



Electrical Driven Motility and Rotational Dynamics of Colloidal Platelet in Nematic Liquid Crystal

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$$A_1 = v \cdot E \cdot (1 - \frac{\pi}{2}) \cdot \dots, NLC \dots$$

$$s \cdot s \cdot \dots$$

$$t \cdot x \cdot \dots$$

$$\dots (k \cdot t \cdot z) \cdot \dots$$

$$\dots s \cdot s \cdot \dots$$

$$IV \dots$$

$$\dots$$

$$\dots$$

$$\dots$$

[4]. S. SU-8. s l-v e t1 H 49(t s)]TJ-14U5t

$$FCPM \dots s \cdot B \dots v \cdot t \cdot s \dots$$

$$\dots NLC \dots FCPM \dots$$

$$ZLI-3412$$

$$0.0, \dots$$

$$5CB.$$

$$NLC \dots$$

$$\dots (k \cdot x),$$

$$\dots [3], s \cdot s \cdot v \dots$$

$$F \cdot (1) \cdot \dots$$

$$\dots$$

$$\dots < 1.$$

$$\dots$$

$$\dots$$

$$NLC, \dots$$

$$\dots$$

$$B \dots < 1.2, \dots$$

$$\dots F \dots$$

$$\dots$$

$$\dots$$

$$F \cdot s \cdot (1) \dots (1) \dots (\frac{\pi}{2}).$$

3() (6.4) (4.5) At >

0 p, 0 s 0 p 1/4 0/2
s x t t . F , v x t t , v
j t s v t t t , s t t
[F. 2()] s t t s t s s
10% t v t s F s v s
s v s v t s NLC, t

Ass s F. 2()
0 r / 2 p 2 p 0 / p 2 1 1 , v r 1/4 0.146
s t t v s s t , 1/4 12.1 s v
F. i t s t ZLI-3412 , / 1/4 11 r s

At - v , s s v
A v 1/4 5
s s v v s s
t s s v (s .
t t) , v x t s s
t s , s S , / 2
s s s t t p t s l
t t s x s.

At v t s v 1/4 5 , t t t
ity s t 1/4 2 , s v
t t t z [s , F. 3()] s v l s
7/4 t t t v t v t t

Il p t t s v t l l
Il t t s t t s l
t s v t t t , 0 // b 1/2 / 0 e 0 e p 1/2
/ p [8] t t t s t t s
s v t l s t s t s t s
P x , NLC s

s s s t t s s
s s n o r b t s
F. s t s FCPM s t s
P k x , s t s t s s t
o r b n o r b 1/4 , o r p x
p o r b z s t s v s l s

n o r b s s t
t t s t s t t t
s s t s l t t t s t
n o r b t n o r b t l l E
s t s x t t t t s t s

8-627.3(s)]TJ0-1.15

[Fr. 3()]

... s s ... l s t ...
... t s ... v t ... s (t v l ... s t v
... s). W s v s v s ... t t s s ... 5CB
... s t ... s t ... s ... 0. T s l ... s s
... 5CB s l - v v ... s t ... s t t ()
... s t ... l l ... s t ... (e 11).

U s ... l s s ... v ... s ... t ...
... t s ... i z ... t ... t t ... l l ... s ... j t
... x s ... x y ... l ... s s ... 1/4 7 / 2 t
... 0 [Fr. 3()]. A ... l ... t j ... s ...
... 1/4 6, 8, 10 V ... s ... v ... Fr. 3(). A t l t t s,
... s ... t t ... 0 p ... 1/4 . 0 ... / , p v ...
... 0 ... 0 p ... 0.2 d ... t ...

... s ... t ... l l ... v ... s ...
... [Fr. 3()] ... A ... l ... v ... t x ... l ... t ...
... t ... l ... t ... l ... s ... l ... l ... t ...
... l ... s ... l ... t ... t ... s s ...
... l ... s t ... l ... t ... l ... s t ... t ... s ...
... n o r ... l ... t ... t ... s ...
... s l ... T ... l s ... t ... s ... t ... s t ... t ...

... s s ... s l ... t ... t 41 (. t t s ,) [T J - 15.676 - 1.1598 T D (. . .) 9 - (6 (t)) 20.33140 T D () T j / F 51 F 1 29420 T D () T j / F 71 T
... s t ... t] ...
... (t) - 941 (s . s s) 2934.7 () 3954.7 v
... t (s) - 32521 (.

√ ◀ ◻ / 2

(t)

... s t ...)

... l t l ...

s l