

## Science and Technology of Hydrogen in Metals: What you should study

Subject	Chapter	Pages
Introduction: Energy, Environment & Sustainability	Whole Chapter I	
Review of H, H <sub>2</sub> , Van der Waals gasses	Whole Chapter II	
Thermodynamics	Chapter III	Except pages 21-23
Critical behaviour and H-H interaction	Chapter IV	Except Sections IV.2 and IV.8
Elasticity	Whole Chapter IV.A	
Band structure of transition metals/ effect of H on electronic states	Whole Chapter V and Appendix VA	
Band structure of complex hydrides	Whole Chapter VII except Section VII.2	Read Section VII.2
Transport properties	Chapter VIII Sections VIII.1	Pages 1-7, 18-26
Practicum: Fuel cell, Electrolyser, Photovoltaic cell	Whole Chapter IXA	
Hydrogen storage in various systems (metals, borohydrides, MOF's, graphite,....)		
Sustainability and Hydrogen	Whole Chapter IX	
Safety	Read whole Chapter	Make a one page summary of the most important safety issues