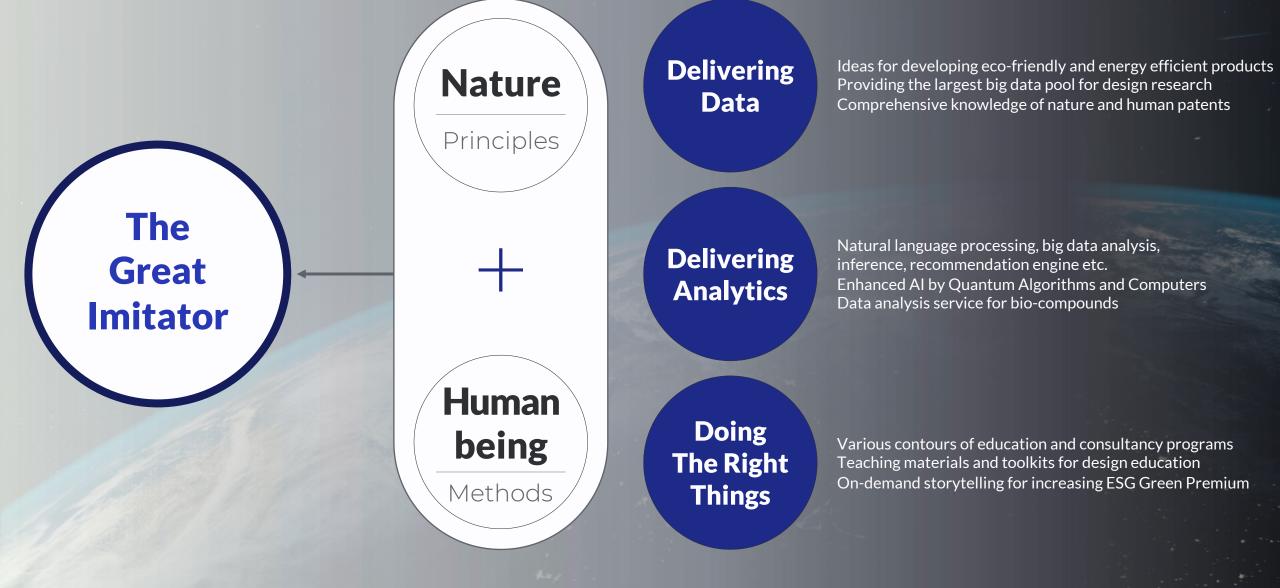
MIMICUS

ideas on demand

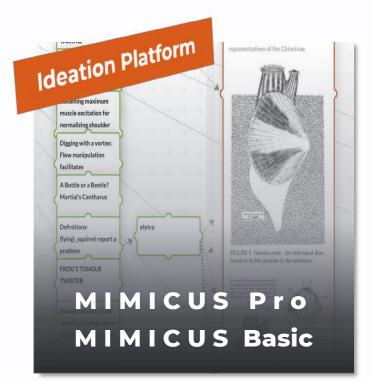
Company Vision



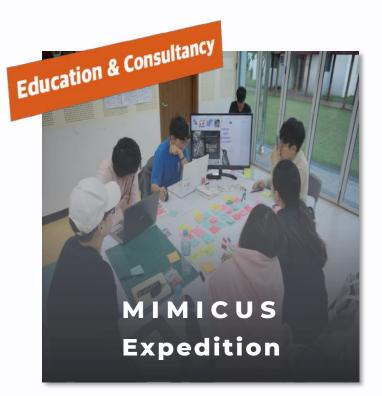
Company **History**

- 2021 Government-aided Biomimicry R&D Project (17'-21' 500K USD)
- 2020 Master plan development for Korean Biomimicry Industry incubation (Ministry of Environment, Republic of Korea)
- 2019 MIMICUS Expedition Practitioner Program for startups (The Daejeon center for creative economy, Republic of Korea)
- 2019 MIMICUS Expedition Beginner Program for university students (Youngnam University)
- 2019 Rotman School CDL Quantum Stream (alumni)
- 2019 ISO/TC266 Biomimetics Committee Member (~present)
- 2018 Robert Wood Johnson Foundation (Johnson&Johnson) International Biophilic Educators Network member
- 2018 MIMICUS Expedition Practitioner Program for small-medium companies (Republic of Korea)
- 2018 Nominated in 2017 KAIST Annual Research Report
- 2018 PreSeed Investment
- 2017 Minister Prize from the Ministry of Science and ICT, Republic of Korea
- 2016 Corporation Establishment HomoMimicus co., Ltd.
- 2015 Research Fellowship, KAIST VRPGP(High Risk High Return)
- 2014 Research Fellowship, KAIST Entrepreneurship Center
- 2009 Teamed Up

Business Area



Design research is fun! Idea recommendation using AI Non-face-to-face research collaboration and security features Providing customized navigation functions for enterprises

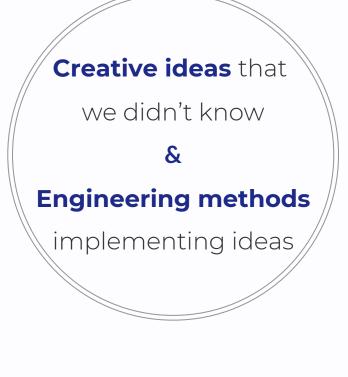


Biomimicry design thinking education Junior / Beginner / Practitioner programs Teaching materials and design toolkits Curriculum works on MIMICUS platform Customized curriculums by requests <section-header><text>

Biomimetic tactical equipment Biomimetic robotics control algorithms On-demand design consulting or storytelling for product & service

expedition.mimic.us

Business Solution





- 1B Natural science papers + patents bibliographic information
- 6M Natural compounds big data
- 20M Biomaterial properties
- 1M Products-Services + Functional Information
- Natural language processing technology
- Case-based Reasoning (CBR) AI-based recommender
- CBR + Ontology
- Network analysis utilizing GBS quantum computing
- Big data analysis of compounds and biological information
- Customer information security
- Consultancy
- Data and platform customization on demands
- Customized troubleshooting
- Education program for biomimetic design thinking
- Biomimicry YouTube to raise public awareness



Which part protects from UV? **1. MIMICUS Pro Platform**

2. MIMICUS Basic Platform



3. MIMICUS Expedition Edu & Consultancy



4. TACCAVE Bio-inspired Tactical Equipment



1

1. MIMICUS Pro Platform

Search bio-derived materials and eco-friendly product ideas Collaborative R&D platform working on 1B papers & patents data, 3M species, 6M natural compounds, and 750K product-function dictionary etc.

2. MIMICUS Basic Platform

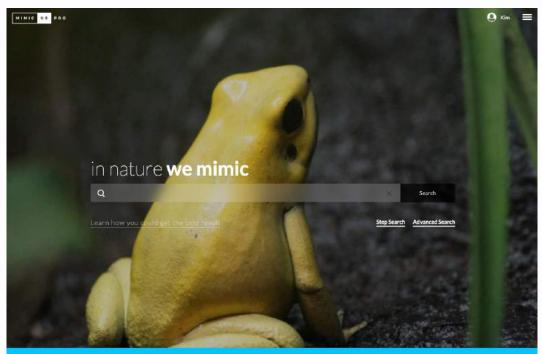
. MIMICUS Expedition Edu 🕴 Consultancy

•. TACCAVE K10 Bio-inspire Desig

1. MIMICUS Pro Platform

pro.mimic.us

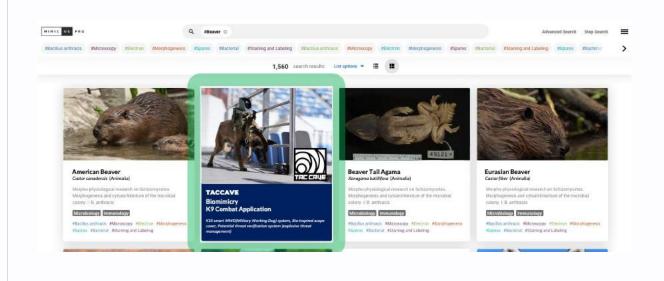
Search bio-derived materials and eco-friendly product development ideas Collaborative R&D platform working on 1B papers & patents data, 3M species, 6M natural compounds, and 750K product-function dictionary etc.



1-a. Default Search

Users can navigate the website as like seeing a picture book without specialized knowledge. In the process of selecting each idea/bio-information/product-information card, the depth of expertise naturally deepens.

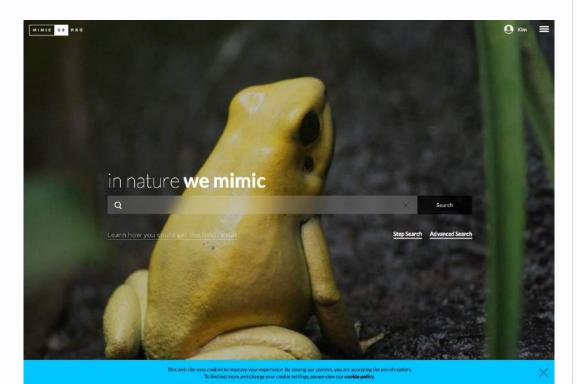
The degree of understanding of related organisms and substances is increased without even knowing themselves!



1. MIMICUS Pro Platform

pro.mimic.us

Search bio-derived materials and eco-friendly product development ideas Collaborative R&D platform working on 1B papers & patents data, 3M species, 6M natural compounds, and 750K product-function dictionary etc.



1-b. Step Search

Hundred experts have hundred ways of searching!
Step search allows customizing the exploration process.
Users may organize search steps by the familiar knowledge depth of bio-ecological information.
Moreover, you can record the exploration process as history.

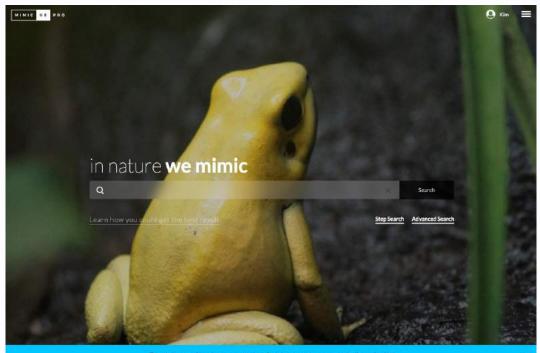
Easy to recall the previous process and restart the exploration from it.

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1. MIMICUS Pro Platform

pro.mimic.us

Search bio-derived materials and eco-friendly product development ideas Collaborative R&D platform working on 1B papers & patents data, 3M species, 6M natural compounds, and 750K product-function dictionary etc.



1-c. Advanced Search

Find eco-friendly ideas or materials that can be used to meet the functional requirements. Advanced search allows users to start the exploration with their domain knowledge. Select the product category or TRIZ strategies you want to develop and search for ideas and materials.

Alternatively, select a biological tissue name (heart, eyes, large intestine, etc.) to start the exploration.

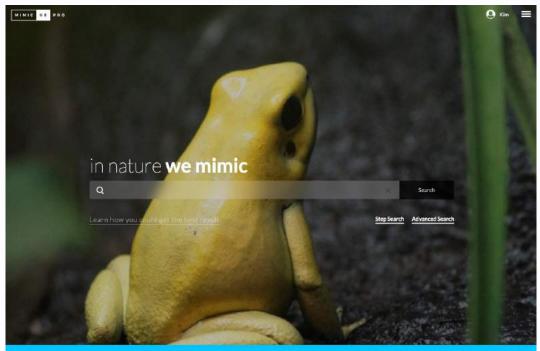
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1. MIMICUS Pro Platform

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1-d. Canvas

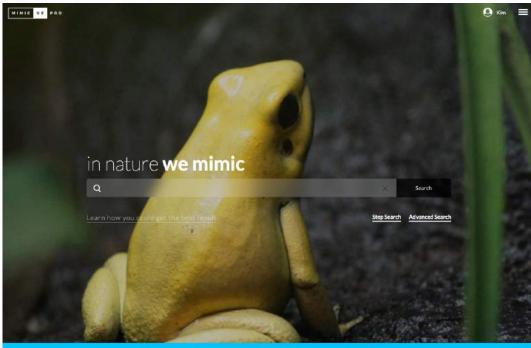
Perform *Default Search* or *Step Search* on canvas that enables real-time group work.
All records of exploration are visualized on the canvas.
This canvas is ready to export for documentation.
No need to create separate research notes to encrypt the process.
The *Canvas* system records all of it (added at the end of 2021).

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1. MIMICUS Pro Platform

pro.mimic.us

Search bio-derived materials and eco-friendly product development ideas Collaborative R&D platform working on 1B papers & patents data, 3M species, 6M natural compounds, and 750K product-function dictionary etc.

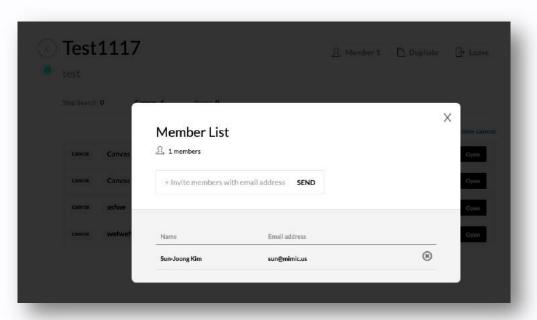


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1-e. Group

The master account(administrator) collectively manages all records of *Group* members. Manage all exploration records, including *Canvas*, *Step Search*, *Scrap* history, deletion, and copy history, etc.

Create a *Group* for a single project to protect your idea within your organization securely.

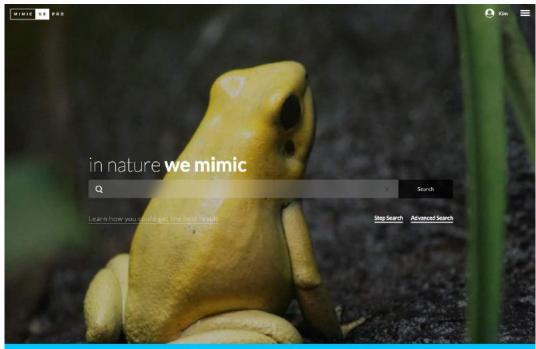


[Use Case] Company S in Germany uses the information security service for each group to operate each project team. It helps to prevent invention ownership disputes.

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1-f. Customized Search (Service inquiry is required)

Develop and provide the on-demand search and exploration environment. Serve customized built-in knowledge-base pool according to the customer's purpose of use (Additional cost required).

The customized built-in knowledge pool is only accessible by members of the organization.

Function-based Search	Product-based Search	Input/Output -oriented Search	Visual Search	State Change based Search	+ Add a Customized Search
AND OR	Main Function	✓ Click to choose a vertex	rb and a noun		
 Search with the ex 	act product function				
Search without th	e function verbs				
 Search without th Search all of the re 					

[Cost] Calculated by the standard of cost estimation according to the size of the knowledge base, server specifications, and the development period for the new recommender algorithm.

[Use Case] Company S of the United Kingdom requested a personalized and customized search engine only for domestic patents and substances investigated in the United Kingdom.



I. MIMICUS Pro Platform

Which part protects from UV?

1

2. MIMICUS Basic Platform

Education platform. Search biological material or eco-friendly product development ideas. Provides a thousand biomimetic design cases and background knowledge

6. MIMICUS Expedition Edu

onsultancy

•. TACCAVE K10 Bio-inspire

2. MIMICUS Basic Platform

basic.mimic.us

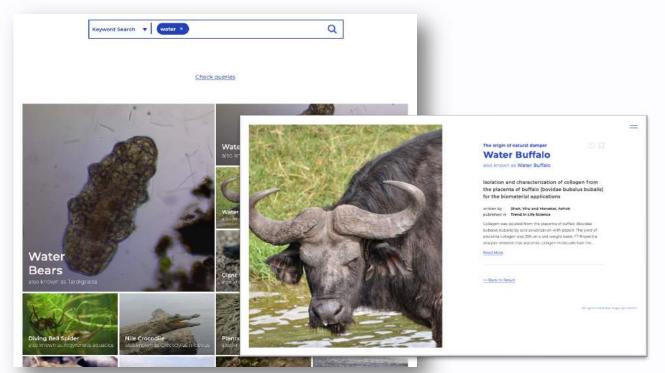
Education platform.

Search biological material or eco-friendly product development ideas. Provides a thousand biomimetic design cases and background knowledge



2-a. Default Search

Users can navigate the website as like seeing a picture book without specialized knowledge. In the process of selecting each idea card, the depth of expertise naturally deepens. The degree of understanding of related organisms and substances is increased without even knowing themselves! Students can search for related expertise.



2. MIMICUS Basic Platform

basic.mimic.us

Education platform.

Search biological material or eco-friendly product development ideas.

Provides a thousand biomimetic design cases and background knowledge



2-b. Product-driven Search

Select the product category which you want to design.

The A.I. system automatically summarizes idea resources to apply on your project. Users also can search deeply down for expertise(research papers) to understand principles.

MINICUS	Pristanistado Noterio 🤷	Dental eq. x	
	Medical Equipment and Accessories and Supplies		
	Information Technology Broadcasting and Telecommunications		
	Defense and Law Enforcement and Security and Safety Equipment and Supplies		

2. MIMICUS Basic Platform

basic.mimic.us

Education platform.

Search biological material or eco-friendly product development ideas.

Provides a thousand biomimetic design cases and background knowledge



2-c. Group and Following

Users can create groups by project and collectively scrap the ideas from nature. Follow teachers or experts in the platform to track the ideas of their interests.

	Group	
Welcon	ne to the group! In this group, you can crea	te groups and
	share your bookmarks with other peop	ole.
	+ Create a new Group	
dccel	1908YU_TeamC	SAP Initial Meeting
name	1908YU_TeamC	Oct. 11 2018 Meeting
 Sun-Joong Kim 2 members 		
MoseMedi		
모세메디 관련 청색기술 아이디어 목록	Sun-Joong Kim	🕒 Sun-Joong Kim
	3 members	1 members
	LaVillette Science Museum	Paris KAIST Worksh
	Workshop	Blabla
	Blabla	Sun-Joong Kim



MINIEUS

IN NATURE, WE EXPLORI and the second second

2. MIMICUS Basic Platform

3. MIMICUS Expedition Edu & Consultancy

Education program for design problem-solving. The program includes the workshop working on Computational Biomimetic Design methodology designed by MIMICUS. Junior / Beginner / Practitioner curriculums are prepared

4. TACCAVE K10 Bio-inspired Design

3. MIMICUS Expedition Education & Consultancy

expedition.mimic.us

Education program for design problem-solving.

The program includes the workshop working on Computational Biomimetic

Design methodology designed by MIMICUS.

Junior / Beginner / Practitioner curriculums are prepared



3-a. Junior Program

Focus on nature and creatures and motivate children to join energy-saving and eco-friendly thinking actively.

- Nature observation workshop and design thinking education (2 Days)
- Recommended for elementary, secondary, and high school students
- MIMICUS Basic 1 month license is provided



[Use Case] We plan to showcase nature observation and design thinking education using the MIMICUS Junior Program on 'gguge,' a non-face-to-face education platform for children.

3. MIMICUS Expedition Education & Consultancy

expedition.mimic.us

Education program for design problem-solving.

The program includes the workshop working on Computational Biomimetic

Design methodology designed by MIMICUS.

Junior / Beginner / Practitioner curriculums are prepared



3-b. Beginner Program

Focus on solving a practical problem to utilize nature's wisdom through Computational Biomimetic Design and design thinking methodologies.

- Nature observation workshop and design thinking education (3 Days)
- Product ideation and simple prototyping is included
- MIMICUS Basic 1 month license is provided



[Use Case] Youngnam University of Korea joined the MIMICUS Beginner Program to enhance students' problem-solving capabilities from 2019.

[Use Case] KAIST utilized the MIMICUS Beginner Program to provide biomimetic design thinking education from 2018.

[Use Case] Art Center Nabi used the MIMICUS Beginner Program to enlarge the artistic creativity of in-house artists.

3. MIMICUS Expedition Education & Consultancy

expedition.mimic.us

Education program for design problem-solving.

The program includes the workshop working on Computational Biomimetic

Design methodology designed by MIMICUS.

Junior / Beginner / Practitioner curriculums are prepared



3-c. Practitioner Program (Consultancy service is included)

Workshop and consultancy to solve real design problems by using CBD*. *CBD: Computational Biomimetic Design (CBD)

- Help practitioners trying biomimicry to improve the green premium of the product & service.
- The workshop includes biomimetic design methodology teaching and activities throughout teaching materials and design toolkits designed by MIMICUS.
- The consultancy service calls a domain expert for advisory at interpreting nature's principles.
- The program schedule requires at least four weeks (3-5 hours workshop per week)



[Use Case] The Daejeon Creative Economy Innovation Center of Korea utilized the MIMICUS Practitioner Program to help ESG innovation of startups by using biomimicry. [Use Case] Gyeongbuk Techno Park of Korea utilized the MIMICUS Practitioner Program to help ESG innovation of industrial goods manufactured by small-medium-sized companies in Korea.

3. MIMICUS Expedition Education & Consultancy

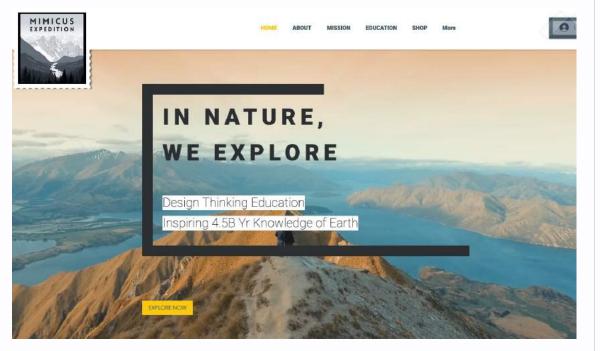
expedition.mimic.us

Education program for design problem-solving.

The program includes the workshop working on Computational Biomimetic

Design methodology designed by MIMICUS.

Junior / Beginner / Practitioner curriculums are prepared



3-d. Teaching Materials and Biomimetic Design Toolkits

Materials and toolkits of MIMICUS Expedition broaden designers' creativity and destruct stereotypes. The materials include a textbook and worksheets to practice biomimetic design methodologies. The board game-like toolkits help designers to interpret various principles of nature quickly remedy design solutions.

- Textbooks and teaching materials
- Boardgame style ESG Green Value enhancement strategy game
- Memory game to study biomimetic design cases and strategies
- Ecosystem observation kits (notebooks, worksheets, stickers, etc.)





I. MIMICUS Pro Platform

2. MIMICUS Basic Platform

6. MIMICUS Expedition Edu 8 Consultancy



1

4. TACCAVE Bio-inspired Tactical Equipment

Tactical solution research and development provider consisting of experts in the field of Bio-inspired Design, Biomimetics, A.I., Machine Learning, and Quantum Computing.

4. TACCAVE Bio-inspired Tactical Equipment

taccave.com

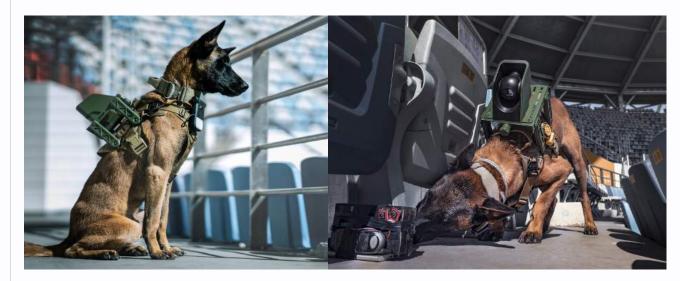
Tactical solution research and development provider consisting of experts in the field of Bio-inspired Design, Biomimetics, A.I., Machine Learning, and Quantum Computing.



K10 Science Device for K9 Units (Smart Military System)

K10 device dramatically reduces the risks on the operation of K9 units: explosives detection, rescue operation, and law enforcement at firearm crimes.

- Scientific device for carrying out remote operations of K9 units
- The system includes a Command Distribution device, Command Transmitter/Receiver adjustable with firearms, Video Receiver, etc.





10 Published Patents for US, Japan, ROK, etc.

- **36** Patents Pending
- **12** Trademarks, Design Patents for US, Japan, China, etc.



Company Color Palette

Color Palette that Delivers Nature

MIMICUS Expedition Color Palette									
Penguin Black	Frog Green	Gingko Yellow	Artic Fox White	Hornet Red	Dino Blue	Urchin Purple	Manta Gray		
2D3033	7AB542	FBC910	E2E8F5	CE5827	1C7BC0	6F396B	425762		

MIMICUS Space Blue 2642BA

MIMICUS

a plethora of green ideas

Ask Us

hello@mimic.us