The Distinction of Taheri Consciousness Fields from Conventional Physical Fields: Evaluating the Magnetic Properties of Materials

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Abstract

The magnetic hysteresis loop provides important information about the magnetic properties of materials. T-Consciousness Fields have a non-physical and non-frequency nature, and their effect begins through the mind of the *announcer*. It is hypothesized that the information transmitted from these fields can lead to changes in treated samples compared with control samples. In this study, changes in the saturation magnetization of three paramagnetic and diamagnetic materials were measured under the influence of three types of T-Consciousness Fields (1, 2, and 3) and in the absence of these fields (control), using a Vibrating Sample Magnetometer (VSM). The results showed significant changes in the magnetic properties of the materials under each of the three T-Consciousness Fields. The effects included both increases and decreases in magnetization, indicating that the effects of the T-Consciousness Fields are distinct from one another. Furthermore, since saturation magnetization is an intrinsic property of matter and does not change under the application of electric and magnetic fields, the observed changes indicate that the nature and effects of T-Consciousness Fields differ from known physical fields. Further experiments are required to better understand the mechanism of action of these 'non-frequency' fields.

Keywords: T-Consciousness Fields, hysteresis loop, magnetic properties, physical fields

Introduction

The magnetic properties of materials depend on their composition and microstructure. Those properties that depend mainly on composition are considered intrinsic properties [1]. The Vibrating Sample Magnetometer (VSM) is a powerful technique introduced in 1950 to characterize the magnetic properties of materials [2].

Based on their behavior in an external magnetic field, materials are generally classified into three main types:

1. Diamagnetic materials, such as gold, which are repelled when placed in a magnetic field.

2. Paramagnetic materials, such as platinum, which can be magnetized, but their magnetization disappears when the external field is removed.

3. Ferromagnetic materials, such as iron and nickel, which exhibit the strongest magnetic behavior and remain magnetized even after the external magnetic field is removed.

New magnetic phases can be induced by applying external pressure [3], temperature [4], and an external magnetic field [5]. Technical information about the magnetic properties of materials can be obtained by studying the hysteresis loop, which describes the relationship between magnetic field strength (H) and the magnetization (M) of materials.

The magnetic properties of pure metals and nanoparticles have long been studied under various environmental conditions. For example, studies have examined saturation magnetization and its related magnetic changes in highly pure iron and nickel [6], non-magnetic oxides [7], and porous anodic aluminum (PAA) [8] at room temperature, as well as aluminum and copper at low temperatures [9].

The limited changes observed have been attributed to the movement of free electrons within the metallic lattice and to alterations in the physical structure of the nanoparticle lattice resulting from the application of an external magnetic field.

Throughout history, scientists have made extensive efforts to understand existence and to explain the laws governing the physical world. These efforts have led to the development of numerous theories and laws that have fundamentally transformed humanity's understanding of nature, such as Newton's law of gravitation and Maxwell's electromagnetic equations.

Along this path, the Grand Unified Theory (GUT) represents an attempt to demonstrate the unity of the fundamental forces of nature, and quantum physics has revealed that some phenomena and physical laws exhibit behavior beyond classical and purely material descriptions [10, 11].

The term 'field' has been used in relation to known physical fields. According to Mohammad Ali Taheri's theory, there are diverse T-Consciousness Fields with various functions, which are subsets of the Cosmic Consciousness Network. These 'fields' have a non-frequency and non-physical nature. Therefore, they cannot be directly measured with quantitative instruments.

The impact of T-Consciousness Fields begins through the mind of the *announcer*, with brief and instantaneous attention directed toward the subject under study. It is possible to record the effects of T-Consciousness Fields through designed experiments and to gain indirect insight into their nature and influence. It is hypothesized that the information transmitted from these fields can produce changes in the properties and behavior of the subject under study [12].

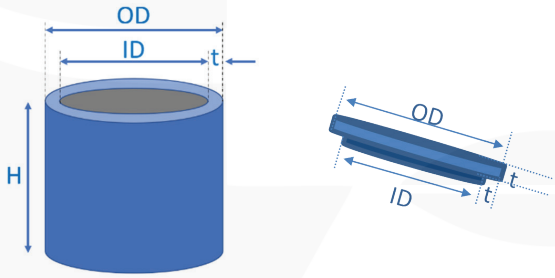
Previously, the effects of T-Consciousness Fields have been reported in experiments on animal models, plants, and microorganisms [13–15]. In this study, the effects of these fields on non-living materials were examined. This experiment also provides an opportunity to compare the effects of these fields with known physical fields. In addition, by applying three types of T-Consciousness Fields (1, 2 and 3), it is possible to evaluate the differences in their impacts and in the information transmitted under their influence.

Materials

Saturation magnetization is one of the intrinsic properties of materials. In this study, changes in the saturation magnetization of materials were measured under the influence of three types of T-Consciousness Fields, once without metallic shields and once with metallic shields of different thicknesses. Three categories of magnetic materials in powder form were examined: nickel (Ni) as a ferromagnetic material, alumina (Al_2O_3) as a pseudo-ferromagnetic material, and copper (Cu) as a diamagnetic material.

To evaluate the possible distinction between the impacts of T-Consciousness Fields and other physical fields, metallic shields of various thicknesses were used. During the experimental period, the control samples, were placed separately on a lower level, without a steel enclosure. The samples exposed to T-Consciousness Fields were placed in the upper enclosure. They were tested once without a shield and once inside cylindrical stainless-steel shields. The test specifications and settings are presented in the figure and table below.

(a)



(b)

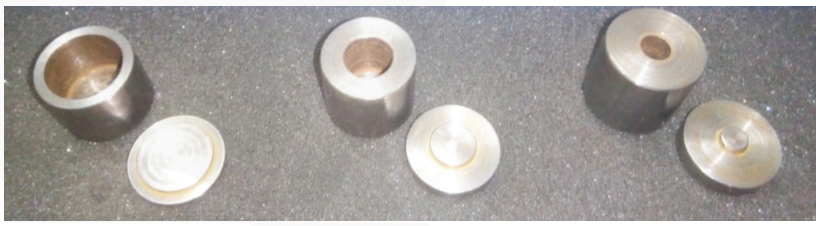


Figure 1. (a) Schematic dimensions of the cylindrical metallic shield, and (b) the three metallic shields used in this study.

Table 1. Dimensions of the cylindrical shields used in this study.

Shield Number	Material	H (mm)	OD (mm)	ID (mm)	t (mm)
0	No shield used	-	-	-	-
1	Stainless-steel	20.6	21.0	6.0	7.5
2	Stainless-steel	19.0	21.0	10.0	5.5
3	Stainless-steel	16.3	21.0	16.0	2.5

Method

Hysteresis Measurement

The magnetic properties of the samples were measured using a Vibrating Sample Magnetometer (VSM), which operates based on Faraday's law of induction. For this purpose, the sample was placed in a constant magnetic field.

The applied magnetic field strength (H) magnetizes the samples by aligning the magnetic domains or by rotating the magnetic moments of atoms or molecules in the direction of the external magnetic

field. The greater the applied magnetic field, the more strongly the sample becomes magnetized.

The magnetic moment generated in the sample produces a magnetic field around it. At this stage, when the sample vibrates, the resulting magnetic field varies with time according to Equation (1):

(1) $\emptyset = AH + B\,(4\pi - D)\,M_s \sin(\omega t)$

where A and B are geometric factors related to the coil assembly; D and M_s are the demagnetization factor and the induced magnetization, respectively; and ω is the vibration frequency of the sample.

Changes in the induced magnetic field can be observed through the induced current in the coil assembly. This induced electromotive force (emf) is proportional to the induced magnetization of the sample according to Equation (2):

(2) $emf = d\emptyset/dt = C\,(4\pi - D)\,M_s\,\omega \cos(\omega t)$

where C is a constant.

Stronger magnetization, measured using the VSM, generates more induced current. This induced current is amplified and transmitted to the data collection system, which is connected to a computer. The data is recorded using the corresponding software, which controls and stores the results.

The VSM used in this study (Figure 2, MDKB, Iran) applies the external magnetic field strength (Hc) with precision up to tenths of an Oersted (Oe) and measures magnetization (M) with accuracy up to tenths of a thousandth of an emu/g. The hysteresis curves, which represent the magnetization of the samples (M) against the applied magnetic field (Hc), are shown in Figures 3-5.



Figure 2. MDKB Setup Used in This Study

Application of T-Consciousness Fields (TCF)

Three types of T-Consciousness Fields (TCFs) were applied to the samples according to the protocol established by the CosmoIntel Research center. Further details are provided in the "Common Considerations" section of this issue.

In this study, three materials with different magnetic properties were used, and the corresponding effects of three distinct T-Consciousness Fields—TCF1, TCF2, and TCF3—on them were examined. All samples had standard laboratory-grade specifications. Magnetic properties, such as the magnetization of the samples, are presented in Table 2.

Table 2. Specifications of the materials used in this experiment

Material	Characteristic	Weight/mg
Ni	Ferromagnetic	5
Al_2O_3	Quasi-ferromagnetic	3
Cu	Diamagnetic	3

Results

The variations in the magnetization of the samples under the influence of T-Consciousness Fields, as well as in their absence (control), are presented in Table 3, and the hysteresis curves are shown in Figures 3 through 5.

Table 3. Variations in the magnetization of the samples under the influence of T-Consciousness Fields in this study

Used TCFs	Material	Treatment time/days	Interval[1] / days	Name according to CF/ shield No.[2]	M (emu/g)	ΔM	Change %
TCF_1	Ni	7	3	Ni00	54.113	0.000	0
				Ni11	57.291	3.1780	6
				Ni12	56.804	2.6910	5
				Ni13	57.783	3.6530	7
TCF_1	Al_2O_3	14	7	Alumina00	0.020	0.00	0
				Alumina11	0.0150	-0.005	-25
				Alumina12	0.00760	-0.0124	-62
				Alumina13	0.00550	-0.0145	-73
				Alumina10	0.013	-0.0070	-35
TCF_2	Al_2O_3	4	11	Alumina00	0.00283	0.000	0
				Alumina20	0.00920	0.00637	225
				Alumina21	0.01289	0.01000	355
				Alumina22	0.00188	-0.00095	-34
				Alumina23	0.04029	0.03746	1323
$TCF_1/TCF_2/TCF_3$	Al_2O_3	4	11	Alumina00	0.00283	0.000	0
				Alumina10	0.00237	-0.00046	-16
				Alumina20	0.00920	0.00637	225
				Alumina30	0.00832	0.00549	193.9
$TCF_1/TCF_2/TCF_3$	Cu	4	11	Cu00	0.00540	0.000	0
				Cu10	0.00418	-0.00122	-23
				Cu20	0.00467	-0.00073	-13.5
				Cu30	0.01692	0.01152	213

1. The time interval between the end of the treatment and the start of the VSM measurement.

2. The first and second digits represent, respectively, the numbers corresponding to the specific designation of the T-Consciousness Field and the shield used. For example, "Alumina 21" refers to an alumina sample treated with T-Consciousness Field No. 2 and shield No. 1. "Cu00" refers to a copper sample without the application of any T-Consciousness Field and without a shield, which is effectively the copper control sample.

As shown in Figure 3, applying T-Consciousness Field 1 to the nickel samples increased their magnetization. The presence of a metallic shield altered the effect of this field on the treated samples. Except for sample Ni12, increasing the shield thickness led to a decrease in the samples' magnetization.

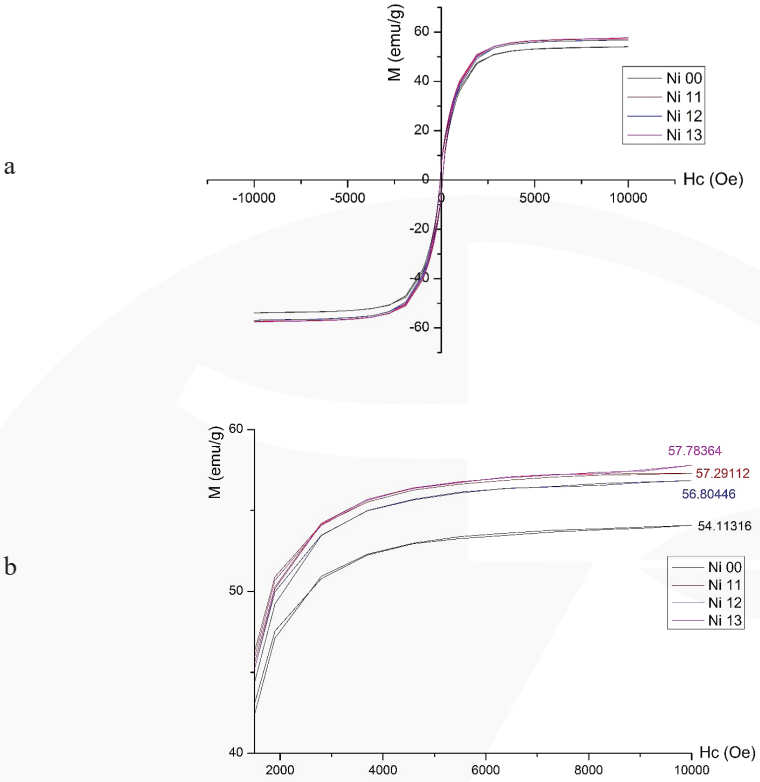


Figure 3 – Hysteresis loops of the (a) Ni samples and a magnified view of the upper section in (b). The first and second digits represent, respectively, the numbers corresponding to the specific designation of the T-Consciousness Field and the shield used. For example, Ni12 refers to a nickel sample treated with T-Consciousness Field 1 and shield number 2.

The influence of T-Consciousness Field 1 (TCF1) and two additional T-Consciousness Fields on alumina samples is depicted in Figure 4. As shown in Figure 4a, the application of TCF1 to the quasi-ferromagnetic alumina samples resulted in a reduction in their magnetization. Consistent with the results observed for Ni samples, the presence of a metal shield altered the impact of TCF1 on the alumina samples; specifically, the magnetization decreased as the shield thickness increased. Furthermore, a comparison between the control (Alumina00), the unshielded TCF1-exposed sample (Alumina10), and samples Alumina12 and Alumina13 indicates that the impact of T-Consciousness Field 1 varies according to the thickness of the shield and dictates the overall shifts in magnetization.

Figure 4b illustrates the variation in magnetization for alumina samples subjected to T-Consciousness Field 2 (TCF2) across various shielding conditions. In contrast to the behavior observed under TCF1, the alumina samples under the influence of TCF2 exhibited a diametrically opposite response; specifically, magnetization increased significantly as the shield thickness progressed, with the exception of the sample within Shield 2. Consistent with the samples' response to TCF1, the application of TCF2 within Shields 1 and 3 resulted in more pronounced shifts in magnetization. Finally, Figure 4c presents the changes in magnetization for alumina samples exposed to T-Consciousness Field 3 (TCF3) in different shields. Unlike TCF1, and to a markedly greater extent than TCF2, this field (TCF3) enhances the magnetization of the alumina samples.

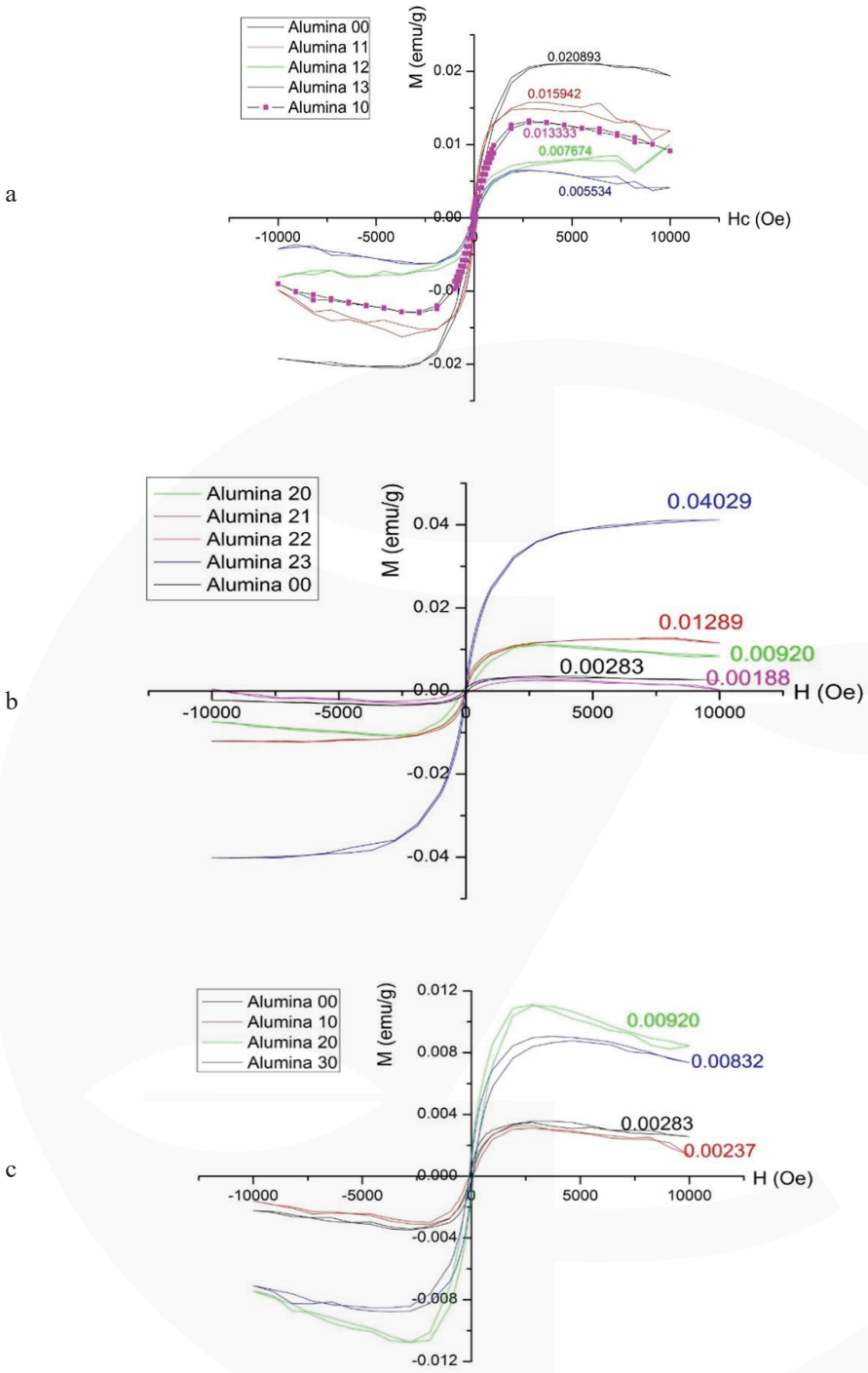


Figure 4. Hysteresis diagram of alumina samples in various shields under the influence of T-Consciousness Field 1 (a), T-Consciousness Field 2 (b), and T-Consciousness Fields 1, 2, and 3 in comparison to the control samples (c). The first and second digits respectively denote the specific T-Consciousness Field number and the applied shield number. For instance, Alumina 21 designates an alumina sample treated with T-Consciousness Field 2 utilizing Shield 1.

Figure 5 illustrates the impacts of T-Consciousness Fields 1 and 2 on copper samples. As observed, these T-Consciousness Fields exerted similar effects on the copper samples, leading to a reduction in magnetization. The influence of T-Consciousness Field 3 on both copper and alumina samples is highly comparable, resulting in a significant increase in magnetization, which stands in contrast to the effects produced by T-Consciousness Fields 1 and 2.

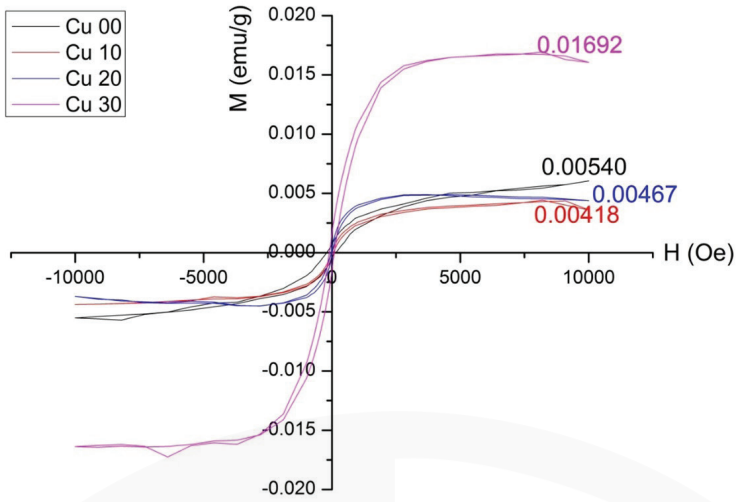


Figure 5. Hysteresis diagram of copper samples. The first and second digits respectively denote the specific T-Consciousness Field number and the applied shield number. For instance, Cu 10 designates a copper sample treated with T-Consciousness Field 1 without shielding.

Discussion

This study investigated the impacts of T-Consciousness Fields on the magnetic properties of materials. These fields have a 'non-frequency' and 'non-physical' nature. As mentioned in the introduction, it is hypothesized that the information transmitted from these T-Consciousness Fields can lead to alterations in the properties and behavior of the subject under study. The results obtained from this experiment demonstrated that the saturation magnetization of the samples under the influence of T-Consciousness Fields changed. The magnetization value of the nickel control sample (Ni00) in this study at 30°C is approximately 54.1 emu/g, which is very close to the reported value of 54.7 emu/g in the literature at this temperature. Crangle and Goodman (1971) reported that the magnetization of nickel samples at 293 K (19.9°C) is approximately 55.1 emu/g, and it increases with decreasing temperature, reaching about 58.6 emu/g at 4 K [6]. The magnetization value of the nickel sample in Shield 3 (Ni13), with the minimum thickness, reached 57.8 emu/g under the influence of T-Consciousness Field 1, which is comparable to the magnetization observed for nickel at a temperature of approximately 140 K (-133.1°C) according to Crangle and Goodman (1971).

In powder form, particularly at the nanoscale, alumina can exhibit quasi-ferromagnetic behavior at room temperature due to the presence of lattice defects, including oxygen vacancies and localized misalignments of electron spins [7, 8]. However, sintering these nanoparticles at a temperature of 1400°C and a pressure of 1 bar for one hour leads to a significant reduction in these defects and an enhancement in crystalline order; consequently, the resulting alumina mass exhibits the inherent diamagnetic behavior of bulk alumina [7, 16].

Upon the application of T-Consciousness Field 1 to the alumina samples, the magnetization of this quasi-ferromagnetic material decreased. Similar to the results obtained for the nickel samples, the presence of a metal shield altered the magnetic response of the samples to T-Consciousness Field 1; specifically, as the shield thickness increases, the magnitude of the changes in magnetization decreases. On the other hand, the unshielded sample exposed to T-Consciousness Field 1 (Alumina10) exhibits a magnetization value intermediate between those of samples Alumina11 and Alumina12. This behavior suggests that the presence of a steel shield can play a modulating role in the impact of T-Consciousness Field 1 on the alumina samples. A precise investigation into the mechanism of this effect requires further complementary studies.

Furthermore, the magnetization value of sample Alumina13 at ambient temperature was determined to be 5.534×10^{-3} emu/g, which is comparable

to the reported value of 5.3 × 10^{-3} emu/g for alumina nanoparticles annealed at 500°C [7]. This consistency indicates that, under the influence of T-Consciousness Field 1, alumina tends toward values closely aligning with the magnetic behavior reported for annealed alumina.

Additionally, the application of T-Consciousness Field 1 resulted in a decrease in the observed saturation magnetization of the copper samples. Since copper is inherently a diamagnetic material, this reduction can be interpreted as the magnetic response of the samples shifting toward the intrinsic diamagnetic behavior of copper. A similar behavior was also observed in the nickel and alumina samples under the influence of T-Consciousness Field 1, indicating a common trend among materials with differing magnetic properties. Given that external magnetic fields typically affect the shape of the magnetization curve and that intrinsic saturation magnetization is primarily a function of temperature and material structure [17], and furthermore, considering the constant temperature and environmental conditions throughout the experimental period, it can be concluded that the observed changes are attributable to the effects of the T-Consciousness Field. The reproducibility of the results has been verified by conducting the experiment multiple times.

In conclusion, this experiment provides evidence for the influence of T-Consciousness Fields at the level of inanimate matter. These effects are distinct from those exerted by electromagnetic fields. Based on the findings of this study, the authors recommend investigating the impact of T-Consciousness Fields on other physical properties of materials, as well as their effects on various forms of energy.

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