

左边界

右边界

表 1: 激光器规格

| Wave-length | Model         | Package | Emmitter type | Manu-facturer |
|-------------|---------------|---------|---------------|---------------|
| 405         | DL-7386-101HG | TO-56   | single        | sanyo         |
| 450         | PL 450        | TO-38   | single        | osram         |
| 638         | ML520G54      | TO-56   | single        | mitsubishi    |
| 655         | DL-5147-242   | TO-56   | single        | sanyo         |
| hline       |               |         |               |               |

| Symbol    | Meaning   |
|-----------|---|
| $t$       | Time  |
| $N$       | Total reported opioid cases                                     |
| $N_t$     | Total reported drug cases                                       |
| $\lambda$ | Average cases induced by a single case                          |
| $A_t$     | Status at $t$   |
| $E$       | Set containing socio-economic factors with high correlation $t$ |
| $T$       | Transition matrix   |
| $i(t)$    | Proportion of opioid cases in all drug cases at $t$             |
| $\mu_1$   | Average number of drug cases induced by an existing drug case   |
| $\mu_2$   | Number of opioid cases induced among all drug cases             |
| $\gamma$  | Drug spread slow down factor                                    |
| $i_0$     | Status at $t$   |
| $H$       | Information Entropy   |
| $p_0$     | Initial number of drug cases                                    |