

5 – List of relevant sources

This chapter includes the list of collected sources (books, online sources, videos, websites etc.) which can be used during the elaboration of the training materials and/or can be added to a reading list for providing further information to students and e-learners.

MODUL 1

History of Electric Vehicles

| Title | Author | Hyperlink or Publisher & Publishing Date | Language |
|--|---------------------------|--|-----------|
| Electric vehicles charge forward | C. C. Chan and Y. S. Wong | IEEE Power and Energy Magazine, vol. 2, no. 6, pp. 24-33, Nov.-Dec. 2004, doi: 10.1109/MPAE.2004.1359010, Link | English |
| Charge! EVs power up for the long haul | C. B. Toepfer | IEEE Spectrum, vol. 35, no. 11, pp. 41-47, Nov. 1998, doi: 10.1109/6.730519, Link | English |
| A Brief History and Evolution of Electric Cars | Christopher McFadden | Link | English |
| Az elektromos autózás rövid története | Unkown | Link | Hungarian |

Battery Technologies

| Title | Author | Hyperlink or Publisher & Publishing Date | Language |
|---|--|--|----------|
| Electric Vehicle Batteries Eye Solid-State Technology: Prototypes Promise Lower Cost, Faster Charging, and Greater Safety | A. Bindra | IEEE Power Electronics Magazine, vol. 7, no. 1, pp. 16-19, March 2020, doi: 10.1109/MPPEL.2019.2961203 Link | English |
| The prospects of panel style nano-battery technology for EV/HEV | A. Rahman, M. Rashid, A. K. M. Mohiuddin and H. Moktar | 2015 IEEE International Conference on Industrial Engineering and Engineering Management (IEEM), Singapore, 2015, pp. 1531-1535, doi: 10.1109/IEEM.2015.7385903, Link | English |
| Electric vehicle battery technologies: From present state to future systems | Sergio Manzetti – Florin Mariasiu | Link | English |
| Performance and cost of materials for lithium-based rechargeable automotive batteries | Richard Schmuck et al. | Link | English |
| Current Li-Ion Battery Technologies in Electric Vehicles and Opportunities for Advancements | Yu Miao et al. | Link | English |
| Advances in battery technologies for electric vehicles | Bruno Scrosati et al. | Link | English |
| Five emerging battery technologies for electric vehicles | Jack Karsten and Darrell M. West | Link | English |
| Impacts of Electric Vehicles - Deliverable 2. Assessment of electric vehicle and battery technology | Gopalakrishnan Duleep et al. | Link | English |



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|--|-------------------|------------------------------|-----------|
| Technology Development of Electric Vehicles: A Review | Xiaoli Sun et al. | Link | English |
| Electric vehicles and battery technologies | VTT | YouTube link | English |
| Innovation in Battery Technologies for Electric Vehicles | n.a. | Link | Romanian |
| Akkumulátor technológia: a jövő akkumulátorai | Peter Magyar | Link | Hungarian |

MODUL 2

Charger Types

| Title | Author | Hyperlink or Publisher & Publishing Date | Language |
|---|--|--|-----------|
| Different fast charging methods and topologies for EV charging | N. Trivedi, N. S. Gujar, S. Sarkar and S. P. S. Pundir | 2018 IEEMA Engineer Infinite Conference (eTechNxT), New Delhi, 2018, pp. 1-5, doi:10.1109/ETECHNXT.2018.8385313, Link | English |
| Fast charging system of electric vehicle (EV) based on hybrid energy storage system | F. Liu, J. Liu, B. Zhang and H. Zhang | 2012 Twenty-Seventh Annual IEEE Applied Power Electronics Conference and Exposition (APEC), Orlando, FL, 2012, pp. 2115-2120, doi: 10.1109/APEC.2012.6166113, Link | English |
| A Bidirectional Wireless Power Transfer EV Charger Using Self-Resonant PWM | J. Lee and B. Han | IEEE Transactions on Power Electronics, vol. 30, no. 4, pp. 1784-1787, April 2015, doi: 10.1109/TPEL.2014.2346255 | English |
| Elektromos autó töltő típusok | e-cars.hu | Link | Hungarian |

Electrical Connections

| Title | Author | Hyperlink or Publisher & Publishing Date | Language |
|---|---|---|----------|
| Grid integration of DC fast-charging stations for EVs by using modular li-ion batteries | M. Gjelij, S. Hashemi, C. Traeholt and P. B. Andersen | IET Generation, Transmission & Distribution, vol. 12, no. 20, pp. 4368-4376, 13 11 2018, doi: 10.1049/iet-gtd.2017.1917 Link | English |

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|---|------------------------------------|---|-----------|
| Power quality and stability impacts of Vehicle to grid (V2G) connection | E. Alghsoon, A. Harb and M. Hamdan | 2017 8th International Renewable Energy Congress (IREC), Amman, 2017, pp. 1-6, doi: 10.1109/IREC.2017.7925995 Link | English |
| Electrical Vehicle Charging | niceic.com | Link | Hungarian |

Licensing and Permitting

| Title | Author | Hyperlink or Publisher & Publishing Date | Language |
|--|--|---|-----------|
| Efficient Allocation of Electric Vehicles Charging Stations: Optimization Model and Application to a Dense Urban Network | F. Baouche, R. Billot, R. Trigui and N. El Faouzi | IEEE Intelligent Transportation Systems Magazine, vol. 6, no. 3, pp. 33-43, Fall 2014, doi: 10.1109/MITS.2014.2324023 Link | English |
| 243/2019. (X. 22.) Korm. Rendelet az elektromobilitás szolgáltatás egyes kérdéseiről | Hungarian Government | Link | Hungarian |
| Határozat: elektromos gépjármű töltésére vonatkozó engedély | A Magyar Energetikai és Közmű-szabályozási Hivatal | Link | Hungarian |
| Töltőtelepítés szabályai Magyarországon – 100 milliós bírság a tét! | n.a. | Link | Hungarian |



Installation

| Title | Author | Hyperlink or Publisher & Publishing Date | Language |
|--|--|--|----------|
| How Electric Vehicles and the Grid Work Together: Lessons Learned from One of the Largest Electric Vehicle Trials in the World | J. Quiros-Tortos, L. Ochoa and T. Butler | IEEE Power and Energy Magazine, vol. 16, no. 6, pp. 64-76, Nov.-Dec. 2018, doi: 10.1109/MPE.2018.2863060 Link | English |
| VEHICLE-TO-GRID NETWORKS | D. H. K. Tsang, Y. Zhang, Y. Wu and A. Leon-Garcia | IEEE Network, vol. 31, no. 2, pp. 6-7, March/April 2017, doi: 10.1109/MNET.2017.7884942 Link | English |
| How-To Guide: electrical vehicle charger installation | City of Boston brochure | Link | English |

MODUL 3

Electricity Standards

| Title | Author | Hyperlink or Publisher & Publishing Date | Language |
|---|---|--|----------|
| Performance Evaluation of a Multi-Standard Fast Charging Station for Electric Vehicles | I. Zenginlis, J. Vardakas, N. Zorba and C. Verikoukis | IEEE Transactions on Smart Grid, vol. 9, no. 5, pp. 4480-4489, Sept. 2018, doi: 10.1109/TSG.2017.2660584, Link | English |
| IEEE 1609 WAVE and IEC 61850 Standard Communication Based Integrated EV Charging Management in Smart Grid | S. M. S. Hussain, T. S. Ustun, P. Nsonga and I. Ali | IEEE Transactions on Vehicular Technology, vol. 67, no. 8, pp. 7690-7697, Aug. 2018, doi: 10.1109/TVT.2018.2838018, Link | English |
| Electric Vehicle Charging Technology Analysis And Standards | Doug Kettles | Link | English |

Safety Considerations

| Title | Author | Hyperlink or Publisher & Publishing Date | Language |
|--|---|---|----------|
| Electrical safety of electric vehicle. | F. Freschi, M. Mitolo and R. Tommasini | 2017 IEEE/IAS 53rd Industrial and Commercial Power Systems Technical Conference (I&CPS), Niagara Falls, ON, 2017, pp. 1-5, doi: 10.1109/ICPS.2017.7945109 Link | English |
| Electrical Safety Considerations in Large-Scale Electric Vehicle Charging Stations | B. Wang, P. Dehghanian, S. Wang and M. Mitolo | IEEE Transactions on Industry Applications, vol. 55, no. 6, pp. 6603-6612, Nov.-Dec. 2019, doi: 10.1109/TIA.2019.2936474, Link | English |

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|---|----------------------|----------------------|---------|
| Safety considerations for electric vehicles and regulatory activities | Costandinos Visvikis | Link | English |
|---|----------------------|----------------------|---------|

Regular Maintenance

| Title | Author | Hyperlink or Publisher & Publishing Date | Language |
|--|--|---|----------|
| Research on coordinated charging and influence of EV based on distributed charge control | C. Xu, J. Shi, X. Han, J. Ma and D. Lv | 2017 Chinese Automation Congress (CAC), Jinan, 2017, pp. 5766-5769, doi: 10.1109/CAC.2017.8243813, Link | English |
| Controlling EV charging and PV generation in a low voltage grid | J. Groenbaek, S. Bessler and C. Schneider | 22nd International Conference and Exhibition on Electricity Distribution (CIRED 2013), Stockholm, 2013, pp. 1-4, doi: 10.1049/cp.2013.1150 Link | English |
| Impacts of Electric Vehicles - Deliverable 2 - Assessment of electric vehicle and battery technology | Gopalakrishnan Duleep (ICF) Huib van Essen (CE Delft) Bettina Kampman (CE Delft) Max Grünig (Ecologic) | CE-publications are available from www.cedelft.eu , Delft, April 2011 | English |
| Electric cars vs Petrol cars | Learn Engineering | YouTube link | English |

Error Management

| Title | Author | Hyperlink or Publisher & Publishing Date | Language |
|---|--|---|----------|
| State of charge, state of health, and state of function monitoring for EV BMS | Zong-You Hou, Pang-Yen Lou and C. Wang | 2017 IEEE International Conference on Consumer Electronics (ICCE), Las Vegas, NV, 2017, pp. 310-311, doi: 10.1109/ICCE.2017.7889332, Link | English |



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|--|-------------------------------|----------------------|---------|
| Electric cars: technical characteristics and environmental impacts | Eckard Helmers & Patrick Marx | Link | English |
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EV Charger Fault Diagnoses

| Title | Author | Hyperlink or Publisher & Publishing Date | Language |
|---|--|--|----------|
| A fuzzy logic approach for fault diagnosis and recovery in PHEV and EV chargers | W. Chen, L. Wang, A. Ulatowski and A. M. Bazzi | 2014 IEEE Transportation Electrification Conference and Expo (ITEC), Dearborn, MI, 2014, pp. 1-5, doi: 10.1109/ITEC.2014.6861758, Link | English |
| Fault Diagnosis of Power Components in Electric Vehicles | Fei Lin, K. T. Chau, C. C. Chan, Chunhua Liu | Link | English |

MODUL 4

Management of EV Chargers

| Title | Author | Hyperlink or Publisher & Publishing Date | Language |
|---|--|---|----------|
| Deploying Electric Vehicles Into Shared-Use Services: Amping up Public Charging Demand to Justify an Investment in Infrastructure | P. Kosak | IEEE Electrification Magazine, vol. 7, no. 1, pp. 32-38, March 2019, doi: 10.1109/MELE.2018.2889548 Link | English |
| Managing the Charging of Electrical Vehicles: Impacts on the Electrical Grid and on the Environment | R. Faria, P. Moura, J. Delgado and A. T. de Almeida | <i>IEEE Intelligent Transportation Systems Magazine</i> , vol. 6, no. 3, pp. 54-65, Fall 2014, doi: 10.1109/MITS.2014.2323437 Link | English |
| Electric Vehicles Charging: Management and Control Strategies | F. J. Soares, D. Rua, C. Gouveia, B. D. Tavares, A. M. Coelho and J. A. P. Lopes | IEEE Vehicular Technology Magazine, vol. 13, no. 1, pp. 130-139, March 2018, doi: 10.1109/MVT.2017.2781538 Link | English |
| Development and trends in Electric Vehicles and charging infrastructures | Joan Pallisé | Link | English |
| Charging ahead: Electric-vehicle infrastructure demand | Hauke Engel, Russell Hensley, Stefan Knupfer, and Shivika Sahdev | Link | English |

Smart Management

| Title | Author | Hyperlink or Publisher & Publishing Date | Language |
|--|--|--|----------|
| Profitability analysis of grid supporting EV charging management | R. Uhlig, S. Harnisch, M. Stötzel, M. Zdrallek and T. Arnoneit | CIREC - Open Access Proceedings Journal, vol. 2017, no. 1, pp. 1945-1948, 10 2017, doi: 10.1049/oap-cired.2017.0219 Link | English |
| Assessment of Technical and Economic Impacts of EV User Behavior on EV Aggregator Smart Charging | J. Clairand, J. Rodríguez-García and C. Álvarez-Bel | Journal of Modern Power Systems and Clean Energy, vol. 8, no. 2, pp. 356-366, March 2020, doi: 10.35833/MPCE.2018.000840 Link | English |
| ELECTRIC-VEHICLE SMART CHARGING INNOVATION LANDSCAPE BRIEF | IRENA | Link | English |
| What is OCPP? What is OCPP's relevance to Electric Vehicle Charging? | Evreporter | YouTube link | English |