University of Nebraska - Lincoln DigitalCommons@University of Nebraska - Lincoln

Donald Umstadter Publications

Research Papers in Physics and Astronomy

1-1-2003

Erratum: "Phase dependence of Thomson scattering in an ultraintense laser field" *Phys. Plasmas* 9, 4325 [2002]

Fei He University of Michigan

Y. Y. Lau University of Michigan

Donald P. Umstadter University of Nebraska-Lincoln, donald.umstadter@unl.edu

Trevor Strickler University of Michigan

Follow this and additional works at: https://digitalcommons.unl.edu/physicsumstadter

Part of the Physics Commons

He, Fei; Lau, Y. Y.; Umstadter, Donald P.; and Strickler, Trevor, "Erratum: "Phase dependence of Thomson scattering in an ultraintense laser field" *Phys. Plasmas* 9, 4325 [2002]" (2003). *Donald Umstadter Publications*. 2.

https://digitalcommons.unl.edu/physicsumstadter/2

This Article is brought to you for free and open access by the Research Papers in Physics and Astronomy at DigitalCommons@University of Nebraska - Lincoln. It has been accepted for inclusion in Donald Umstadter Publications by an authorized administrator of DigitalCommons@University of Nebraska - Lincoln.

Erratum: "Phase dependence of Thomson scattering in an ultraintense laser field" [Phys. Plasmas 9, 4325 (2002)]

Fei He, Y. Y. Lau, Donald P. Umstadter, and Trevor Strickler Department of Nuclear Engineering and Radiological Sciences, University of Michigan, Ann Arbor, Michigan 48109-2104

(Received 10 October 2002; accepted 10 October 2002)

[DOI: 10.1063/1.1526832]

The conclusions of this paper on the frequency scaling of the peak intensity of Thomson scattering of an electron that is initially at rest are restricted to the backscatter direction of the laser. All data were obtained only for the backscatter direction. In the forward direction of the laser, there is no frequency upshift. At an oblique angle that depends on the normalized laser field amplitude, $\omega/\omega_0 \sim O(a^3)$ for large *a*, where ω_0 is the laser frequency and *a* is the normalized laser electric field amplitude. Also, in Fig. 3, a = 10.