

INTRODUCTION

[Ultrafast phenomena and terahertz waves: introduction](#)

Li-Guo Zhu, Zhengming Sheng, Harald Schneider, Hou-Tong Chen, and Masahiko Tani

J. Opt. Soc. Am. B 39(3), UPT1-UPT2 (2022)

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[Experimental investigation of the deflagration rate for PBX utilizing terahertz-wave-based Doppler velocimetry](#)

Xilong Huang, Zhaohui Zhai, Hua Fu, Jinhe Li, Ping Li, and Tao Li

J. Opt. Soc. Am. B 39(3), A25-A30 (2022)

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[THz generation by optical rectification of femtosecond laser pulses in a liquid crystal](#)

Lei Wang, Hongsong Qiu, Ping Jin, Shijun Ge, Zhixiong Shen, Wei Hu, Bingxiang Li, Makoto Nakajima, Biaobing Jin, and Yanqing Lu

J. Opt. Soc. Am. B 39(3), A89-A93 (2022)

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[Switchable and tunable bifunctional THz metamaterial absorber](#)

Baohe Zhang and Kai-da Xu

J. Opt. Soc. Am. B 39(3), A52-A60 (2022)

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[Qualitative detection of amino acids in a mixture with terahertz spectroscopic imaging](#)

Bo Wang, Kun Meng, Tian Song, and Zeren Li

J. Opt. Soc. Am. B 39(3), A18-A24 (2022)

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[Self-compression of mJ pulses to 10 fs in a hollow-core waveguide: effects of higher-order dispersion](#)

Qiandong Ran, Hao Li, Qijie Wang, and Ying Zhang

J. Opt. Soc. Am. B 39(3), A1-A8 (2022)



[Detection of aging in the common explosive RDX using terahertz time-domain spectroscopy](#)

Zhijin Yan and Wei Shi

J. Opt. Soc. Am. B 39(3), A9-A12 (2022)



[Non-destructive and high-sensitivity plasma diagnostics based on third-harmonic generation of ultrashort-pulsed laser](#)

Shanbiao Pang, Lunhua Deng, Xiaodong Huang, Ke Liu, Meng Zhang, and Huailiang Xu

J. Opt. Soc. Am. B 39(3), A13-A17 (2022)



[Ultrafast dynamic nonlinear phenomena and mechanisms of photonic crystals over photonic gap and band regions](#)

Xueyang Shi, Yu Zhang, and Xunya Jiang

J. Opt. Soc. Am. B 39(3), A31-A42 (2022)



[Progress, challenges, and opportunities of terahertz emission from liquids](#)

Yiwen E, Liangliang Zhang, Anton Tsyppkin, Sergey Kozlov, Cunlin Zhang, and X.-C. Zhang

J. Opt. Soc. Am. B 39(3), A43-A51 (2022)



[High-resolution dual-energy sixteen-channel Kirkpatrick – Baez microscope for ultrafast laser plasma diagnostics](#)

Shengzhen Yi, Haoxuan Si, Ke Fang, Zhiheng Fang, Jiali Wu, Runze Qi, Xiaohui Yuan, Zhe Zhang, and Zhanshan Wang

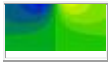
J. Opt. Soc. Am. B 39(3), A61-A67 (2022)



[Frequency tuning for broadband terahertz emission from two-color laser-induced air plasma](#)

Linzheng Wang, Zhelin Zhang, Tianhao Xia, Yanping Chen, and Zhengming Sheng

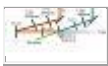
J. Opt. Soc. Am. B 39(3), A68-A74 (2022)



[Comparative study of different optimization methods for single attosecond pulse generation with a two- or three-color gating scheme](#)

Ke Yang, Jin-Xu Du, Guo-Li Wang, Zhi-Hong Jiao, Song-Feng Zhao, and Xiao-Xin Zhou

J. Opt. Soc. Am. B 39(3), A75-A82 (2022)



[Enhancement of terahertz radiation from a filament by using circularly polarized two-color laser fields](#)

Yan-Yun Tu, Chao Meng, Xu Sun, Hai-Zhong Wu, Pan Song, Cong-Sen Meng, Xiao-Wei Wang, Zhao-Yan Zhou, Zhi-Hui Lyu, Dong-Wen Zhang, Zeng-Xiu Zhao, and Jian-Min Yuan

J. Opt. Soc. Am. B 39(3), A83-A88 (2022)