

Supplemental Table S 1: Summary of the studies (n=57) included in the systematic review.

(Author(s), year)	References	DOI	Type of article	AR system	Tourism setting	AR device	Virtual content
(Abidin et al., 2018)	[58]	https://doi.org/10.18517/ijaseit.8.4-2.6822	Journal article	Markerless	Outdoor	Handheld	Visual
(Affan et al., 2018)	[63]	https://doi.org/10.12928/TELKOMNIKA.v16i4.7759	Journal article	Marker	Outdoor	Handheld	Visual
(Agustina et al., 2018)	[64]	https://doi.org/10.1088/1757-899X/434/1/012265	Conference paper	Marker	Indoor	Handheld	Visual
(Amato et al., 2013)	[51]	https://doi.org/10.1145/2536853.2536878	Conference paper	Marker (hybrid)	Indoor/Outdoor	Handheld	visual
(Basori et al., 2019)	[45]	https://doi.org/10.1016/j.procs.2019.12.091	Conference paper	Markerless	Outdoor	Handheld	Visual
(Besharat et al., 2016)	[67]	https://doi.org/10.3233/AIS-160395	Journal article	Marker	Outdoor	Handheld	Visual
(Bibiloni et al., 2016)	[53]	https://doi.org/10.1007/978-3-319-38907-3_5	Book section	Marker	unclear	Handheld	Visual
(Bird et al., 2022)	[57]	https://doi.org/10.1177/00472875221134031	Journal article	Markerless	Indoor	HMD	Visual
(Boboc et al., 2019)	[92]	https://doi.org/10.3390/su11041167	Journal article	Markerless	Outdoor	Handheld	Multisensory
(C. Boletsis and Chasanidou, 2018)	[78]	https://doi.org/10.1145/3240167.3240243	Conference paper	Markerless	Outdoor	HMD	Auditory
(Costas Boletsis and Chasanidou, 2018)	[35]	https://doi.org/10.1145/3197768.3201549	Conference paper	Markerless	Outdoor	Handheld	Auditory
(Cejka et al., 2021)	[48]	https://doi.org/10.1109/ACCESS.2021.3059978	Journal paper	Hybrid	Outdoor	Handheld	Visual
(Chen, 2014)	[79]	https://doi.org/10.1016/j.procs.2014.08.180	Conference paper	Markerless	Outdoor	Handheld	Visual
(Chendeb et al., 2013)	[80]	https://doi.org/10.5194/isprsarchives-XL-2-W2-25-2013	Conference paper	Markerless	Outdoor	Telescope/desktop	Visual

(Chong and Alimardanov, 2021)	[60]	https://doi.org/10.1007/978-3-030-68452-5_31	Conference paper	Markerless	Outdoor	Handheld	Auditory
(Cibilic et al., 2021)	[93]	https://doi.org/10.5194/ica-proc-4-21-2021	Conference paper	Markerless	Outdoor	Handheld	Visual
(Demir and Karaarslan, 2018)	[81]	https://doi.org/10.1109/SGCF.2018.8408965	Conference paper	Markerless	Outdoor	Handheld	Visual
(Dewi Agushinta et al., 2019)	[68]	https://doi.org/10.1088/1742-6596/1196/1/012060	Conference paper	Marker	Outdoor	Handheld	Visual
(Fakhour et al., 2020)	[82]	https://doi.org/10.1007/978-3-030-36653-7_1	Book section	Markerless	Outdoor	HMD	Auditory
(Fino et al., 2013)	[73]	https://doi.org/10.1016/j.procs.2013.11.040	Conference paper	Marker	Outdoor	Handheld	Visual
(Flores et al., 2019)	[94]	https://doi.org/10.35940/ijrte.B1345.0982S1119	Journal article	Markerless	Outdoor	Handheld	Visual
(Galih et al., 2019)	[83]	https://doi.org/10.13189/ujeee.2019.061307	Journal article	Markerless	Outdoor	Handheld	Visual
(Gutierrez et al., 2015)	[69]	https://doi.org/10.1016/j.procs.2015.12.262	Conference paper	Marker	Outdoor	Handheld	Multisensory
(Han et al., 2018)	[70]	https://doi.org/10.1080/1743873X.2016.1251931	Journal article	Hybrid	Outdoor	Handheld	multisensory
(Han et al., 2019)	[91]	https://doi.org/10.1080/02614367.2019.1604790	Journal article	Markerless	Indoor	HMD	Multisensory
(Haryani and Triyono, 2020)	[65]	https://doi.org/10.30630/joiv.4.1.157	Journal article	Marker	Indoor	Handheld	Visual
(Huo et al., 2018)	[95]	https://doi.org/10.1051/mateconf/201824603014	Conference paper	Markerless	Outdoor	Handheld	Visual
(Kadi et al., 2017)	[84]	https://doi.org/10.1109/ICSITech.2017.8257110	Conference paper	Markerless	Outdoor	Handheld	Visual
(Kaghat et al., 2020)	[56]	https://doi.org/10.1016/j.compeleceng.2020.106606	Journal article	Markerless	Indoor	HMD	Auditory
(Li et al., 2022)	[74]	https://doi.org/10.3389/fpsyg.2022.943277	Journal article	Marker	Outdoor	Handheld	Visual

(Lin and Chen, 2017)	[54]	https://doi.org/10.3390/sym9070113	Journal article	Marker	Unclear	Handheld	Visual
(Lipianina-Honcharenko et al., 2022)	[49]	https://doi.org/10.47839/ijc.21.2.2596	Journal article	Markerless (hybrid)	Outdoor	Handheld	Visual
(Litvak and Kuflik, 2020)	[85]	https://doi.org/10.1007/s00779-020-01366-7	Journal article	Markerless	Outdoor	Handheld/HMD	Multisensory
(Marto et al., 2021)	[46]	https://doi.org/10.1109/ACCESS.2021.3050974	Journal article	Markerless	Outdoor	Handheld	Multisensory
(Mendes et al., 2019)	[47]	https://doi.org/10.3390/A12070140	Journal article	Markerless	Indoor	Spatial	Visual
(Mendoza et al., 2015)	[59]	https://doi.org/10.1016/j.procs.2015.12.244	Conference paper	Markerless	Outdoor	Handheld	Visual
(Messelodi et al., 2015)	[96]	https://doi.org/10.1007/978-3-319-23234-8_19	Book section	Markerless	Outdoor	Handheld	Visual
(Paliokas et al., 2020)	[55]	https://doi.org/10.3390/app10217868	Journal article	Marker	Indoor	Handheld	Visual
(Panou et al., 2018)	[61]	https://doi.org/10.3390/ijgi7120463	Journal article	Markerless (hybrid)	Outdoor	Handheld	Visual
(Pu et al., 2017)	[43]	https://doi.org/10.18517/ijaseit.7.1.1797	Journal article	Marker	Unclear	Handheld	Visual
(Rezaee et al., 2021)	[86]	https://doi.org/10.3390/app11136047	Journal article	Markerless	Outdoor	Handheld	Visual
(Rodrigues et al., 2019)	[44]	https://doi.org/10.1109/ACCESS.2019.2953003	Journal article	Marker	Indoor	Handheld	Multisensory
(Rokhsaritalemi et al., 2022)	[87]	https://doi.org/10.3390/app12105241	Journal article	Markerless	Outdoor	Handheld	Visual
(Sasaki and Yamamoto, 2019)	[75]	https://doi.org/10.3390/ijgi8090381	Journal article	Hybrid	Outdoor	Handheld	Visual
(Shih et al., 2020)	[71]	https://doi.org/10.3390/su12219262	Journal article	Marker	Outdoor	Handheld	Visual
(Shih et al., 2019)	[62]	https://doi.org/10.3390/s19173725	Journal article	Hybrid	Outdoor	Handheld	Visual

(Shin and Choi, 2021)	[50]	https://doi.org/10.3390/electronics10202552	Journal article	Markerless	Indoor	Handheld	Visual
(Tahyudin and Saputra, 2017)	[72]	https://doi.org/10.11591/ijece.v7i6.pp3500-3506	Journal article	Hybrid	Outdoor	Handheld	Visual
(Tatić, 2022)	[76]	https://doi.org/10.55630/dipp.2022.12.12	Conference paper	Marker	Outdoor	Handheld	Visual
(tom Dieck and Jung, 2018)	[52]	https://doi.org/10.1080/13683500.2015.1070801	Journal article	Hybrid	Indoor/Outdoor	Handheld	Multisensory
(tom Dieck et al., 2016)	[42]	https://doi.org/10.1108/IHTT-09-2015-0036	Journal article	Marker	Indoor	HMD	Visual
(tom Dieck et al., 2018a)	[77]	https://doi.org/10.1016/j.chb.2017.12.043	Journal article	Marker	Outdoor	Handheld	Multisensory
(tom Dieck et al., 2018b)	[66]	https://doi.org/10.1080/13683500.2016.1224818	Journal article	Marker	Indoor	HMD	Visual
(Wegrzyn and Moscicka, 2017)	[88]	https://doi.org/10.1515/geocart-2017-0018	Journal article	Markerless	Outdoor	Handheld	Visual
(Williams et al., 2017)	[89]	https://doi.org/10.14236/ewic/HCI2017.1	Conference paper	Markerless	Outdoor	handheld	Visual
(Yovcheva et al., 2014)	[28]	https://doi.org/10.4018/ijmhci.2014040102	Journal article	Markerless	Outdoor	Handheld	Visual
(Zaifri et al., 2018)	[90]	https://doi.org/10.1109/ISACV.2018.8354051	Conference paper	Markerless	Outdoor	Handheld	Visual