

Attached Table 1 List of Research Areas in which "Publicly Offered Research" is Solicited in Grant-in-Aid for Transformative Research Areas (A) **(30 Research Areas)**

Note: See “Attached Table 2: Research Outline of Research Areas Shown on Attached Table 1” for the outline of Publicly Offered Research projects in each Research Area.

No	Number of Research Area	Title	Term of Project	Research Period	Number of projects scheduled to be selected	Upper Limit of Annual Budget (in million yen)
1	22A101	Establishment of Child Poverty Research	FY2022–2026	2 years	15	1
2	22A201	Establishing data descriptive science and its cross-disciplinary applications	FY2022–2026	2 years	15 3	2 3
3	22A202	Foundation of “Machine Learning Physics” —— Revolutionary Transformation of Fundamental Physics by A New Field Integrating Machine Learning and Physics	FY2022–2026	2 years	33 15	1 2
4	22A203	Systems biosynthetics based on accumulation, prediction, and creation of biological reactions	FY2022–2026	2 years	24	4.5
5	22A204	Chiral materials science pioneered by the helicity of light	FY2022–2026	2 years	3 18	2 3
6	22A205	Supra-ceramics: Molecule-driven frontier of inorganic materials	FY2022–2026	2 years	30	2.3
7	22A206	CO world	FY2022–2026	2 years	12 3	3 8
8	22A301	Deciphering and Manipulating Brain Dynamics for Emergence of Behaviour Change in Multidimensional Biology	FY2022–2026	2 years	20	3
9	22A302	Mechanical self-transformation of living systems	FY2022–2026	2 years	5 12	3 5
10	22A303	Genomic dynamics underlying the plastic hermaphroditism in plants: the basis of exploratory reproductive adaptations.	FY2022–2026	2 years	10 5	4.5 7
11	22A304	Reevaluation of self recognition by immune system to decipher its physiological advantages and pathological risk	FY2022–2026	2 years	25	3
12	22A401	Photonic Computing Highlighting Ultimate Nature of Light	FY2022–2026	2 years	10 5	2.5 6
13	22A402	Macro coastal oceanography: integrated simulation for the material dynamics from the land through the open ocean	FY2022–2026	2 years	10 6	2 5
14	24A101	The past, present, and future of “misbehaving climate” and humans	FY2024–2028	2 years	2 2 1 2 2	2 2.5 3 5 7
15	24A102	Materia-Mind: Constructing a New Human Historical Science of the Co-creation of Material and Mind	FY2024–2028	2 years	4 8 2 3	1.5 2 3 4.3
16	24A201	Ion Jamology: Materials design transformation by understanding non-equilibrium and collective ion flow	FY2024–2028	2 years	5 10	3 4
17	24A202	Integrated Science of Synthesis by Chemical Structure Reprogramming	FY2024–2028	2 years	28	2.5
18	24A203	Habitable Japan: Sustainability of atmospheric and oceanic environment as a survival basis of island country Japan	FY2024–2028	2 years	9 3	3 9
19	24A204	Chimera Quasiparticles for Novel Condensed-Matter Science	FY2024–2028	2 years	11 11	2 3
20	24A205	Investigation on the Origin and Evolution of Matter in the Universe by Extremely Rare Events: Frontire of Creating a New Insight on the Matte in the Universe	FY2024–2028	2 years	10 4 2	1.5 3.7 4.5

21	24A206	Plasma-driven Seed Memory Operation: Frontiers in Molecular Dynamics in Seeds driven by Plasma	FY2024–2028	2 years	18	3
22	24A207	Generative design to unlock the potential of protein function	FY2024–2028	2 years	22	3
23	24A301	Manipulating Genomes of Intracellular Symbiotic Organelles: Advancements in Technology, Applications for Fundamental Sciences, and Beyond.	FY2024–2028	2 years	15	3.5
24	24A302	Biological cluster: dynamic assembly and functional properties of supramolecular complexes in cells	FY2024–2028	2 years	7 10	3 5
25	24A303	Co-evolutionary emergence of extended phenotypes	FY2024–2028	2 years	12	4.5
26	24A304	chronoproteinology: Protein Machinery that drives “time” on various time scales	FY2024–2028	2 years	16	4
27	24A305	Emergence of brain functions from the dynamic connectome	FY2024–2028	2 years	14 7	3 5
28	24A306	Deciphering the epicode of chromatin, which controls cell fate decisions in organisms	FY2024–2028	2 years	15	3.8
29	24A401	Multicellular neurobiocomputing: Understanding and advancing towards biological supremacy	FY2024–2028	2 years	5 14	2.5 5
30	24A402	Global Antarctic Science: connecting the chain of changing huge ice sheet and global environments	FY2024–2028	2 years	12 4	1.4 3