

Retraction

Retracted: Study on the Construction of Landscape Architecture in Residential District Based on Urban Greening Remote Sensing

Journal of Sensors

Received 13 September 2023; Accepted 13 September 2023; Published 14 September 2023

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This article has been retracted by Hindawi following an investigation undertaken by the publisher [1]. This investigation has uncovered evidence of one or more of the following indicators of systematic manipulation of the publication process:

- (1) Discrepancies in scope
- (2) Discrepancies in the description of the research reported
- (3) Discrepancies between the availability of data and the research described
- (4) Inappropriate citations
- (5) Incoherent, meaningless and/or irrelevant content included in the article
- (6) Peer-review manipulation

The presence of these indicators undermines our confidence in the integrity of the article's content and we cannot, therefore, vouch for its reliability. Please note that this notice is intended solely to alert readers that the content of this article is unreliable. We have not investigated whether authors were aware of or involved in the systematic manipulation of the publication process.

Wiley and Hindawi regrets that the usual quality checks did not identify these issues before publication and have since put additional measures in place to safeguard research integrity.

We wish to credit our own Research Integrity and Research Publishing teams and anonymous and named external researchers and research integrity experts for contributing to this investigation.

The corresponding author, as the representative of all authors, has been given the opportunity to register their agreement or disagreement to this retraction. We have kept a record of any response received.

References

- [1] Y. Zhai and W. Li, "Study on the Construction of Landscape Architecture in Residential District Based on Urban Greening Remote Sensing," *Journal of Sensors*, vol. 2022, Article ID 1449166, 11 pages, 2022.

Research Article

Study on the Construction of Landscape Architecture in Residential District Based on Urban Greening Remote Sensing

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Received 3 September 2021; Revised 9 January 2022; Accepted 20 January 2022; Published 4 February 2022

Academic Editor: Haibin Lv

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The garden landscape of urban residential areas has significant environmental benefits, allowing people to get closer to nature and integrate with nature to relax and have some social benefits at the same time. This article is aimed at studying the effect of urban greening remote sensing on residential landscape construction. This paper uses the greening remote sensing image processing algorithm combined with the analysis method of SURF color remote sensing image and conducts the experiment based on the urban greening remote sensing on the residential area landscape architecture research. This article combines sustainable development strategies with innovative design methods to deeply study the role of urban greening remote sensing on the construction of residential landscape architecture. At the same time, the experiment in this article also proposes that the garden landscape of urban residential areas can provide entertainment for people, soothe residents' mood, and achieve the best use of residential buildings. However, there are still some constraints in the development process of residential industry: insufficient government support, relatively backward technology of residential industrialization, lack of support and input from enterprises, and prejudice of people's traditional concept towards it. The experimental results of this paper show that the remote sensing image features of buildings in residential areas and public areas are obvious. In the recognition of 46 training features and 34 detection features, the number of correct remote sensing recognition features is 32, and the green building image remote sensing recognition is good. The accuracy is 94%, which can meet the identification requirements of greening in the building. Combined with the specific conditions of urban greening and garden construction in my country, it can meet people's entertainment needs and, to a certain extent, can also improve people's life and cultural taste.

1. Introduction

In order to meet people's needs, in the process of landscaping, designers must not only consider all aspects of the overall layout of the community. But also, combining the opinions of the community to designing a garden landscape that meets the visual and tactile requirements will not only improve people's quality of life. But the construction company itself will also be financially profitable. Therefore, it is particularly important to strengthen the landscape design of urban blocks and create a good environment. Landscape design refers to the planning and design of landscapes and gardens. Its elements include natural landscape elements and artificial landscape elements. It intersects with disciplines such as planning, ecology, and geography and has dif-

ferent meanings in different disciplines. People-oriented design is the focus of today's designers, because residential areas are places where people live. If the residents of the community are not satisfied with the living environment, it will affect the mood of the residents. The design community must be able to explore the psychology of human change in the natural landscape. Designers should not just make living spaces look unique. It also allows the garden landscape to be deeply rooted in the hearts of the people, so that people can be well infected, promote the complete elimination of the harmony between man and nature, and meet people's deep-seated demand for people-oriented design concepts. Designers can learn from the wonderful garden landscape. Our current urban residential areas are combined with the nature. In order to make the community garden landscape

more humane, designers should be able to design according to factors such as age, gender, and education level. Overseas city parks started earlier than domestic ones. In ancient Greece, open gardens and green spaces were created for urban residents. This is also the first performance of the park in the western city. In the ancient Roman era, over time, urban parks have theoretically appeared, and some cemeteries and urban squares are open to residents. This provides residents with a place to be there, rest, and relax. City parks in modern times are designed due to the needs of urban residents and historical progress. Some private gardens in Western countries have also begun to open to residents from time to time. It has become a modern city park, laying the foundation for design and construction.

Economic growth has brought people a good quality of life. The construction of urban residential areas pays more and more attention to the construction of landscapes. In addition to creating aesthetic effects is in landscape construction. You need to pay more attention to usability. In utilizing natural resources and environmental resources improve the urban ecological environment, build a sponge city, improve the sponge system, and fully examine the role of green space in urban settlements. At the same time, the quality of garden construction is guaranteed. Optimize the hydrological cycle of the park and improve the efficiency of urban water recycling. Residential areas are mostly artificial green space, combined with the unique situation that most of the residential green space is located on the roof of the underground garage. The design has some 3D ground scale. Very flat soil is not conducive to rainwater retention. If the soil is too steep, the runoff will increase and the flow rate will also increase. They are easy to cause soil erosion, which is not conducive to the cleaning and collection of rainwater. Use appropriate 3D soil treatment technology. 3D soil treatment technology is the use of 3D ideas to achieve a variety of treatments and analyses of soil. Proper ground design creates gentle slopes and submerged grasslands of various sizes. It also improves the drainage and leakage capacity of the soil surface, which not only meets the artistic and aesthetic principles of landscape design. It also includes the characteristics of sponge cities and many goals, such as saving water, reducing runoff rates, and releasing the drainage pressure of the system. In urban garden design, the development of science and technology also plays an important role. The garden technicians combine the pollution structure with GIS coupling technology to realize the collection and treatment of surface rainwater. GIS coupling technology is a product of multiple disciplines. It is based on geographic space and uses geographic model analysis methods to provide a variety of spatial and dynamic geographic information in real time. It is a computer technology system that serves geographic research and geographic decision-making. In order to meet the daily demand for garden water in urban garden design, technicians must formulate the overall design of the garden. Fully consider the uncertain factors of the garden. Analyze the garden design plan. Use a variety of design options and compare them with local building structures. The overall design of the garden should be combined with the architecture to understand the design of the water-proof structure

and the structure design of the pool sidewalk in the garden sponge city design, especially the design is the garden side, and the water-saving device and the water-saving device must be installed together with the rain pipe, so that rainwater can directly irrigate the ground. Therefore, new design techniques can be effectively integrated into urban gardens.

Based on the research of urban greening remote sensing on the construction of landscape architecture in residential areas, many experts and scholars have expressed their opinions on the development and trend of this subject. Lin's article mentioned that plant landscape morphology design is an important part of plant landscaping. Through the interaction of landscape morphology design and other means, promoting the development of plant landscape is an important direction of modern urban plant landscaping research. This article discusses the application of constructive thinking in the construction of urban plant landscape morphology by expounding the five main influencing factors of landscape plants: "flexibility," "art," "subject," "method," and "artistic conception." The development of the form provides a theoretical basis [1]. Park and Han's research purpose is to create a variety of landscapes in the process of transforming the container as a tool of trade activities into a building. Today, as a complex facility, the container forms a relationship with people and constantly creates new cultures. In their article, they consider these container structures from the perspective of landscape, taking meaning as one of the landscape factors in creating cultural landscapes. For the method, based on various statistical data and literature data, this research constructs a methodological framework, analyzes the text called container from the perspective of physical elements and active elements, and analyzes it at the functional level. The research is based on the literature, specifically with the human landscape as the text, the functional dimensions of urban design, and the characteristics of container construction. For the results, this study used the content of field analysis, interviews, and previous studies to analyze the physical and activity characteristics of the target area, and then analyzed the content from the functional dimension. Through this process, the conclusion of this research is to study the construction of the container and put forward the analysis direction in the functional dimension to show the proposed landscape characteristics [2]. The purpose of Ichimura et al.'s research is to understand how landscape architecture companies implement regional problem-solving businesses and their business awareness and to explore the possibility of creating shared value in the landscape architecture industry in the future. We conducted a questionnaire survey on 842 landscape constructions across the country (162 valid responses). These results are as follows: (1) 57% of the surveyed companies did not increase sales; (2) 95% of the surveyed companies believe that it is necessary to improve their current business development capabilities in the future; (3) 27% of the surveyed companies implement regional problem-solving services; and (4) companies that implement regional problem-solving services have a large number of employees, the average age of employees is relatively small, the number of new employees is large, the capital is large, and their sales are high. In addition, based more on the

awareness of business improvement and the characteristics of companies that implement regional problem-solving businesses, we have studied the ways that landscape construction companies seek to implement regional problem-solving businesses [3].

Through the description of the above-mentioned scholars, we can have a preliminary understanding of the research on the landscape design of residential areas based on urban greening remote sensing. However, the above-mentioned scholars are not very comprehensive in introducing garden construction. Therefore, on the basis of other scholars' research, this article will put forward many problems in urban greening remote sensing and propose corresponding solutions to promote faster and better development of garden construction.

2. Study of Residential Area Landscape Architecture Based on Urban Greening Remote Sensing

2.1. Construction of Landscape Architecture in Residential Areas. When designing garden landscapes, we must always respect the concept of ecological environment, that is, in-depth analysis of ecological damage, understanding of risks, and continuous improvement of environmental awareness through prevention [4]. Ecological balance is creating a beautiful homeland for environmental protection design that is in the real design link. The employees involved must collect raw materials and recycle them carefully. Significantly reduce toxic and harmful emissions, and strictly control waste in specific practices. To sum up, when evaluating the landscape quality of urban residential areas, one should not only look at beauty. But we must also be careful about whether the living space meets the requirements of environmental protection. In landscaping, a number of scientific and reasonable measures must be taken to ensure that the living space reflects science, culture, beauty, etc. and, on this basis, create higher environmental benefits, and create a high-quality, community-based modern ecosystem. Different distances, different levels, or different projection positions adopt different processing methods to give the overall landscape a rich and different sense of hierarchy and three-dimensionality. Scenery with different viewing positions can also change the position of the viewer's perspective. In several processing methods, etc., in order to achieve a specific visual effect, such as creating a narrow valley, so that the viewer looks at the rock and feels very tall, it is necessary to analyze the current situation of the original landscape. In landscape analysis, the size projection is understandable [5]. For a relatively large terrain, such analysis is often difficult due to the complexity of human resources and terrain. An effective way to achieve the above goals is to use GIS to establish a relatively complete large-scale image resource database. Cities are complex artificial ecosystems, including urban residents, urban buildings, urban green spaces, and other elements; it is a unique landscape with high population and resource density. With the development of cities, modern technology and information technology continue to

innovate. The face of urban ecological problems is particularly great. One is to attach importance to the human-dominated biological environment. Ecological pollution seriously affects the health of humans and other organisms in urban residential areas and also limits the separation of urban development from urban economy and the development of a harmonious relationship between urban ecology. In cities, the ecological environment is seriously threatened. Urban development will face major problems. What residents need is a natural environment that is in harmony, stability, and coexistence with nature, where they can experience the duality of soul and body. Comfortable environment, clean water, and comfortable rest area can provide more benefits for urban residents [6]. It all depends on the natural area of the city. This is the green area of the city. Urban green space is a special type of urban land that coexists with urban construction and naturalization. It is an important available land for improving the urban environment and improving the quality of life of urban residents. This is also a key factor for improvement. In urban ecosystem and maintaining the balance of the natural environment, there is no end to the construction of an urban environmental ecosystem. They are all active efforts of people to explore the harmonious coexistence of the natural environment and the city [7, 8].

According to the concept of "urban forest," the coexistence of cities and forests, creating an ecologically harmonious and efficient urban forest ecosystem has played a role in promoting urban theoretical research and has become a new concept urban greening system for social development. The urban greening system is an integral part of the city master plan, reflecting the natural attributes of the city. At the beginning of human site selection and construction of cities, most of the cities were chosen in places adjacent to mountains, rivers, and lakes, which gave great influence to the form, functional layout, and urban landscape of cities. The influence of natural environment on urban development is huge. Urban parks and green spaces have a significant impact on the urban environment. Therefore, the concept of urban forest is used to guide the landscape of urban parks and the ecological functions of the landscape. City parks play a bigger role. For more functions, the construction and development of urban forests are an inevitable choice in the process of urban ecologicalization. Urban ecosystems and urban forests are based on compassion and have become a solid foundation and guarantee for the development of urban ecosystems. "Urban forest" is proposed to solve urban environmental problems. City parks are more than just botanical landscapes. It is also a reflection of the ecological functions of the entire plant community and forest community landscape [9, 10]. The construction of urban forest is not only reflected in the improvement of the urban appearance. At the same time, it also promotes the city's air, hydrology, culture, and sustainable development. The creation of forest landscapes in urban parks and green spaces not only provides useful spaces for the city. It also plays an important role in the construction of urban forest ecosystem. Compared with Western countries, the greening of gardens and landscapes in urban residential areas in my

country has slowly begun to grow. Before the 21st century, people's concept of greening in residential areas was still weak. In the urban residential areas of China, the greening growth in the landscape is slower than that of the southern coastal cities. To overcome the geographical and hydrological climate, rely on the special topography of "mountains and rivers" to optimize the garden landscape style, increase the urban green area, increase the green coverage, understand the viewing experience of residents at different levels, and use landscape elements to optimize the landscape and decorative functions. This will be the guideline and idea for every employee who soothes the garden landscape. This is also the primary focus of this research. Sustainable development strategy is my country's basic national policy [11], and industrial development must be guided by the basic national policy. In this figure, the construction industry is one of the resource-intensive industries. According to the survey, the construction industry consumes about 20% of global energy consumption every year. In this case, green building, as a building type that saves materials, water, electricity, land, and environmental protection, has also become the development goal of the construction industry [12]. My country's construction is still dominated by traditional high-energy buildings. To change the status quo of this industry, we must promote the development of green buildings. Facing my country's huge environment are pressure and huge housing demand. As one of the most energy-intensive sectors, the construction sector puts forward the concept of housing and green building sectors. Under this new situation, industry leaders proposed that green buildings are based on the green concept of energy saving and environmental protection, which runs through the entire life cycle of the building. And use the housing industry as a construction method to achieve higher green demand [13, 14].

The landscape covers a wide area, and the relationship between the elements is complex, bringing greater difficulties to the development of landscape design. Difficulties in landscape design include the following: disconnect between site analysis and design output, single dimensionality in thinking about problems, confusion between strategy and methodology, inversion of detail and wholeness, and blurring of the primary and secondary structures of pictorial expression. Whether it is analyzed from the perspective of urban and rural appearance or from the analysis of its characteristics that emphasize landscape experience, visual analysis will become the link between all elements and an important breakthrough in dealing with complex elements [15]. Taking the landscape at the intersection of mountains and plains as an example, the separated spatial form and ecological foundation will become the limitations of traditional design and landscape design, leading to fragmentation of mountains and simple landscapes. Then, from an optical analysis point of view, there are two visual interfaces in Piedmont: simple and mountainous. Through the study of the reflection relationship between the two major interfaces, the optical analysis conducts an overall study of the mountain-plain landscape elements with the perspective as the link, establishes the mountain-plain connection, and weakens the mountain and plain geological boundaries, style elements,

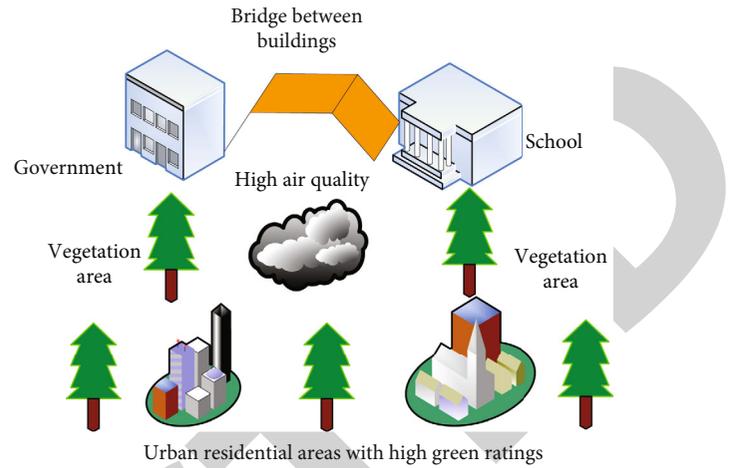


FIGURE 1: Schematic diagram of green building grades.

urban and rural land, and the boundary of the landscape area. The boundary-induced differentiation is integrated into a unified plain area with a simple landscape. Therefore, the optical resolution has great support for landscape design [16].

2.2. Goal of Urban Garden Construction. When designing green landscapes in residential areas, people hope that the environment in residential areas is closer to nature. It can completely relax the body and mind. Therefore, when designing, we should adhere to the "people-oriented" design concept and conduct special investigations on the three aspects of the law of action for urban residents. For aesthetic and psychological needs, we learned from the survey results that we must learn to plant trees and create livable buildings and garden environments. At the same time, we must understand [17, 18] that the current stage of residential garden landscape design is not limited to attracting the attention of residents. Create colorful effects, and focus on being close to nature. Pay more attention to creating natural and natural green landscape effects. According to the social characteristics and needs of people in the residential area, it is more environmentally friendly and simulates the environment and natural landscape as the focus of mountain, water, and green design. Under the leadership of the understanding of the department and the housing department, it may be easier to understand the concept of the housing department. During the development of the housing industry in my country, many scientists and experts have expounded and explained the concept of the housing industry. The most well-known one is the concept defined by Professor Li Zhongfu, the most well-known housing industry. He explained the concept of the housing sector as follows: the organization of housing production and management operates in the form of social production. In other words, the housing sector must be market-oriented [19]. The building material industry, light industry, and other industries produce housing parts in an industrial way, and the use of technological capabilities based on on-site assembly refers to the design and manufacture of housing parts. The entire

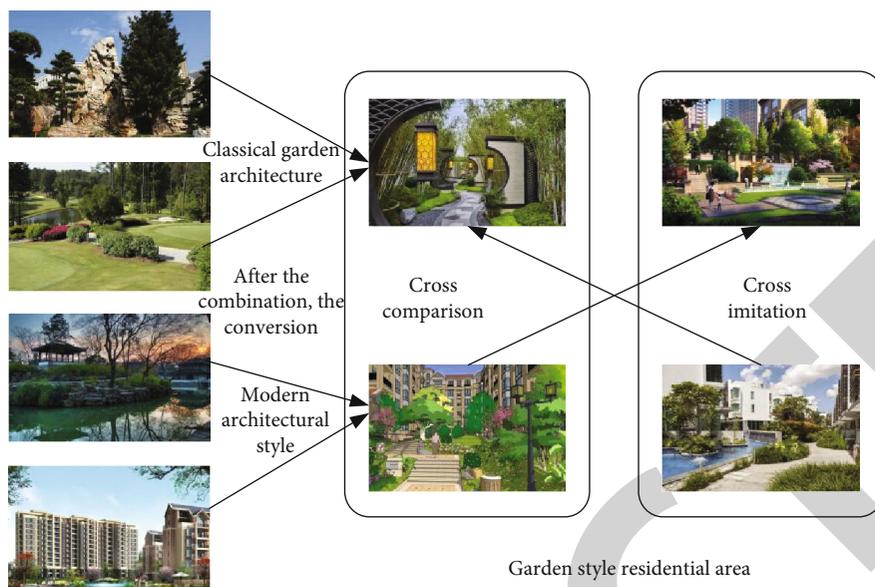


FIGURE 2: Garden-residential area.



FIGURE 3: Aerial photography of garden landscape.

assembly, construction, marketing, and operation processes are connected to a complete industrial system to realize the integrated production and operation model of housing supply, manufacturing, and marketing. Make your home industrialized and agile, such as mobile phones, automobiles, and other products [20, 21].

The real housing industry development in my country began in 1994. The former Minister of Construction put forward the concept of housing industry in 1994. Later, my country started the housing industry, and China also saw the rise of the housing industry. First, in 1950, China developed large-scale prefabricated composite buildings under the influence of the former Soviet Union, but it was affected by economic strength and other aspects. The second time was in the mid to late 1970s, when the country began to use prefabricated panels as building floors and roofs [22]. During this period, the introduction of a prestressed concrete structural system supported this to a certain extent. China's construction industry is limited by technology and craftsmanship. The houses built in this way cannot meet the durability and safety requirements and ultimately cannot promote the construction industry to the industrialization process. In the street landscape design of urban residential

TABLE 1: Feature point comparison analysis table.

Methods	Feature points	Matching point pair	Correct rate
Real data	377	25	84%
SURF algorithm	326	36	96%
Improve algorithm	356	45	87%

areas, designers should pay attention to the connection between traffic areas and residential areas. And in a specific design, the two parts are protected as a whole. We should pay attention to the following points: first, design an access control system to prevent irrelevant vehicles from entering the community. And design roads with principled and logical alignment, paving, etc., to reduce the speed of vehicles entering the community. Realize the coexistence of people and vehicles and the separation of people and vehicles [23]. Second, branch roads or loops can be constructed in residential areas. Third, entrances such as residences and parking lots can be designed to form a weaving deformation.

TABLE 2: Time evaluation form.

Methods	Stage	Time (ms)	Total (ms)
SURF algorithm	Feature point	854	1822
	Feature point matching	968	
Improve algorithm	Feature point	478	1130
	Feature point matching	652	

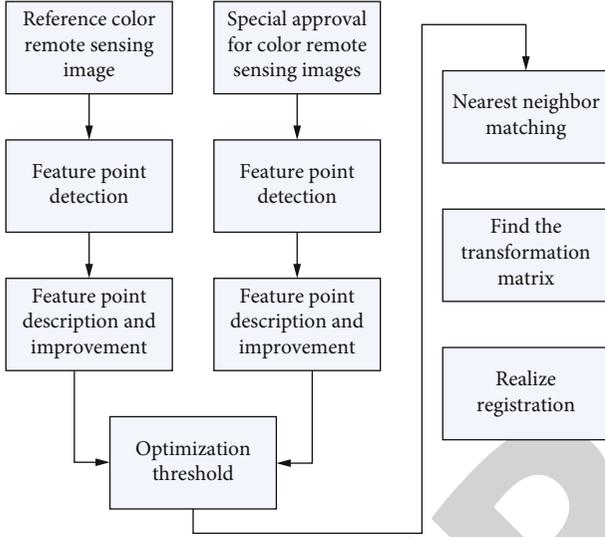


FIGURE 4: Urban greening remote sensing.

Then, expand each courtyard area. At the same time, we can use green space, sidewalks, etc. to divide the space to create a multifunctional place which can be combined. Fourth, the road should be suitable for people to come and go. Fifth, we must fully consider firefighting and rescue. Sixth, when designing roads at least to reduce the impact on the living space, always adhere to the principle of ensuring the tranquility of the living space and prepare accordingly. Seventh, when designers plant trees on the sidewalk, they need to create a green belt that allows people to truly feel the impact of the environment. This facilitates subsequent maintenance work and reduces costs. In terms of land selection, people naturally prefer undulating land instead of flat ordinary land. This will make people feel more comfortable. Relevant designers should pay attention to the selection of native plants, because native plants are more suitable than other plants and have better drought resistance, and at the same time, we can prefer ornamental plants. Continuously improve the orderly and urban residential landscape vegetation. And in the design process, the decorative value is increased to a certain extent. If it is a good lawn, there is no need to build a flower stand. If you make a flower stand, it will not only destroy the overall beauty of the green space to a certain extent. However, it also causes waste due to violation of economic principles and practices.

2.3. Greening Remote Sensing Image Processing Algorithm. Because of the close relationship between NDVI and plant chlorophyll in content and growth conditions, we get the bare land area of 0.2 and below and 0.5 and above as the vegetation area [24].

The mixed area is considered between the two thresholds. The following formula is done like this:

$$\begin{aligned} \varepsilon &= (\text{NDVI}_{\max} - \text{NDVI}_{\min})^{i=2}, \\ T_0 &= \frac{K_1}{K_2} + 1 \times DN_{10}, \\ f_i &= f_{\min} + (f_{\max} - f_{\min})\beta. \end{aligned} \quad (1)$$

Through the SURF color remote sensing image, combined with the requirements of ecological protection, the following algorithm can be derived:

$$\begin{aligned} R_n &= G_0 + H + \lambda e^2, \\ R_n &= (1 - \alpha)R_{sd} + \varepsilon\alpha(T^4 - T^3), \\ v_i^j &= v_i^{t-1} + (x_i^{t-1} - x_*)f_i. \end{aligned} \quad (2)$$

Based on the urban greening remote sensing technology, the green planning of many residential areas has begun to be on track. The design of urban residential garden landscape is required to have aesthetic and ecological characteristics, so remote sensing algorithms came into being.

$$\begin{aligned} G_0 &= R_n \cdot [T_c + (1 - f_i) \cdot (T_b - T_c)], \\ N_c &= \frac{C_d \cdot \text{LAI}}{2u^2/uh^2}, \\ x^t &= x_{i=1}^j + v_i^t. \end{aligned} \quad (3)$$

Based on the above formula, we can derive the following algorithm according to the different requirements of different residential areas for the greening range:

$$\begin{aligned} kB^{-1} &= \frac{1}{2}(\text{Re})^{1/4} - \ln(T_c), \\ H_{i=3} &= R_n - G_0 \cdot \frac{\lambda E_w}{H_{\text{wet}}}, \\ r_i^{t+1} &= r^0 \times (1 - \exp(-\gamma \times t)). \end{aligned} \quad (4)$$

The calculation difficulty of the single-channel method is the determination of atmospheric parameters. To improve the accuracy, many sources are introduced for parameter modification. Landsat uses the vertical profile of the atmosphere to optimize specific radiation values [25], so as to better choose the vegetation type of the green landscape.

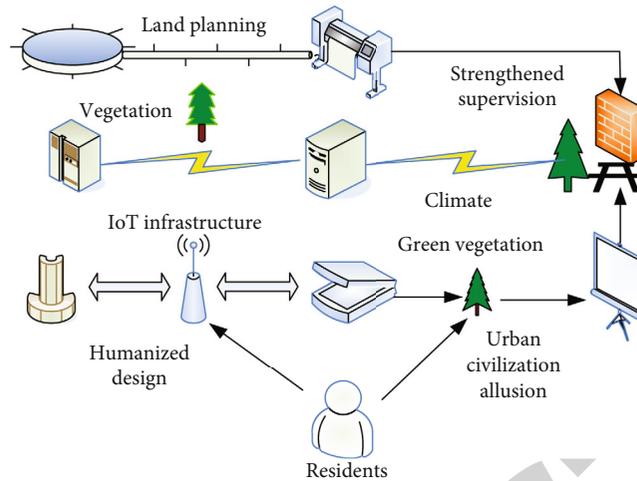


FIGURE 5: Residential garden landscape map.

$$\begin{aligned}
 ET_p &= E_{i=m}^n [(EF_1) - (ET_{i=0})], \\
 VPD &= \frac{\exp}{T_a} \cdot \left(1 - \frac{RH}{100}\right), \\
 GABA &= \frac{N \sum_{i=1}^k x}{N^2 - \sum_{i=1}^k (x_i x_i)}, \\
 GD_k &= \frac{1}{L} \sum_{n=1}^L \frac{|h(n) - h_j|}{\text{Max}(h_i^k(n))}.
 \end{aligned} \tag{5}$$

Through the principles of the SEBS model, we can observe water resources, climate, environment, etc. through satellites, so as to better determine the construction plan of the garden landscape. The formula for its performance principle is as follows:

$$\begin{aligned}
 TVDI &= \frac{LST - LST_{\min}}{LST_{\max} - LST_{\min}}, \\
 \alpha &= \beta_2 + \alpha_2 \times \frac{\varepsilon_7}{T \cdot \lambda}, \\
 \delta &= \sqrt{\frac{\sum_{i=1}^k \nabla^2}{k}}, \\
 v_j &= (a_i x_i^2 + b_i x_i + c_i) - b_j x_j.
 \end{aligned} \tag{6}$$

3. Experiments on the Research of Residential Area Landscape Architecture Based on Urban Greening Remote Sensing

In the landscape design of urban residential areas, it is necessary to adapt measures to local conditions, adhere to economic and practical principles, scientifically utilize natural resources, fully study and understand regional conditions, and maximize benefits. Using as much of the original resources as possible, land use of natural resources to connect landscape design has many advantages. It is necessary

TABLE 3: The list of top plants of Yaquan Bay district.

Serial number	Name	Remarks	Number
1	Sophora japonica	Beautiful tree	56
2	Ginkgo biloba	Big canopy	77
3	Firmiana platanifolia	Deciduous tree	48

not only to get close to nature but also to reduce the investment brought about by large-scale construction.

3.1. Experimental Strategies for Greening Remote Sensing. The comparison between urban residential areas and traditional residential areas is more important than garden landscape design in the past. In other words, in the process of real landscape design, we should attach great importance to landscape design and make it independent. When planning a project to create a better landscape environment, the designer should ensure that landscape design is introduced at an early stage. Make full use of topography and glacial landforms, make full use of the rich and diverse plant resources in the area, rationally allocate landscape elements, and make effective use to ensure the harmonious design of urban residences and the architectural structure of environmentally friendly design. In order to give full play to the green functions, we must attach great importance to the functions related to residential and landscape design. Naturally connect people and scenery to create a quality living space.

3.2. Urban Residential Areas. Urban residential areas generally refer to residential clusters where supporting infrastructure is improved through collaborative planning. The government builds and develops and closes urban roads. The supporting public service infrastructure functions are as complete as possible to meet the material, spiritual, and cultural needs of the residents in the residential area. The architectural environment of the skeleton street is planned and designed to create a quiet, clean, and beautiful living environment. Arrange surrounding trees or landscaping

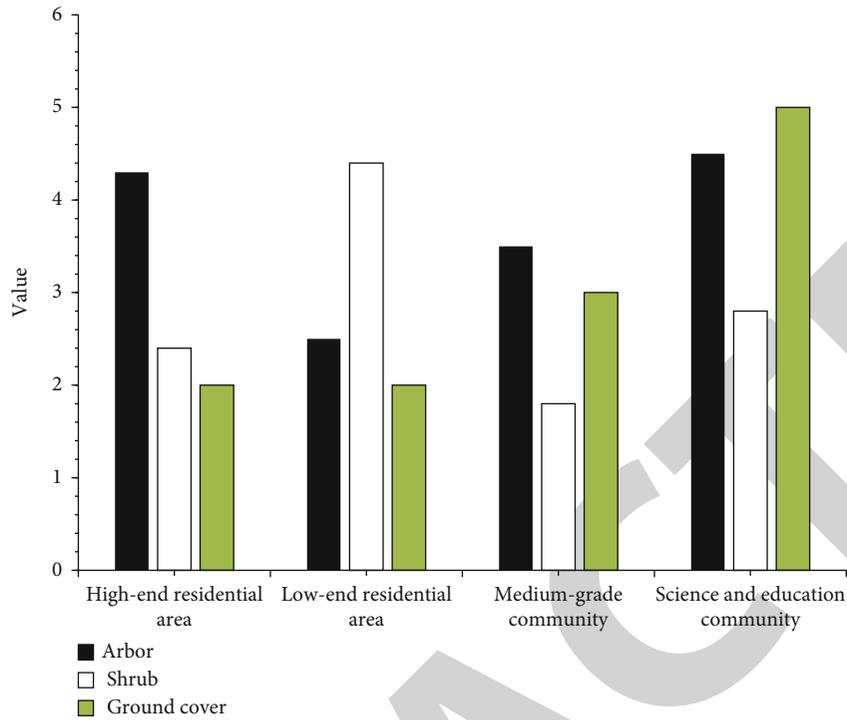


FIGURE 6: Comparison of the types of trees, shrubs, and ground covers in different grades of residential communities.

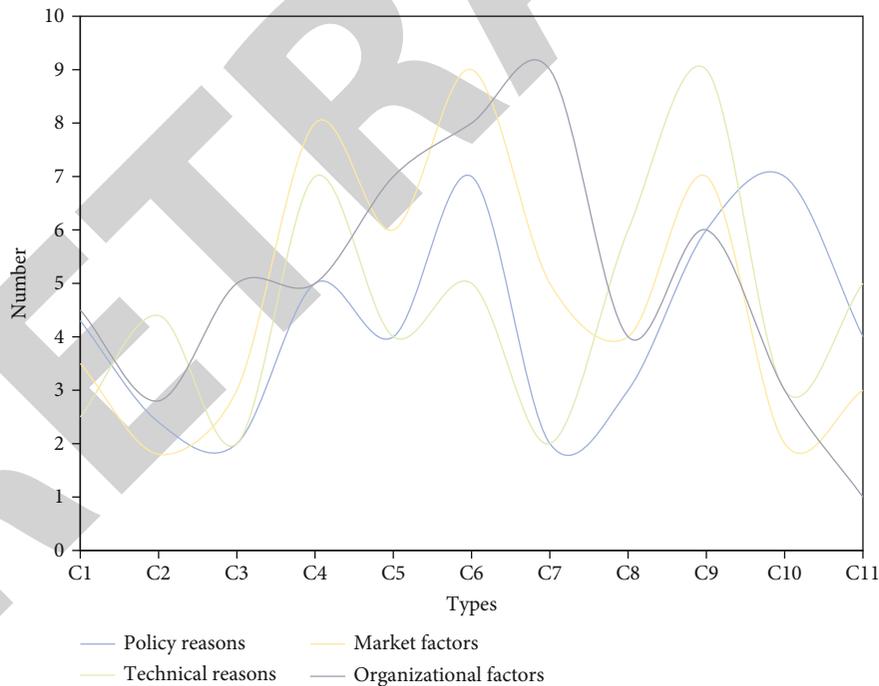


FIGURE 7: Restrictive factors of green building development in housing industrialization.

and landscape design and construction activities. As people’s demand for the living environment continues to increase, landscaping has become an important issue for people to choose a community. Therefore, the urban garden landscape design is closely related to people’s lives. Therefore, in the design process, the designer must completely stand in the

perspective of the community residents, design a reasonable garden landscape, and reflect the value of garden landscape design. It should be noted that in the garden landscape design, designers should rationally design and incorporate green design concepts to create a beautiful living environment for people and improve the air quality of people’s lives.

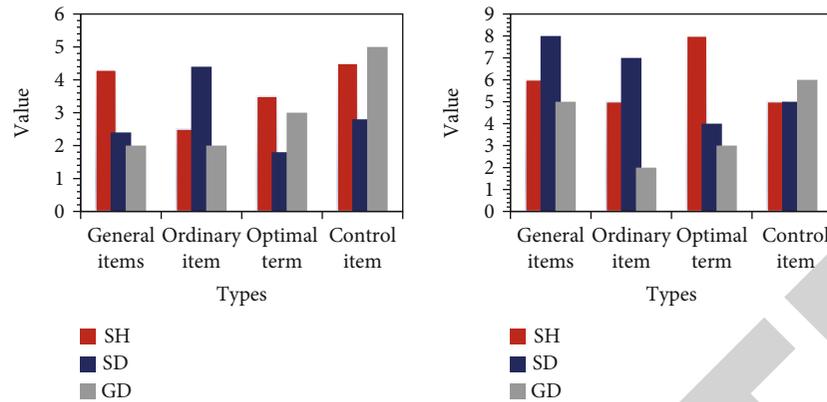


FIGURE 8: Comparison of green coverage in different provinces.

This not only reflects the concept of environmental protection but also allows people to integrate into nature. This also fully shows that in the process of landscape design, designers must be able to combine sustainable development strategies with innovative design methods. Only in this way can the quality of garden landscape design be improved.

3.3. Planning of the Greening Layout of Urban Residential Areas. Many cities and suburbs have very high requirements for green buildings, and green buildings will be divided into certain grades. From Figure 1, we can see the schematic diagram of green building grades.

Experiments have shown that with the inheritance of the profound cultural heritage of ancient China from generation to generation, the beauty of garden architecture is deeply rooted in the hearts of the people. Therefore, many real estate development companies attract customers in the future, and they also begin to pay attention to the greening of residential areas. Imitate the layout of the garden landscape, as we can see from Figure 2.

Through the aerial top view of Figure 3, we can roughly understand the proportion of green space, roads, vegetation, buildings, etc. in the urban layout.

Through the SURF algorithm, the color remote sensing image is matched, as shown in Table 1.

After the color remote sensing images are matched, they are registered according to the default parameters. The experimental parameters are shown in Table 2.

In order to better use the RANSAC algorithm to purify the matching point pairs and obtain the transformation matrix to realize the optimization of the urban greening remote sensing for the construction of the landscape architecture in the residential area, the performance method is shown in Figure 4:

With the improvement of people's living needs, the construction of landscaping in residential areas has received more and more attention, and more and more people are paying more and more attention to the balance between the ecosystem and the environment. As a result, the landscape design of the residential area is not compatible with the construction results, and there are certain drawbacks, as shown in Figure 5.

In terms of landscape functions, the upper-layer plants can play a role of space separation. Completely improve the quality of the landscape. Most plant choices are natural plants with regular shapes. Its specific performance is shown in Table 3:

The number of vegetation in different environments and different grades of residential communities is different, as shown in Figure 6.

There are many restrictive factors in the development of green buildings in residential industrialization, so we should pay more attention to the restrictive factors. From Figure 7, we can see the influence of restrictive factors on the development of green industry.

The urban layout and planning of each province are different, which are closely related to the economic development of each region. Therefore, this relationship also affects the ratio of green coverage area of each city. Through Figure 8, we can figure it out.

Green building lacks technical and talent support. It is a comprehensive system project that includes green building design, building material production, equipment procurement, construction, operation, evaluation, energy consumption monitoring, and construction waste recycling. Supported by scientific research teams and talents, promote its growth, coordinate development of all links, and ensure the common development of green buildings throughout the life cycle. We can see from Figure 9 the green building development.

The green building grade score items are set to a certain degree. Finally, it can be seen that the remote sensing image characteristics of the buildings in the residential area and the public area are obvious. In the identification of 46 training features and 34 detection features, the remote sensing identification features are correct. The number is 32, and the accuracy of remote sensing recognition of greening building images is 94%, which can meet the recognition requirements of greening in buildings, as shown in Figure 10.

4. Discussion

Urban forests have very complex plant communities that can absorb sound, prevent sand, repair soil, purify air, and

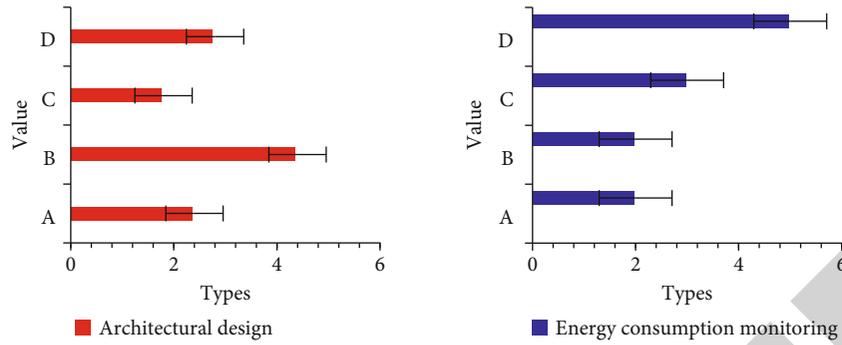


FIGURE 9: Green building development.

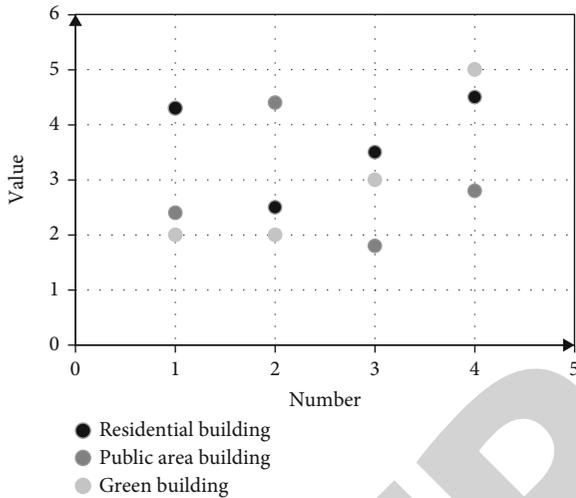


FIGURE 10: Green building evaluation index weight.

retain water and soil. At the same time, it is also a kind of natural ecological conservation, which provides the living and breeding soil for the animals and plants in the city. Urban forest ecological culture is one of the important manifestations of urban forest culture. It can ensure a healthy and unobstructed living space for urban residents, protect urban biodiversity, and make the city a sustainable living environment. The water system involved in the park is mainly the decorative landscape water system located in the middle of the space and the surface water flowing through the area. Considering the comprehensive utilization of urban water system, the water system landscape of the park focuses on rainwater collection and utilization, creating ecological waterways to divert rainwater to the landscape water system. And in the water system design process, combined with the platform planting design, design scattered liquid plant reservoirs on the platform, extend the water system path, clear mountain runoff, and then fall into the rainwater collection tank to further clean the water body. The high-intensity pressure and tight nerves of urban residents must go deep into the natural forest to relieve the pressure of fast-paced life. Various parks have become people's first choice. Urban residents can relax in the urban forest and enjoy the relaxed and happy urban life brought by the urban forest.

5. Conclusions

In order to make the garden landscape design more pleasing to the eye, designers should pay attention to the optimization of the garden landscape, which requires lines to connect the landscape to each other, so that the community garden landscape can be viewed regularly to achieve good results. On the other hand, the designer must be able to explore new ways to enhance the cultural atmosphere of the community and give people a good perspective. When you feel the result, you must also be able to get cultural influence from it. Only when the community landscape in the garden is polluted can people get good physical and mental relaxation, relieve pressure to a certain extent, and create a happy mood. Only by realizing the dynamic and static phases can the community be more popular only when they are combined. With the improvement of people's living standards, people's taste in life gradually improves. People engage in various cultural and recreational activities to enrich their skin color, improve their lifestyle after rest, and form a good overall quality. Therefore, the garden landscape designed by the designer must not only be safe and convenient but also be more interesting. The landscape in the garden should be able to form an open pattern, so that people can understand and recognize each other through the garden landscape, thereby promoting the formation of good interpersonal relationships and making the community feel at home.

Data Availability

No data were used to support this study.

Conflicts of Interest

The authors declare that there are no conflicts of interest regarding the publication of this article.

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