

Fig. 1

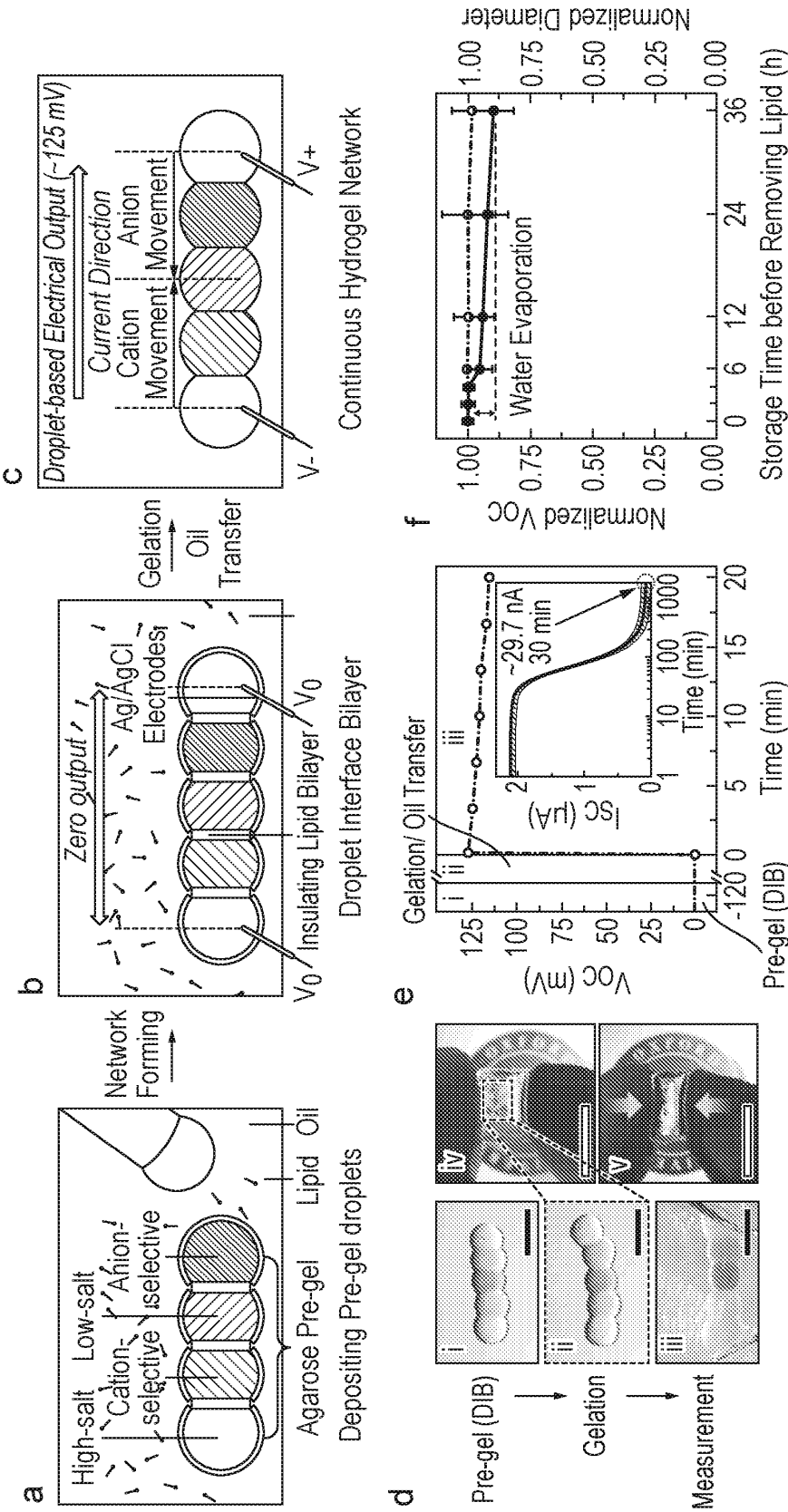


Fig. 2

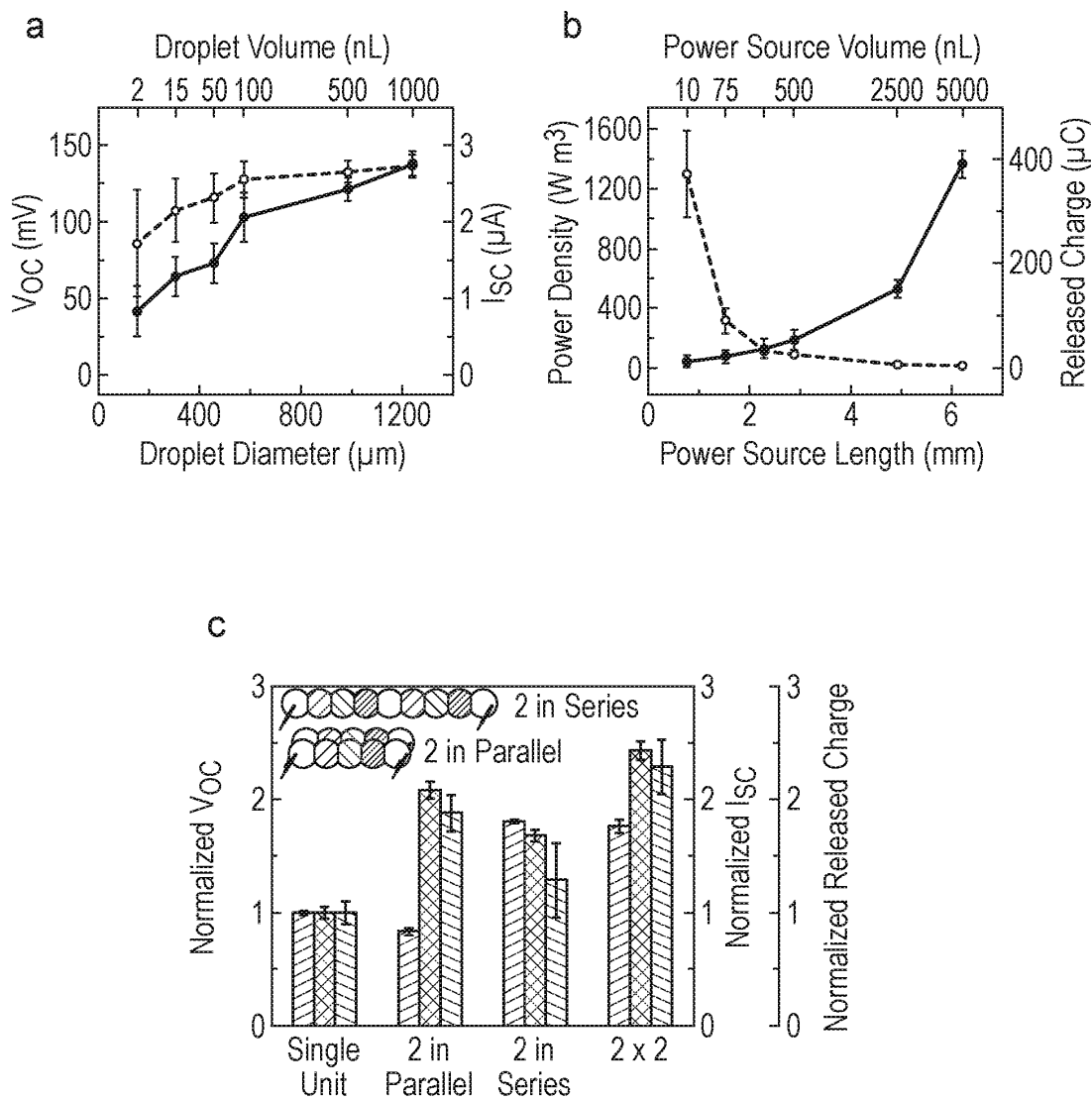


Fig. 3

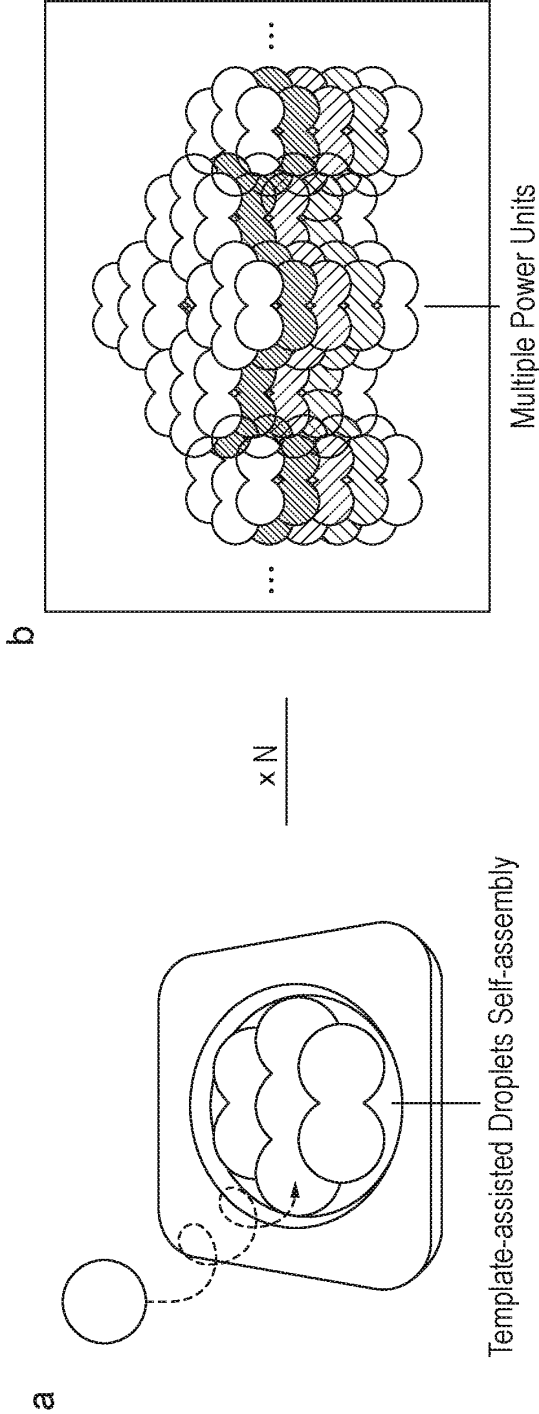


Fig. 3 Cont.)

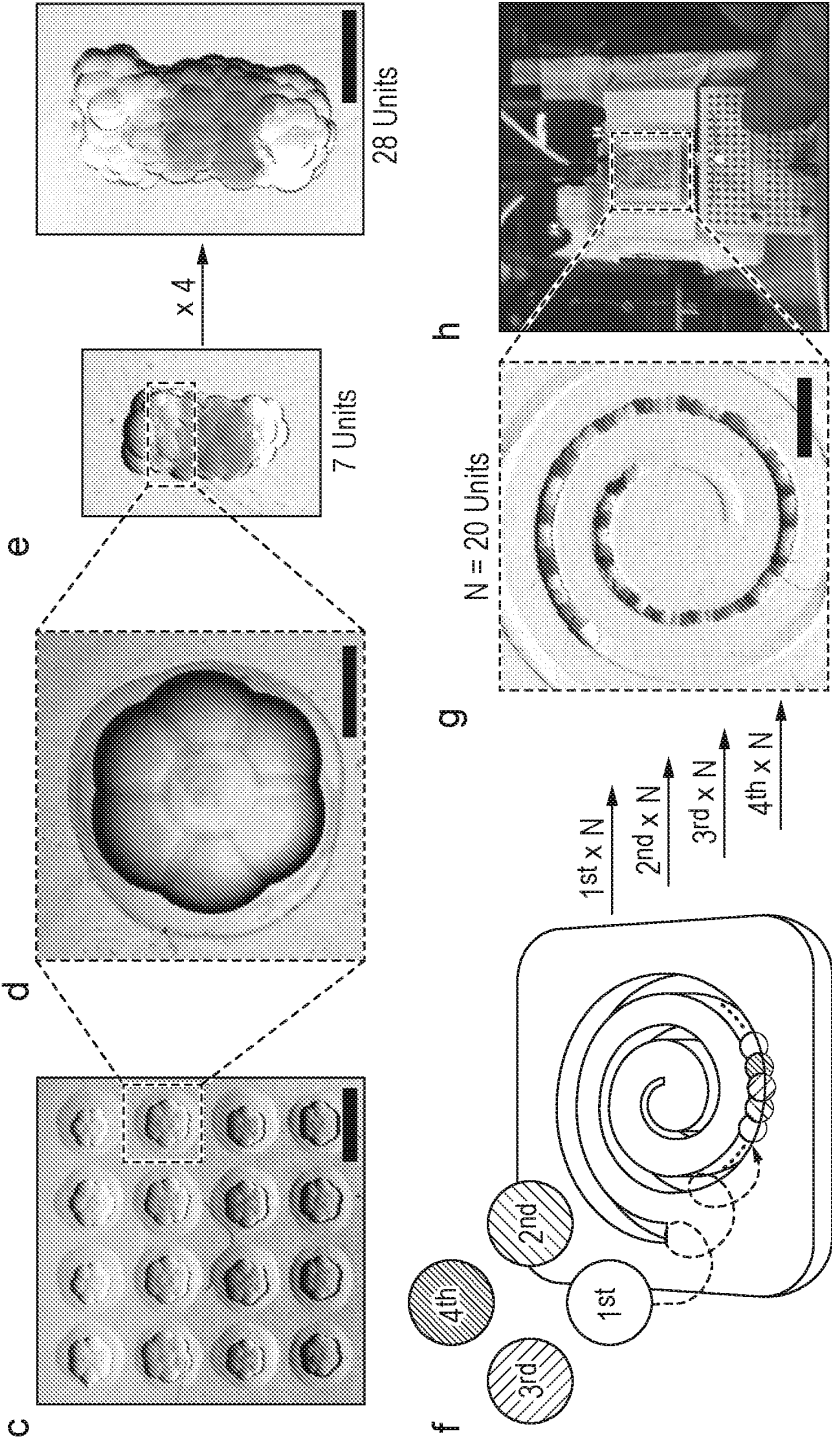


Fig. 4

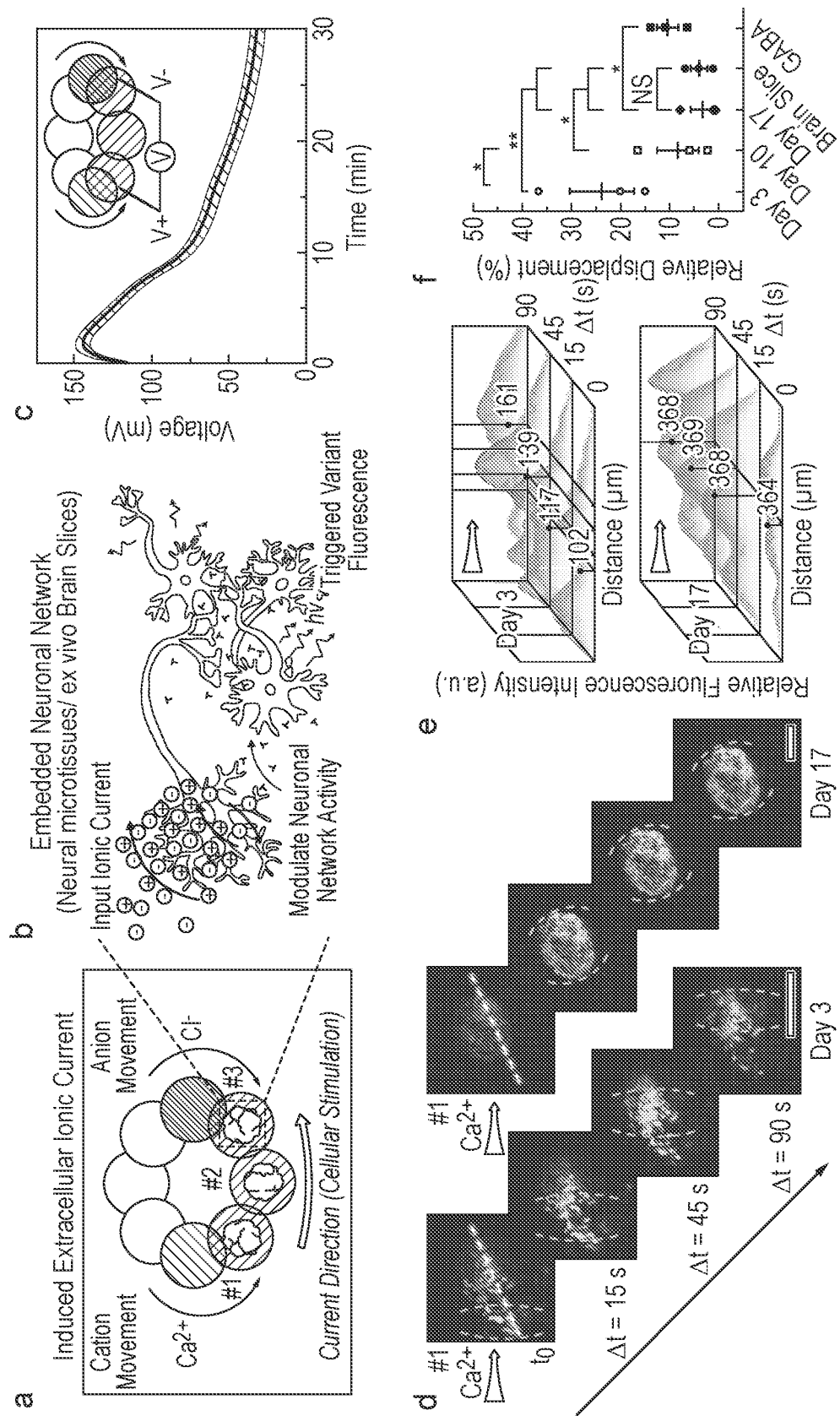


Fig. 5

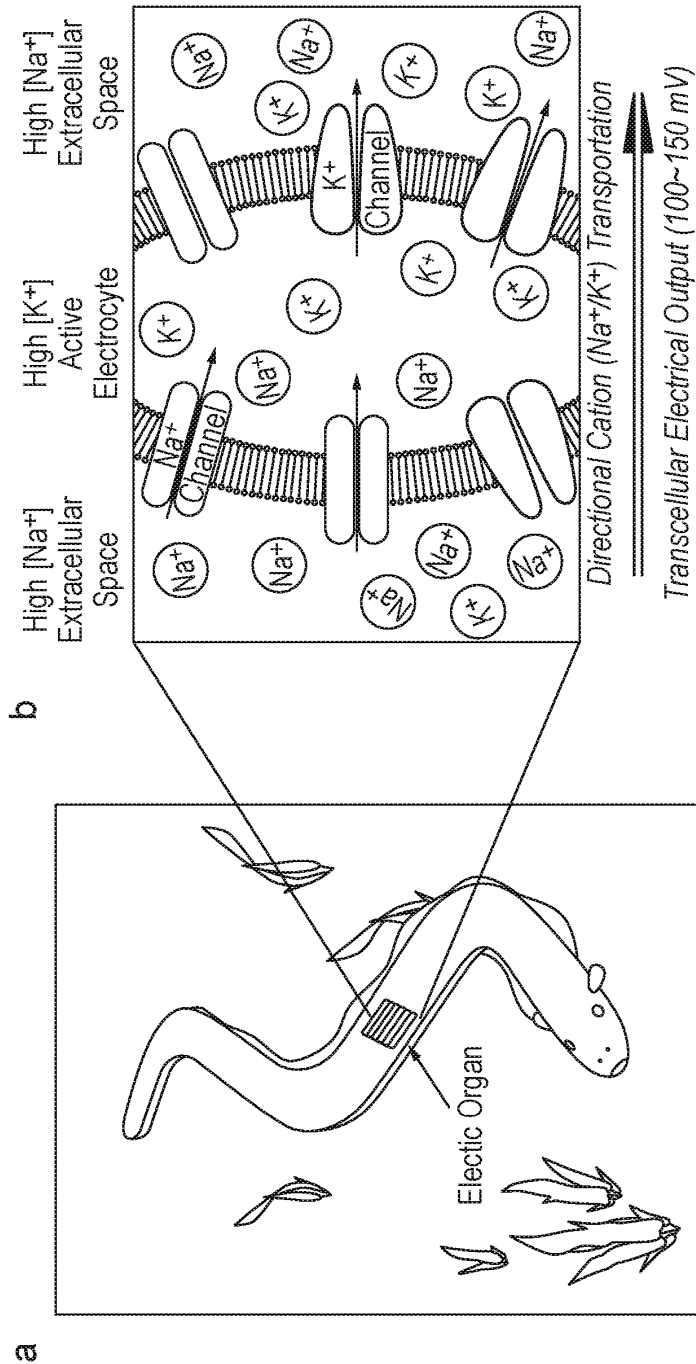
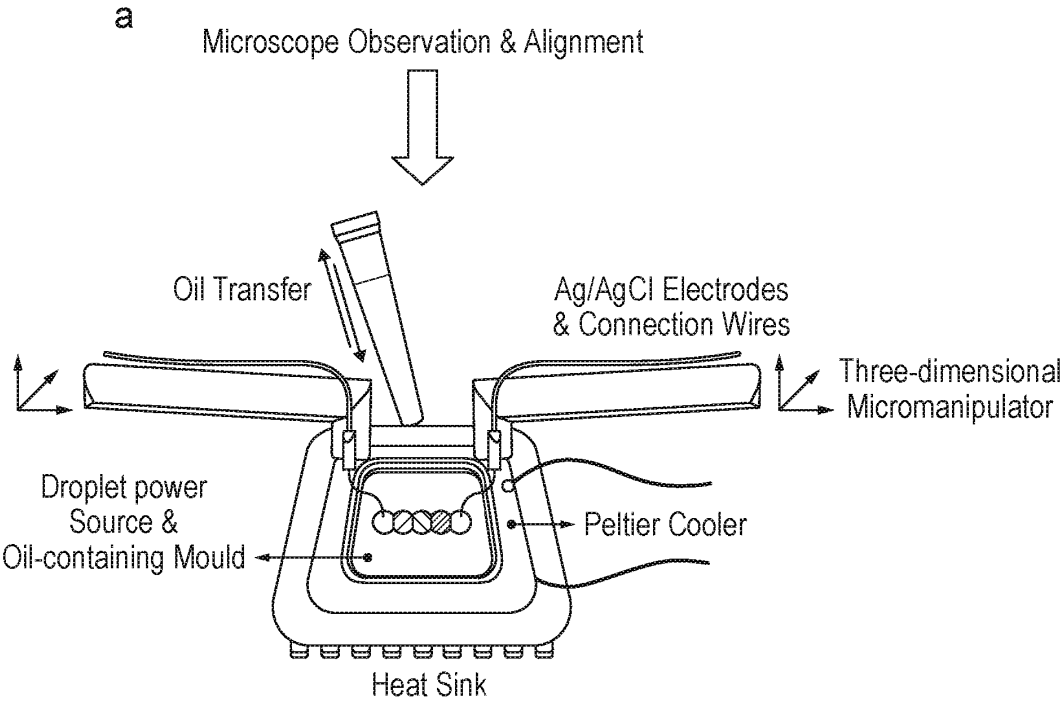


Fig. 6



- b
- i. Droplet Deposition and Partial Gelation
 - ii. Oil Transfer (Lipid Removal)
 - ii. DIB Disassemble & Full Gelation
 - iv. Stable Continuous Hydrogel Structures

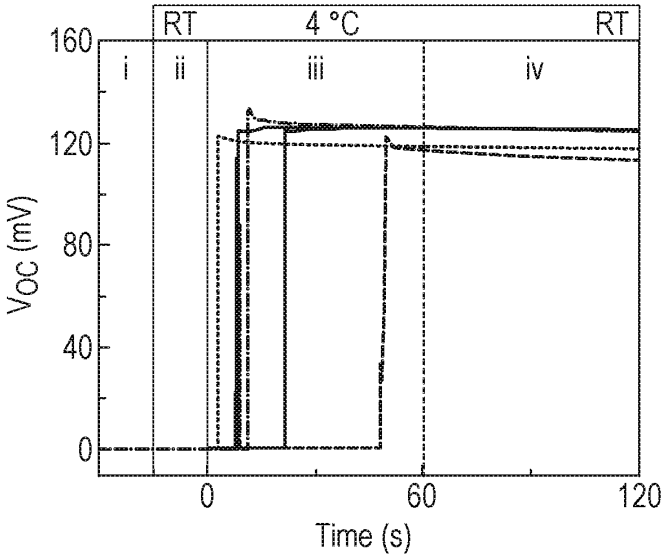


Fig. 7

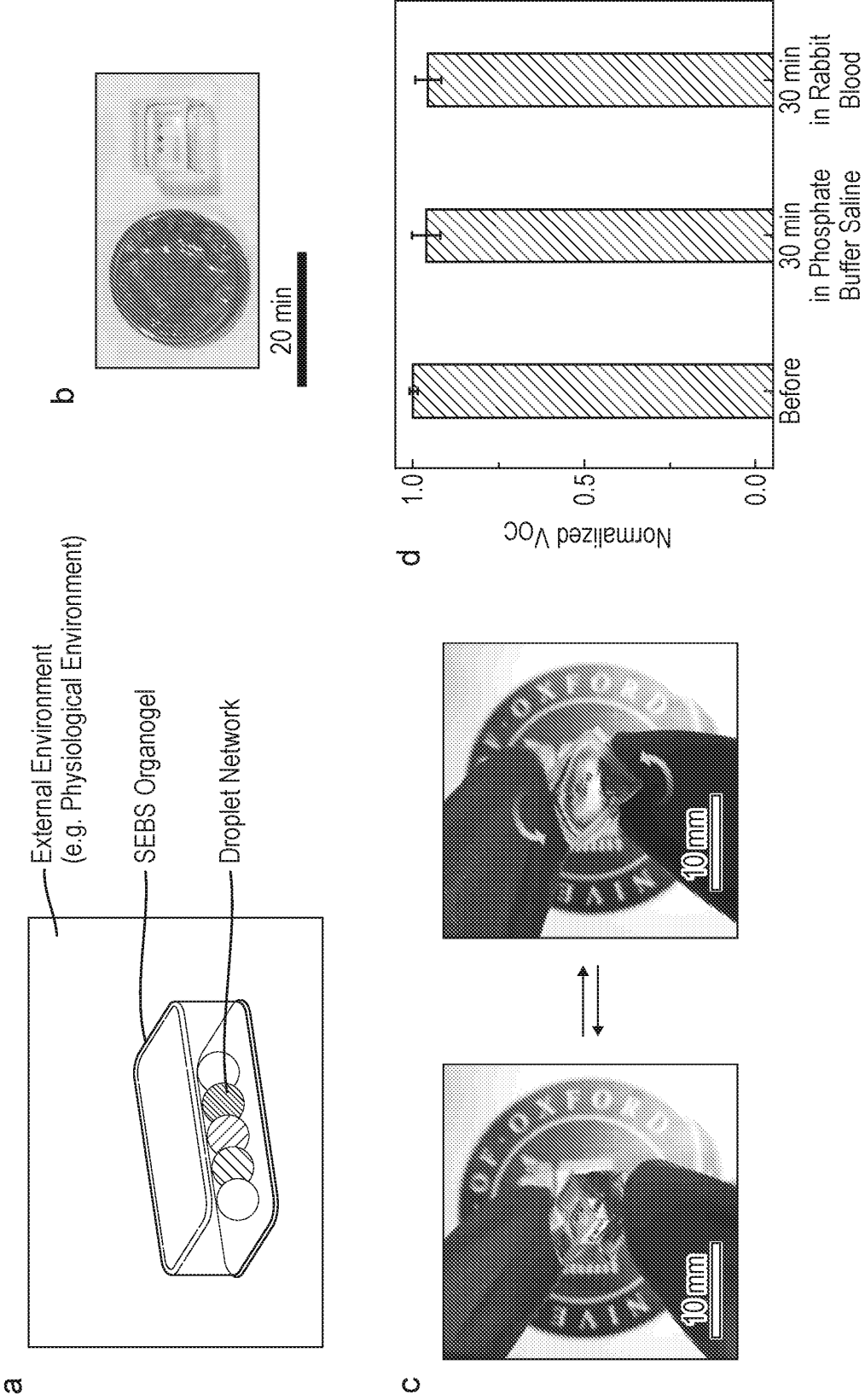
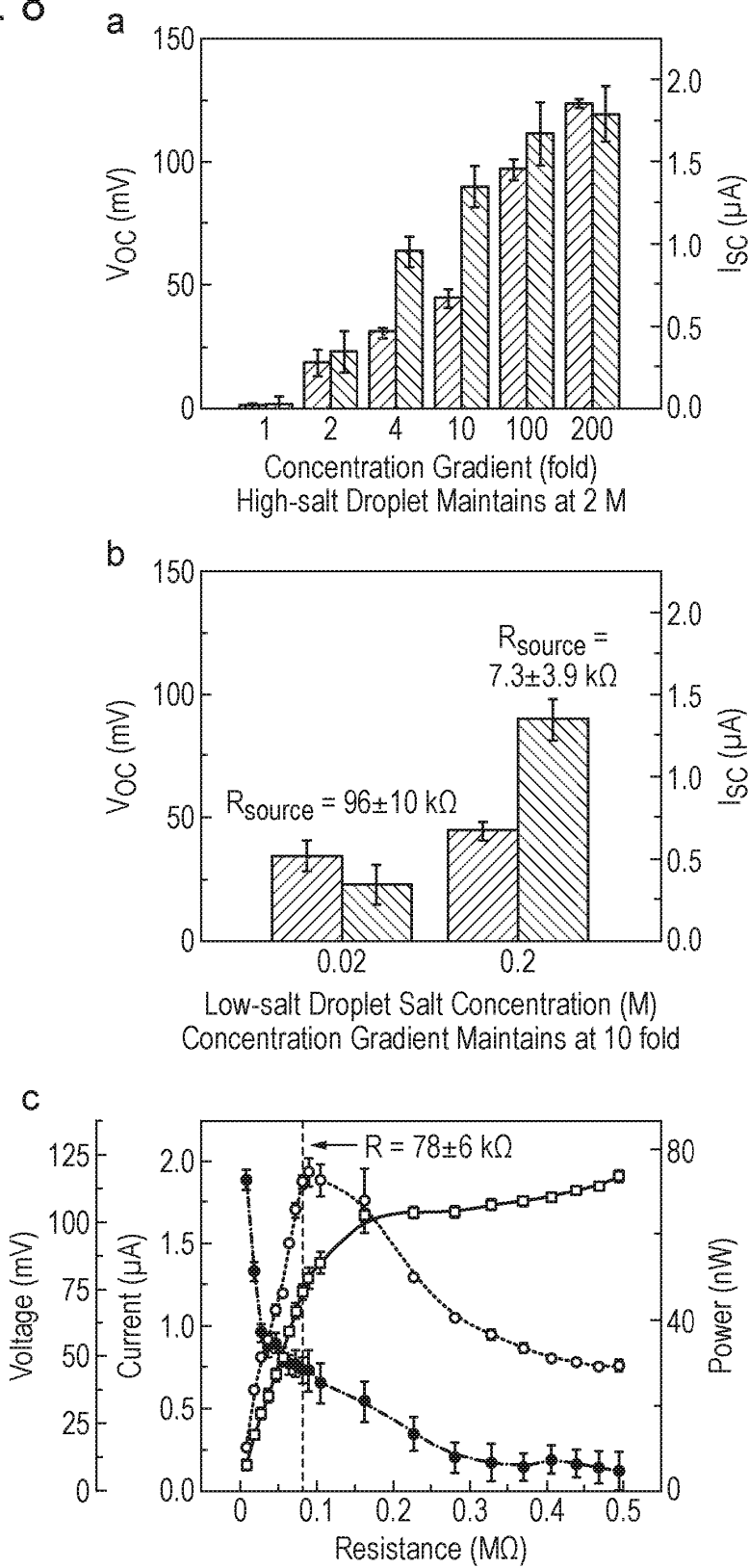


Fig. 8



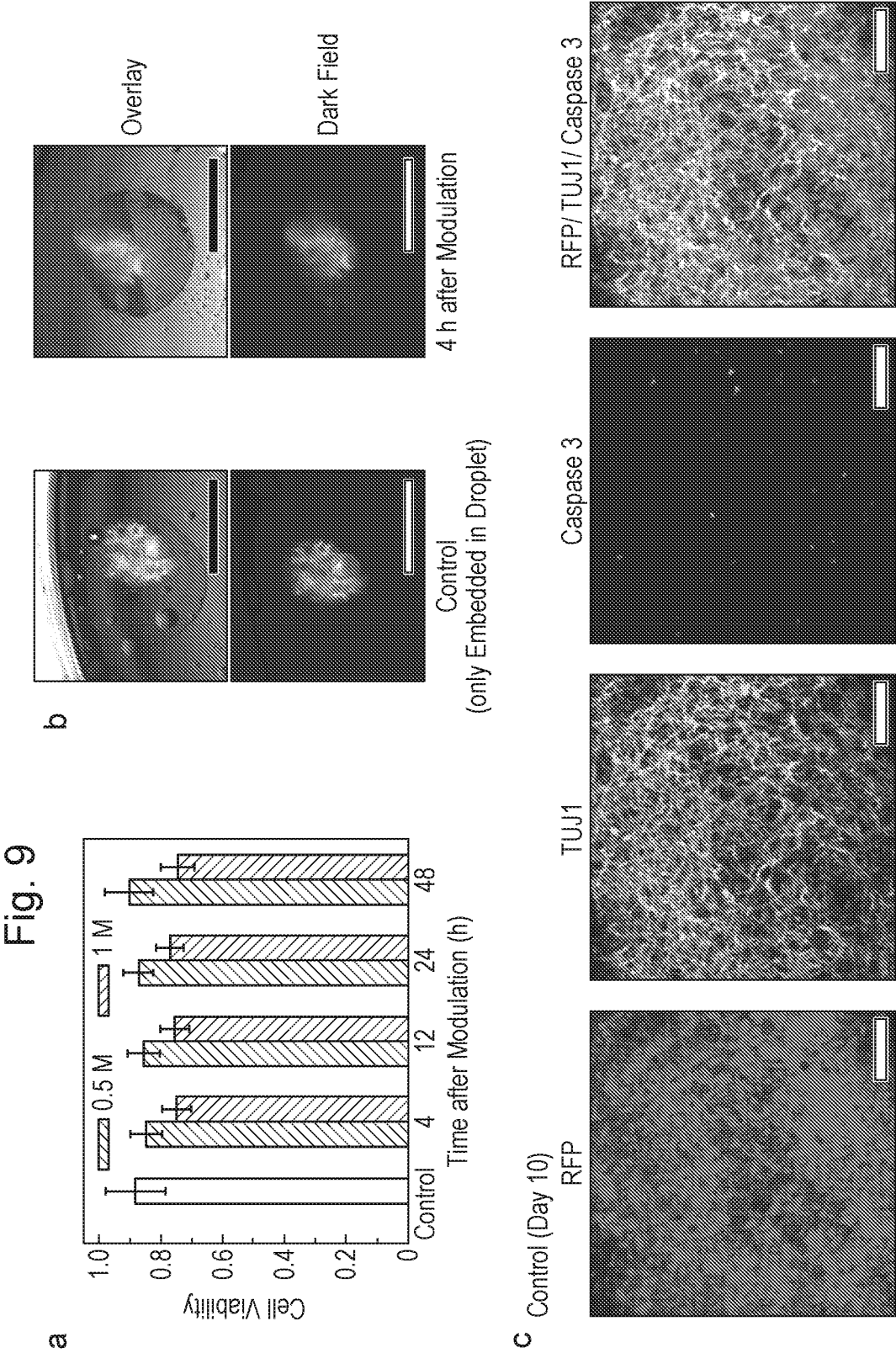


Fig. 9 Cont.)

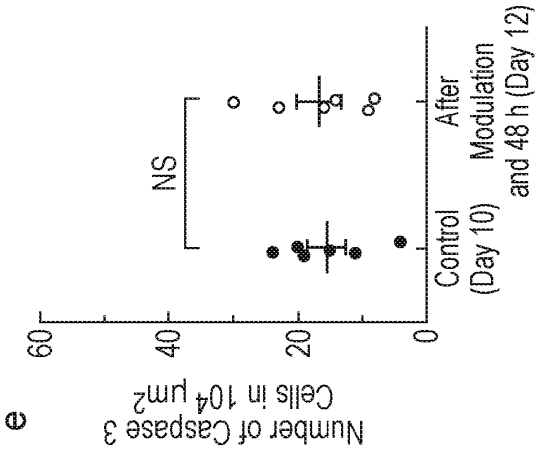
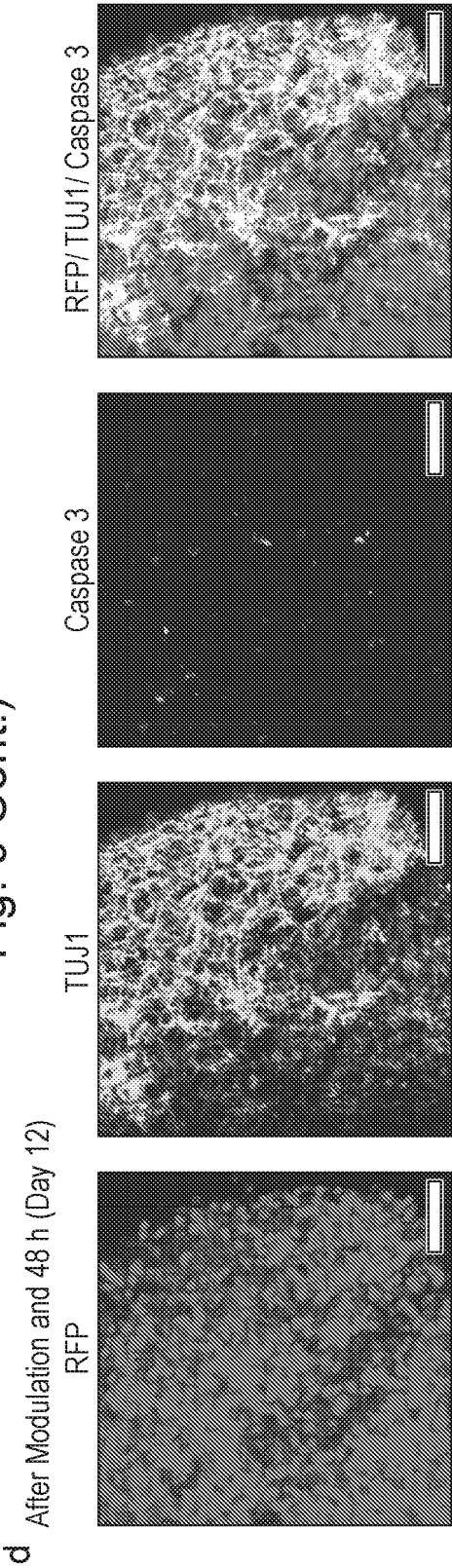
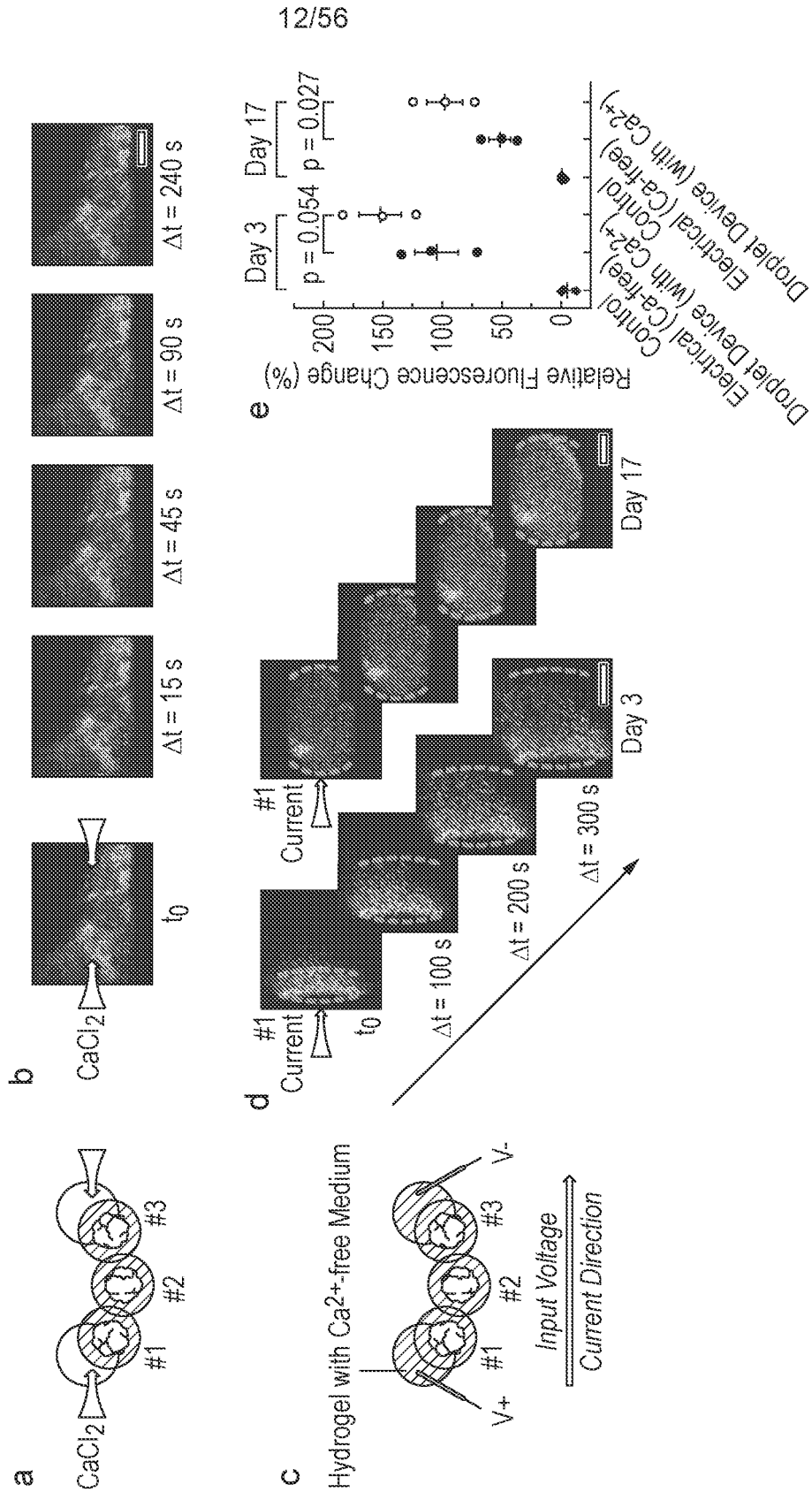


Fig. 10



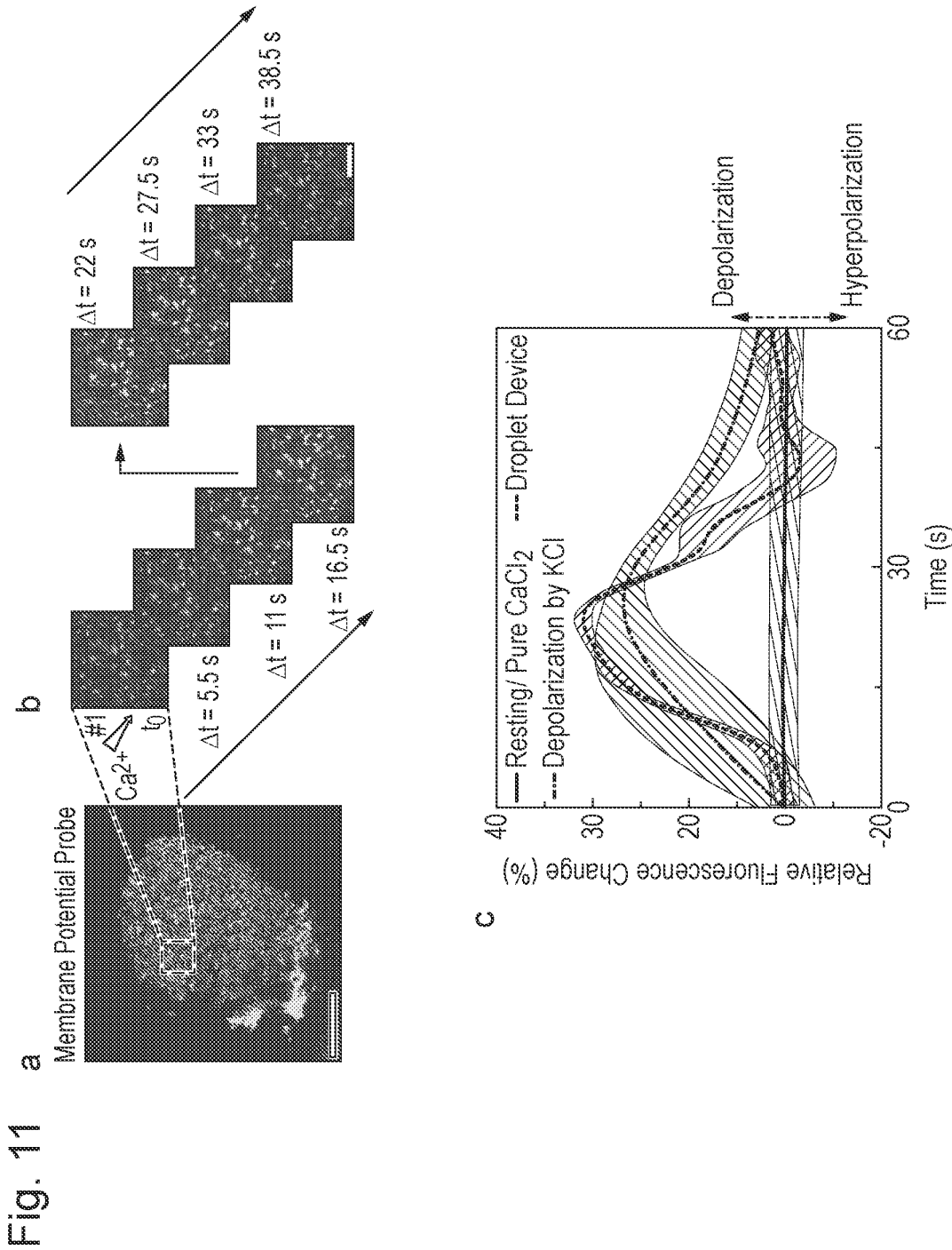


Fig. 12

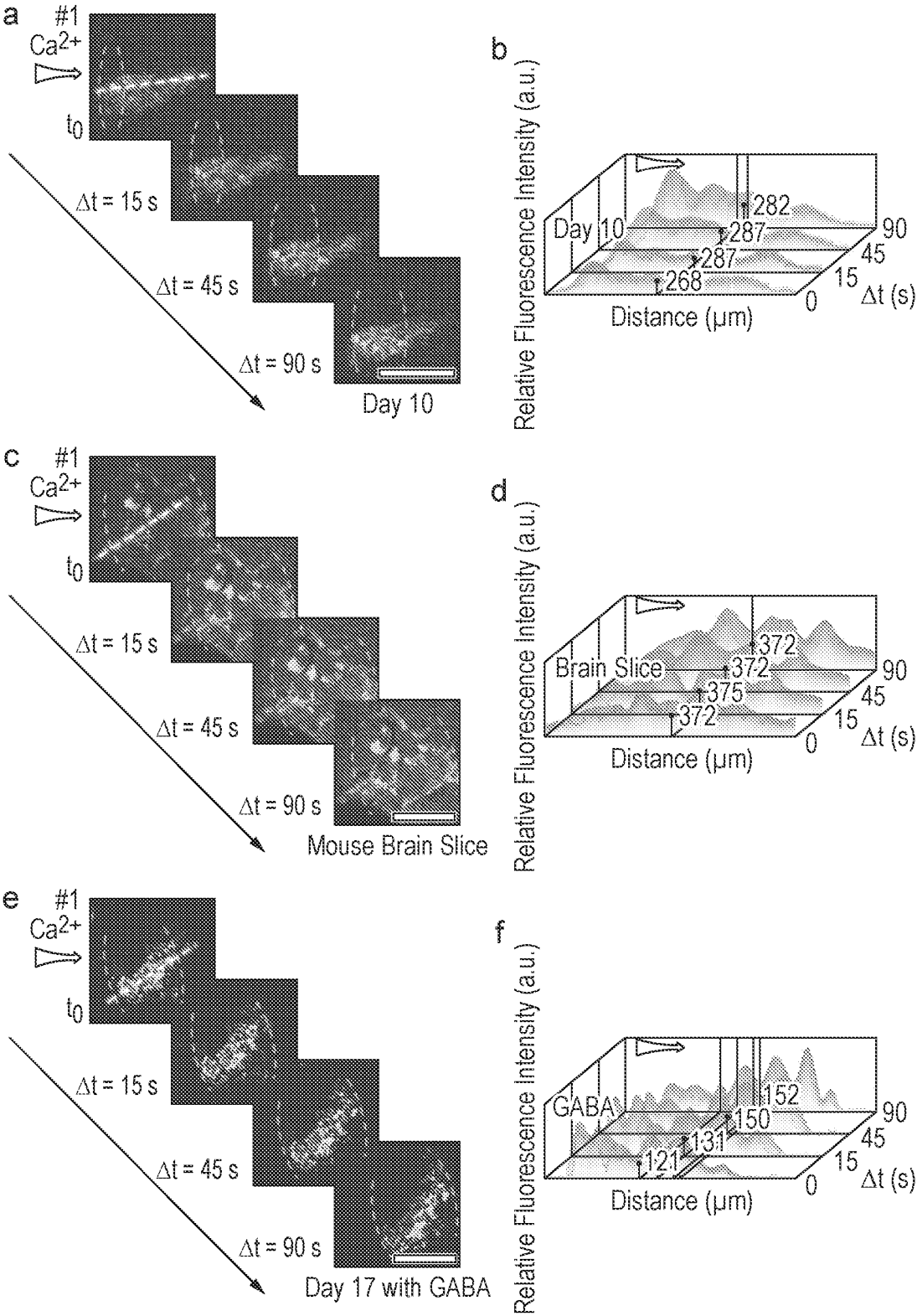
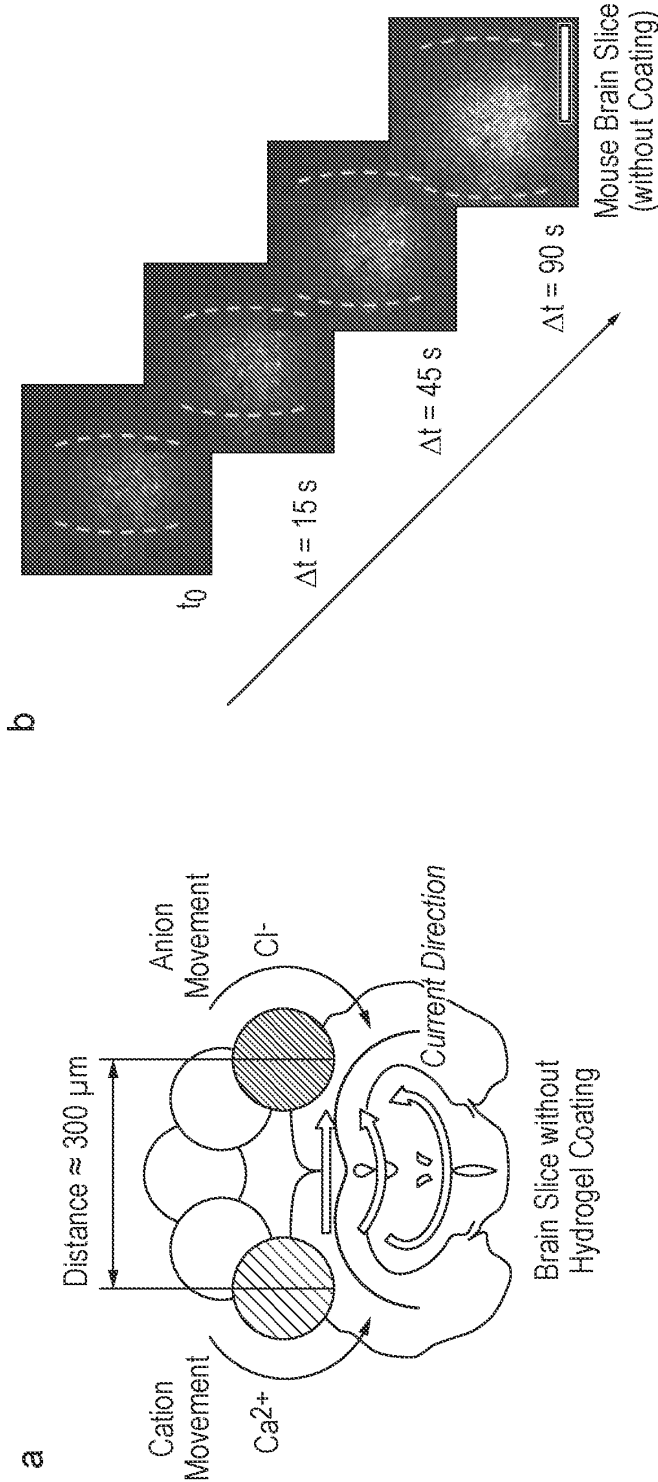
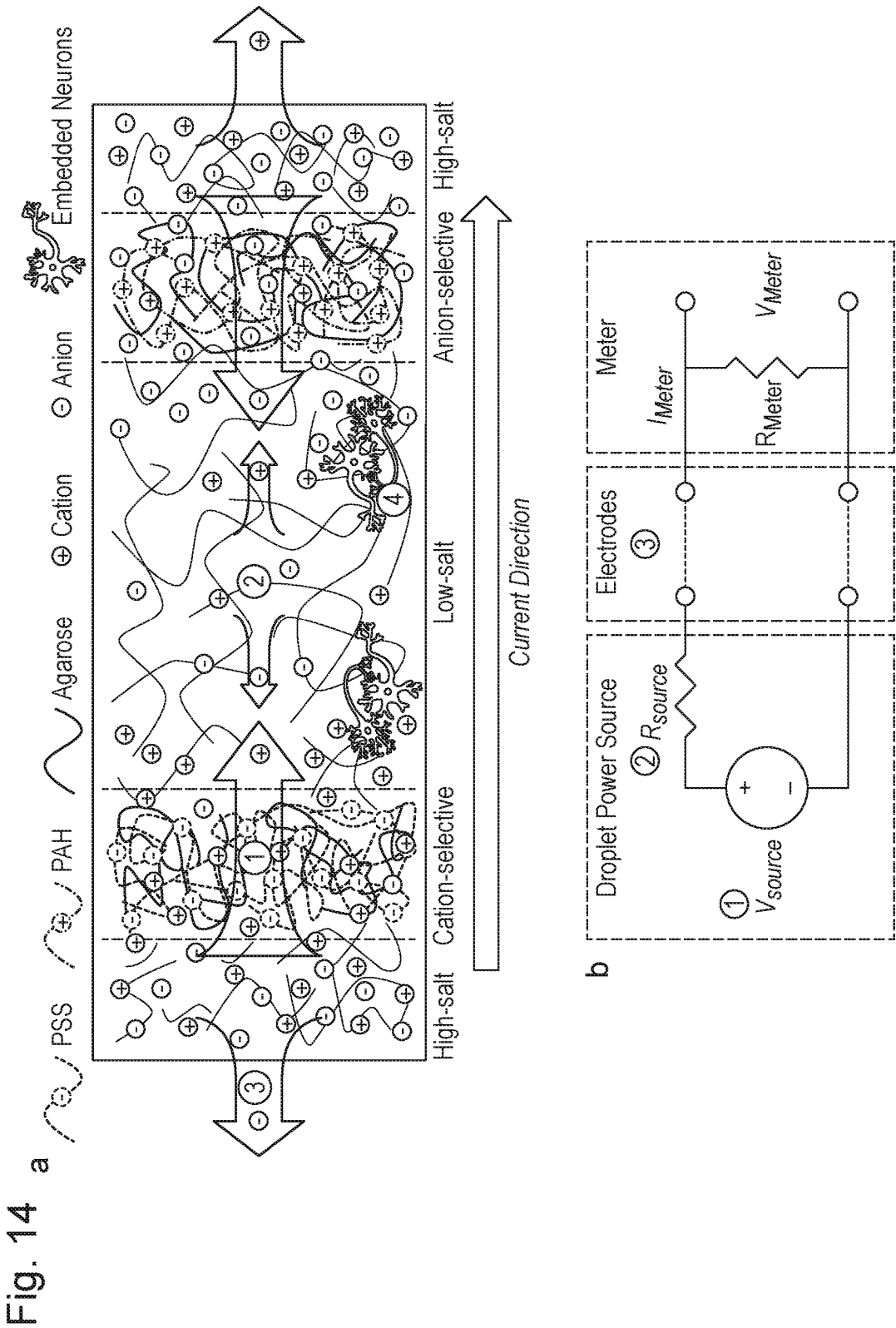


Fig. 13





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Fig. 15

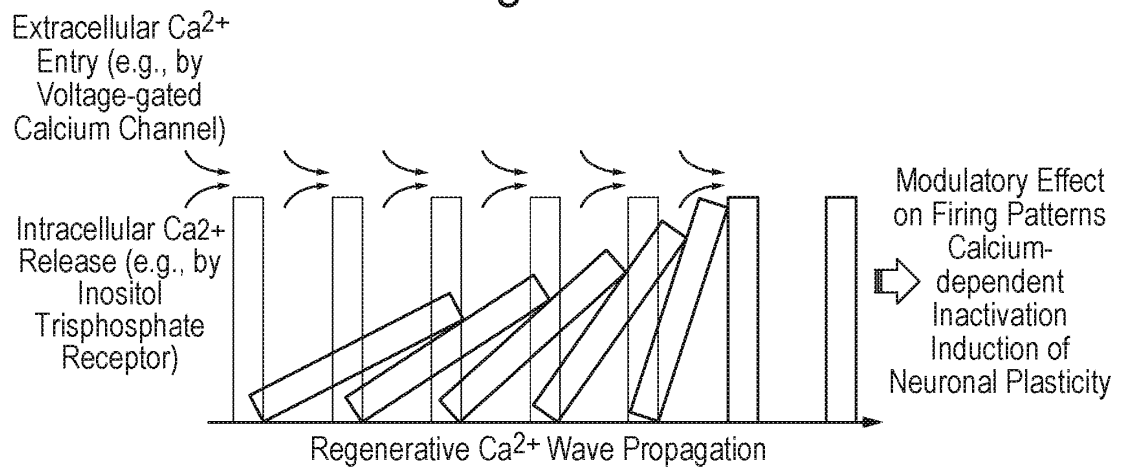


Fig. 16

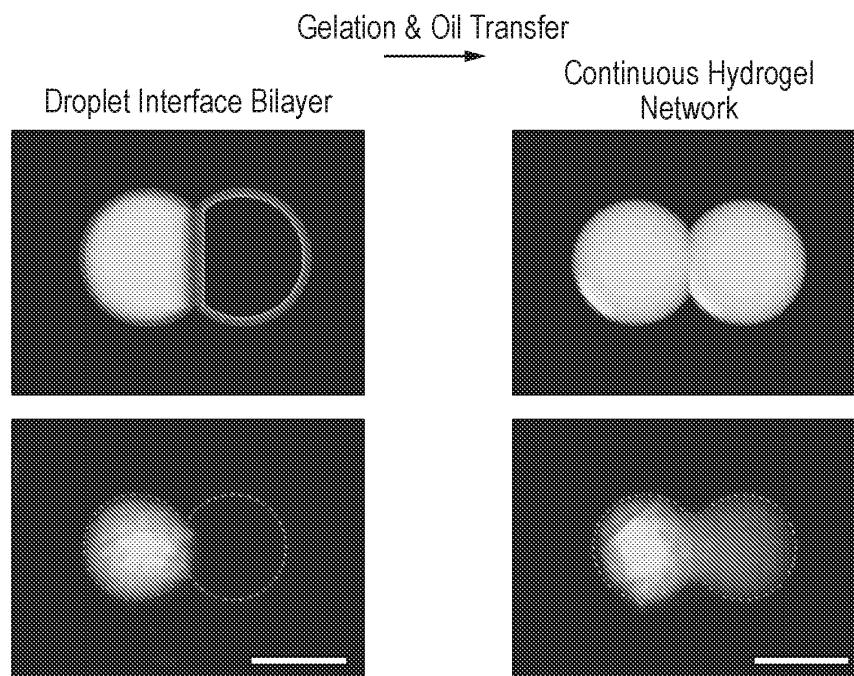


Fig. 17

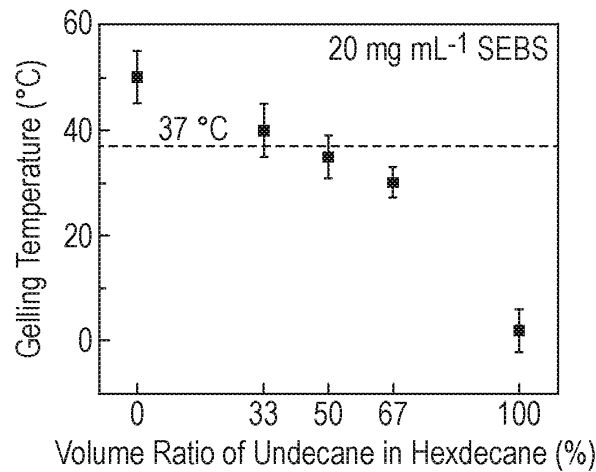
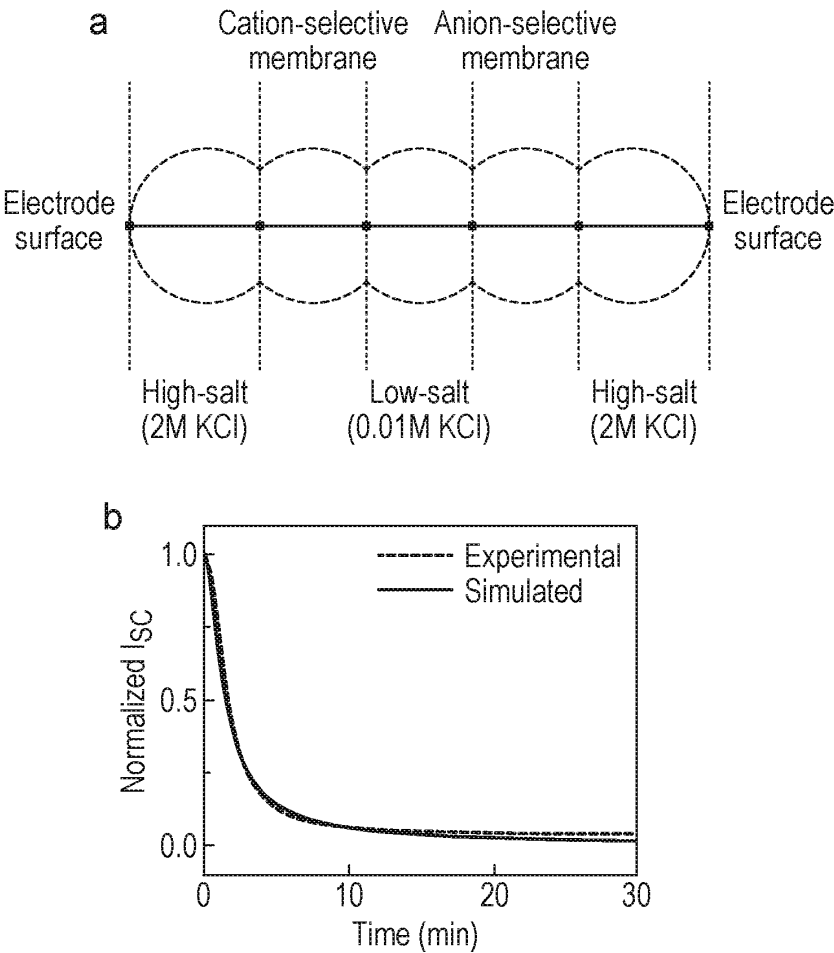


Fig. 18



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Fig. 19

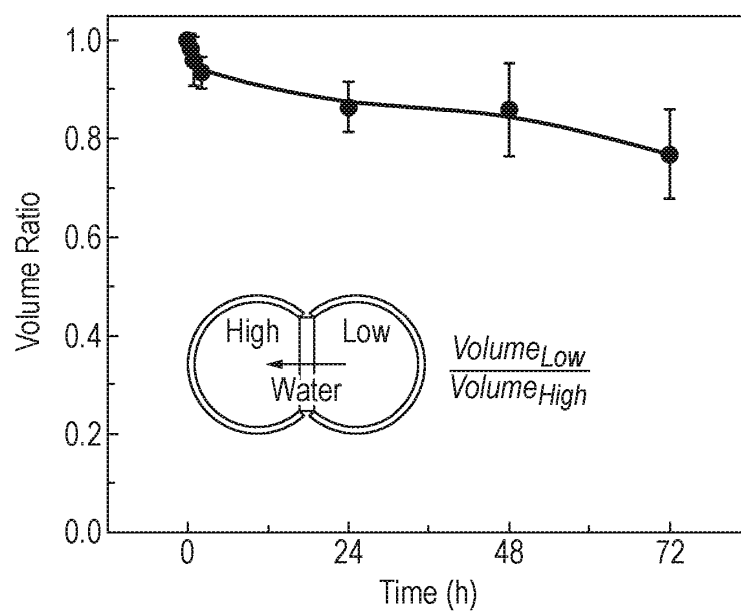


Fig. 20

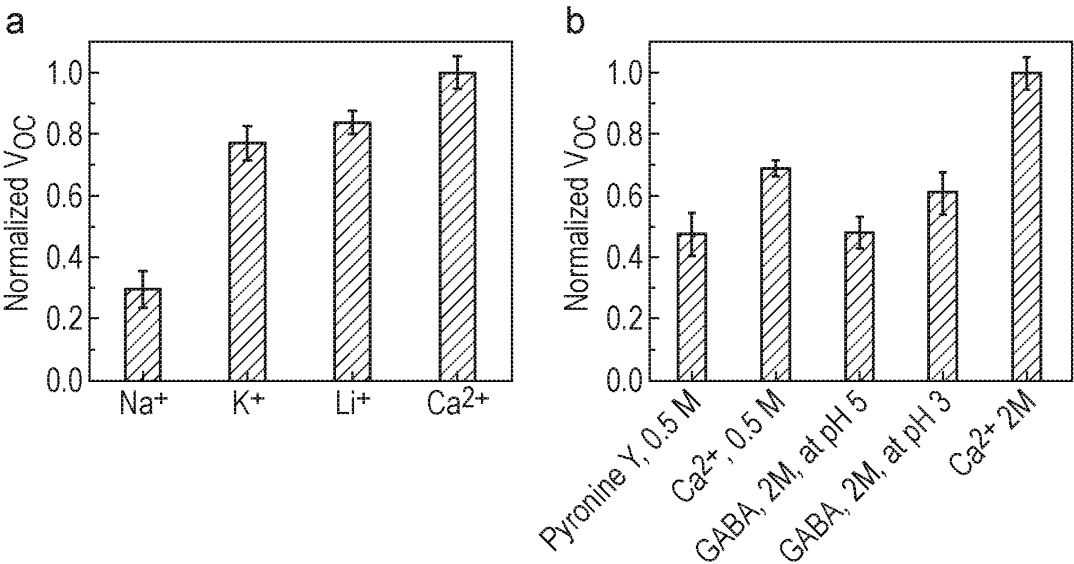


Fig. 21

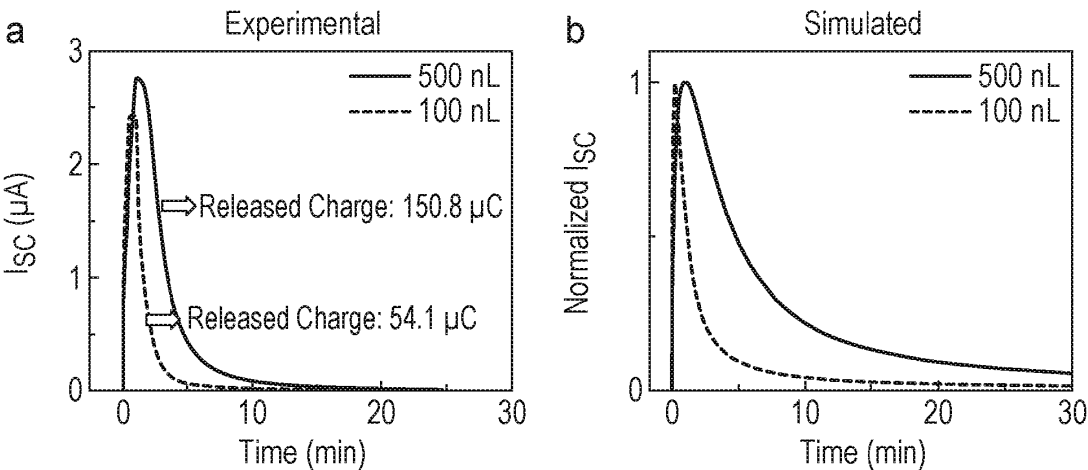
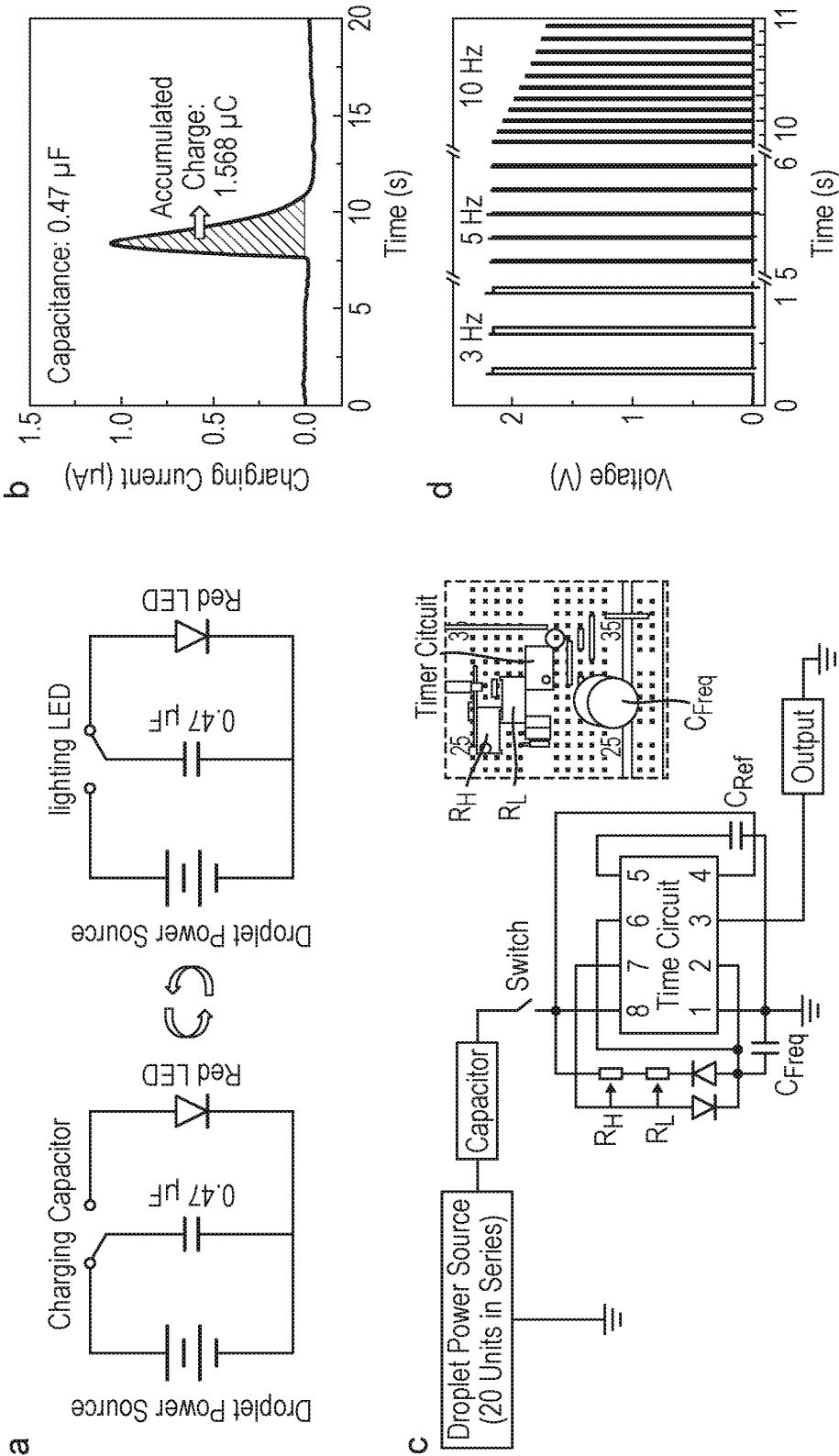


Fig. 22



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Fig. 23

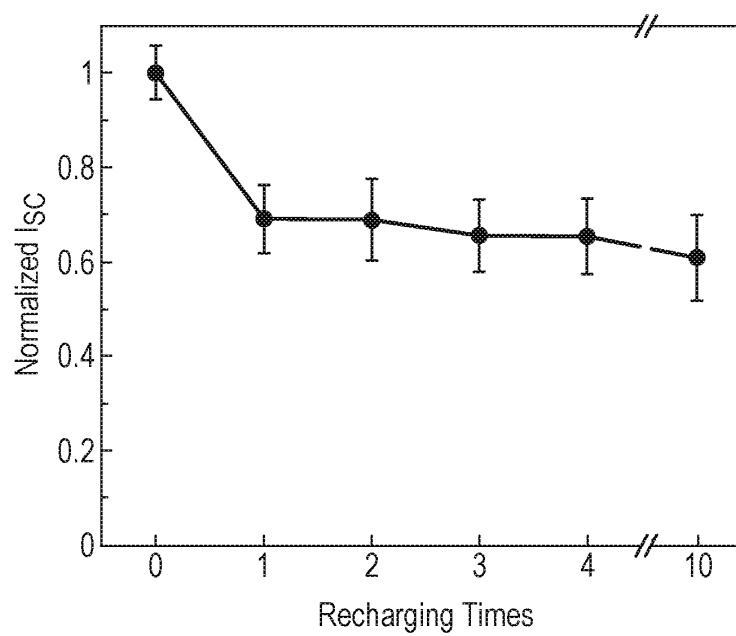


Fig. 24

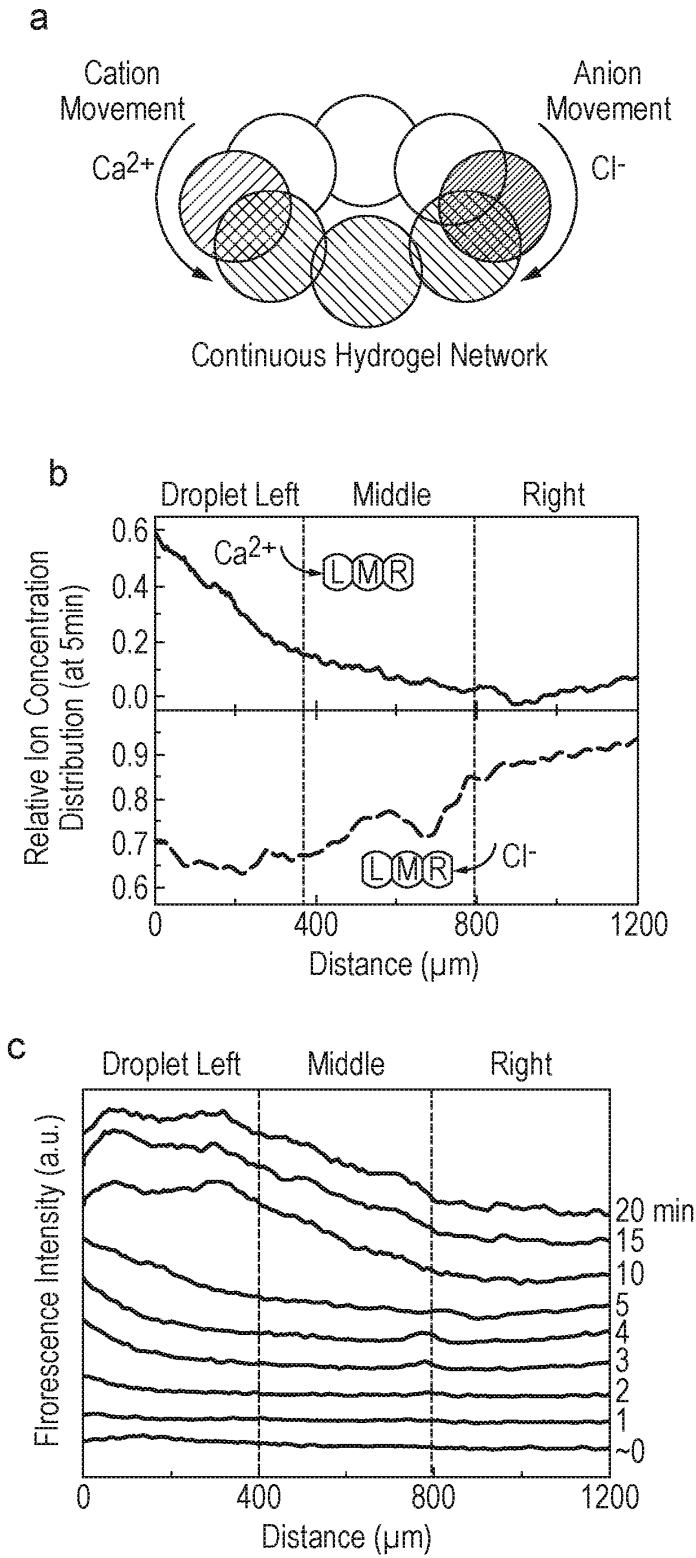


Fig. 24 (Cont.)

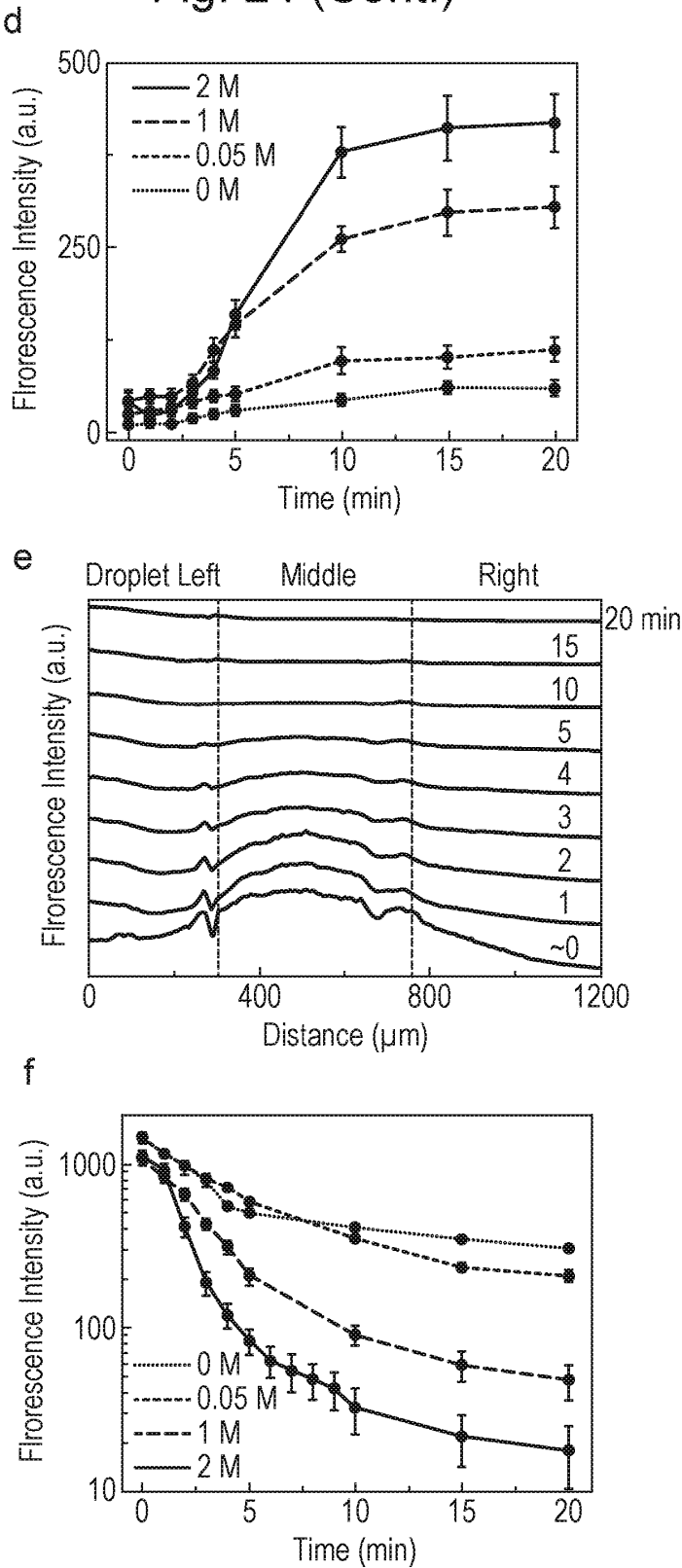


Fig. 25

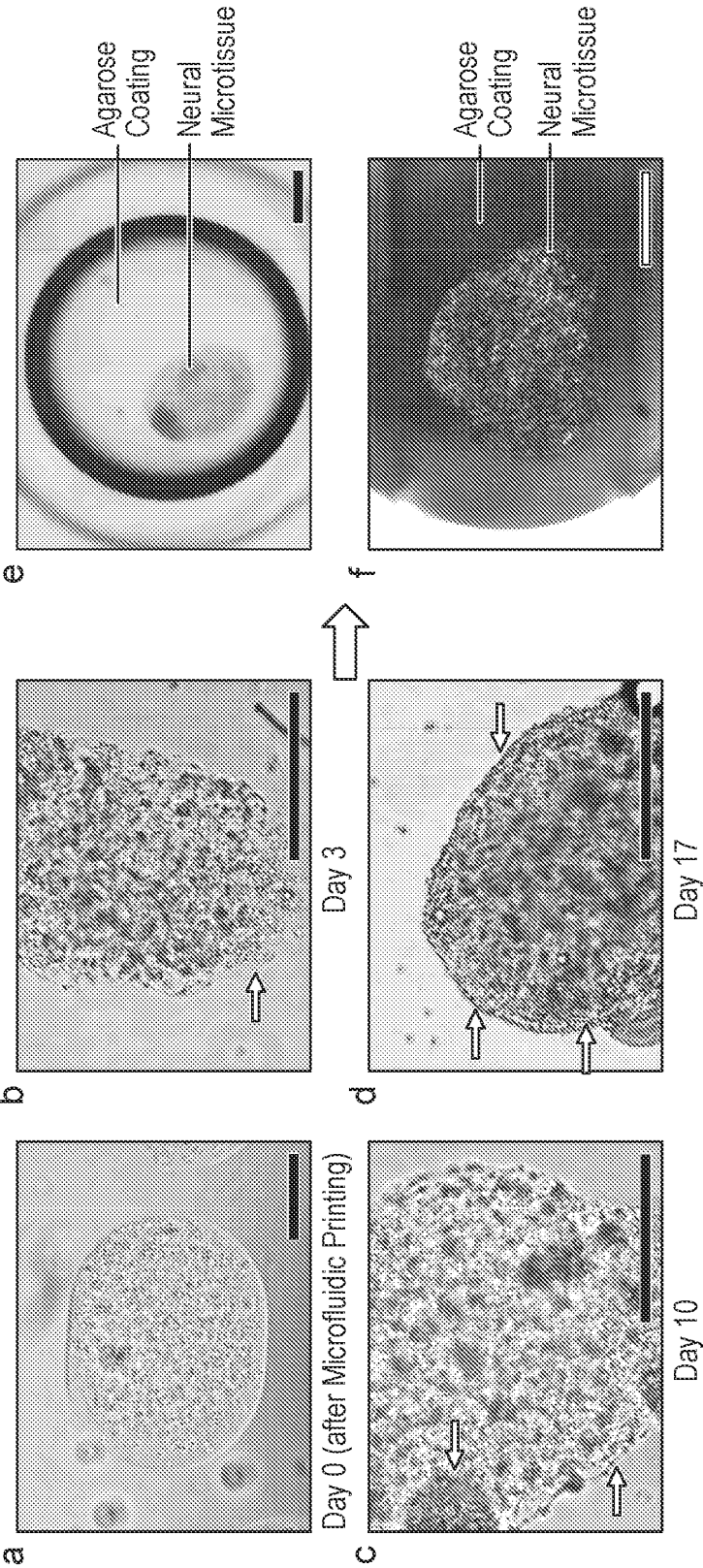
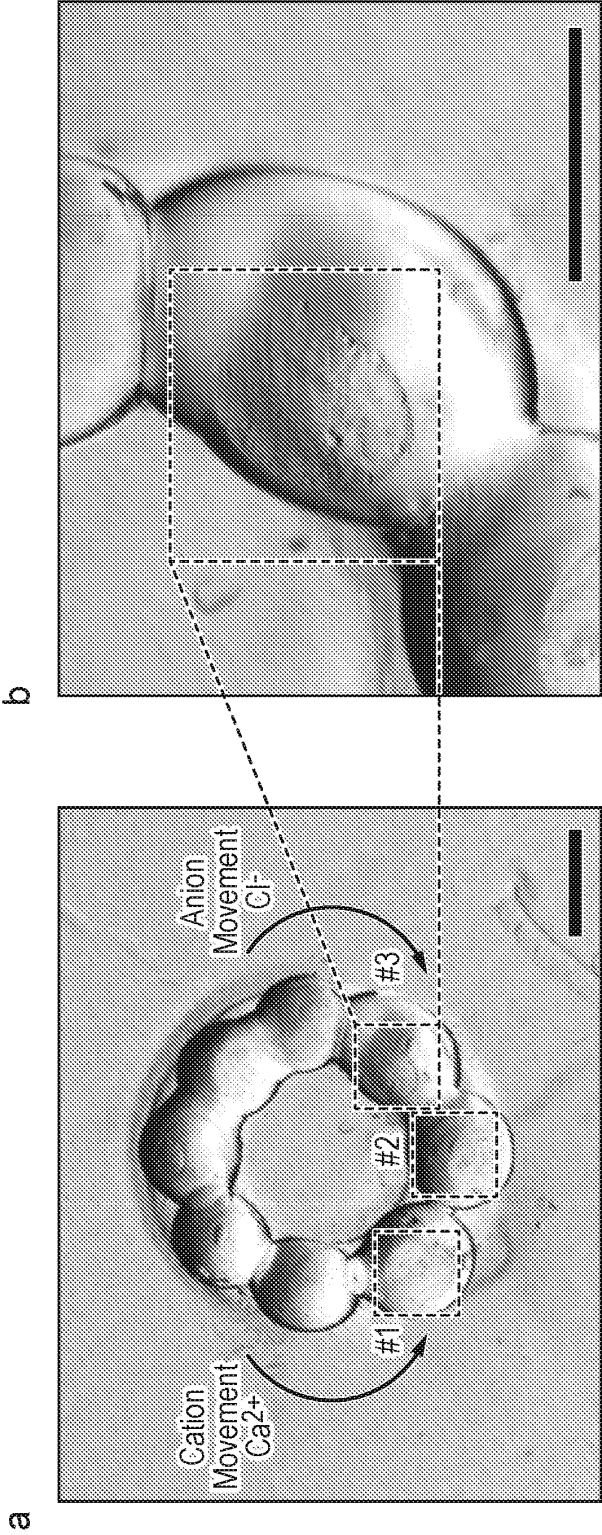
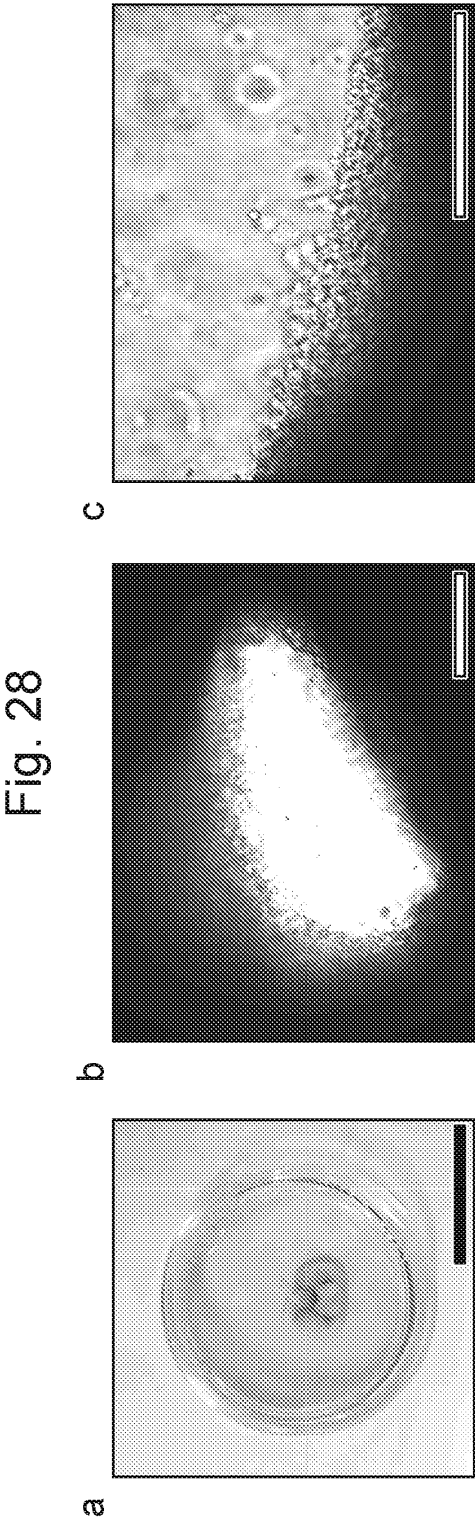
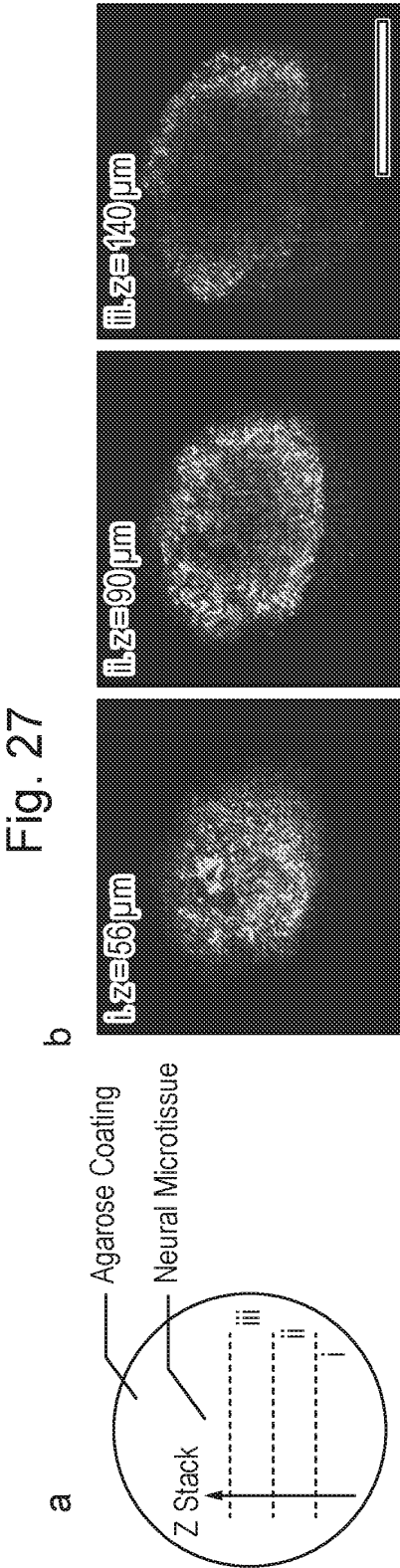


Fig. 26





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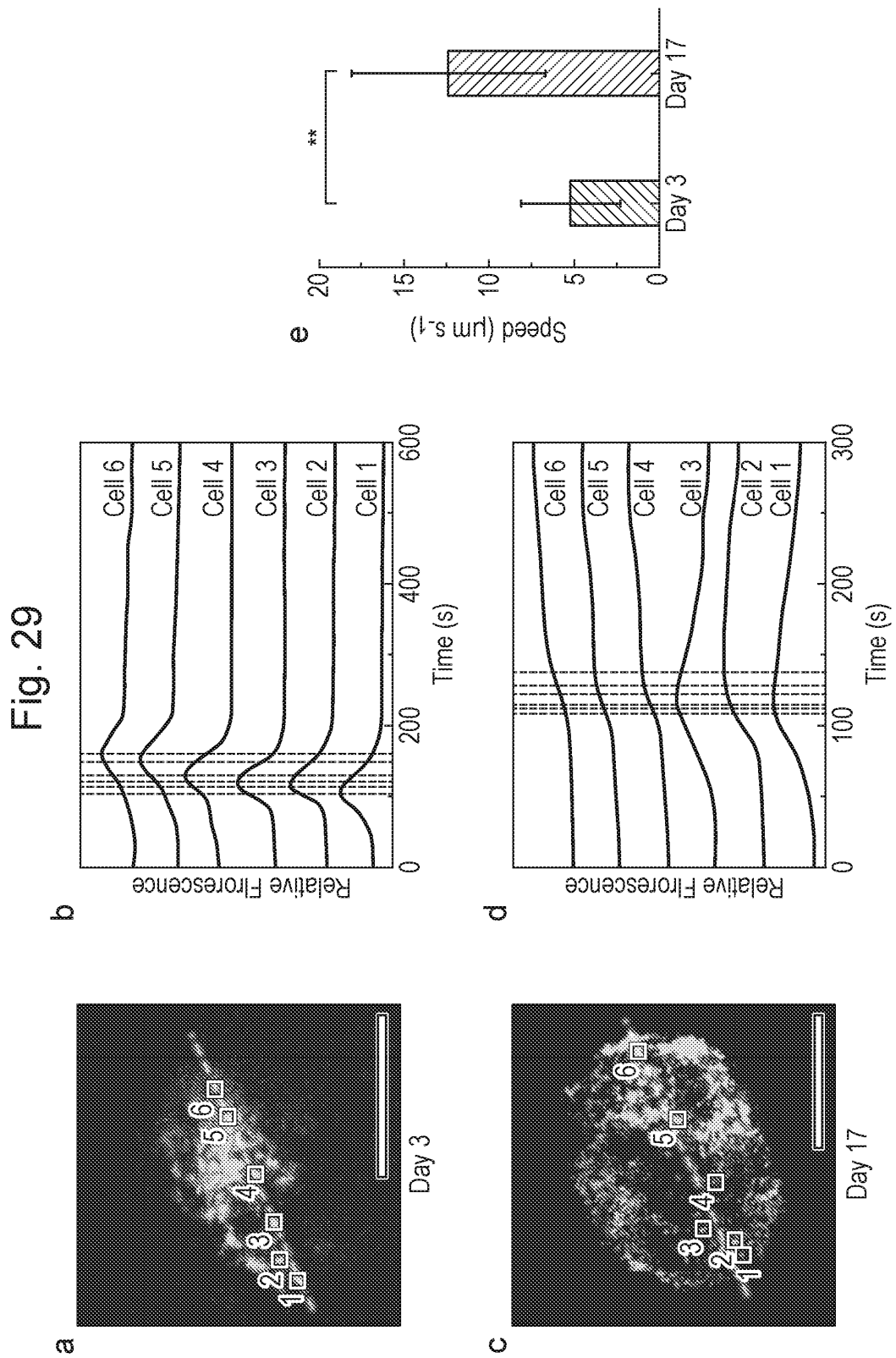


Fig. 31

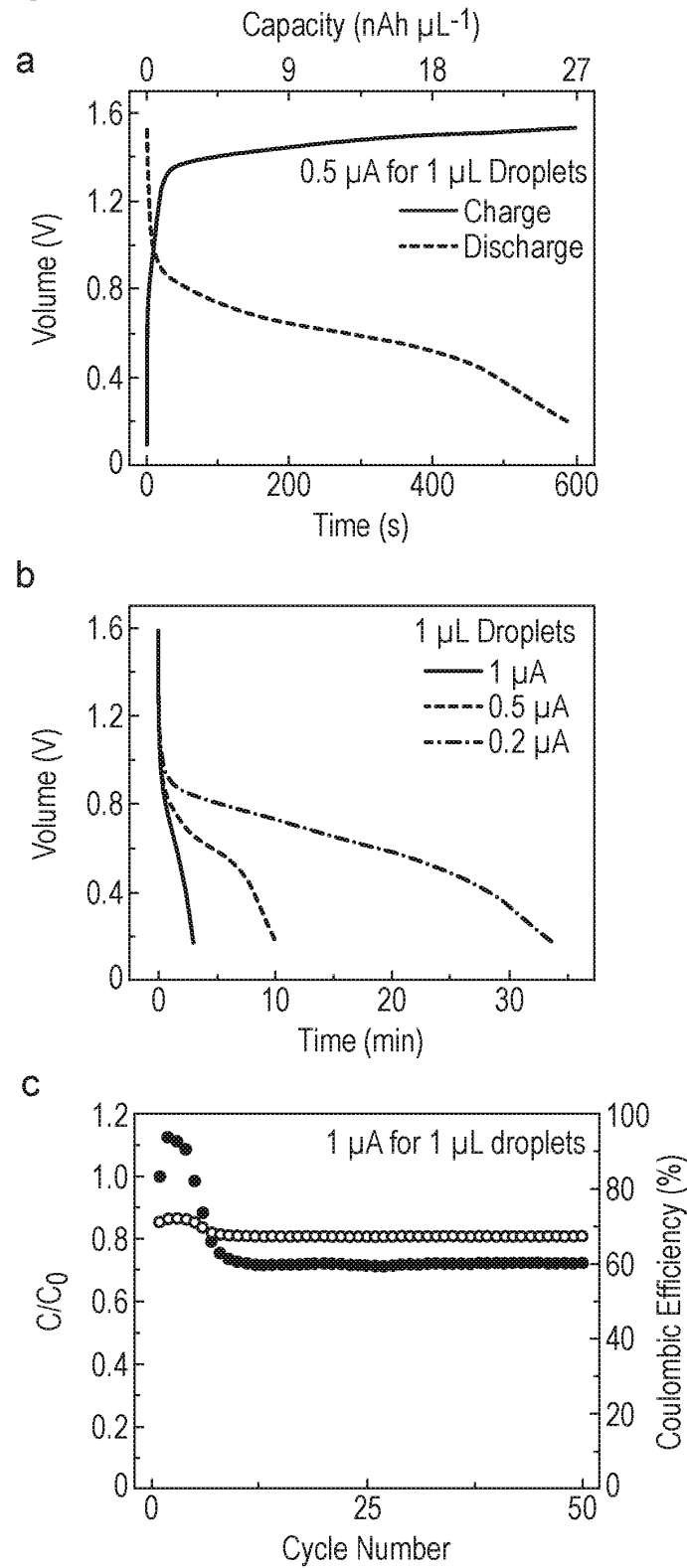


Fig. 31 (Cont.)

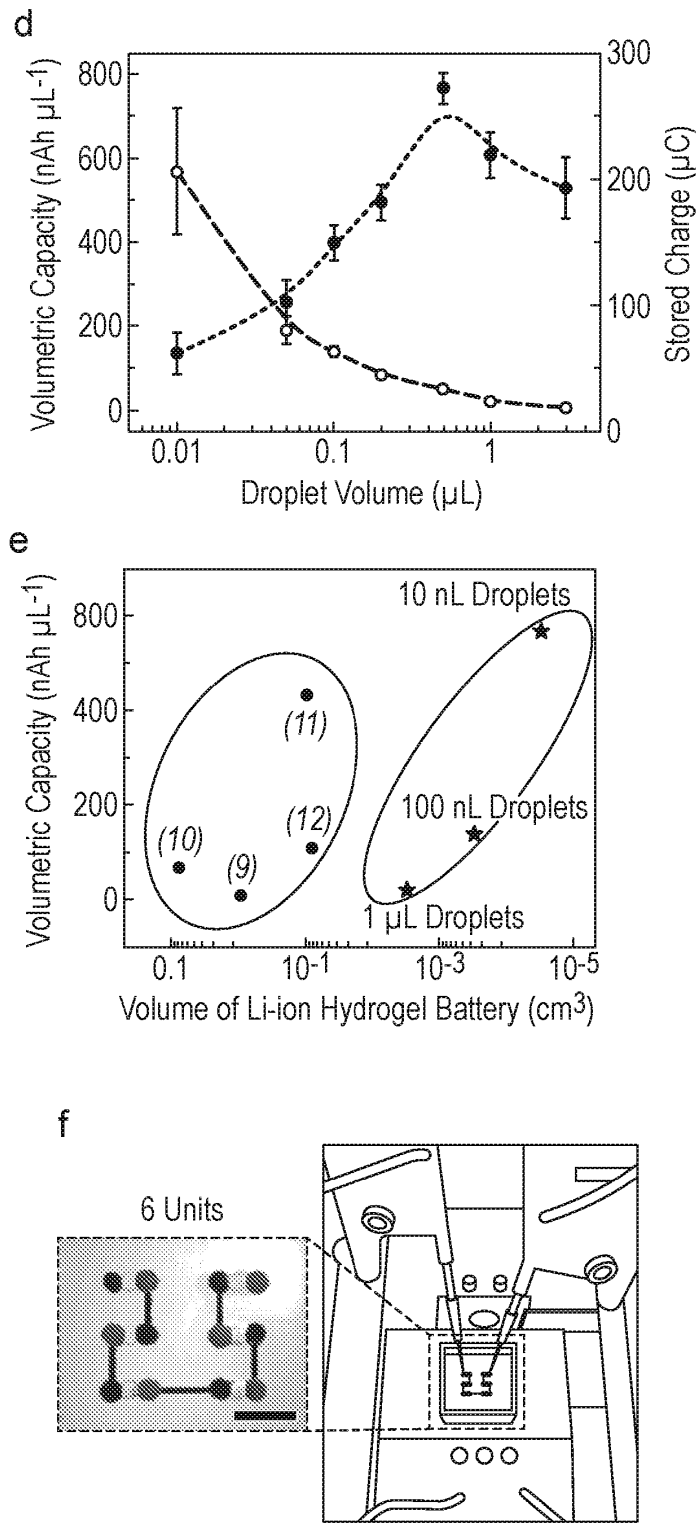


Fig. 32

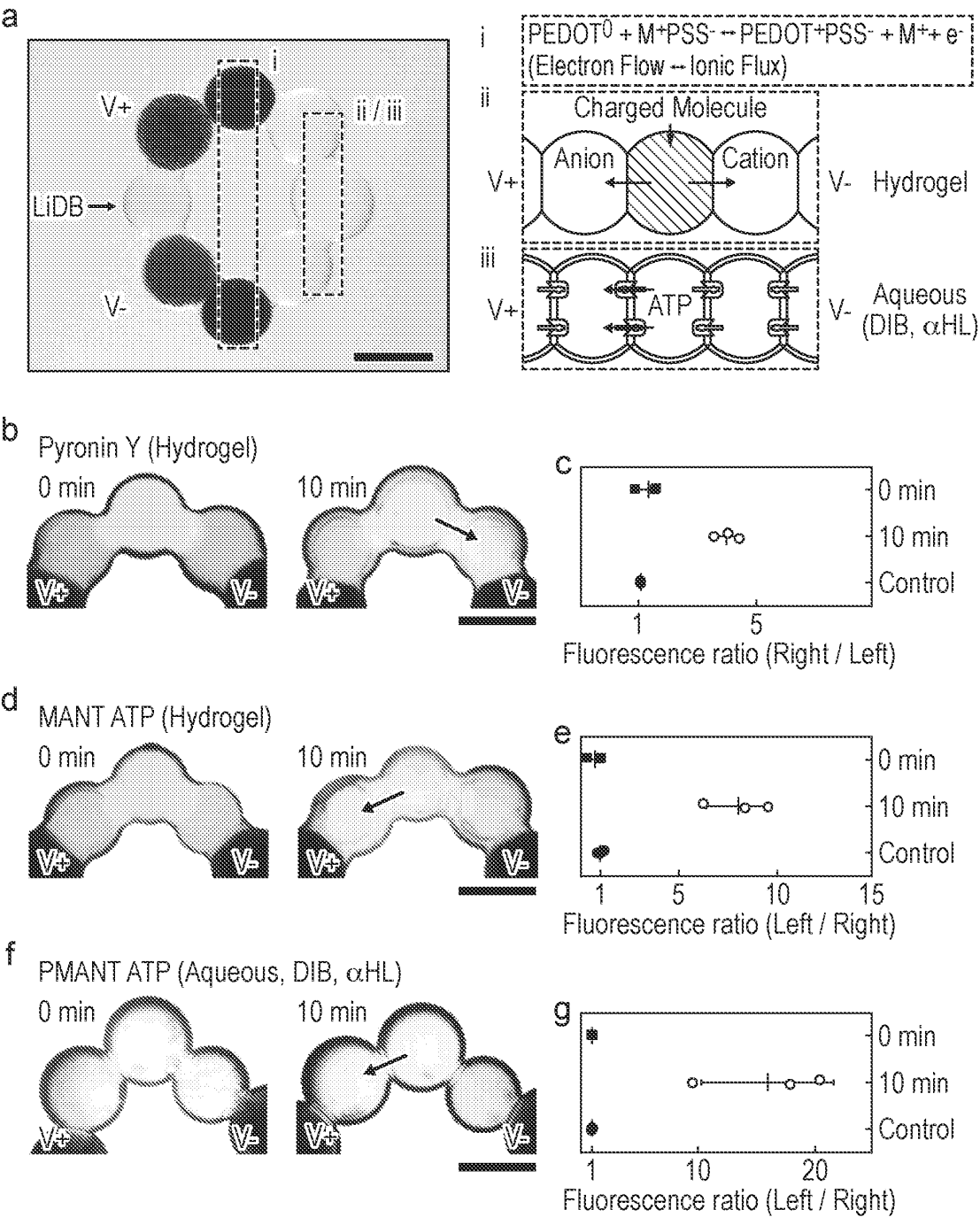


Fig. 33

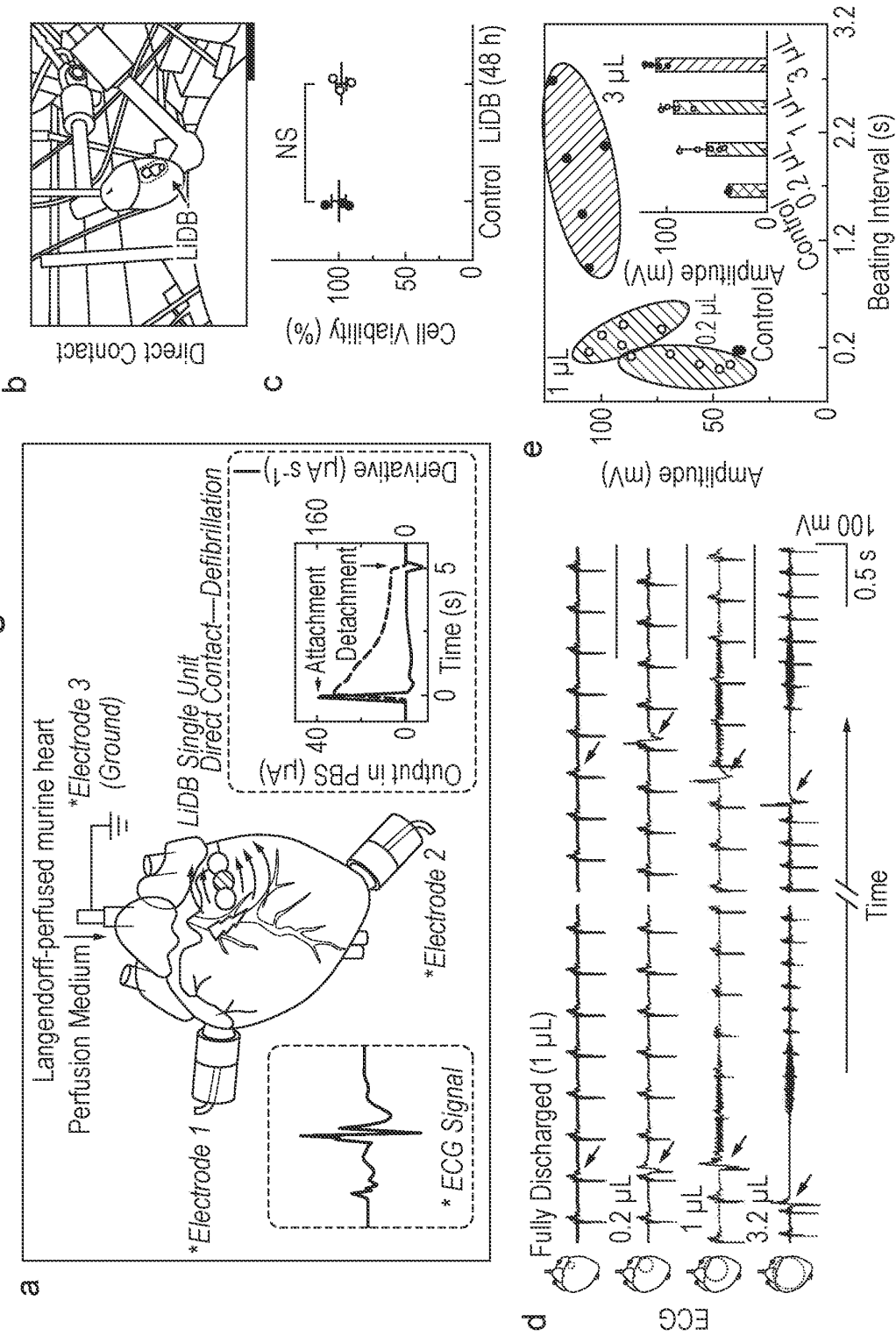
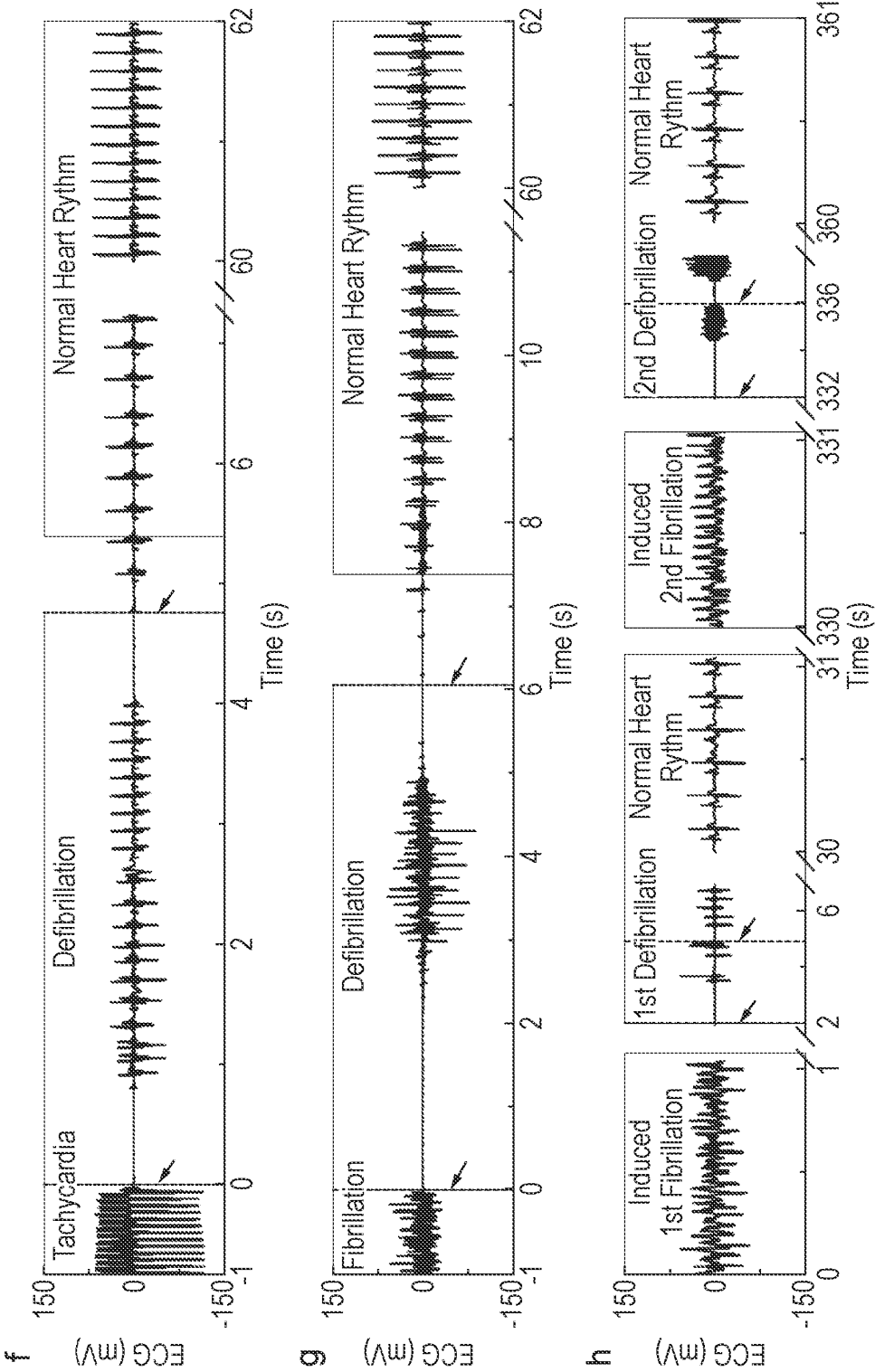


Fig. 33 (Cont.)



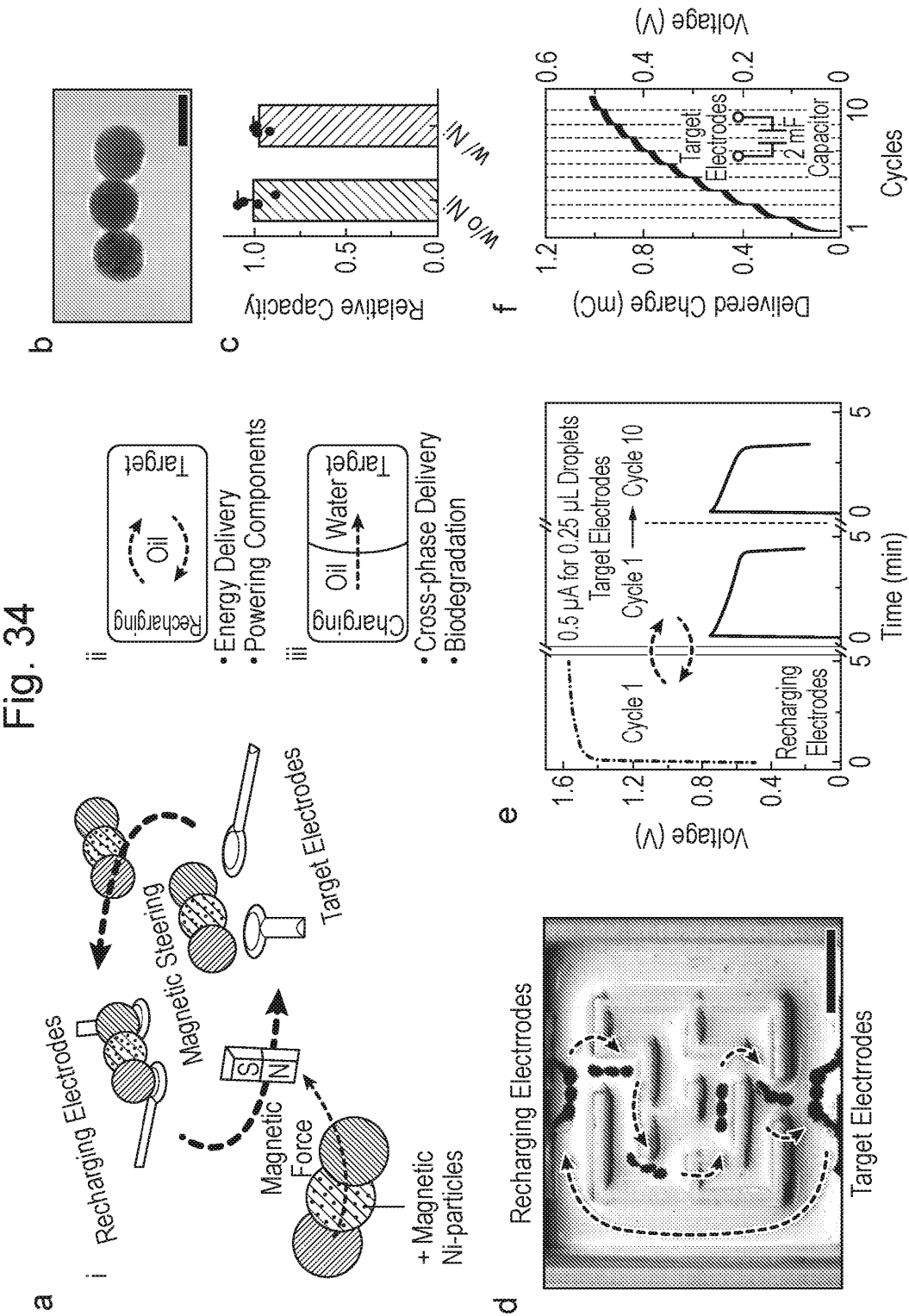


Fig. 34 (Cont.)

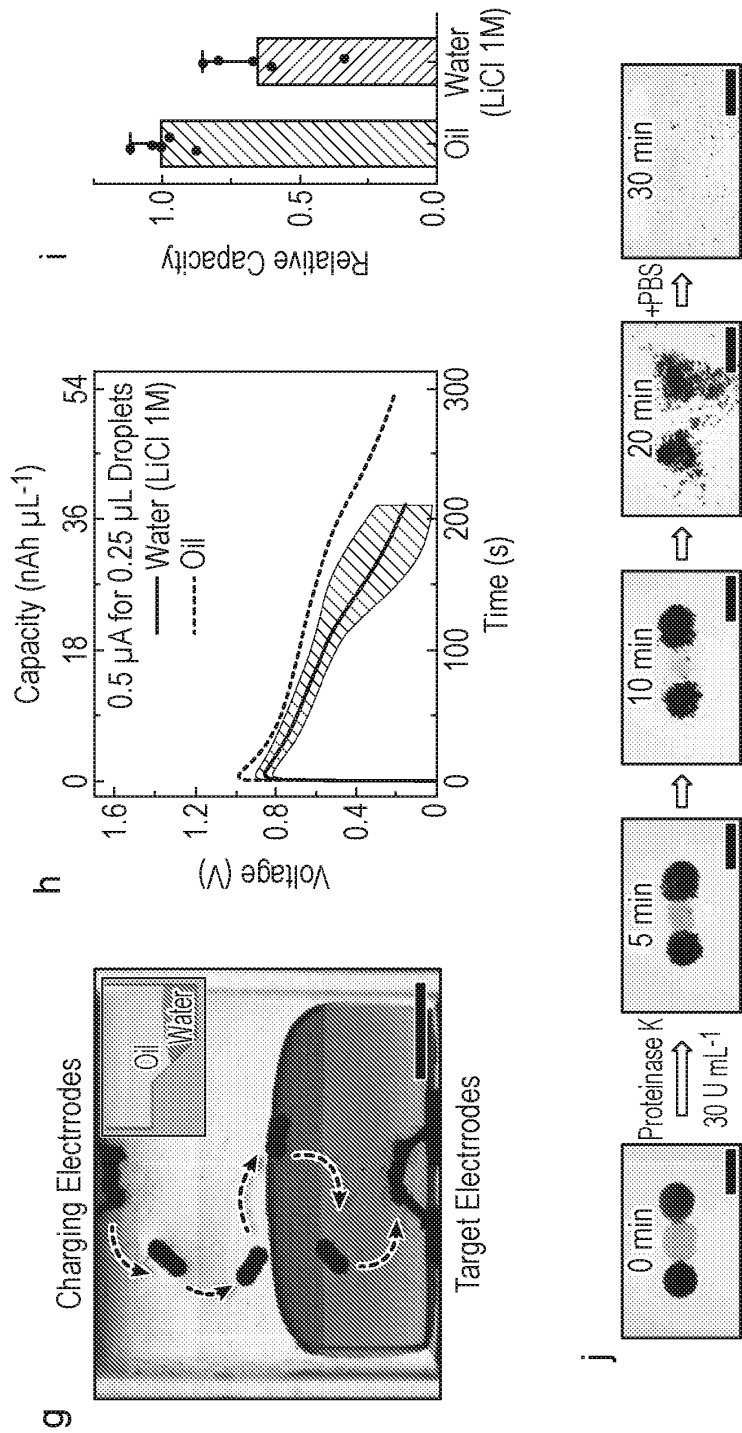
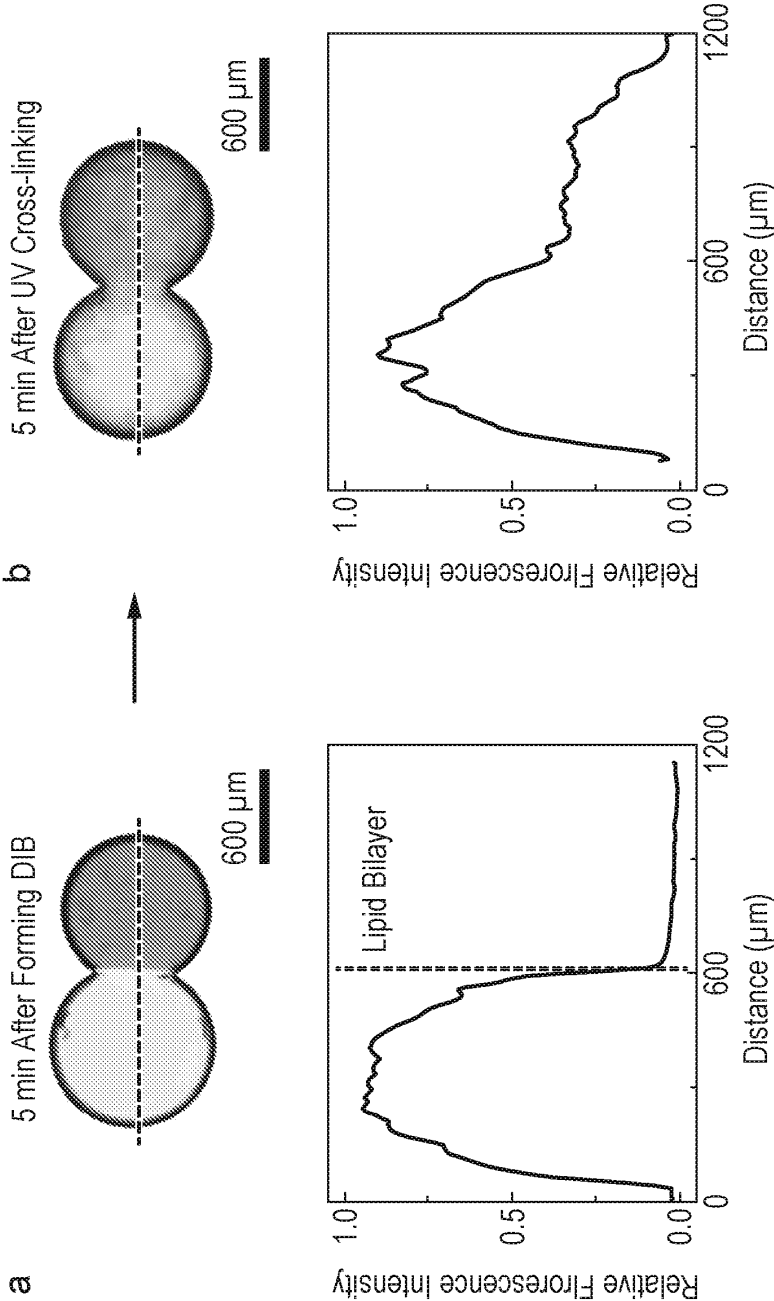


Fig. 35



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Fig. 36

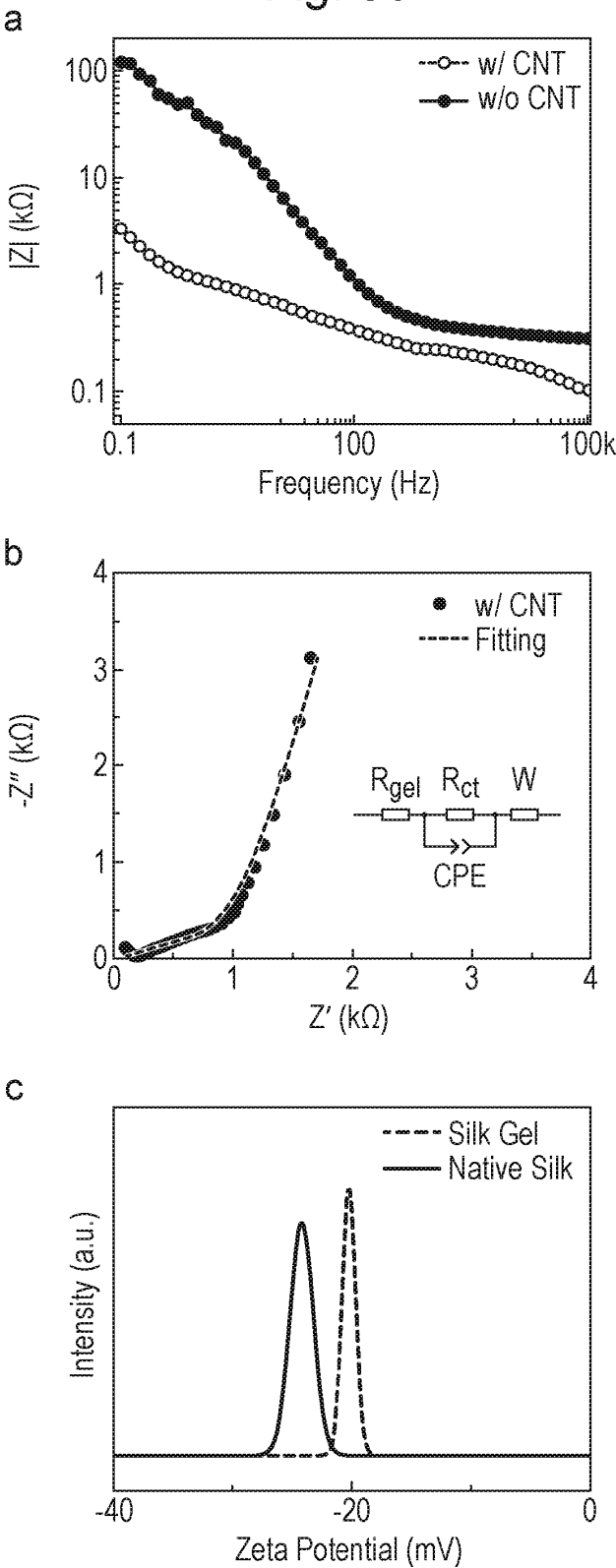


Fig. 37

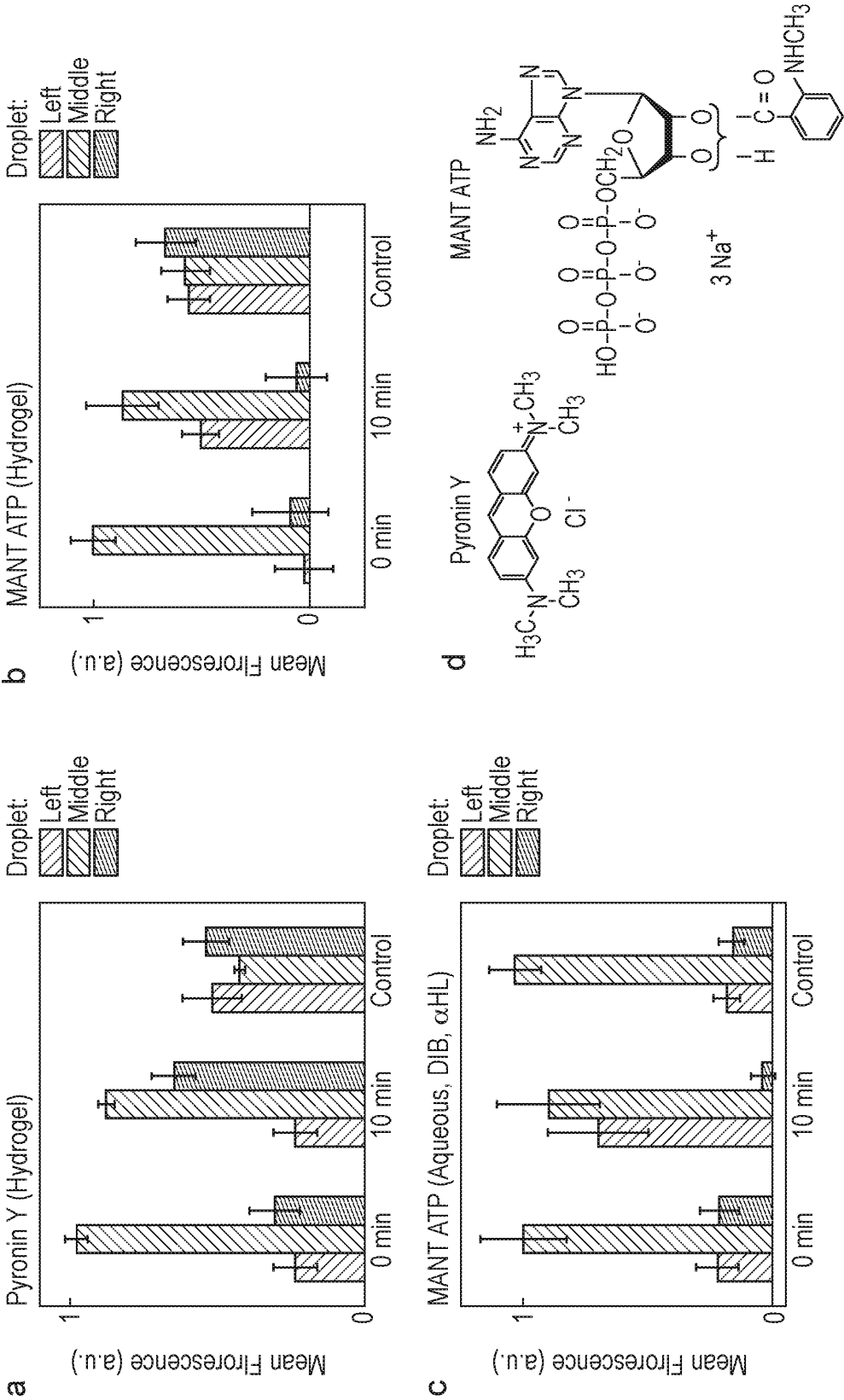


Fig. 38

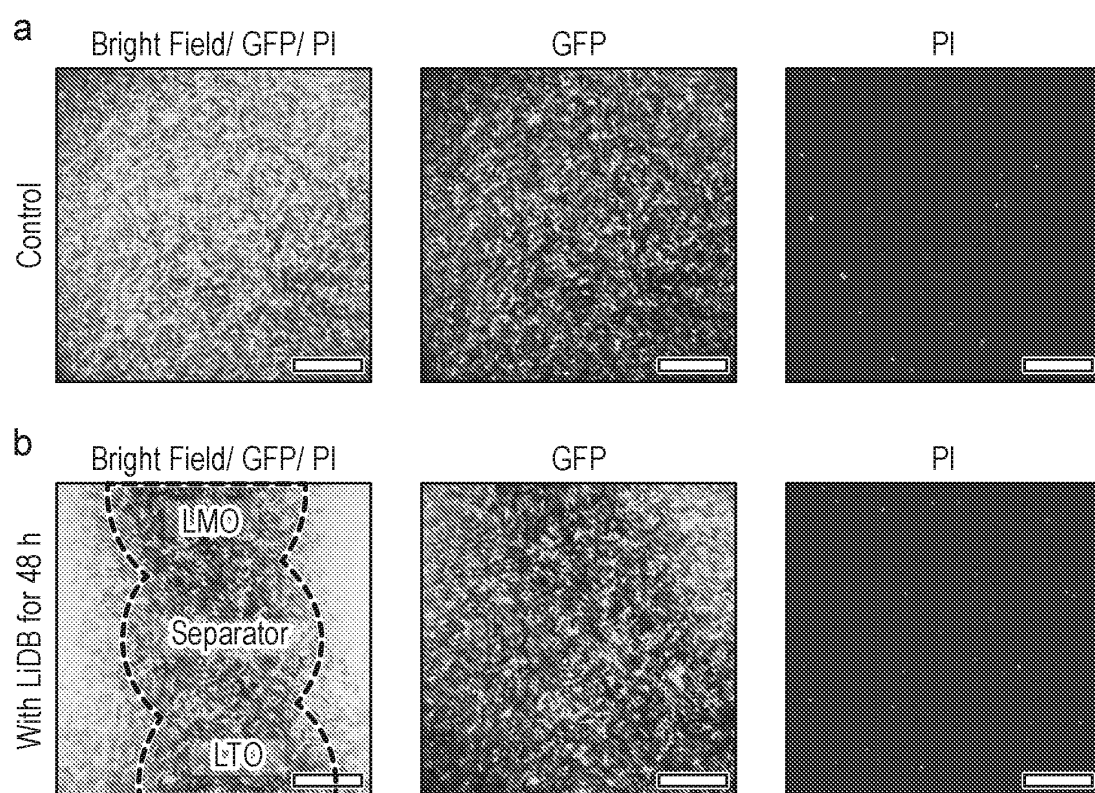
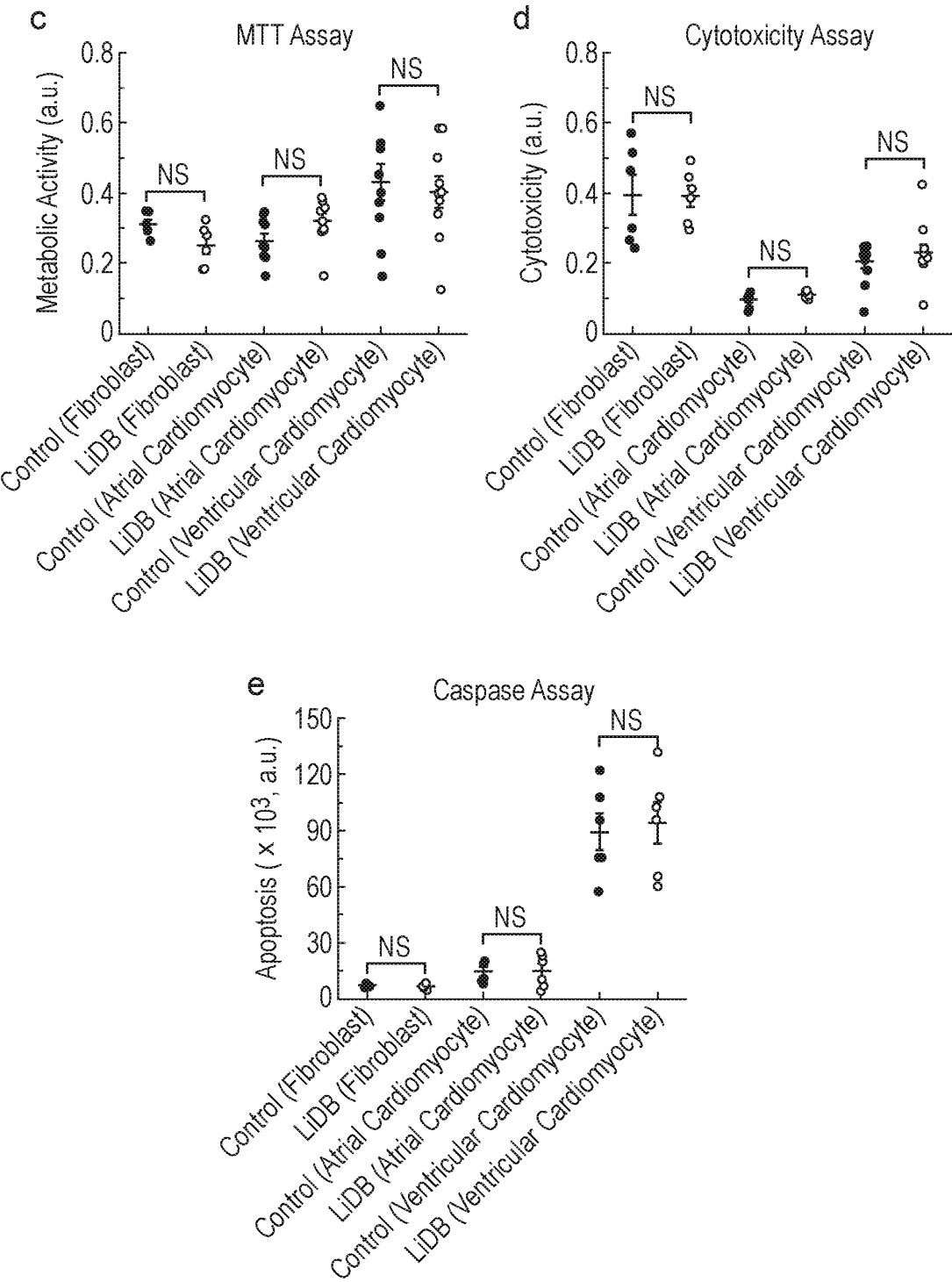


Fig. 38 (Cont.)



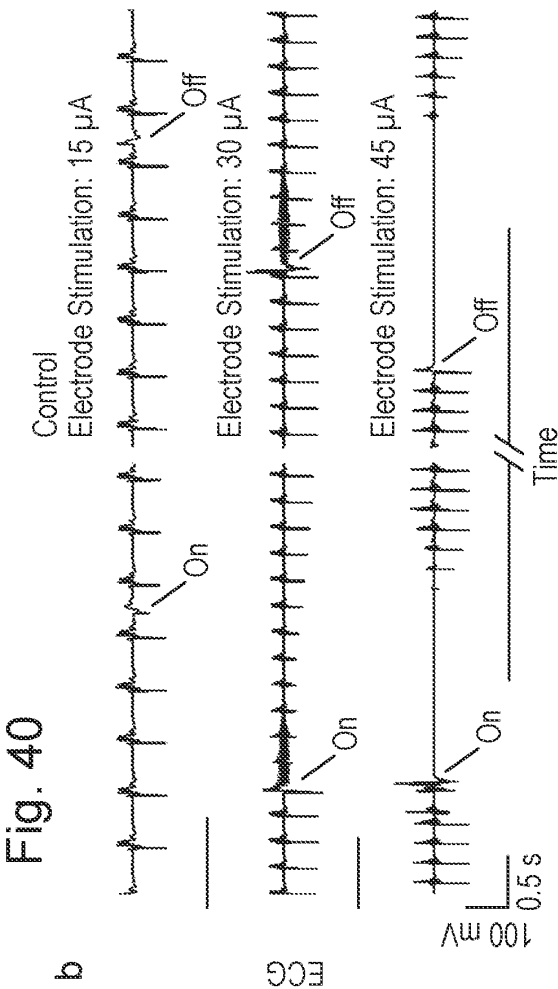
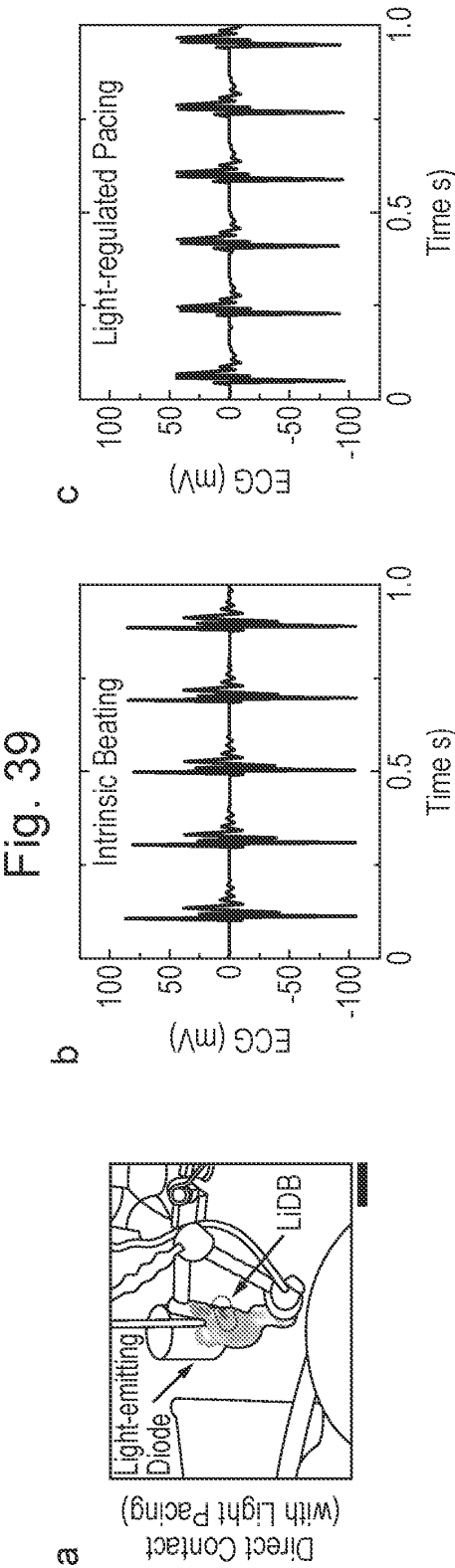


Fig. 41

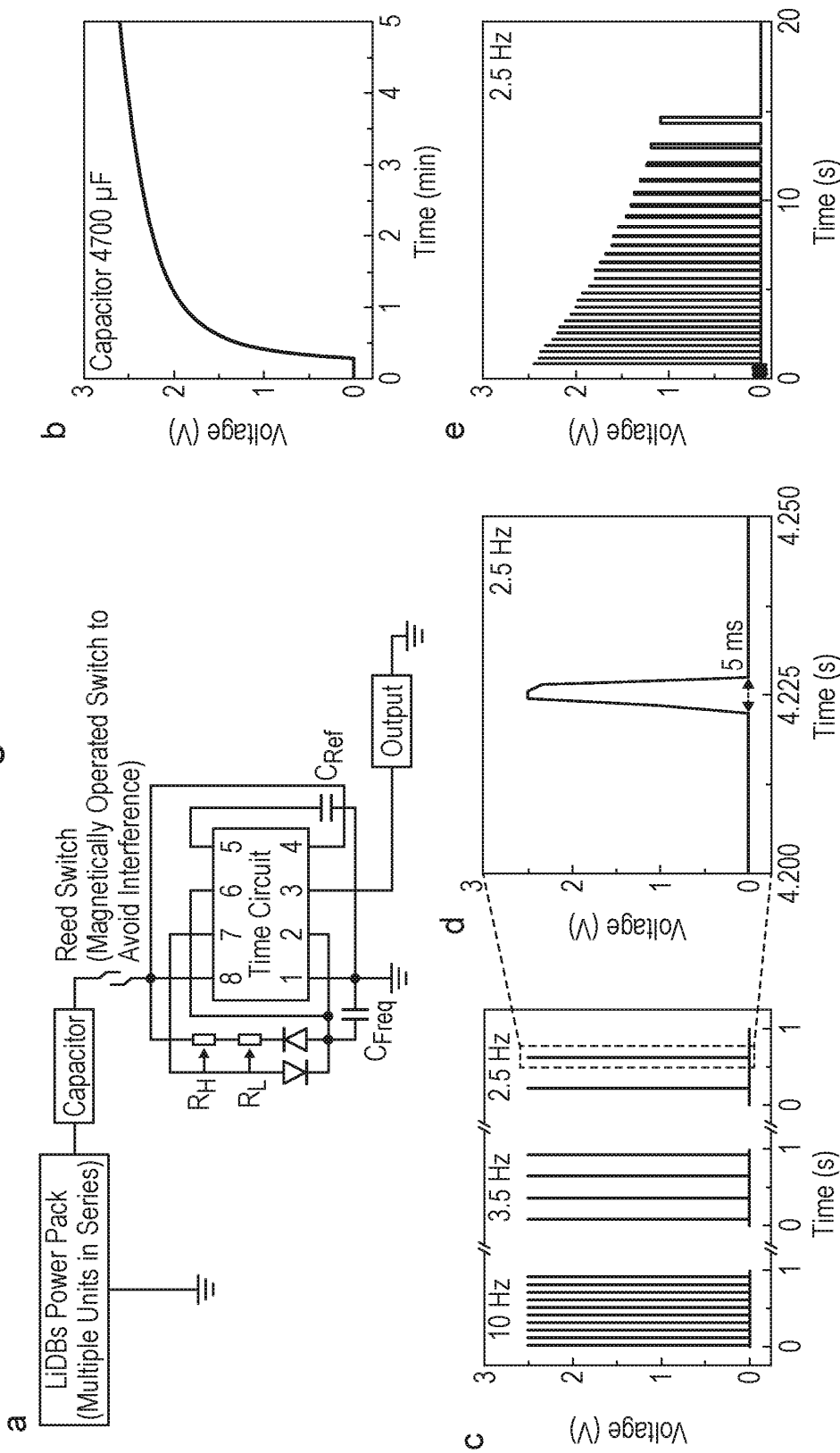


Fig. 42

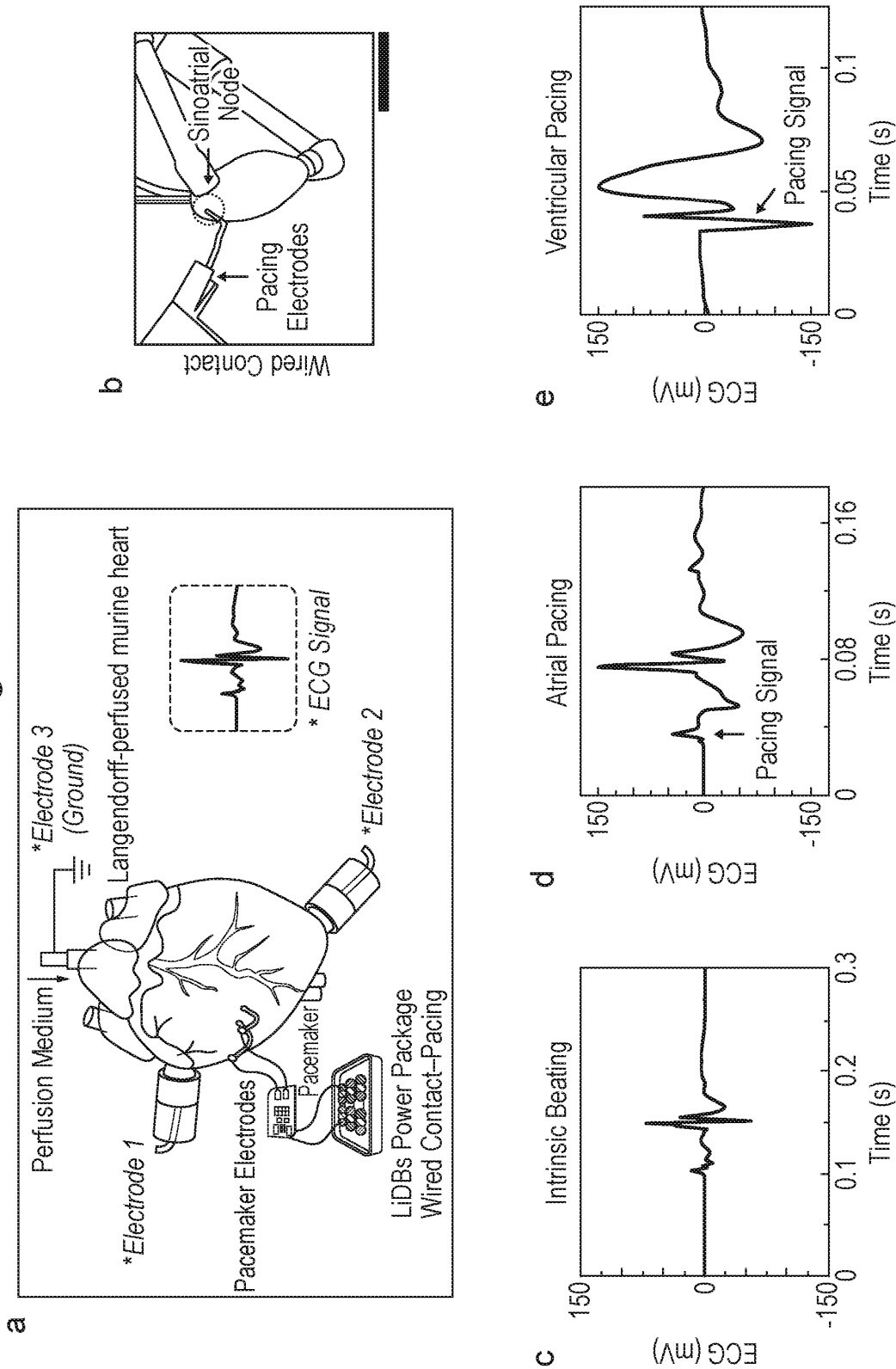
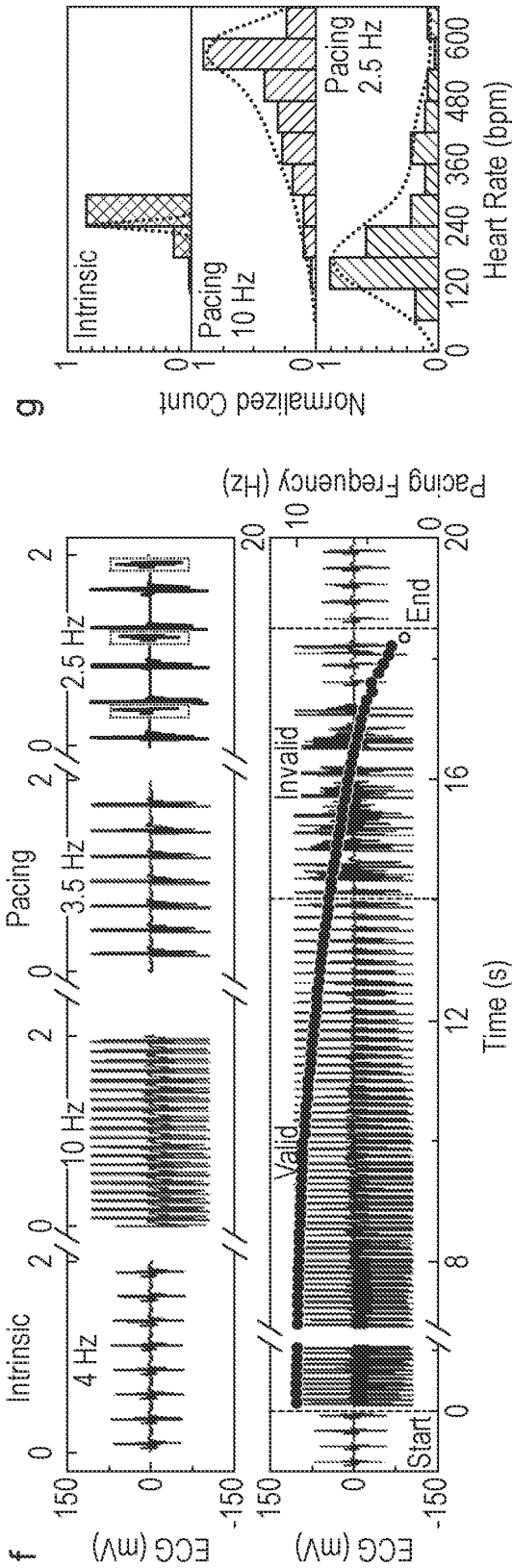


Fig. 42 (Cont.)



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Fig. 43

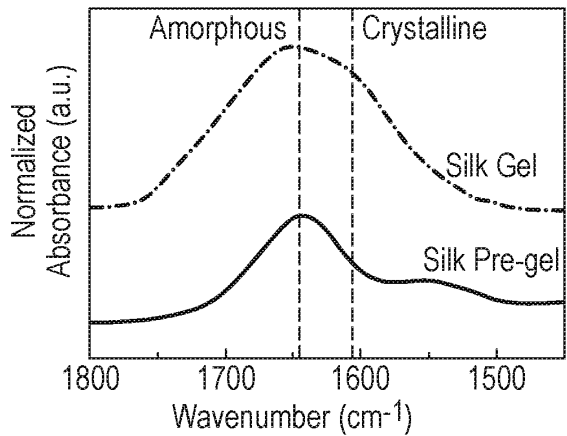


Fig. 44

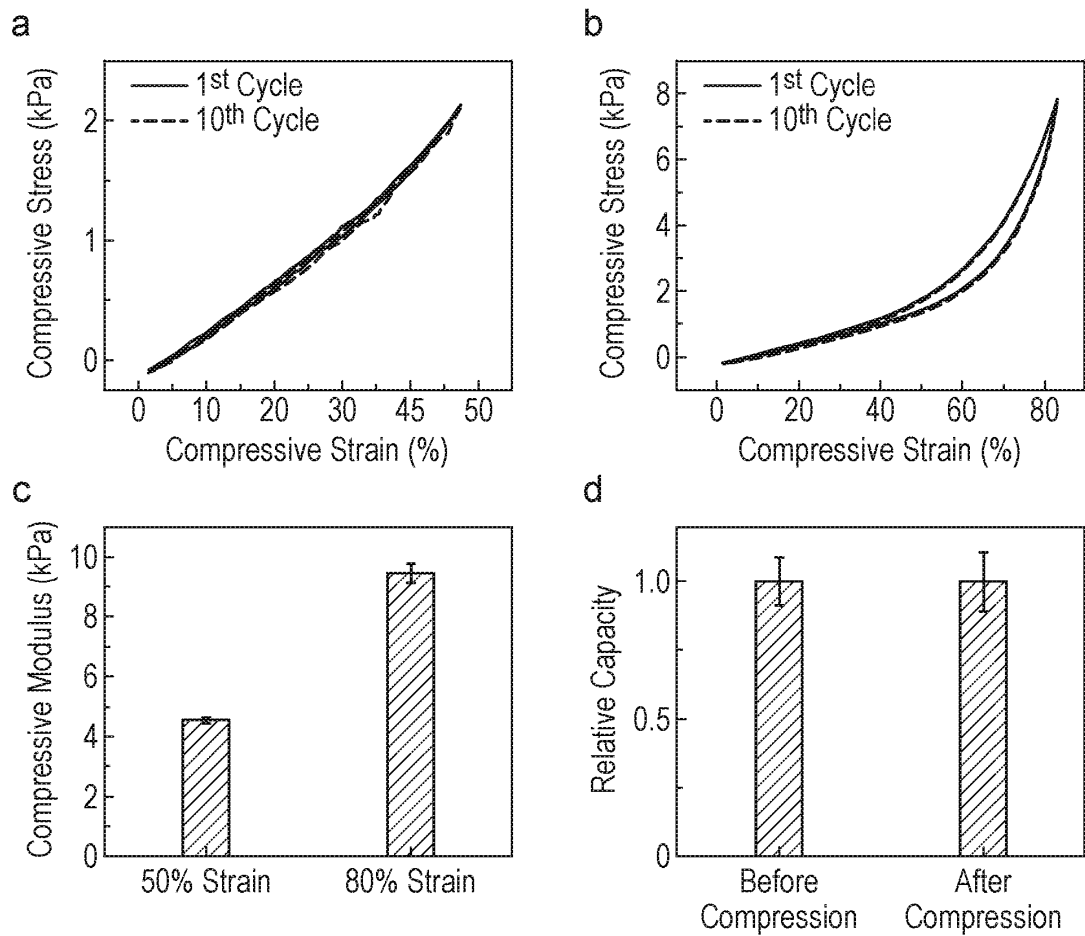


Fig. 45

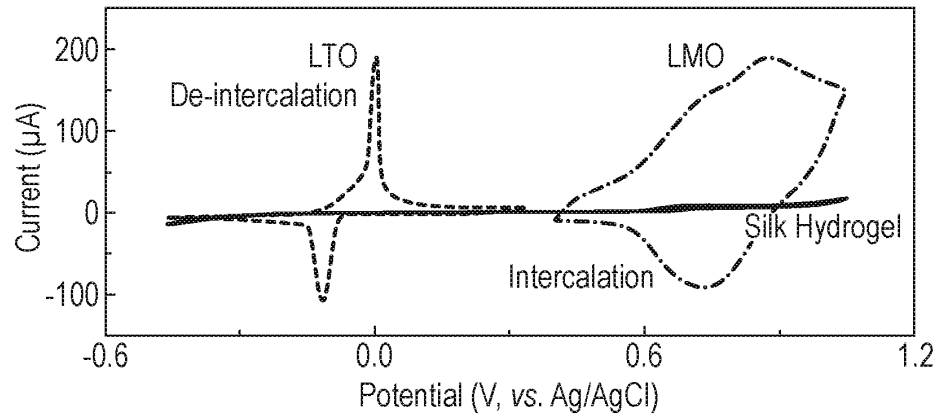


Fig. 46

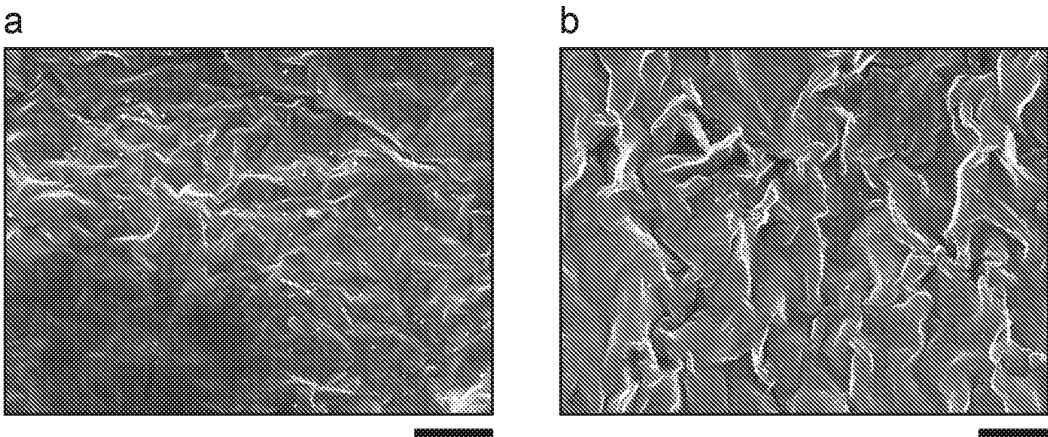


Fig. 47

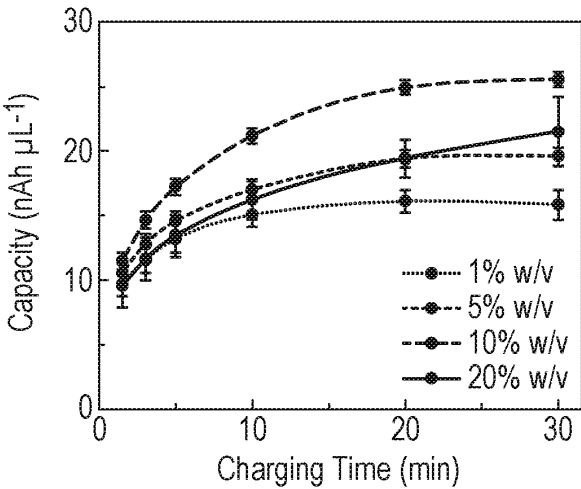


Fig. 48

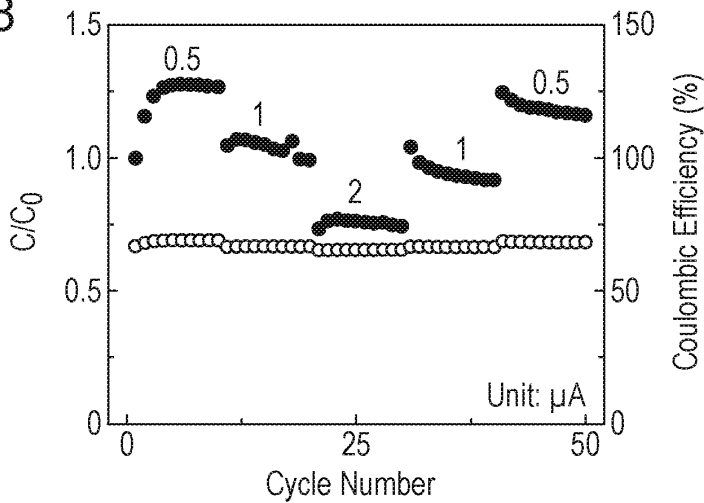


Fig. 49

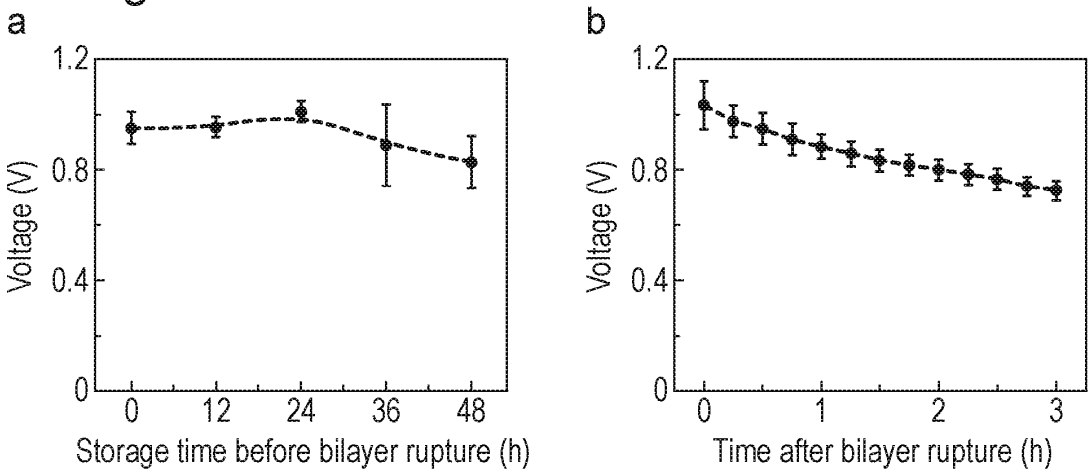


Fig. 50

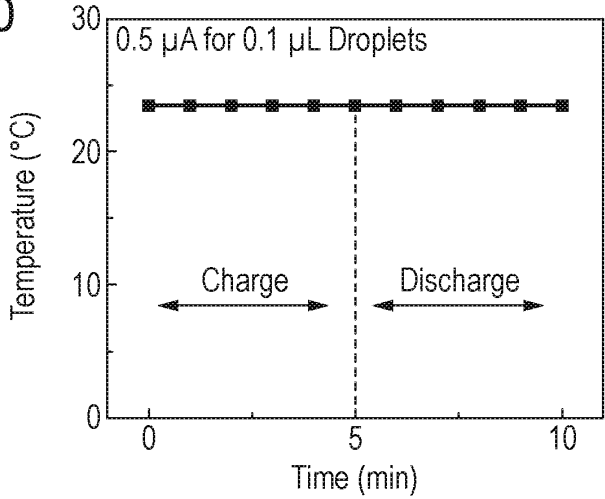


Fig. 51

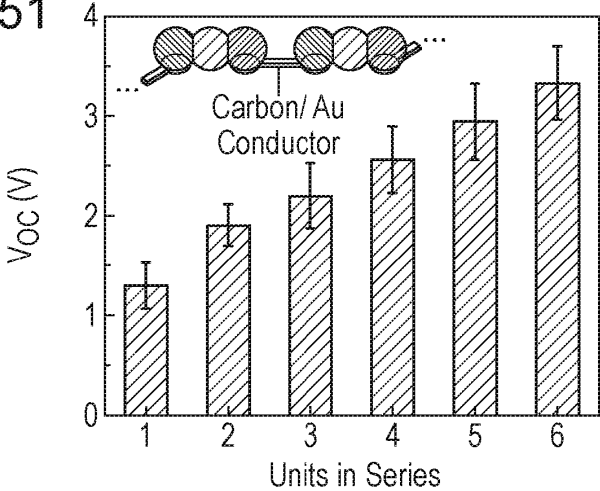


Fig. 52

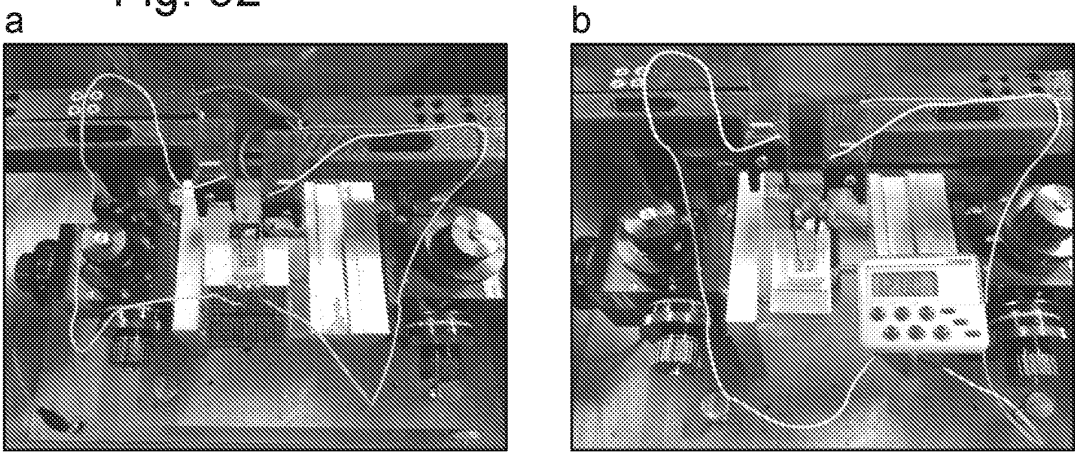


Fig. 53

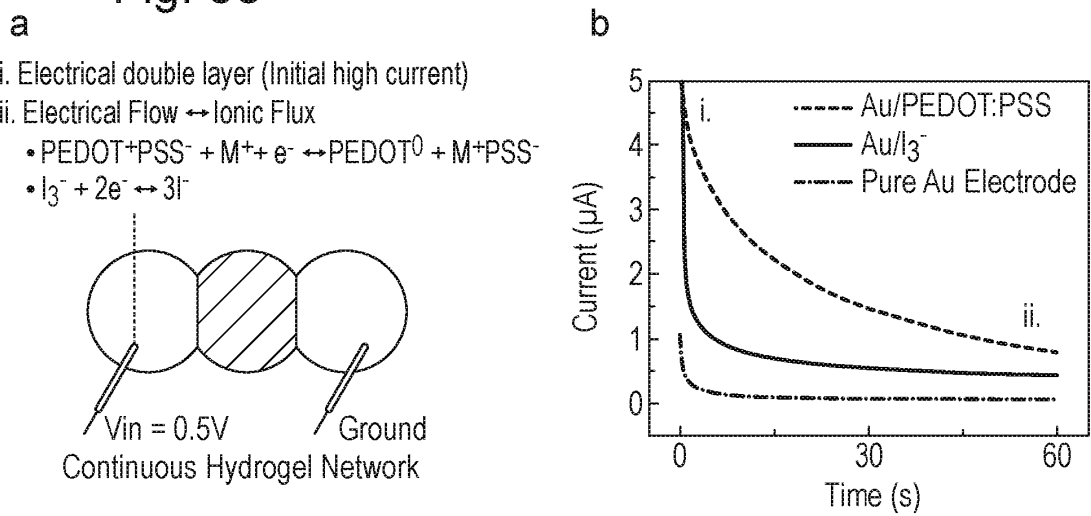


Fig. 54

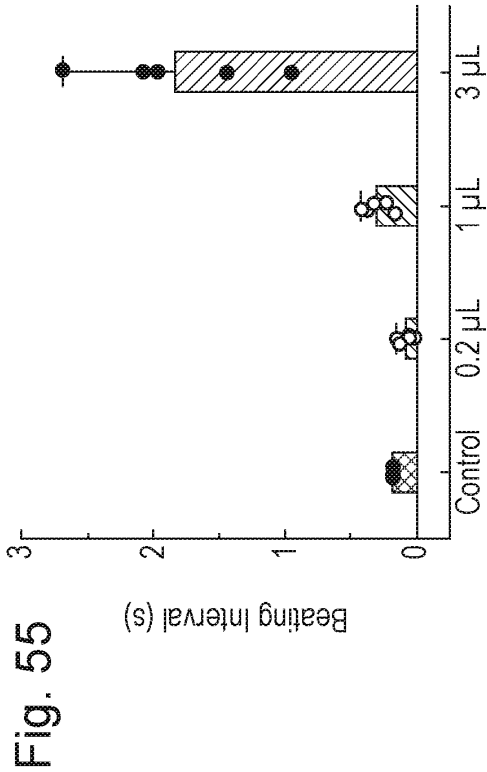
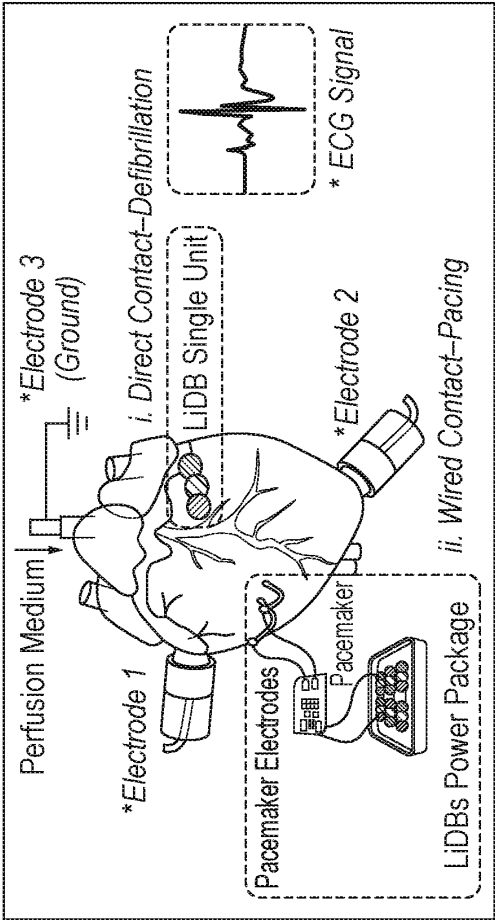
All LiDBs were fully charged for 10 min before use.

i. Direct Contact–Defibrillation

- LiDB single unit
- *Pnmt*^{Cre/ChR2} hearts (n = 11)
- Light-regulated pacing to prevent ectopic heartbeat

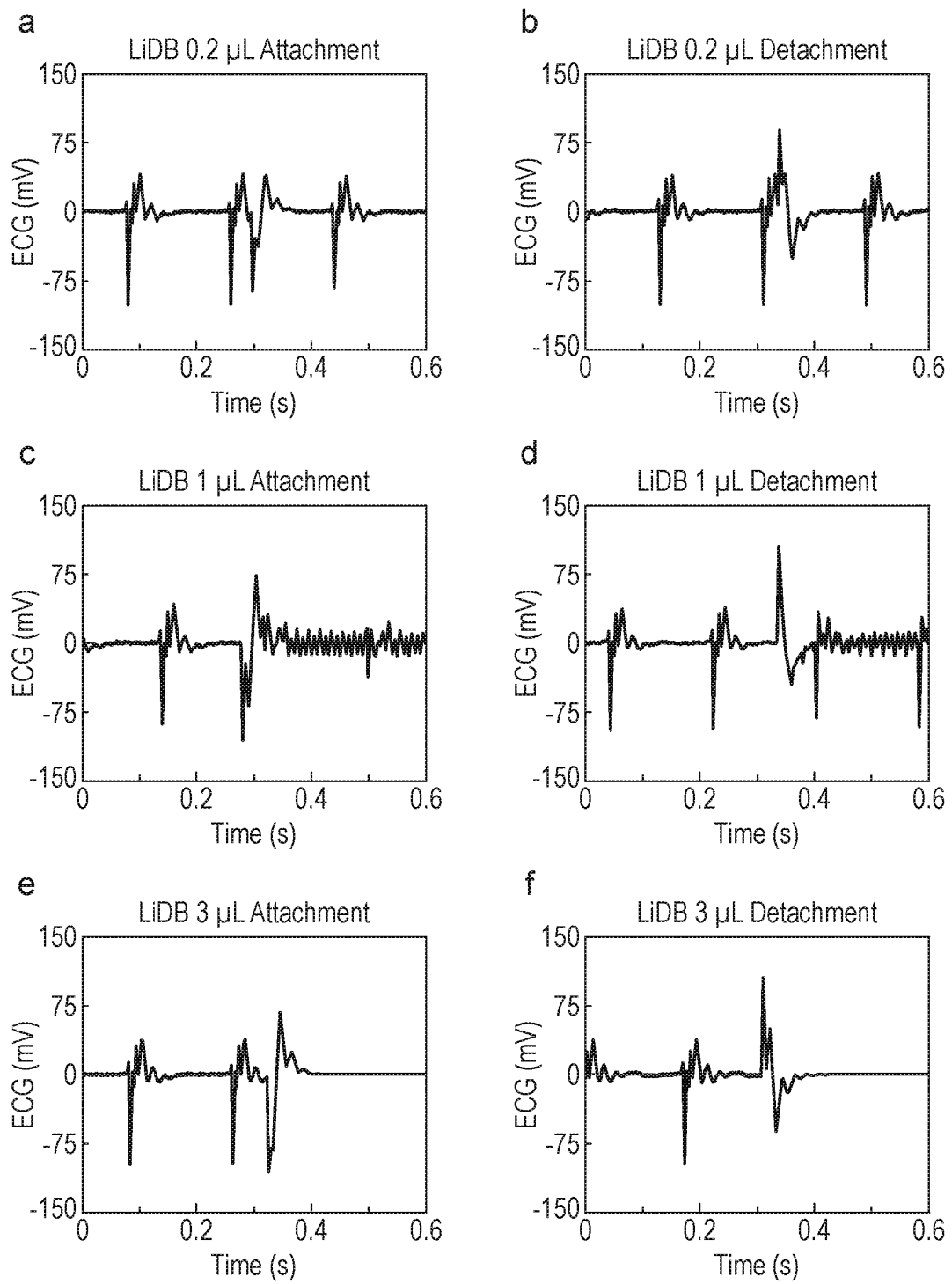
ii. Wired Contact–Pacing

- LiDBs power package (e.g., 6 LiDBs in series)
- WT mouse hearts (n = 5)
- Spontaneous beating without light regulation



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Fig. 56



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Fig. 57

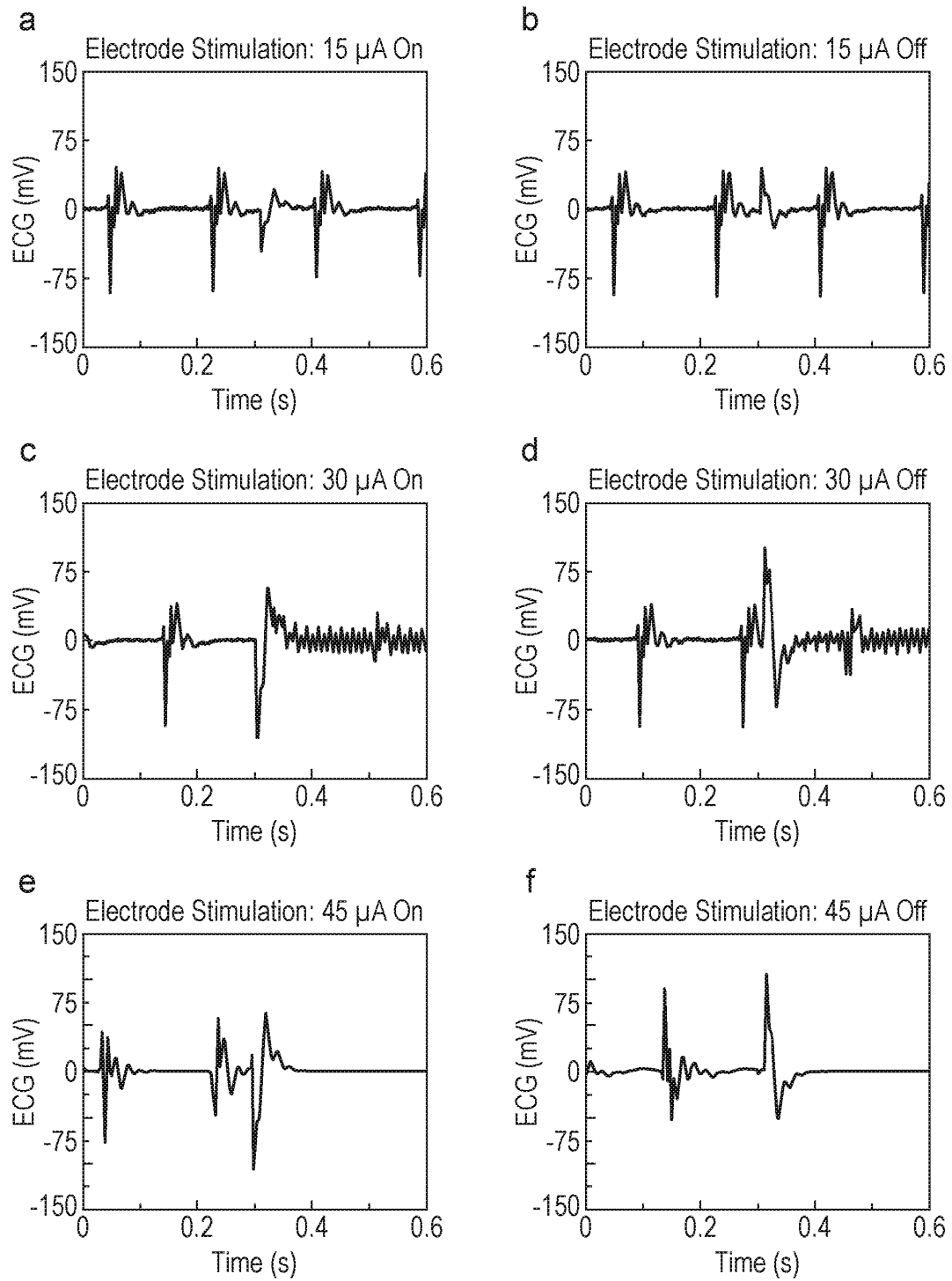


Fig. 58

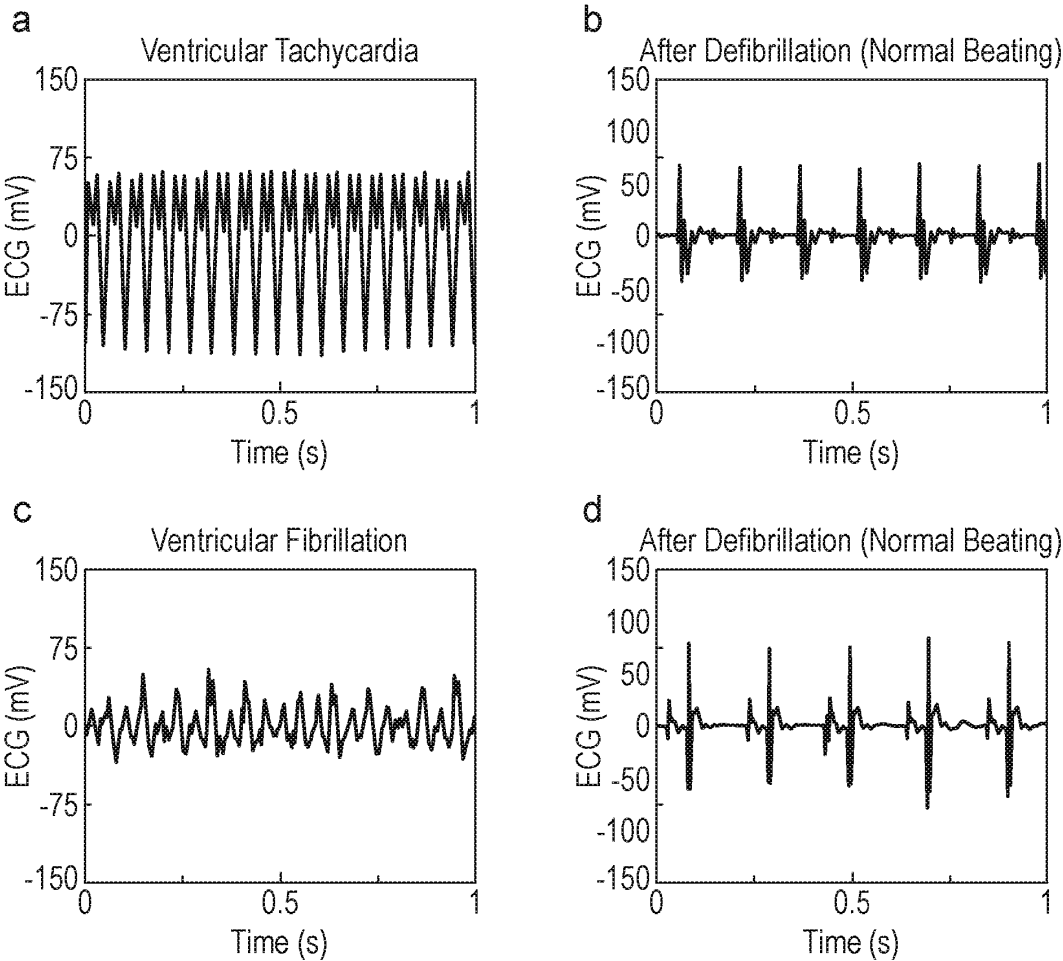
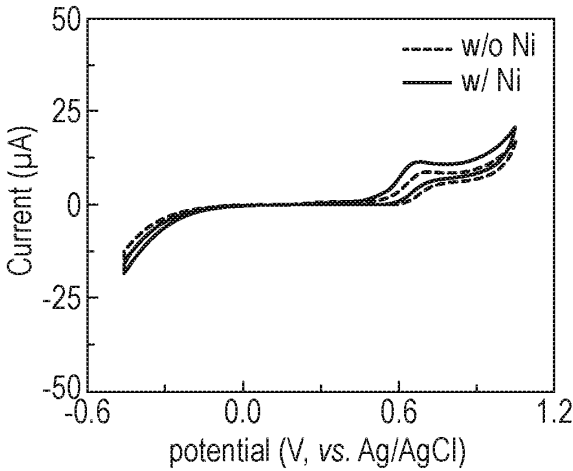


Fig. 59



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Fig. 60

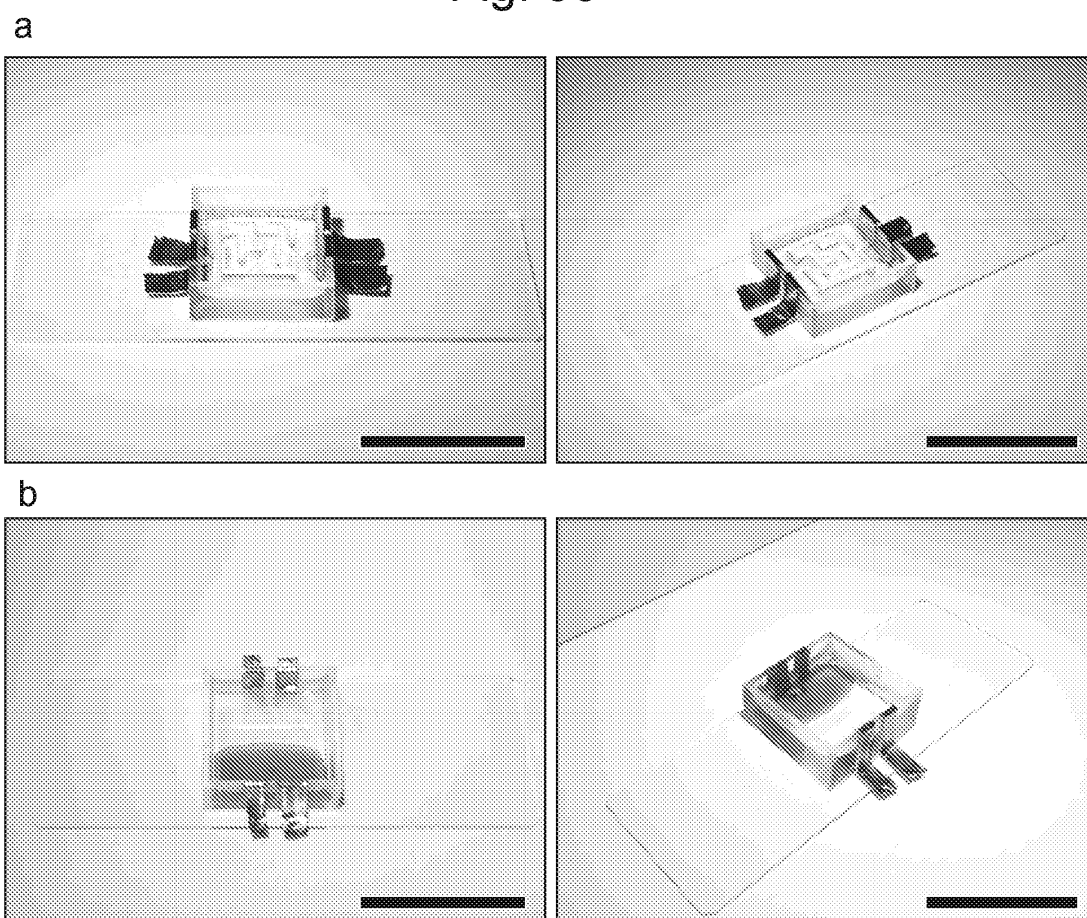


Fig. 61

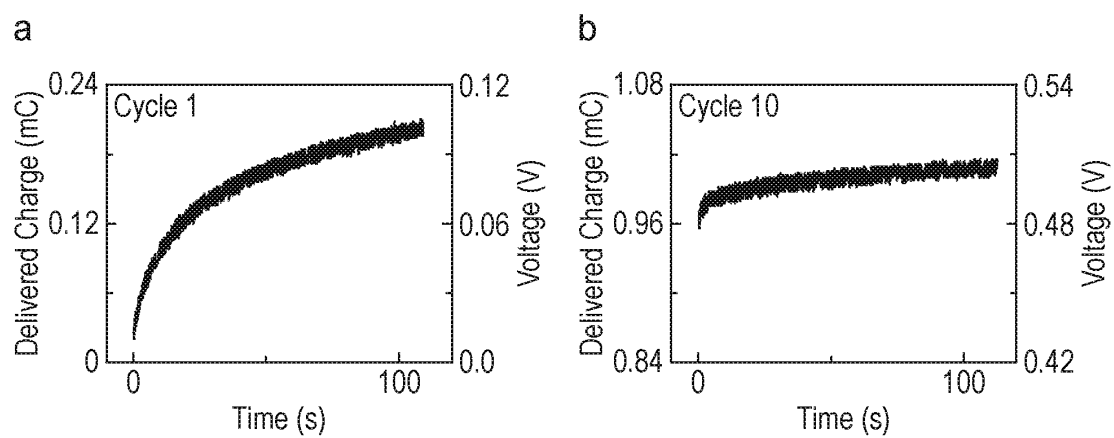


Fig. 62

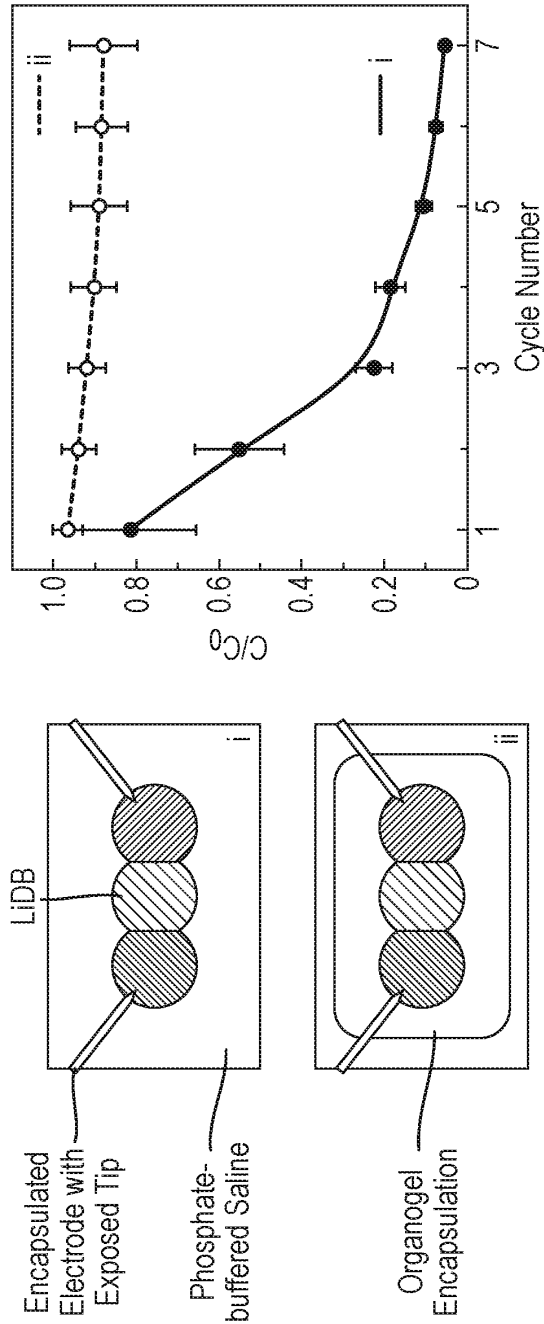


Fig. 63

