

Appendix

(1) Second-order feedback loops (n = 17):

$$\begin{aligned} & (R_{71}, +, R_{51})(R_{51}, +, A_{513}, L_7), 2(R_{52}, -, A_{55}, L_7)(R_{71}, +, R_{51}), (R_{52}, +, A_{57}, L_7)(R_{71}, +, R_{51}), \\ & (R_{52}, +, A_{581}, L_7)(R_{71}, +, R_{51}), (R_{52}, -, A_{581}, L_7)(R_{71}, +, R_{51}), (R_{52}, +, L_4)(R_4, +, R_{51}), \\ & (R_3, +, L_4)(R_4, -, R_3), (R_3, +, L_4)(R_4, +, R_3), 2(R_{62}, -, L_2)(R_2, +, R_{61}), (R_1, +, A_{11}, L_6)(R_{61}, -, L_1), \\ & (R_1, +, A_{11}, L_6)2(-R_{62}, +, L_1), (R_1, +, A_{12}, L_6)(R_{61}, -, L_1), (R_1, +, A_{12}, L_6)2(-R_{62}, +, L_1), \end{aligned}$$

(2) Third-order feedback loops (n = 16):

$$\begin{aligned} & (R_{71}, +, R_{51})(R_{51}, -, A_{511}, R_3)(R_3, +, L_7), (R_{71}, +, R_{51})(R_{51}, +, A_{514}, R_3)(R_3, +, L_7), \\ & (R_{71}, +, R_{51})(R_{51}, +, A_{54}, R_3)(R_3, +, L_7), (R_{52}, +, L_4)(R_4, +, A_{33}, L_7)(R_{71}, +, R_{51}), \\ & (R_3, +, L_4)(R_4, +, R_{51})(R_{51}, -, A_{511}, R_3), (R_3, +, L_4)(R_4, +, R_{51})(R_{51}, +, A_{514}, R_3), \\ & (R_3, +, L_4)(R_4, +, R_{51})(R_{51}, +, A_{54}, R_3), (R_{62}, +, R_3)(R_3, +, L_2)(R_2, +, R_{61}), \\ & (R_2, +, R_{61})(R_{61}, +, R_3)(R_3, +, L_2), (R_1, +, A_{11}, L_6)2(-R_{62}, -, L_2)(R_2, +, L_1), \\ & (R_1, +, A_{11}, L_6)2(-R_{62}, -, L_2)(R_2, +, A_{22}, L_1), (R_1, +, A_{12}, L_6)2(-R_{62}, -, L_2)(R_2, +, L_1), \\ & (R_1, +, A_{12}, L_6)2(-R_{62}, -, L_2)(R_2, +, A_{22}, L_1), \end{aligned}$$

(3) Fourth-order feedback loops (n = 24):

$$\begin{aligned} & (R_{71}, +, R_{51})(R_{51}, -, A_{511}, R_3)(R_3, +, L_4)(R_4, +, A_{33}, L_7), \\ & (R_{71}, +, R_{51})(R_{51}, +, A_{514}, R_3)(R_3, +, L_4)(R_4, +, A_{33}, L_7), \\ & (R_{71}, +, R_{51})(R_{51}, +, A_{54}, R_3)(R_3, +, L_4)(R_4, +, A_{33}, L_7), \\ & (R_{71}, +, R_{51})(R_{51}, -, A_{511}, R_3)(R_3, +, L_2)3(R_2, +, L_7), \\ & (R_{71}, +, R_{51})(R_{51}, +, A_{514}, R_3)(R_3, +, L_2)3(R_2, +, L_7), \\ & (R_{71}, +, R_{51})(R_{51}, +, A_{54}, R_3)(R_3, +, L_2)3(R_2, +, L_7), \\ & (R_{52}, +, L_4)(R_4, -, R_3)(R_3, +, L_7)(R_{71}, +, R_{51}), \\ & (R_{52}, +, L_4)(R_4, +, R_3)(R_3, +, L_7)(R_{71}, +, R_{51}), \\ & (R_{62}, -, L_4)(R_4, -, R_3)(R_3, +, L_2)(R_2, +, R_{61}), \end{aligned}$$

$$(R_{62}, -, L_4)(R_4, +, R_3)(R_3, +, L_2)(R_2, +, R_{61}),$$

$$(R_1, +, A_{11}, L_6)(R_{61}, +, R_3)(R_3, +, L_2)(R_2, +, L_1),$$

$$(R_1, +, A_{11}, L_6)(R_{61}, +, R_3)(R_3, +, L_2)(R_2, +, A_{22}, L_1),$$

$$(R_1, +, A_{11}, L_6)(-R_{62}, +, R_3)(R_3, +, L_2)(R_2, +, L_1),$$

$$(R_1, +, A_{11}, L_6)(-R_{62}, +, R_3)(R_3, +, L_2)(R_2, +, A_{22}, L_1),$$

$$(R_1, +, A_{12}, L_6)(R_{61}, +, R_3)(R_3, +, L_2)(R_2, +, L_1),$$

$$(R_1, +, A_{12}, L_6)(R_{61}, +, R_3)(R_3, +, L_2)(R_2, +, A_{22}, L_1),$$

$$(R_1, +, A_{12}, L_6)(-R_{62}, +, R_3)(R_3, +, L_2)(R_2, +, L_1),$$

$$(R_1, +, A_{12}, L_6)(-R_{62}, +, R_3)(R_3, +, L_2)(R_2, +, A_{22}, L_1),$$

(4) Fifth-order feedback loops (n = 17):

$$(R_{52}, +, L_4)(R_4, -, R_3)(R_3, +, L_2)3(R_2, +, L_7)(R_{71}, +, R_{51}),$$

$$(R_{52}, +, L_4)(R_4, +, R_3)(R_3, +, L_2)3(R_2, +, L_7)(R_{71}, +, R_{51}),$$

$$(R_{62}, -, L_4)(R_4, +, R_{51})(R_{51}, -, A_{511}, R_3)(R_3, +, L_2)(R_2, +, R_{61}),$$

$$(R_{62}, -, L_4)(R_4, +, R_{51})(R_{51}, +, A_{514}, R_3)(R_3, +, L_2)(R_2, +, R_{61}),$$

$$(R_{62}, -, L_4)(R_4, +, R_{51})(R_{51}, +, A_{54}, R_3)(R_3, +, L_2)(R_2, +, R_{61}),$$

$$(R_1, +, A_{11}, L_6)(-R_{62}, -, L_4)(R_4, -, R_3)(R_3, +, L_2)(R_2, +, L_1),$$

$$(R_1, +, A_{11}, L_6)(-R_{62}, -, L_4)(R_4, -, R_3)(R_3, +, L_2)(R_2, +, A_{22}, L_1),$$

$$(R_1, +, A_{11}, L_6)(-R_{62}, -, L_4)(R_4, +, R_3)(R_3, +, L_2)(R_2, +, L_1),$$

$$(R_1, +, A_{11}, L_6)(-R_{62}, -, L_4)(R_4, +, R_3)(R_3, +, L_2)(R_2, +, A_{22}, L_1),$$

$$(R_1, +, A_{12}, L_6)(-R_{62}, -, L_4)(R_4, -, R_3)(R_3, +, L_2)(R_2, +, L_1),$$

$$(R_1, +, A_{12}, L_6)(-R_{62}, -, L_4)(R_4, -, R_3)(R_3, +, L_2)(R_2, +, A_{22}, L_1),$$

$$(R_1, +, A_{12}, L_6)(-R_{62}, -, L_4)(R_4, +, R_3)(R_3, +, L_2)(R_2, +, L_1),$$

$$(R_1, +, A_{12}, L_6)(-R_{62}, -, L_4)(R_4, +, R_3)(R_3, +, L_2)(R_2, +, A_{22}, L_1),$$

(5) Sixth-order feedback loops (n = 15):

$$\begin{aligned}
& (R_{62}, -, L_4)(R_4, +, A_{33}, L_7)(R_{71}, +, R_{51})(R_{51}, -, A_{511}, R_3)(R_3, +, L_2)(R_2, +, R_{61}), \\
& (R_{62}, -, L_4)(R_4, +, A_{33}, L_7)(R_{71}, +, R_{51})(R_{51}, +, A_{514}, R_3)(R_3, +, L_2)(R_2, +, R_{61}), \\
& (R_{62}, -, L_4)(R_4, +, A_{33}, L_7)(R_{71}, +, R_{51})(R_{51}, +, A_{54}, R_3)(R_3, +, L_2)(R_2, +, R_{61}), \\
& (R_1, +, A_{11}, L_6)(-R_{62}, -, L_4)(R_4, +, R_{51})(R_{51}, -, A_{511}, R_3)(R_3, +, L_2)(R_2, +, L_1), \\
& (R_1, +, A_{11}, L_6)(-R_{62}, -, L_4)(R_4, +, R_{51})(R_{51}, -, A_{511}, R_3)(R_3, +, L_2)(R_2, +, A_{22}, L_1), \\
& (R_1, +, A_{11}, L_6)(-R_{62}, -, L_4)(R_4, +, R_{51})(R_{51}, +, A_{514}, R_3)(R_3, +, L_2)(R_2, +, L_1), \\
& (R_1, +, A_{11}, L_6)(-R_{62}, -, L_4)(R_4, +, R_{51})(R_{51}, +, A_{514}, R_3)(R_3, +, L_2)(R_2, +, A_{22}, L_1), \\
& (R_1, +, A_{11}, L_6)(-R_{62}, -, L_4)(R_4, +, R_{51})(R_{51}, +, A_{54}, R_3)(R_3, +, L_2)(R_2, +, L_1), \\
& (R_1, +, A_{11}, L_6)(-R_{62}, -, L_4)(R_4, +, R_{51})(R_{51}, +, A_{54}, R_3)(R_3, +, L_2)(R_2, +, A_{22}, L_1), \\
& (R_1, +, A_{12}, L_6)(-R_{62}, -, L_4)(R_4, +, R_{51})(R_{51}, -, A_{511}, R_3)(R_3, +, L_2)(R_2, +, L_1), \\
& (R_1, +, A_{12}, L_6)(-R_{62}, -, L_4)(R_4, +, R_{51})(R_{51}, -, A_{511}, R_3)(R_3, +, L_2)(R_2, +, A_{22}, L_1), \\
& (R_1, +, A_{12}, L_6)(-R_{62}, -, L_4)(R_4, +, R_{51})(R_{51}, +, A_{514}, R_3)(R_3, +, L_2)(R_2, +, L_1), \\
& (R_1, +, A_{12}, L_6)(-R_{62}, -, L_4)(R_4, +, R_{51})(R_{51}, +, A_{514}, R_3)(R_3, +, L_2)(R_2, +, A_{22}, L_1), \\
& (R_1, +, A_{12}, L_6)(-R_{62}, -, L_4)(R_4, +, R_{51})(R_{51}, +, A_{54}, R_3)(R_3, +, L_2)(R_2, +, L_1), \\
& (R_1, +, A_{12}, L_6)(-R_{62}, -, L_4)(R_4, +, R_{51})(R_{51}, +, A_{54}, R_3)(R_3, +, L_2)(R_2, +, A_{22}, L_1),
\end{aligned}$$

(6) Seventh-order feedback loops (n = 15):

$$\begin{aligned}
& (R_1, +, A_{11}, L_6)(-R_{62}, -, L_4)(R_4, +, A_{33}, L_7)(R_{71}, +, L_5)(R_{51}, -, A_{511}, R_3)(R_3, +, L_2)(R_2, +, L_1), \\
& (R_1, +, A_{11}, L_6)(-R_{62}, -, L_4)(R_4, +, A_{33}, L_7)(R_{71}, +, L_5)(R_{51}, -, A_{511}, R_3)(R_3, +, L_2)(R_2, +, A_{22}, L_1), \\
& (R_1, +, A_{11}, L_6)(-R_{62}, -, L_4)(R_4, +, A_{33}, L_7)(R_{71}, +, L_5)(R_{51}, +, A_{514}, R_3)(R_3, +, L_2)(R_2, +, L_1), \\
& (R_1, +, A_{11}, L_6)(-R_{62}, -, L_4)(R_4, +, A_{33}, L_7)(R_{71}, +, L_5)(R_{51}, +, A_{514}, R_3)(R_3, +, L_2)(R_2, +, A_{22}, L_1), \\
& (R_1, +, A_{11}, L_6)(-R_{62}, -, L_4)(R_4, +, A_{33}, L_7)(R_{71}, +, L_5)(R_{51}, +, A_{54}, R_3)(R_3, +, L_2)(R_2, +, L_1), \\
& (R_1, +, A_{11}, L_6)(-R_{62}, -, L_4)(R_4, +, A_{33}, L_7)(R_{71}, +, L_5)(R_{51}, +, A_{54}, R_3)(R_3, +, L_2)(R_2, +, A_{22}, L_1), \\
& (R_1, +, A_{11}, L_6)(-R_{62}, -, L_4)(R_4, +, A_{33}, L_7)(R_{71}, +, R_{51})(R_{51}, -, A_{511}, R_3)(R_3, +, L_2)(R_2, +, L_1),
\end{aligned}$$

[illegible]