

Wakamiya Lab Equipment List

	Field	No	InstrumentName	Manufacturer	Model number	HP-EN
1	Organic Synthesis	01	Monowave	Anton Parr	Monowave 300	
1	Organic Synthesis	02	Low Speed Bench-Top Centrifuge	TOMY SEIKO	LCX-100	
1	Organic Synthesis	03	Gel Permeation Chromatography	Tosoh Corporation	HLC-8121GPC / HT	
1	Organic Synthesis	04	Flash Systems	Biotage	Isolera ISO-1SW	https://www.biotage.com/product-group/isolera-flash-systems
1	Organic Synthesis	05	Recycling Preparative HPLC	Japan Analytical Industry Co.,Ltd.	LC-9130G NEXT	http://www.jai.co.jp/english/products/hplc/gradient.html
1	Organic Synthesis	06	Recycling Preparative HPLC	Japan Analytical Industry Co.,Ltd.	LaboACE LC-5060	http://www.jai.co.jp/english/products/hplc/LC-5060.html
1	Organic Synthesis	07	Solvent Purification System	NIKKO HANSEN&CO.,LTD.	GlassContour 6-1S	※Using Solvent 《DCM, ETHER, HEXANE, THF, PhCl, Tol》
1	Organic Synthesis	08	Solvent Purification System	NIKKO HANSEN&CO.,LTD.	GlassContour 6-1S	※Using Solvent 《DMF Tol1,4-DIOXAN, PENTANE, Ddichlorobenzene》
1	Organic Synthesis	09	Vacuum line	—	—	※Using Solvent 《DMF Tol1,4-DIOXAN, PENTANE, Ddichlorobenzene》
1	Organic Synthesis	10	Theoretical calculator	HPC SYSTEMS Inc.	HPC5000-XBW216TS-Silent	※Using Solvent 《DMF Tol1,4-DIOXAN, PENTANE, Ddichlorobenzene》
1	Organic Synthesis	11	Recycling Preparative HPLC	Japan Analytical Industry Co.,Ltd.	LC-5060	※Using Solvent 《DMF Tol1,4-DIOXAN, PENTANE, Ddichlorobenzene》

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2	Analyser・Spectrometers	01	UV-VIS-NIR Spectrometer	Shimadzu	UV-3150	https://www.shimadzu.com/an/molecular_spectro/uv/uv-3600plus.html
2	Analyser・Spectrometers	02	Quantaaurus-QY	Hamamatsu Photonics Co., Ltd.	C11347-01	
2	Analyser・Spectrometers	03	Quantaaurus-Tau	Hamamatsu Photonics Co., Ltd.	C11367-25	
2	Analyser・Spectrometers	04	Fluorescence Spectrophotometer	Horiba	FluoroMax 4P-NIR	
2	Analyser・Spectrometers	05	Laser Ellipsometer	GAERTNER SCIENTIFIC	LS-100	http://www.gaertnerscientific.com/ellipsometers/lse-ms.htm
2	Analyser・Spectrometers	07	Photoemission Yield Spectroscopy in Air (PYSA)	RIKEN KEIKI Co., Ltd.	AC-3E	https://www.rikenkeiki.co.jp/english/products/detail/64
2	Analyser・Spectrometers	08	Photoelectron Yield Spectroscopy under vacuum Measurement System (PYS)	Bunkoukeiki Co.,Ltd.	BIP-KV-201-P5	http://bunkoukeiki.co.jp/pdf/pdf/No.WebFlyer-BIP-KV201-1401YN23-E.pdf
2	Analyser・Spectrometers	09	Melting Point Apparatus	Stanford Research Systems	Optimelt	※Using Solvent 《DMF To1,4-DIOXAN, PENTANE, Ddichlorobenzene》
3	Thermal Analysis	01	Differential Scanning Calorimeter	Shimadzu	DSC-60 Plus	https://www.shimadzu.com/an/thermal/dsc60plus.html

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3	Thermal Analysis	02	Thermo Gravimetric Analysis	Shimadzu	TGA-50	
4	Imaging	01	Scanning Electron Microscope	Hitachi High-Technologys	SU-8010	
4	Imaging	02	Digital Microscope	Keyence	VHX-6000	
4	Imaging	03	Atomic Force Microscope	Molecurer Imaging	PicoPlus	
5	Glovebox	01	Glovebox(Unico1)	Unico	UL-1300A	
5	Glovebox	02	Glovebox(Unico2)	Unico	UL-1300A	
5	Glovebox	03	Glovebox(MBRAUN1)	MBRAUN	LABstar	https://www.mbraun.com/en/products/glovebox-workstations.html
5	Glovebox	04	Glovebox for 4person	Kiyon	KK-041AD	http://koreakiyon.co.kr/
5	Glovebox	05	Roll-to-roll film fabrication Glovebox	Original	—	
5	Glovebox	06	Glovebox(MBRAUN2)	MBRAUN	LABmaster pro	https://www.mbraun.com/en/products/glovebox-workstations.html
5	Glovebox	07	Glovebox(MBRAUN3)	MBRAUN	LABmaster pro	https://www.mbraun.com/en/products/glovebox-workstations.html

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5	Glovebox	08	Glovebox for 2person	MBRAUN	UNILAB SP	https://www.mbraun.com/en/products/glovebox-workstations.html
5	Glovebox	09	Glovebox(Unico3)	Unico	UL-1300A	
5	Glovebox	10	Glovebox(Unico4)	Unico	UL-1300A	
6	Device Fabrication	01	Clean Bench	Hitachi Industrial Equipment Systems Co.,Ltd.	PCV-1915CF	
6	Device Fabrication	02	Micro Electric Furnace	FULL-TECH	FT-100 / FT-101FM	
6	Device Fabrication	03	UV Ozone Cleaner	Filgen, Inc.	UV253V8/UV253-OZ	https://filgen.jp/Product/SI/English/UV/
6	Device Fabrication	04	Atmospheric Pressure Plasma	Aqa Co., Ltd.	Atmospheric pressure plasma Jet JP-Net Conveyor customized.	
6	Device Fabrication	05	Vacuum Deposition Device	ALS Technology Co., Ltd.	E-80LL-TransB	
6	Device Fabrication	06	Vacuum Deposition Device	ALS Technology Co., Ltd.		
6	Device Fabrication	07	High Speed Vacuum Coater	ULVAC KIKO, Inc	ULVAC VPC-1100	https://www.ulvac-kiko.com/en/systems/vpc1100.html
6	Device Fabrication	08	Byko-drive	Tetsutani & CO.,LTD.	ビコドライブV	

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6	Device Fabrication	09	Auto Film Applicator	TESTER SANGYO CO., LTD.	PI-1210	http://www.testter.co.jp/products/pi/pi_1210-e.html
6	Device Fabrication	10	sputtering equipment	Cryovac Corporation	CV-19D-RDSP	http://www.cryovac.jp/eproducts-d.htm
6	Device Fabrication	11	#REF!	#REF!	RIE-10NR	https://www.samcointl.com/etching/rie-systems/
6	Device Fabrication	12	Super Low Speed Dip Coater	SDI Co.,LTD.	MD-0408-S6	https://www.sdicompany.com/en/dipcoater/md0408s8.php
6	Device Fabrication	13	Spin Coater [suitable for 100×100 mm substrates]	MIKASA CO., LTD	MS-B150	http://photolithography-rd.com/english/spin_coating.html#ms-b150
6	Device Fabrication	14	Spin Coater [suitable for 75×75 mm substrates]	MIKASA CO., LTD	MS-B100	http://photolithography-rd.com/english/spin_coating.html#ms-b100
6	Device Fabrication	15	Spin Coater [suitable for 75×75 mm substrates]	MIKASA CO., LTD	MS-A100	
6	Device Fabrication	16	Compact coater for research	Asahi Sunac CO., LTD	rCoater	https://www.sunac.co.jp/en/nc/products/index.html
6	Device Fabrication	17	laminator	Nisshinbo Mechatronics Inc.	PVL0202S	
6	Device Fabrication	18	Screen printer	Micro-tec Co., Ltd.	MT-2934TVC	
6	Device Fabrication	19	Screen printer	NEWLONG SEIMITSU KOGYO Co., Ltd.	DP-320	https://www.newlong.co.jp/en/publics/index/109/

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6	Device Fabrication	20	Spin Coater [suitable for 150×150 mm substrates]	ブルーオーシャンテクノロジー	AJC-500 KU	
6	Device Fabrication	21	Stirring deaerator	Tokyo Garasu Kikai Co., Ltd.	カクハンター SK-300S II	
6	Device Fabrication	22	Chamber-type vacuum deaeration Sheeler	Fujiimpulse Co., Ltd.	FCB-200	
6	Device Fabrication	23	Laser processing machine	MITSUBOSHI DIAMOND INDUSTRIAL CO., LTD.	LPM900T-SP	
7	Device Measurements	01	J-V Measuring Equipment	Bunkoukeiki Co.,Ltd.	OTENTO-SUNIII	
7	Device Measurements	02	IPCE Measuring Equipment	Bunkoukeiki Co.,Ltd.	SMO-250III	
7	Device Measurements	03	Solar Cell Heat- and Wheather-Resistibility Test System	BunkouKeiki	BIR-50	http://www.bunkoukeiki.co.jp/Special%20Application.html
7	Device Measurements	04	Standard Type Solar Simulator (Single light type)	Yamashita Denso Corporation	YSS – 50A～400A	http://yamashitadenso.co.jp/english2/product/product01/standard-type-solar-simulator-single-light-type
7	Device Measurements	05	Surface Profiler	KLA-Tenchore	Alpha-Step IQ	https://www.schaefer-tec.it/en/products/alpha-step-iq-surface-profiler-contact-profilometers-kla-tencor
7	Device Measurements	06	Advanced Electrical Characterization	Dr. Murdey	—	
7	Device Measurements	07	Electrochemical analyzer	BAS Inc.	ALS/chi-660E	