Electronic Supplementary Material (ESI) for RSC Advances. This journal is © The Royal Society of Chemistry 2023

Table SI. Formation process of ink droplets of different washing-free disperse dye ink.

	Table S1.	Formation process of ink droplets of different washing-free disperse dye ink.
Ink sample	Driving waveform	The inkjet properties of washing-free disperse dye ink
	A	19րs 20րs 21րs 23րs 24րs 25րs 26րs 27րs 28րs 29րs 30րs 31րs 32րs 33րs 34րs 35րs 36րs 37րs 38րs 39րs 40րs 41րs 42րs 43րs 44րs 45րs 46րs 47րs 48րs 49րs 50րs 55րs 60րs 65րs 70րs 75րs 80րs 85րs 90րs 95րs 100րs
Ink a	В	19µs 20µs 21µs 22µs 23µs 24µs 25µs 26µs 27µs 28µs 29µs 30µs 31µs 32µs 33µs 34µs 35µs 36µs 37µs 38µs 39µs 40µs 41µs 42µs 43µs 44µs 45µs
	C	19ps 20ps 21ps 22ps 23ps 24ps 25ps 26ps 27ps 28ps 29ps 30ps 31ps 32ps 33ps 34ps 35ps 36ps 37ps 38ps 39ps 40ps 41ps 42ps 43ps 44ps 45ps 46ps 47ps 48ps 49ps 50ps
	A	19nc 20nc 21nc 22nc 22nc 24nc 25nc 26nc 27nc 28nc 29nc 30nc 31nc 32nc 33nc 34nc 35nc 36nc 37nc 38nc 39nc 40nc 41nc 42nc 43nc 44nc 45nc 56nc 55nc 60nc 65nc 70nc 75nc 86nc 85nc 90nc 95nc 100nc
Ink b	В	19µs 20µs 21µs 22µs 24µs 25µs 26µs 27µs 28µs 29µs 30µs 31µs 32µs 33µs 34µs 35µs 36µs 37µs 38µs 39µs 40µs 43µs 42µs 43µs 44µs 45µs
	С	19ps 20ps 21ps 22ps 23ps 24ps 25ps 26ps 27ps 28ps 29ps 30ps 31ps 32ps 33ps 34ps 35s 36ps 37ps 38ps 39ps 40ps 41ps 42ps 43ps 44ps 45ps 46ps 47ps 48ps 49ps 50ps 55ps
Ink c	A	19ps 20ps 21ps 22ps 23ps 24ps 25ps 26ps 27ps 28ps 29ps 30ps 31ps 32ps 33ps 34ps 35ps 36ps 37ps 38ps 39ps 40ps 41ps 42ps 43ps 44ps 45ps 50ps 55ps 60ps 65ps 70ps 75ps 80ps 85ps

	В	19ps 20ps 21ps 22ps 23ps 24ps 25ps 26ps 27ps 28ps 29ps 30ps 31ps 32ps 33ps 34ps 35ps 36ps 37ps 38ps 39ps 40ps 41ps 42ps 43ps 44ps 45ps 50ps 60ps 70ps 75ps 80ps 85ps 90ps 95ps 100ps 105ps
	С	19ps 20ps 21ps 22ps 23ps 24ps 25ps 26ps 27ps 28ps 29ps 30ps 31ps 32ps 33ps 34ps 35ps 36ps 37ps 38ps 39ps 40ps 41ps 42ps 43ps 44ps 45ps 46ps 47ps 48ps 49ps 50ps
	A	19ps 20ps 21ps 22ps 23ps 24ps 25ps 26ps 27ps 28ps 29ps 30ps 31ps 32ps 33ps 34ps 35ps 36ps 37ps 38ps 39ps 41ps 42ps 43ps 44ps 45ps 50ps 55ps 60ps 65ps 70ps 75ps 80ps 85ps 90ps 95ps 100ps
Ink d	В	19με 20με 21με 22με 23με 24με 25με 26με 27με 28με 29με 30με 31με 32με 33με 34με 35με 36με 37με 38με 39με 40με 41με 42με 43με 45με 46με 47με 48με 49με
	С	19με 20με 21με 22με 23με 24με 25με 26με 27με 28με 29με 30με 31με 32με 33με 33με 35με 36με 37με 38με 39με 40με 42με 43με 44με 45με 46με 47με 48με 49με 50με 51με 52με 53με
	A	19րs 20րs 22րs 23րs 24րs 25րs 26րs 27րs 28րs 29րs 30րs 31րs 33րs 34րs 35րs 36րs 37րs 38րs 39րs 40րs 41րs 42րs 43րs 44րs 45րs 46րs 47րs 48րs 49րs 50րs 51րs 55րs 60րs
Ink e	В	19με 20με 21με 22με 23με 24με 25με 26με 27με 28με 29με 30με 31με 32με 33με 34με 35με 36με 37με 38με 39με 40με 41με 42με 43με 44με 45με 50με 55με 60με 65με 70με 75με 80με 85με 90με 95με100με
	С	19µs 20µs 21µs 22µs 23µs 24µs 25µs 26µs 27µs 28µs 29µs 30µs 31µs 32µs 33µs 34µs 35µs 36µs 37µs 38µs 39µs 41µs 42µs 43µs 44µs 45µs 46µs 47µs 48µs 49µs 50µs

		1945 2045 2145 2265 3346 2445 2546 2645 375 2545 45
	A	1918 2018 2218 2318 2418 2518 2618 2718 2818 2918 3618 3148 3348 3348 3548 3548 3648 3798 3898 4018 4118 4218 4318 4418 4518 4618 4718 4818 4918 5618 5518 6618 6518 7618 7518 8618 8518 9618 9618 10618 10
Ink f	В	19ps 20ps 21ps 22ps 23ps 24ps 25ps 26ps 27ps 28ps 29ps 30ps 31ps 32ps 33ps 34ps 35ps 36ps 37ps 38ps 39ps 40ps 41ps 42ps 43ps 44ps 45ps 46ps 47ps 48ps 49ps 50ps 51ps 52ps 53ps 54ps 55ps 56ps 60ps 65ps 70ps 75
_		
	C	19µs 20µs 21µs 22µs 23µs 24µs 25µs 26µs 27µs 28µs 29µs 30µs 31µs 32µs 33µs 34µs 35µs 36µs 37µs 38µs 39µs 40µs 41µs 42µs 43µs 44µs 45µs 46µs 47µs 48µs 49µs 50µs
	A	19ps 20ps 21ps 22ps 23ps 24ps 25ps 26ps 27ps 28ps 29ps 30ps 31ps 32ps 33ps 34ps 35ps 36ps 37ps 38ps 39ps 40ps 41ps 42ps 43ps 44ps 45ps 50ps 55ps 60ps 65ps 70ps 75ps 38ps 85ps 90ps 95ps 100ps
Ink g	В	19 μs 20 μs 21 μs 22 μs 23 μs 24 μs 25 μs 26 μs 27 μs 28 μs 29 μs 30 μs 31 μs 32 μs 33 μs 34 μs 35 μs 36 μs 37 μs 38 μs 39 μs 40 μs 41 μs 42 μs 43 μs 44 μs 45 μs 50 μs 60 μs 65 μs 70 μs 75 μs 80 μs 85 μs 90 μs 95 μs 100 μs
_		
	C	19µs 20µs 21µs 22µs 23µs 24µs 25µs 26µs 27µs 28µs 29µs 30µs 31µs 32µs 33µs 34µs 35µs 36µs 37µs 38µs 39µs 40µs 41µs 42µs 43µs