

FIG. 1

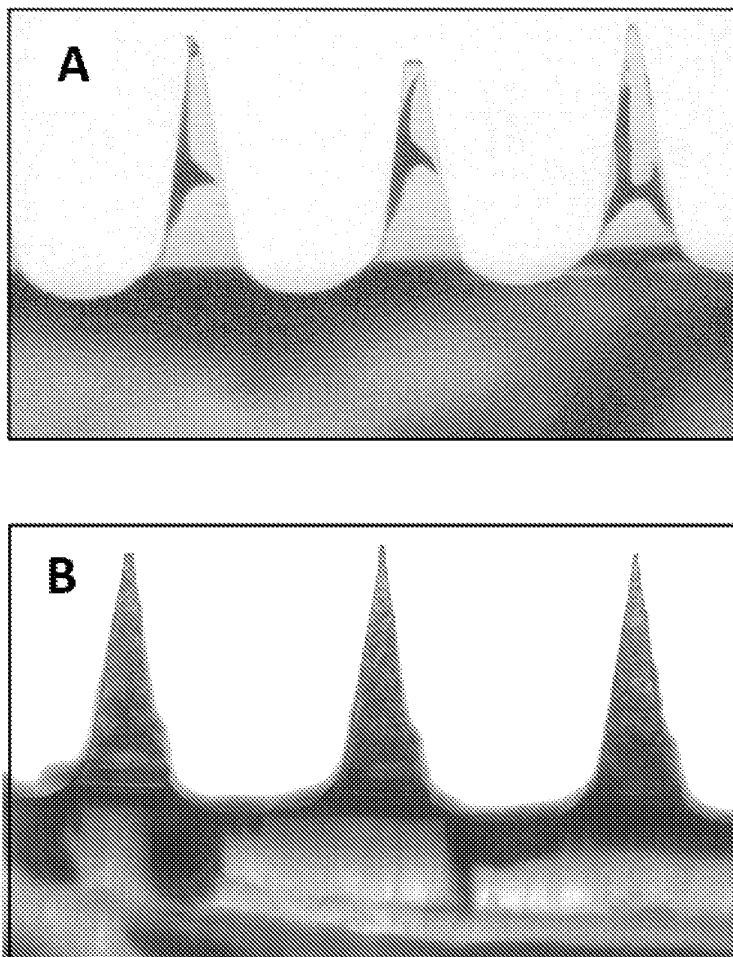


FIG. 2

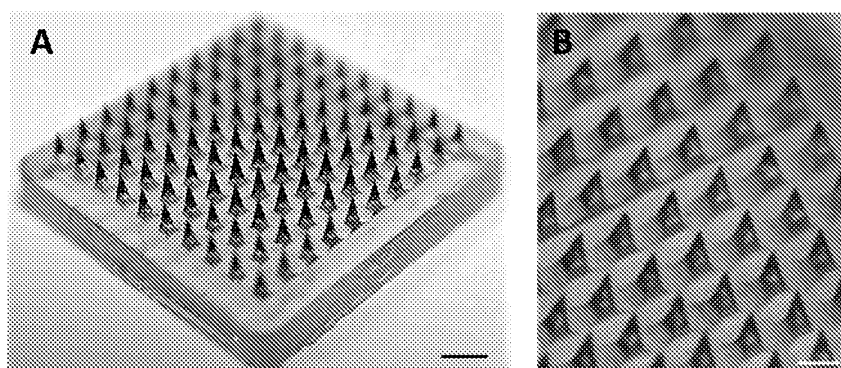


FIG. 2 (Continued)

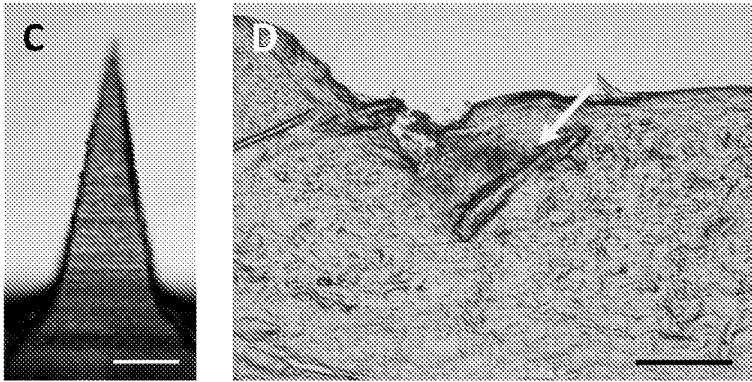


FIG. 3

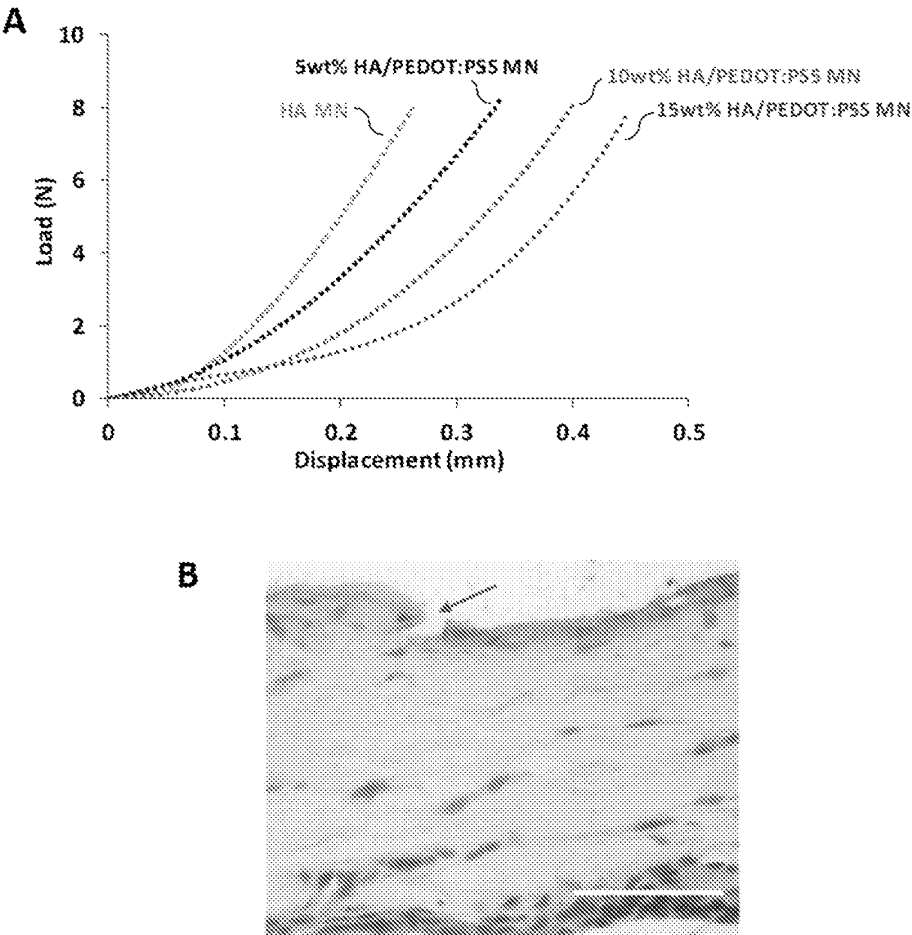


FIG. 3 (Continued)

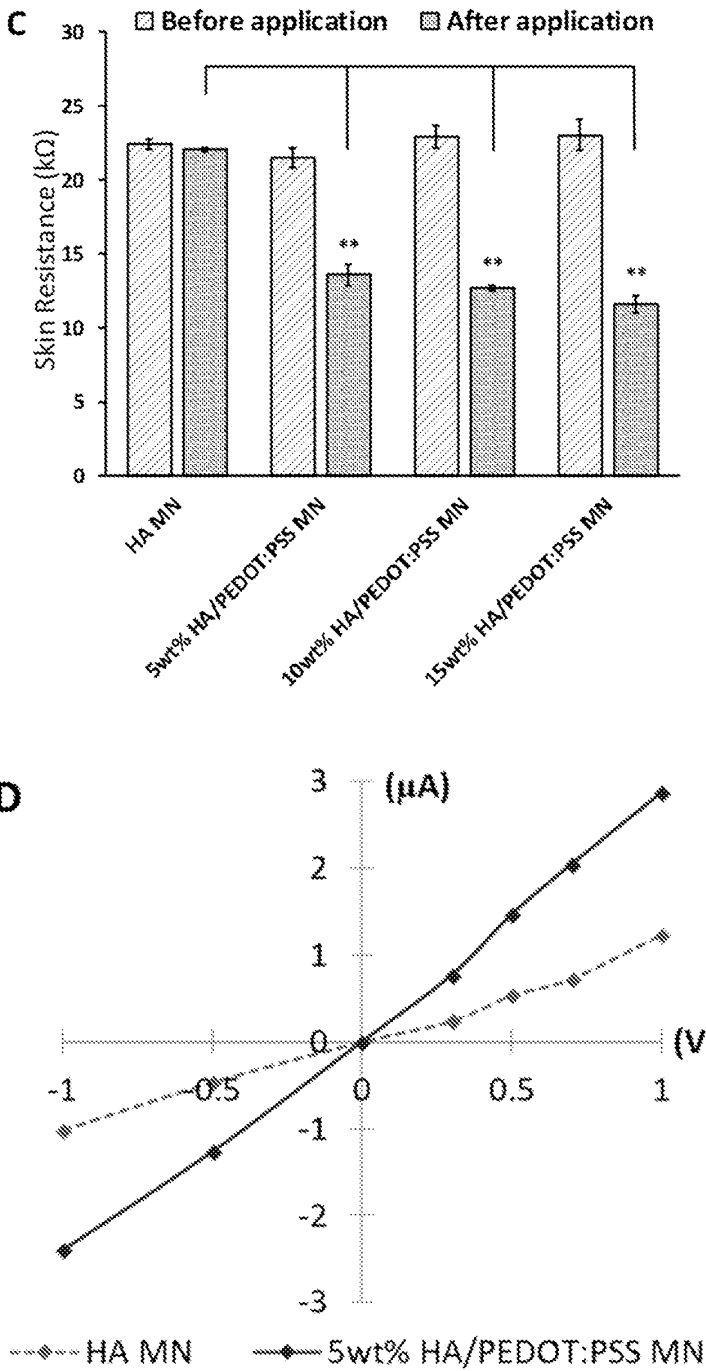


FIG. 3 (Continued)

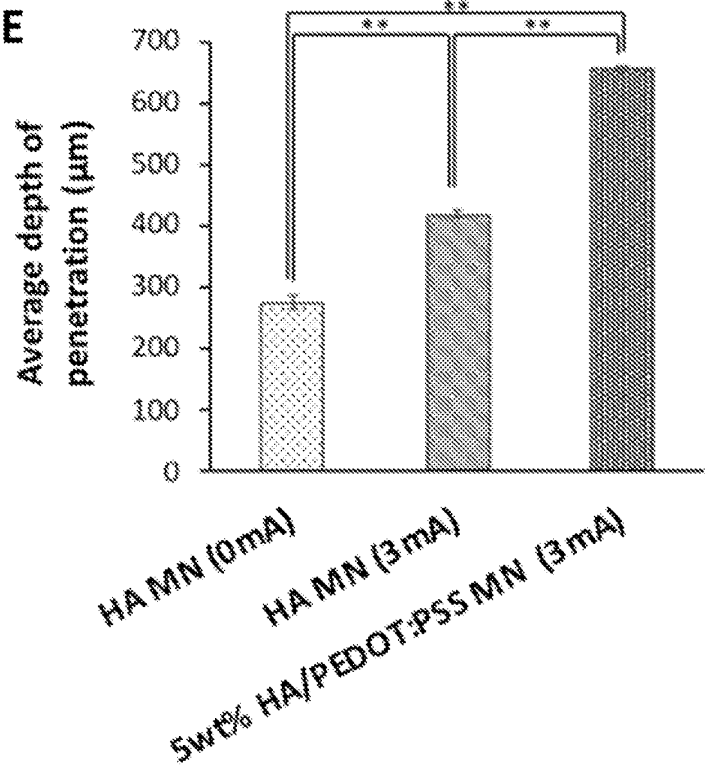
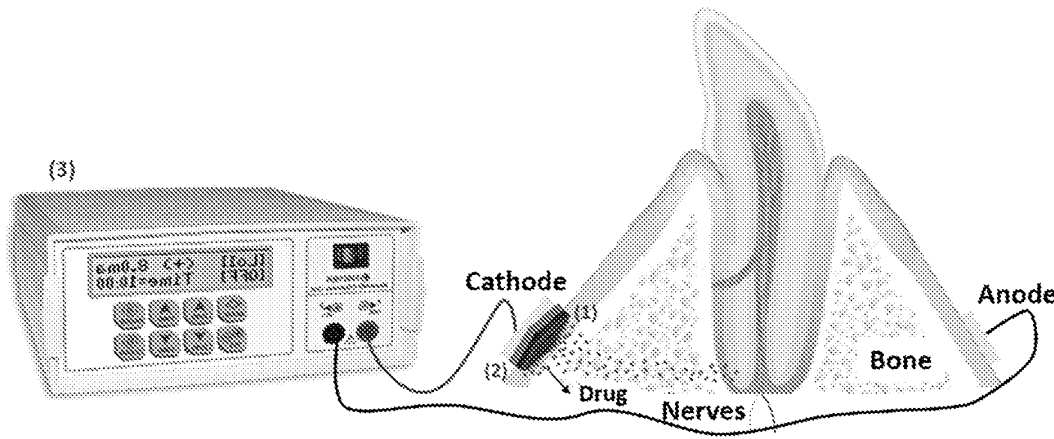


FIG. 4



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FIG. 5

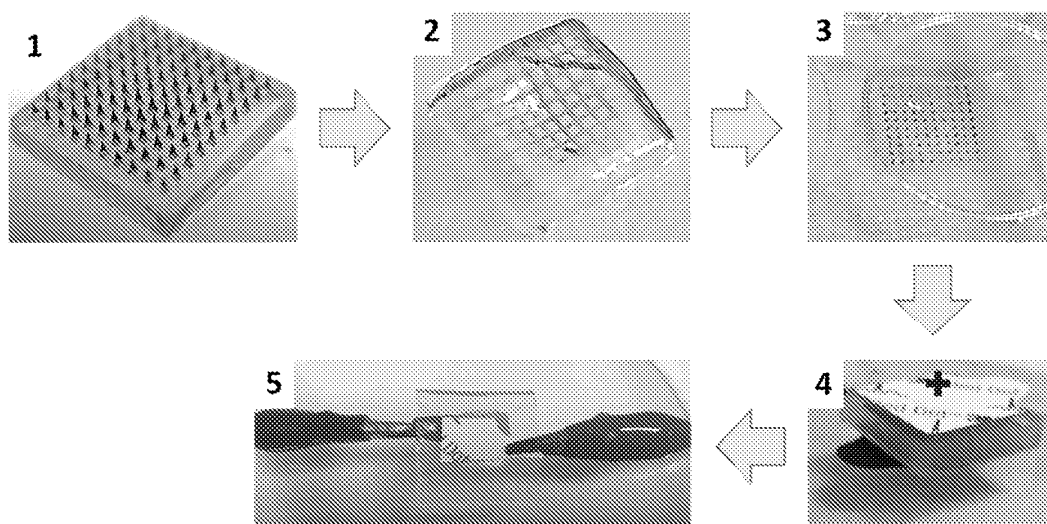


FIG. 6

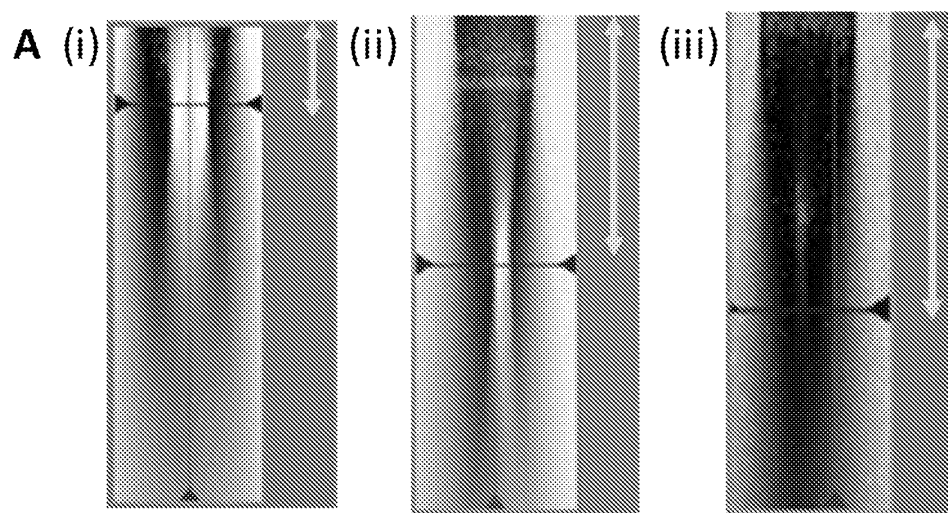
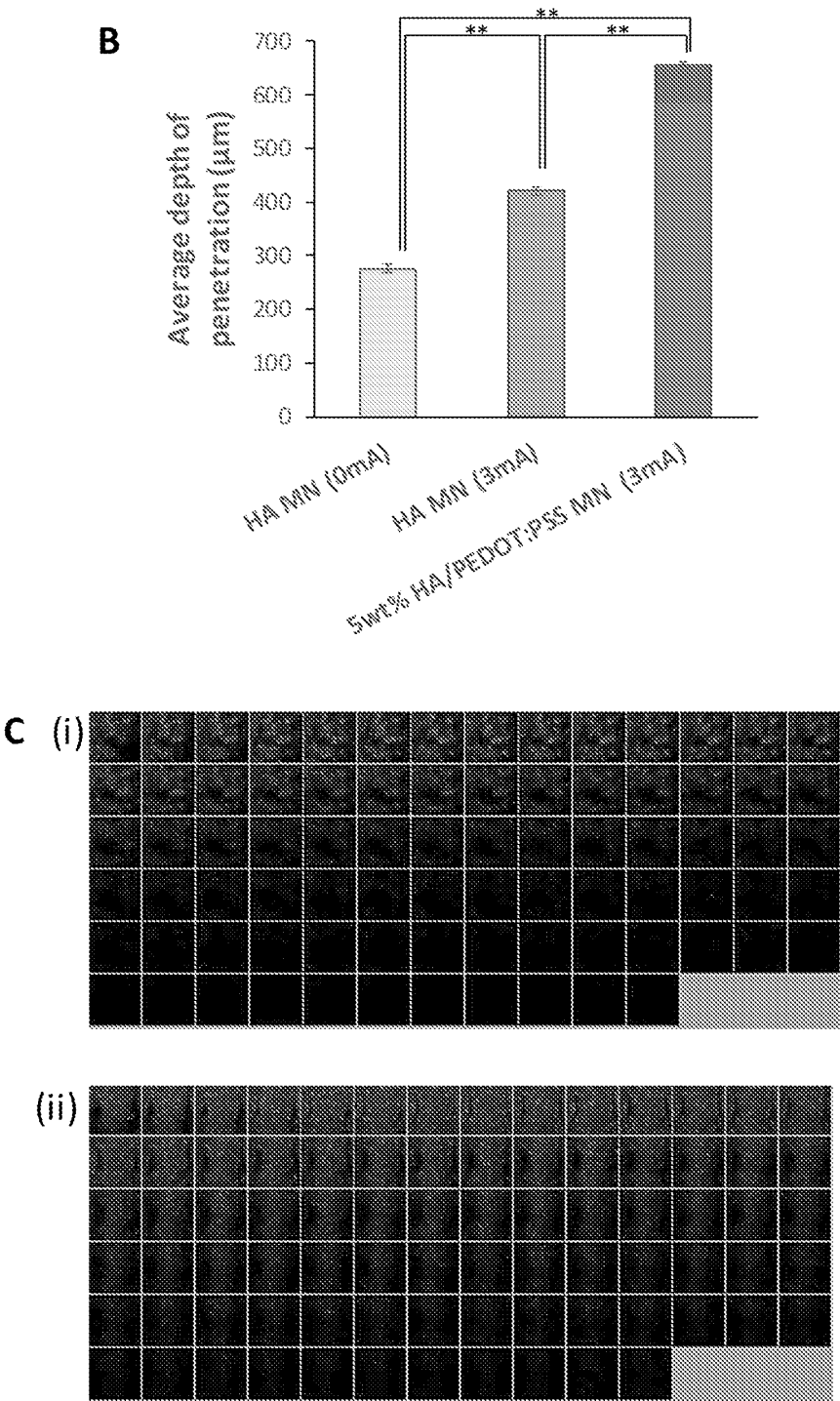


FIG. 6 (Continued)



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FIG. 7

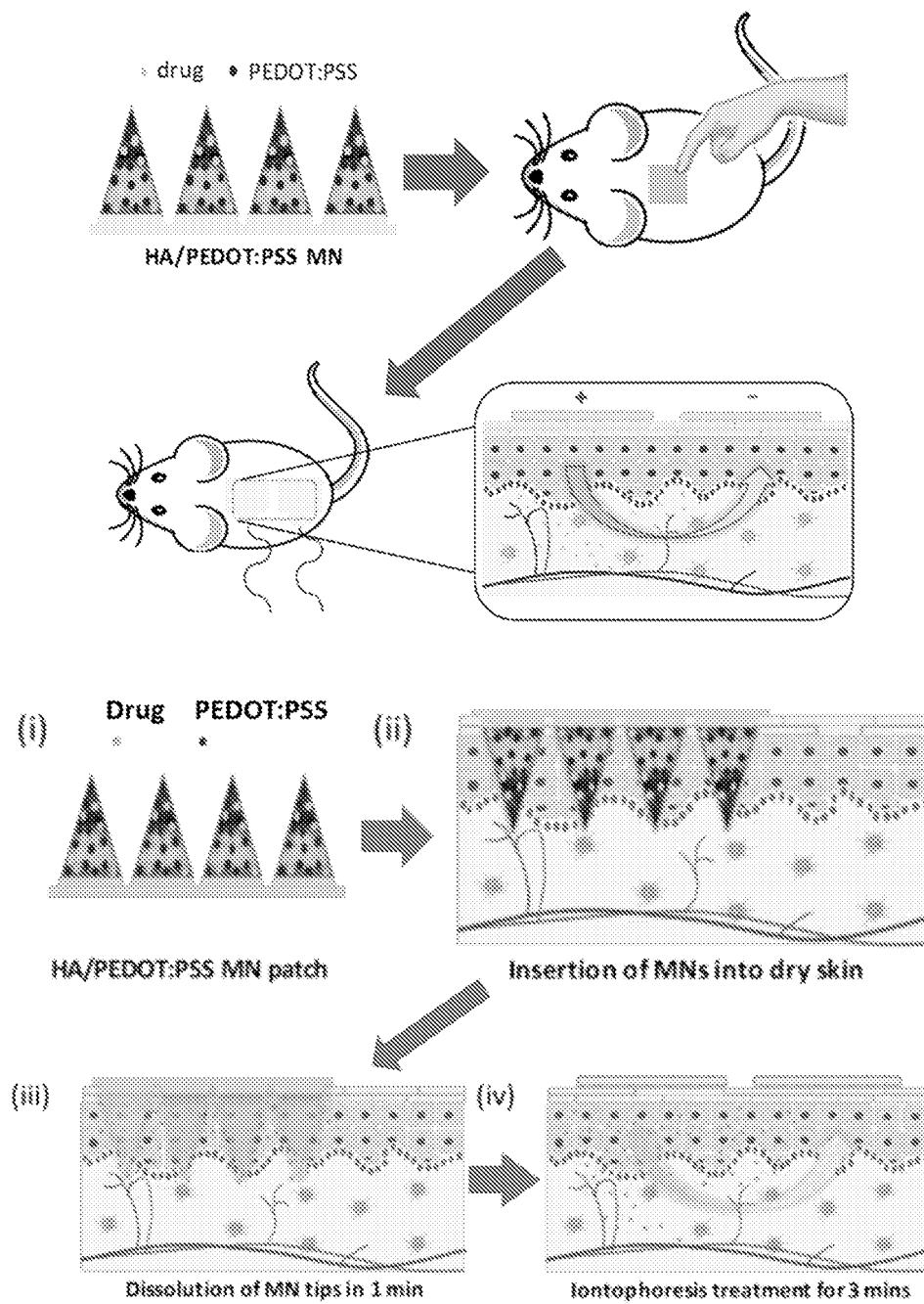
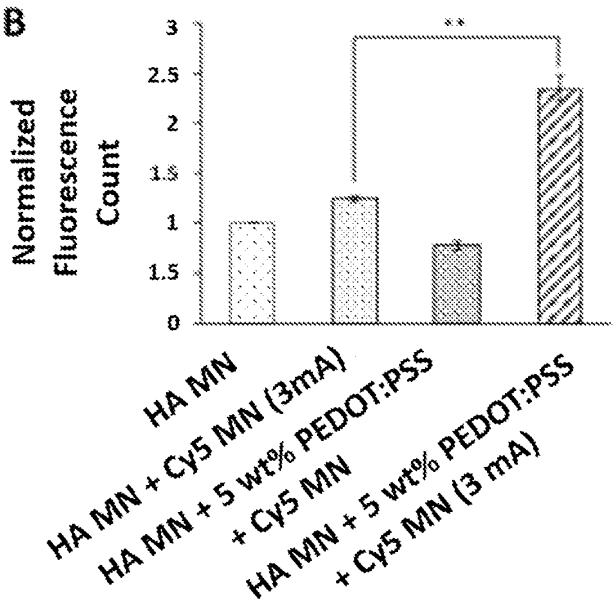
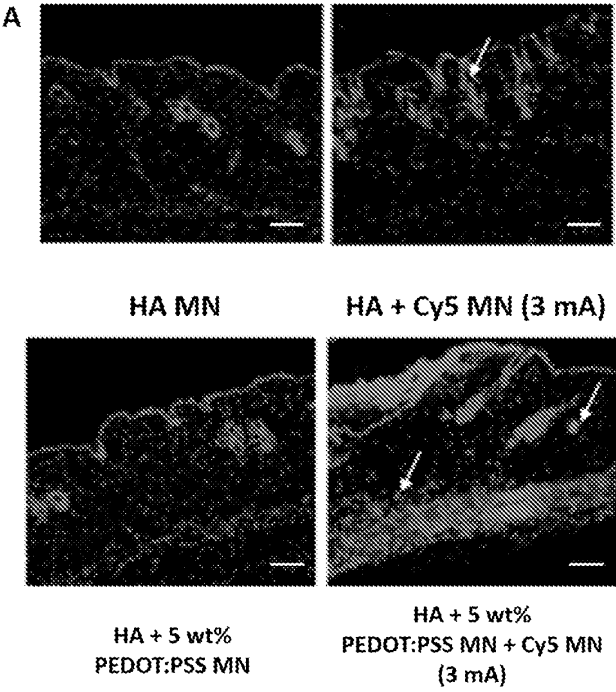
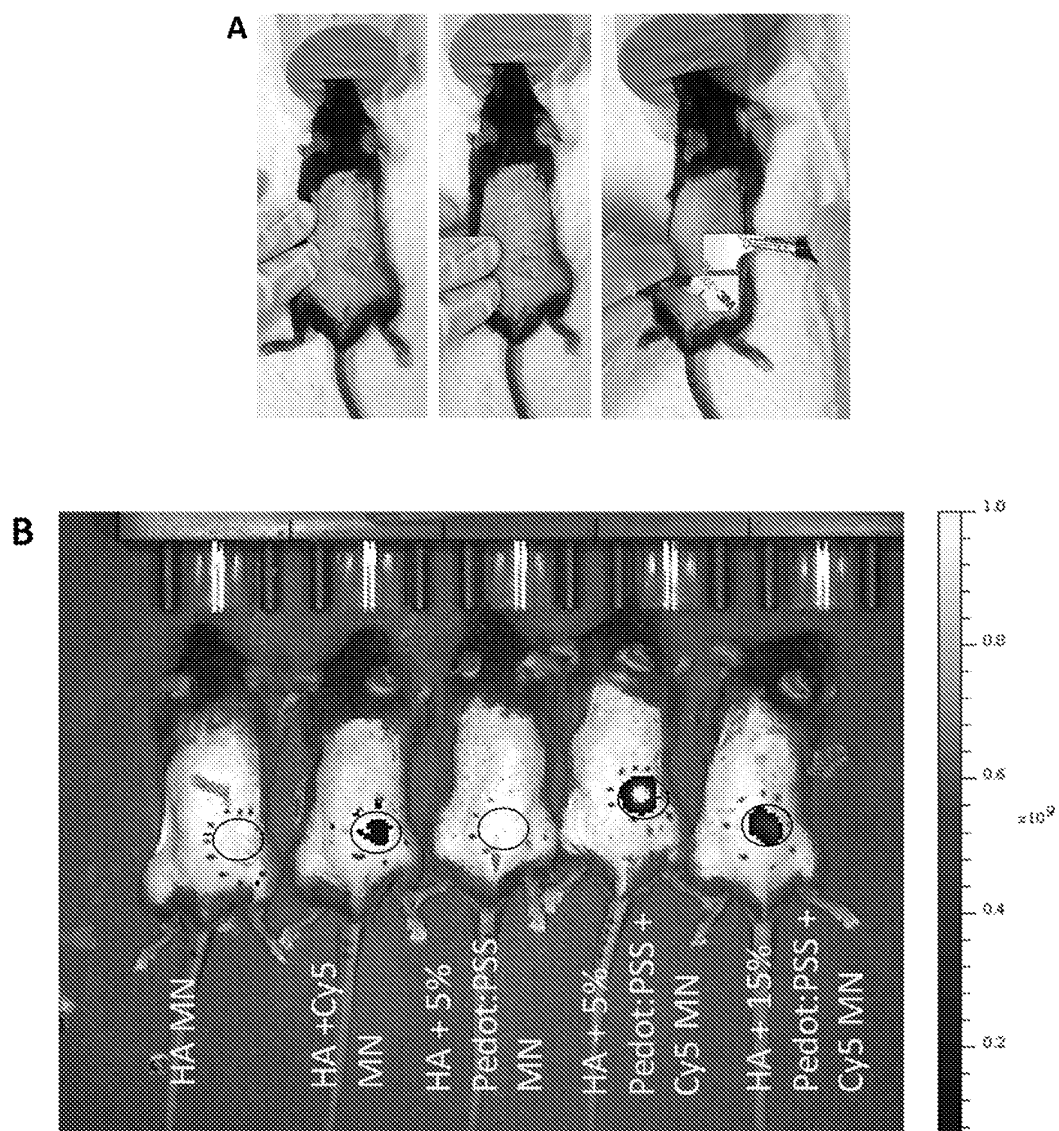


FIG. 8

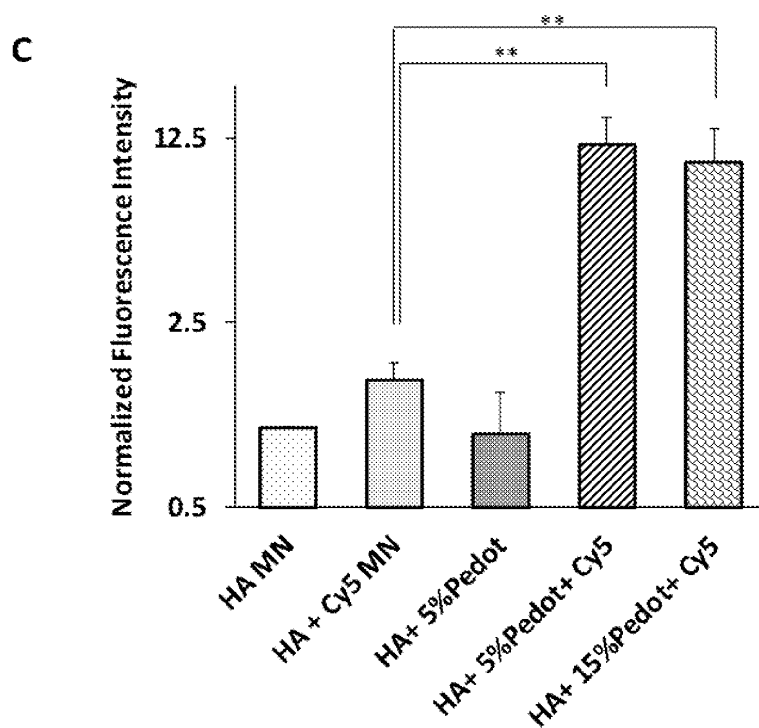
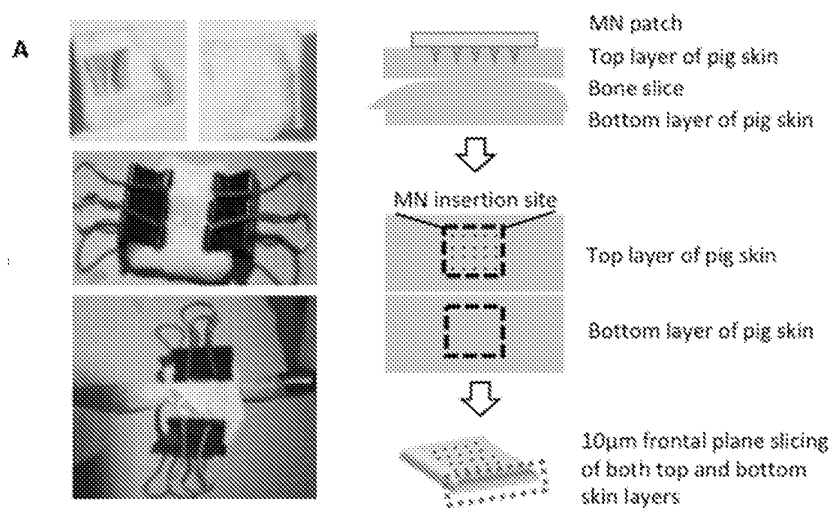


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FIG. 9

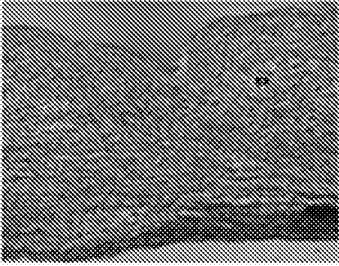
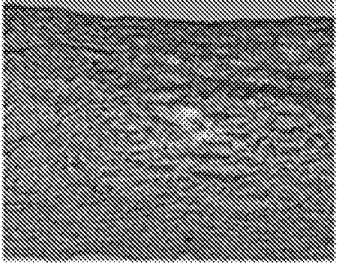
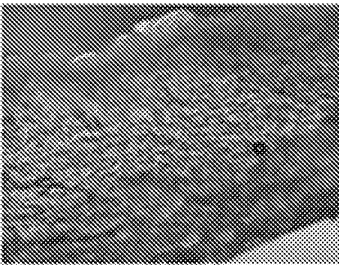
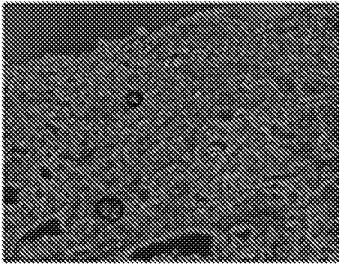
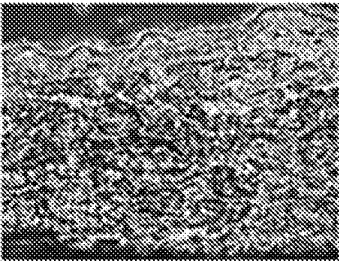
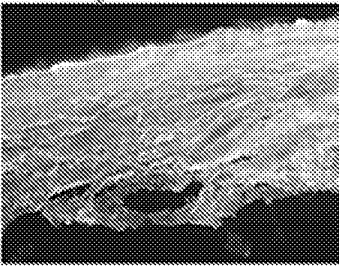
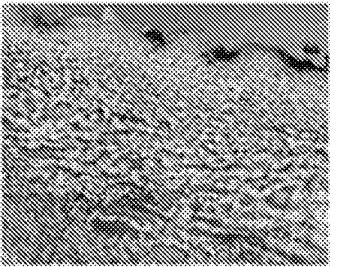
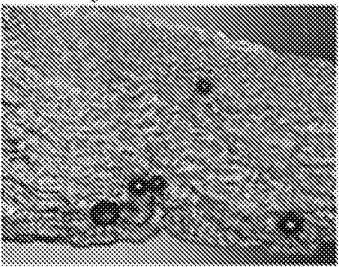


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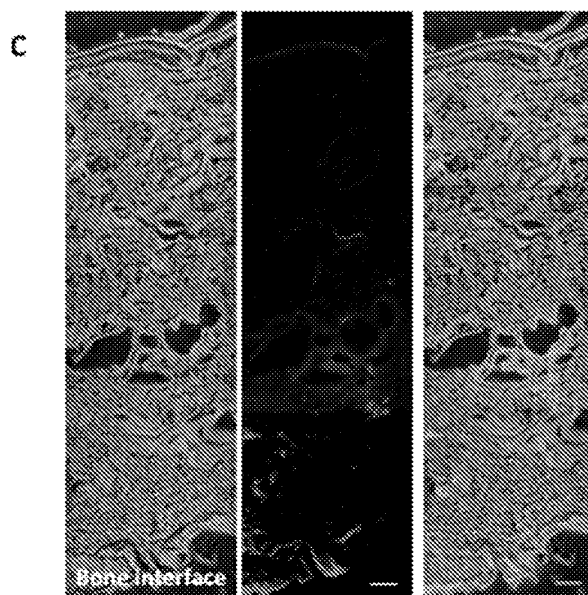
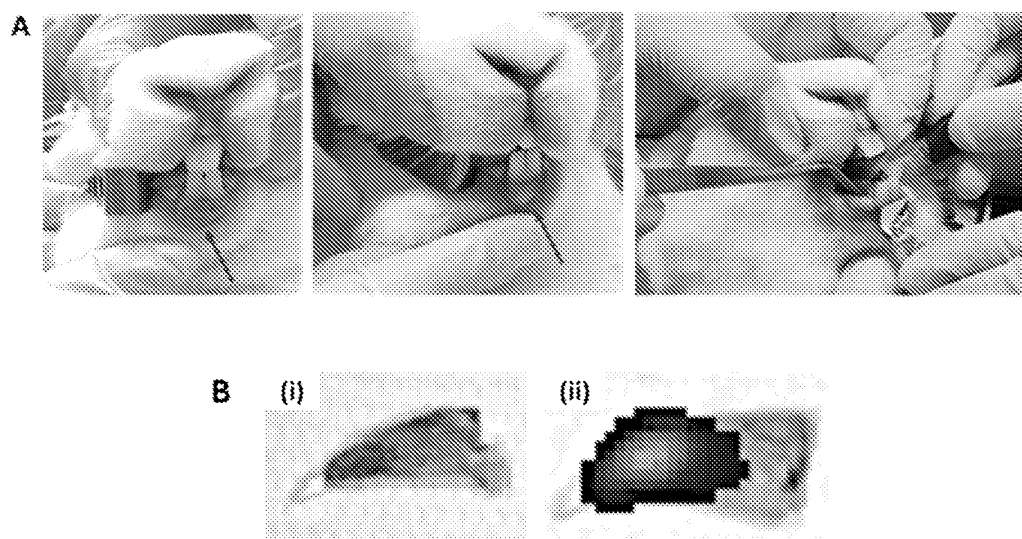
FIG. 9 (Continued)**FIG. 10**

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FIG. 10 (Continued)

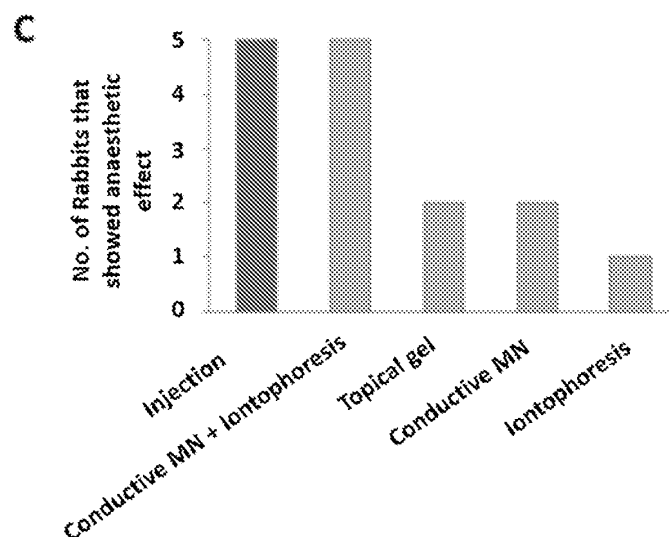
B	Test Group	Top Layer	Bottom Layer
	1) HA MN <u>Control (No dye, no iontophoresis)</u>	No fluorescence 	No fluorescence 
	2) HA MN + Cy5 <u>No iontophoresis</u>	Shows fluorescence 	No fluorescence 
	3) HA MN + Cy5 <u>Iontophoresis: 5 mins, 10mA</u>	Shows fluorescence 	Shows slight fluorescence 
	4) HA/PEDOT:PSS MN + Cy5 <u>Iontophoresis: 5 mins, 10mA</u>	Shows fluorescence 	Shows significant fluorescence 

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FIG. 10 (Continued)**FIG. 11**

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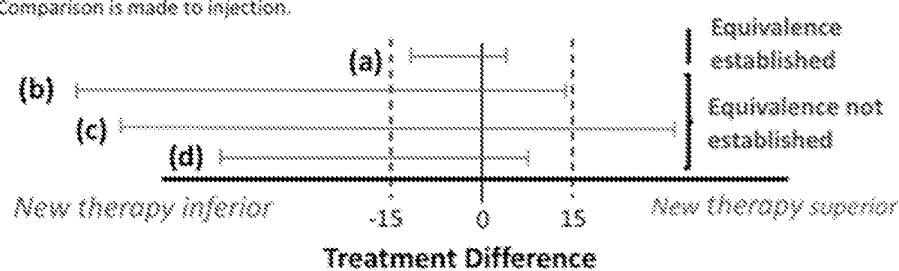
FIG. 11 (Continued)



D

Rabbit	Duration of anaesthetic effect (minutes)				
	Injection	Conductive MN + Iontophoresis	Topical gel	Conductive MN	Iontophoresis
1	30	30	45	3	0
2	20	17	2.5	0	5
3	20	20	2.5	0	0
4	102	87	0	0	0
5	120	120	120	120	0
Mean Difference*		-3.6	34.3	-24	33.75
Standard Deviation*		6.5	39.3	45.4	14.36
95% Confidence Interval*		-11.67, 4.47	-83.0, 14.6	-80.8, 32.0	-56.6, -10.8

*Comparison is made to injection.



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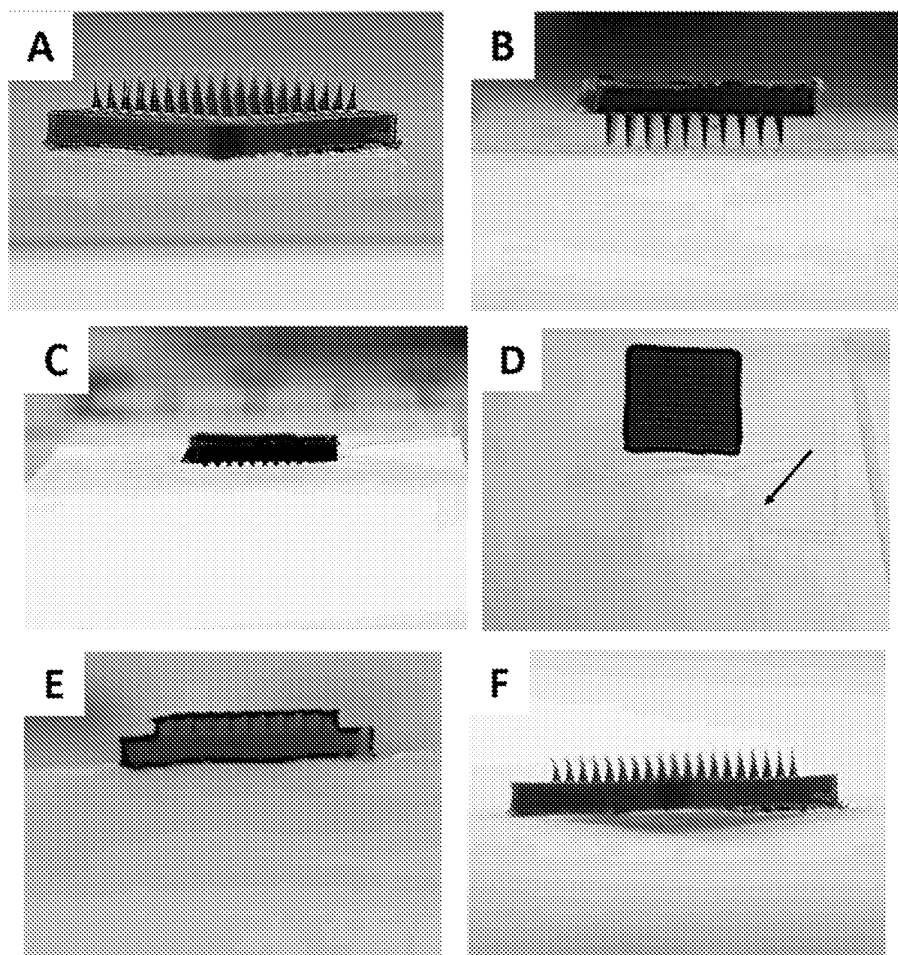
FIG. 12

FIG. 13

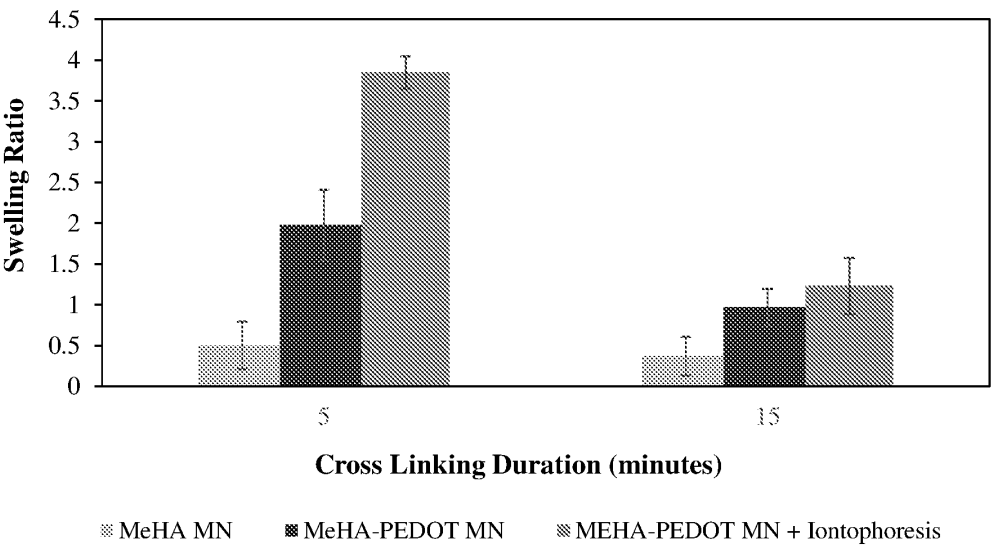
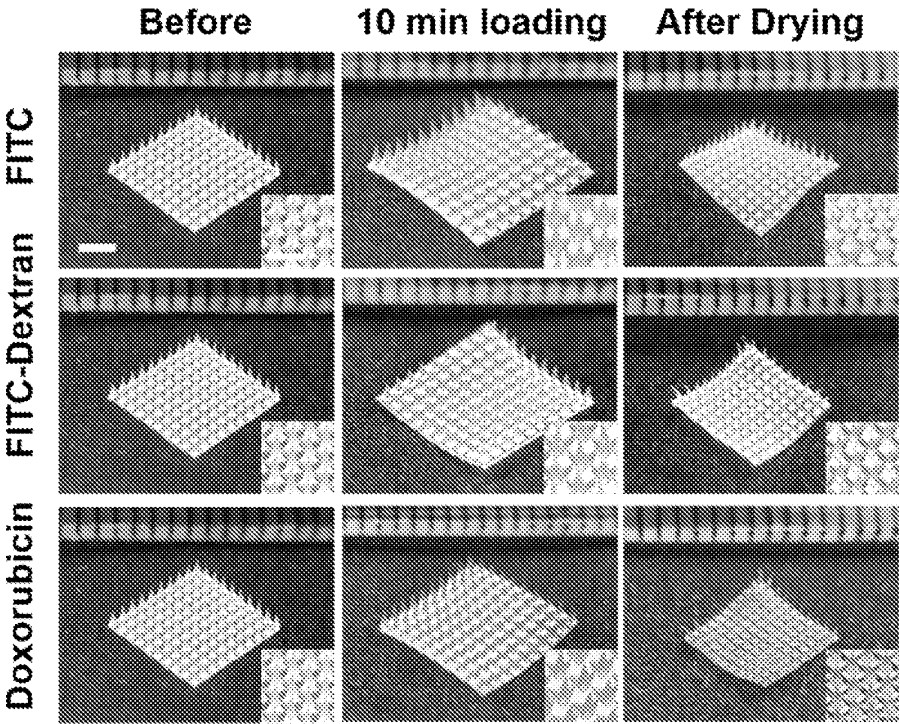
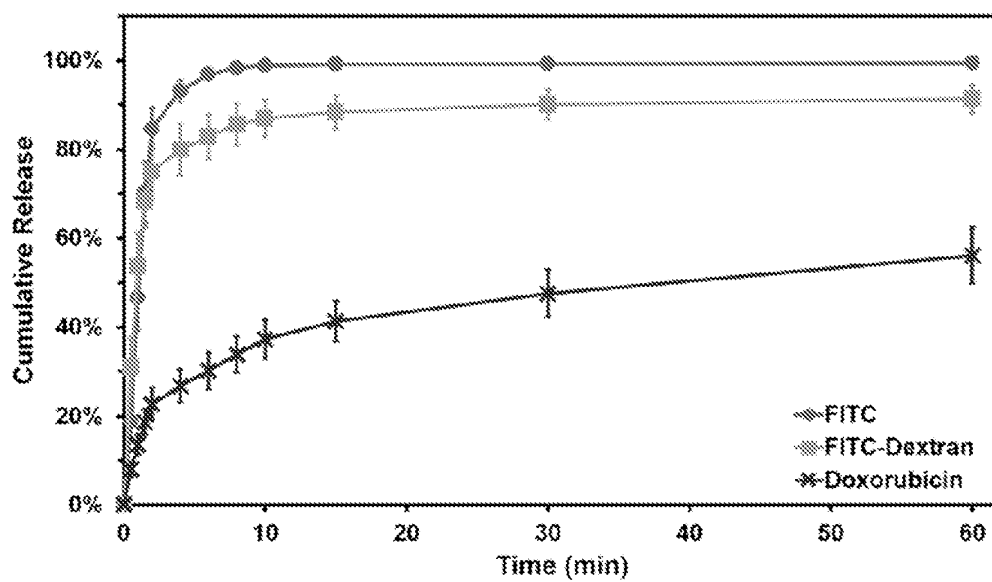


FIG. 14



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FIG. 15

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FIG. 16

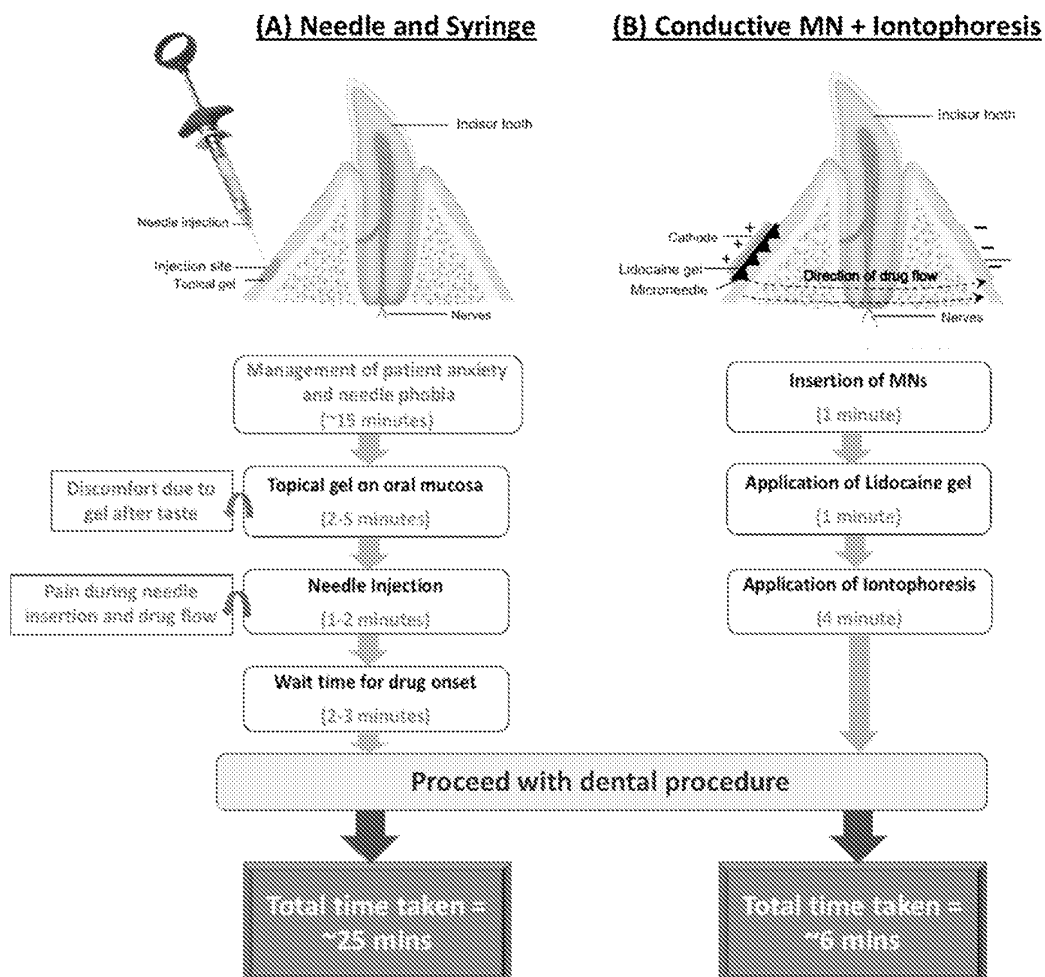


FIG. 17

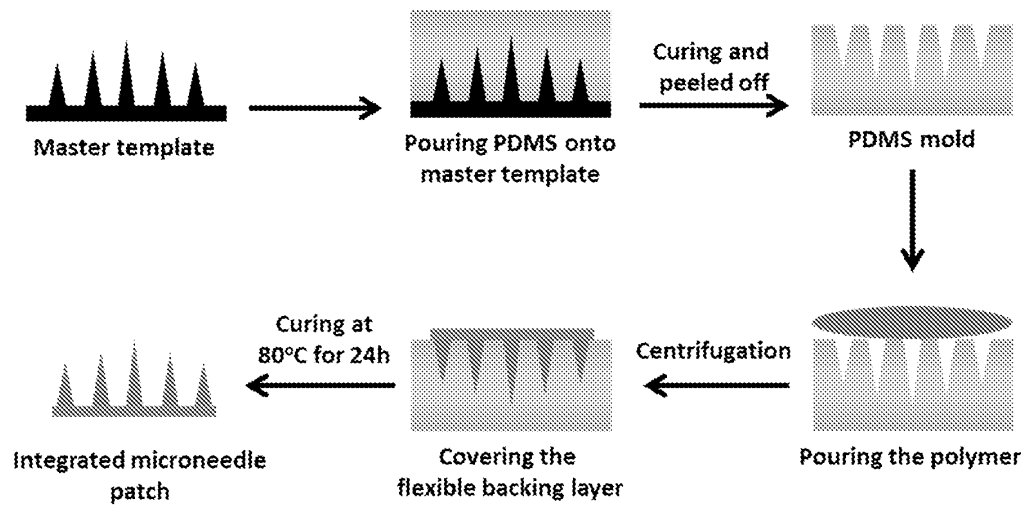


FIG. 18

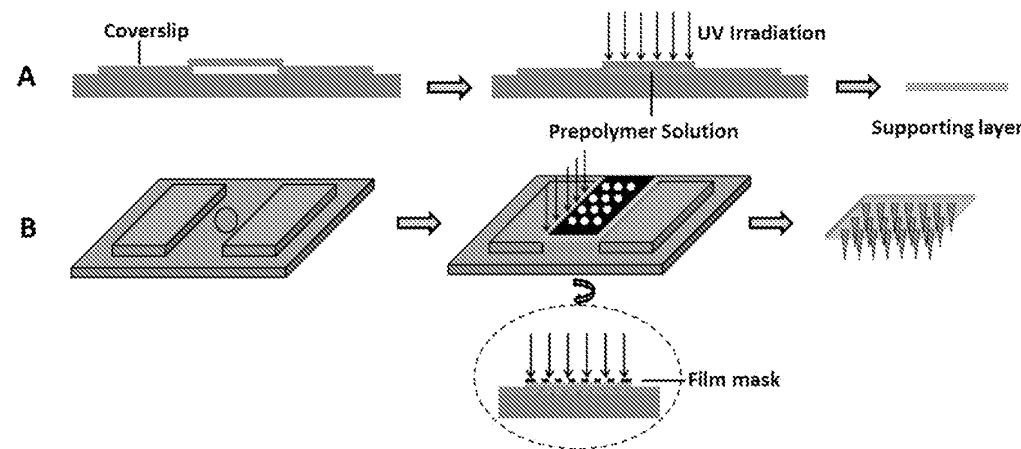
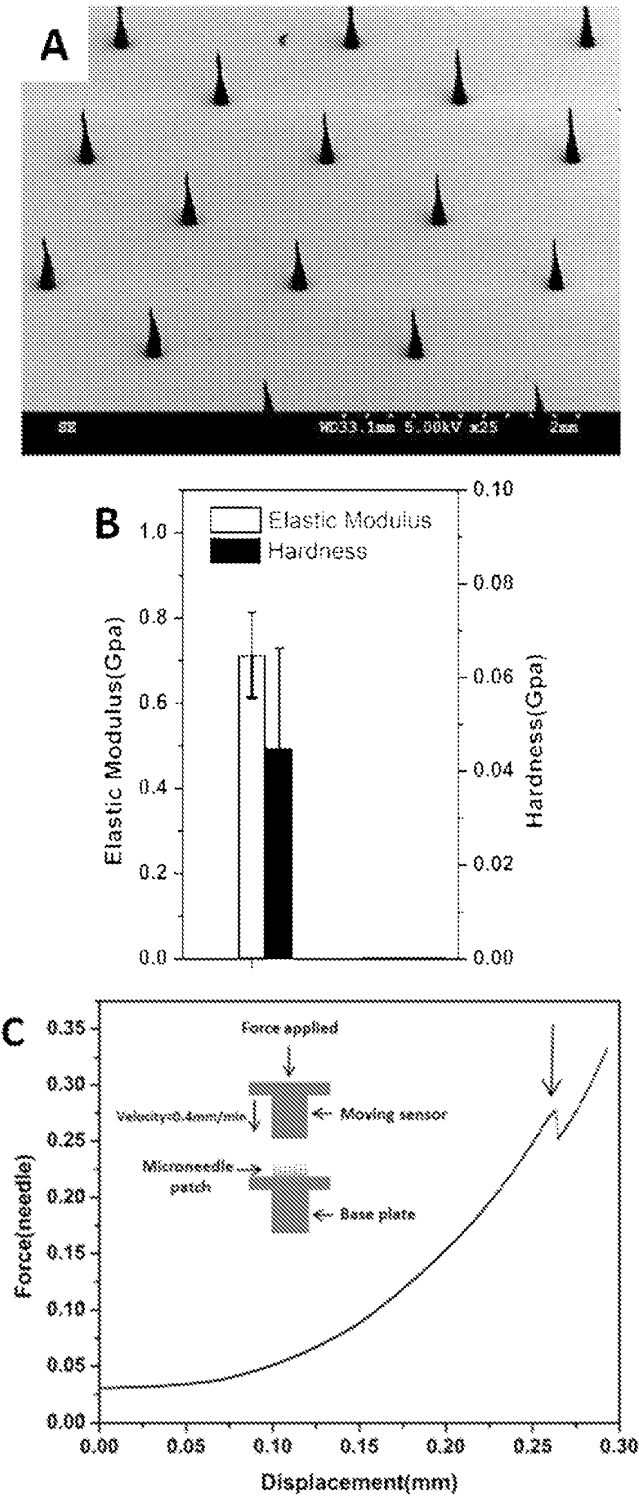


FIG. 19



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FIG. 20

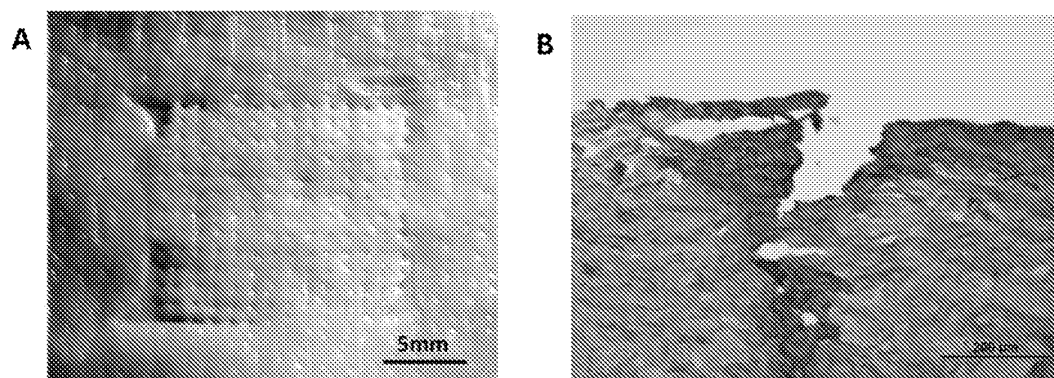


FIG. 21

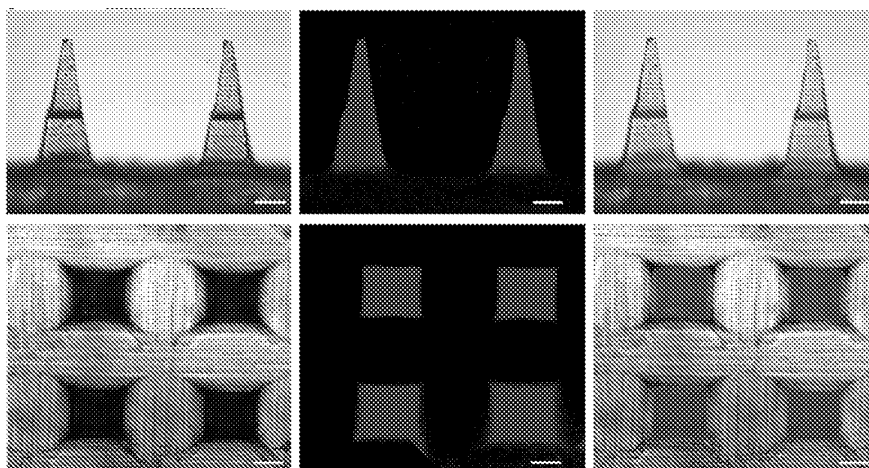
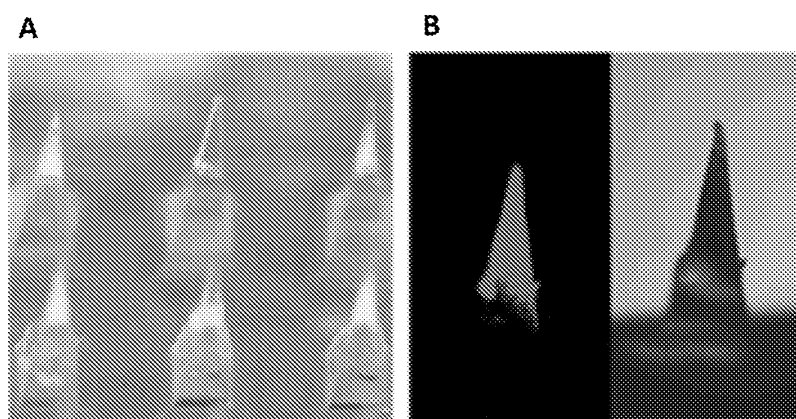


FIG. 22



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FIG. 23

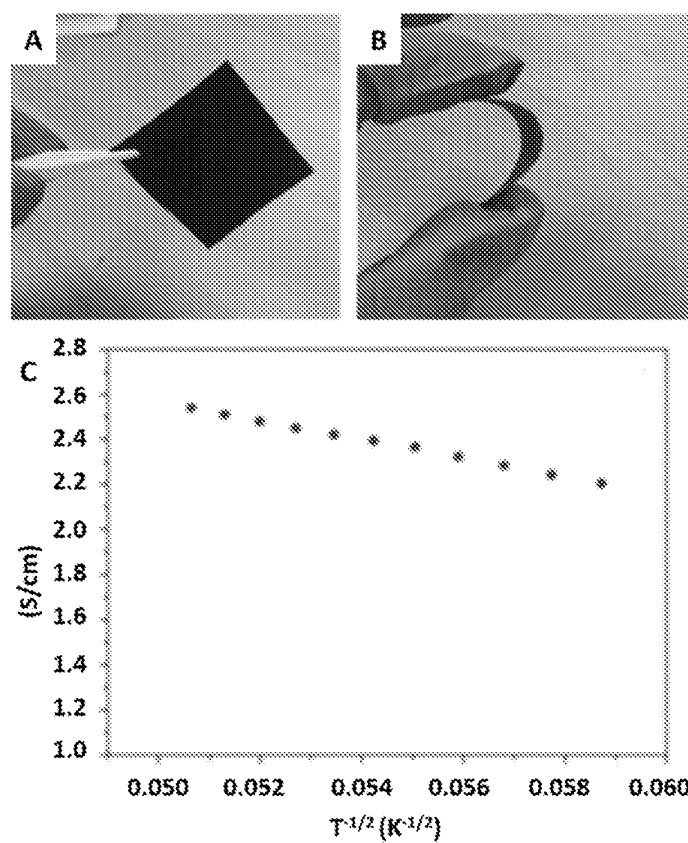
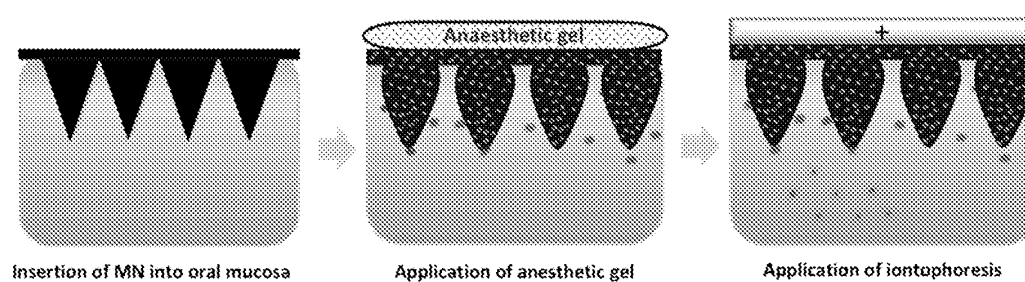
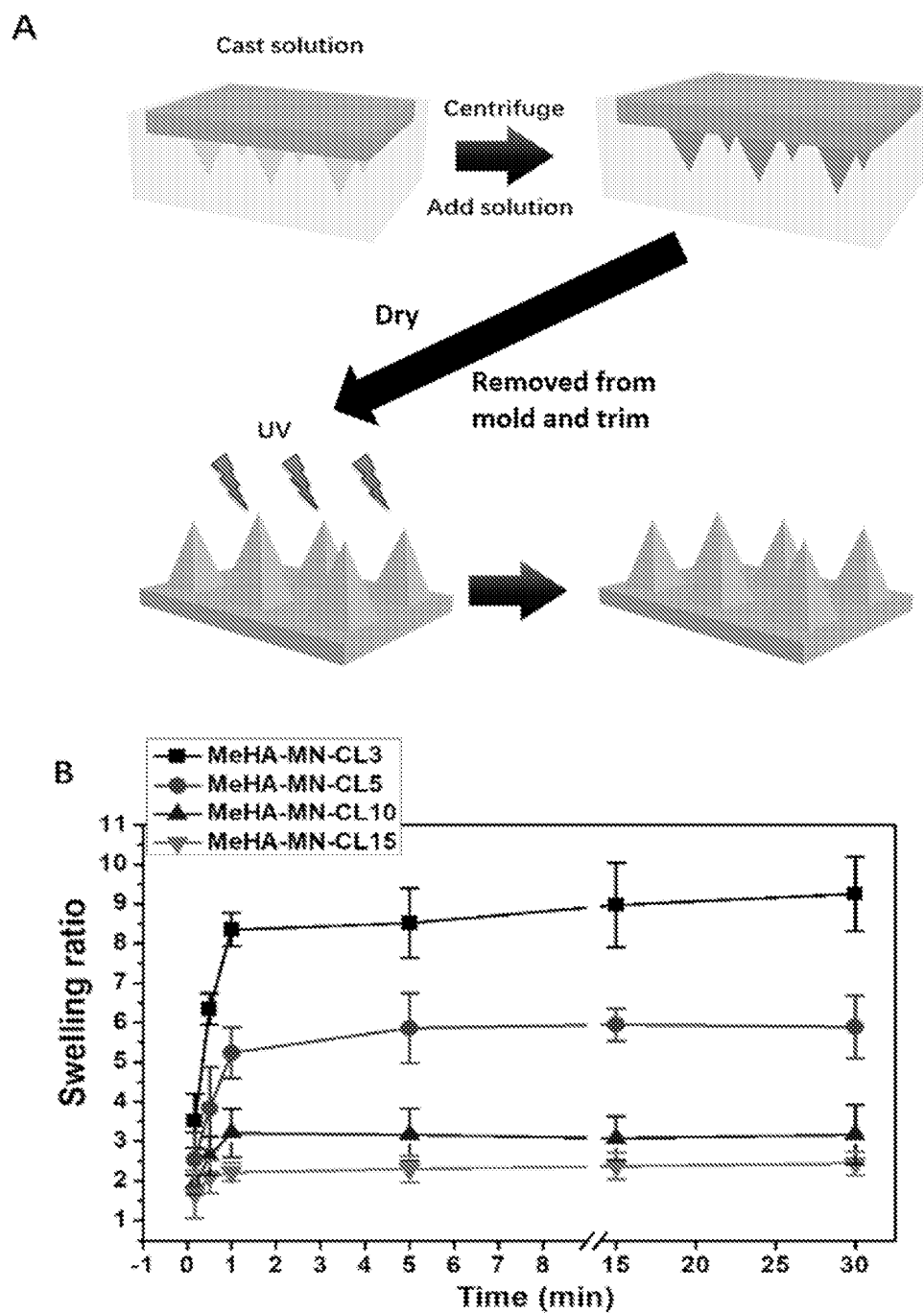


FIG. 24



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FIG. 25



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FIG. 25 (Continued)