

Magnetite is one form of iron oxide (Fe3O4). It is made in the tissues of many species. It also accumulates in our tissues from industrial, medical and other sources.

It is the most magnetic of all naturally occurring minerals on Earth. It is, therefore, very responsive to electromagnetic fields, whether natural or artificially-produced.

Magnetic fields may affect orienting and homing via several mechanisms, not only the magnetite response (effects on cryptochrome, for example); however, Dr. Kirschvink makes a strong case for magnetite interactions as an important factor to study.

For every natural magnetite particle in the brain, there are 100 industrial particles. With a different shape, they are easily identified.

"The problem with (industrial) magnetite is that it's toxic."



[Diesel exhaust](#)

[The new pollutant](#)

[Nanospheres of magnetite](#)

[Use in genetic engineering](#)

[Medical nano-technologies](#)

★ [Magnetic waste in the brain](#)

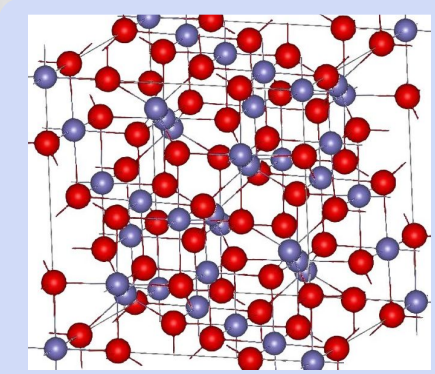
[Industrial air pollutants in brain](#)

[Rats inhale toner, lung inflammation](#)

[Collection on leaves in polluted areas](#)

[Detected in hydrocarbon contamination](#)

Environmental magnetite



MaterialScientist: Synthetic magnetite

What is magnetite?

[Minerals.net](#)

[Univ. of Minnesota](#)

★ [More in cerebellum than cortex](#)

Biogenic magnetite

[Orientation](#)

[Biomineralization](#)

[Biogenic magnetite](#)

★ [Basis for MF orientation](#)

Biogenic human magnetite

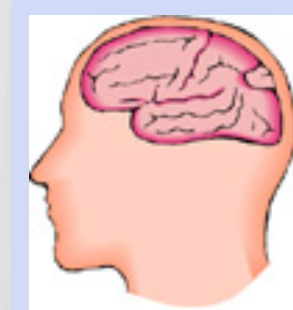
[Human retina](#)

[Ethmoid bone](#)

[Human sinuses](#)

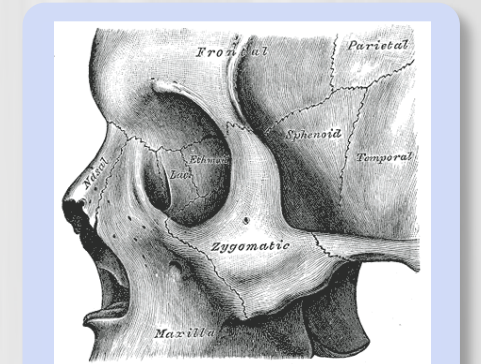
[Human brain](#)

[Virtually all tissues](#)



The Human Brain

"Microwave techniques... rapidly heat dielectric or magnetic materials [and so are] commonly used as a source of heat and an alternative to conventional conductive heating methods"  
[Wang et al](#)



Magnetite found in bone at top of nose.

# NON-IONIZING EMF AND MAGNETITE: LEARNING FROM JOSEPH KIRSCHVINK AND OTHERS

Studies

★ [Magnetite "map", newt orientation](#)

★ [Long term memory and magnetite](#)

★ [Magnetite nanoparticles, AD amyloid](#)

★ [Magnetite nanoparticles, PMF effects](#)

Industrial and medical nanoparticles of magnetite are being used for medical applications and research. What are the effects on other tissues and systems?



Magnetite in beach sand



SEE OTHER MAPS:

[EMF AND BEES](#)  
[EMF AND BIRDS](#)  
[EMF AND CRYPTOCHROME](#)

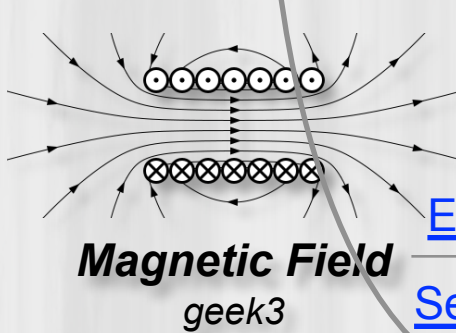
Home: [Oscillatorium](#)  
Newest version: [this map](#)  
Date of this update: 09-04-19

★ [MAGNETOCEPTION AND EMF EFFECTS](#)

## MAGNETIC 6TH SENSE IN HUMANS

VIMEO: [RESONANCE](#)  
MAGNETITE, CRYPTOCHROME, MELATONIN, EMF

"Magnetite best absorbs radiation in the microwave frequencies in the 0.5 to 10 Gigahertz range."



EMF effects on tissue magnetite

[Human effects](#)

[Cows disoriented](#)

[ELF and biogenic magnetite](#)

[Magnetic fields heat magnetite](#)

[MF pulse, birds change headings](#)

[EMF to magnetite uses in medicine](#)

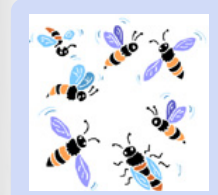
[Serious concerns about cell phones](#)

★ [Humans and our Magnetic Sense](#)

[EMF: Biologic implications on life forms](#)

[MF, ambient, modified, mammal behavior](#)

[Magnetic pulsations and humans, animals](#)



"The kind of magnetite [they] discovered (ferromagnetite) interacts a million times more strongly with external magnetic fields than with other biological material... The crystals... could be moved around by magnetic fields only slightly stronger than the earth's natural magnetic background."

[Bees disappear in India](#)

Special case of bees

[Colony collapse disorder](#)

[Bees, magnetite, NO systems](#)

[Magnetoreception and magnetite](#)

★ [Magnetite, bees magnetic sense](#)

[EMF disrupting nature on a massive scale](#)

★ [Magnetite, bee abdomen, magnetic sense](#)

Magnetoception, or magnetoreception, is the ability to detect magnetic fields to perceive direction, altitude or location.

Magnetite may be natural (biogenic), which is mildly magnetic, or synthetic, which is more magnetic.

[DATABASE OF MAGNETITE/PHYSIOLOGY STUDIES](#)