Over the last years, the organofluorine research field has known a fast expansion, [1] as shown by the plethora of pharmaceuticals and agrochemicals containing at least one fluorine atom [2]. Consequently, a special attention was paid to the development of modern strategies in organofluorine chemistry. Besides, transition metal catalyzed direct C-H bond functionalization has known tremendous progress over the last decade allowing new retrosynthetic disconnections and innovative approaches [3]. In that context, we focused on the development of new methodologies to introduce fluorinated groups onto molecules based on the combination of organofluorine chemistry and transition metal catalyzed C-H bond functionalization. Besides, a special attention was paid to the design of original electrophilic reagents [4].


