Flexibly programmable high-Q RF-filtering is crucial to realize highly reconfigurable CMOS radio receiver ICs. If such filters operate directly on the limited selectivity antenna signal, high blocker tolerance is demanded for interference robustness and to handle TX leakage in Frequency Division Duplex scenarios. Passive switch-R-C circuits, also known as N-path filters, commutated filters or frequency translated filters, can offer tunable RF-filter functionality where the switch-frequency defines the RF-filter center frequency. It can also be combined with frequency conversion in mixer-first switch-R-C receivers. This talk will review developments in this field over the last decade with special focus on ways to improve the linearity, selectivity and blocker tolerance.

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