

## Plant Growth and Improvement of Engine Combustion Efficiency through the Electromagnetic Field of a Device

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### Abstract

We are researching to develop a fuel consumption efficiency of 33% on average when we drive different kinds of cars on the road. The Koga device is polyethene consisting of aluminium metal and neodymium magnet, and the fuel activates through the Koga, which is activated by the specially processed water in advance. We report the collaborated mechanism of magnetic and electric fields to improve fuel combustion where the liquid fuel passing the Koga can produce smaller fuel molecules.

**Keywords:** fuel efficiency; plant growth; electromagnetic field; pico-sized water; reducibility

### Introduction

**Methods** We performed a proof-of-concept experiment on a highway and local street. The average speed on the highway for a two-ton track with standard diesel oil was 83.2 km/h. On the other hand, the track with the oil through Koga was 74.3 km/h on the same highway (January 19<sup>th</sup> to 21<sup>st</sup>, 2025).

We execute the activation of fuel by specially processed water pressurized more than 100MPa, in which the water involves a quantum hydrogen atom-like elementary particle. Sugihara named the particle; infoton [9] and the water involving the particle is SIGN water (Spin Information Gauge Network) [10].

The Koga is processed by the SIGN water immersed for a few days.

### Visualization of quantum level of SIGN water

We radiate laser light to the plastic boxes perpendicularly, as shown in Figure 1, indicating the specific difference between one path and two paths compared with tap water of control. The two Kogas mean two paths through Koga, as depicted in the Koga circulation system (Figure 2).

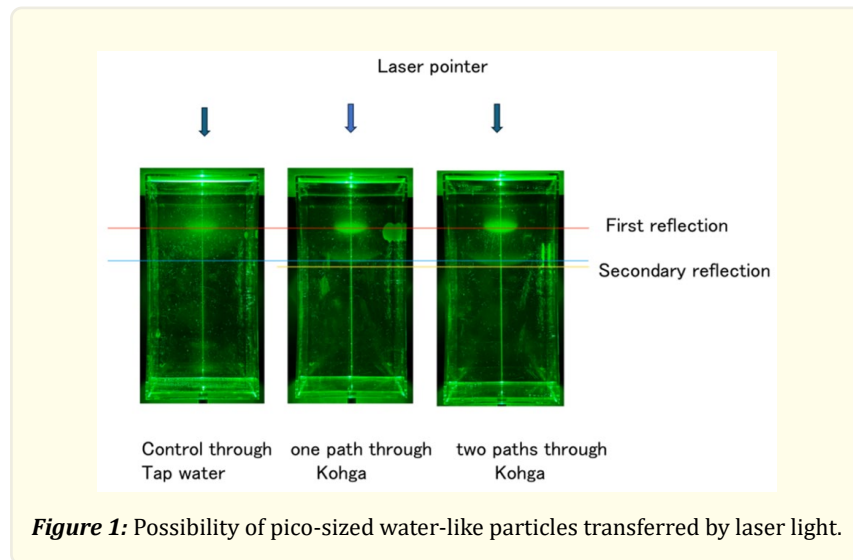


Figure 1: Possibility of pico-sized water-like particles transferred by laser light.

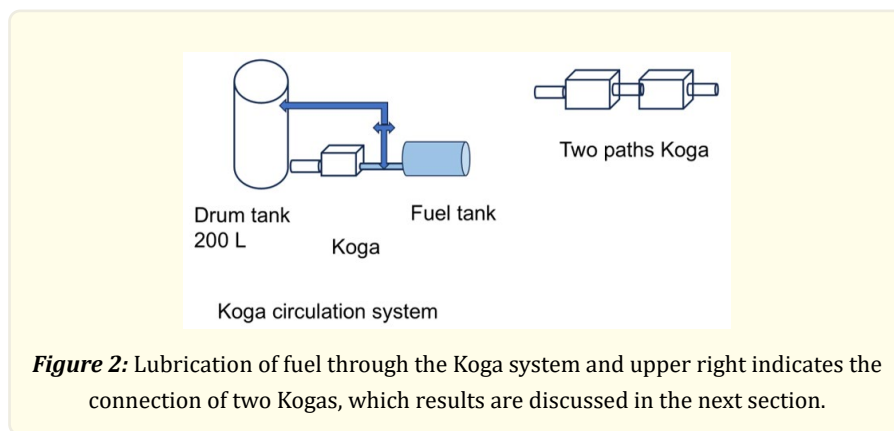


Figure 2: Lubrication of fuel through the Koga system and upper right indicates the connection of two Kogas, which results are discussed in the next section.

## Results and Discussion

### Quantum particle level of Koga functions

Figure 3 indicates one piece of evidence for the water’s smallness: the beakers might be broken due to the size of the water particles.

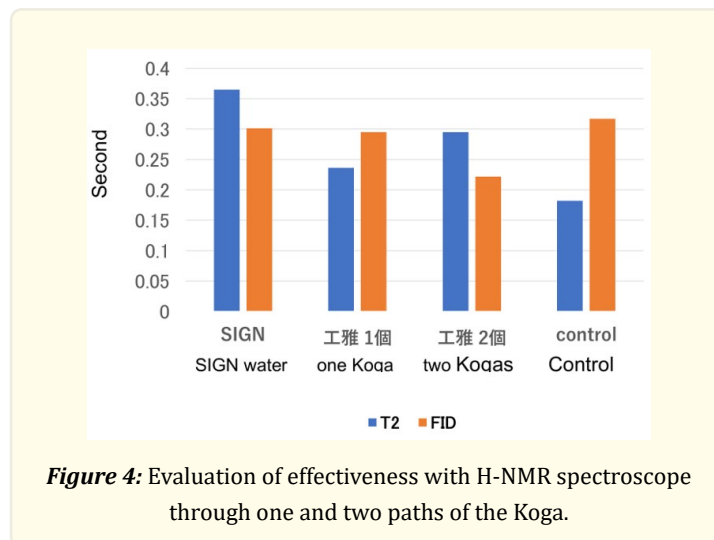
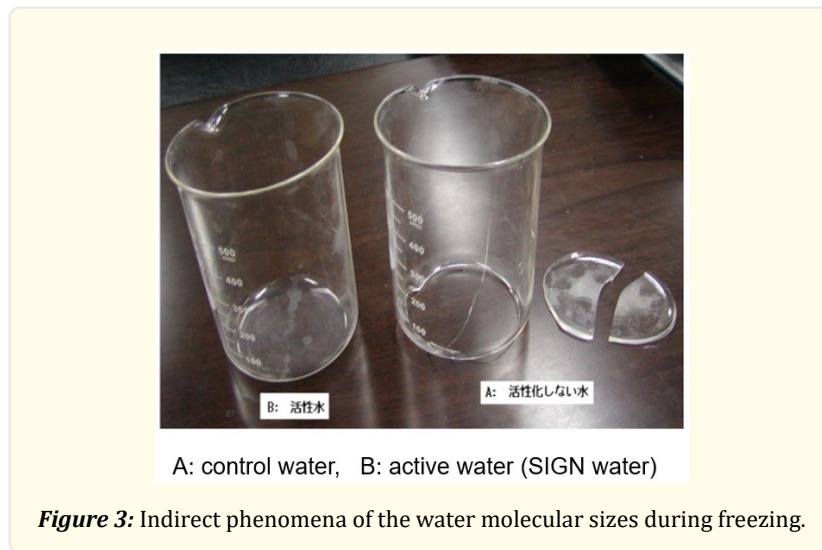
The pico-sized extended particle, SIGN water, did not change a volume when freed. Furthermore, after breaking clusters of control water, SIGN water emits GHz particles, which are quantum-level particles, resulting in tiny ice crystals. On the other hand, a control water beaker increases the volume by 10 %, and the beaker breaks the bottom into half with cracks from top to bottom.

These phenomena may be associated with a drip-in meat thaw.

### Evaluation of effectiveness through one path and two paths

We can recognize indirectly the smallness of the quantum particle of water (Figure 4). The typical spectra in the Figure are compared with the SIGN water and control water, mainly tap water or deionized water (DI).

The T2 indicates relaxation time, meaning all particles have a more significant value, and FID shows free induction decay, meaning small particles have a smaller value.



We must be careful because they are opposite relations. The object is a pico-size particle, which is significant even if the time is less than one second.

**Essential functions of Koga from viewpoints of magnetic field and electric field.**

A spin of the infoton may form quantum particles in gasoline, water and any liquid passing through the Koga.

The Koga uses neodymium magnets, which are permanent magnets, but they are different from the SQUID (direct current Superconducting Quantum Interference Device) [13, 14] and the memristor, which uses magnets [15, 16].

The Infoton may hold diamagnetic closing to the human body (brain), which is said to be  $10^{-12}$  T. We confirm that the indicator of the electromagnetic field meter (EMF-825---Mother Tool) moves a minimal amount.

Due to the infoton’s precession, an electron of the metal in the Koga goes around and functions, expanding the magnetism from neodymium in the Koga.

Furthermore, the expansion of magnetism with the infoton will make the liquid or water passing through the Koga smaller.

### Spin and its precession

We estimate the essential physical factors are the spin of the infoton. Here, we note briefly a field generated by any substance. In our case, a spin of the infoton may develop the gauge field, and we can expect the unique reaction of the intron with other nuclei in the nuclear transmutation [17, 18], but we do not discuss nuclear transmutation here.

Research on spin glass in the  $\text{EuO-TiO}_2$  system, which performs a phase transition at cooling conditions and shows spin glass at lower temperatures, is of different genres [19].

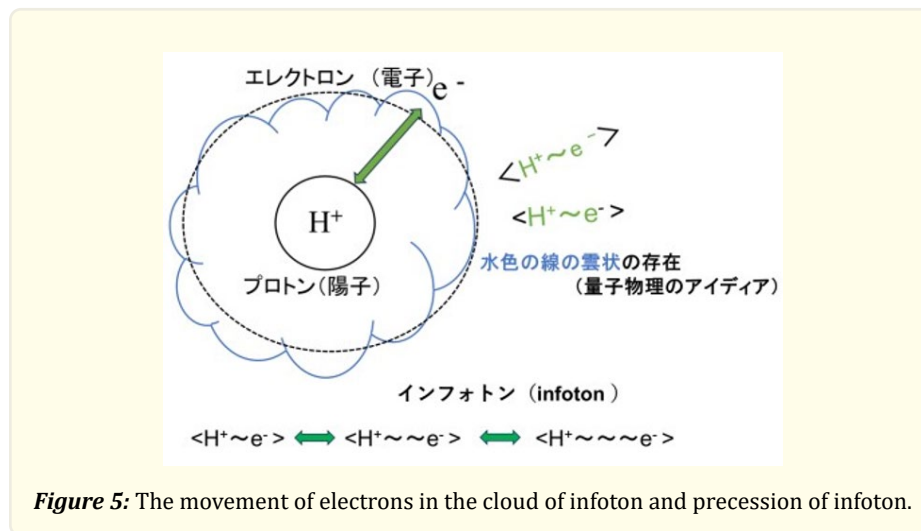


Figure 5: The movement of electrons in the cloud of infoton and precession of infoton.

Each stage of infoton describes an oscillation in the electron cloud and the movement of infoton leading to the tensor as well. Therefore, the infoton may move around in various directions in a space rather than a vector.

### The Koga unique device as a unified frame physics

Nanoscale magnetometry was recently developed, which is nanoengineered a singly connected Josephson junction with a periodic superparamagnetic Ni/Al multilayer; the nanoscale magnetic sensor is a DC SQUID, but this new lumped device is more suitable for miniaturization, which is unnecessary significant space like SQUID. The SQUID research described the temperature dependence of magneticity; the magnetization of the assembly behaves as  $M(H) = n \mu \tanh(\mu H / k_B T)$ , where  $n$  and  $\mu$  are the number density and magnetic moment of the nanoparticles in the sample, respectively.

The Koga unifies four power circuits, which may be a unified physics frame.

The Koga's unique characteristic is holding aluminium's non-magnetic and electrical conductivity and collaboration with neodymium; the infoton's information connects them.

### Reduction of fuel consumption rate of the engines

We employ vehicles made by different manufacturers to drive on the road and diesel engines in an agriculture house for a couple of months. That is why fuels are different, like gasoline and diesel.

The theory is the same that we elucidated previously [10], and the various hydrocarbons react as follows;

$C_8H_{18} \rightarrow C_n H_m, CO_2, CO, H_2O, NOx$ ; higher hydrocarbon is defined as the carbon content above 8; h HC, and l HC; lower hydrocarbons are less than it.

And (h HC)  $N_2^*$ ;  $N_2$ - activated hydrocarbons with the SIGN water;

[i]  $l\text{ HC} + h\text{ HC} + O_2 + N_2 \rightarrow (h\text{ HC})N_2^* + l\text{ HC} + CO + CO_2 + NOx + H_2O$ .

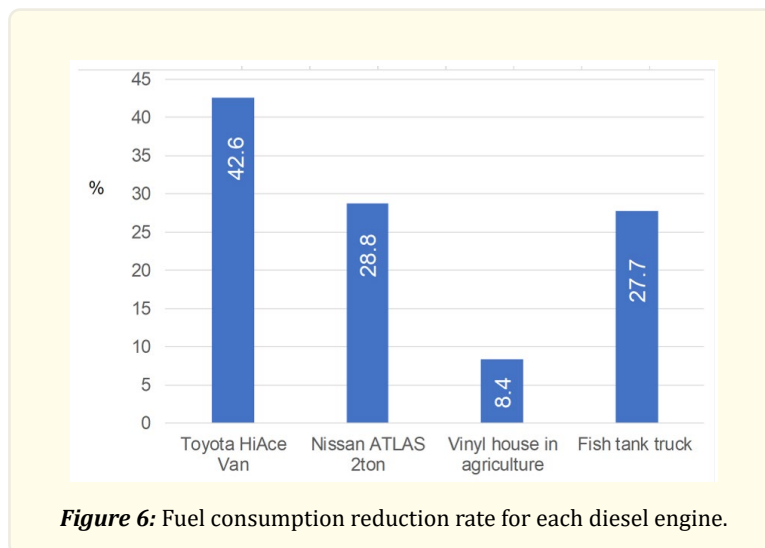
[ii]  $(h\text{ HC})N_2^* + O_2 \rightarrow (C\text{ or }l\text{ HC}) + N_2 + H_2O$ .

[iii]  $(h\text{ HC})N_2^* + CO \rightarrow (C\text{ or }l\text{ HC}) + N_2 + O_2 + H_2O$ .

[iv]  $(h\text{ HC})N_2^* + CO_2 + NOx \rightarrow (C\text{ or }l\text{ HC}) + N_2 + O_2 + H_2O$ .

As a result, we can expect a reduction of car exhaust gases, which will result in the formation of charcoal, lower hydrocarbons, nitrogen, oxygen, and water.

Figure 6 indicates the fuel consumption reduction rate for each diesel engine. The corabollation of magnetic and electric fields in the Koga expanded the coverage of the magnetic effect by the pico-sized hydrogen function. As a result, we expected the reduction of car-exhausted gages, leading to a better environment.



### Plant growth

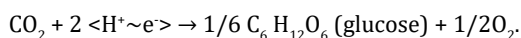
Figure 7 shows blueberry agriculture, and the centre line is set with the Koga (white).

The plant growth with the Koga is remarkable compared with others.

We discussed that plants can easily absorb water because of pico-sized SIGN water, which activates chlorophyll formation.

We have experienced the growth of rice plants (2022~2024) and sweeter apples (2022), although the devices were made of different materials.

The function of the infoton may be as follows;



If an infoton goes around at one-hundredth of light speed, kinetic energy is calculated to be 0.046 MeV. On the other hand, the covalent bond strength of C-C in CO<sub>2</sub> is 3.7 eV [20], resulting in a quick reaction of the infoton with CO<sub>2</sub>.



**Figure 7:** Blueberry plants and the centre line set with the Koga are shown in white devices (2024).

## Conclusion

We reported a better fuel consumption efficiency of 33 % on average when driving different kinds of cars on the road. The Koga device that passes the fuel can be activated by specially processed water containing a pico-sized hydrogen-like elementary particle. We discussed the collaborated mechanism of magnetic and electric fields to improve fuel combustion, in which the liquid fuel passing the Koga can produce smaller fuel molecules.

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