This Special Topic, edited by Erick Carreira, highlights recent advances in organonickel chemistry. Nickel catalysts have been applied in a wide range of organic transformations, for example, in nickel-catalyzed C–C bond-forming reactions. Various research groups greatly expand the use of nickel catalysts and present their latest results herein.

**Advanced Strategies in Synthesis with Nickel**

- **Y. Peng**
- **M. Szostak**
- **C. Aissa**
- **J. Ichikawa**

\[
\begin{align*}
\text{Ni catalyst} & \quad \text{[N–C activation]} \\
\text{N-acylsuccinimide} = \text{half-twisted amide}
\end{align*}
\]

- \[\text{RF} = \text{CF}_3, \text{C}_4\text{F}_9\]
- \[\text{27 examples} \quad 12–94\%\]

\[
\text{Ar}_1 \quad \text{O} \quad \text{O} \quad \text{Ar}_2
\]

\[
\text{NiBr}_2 \cdot \text{glyme}
\]

\[
\text{LiBr, Mn}_0 \quad \text{DMF, 40 ºC}
\]

\[
27 \text{ examples} \quad 12–94\%
\]