

A list of principal R&D Products (Masao Yamada)

1. X-ray lithography @ Fujitsu: World's first Ta/BNC and Ta/ β -SiC X-ray mask.
2. 130nm ~ 90nm CMOS semiconductor devices @ Fujitsu: equipped with world's first Cu/Low-k multilayer wiring.
3. Mouse cDNA microarray @ NLE: a pioneering DNA microarray in Japan
4. Cyanobacterial cDNA microarray @ NLE: equipped with 2,397 genes, jointly developed with Nagoya University.
5. 12ch SPR@NLE: high throughput SPR system with 12 channels, jointly developed with Kagoshima University.
6. Evanescent-field fluorescence excitation scanner (GSR1200) @ Moritex: world's first glycan profiling system (GlycoStation), equipped with EMCCD, jointly developed with AIST.
7. Lectin microarray (LecChip Ver1.0) @ Moritex: the world's first lectin microarray with 45 kinds of natural lectins, jointly developed with AIST.
8. Enrichment device @GP Bioscience: sample pretreatment automation device, jointly developed with AIST.
9. Mesenchymal stem cell quality control system @ GlycoTechnica: a method combining lectin microarray and AI, joint development with National Center for Child Health and Development.
10. Statistical analysis/Deep learning software (SA/DL-Easy) @ GlycoTechnica: bringing deep learning technology closer to everybody.
11. Urine testing method for IgA nephropathy @GlycoTechnica: joint development with Okayama University School of Medicine.
12. Evanescent-field fluorescence excitation scanner (GSR2300) @ GlycoTechnica: the world's highest performance glycan profiler, enabling glycan profiling with just 3 cells.
13. Lectin microarray (LecChip Ver2.0) @ GlycoTechnica: mainly uses recombinant lectins to expand the glycan binding specificity of LecChip Ver1.0, jointly developed with AIST and Hiroshima University.
14. Simple and low-cost evanescent-field fluorescence excitation scanner (GSL2200) @ GlycoTechnica: world's fastest and cheapest glycan profiler, scanning less than 10 seconds.
15. Blood type focused glycan array @ GlycoTechnica: with carefully selected 28 kinds of glycans for evaluation of glycan binding specificity of SARS-CoV-2.
16. Lectin array for simple glycan analysis of mAb drugs @ GlycoTechnica: a 14-well lectin array with carefully selected 9 kinds of lectins, jointly developed with FDA.

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17. Optic biome sensor (OBS) @ Mx: under development aiming realization of environmentally regenerative agriculture.