Supplementary Material

Table 1. Selected studies: publication years, countries, topics, methods, AI types

Author(s)	Year	Country	Topic	Focus Area	Lasswell-Formula	Type of Study	Type of Method	AI Type
Barbacci	2002	Italy	AI	Communication about AI	What/ How	Theoretical	N/A	N/A
Bilgin et al.	2022	Australia	Technology	Communication about AI	To whom	Empirical	Qualitative	N/A
Bingaman et al.	2021	USA	AI	Communication about AI	To whom/ Effect	Empirical	Quantitative	N/A
Brewer et al.	2022	USA	AI	Communication about AI	To whom/ Effect	Empirical	Quantitative	N/A
Cave et al.	2023	UK	Social issues	Communication about AI	What/ How	Empirical	Quantitative	N/A
Chang	2024	South Korea	AI	Communication about AI	What/ How	Empirical	Quantitative	ChatGPT
Chen et al.	2024	USA	Social issues	Communication with AI	To whom/ Effect	Empirical	Quantitative	ChatGPT
Cheung & Ho	2024	Singapore	Technology	Communication about AI	How/ To whom	Empirical	Quantitative	N/A
Choi et al.	2024	South Korea	AI	Communication about AI	To whom/ Effect	Empirical	Quantitative	N/A
David et al.	2024	USA	AI	Communication about AI	To whom/ Effect	Empirical	Quantitative	N/A
Deroy	2023	Germany	AI	Communication about AI	What	Theoretical	N/A	N/A
Dillon & Schaffer-Goddard	2023	UK	Literature	Communication about AI	To whom	Empirical	Qualitative	N/A
Goh & Ho	2024	Singapore	Technology	Communication about AI	Who	Empirical	Qualitative	N/A
Haynes	2003	Australia	Science	Communication about AI	What	Theoretical	N/A	N/A
Lermann Henestrosa & Kimmerle	2024	Germany	Science communication	Impact of AI on science communication ecosystems	Effect	Empirical	Quantitative	ChatGPT
Hermann	2021	Germany	Science	Communication about AI	What	Theoretical	N/A	N/A
Hoang	2020	Switzerland	Technology	Impact of AI on science communication ecosystems	How	Theoretical	N/A	N/A
Klein-Avraham et al.	2024	Israel	AI	Impact of AI on science communication ecosystems	Who/ How	Theoretical	N/A	LLMs in general
Li et al.	2024	USA	Science communication	Communication about AI	Effect	Empirical	Qualitative	N/A

Liao et al.	2024	USA	Health	Communication with AI	Who	Empirical	Qualitative	N/A
Mehlenbacher et al.	2024	Canada	Health/ Environment	Communication with AI	What	Empirical	Qualitative	ChatGPT
Nawaz et al.	2022	International	Health	Communication about AI	What	Empirical	Quantitative	N/A
Peng	2020	USA	Technology	Communication about AI	To whom	Empirical	Quantitative	N/A
Richards et al.	2024	New Zealand	Environment	Communication with AI	What	Empirical	Qualitative	ChatGPT
Romele	2022	Germany	AI	Impact of AI on science communication ecosystems	How	Theoretical	N/A	N/A
Samuel et al.	2020	UK/Canada	Health	Communication about AI	What/ To whom	Empirical	Both	N/A
Sieber et al.	2024	Canada	AI	Communication about AI	To whom	Empirical	Both	N/A
Većkalov et al.	2023	Netherlands	AI/ Technology/ Health	Communication about AI	To whom	Empirical	Quantitative	N/A
Vergeer	2020	Netherlands	AI	Communication about AI	What	Empirical	Quantitative	N/A
Volk et al.	2024	Switzerland	Science communication	Communication with AI	What	Empirical	Both	ChatGPT
Wagner et al.	2023	Estonia	Technology	Communication about AI	To whom	Empirical	Both	N/A
Wen & Chen	2024	Taiwan	Technology	Communication about AI	To whom	Empirical	Quantitative	N/A
Yeao et al.	2022	USA	Environment/ AI/ Health	Communication about AI	To whom/ Effect	Empirical	Quantitative	N/A
Zeng et al.	2020	China	AI	Communication about AI	What	Empirical	Quantitative	N/A
Zenni & Andrew	2023	Brazil	Social issues	Impact of AI on science communication ecosystems	How	Theoretical	N/A	LLMs in general

Bibliography of the studies used in the study review.

Barbacci, S. (2002). From the Golem to Artificial Intelligence: Science in the theatre for an existential reflection. *Journal of Science Communication*, *1*(3), A04. https://doi.org/10.22323/2.01030204

Bilgin, G., Kerruish, E., Kennett, R., DeSalle, R., Beck, A., Jordan, A., Newton-Walters, D., & Cracknell, M. (2022). 'Born or Built?' Exploring visitor understandings of robotics. *Journal of Science Communication*, *21*(1), N02. https://doi.org/10.22323/2.21010802

Bingaman, J., Brewer, P. R., Paintsil, A., & Wilson, D. C. (2021). "Siri, Show Me Scary Images of AI": Effects of Text-Based Frames and Visuals on Support for Artificial Intelligence. *Science Communication*, *43*(3), 388–401. https://doi.org/10.1177/1075547021998069

Brewer, P. R., Bingaman, J., Paintsil, A., Wilson, D. C., & Dawson, W. (2022). Media Use, Interpersonal Communication, and Attitudes Toward Artificial Intelligence. *Science Communication*, *44*(5), 559–592. https://doi.org/10.1177/10755470221130307

Cave, S., Dihal, K., Drage, E., & McInerney, K. (2023). Who makes AI? Gender and portrayals of AI scientists in popular film, 1920–2020. *Public Understanding of Science*, *32*(6), 745–760. https://doi.org/10.1177/09636625231153985

Chang, M. (2024). Does the Media's Partisanship Influence News Coverage on Artificial Intelligence Issues? Media Coverage Analysis on Artificial Intelligence Issues. *Social Science Computer Review*, 08944393241268526. https://doi.org/10.1177/08944393241268526

Chen, K., Shao, A., Burapacheep, J., & Li, Y. (2024). Conversational AI and equity through assessing GPT-3's communication with diverse social groups on contentious topics. *Scientific Reports*, *14*(1), 1561. https://doi.org/10.1038/s41598-024-51969-w

Cheung, J. C., & Ho, S. S. (2024). Explainable AI and trust: How news media shapes public support for AI-powered autonomous passenger drones. *Public Understanding of Science*, 09636625241291192. https://doi.org/10.1177/09636625241291192

Choi, S., Lee, C., Park, A., & Lee, J. A. (2024). How the Public Makes Sense of Artificial Intelligence: The Interplay Between Communication and Discrete Emotions. *Science Communication*, 10755470241297664. https://doi.org/10.1177/10755470241297664

David, P., Choung, H., & Seberger, J. S. (2024). Who is responsible? US Public perceptions of AI governance through the lenses of trust and ethics. *Public Understanding of Science*, *33*(5), 654–672. https://doi.org/10.1177/09636625231224592

Deroy, O. (2023). The Ethics of Terminology: Can We Use Human Terms to Describe AI? *Topoi*, *42*(3), 881–889. https://doi.org/10.1007/s11245-023-09934-1

Dillon, S., & Schaffer-Goddard, J. (2023). What AI researchers read: The role of literature in artificial intelligence research. *Interdisciplinary Science Reviews*, *48*(1), 15–42. https://doi.org/10.1080/03080188.2022.2079214

Goh, T. J., & Ho, S. S. (2024). Trustworthiness of Policymakers, Technology Developers, and Media Organizations Involved in Introducing AI for Autonomous Vehicles: A Public Perspective. *Science Communication*, *46*(5), 584–618. https://doi.org/10.1177/10755470241248169

Haynes, R. (2003). From Alchemy to Artificial Intelligence: Stereotypes of the Scientist in Western Literature. *Public Understanding of Science*, *12*(3), 243–253. https://doi.org/10.1177/0963662503123003

Hermann, I. (2023). Artificial intelligence in fiction: Between narratives and metaphors. *AI & SOCIETY*, *38*(1), 319–329. https://doi.org/10.1007/s00146-021-01299-6

Hoang, L. N. (2020). Science Communication Desperately Needs More Aligned Recommendation Algorithms. *Frontiers in Communication*, *5*. https://doi.org/10.3389/fcomm.2020.598454

Klein-Avraham, I., Greussing, E., Taddicken, M., Dabran-Zivan, S., Jonas, E., & Baram-Tsabari, A. (2024). How to make sense of generative AI as a science communication researcher? A conceptual framework in the context of critical engagement with scientific information. *Journal of Science Communication*, *23*(6), A05. https://doi.org/10.22323/2.23060205

Lermann Henestrosa, A., & Kimmerle, J. (2024). The Effects of Assumed AI vs. Human Authorship on the Perception of a GPT-Generated Text. *Journalism and Media*, *5*(3), Article 3. https://doi.org/10.3390/journalmedia5030069

Li, W., Xu, S., Zheng, X., & Sun, R. (2024). Bridging the Knowledge Gap in Artificial Intelligence: The Roles of Social Media Exposure and Information Elaboration. *Science Communication*, *46*(4), 399–430. https://doi.org/10.1177/10755470241232352

Liao, W., Weisman, W., & Thakur, A. (2024). On the Motivations to Seek Information From Artificial Intelligence Agents Versus Humans: A Risk Information Seeking and Processing Perspective. *Science Communication*, *46*(4), 458–486. https://doi.org/10.1177/10755470241232993

Mehlenbacher, B., Balbon, A. P., & Mehlenbacher, A. R. (2024). Synthetic Genres: Expert Genres, Non-Specialist Audiences, and Misinformation in the Artificial Intelligence Age. *Journal of Technical Writing and Communication*, 00472816231226249. https://doi.org/10.1177/00472816231226249

Nawaz, F. A., Barr, A. A., Desai, M. Y., Tsagkaris, C., Singh, R., Klager, E., Eibensteiner, F., Parvanov, E. D., Hribersek, M., Kletecka-Pulker, M., Willschke, H., & Atanasov, A. G. (2022). Promoting Research, Awareness, and Discussion on AI in Medicine Using #MedTwitterAI: A Longitudinal Twitter Hashtag Analysis. *Frontiers in Public Health*, *10*, 856571. https://doi.org/10.3389/fpubh.2022.856571

Peng, Y. (2020). The ideological divide in public perceptions of self-driving cars. *Public Understanding of Science*, *29*(4), 436–451. https://doi.org/10.1177/0963662520917339

Richards, D., Worden, D., Song, X. P., & Lavorel, S. (2024). Harnessing generative artificial intelligence to support nature-based solutions. *People and Nature*, *6*(2), 882–893. https://doi.org/10.1002/pan3.10622

Romele, A. (2022). Images of Artificial Intelligence: A Blind Spot in AI Ethics. *Philosophy & Technology*, *35*(1), 4. https://doi.org/10.1007/s13347-022-00498-3

Samuel, G., Diedericks, H., & Derrick, G. (2021). Population health AI researchers' perceptions of the public portrayal of AI: A pilot study. *Public Understanding of Science*, *30*(2), 196–211. https://doi.org/10.1177/0963662520965490

Sieber, R., Brandusescu, A., Adu-Daako, A., & Sangiambut, S. (2024). Who are the publics engaging in AI? *Public Understanding of Science*, *33*(5), 634–653. https://doi.org/10.1177/09636625231219853

Većkalov, B., van Stekelenburg, A., van Harreveld, F., & Rutjens, B. T. (2023). Who Is Skeptical About Scientific Innovation? Examining Worldview Predictors of Artificial Intelligence, Nanotechnology, and Human Gene Editing Attitudes. *Science Communication*, *45*(3), 337–366. https://doi.org/10.1177/10755470231184203

Vergeer, M. (2020). Artificial Intelligence in the Dutch Press: An Analysis of Topics and Trends. *Communication Studies*, *71*(3), 373–392. https://doi.org/10.1080/10510974.2020.1733038

Volk, S. C., Schäfer, M. S., Lombardi, D., Mahl, D., & Yan, X. (2024). How generative artificial intelligence portrays science: Interviewing ChatGPT from the perspective of different audience segments. *Public Understanding of Science*, *34*(2), 132-153. https://doi.org/10.1177/09636625241268910

Wagner, W., Viidalepp, A., Idoiaga-Mondragon, N., Talves, K., Lillemäe, E., Pekarev, J., & Otsus, M. (2023). Lay representations of artificial intelligence and autonomous military machines. *Public Understanding of Science*, *32*(7), 926–943. https://doi.org/10.1177/09636625231167071

Wen, C.-H. R., & Chen, Y.-N. K. (2024). Understanding public perceptions of revolutionary technology: The role of political ideology, knowledge, and news consumption. *Journal of Science Communication*, *23*(5), A07. https://doi.org/10.22323/2.23050207

Yeo, S. K., Su, L. Y.-F., Cacciatore, M. A., Zhang, J. S., & McKasy, M. (2023). The differential effects of humor on three scientific issues: Global warming, artificial intelligence, and microbiomes. *International Journal of Science Education, Part B*, *13*(1), 59–83. https://doi.org/10.1080/21548455.2022.2123259

Zeng, J., Chan, C., & Schäfer, M. S. (2022). Contested Chinese Dreams of AI? Public discourse about Artificial intelligence on WeChat and People's Daily Online. *Information, Communication & Society*, *25*(3), 319–340. https://doi.org/10.1080/1369118X.2020.1776372

Zenni, R. D., & Andrew, N. R. (2023). Artificial Intelligence text generators for overcoming language barriers in ecological research communication. *Austral Ecology*, *48*(7), 1225–1229. https://doi.org/10.1111/aec.13417