Appendix 2.

*Search strategy*

(“non-invasive brain stimulation” [tiab] or “Noninvasive Cranial Nerve Neuromodulation” [tiab] or “Electrical Stimulation of the Brain” [tiab] or “Brain Stimulation” [tiab] or “Cranial nerve modulation” [tiab] or “Cranial nerve modulator” [tiab] or “transcranial magnetic stimulation” [tiab] or “TMS” [tiab] or “repetitive transcranial magnetic stimulation” [tiab] or “rTMS”) And （“Aged” [tiab] or “aging” [tiab] or “elderly “senior” [tiab] or “geriatric” [tiab] or“gerontology ” [tiab] or “Senescence” [tiab] or “frail elderly “Young” [tiab] or “youngster” [tiab] or “stripling” [tiab] or “childish” [tiab] or “youthful” [tiab] or “immature” ) And （“cortical plasticity” [tiab] or “neuronal plasticity” [tiab] or “neuroplasticity” [tiab] or “neural plasticity” ）

**PICOS form:**

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| --- |
| Inclusion Criteria |
| Participants | Healthy individuals aged >18 years |
| Interventions | All studies that used the TMS to detect brain cortical excitability and plasticity were included |
| Comparisons | Healthy elderly (≥50 years) vs. healthy young (<50 years) individuals |
| Outcomes | primary outcome: RMT; secondary outcome : MEPs ,AMT,adverse events |
| Study design | cohort or case-control studies |