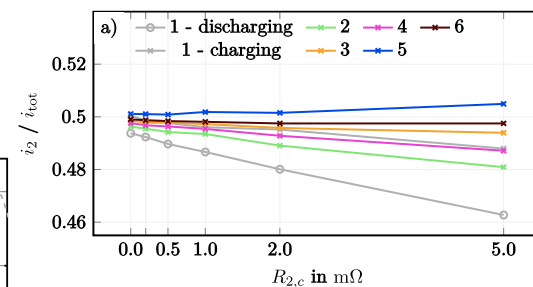
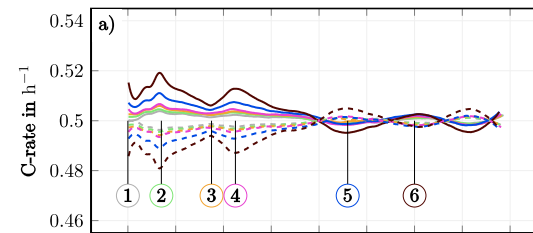
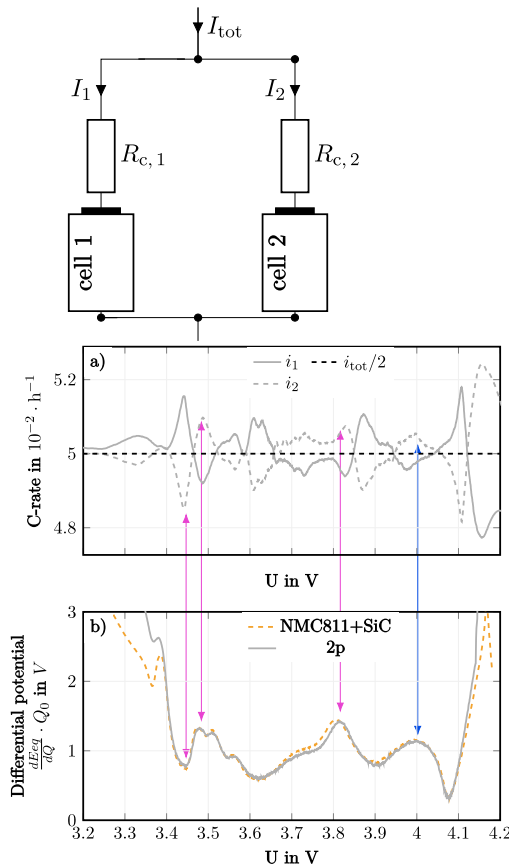


Experimental study of parallel-connected lithium-ion cells with controllable interconnection resistance

Inhomogeneous resistance increments

— $R_{c,1} = 0.0 \text{ m}\Omega$	- - - $R_{c,2} = 0.0 \text{ m}\Omega$
— $R_{c,1} = 0.0 \text{ m}\Omega$	- - - $R_{c,2} = 0.2 \text{ m}\Omega$
— $R_{c,1} = 0.0 \text{ m}\Omega$	- - - $R_{c,2} = 0.5 \text{ m}\Omega$
— $R_{c,1} = 0.0 \text{ m}\Omega$	- - - $R_{c,2} = 1.0 \text{ m}\Omega$
— $R_{c,1} = 0.0 \text{ m}\Omega$	- - - $R_{c,2} = 2.0 \text{ m}\Omega$
— $R_{c,1} = 0.0 \text{ m}\Omega$	- - - $R_{c,2} = 5.0 \text{ m}\Omega$

- Degree of distribution of the current is determined by the path resistance.
- Main crossing points, where the currents intersect each other, are affected by the Open Circuit Voltage (OCV)
- Gradient of the OCV defines the current distribution.
 - High gradient results in a large spread between the individual cell currents.



- Aging study
- Dynamical profiles
- DVA Analysis