

A few publications: Please check CV for details

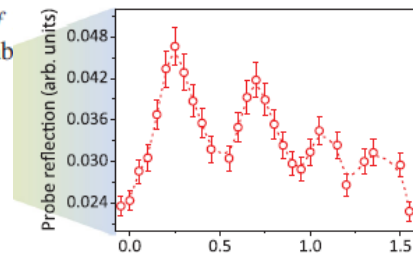
PRL 114, 115001 (2015)

PHYSICAL REVIEW LETTERS

Terahertz Acoustics in Hot Dense Laser Plasmas

Amitava Adak,¹ A. P. L. Robinson,² Prashant Kumar Singh,¹ Gourab Chatterjee,¹ Amit D. Lad,¹ John Pasley,^{1,2,3} and G. Ravindra Kumar^{1,*}

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(Received 4 November 2014)



APPLIED PHYSICS LETTERS 109, 174101 (2016)

Efficient transport of femtosecond laser-generated fast electrons in a millimeter thick graphite

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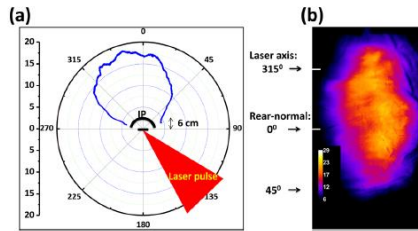


FIG. 3. (a) Polar plot for the angular distribution of the hot electrons emitted from the rear side of the graphite target, calculated by taking the vertical line-out from the IP image in (b). The color bar in the IP image indicates the flux in arbitrary units.

PHYSICS OF PLASMAS 24, 072702 (2017)



Controlling femtosecond-laser-driven shock-waves in hot, dense plasma

Amitava Adak,¹ Prashant Kumar Singh,¹ David R. Blackman,² Amit D. Lad,¹ Gourab Chatterjee,¹ John Pasley,^{2,3} A. P. L. Robinson,³ and G. Ravindra Kumar^{1,a)}

nature COMMUNICATIONS

ARTICLE

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Magnetic turbulence in a table-top laser-plasma relevant to astrophysical scenarios

Gourab Chatterjee^{1,†}, Kevin M. Schoeffler², Prashant Kumar Singh¹, Amitava Adak¹, Amit D. Lad¹, Sudip Sengupta³, Predhiman Kaw³, Luis O. Silva², Amita Das³ & G. Ravindra Kumar¹

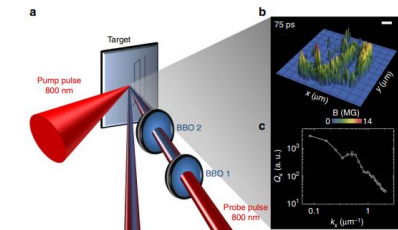


Figure 1 | Experimental set-up and representative magnetic-field polarogram and turbulent energy spectrum. (a) Schematic of the experimental set-up.

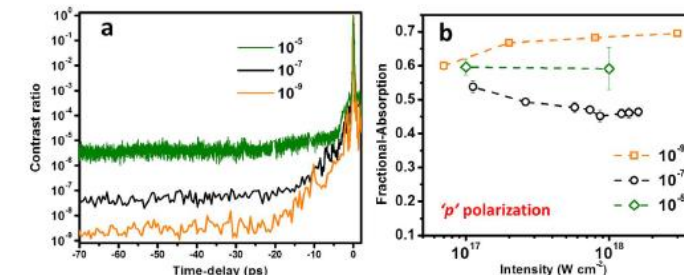
SCIENTIFIC REPORTS

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Contrasting levels of absorption of intense femtosecond laser pulses by solids

Prashant Kumar Singh¹, Y. Q. Cu², Amitava Adak¹, Amit D. Lad¹, Gourab Chatterjee¹, P. Brijesh^{1,2}, Z. M. Sheng^{3,4,5,6} & G. Ravindra Kumar¹

The absorption of ultraintense, femtosecond laser pulses by a solid unleashes relativistic electrons,



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