

R T S H R E S F D  
S S N

<sup>1</sup>Sae Ke Lab a . . f S e a i c e a d M i c r o c e , I i e f S e i c d c ,  
C h i e e A c a d e . . f S c i e c e , B e i j i g 1 0 0 0 8 3 , C h i a  
<sup>2</sup>C e g e f M a e i a S c i e c e a d O - E c o n o m i c T e c h n o l o g y ,  
U i e i . f C h i e e A c a d e . . f S c i e c e , B e i j i g 1 0 0 0 4 9 , C h i a  
<sup>3</sup>S e g e i c I n s t i t u t e f Q a n g I n s t i t u t e f P h i s i c s ,  
U i e i . f S c i e c e a d T e c h n o l o g y f C h i a , H e f e i , A h i 2 3 0 0 2 6 , C h i a  
<sup>4</sup>R e w a b e a d S a i a b e E e g I i e , U i e i . f C a d , B e i j i g , C a d 8 0 3 0 9 , U S A  
( 6 A r 2 0 1 7 ; r e v i s e d m a n u s c r i p t 2 9 M a y 2 0 1 7 ; a c c e p t e d 2 1 M a y 2 0 1 7 )  
r e v i s e d m a n u s c r i p t 2 9 M a y 2 0 1 7 ; a c c e p t e d 2 1 M a y 2 0 1 7 )

$k_z, \Delta E_{ss}(0; k_z) \approx \frac{1}{4} 2\alpha_R k_z \hbar \gamma k_z^3$   
 $E_{41} = \Delta E_{ss}(0; k_z) \approx \frac{1}{4} 2\alpha_R k_z \hbar \gamma k_z^3$   
Ra h b a e f f e c i D a w i e . ( )  
 $\alpha_R = 100 m$ ,  $\alpha_R = 50-100 m$   
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[ 20 ], [ 4,8,21 ], [ 1,2,7 ], [ 22-26 ]  
M e h d : D i e c e a a i f h e e g h f h e  
Ra h b a e f f e c . —  
[ 27 )  
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 [ 29 r , r m f , r , - r .  
 m . f , . 3, 650 (2007).

[ 30 r . Br , r -  
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 . B 65, 241305 (2002).  
 [ 31 A . r , A . r ,  
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 m r A r , . 97, 036805  
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 [ 32 r , r , r , f , r ,  
 A r , . B 81, 155449 (2010).