

## ملخص الرسالة

1 :1:2 ) .

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-1

(EDAX)

(X-Ray)

(IR)

(NMR)

.(DSC)

(orthorhombic)

."a ≠ b ≠ c"

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. 400

-2

. 470 273

.

$10^6$  - 500

. 470 273

,

$$.\sigma_{tot}=\sigma_{dc}+A\omega^s$$

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$$10^6\text{ - }500\qquad\qquad\qquad-3$$

$$.\qquad470\qquad273$$

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$$\varepsilon^{\prime},\varepsilon^{\prime\prime}$$

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$$\varepsilon^{\prime},\varepsilon^{\prime\prime}$$

$$-4$$

$$273\qquad\qquad\qquad10^6\text{ - }500$$

$$.\qquad373$$

$$.\sigma_{tot}=\sigma_{dc}+A\omega^s$$

$$\sigma_{tot}=A\omega^s$$

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-5

500 Hz      323K

.%50

-6

373      273       $10^6 - 500$

$\epsilon'', \epsilon'$

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$\epsilon'', \epsilon'$

-7

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1.2 V (i)

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(ii)

(iii)

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