678

Accession Number

12378330

Author

Shalaby M. Merbold H. Peccianti M. Razzari L. Sharma G. Ozaki T. Morandotti R. Feurer T. Weber A. Heyderman L. Patterson B. Sigg H.

Author Unabbreviated

Shalaby Mostafa; Merbold Hannes; Peccianti Marco; Razzari Luca; Sharma Gargi; Ozaki Tsuneyuki; Morandotti Roberto; Feurer Thomas; Weber Anja; Heyderman Laura; Patterson Bruce; Sigg Hans

Author/Editor Affiliation

Shalaby M. Peccianti M. Razzari L. Sharma G. Ozaki T. Morandotti R. : INRS-EMT, Varennes, QC J3X 1S2, Canada

Merbold H. Feurer T. : IAP, University of Bern, Sidlerstrasse 5, Bern 3012, Switzerland

Weber A. Heyderman L. Sigg H. : LMN, Paul Scherrer Institut, Villigen 5232, Switzerland

Patterson B. : SwissFEL, Paul Scherrer Institut, Villigen 5232, Switzerland

Title

Concurrent field enhancement and high transmission of THz radiation in nanoslit arrays

Source

Applied Physics Letters, vol.99, no.4, 25 July 2011, 041110 (3 pp.). Publisher: American Institute of Physics, USA.

Abstract

We experimentally and numerically investigate the transmission of THz radiation through uniform nanoslit arrays. These structures are capable of inducing plasmon-mediated field enhancement while concurrently providing high field transmission. Combined with intense THz radiation, estimated field strengths as high as 26 MV/cm are obtained in the near-field regime which will facilitate nonlinear THz experiments. (17 References).