



## Galvanic Skin Response(GSR)

### (2) History

Here is a clear and concise timeline of Galvanic Skin Response (GSR) history.

Year	Scientist/Entity	Discovery/Contribution	Significance
1849	Emil du Bois-Reymond (Germany)	Observed skin electrical activity during muscle contraction.	First to document bioelectric phenomena in skin; paved the way for EDA research.
1878	Hermann & Luchsinger (Switzerland)	Linked EDA to <i>sweat gland</i> activity; found strongest responses on palms.	Shifted focus from muscles to <i>autonomic nervous system</i> responses.
1879	Charles Vigouroux (France)	Studied EDA in emotionally disturbed patients.	First connection between <i>EDA</i> and <i>psychological states</i> .

<b>1888</b>	Féré (France)	Proved EDA varies with emotions and is affected by drugs.	Strengthened the link between EDA and emotional arousal.
<b>1889</b>	Ivane Tarkhnishvili (Russia)	Built first real-time skin potential meter; recorded EDA with no external stimuli.	Laid the groundwork for <i>continuous physiological monitoring</i> .
<b>1906</b>	Carl Jung (Switzerland)	Used EDA to study unconscious responses in word association tasks.	Introduced EDA to psychoanalysis; called it a “mirror to the unconscious.”
<b>1935–36</b>	Wilhelm Reich (Austria/Norway)	Investigated EDA as proof of “bio-electrical” energy flow (controversial work).	Although debated, this helped expand psychological interest in GSR.
<b>1970s</b>	Various Researchers	Over 1,500 studies published; EDA used widely in lie detection, psychology, and stress research.	Firm establishment of EDA as a mainstream psychophysiological tool.
<b>1990s</b>	MIT & Stanford Labs	Start of <i>wearable sensor</i> research.	Early prototypes of portable

			GSR devices for field use.
<b>2000s</b>	Rosalind Picard (MIT Media Lab)	Developed wearable GSR devices (e.g., Empatica); applied to autism, stress, and epilepsy.	Made EDA practical, reliable, and wearable—merged it with affective computing.
<b>2010s</b>	Ioannis Pavlidis (University of Houston)	Created contactless GSR monitoring via thermal imaging.	Revolutionized GSR by enabling non-invasive, remote emotional tracking.
<b>Present</b>	Multiple Startups & Research Labs	Use of GSR in smartwatches, fitness trackers, mental health apps, AI interfaces.	GSR now powers real-time emotional monitoring, digital health, and AI-driven biofeedback.