

Journal References Supporting the IRI EM Pulser 78 Design (7.8 Hz) – most are open access

[Cardioprotection from stress conditions by weak magnetic fields in the Schumann Resonance band](#)

Nature Scientific Reports, (2019) 9:1645

“We show that applying 7.8Hz, 90nT magnetic fields (MF) causes a gradual decrease in the spontaneous calcium transients’ amplitude.... However, the effect is frequency dependent; the described changes occurred only in the 7.6–8Hz range...**We show that the Schumann Resonance field induced reduction in Creatine Kinase release is associated with a stress response process and has a protective character.**”

[Fast Pulse Rise Time Combined with a Low Pulse Rate Found to Counter Inflammation While Providing Pain Relief, Cardioprotection, And Even Cartilage Regeneration with a Portable Device as Confirmed by NASA](#)

American Journal of Biomedical Science & Research, July 8, 2025, Thomas F. Valone

The non-invasive electrotherapeutic **EM Pulser 78**, designed by a Medical Doctor, has an anti-inflammatory response following individual NASA studies and subsequent patents that additionally include tissue repair, cardioprotection under stress, and cartilage regeneration. This article is a follow-up to “How Energy Medicine Will Save Health Care” in AJBSR.

[Long-Term Study of Heart Rate Variability Responses to Changes in the Solar and Geomagnetic Environment](#)

Nature Scientific Reports, (2018) 8:2663

“Overall, the study confirms that daily Autonomic Nervous System activity responds to changes in geomagnetic and solar activity during periods of normal undisturbed activity and it is initiated at different times after the changes in the various environmental factors and persist over varying time periods....Increase in cosmic rays, solar radio flux, and **Schumann resonance power** was all associated with increased HRV and parasympathetic activity”

[Does Schumann resonance affect our blood pressure?](#)

Biomedicine & Pharmacotherapy, Volume 59, Supplement 1, October 2005, Pages S10-S14

“Disease-Related Illnesses [were] **negatively associated** with Blood Pressure Reactivity to Schumann Resonance (BPR-SR)...suggesting a better health status for those who showed lower BP on enhanced SR days. Males showed higher BPR-SR...than females (P=0.004–0.016).”

[Does exposure to extremely low frequency magnetic fields produce functional changes in human brain?](#)

Basic Neurosciences, Genetics and Immunology, Feb. 3, 2009

“Behavioral and neurophysiological changes have been reported after exposure to extremely low frequency magnetic fields (ELF-MF) both in animals and in humans... The increase in paired-pulse facilitation...suggests that PEMFs exposure may produce an **enhancement in cortical excitatory neurotransmission**. This study suggests that PEMFs may produce functional changes in human brain.”

[Electromagnetic Forces and Life Processes](#)

Technology Review, December 1972, Robert O. Becker (author of *The Body Electric*)

“The concept that electromagnetic forces might have any effect upon living organisms-other than the thermal effect due to Joule heating was for many years rejected by the organized biomedical community. But under the weight of experimental evidence this attitude is changing; indeed, the medical community is now expressing **considerable interest in the possible therapeutic effects** of direct application of small amounts of electrical energy.”

[Long-lasting, dissociable improvements in working memory and long-term memory in older adults with repetitive neuromodulation](#)

Nature Neuroscience | VOL 25 | September 2022 | 1237–1246 | www.nature.com/natureneuroscience

“The development of technologies to protect or enhance memory in older people is an enduring goal of translational medicine. Here we describe repetitive (4-day) transcranial alternating current stimulation (tACS) protocols for the selective, **sustainable enhancement of auditory-verbal working memory and long-term memory** in 65–88-year-old people.”