*Physical Science and Engineering Division, King Abdullah University of Science and Technology (KAUST), Thuwal 23955-6900, Saudi Arabia*

⁶*Optoelectronics Research Centre and Centre for Photonic Metamaterials, University of Southampton, Highfield, Southampton SO17 1BJ, UK*

⁷*Department of Physics, Faculty of Science, University of Hong Kong, Hong Kong*

⁸*School of Electrical and Computer Engineering, Oklahoma State University, Stillwater, Oklahoma 74078, USA.*

This research dataset should be interpreted and understood in the context of the corresponding manuscript, which has been published in Nano Letters with DOI: 10.1021/acs.nanolett.1c02372. All relevant information regarding the dataset, how it was obtained and its context is contained in the manuscript. The data correspond to the data shown in the figures of the manuscript.

This dataset supports the publication:

Publication DOI: 10.1021/acs.nanolett.1c02372

Title and authors: as above

Journal: Nano Letters

Volume (number) 21(18)

Article pages: 7699-7707

Year: 2021

Dataset DOI: 10.5258/SOTON/D1948

Time of data collection: 2021

Licence: CC-BY

Research funded by: National Key Research and Development Program of China (Grant 2017YFA0701004); the National Natural Science Foundation of China (Grants 61735012, 62025504, 62075158, 11974259, 61875150, 61935015, 62005193, 61901001, U20A20164, 61971001, 61975177, and 62135008); the Tianjin Municipal Fund for Distinguished Young Scholars (18JCJQJC45600); the UK's Engineering and Physical Sciences Research Council (Grants EP/M009122/1 and EP/T02643X/1); the Research Grants Council of Hong Kong (AoE/P-701/20).

File creation: Data file created by Xueqian Zhang in September 2021.
Read me file created by Eric Plum in September 2021.