

Accepted Manuscript

Research paper

Colliding the hydrocarbon building blocks of astrochemical polycyclic aromatic hydrocarbons with 8 keV He^{+} and H_2^{+} ions: luminescence from methane, acetylene, benzene and naphthalene

Shaan Rashid, Alicia Sit, Brandi West, Paul M. Mayer

PII: S0009-2614(16)30941-1

DOI: <http://dx.doi.org/10.1016/j.cplett.2016.11.052>

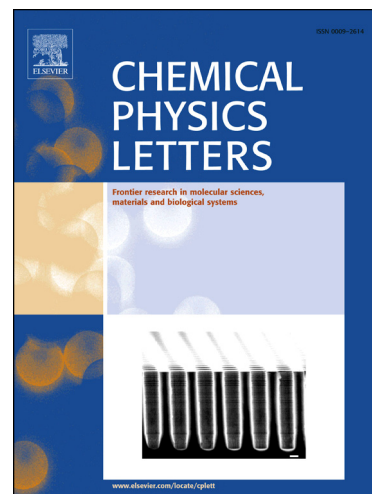
Reference: CPLETT 34359

To appear in: *Chemical Physics Letters*

Received Date: 31 October 2016

Revised Date: 24 November 2016

Accepted Date: 25 November 2016



Please cite this article as: S. Rashid, A. Sit, B. West, P.M. Mayer, Colliding the hydrocarbon building blocks of astrochemical polycyclic aromatic hydrocarbons with 8 keV He^{+} and H_2^{+} ions: luminescence from methane, acetylene, benzene and naphthalene, *Chemical Physics Letters* (2016), doi: <http://dx.doi.org/10.1016/j.cplett.2016.11.052>

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

Colliding the hydrocarbon building blocks of astrochemical polycyclic aromatic hydrocarbons with 8 keV He⁺ and H₂⁺ ions: luminescence from methane, acetylene, benzene and naphthalene

Shaan Rashid, Alicia Sit, Brandi West and Paul M. Mayer*

Department of Chemistry and Biomolecular Sciences, University of Ottawa, 10 Marie-Curie, Ottawa, Ontario, Canada K1N 6N5

Running Title: keV collisions with He⁺ and H₂⁺

Keywords: keV collision, methane, acetylene, benzene, naphthalene, collision induced emission, excited states, H₂⁺, He⁺

Corresponding author. Tel: (613) 562-5800 ext. 6038; Fax: (613) 562-5170. E-mail address: pmmayer@uottawa.ca

Download English Version:

<https://daneshyari.com/en/article/5378459>

Download Persian Version:

<https://daneshyari.com/article/5378459>

[Daneshyari.com](https://daneshyari.com)