PRODUCT CATALOGUE

44+ Nano & Quantum Nano Products

Organised into four material tiers — every product shares the same proprietary, plant-based, chemical-free green synthesis process; only the target application changes.

Tier	Focus	Scope
Tier 1	Precious & Noble Metal Nano	Gold, Silver, Platinum, Palladium — diagnostics, electronics, catalysis
Tier 2	Green Conductive Materials	Graphene, carbon nanotubes, nano copper — batteries, composites, EMI shielding
Tier 3	Energy & Critical Minerals	Hydrogen catalysts, Scandium, Yttrium, Lanthanum — energy & supply-chain security
Tier 4	Quantum Nano Advanced	Quantum dots, nano composites, smart coatings, water-safety materials

Representative Products

Code	Product	Tier	Key Applications	Stage
`#0012 · AU`	Nano Gold (Grades A–D)	1	Diagnostics, imaging, drug delivery, electronics, catalysis	Commercial
`#0032 · AG`	Nano Silver (Medical & Industrial)	1	Antimicrobial coatings, wound care, conductive inks, textiles	Commercial
`#0051 · PT/PD`	Nano Platinum & Palladium (PGM)	1	Fuel cells, auto catalysts, hydrogen purification	Commercial
`#0044 · GR`	Graphene Nano Platelets	2	EV batteries, composites, EMI shielding, conductive inks	Pilot
`#0047 · CU`	Nano Copper	2	Conductive inks, PCBs, antimicrobial coatings, EV batteries	Commercial
`#0049 · CNT`	Carbon Nanotubes & Nanoparticles	2	Composites, sensors, supercapacitor electrodes	Pilot
`H2 · CAT`	Green Hydrogen Nano-Catalysts	3	Electrolysers, fuel cells, hydrogen mobility	R&D
`RE · SC/Y/LA`	Critical & Rare Earth Nanomaterials	3	Semiconductors, aerospace alloys, LED phosphors	R&D
`QD · 001`	Quantum Dot Materials	4	Electronics, bio-imaging, sensors, LEDs, quantum computing R&D	R&D
`WF · 010`	Nano Filtration & Water-Safety Materials	4	Drinking-water storage, municipal & industrial water treatment	R&D

Development stage key — **R&D:** lab-validated, pre-pilot · **Pilot:** field/industrial trials underway · **Commercial:** available for bulk order and export.

Validation Status

Product	Validation Parameter	Validating Body	Status
Nano Gold (Grades A–D)	Particle size, elemental purity (>99.9%)	MNIT Jaipur MRC	Validated
Nano Silver	Particle size distribution, purity	MNIT Jaipur MRC	Validated
Nano Platinum & Palladium	Catalytic activity, elemental purity	MNIT Jaipur MRC	Validated
Nano Copper	Conductivity, particle size	MNIT Jaipur MRC	Validated
Graphene Nano Platelets	Layer count, conductivity	IIT Gandhinagar CRTDH (proposed)	In Progress
Green Hydrogen Catalysts	Electrolysis efficiency	IIT Gandhinagar CRTDH (proposed)	Planned

A detailed datasheet for each of the 44 SKUs (grade specifications, particle-size distribution, recommended handling) is available on request. Full MNIT Jaipur validation certificates are shared under NDA to qualified buyers, research institutions and investors.