



上海交通大学
SHANGHAI JIAO TONG UNIVERSITY



2012.11



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- ◆ 1988
- ◆ 1996
- ◆ 1999
- ◆ 2000
- ◆ 2000
- ◆ 2004
- ◆ 2008
- ◆ 2010
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EFSA

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1996

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103

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32

31

56





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$\frac{3}{4}$

10





ACS ACO PG







Bt





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EDCs





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Our Stolen Future

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EDCs

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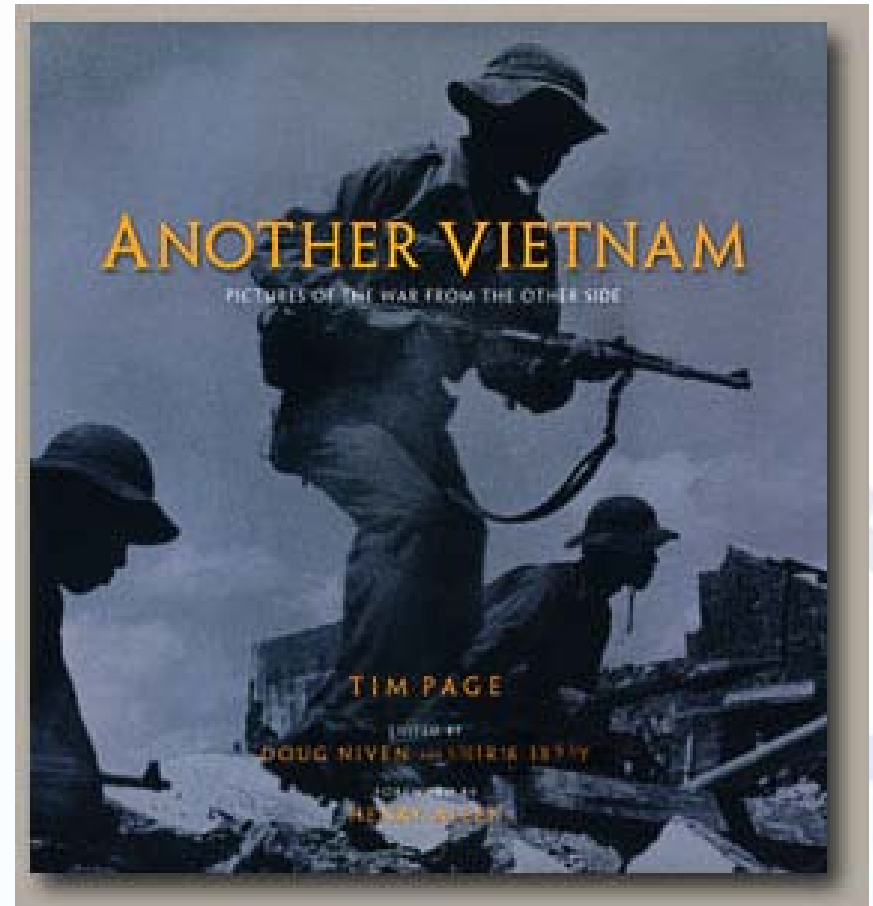




EDCs

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hormesis

◆ hormesis

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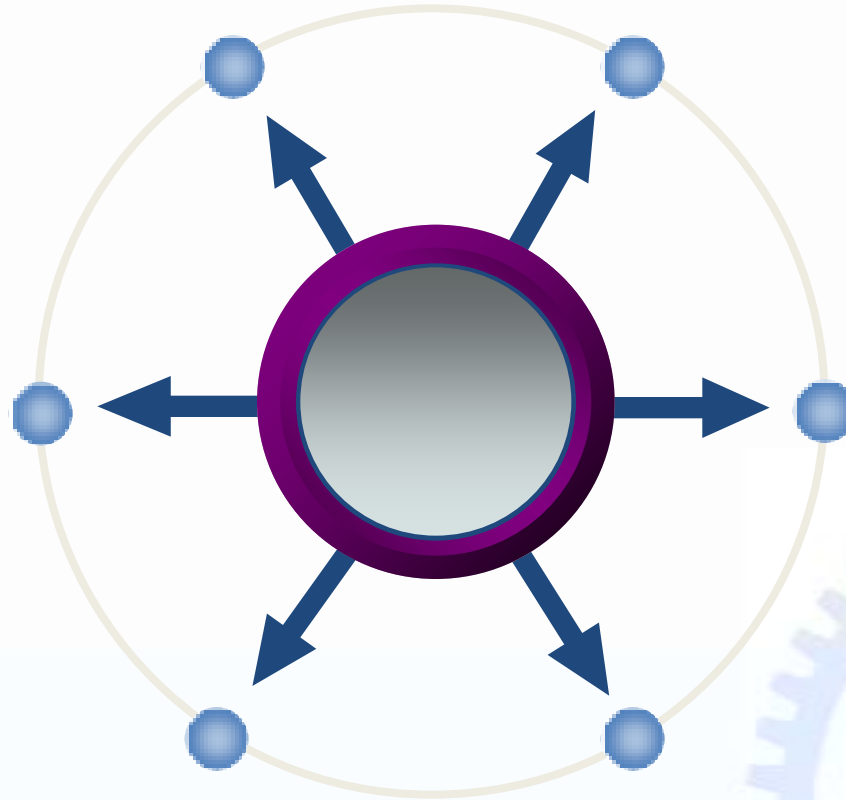
3

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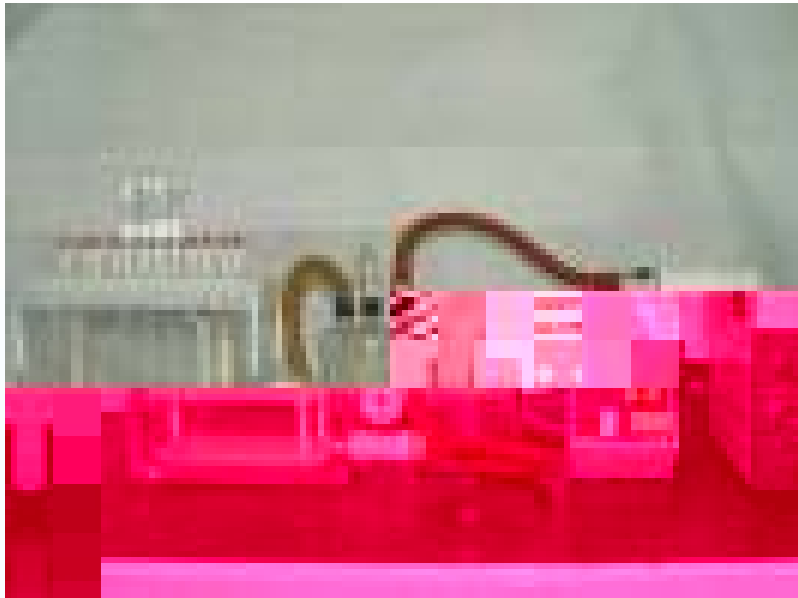


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2012





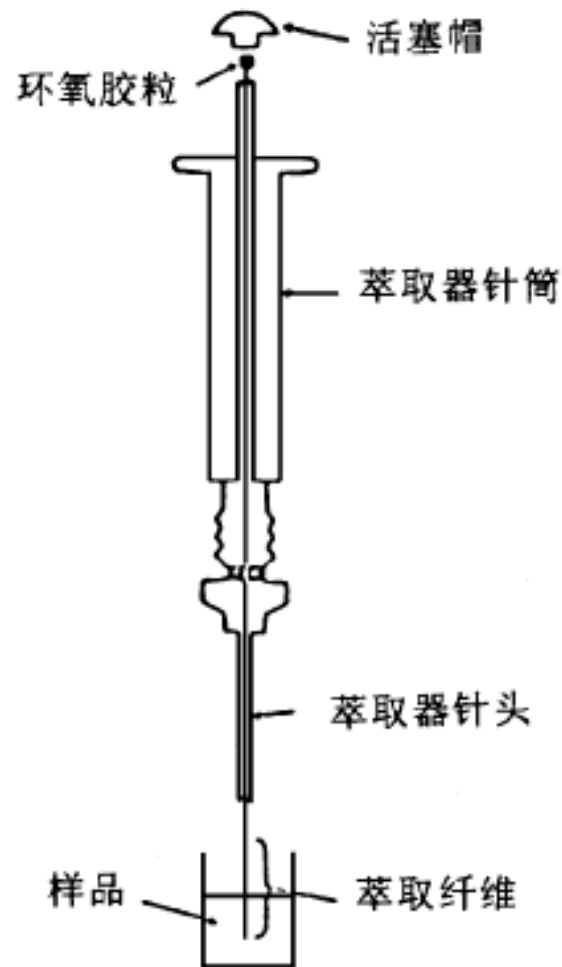
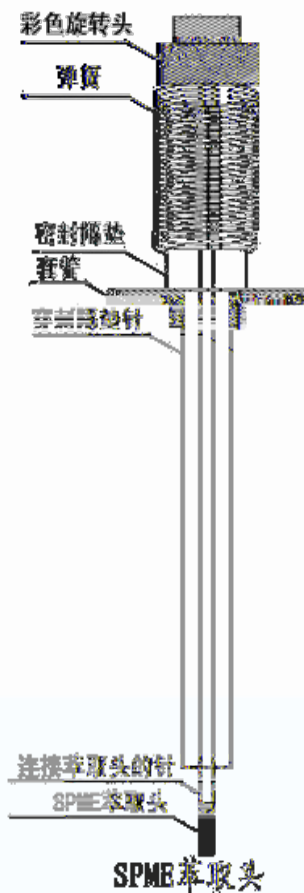
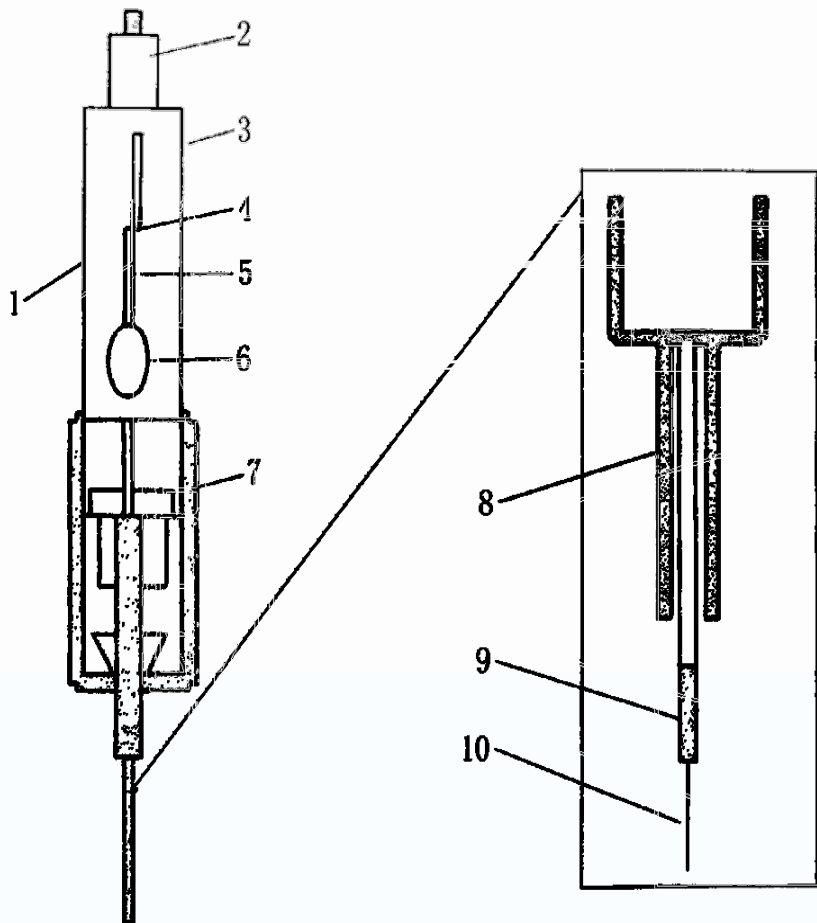
SPME

(GC)

(HPLC)

SPME





固相微萃取(SPME)萃取器



5000

6500

50

100

1200





(ASE)

(50-200)

(10.3-20.6MPa)

1g

1.5mL

15min

EPA





(SFE)

SFE

SFE





➔ (MSPD)

➔ (1 4)

MSPD





MSPD/HPLC - MS/MS

4 2-

C18

MCX

(MRM)

(2012



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GP—MSE

(GC—MS)

(PCNB)

(PCA)

(PCTA)

2011

53

1896



methods, MRMs

20 80

Multi-residue





1

2

3



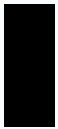


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NS)





GC

HPLC

DI

MS

GC

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GC-MS

HPLC

MS

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LC-MS

MS

MS





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(SPME/GC-MS)

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2012

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1

2





3

4 X

X



60

1896



DNA





PCR



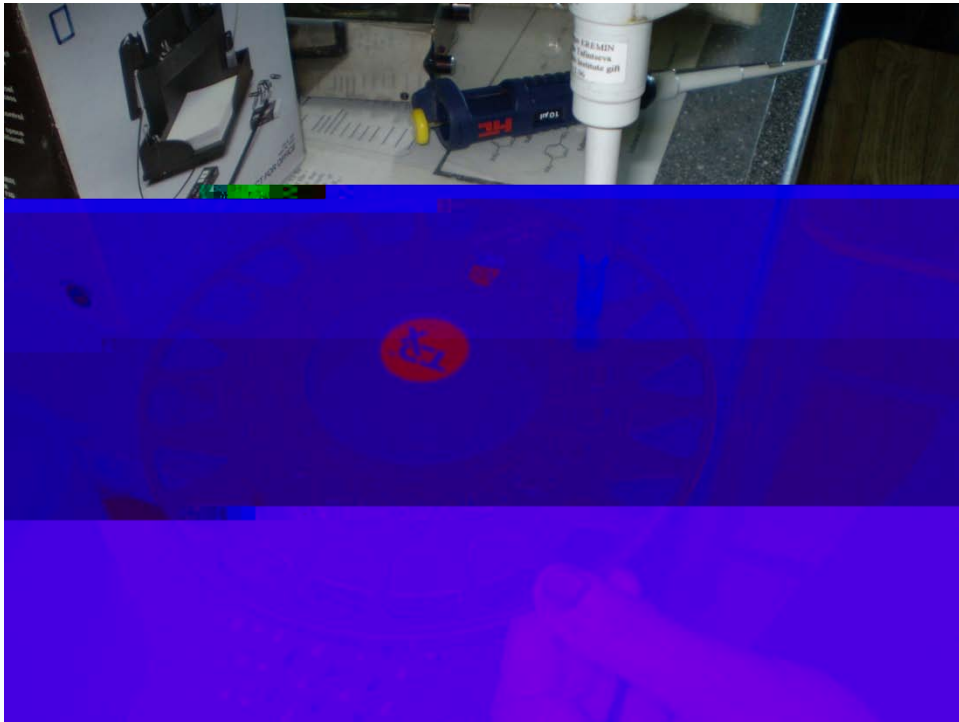


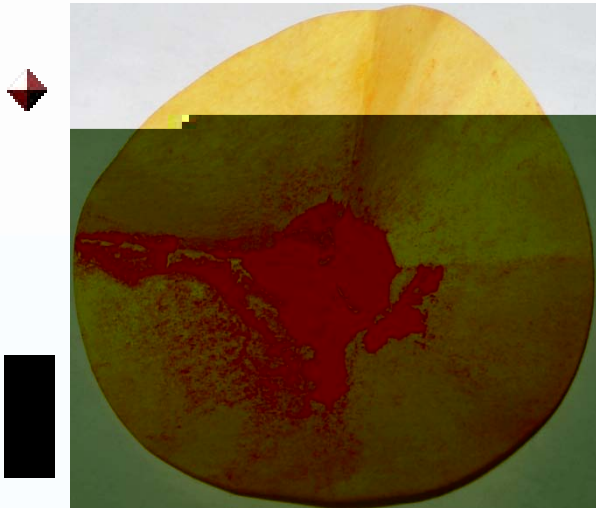
FRET





(Fluorescence Polarization Immunoassay FPIA)





2010

65

1896



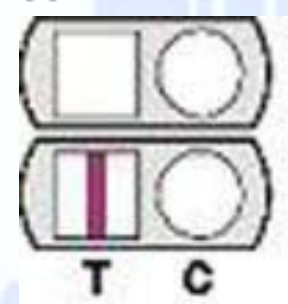
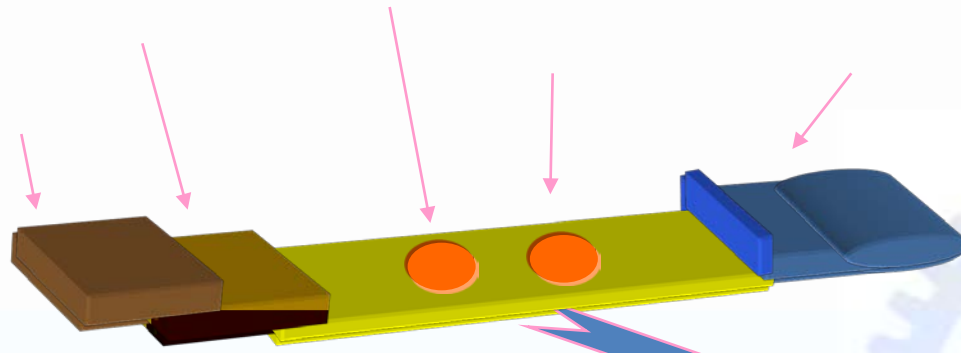
ELISA

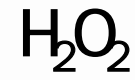
ELISA



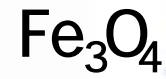


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TMB





Fe_3O_4

Fe_3O_4

ELI SA



2011

69

1896



PCR

〈 PCR

DNA

〈 DNA

DNA RNA

〈 PCR

DNA

PCR

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PCR

PCR





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DNA

DNA





(Aptamer) "

" (Systematic evolution of ligands by
exponential enrichment, SELEX

PCR





ATP





(RRS)

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1896



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TFA)





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Thanks for your attention

