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Selective Drying Phenomena of Fuel Cell CCM Inks

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CCM in a Fuel Cell

Ink Formulation & Mass Fluxes while Drying









[1] Pollet, et al., Current status of automotive fuel cells for sustainable transport, DOI: 10.1016/j.coelec.2019.04.021, 2019. [2] after: US DOE, Quadrennial Technology Review 2015 Chapter 6: Innovating Clean Energy Technologies in Advanced Manufacturing, 2015.
[3] Kumberg, et al., Scharfer, Schabel, Energy Technol., 7, 1900722, 2019.
[4] Jaiser, et al., Scharfer, Schabel, Journal of Power Sources, Vol. 318, 2016, 210-219, 2016. [5] Kumberg, et al., Scharfer, Schabel, Energy Technology, 2021, Vol 9: 2100367.
[6] Klemens, et. al., Scharfer, Schabel, Energy Technology, DOI: 10.1002/ente.202300267, 2023.

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