

**Table S1.** Relevant studies within V2G research field

	NO.	EV	V2G	Schedule	Smart grid	Renewable energy	Energy storage	Battery	Energy system	Frequency regulation	Distributed generation	Voltage control	Economic analysis	Communication network
3.1.1 Energy Storage	[17]	✓	✓	—	—	—	—	—	—	—	—	—	—	—
	[19]	✓	✓	—	—	✓	✓	✓	—	—	—	—	—	—
	[21]	✓	✓	—	—	—	—	✓	✓	✓	—	—	✓	—
	[22]	✓	✓	—	—	—	—	—	—	—	—	—	✓	—
	[23]	✓	✓	—	—	—	—	✓	—	—	✓	—	—	—
	[24]	✓	✓	—	—	—	✓	—	✓	—	—	—	—	—
	[25]	✓	✓	—	—	✓	✓	—	—	—	—	—	—	—
	[26]	✓	✓	—	—	✓	✓	✓	—	—	—	—	✓	—
	[27]	✓	✓	—	—	—	✓	✓	—	—	—	—	—	—
3.1.2 Renewable Energy Sources	[28]	✓	✓	—	—	✓	—	✓	—	—	—	—	✓	—
	[29]	✓	✓	—	—	—	—	—	—	—	✓	—	—	—
	[30]	✓	✓	—	—	✓	—	—	✓	—	—	—	—	—
	[31]	✓	✓	—	—	✓	✓	—	—	✓	—	—	—	—
	[32]	✓	✓	—	—	✓	—	—	—	—	✓	—	—	—
	[33]	✓	✓	—	✓	✓	✓	—	—	—	—	—	—	—
	[34]	✓	✓	—	✓	—	—	✓	—	—	—	—	—	—
	[35]	✓	✓	—	—	—	—	—	—	—	—	—	—	—
	[36]	✓	✓	—	—	✓	—	—	—	—	—	—	—	—
	[37]	✓	✓	—	—	✓	—	✓	—	—	—	—	—	—
	[38]	✓	✓	—	—	✓	—	—	✓	—	—	—	—	—
	[39]	✓	✓	—	—	✓	—	—	✓	—	—	—	—	—
	[40]	✓	✓	—	✓	✓	—	—	—	—	✓	—	—	—

	[41]	✓	✓	—	—	✓	—	—	—	—	—	—	—	—	—
	[42]	✓	✓	—	—	✓	✓	—	—	—	—	—	—	—	—
3.1.3 Scheduling	[43]	✓	✓	✓	—	—	—	✓	—	—	✓	—	—	—	—
	[44]	✓	✓	✓	—	—	—	✓	—	—	—	—	—	—	—
	[45]	✓	✓	✓	—	—	✓	—	—	—	—	—	✓	—	—
	[46]	✓	✓	✓	—	—	—	—	—	—	—	—	—	—	—
	[47]	✓	✓	✓	—	—	—	—	—	—	—	—	✓	—	—
	[48]	✓	✓	✓	—	—	—	✓	—	—	—	—	✓	—	—
	[49]	✓	✓	✓	✓	✓	—	—	—	—	—	—	—	—	—
	[50]	✓	✓	✓	—	—	—	—	—	—	—	—	—	—	—
	[51]	✓	✓	✓	—	✓	—	—	—	—	—	—	—	—	—
	[52]	✓	✓	✓	—	✓	—	—	—	—	—	—	—	—	—
	[53]	✓	✓	✓	✓	—	—	✓	—	—	—	—	—	—	—
	[54]	✓	✓	✓	—	—	✓	—	✓	—	—	—	✓	—	—
3.2.1 Frequency Regulation	[56]	✓	✓	—	—	—	—	✓	—	✓	—	—	—	—	—
	[57]	✓	✓	—	—	—	—	✓	—	✓	—	—	—	—	—
	[58]	✓	✓	✓	—	—	—	—	—	✓	—	—	—	—	—
	[59]	✓	✓	✓	—	—	—	✓	—	✓	—	—	✓	—	—
	[60]	✓	✓	✓	—	—	—	✓	—	✓	—	—	✓	—	—
	[61]	✓	✓	—	✓	—	—	—	✓	✓	—	—	—	—	—
3.2.2 Voltage Control	[62]	✓	✓	—	—	✓	—	—	—	—	✓	✓	—	—	—
	[63]	✓	✓	—	—	—	—	—	—	—	✓	✓	—	—	—
	[64]	✓	✓	—	—	—	—	—	—	—	—	✓	—	—	—
	[65]	✓	✓	—	—	—	—	—	—	—	—	✓	—	—	—
	[66]	✓	✓	—	✓	—	—	✓	—	—	—	✓	—	—	—
	[67]	✓	✓	—	—	—	—	✓	—	✓	—	✓	—	—	—

	[68]	✓	✓	—	—	—	—	—	—	—	—	—	✓	✓	—
	[69]	✓	✓	—	—	—	—	✓	—	—	—	—	✓	✓	—
<b>3.3.1.</b> <b>Smart Grid</b>	[71]	✓	✓	—	✓	✓	—	—	—	—	—	—	—	—	—
	[72]	✓	✓	—	✓	—	—	—	—	—	—	—	—	—	—
	[73]	✓	✓	—	✓	—	—	✓	—	—	—	—	—	—	—
	[74]	✓	✓	—	✓	—	—	—	✓	—	—	—	—	—	—
	[75]	✓	✓	—	✓	✓	—	✓	—	✓	—	—	—	—	—
	[76]	✓	✓	—	✓	—	—	—	—	—	✓	—	—	—	—
	[77]	✓	✓	—	✓	—	—	✓	—	—	—	—	—	—	—
	[78]	✓	✓	—	✓	—	—	—	—	—	—	—	—	—	—
	[79]	✓	✓	—	✓	✓	—	—	—	—	—	—	—	—	—
	[81]	✓	✓	✓	✓	—	—	—	—	—	—	—	—	—	—
	[82]	✓	✓	✓	✓	—	—	—	—	—	—	—	✓	—	—
	[83]	✓	✓	✓	✓	—	—	✓	—	—	—	—	—	—	—
<b>3.3.2</b> <b>Communication Networks</b>	[85]	✓	✓	—	✓	—	—	—	—	—	—	—	—	—	✓
	[86]	✓	✓	—	—	—	—	—	—	—	—	—	—	—	✓
	[87]	✓	✓	—	—	—	—	—	—	—	—	—	—	—	✓
	[88]	✓	✓	—	—	—	—	—	—	—	—	—	—	—	✓
	[89]	✓	✓	—	—	—	—	—	—	—	—	—	—	—	✓
	[90]	✓	✓	—	—	—	—	—	—	—	—	—	—	—	✓
	[91]	✓	✓	—	—	—	—	—	—	—	—	—	—	—	✓
	[92]	✓	✓	—	—	—	—	—	—	—	—	—	—	—	✓
	[93]	✓	✓	—	—	—	—	—	—	—	—	—	—	—	✓