Review of: "Low-Carbon Hydrogen Economy Perspective and Net Zero-Energy Transition through Proton Exchange Membrane Electrolysis Cells (PEMECs), Anion Exchange Membranes (AEMs) and Wind for Green Hydrogen Generation"

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Potential competing interests: No potential competing interests to declare.

Mittal et al. reviewed the low-carbon hydrogen economy perspective and net zero-energy transition through proton exchange membrane electrolysis cells (PEMECs), anion exchange membranes (AEMs), and integrating wind energy for green hydrogen generation.

Also, they examined theoretically and economically the hydrogen production via water electrolysis with the help of anion-conducting solid polymer electrolytes and a novel integrated inorganic membrane electrode assembly (I2 MEA) for anion exchange membrane (AEM) water electrolysis by using inorganic Mg-Al layered double hydroxides (Mg-Al LDHs) as an ionic conductor with the aim of producing low-carbon hydrogen. The paper is well-organised and supported by figures and tables. The introduction may be improved by including other methods of energy production and CO2 emission therein. Sufficient figures and tables. The related references may be included as follows: Fluid Phase Equilibria 246 (1-2), 1-5,2006; Fuel 85 (14-15), 2012-2017, 2006; Industrial & Engineering Chemistry Research 46 (5), 1578-1583, 2007; Energy & Fuels 19 (1), 258-262, 2006; Journal of Chemical & Engineering Data 50 (5), 1773-1776, 2005; Environmental Chemistry Letters 19, 875-910, 2021; Energy Policy 35 (10), 5109-5116, 2007; Fuel 86 (5-6), 813-819, 2007; Fuel Processing Technology 91 (6), 635-640, 2010; Energy Policy 36 (1), 326-334, 2008; Journal of Chemical & Engineering Data 51 (2), 504-509, 2006; Korean Journal of Chemical Engineering 23, 954-960, 2006; Energy & Fuels 19 (6), 2268-2272, 2005; Korean Journal of Chemical Engineering 25, 323-328, 2008; Journal of Industrial and Engineering Chemistry 10 (3), 361-36, 2004; Journal Scientific & Industrial Research 64 (3), 198-204, 2005; Energy & Fuels 23 (11), 5467-5473, 2009; Korean Journal of Chemical Engineering 25, 1-6, 2008; International Journal of Hydrogen Energy 48 (96), 38015-38026, 2023.