

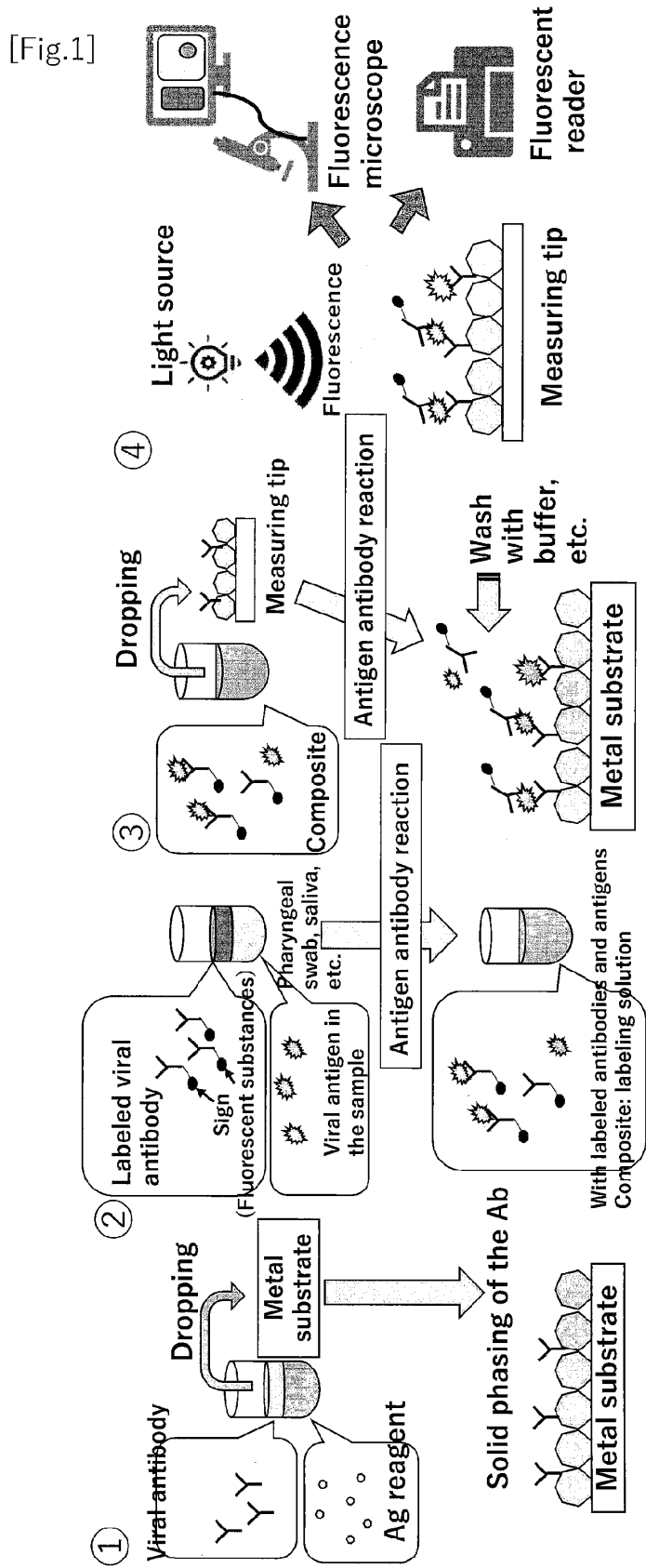


Fig.1

[Fig.2A]

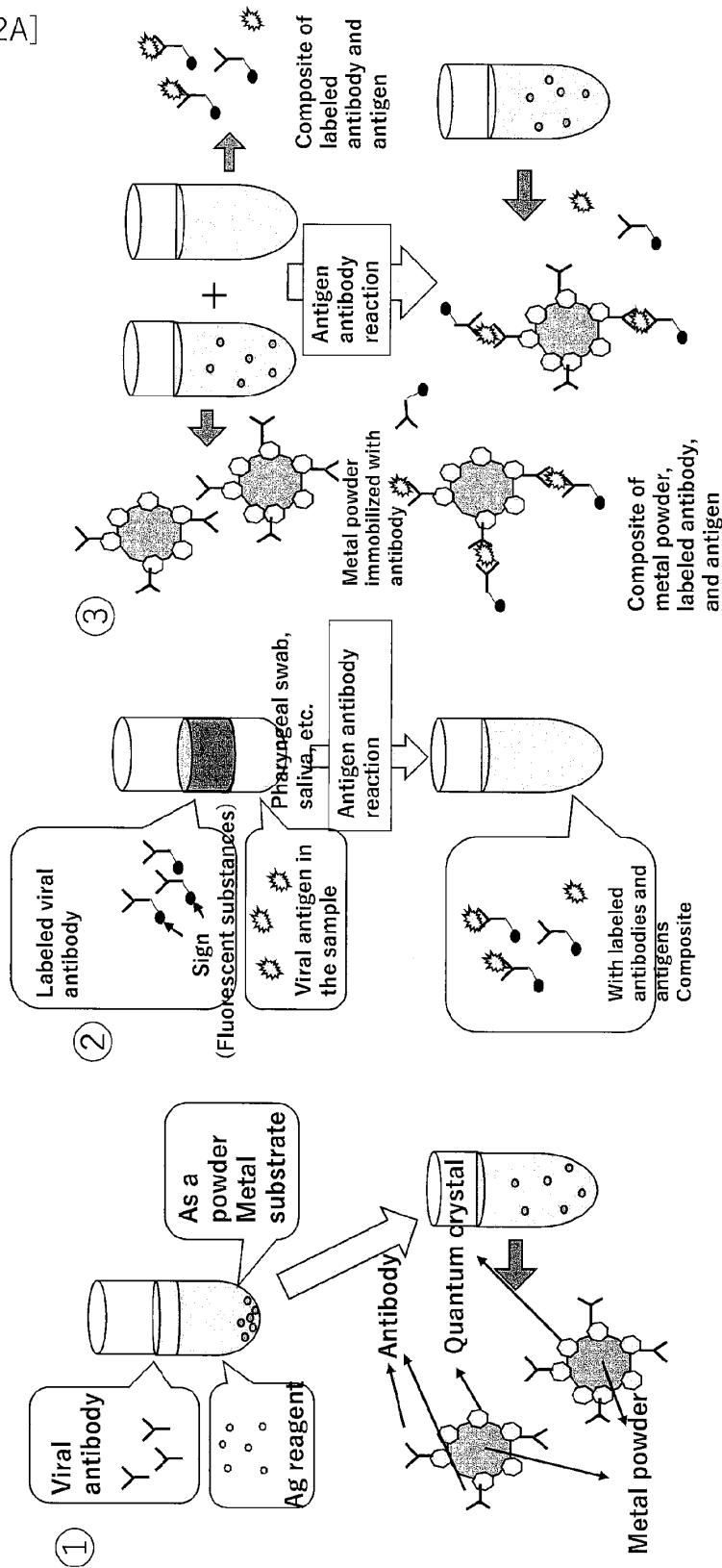


Fig.2A

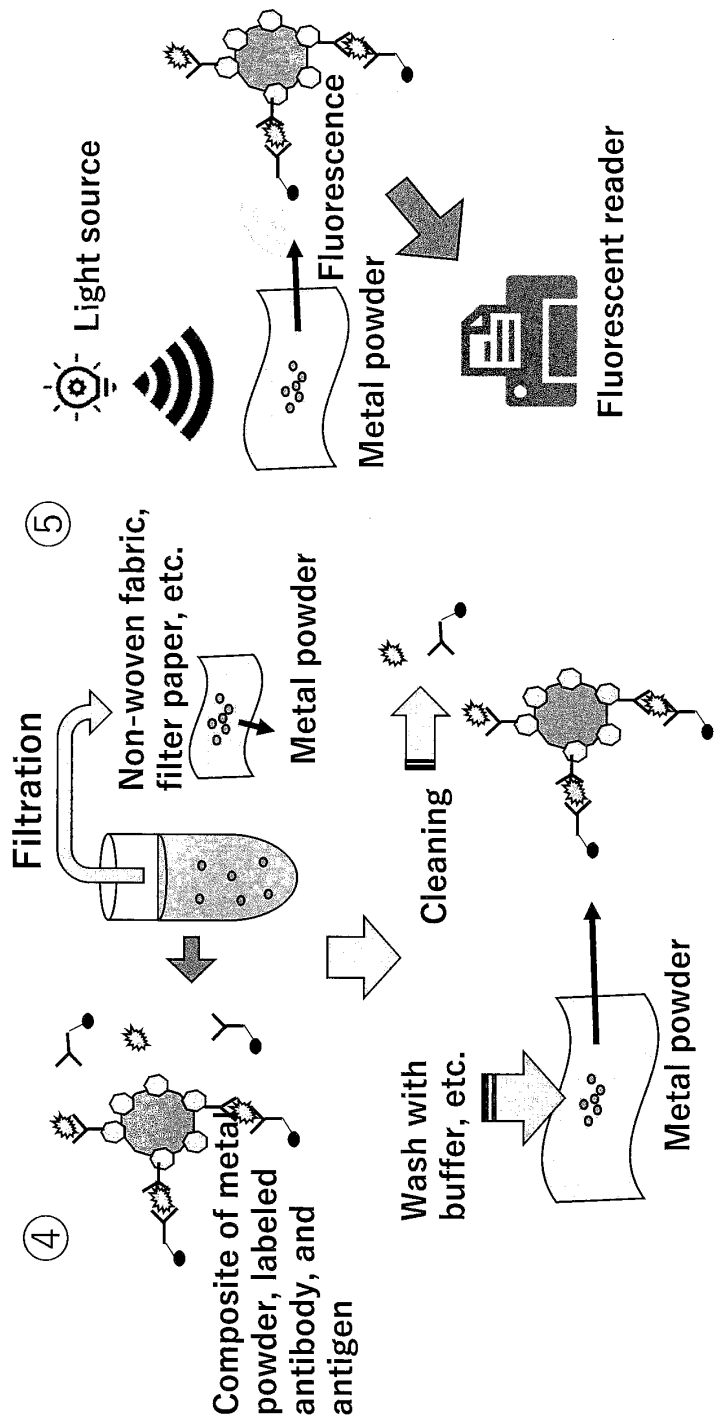


Fig.2B

[Fig.3]

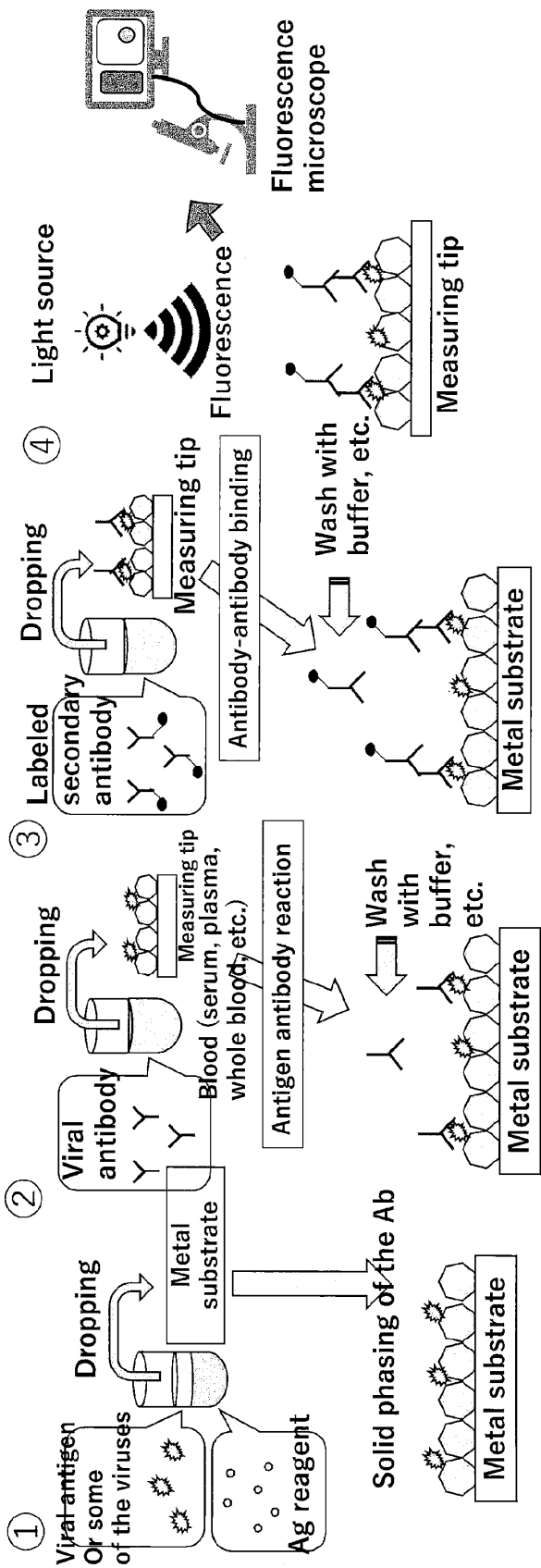


Fig.3

[Fig.4]

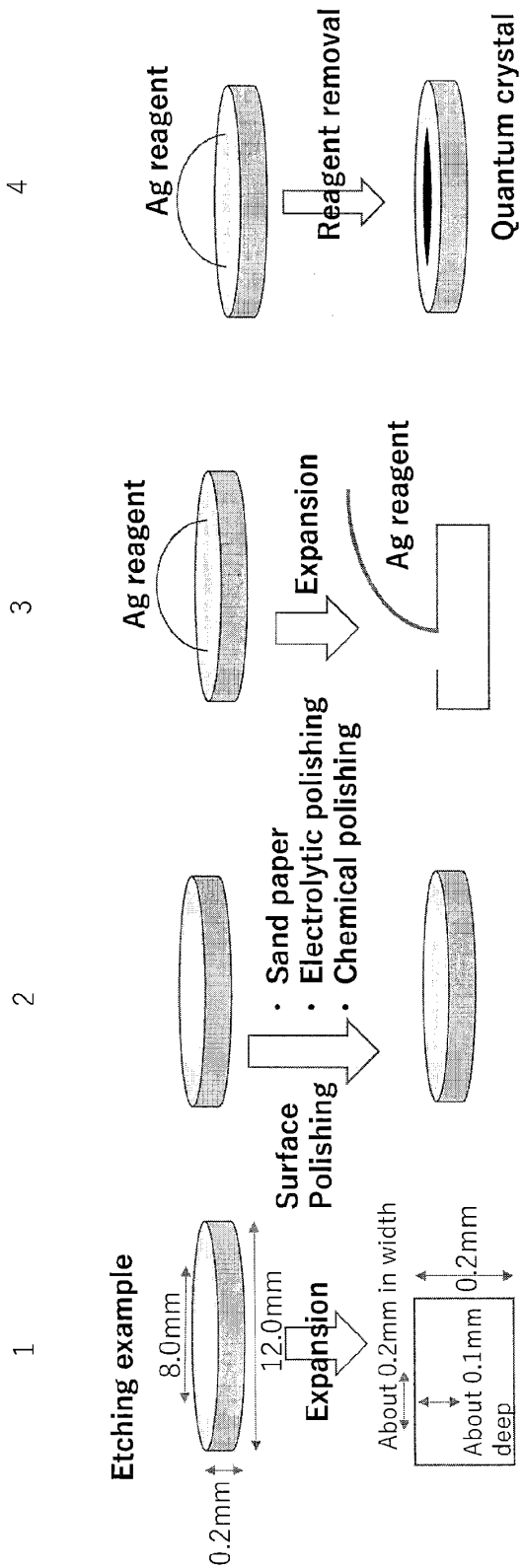


Fig.4

[Fig.5]

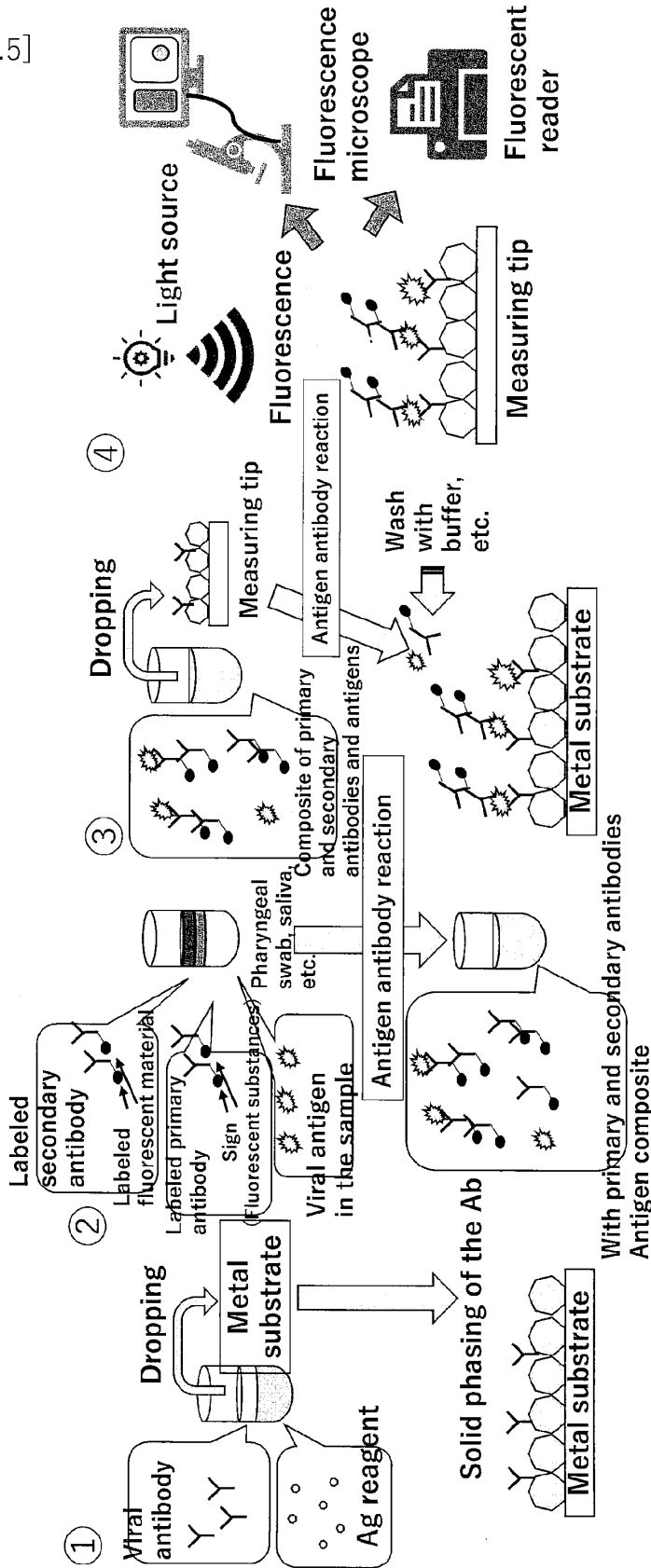


Fig.5

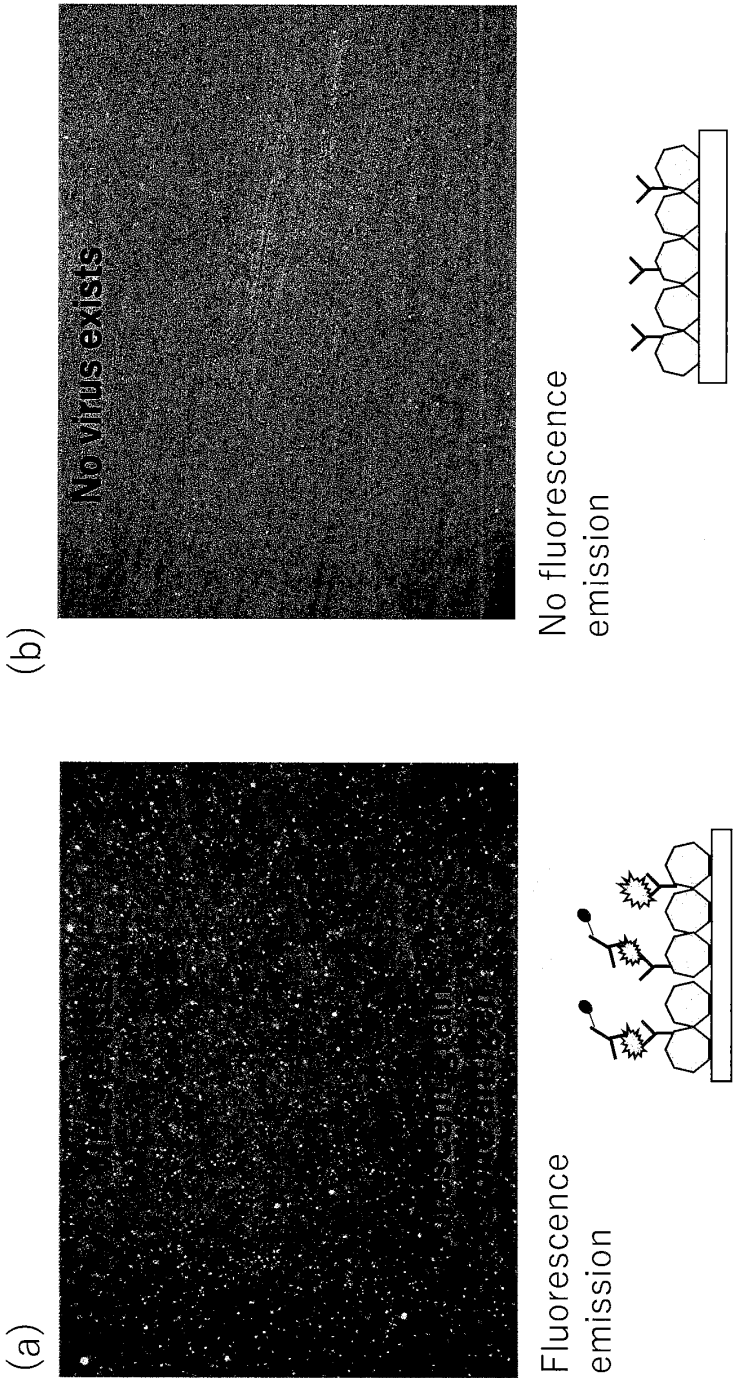
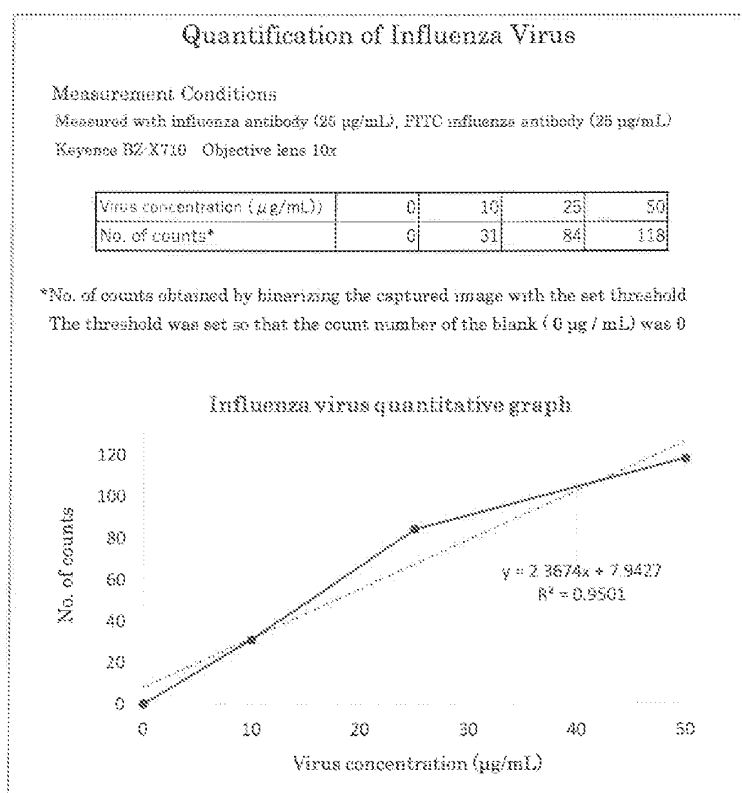


Fig.6

[Fig. 7]



[Fig.8A]
Fluorescence image measurement and counting automation system (B)

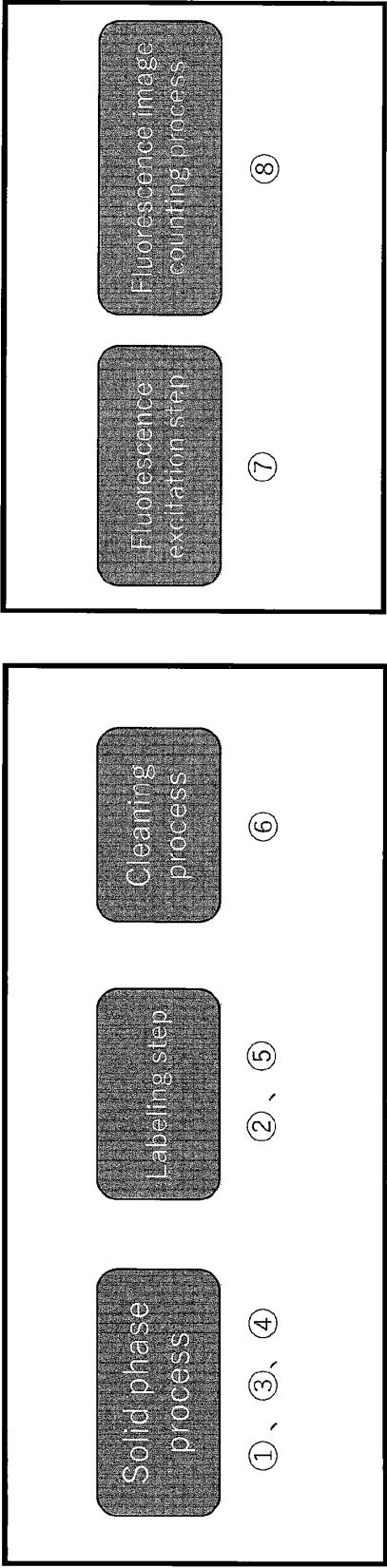
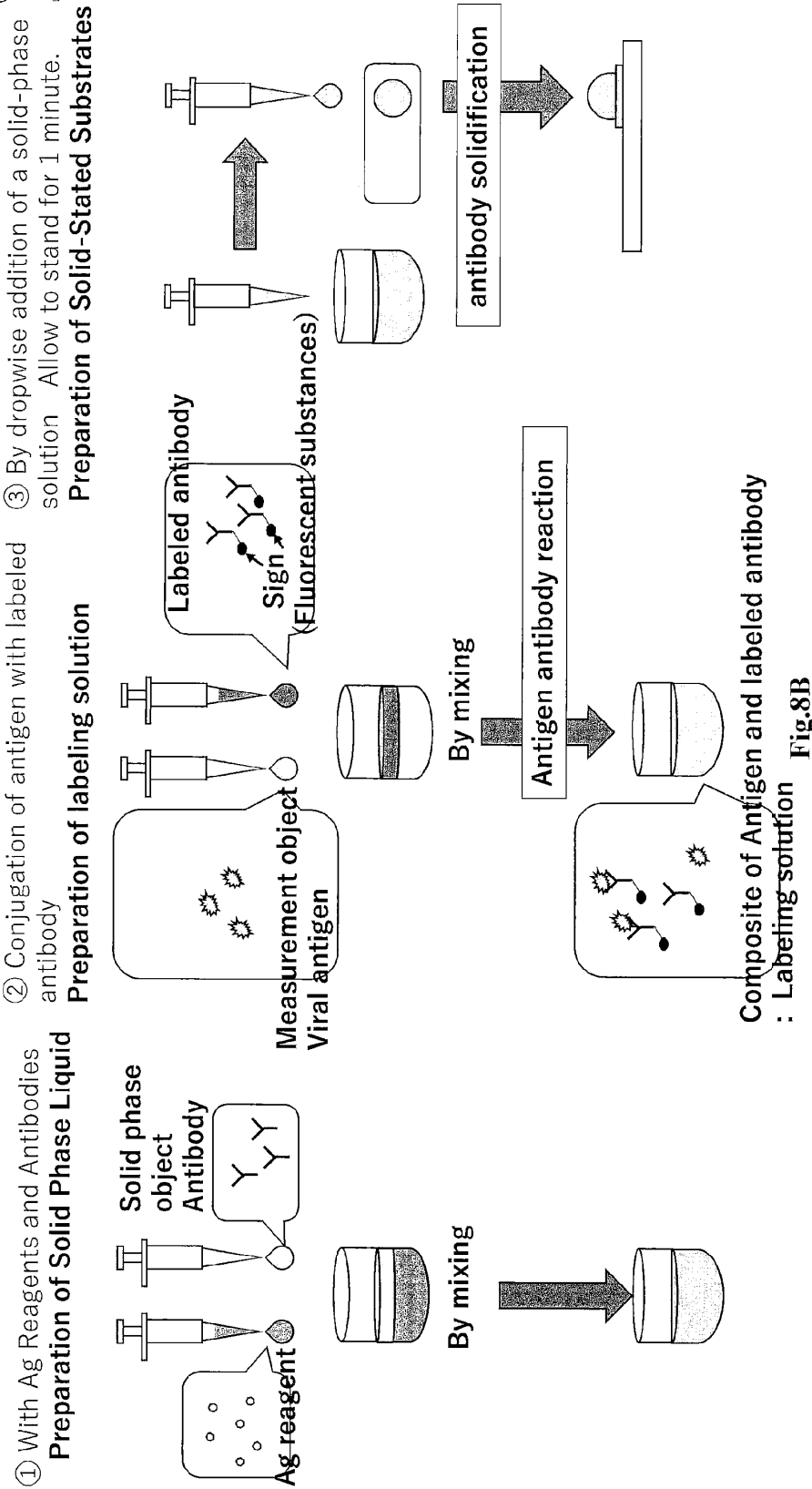
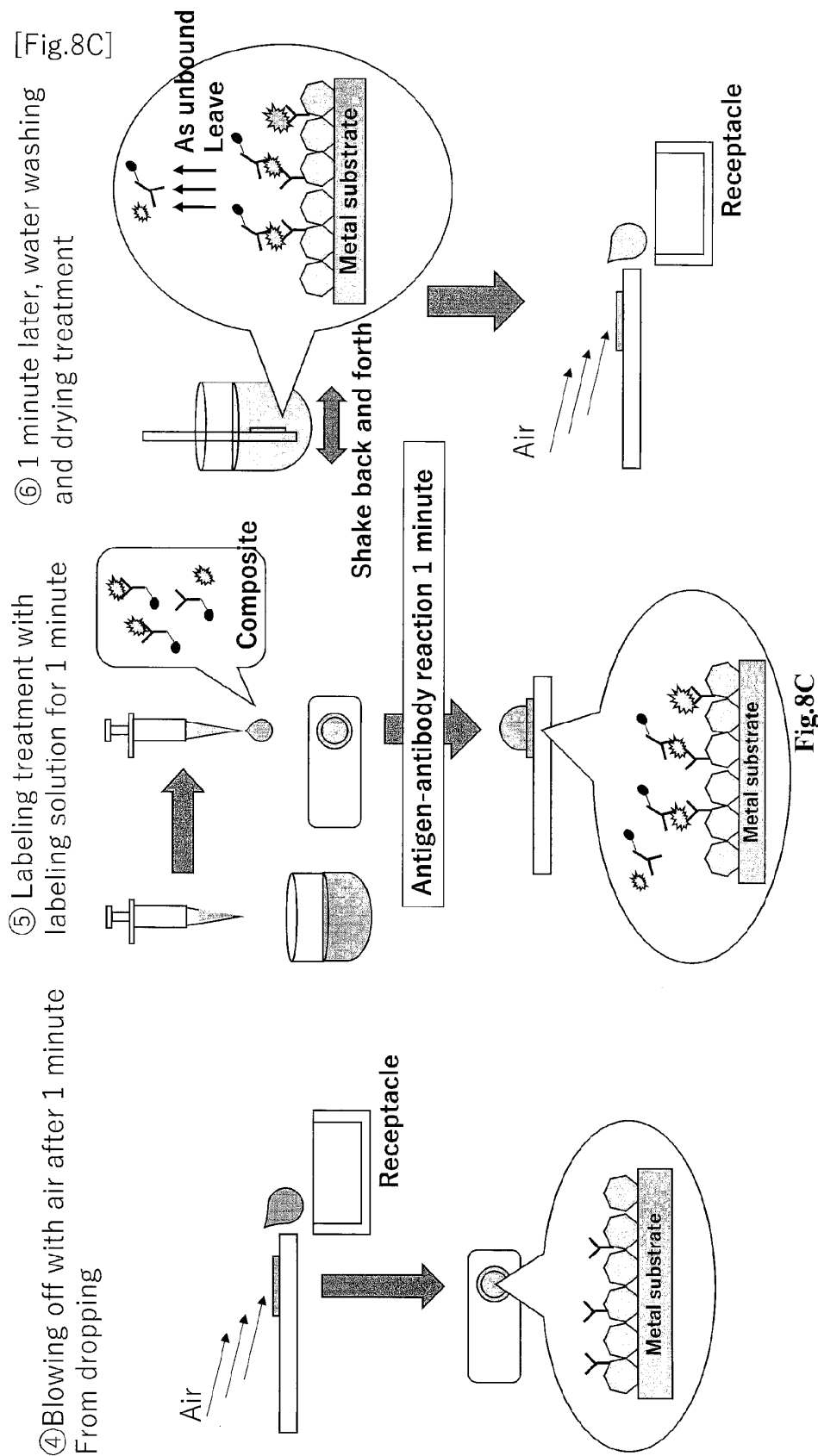


Fig.8A

[Fig.8B]





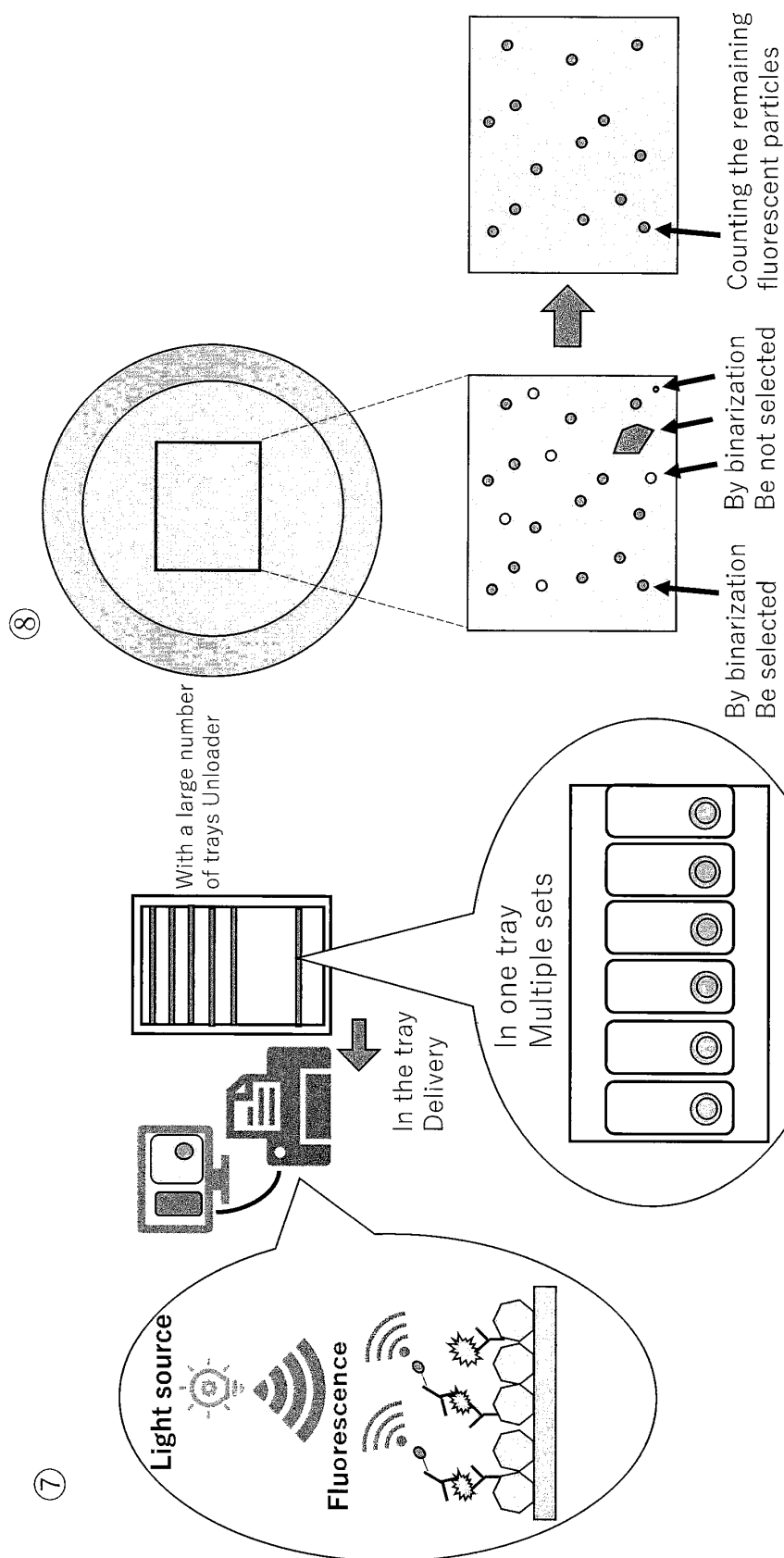


Fig.8D

(a) Ag2000ppm+Buffer
(b) Ag2000ppm plus influenza antibodies (50 μ g/ml)
(c) Ag2000ppm plus influenza virus (50 μ g/ml)

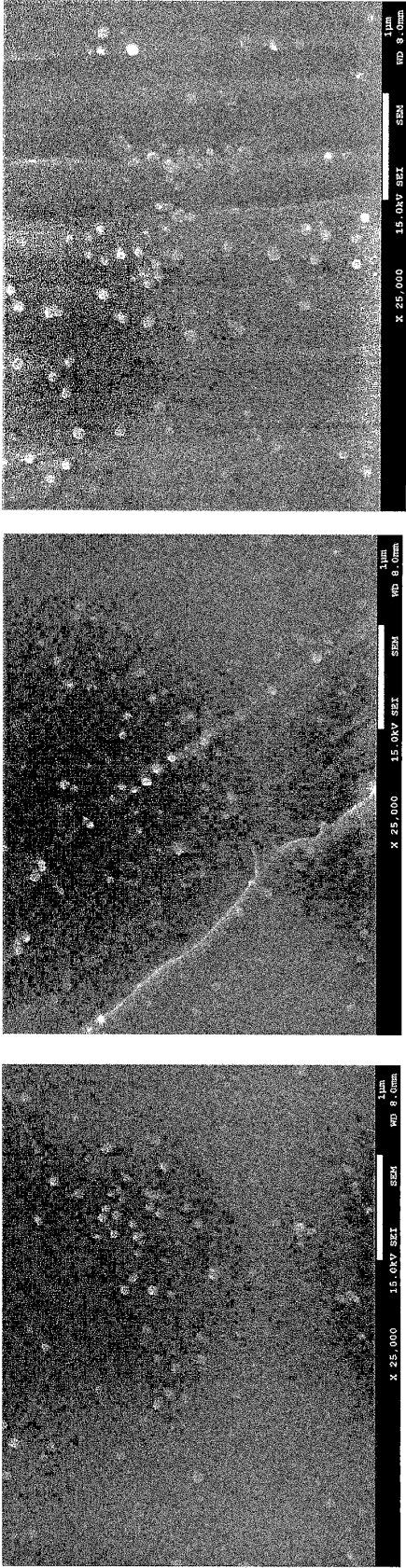


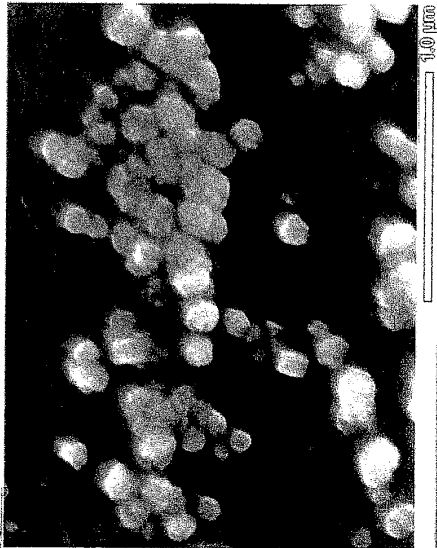
Fig.9-1

Ag4000ppm+Buffer

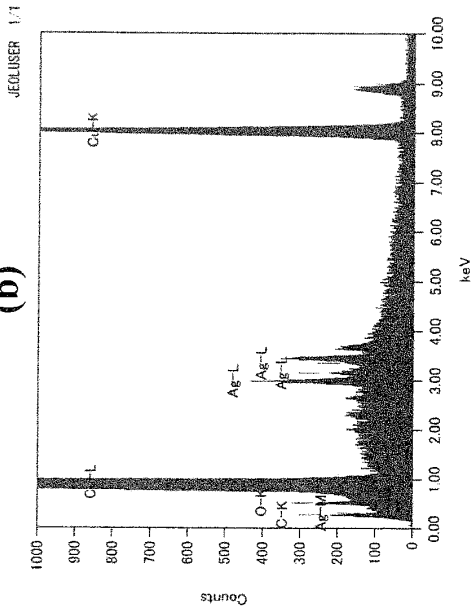
view005

視野005

(a)



(b)

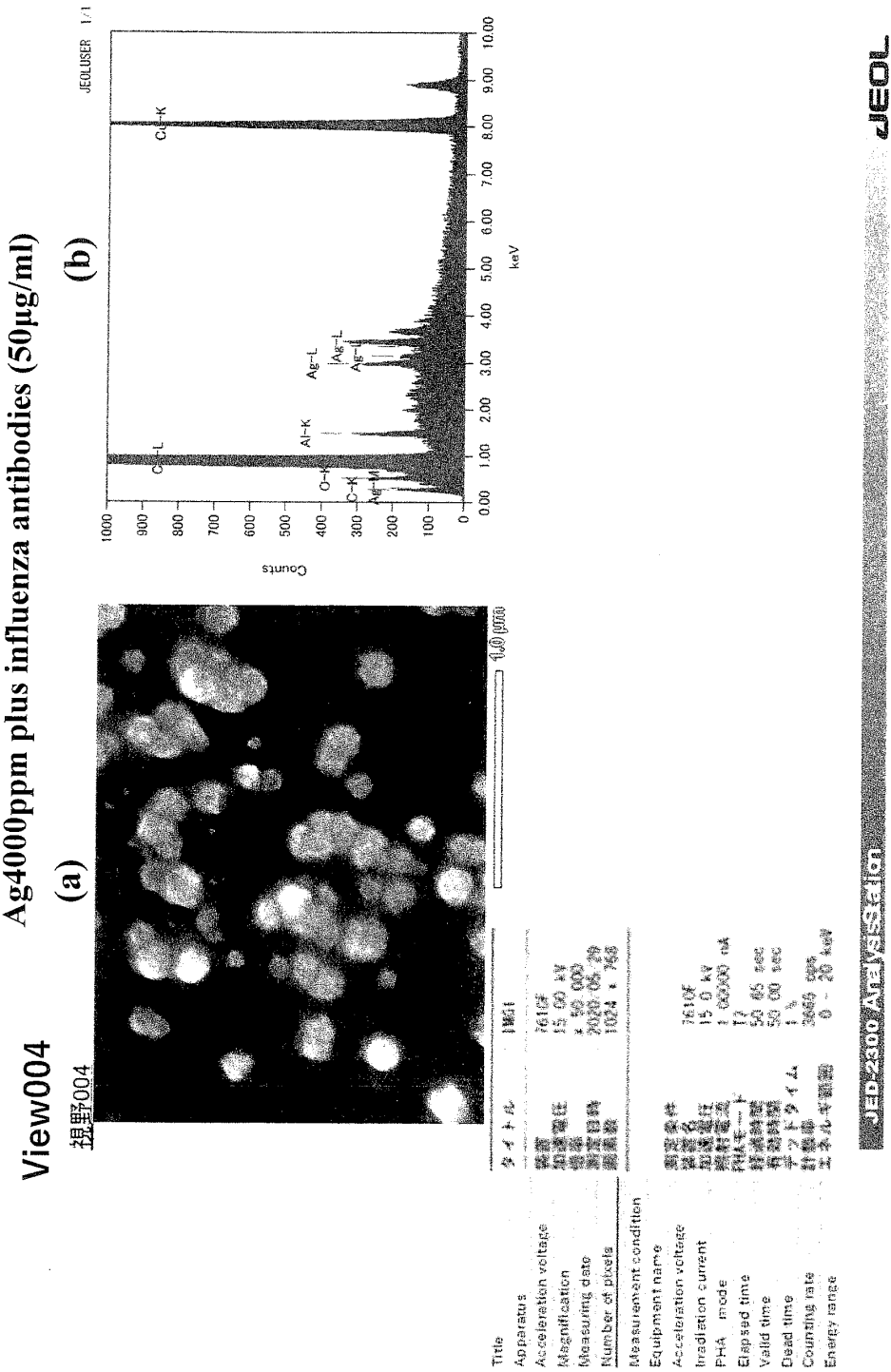


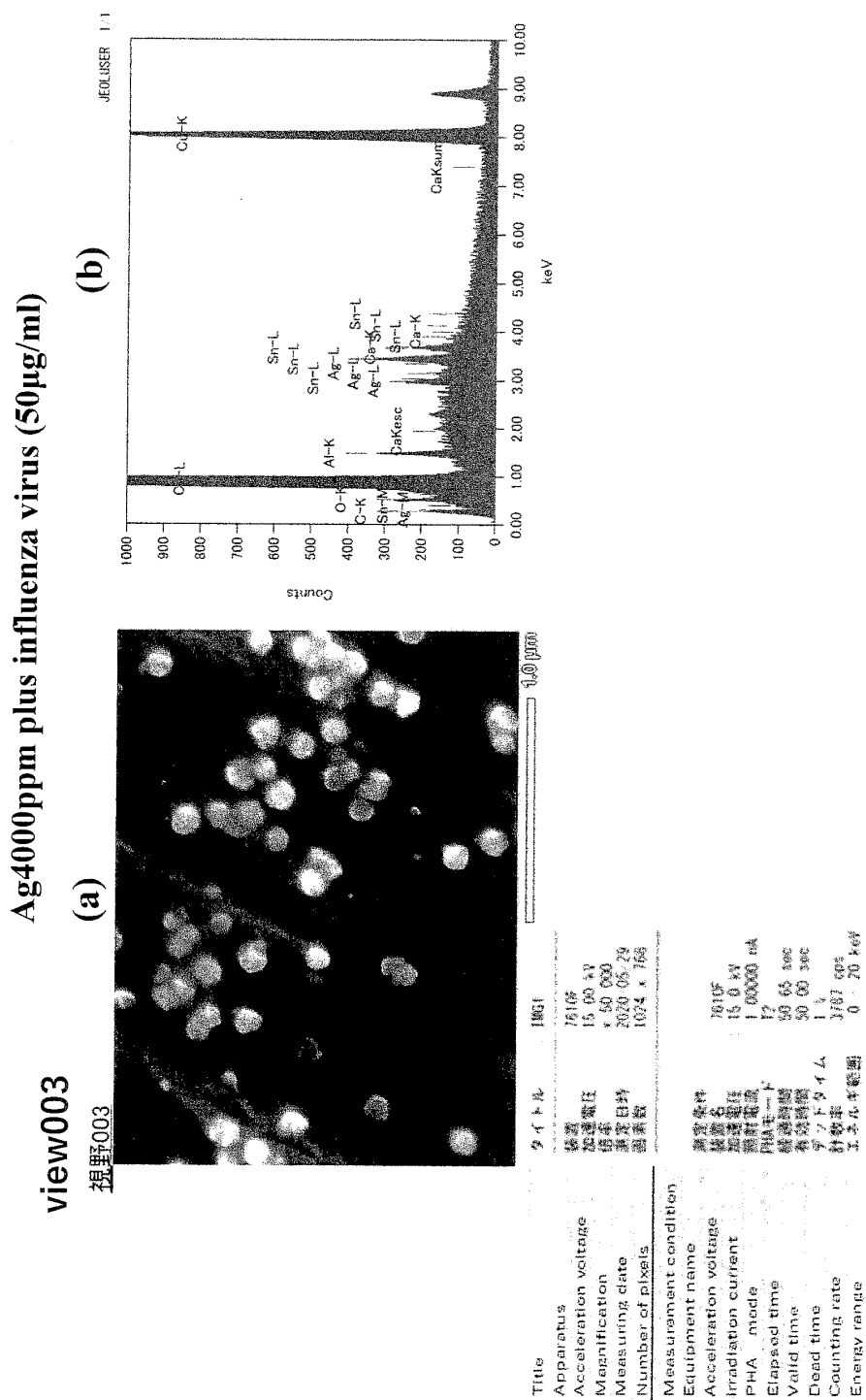
Title	タイトル	1951
Apparatus	装置	7610F
Acceleration voltage	加速電圧	15.00 kV
Magnification	倍率	× 50,000
Measuring date	測定日時	2020.05.29
Number of pixels	画素数	1024 × 768
Measurement condition	測定条件	
Equipment name	装置名	7610F
Acceleration voltage	加速電圧	15.0 kV
Irradiation current	照射電流	1.00000 nA
PHA mode	PHAモード	12
Elapsed time	経過時間	50.63 sec
Valid time	有効時間	50.00 sec
Dead time	デッドタイム	1 %
Counting rate	計数率	3773 cps
Energy range	エネルギー範囲	0 - 20 keV

JEB-2200 AFV-SS101

JEOL

Fig. 9-2





[Fig.10]

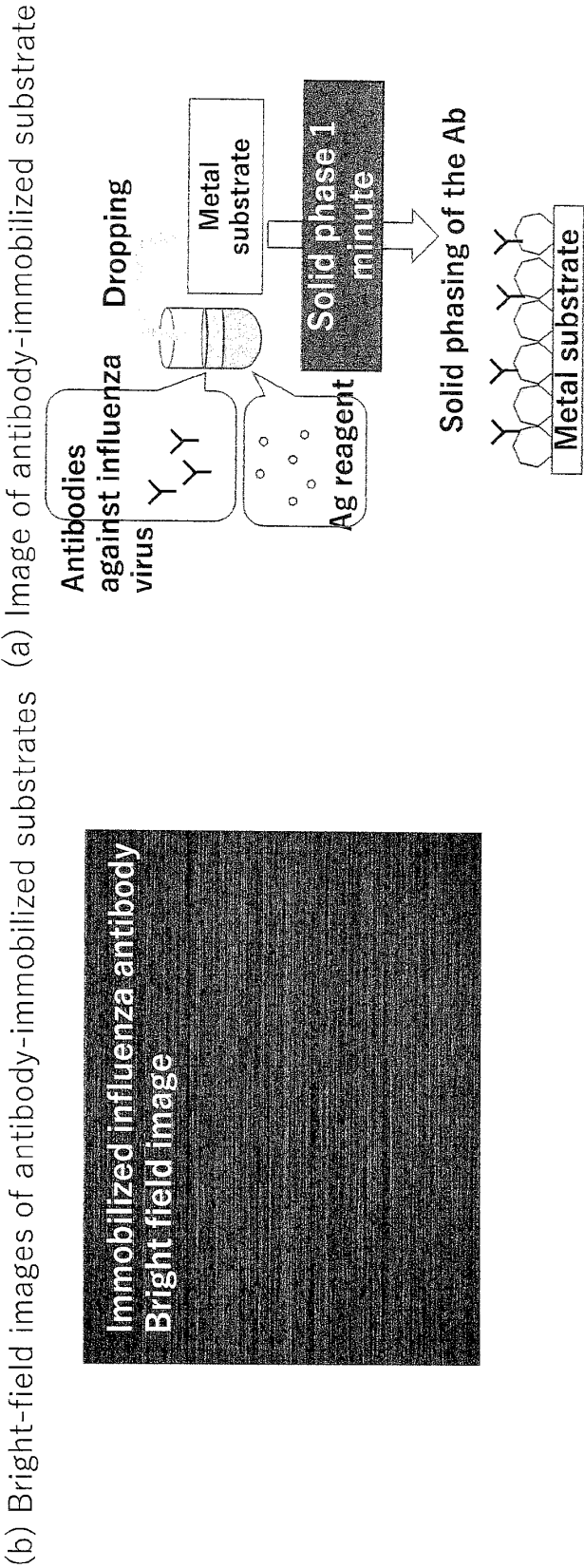


Fig.10

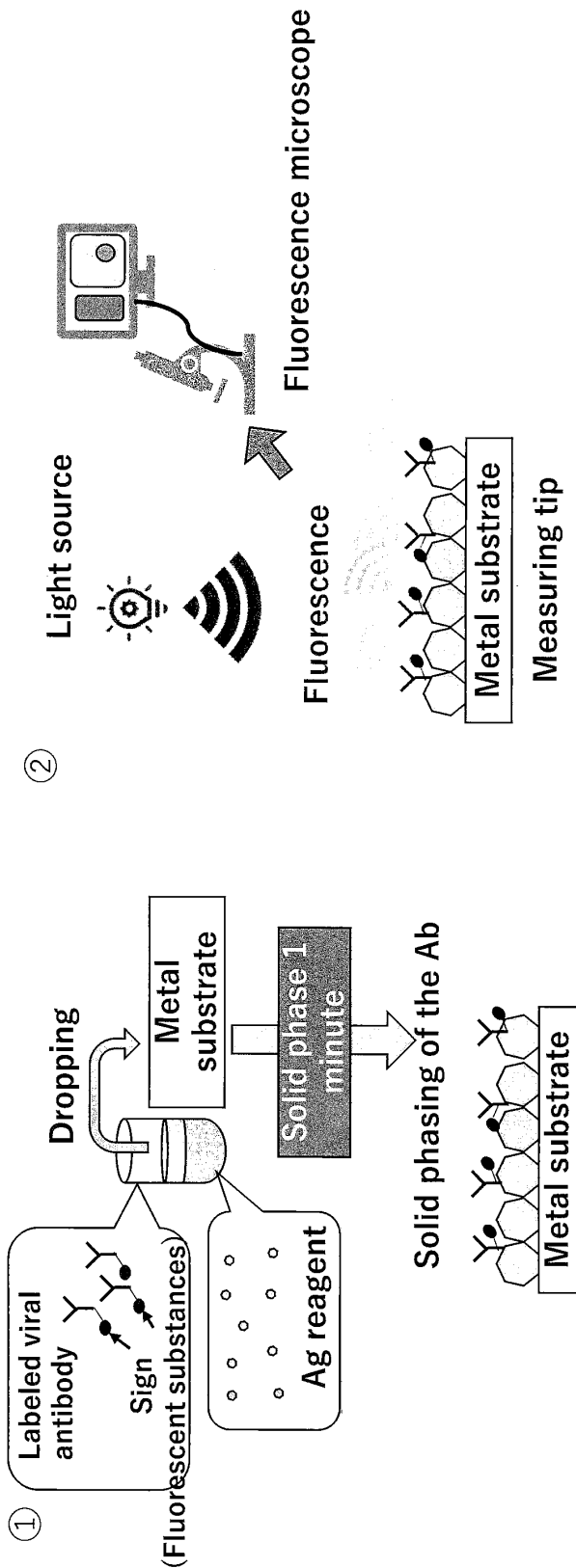


Fig.11a

Solidification of FITC influenza antibodies

- Measurement conditions
Solid-phase substrates: Quantum-crystal concentration 2000ppm + FITC influenza antibodies concentration

FITC influenza antibodies (μg/ml)	31.25	62.5	125	250
Number of counts	30	92	286	438

※ Threshold value 72 One-field measurement of a 10 × lens without a blurring filter

Solid phasedFITCAntibody counts

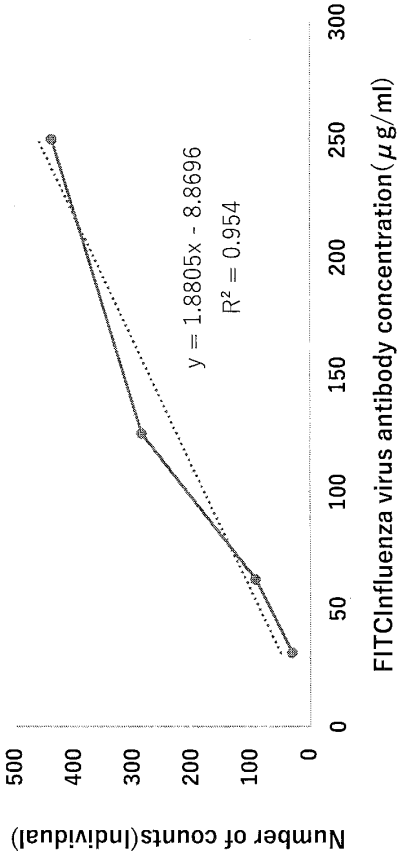


Fig.11b

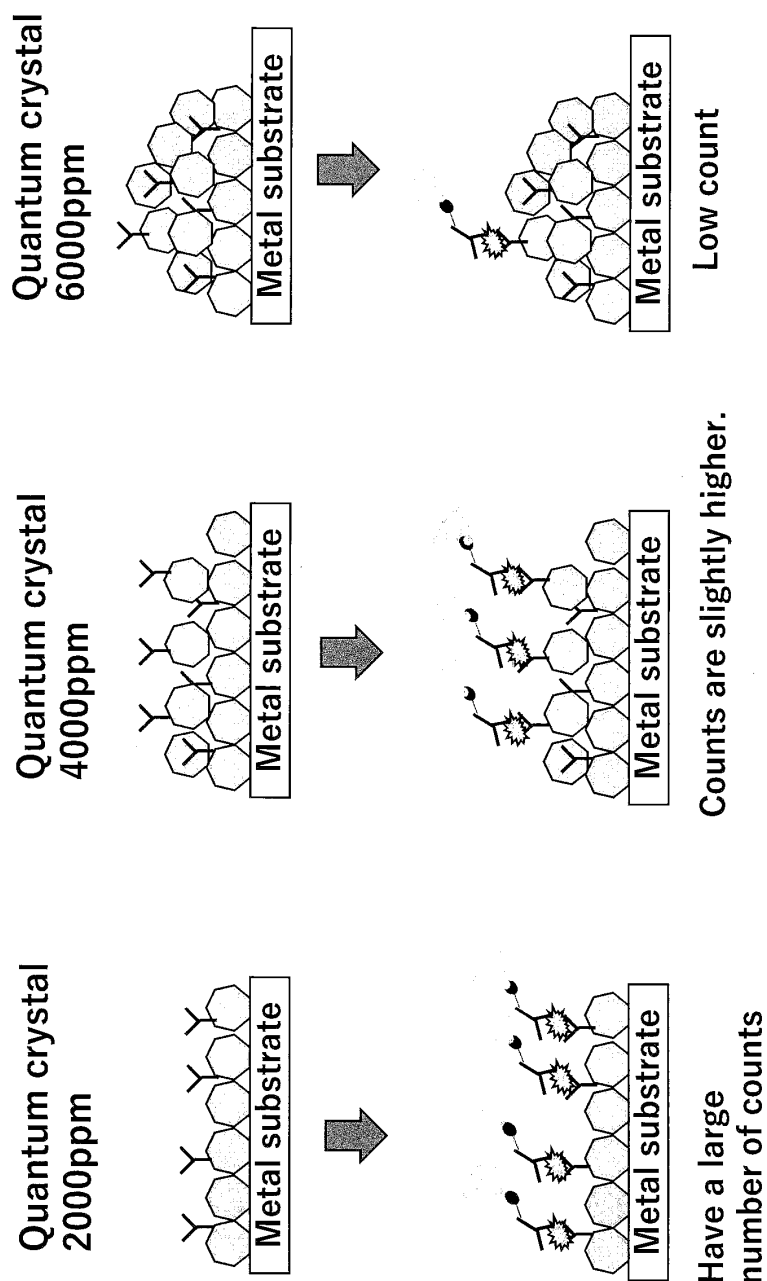


Fig.12

[Fig.13]

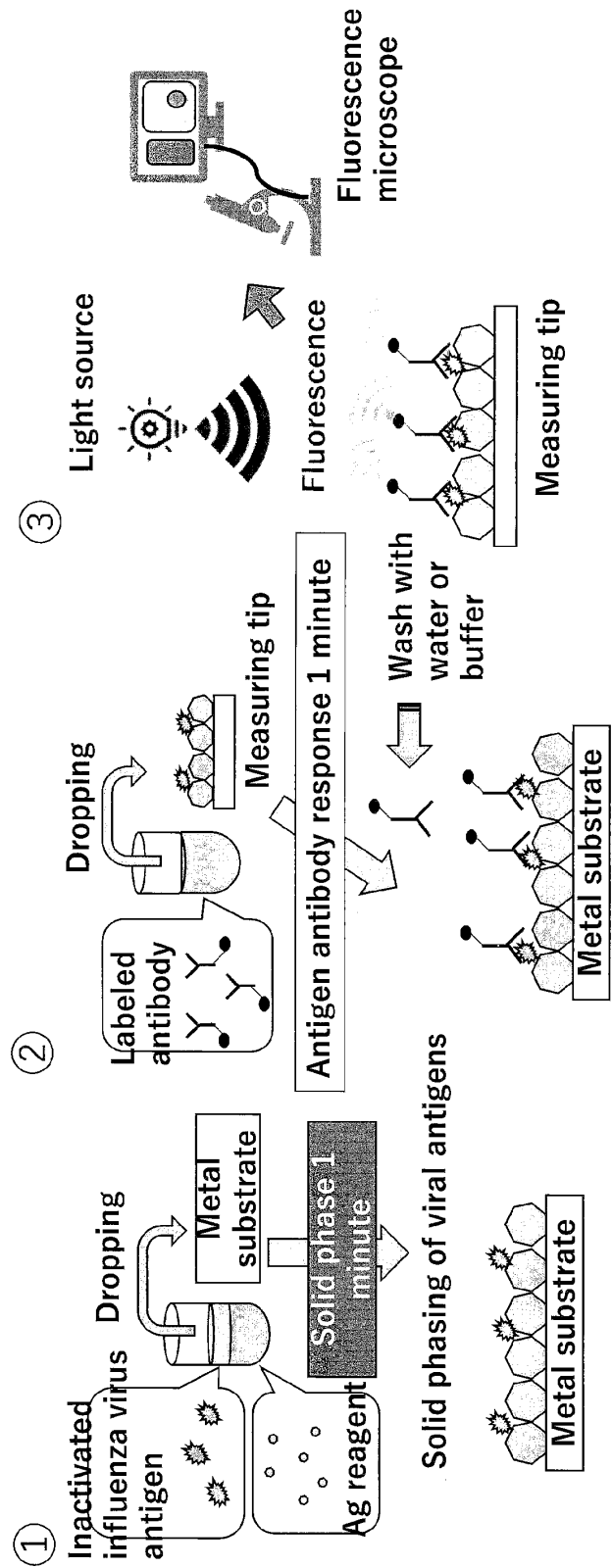


Fig.13

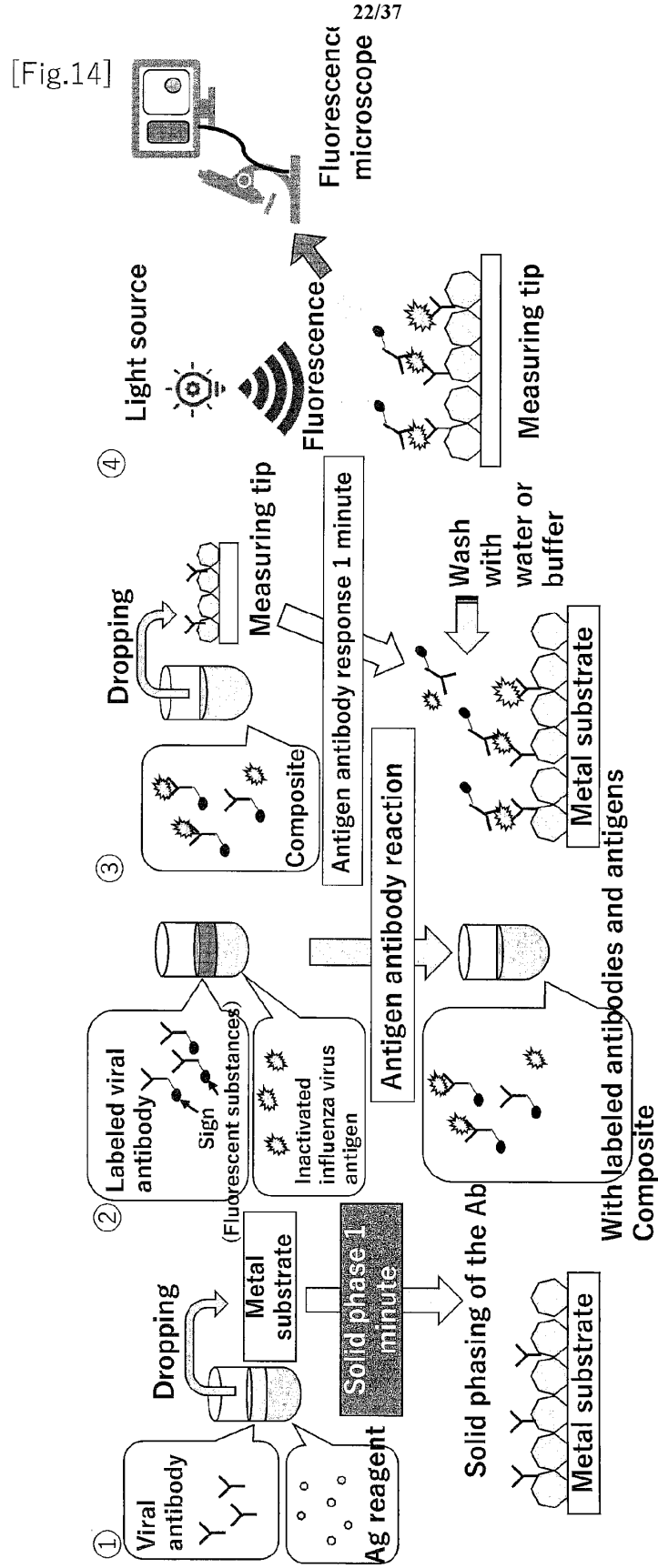


Fig.14

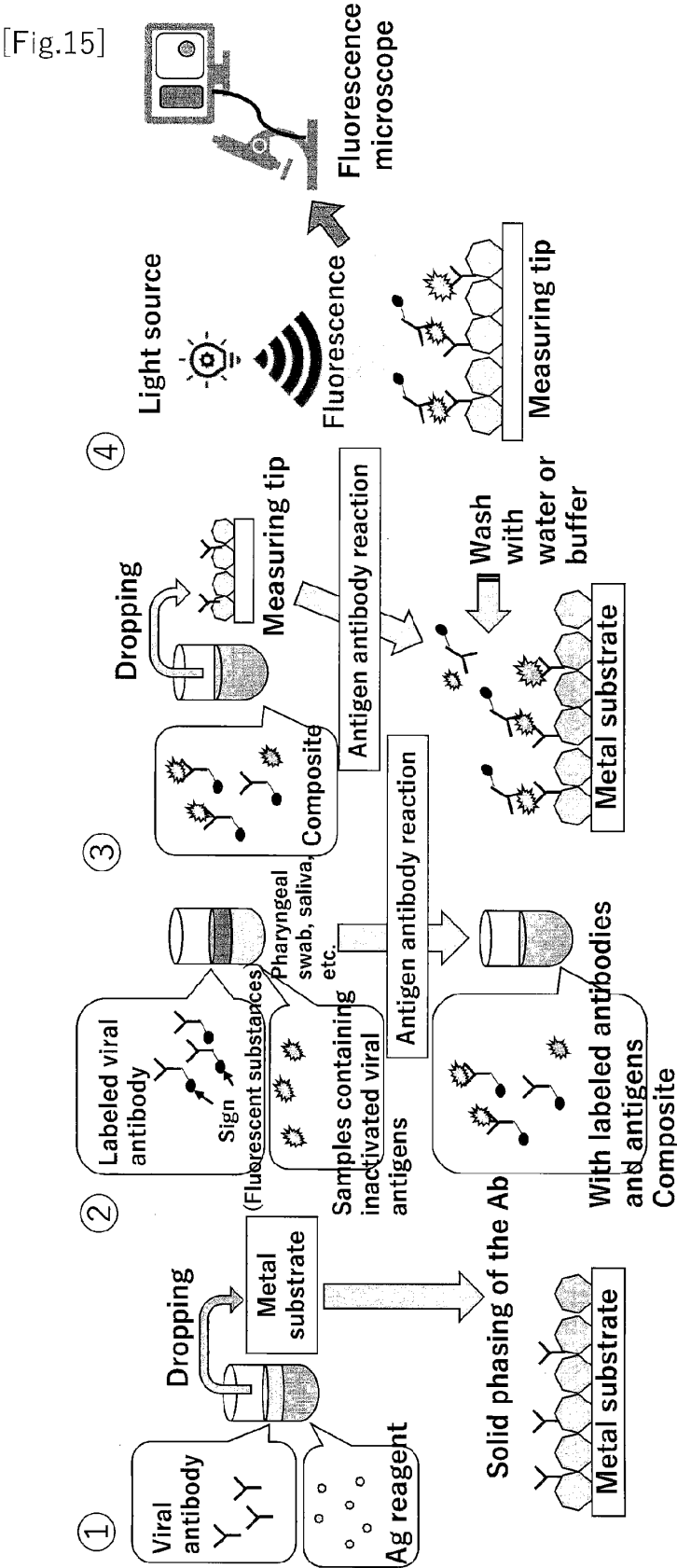
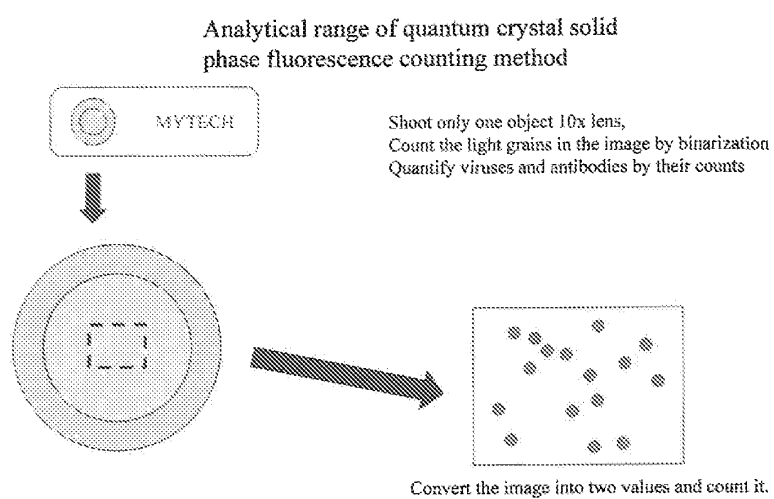


Fig.15

[Fig. 16]

**Fig. 16**

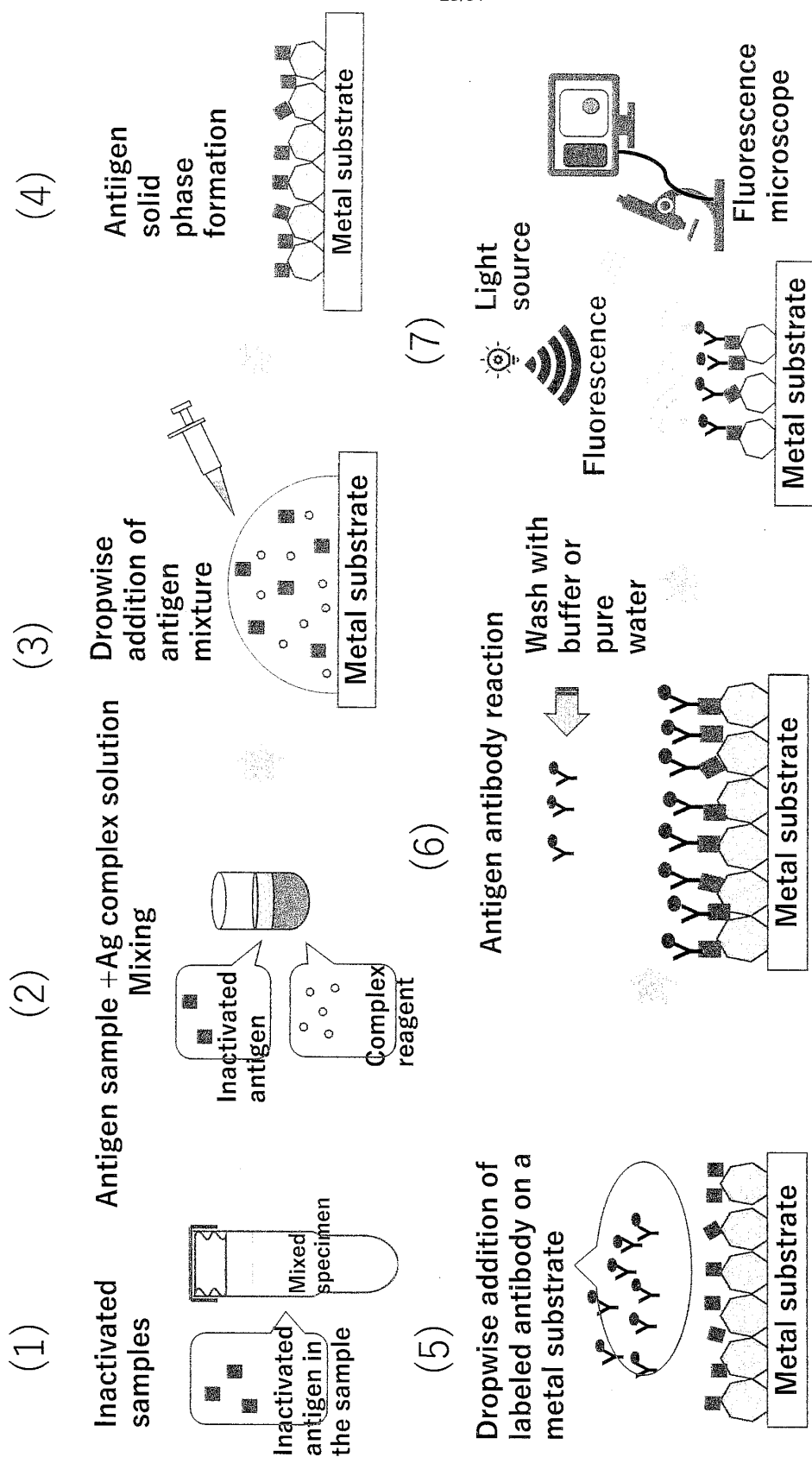


Fig.17

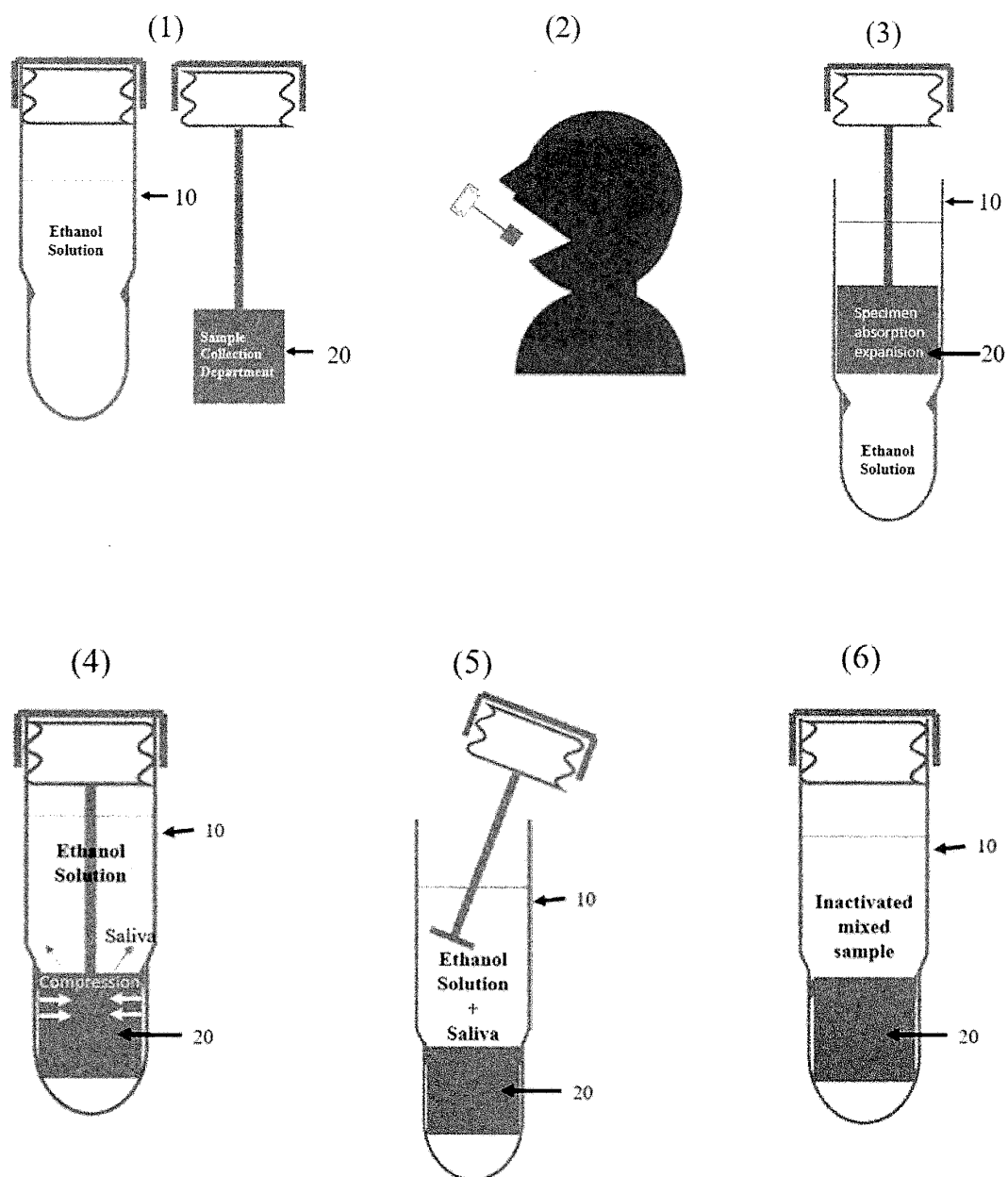


Fig.18

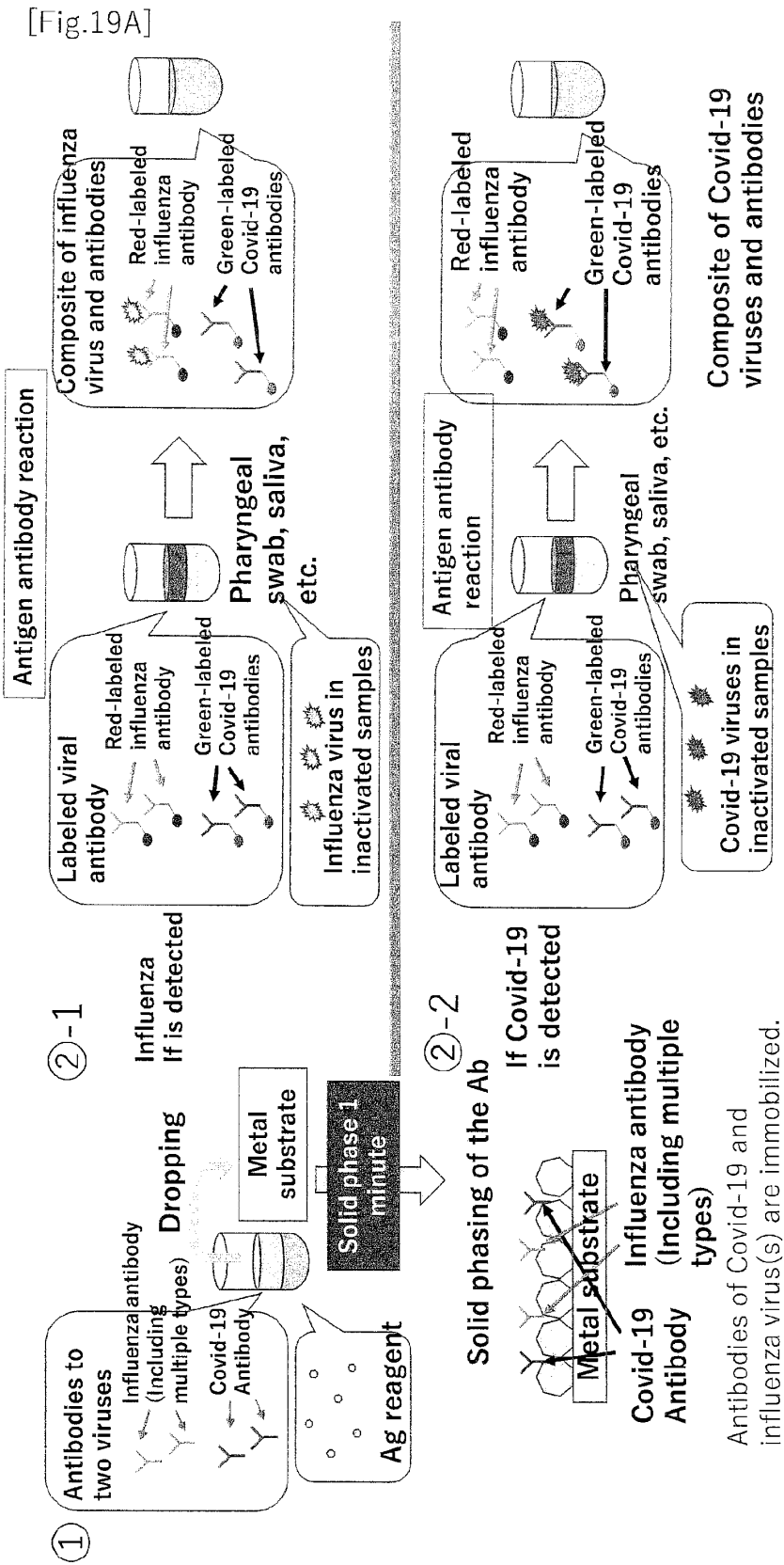


Fig.19A

[Fig.19B]

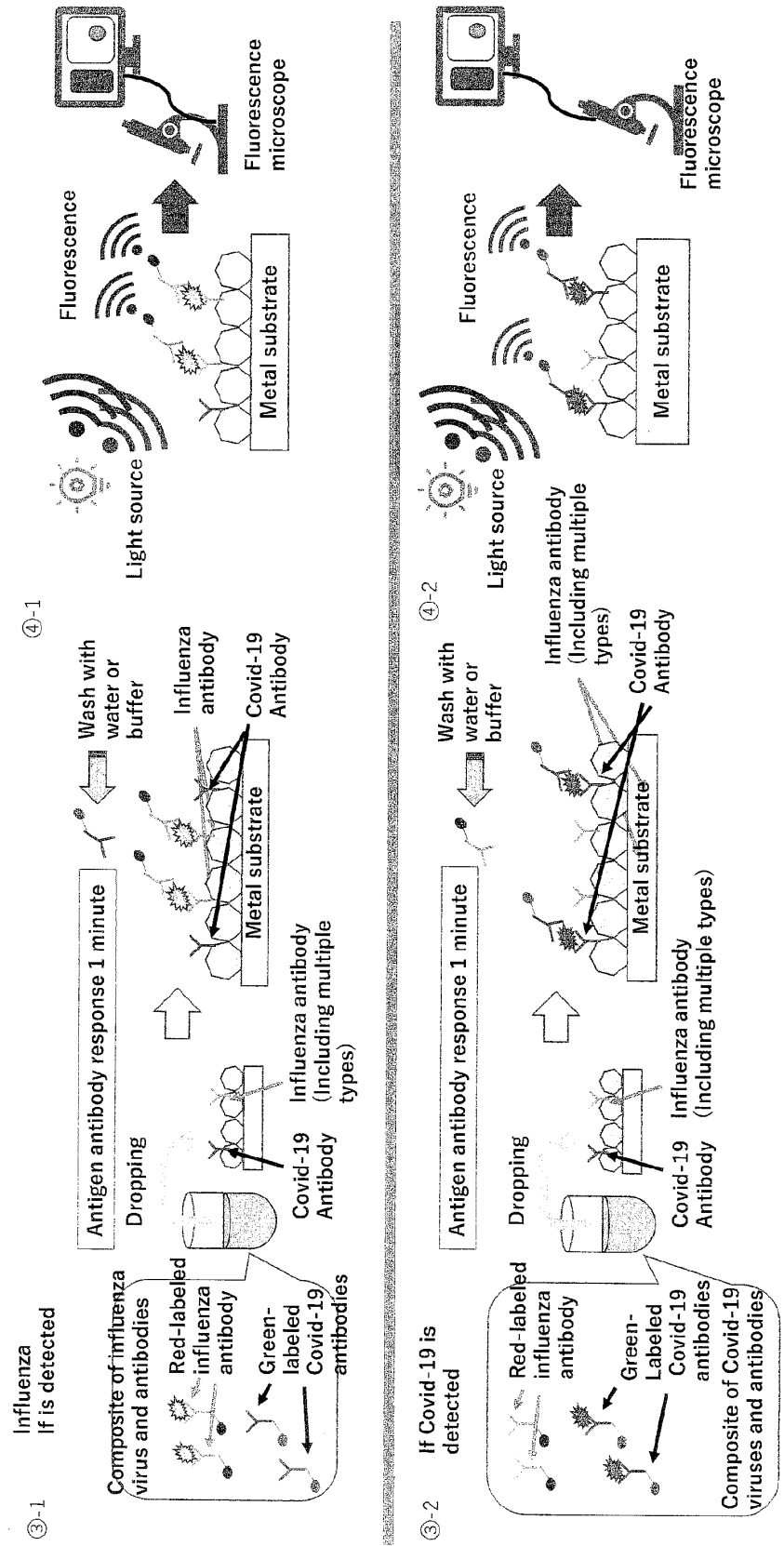
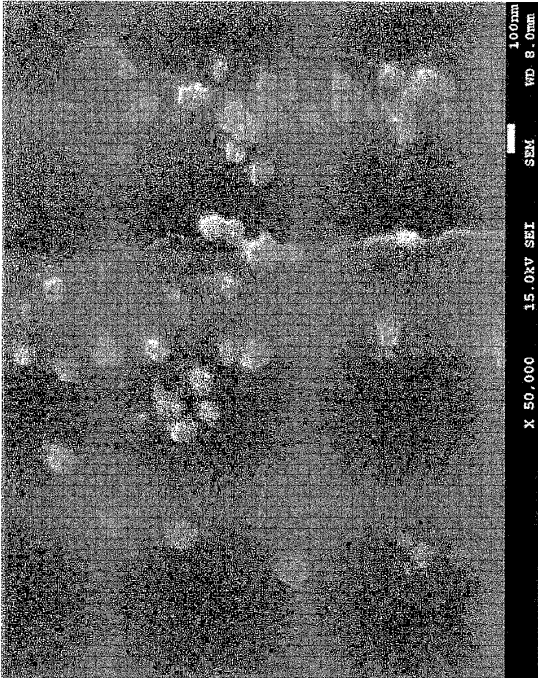


Fig.19B

[Fig.20A]

(b)



(a)

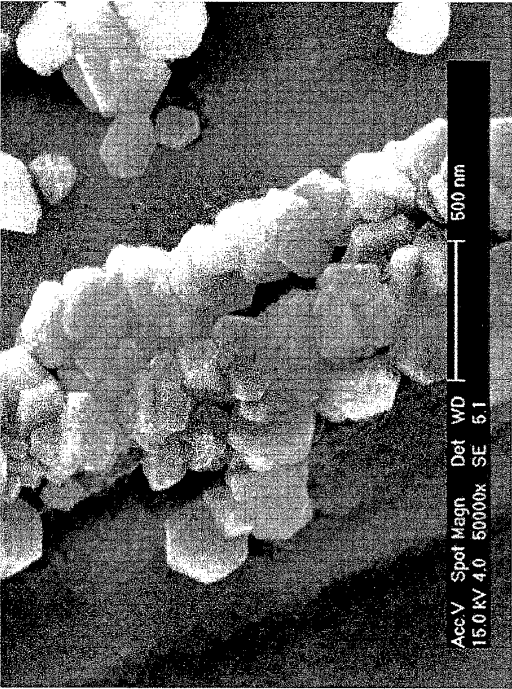


Fig.20A

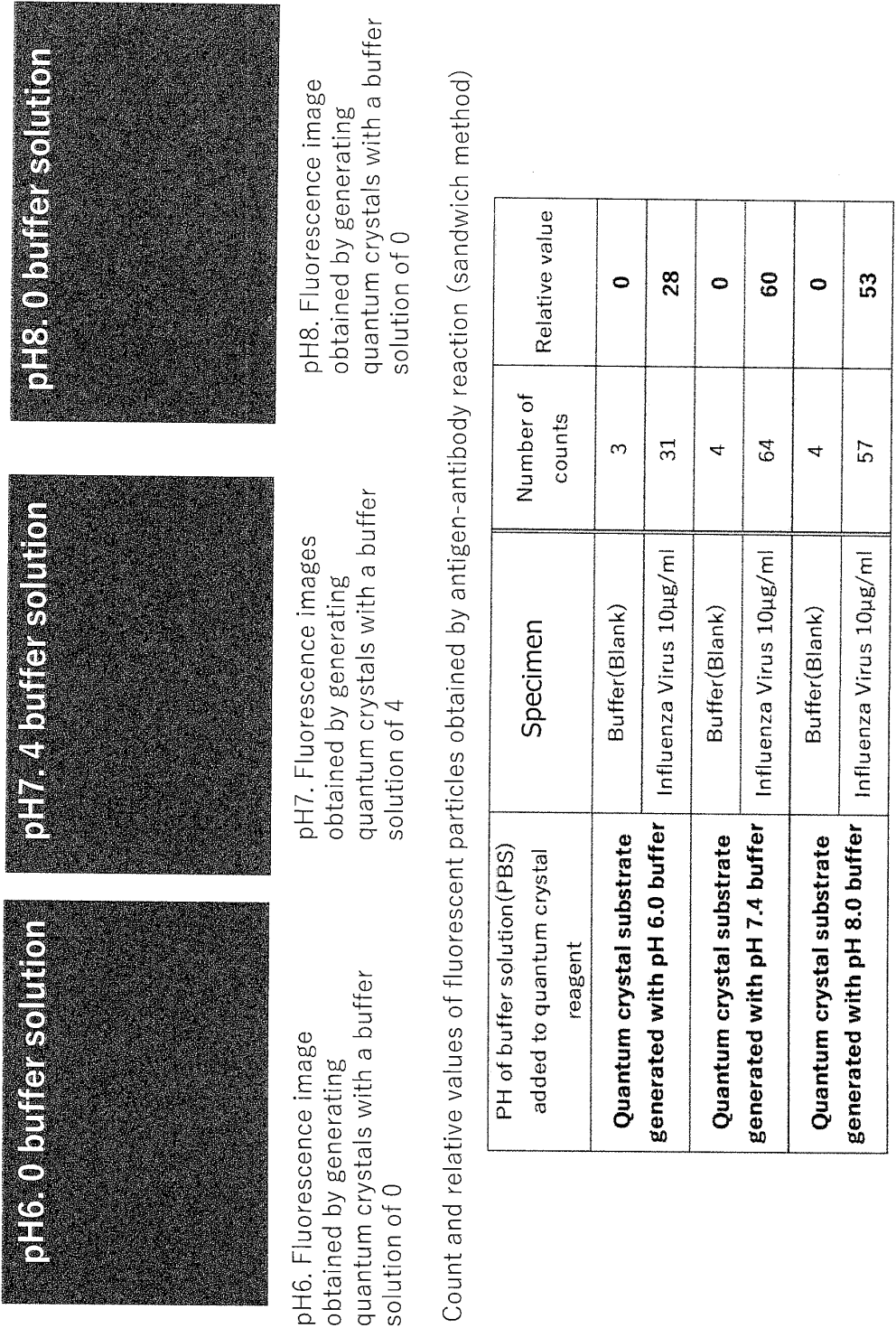


Fig.20B

[Fig.21]

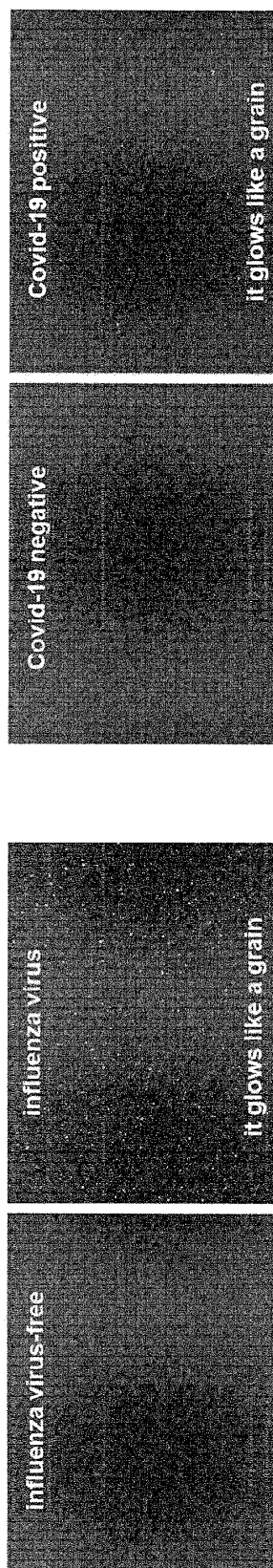
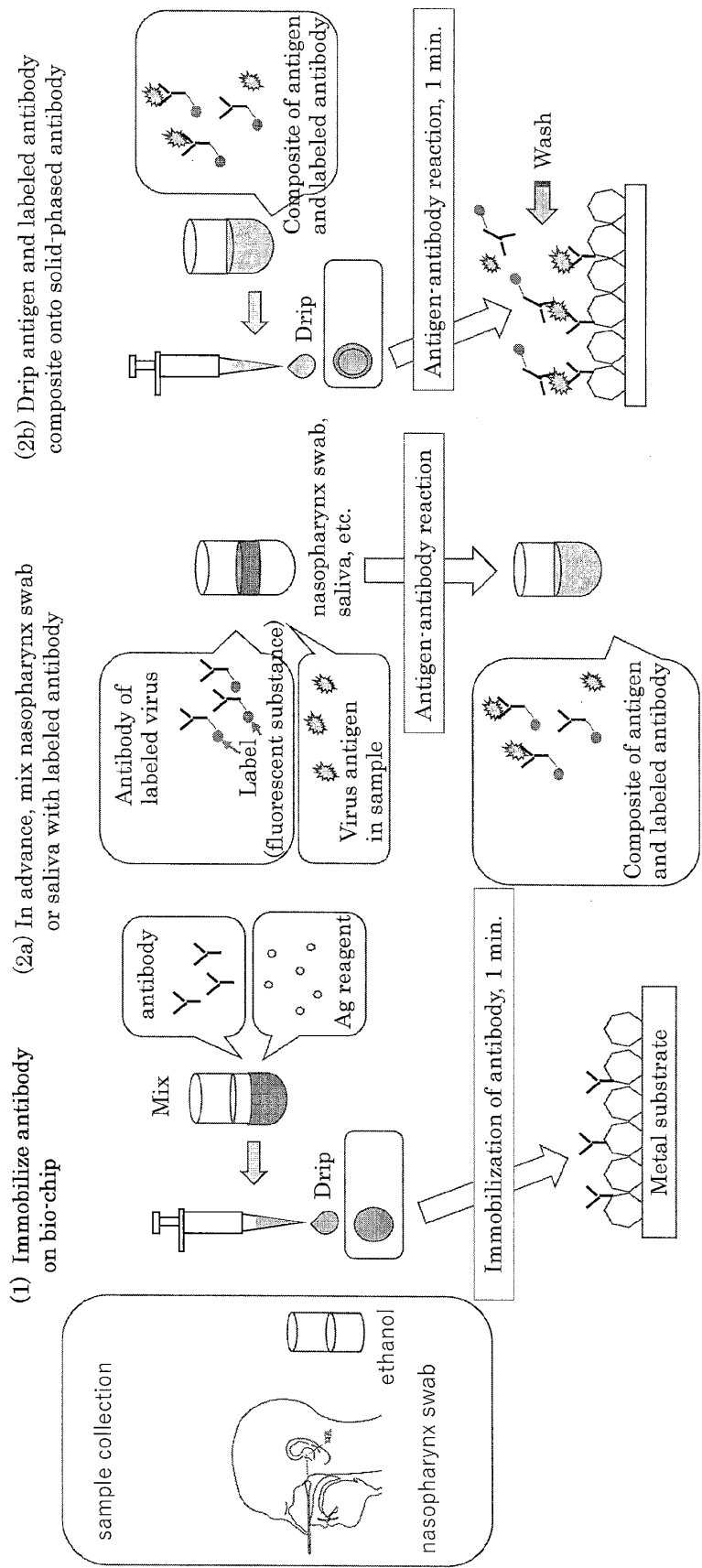


Fig.21

[Fig.22]



[Fig.22]continue

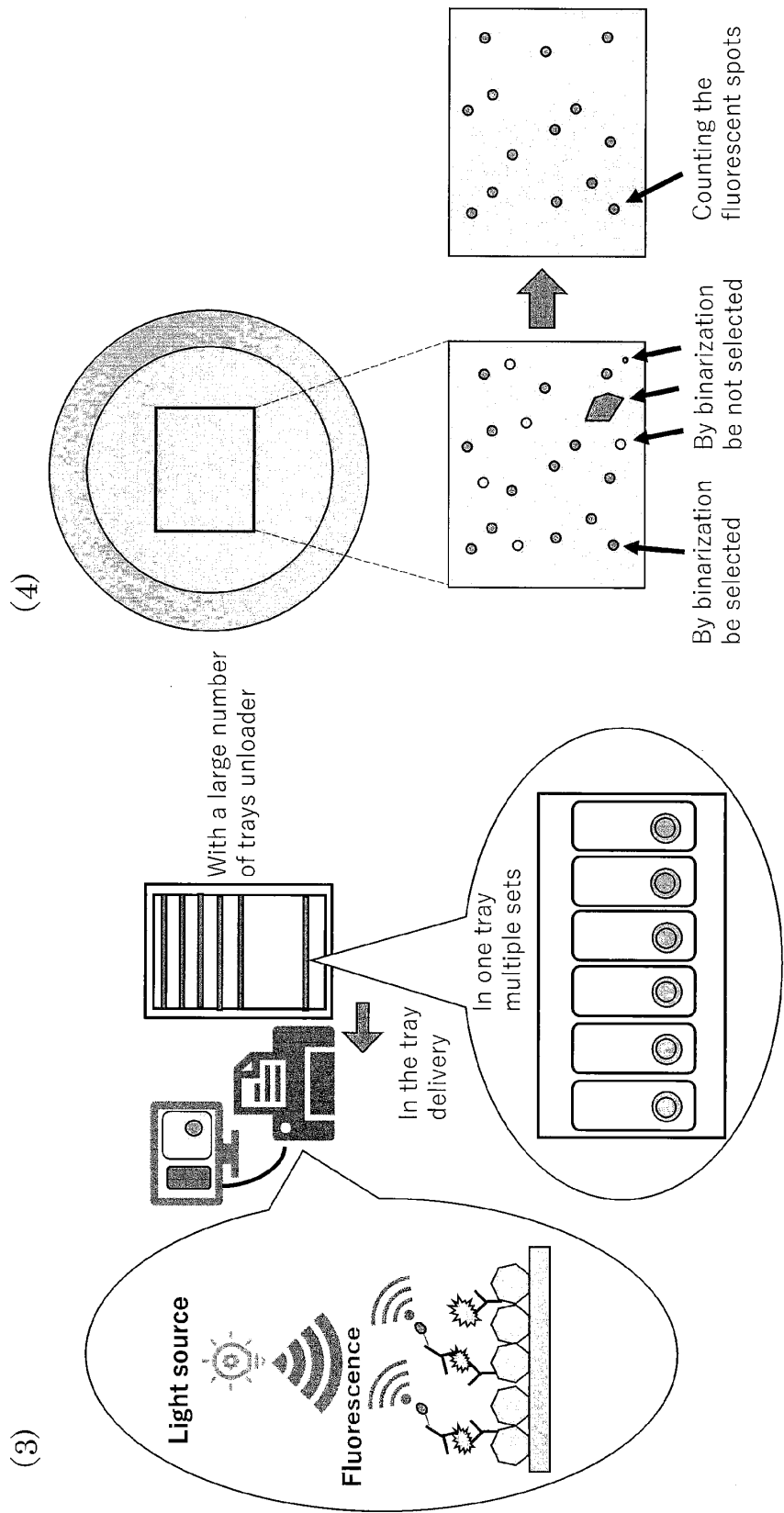


Fig.22

Quantification of Influenza Virus

Measurement Conditions

Measured with influenza antibody (25 μ g/mL) FITC influenza antibody (25 μ g/mL)
Keyence BZ-X710 Objective lens 10x

Virus concentrations (μ g/mL)	0	10	25	50
No. of counts*	0	31	84	118

*No. of counts obtained by binarizing the captured image with the set threshold
The threshold was set so that the count number of the blank(0 μ g/mL) was 0

Influenza virus quantitative graph

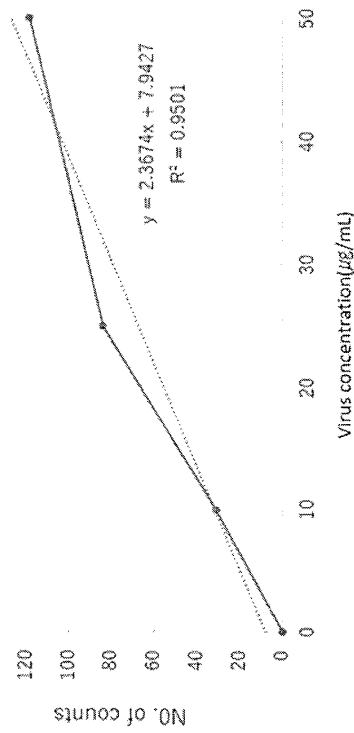
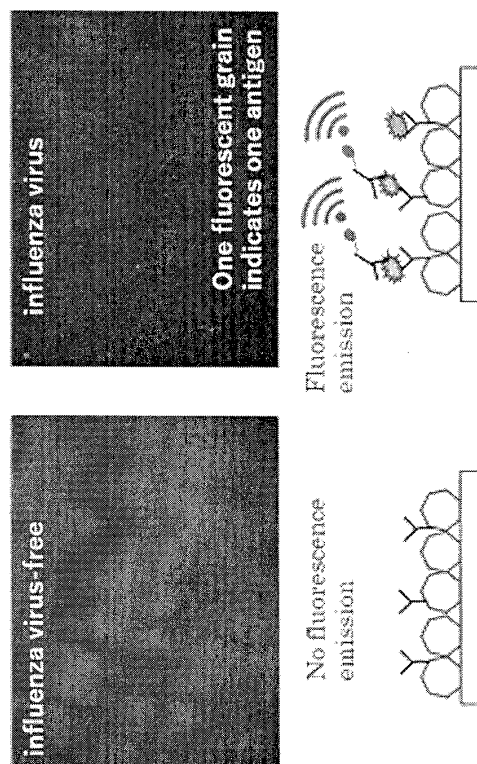


Fig.23



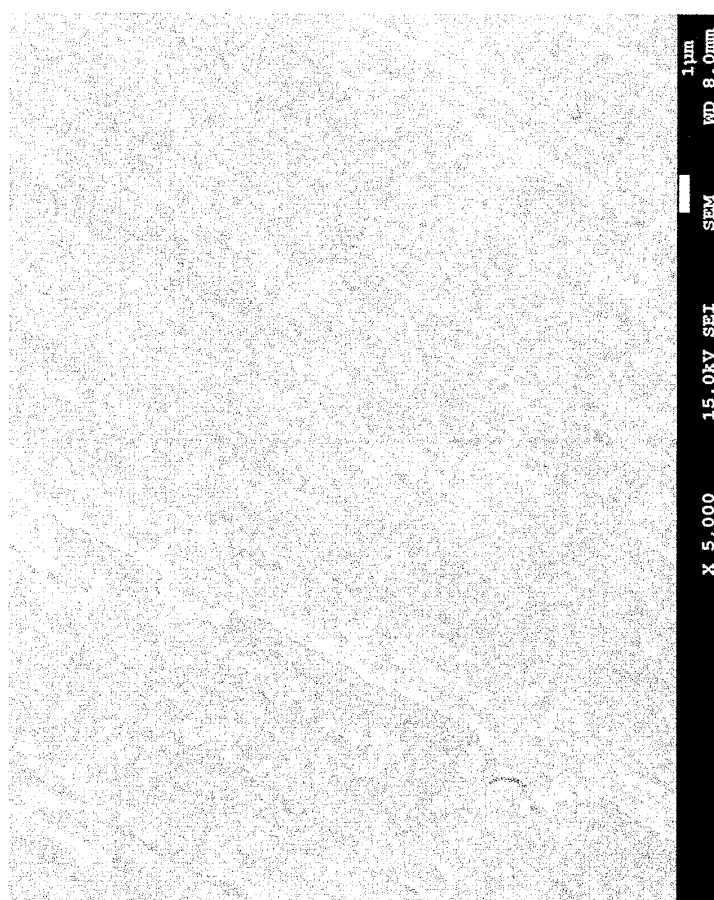


Fig.24

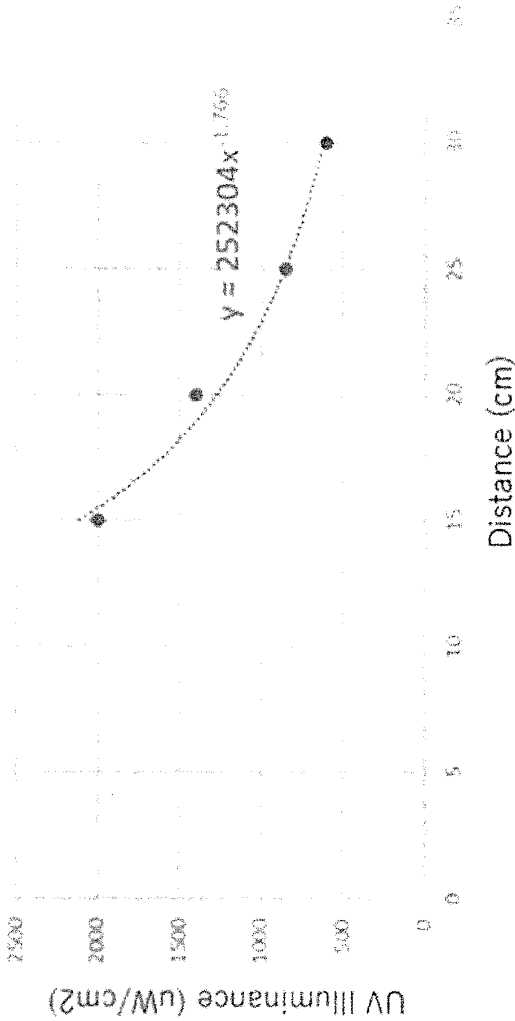
Illuminance of UV-light (FL254-SD)

UV-Illuminance (uW/cm2)	2000	1400	850	600
Distance (cm)	15	20	25	30
Inactivating dose of UV (mJ/cm2)	1048			
Inactivation time (sec)	524 (8.7min)	749 (12.5min)	1233 (20.6min)	1747 (29.1min)

(a)

Calculation formula UV irradiation dose = UV illuminance x irradiation time

UV Illuminance and Distance Calibration Curves



(b)

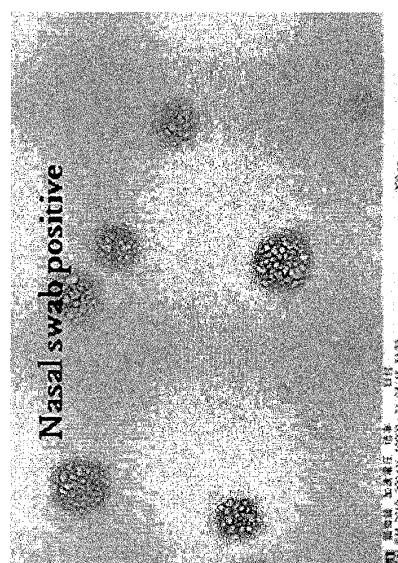
Relative value of CV test for specimens inactivated by UV irradiation

specimen	Type	Covid-19	count value	relative value
Blank(0.1M PBS)	-	-	25	-
No.1	saliva	positive	41	16
No.2	saliva	positive	51	26
No.3	nasal swab	positive	51	26
No.4	nasal swab	positive	38	13
No.5	saliva	negative	24	-1
No.6	saliva	negative	29	4

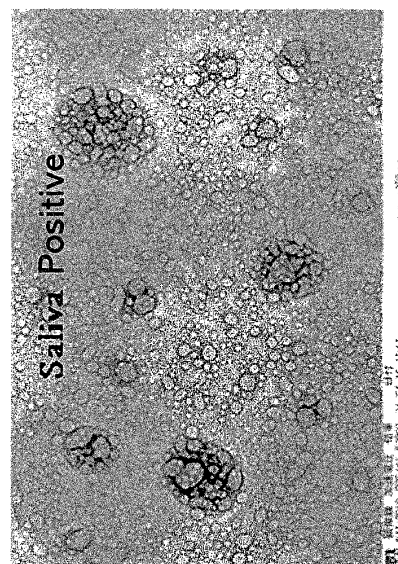
TEM image

Instrument: JEOL JEM-2010

Support film: High-resolution carbon HRC-C10



Nasal swab positive



Saliva Positive

SUBSTITUTE SHEET (RULE 26)