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**Technical terms for analytical
chemistry (optical part)**

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Foreword

This translation has been made based on the original Japanese Industrial Standard revised by the Minister of Economy, Trade and Industry through deliberations at the Japanese Industrial Standards Committee as the result of proposal for revision of Japanese Industrial Standard submitted by The Japan Society for Analytical Chemistry (JSAC)/Japanese Standards Association (JSA) with the draft being attached, based on the provision of Article 12 Clause 1 of the Industrial Standardization Law applicable to the case of revision by the provision of Article 14.

Consequently **JIS K 0212**:1990 is replaced with this Standard.

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Technical terms for analytical chemistry (optical part)

Introduction

This Japanese Industrial Standard was established in 1963, and then went through two revisions in 1990. The revision at this time involves modification based on the review conducted on the entire contents of this Standard, and some additions of the terms from the new technical fields which have emerged since the last revision.

No International Standard has been established at this point.

1 Scope

This Standard specifies the main terms and definitions used in the optical part in chemical analysis. The terms covered in this Standard are those in the wavelength range from X-ray to terahertz. The terms related to the electromagnetic analysis including X-ray diffraction analysis are excluded.

2 Terms and definitions

The terms and definitions shall be as follows.

NOTE 1 When two or more terms are shown, the preference of use is given according to the order of appearance.

NOTE 2 For the terms which are deemed confusable with others, the technical field to which they are related is given in the parentheses immediately following the term in question.

NOTE 3 When two or more English equivalents are given with “,” in between, the one(s) appearing after the first one is (are) either the synonym or the abbreviation.

No.	Japanese term	Reading	Definition	English equivalent (informative)
1	アーケ光源	ÂKU KÔGEN	light source by which the arc discharge is carried out between electrodes for the spectroscopic measurement	arc source
2	アーケ線	ÂKU SEN	the linear spectrum radiated from neutral atoms excited by arc or flame	arc line
3	アーケ放電発光分光分析法	ÂKU HÔDEN HAKKÔ BUNKÔ BUNSEKI HÔ	emission spectrochemical analysis using a performing arc discharge between the electrodes and taking this as the light source	arc discharge atomic emission spectrometry
4	アケチノメーター	AKUTINO MÊTÂ	an instrument to measure the intensity of radiation, ultraviolet ray, etc. by utilizing a photoreaction	actinometer
5	イオン線	ION SEN	the linear spectrum radiated by excited ions	ionic line
6	EXAFS, 拡張X線吸収微細構造解析法	Î EKKUSU Ê EHU ESU, KAKUTYÔ EKKUSU SEN KYÛSYÛ BISAI KÔZÔ KAISEKI HÔ	the method for analyzing the wavy damped variation structure observed in the region of approximately 30 eV to 1 keV at the side of shorter wavelength (high energy) than the absorption end in X-ray absorption spectrum	extended X-ray absorption fine structure, EXAFS
7	位相コントラスト	ISÔ KONTORASUTO	the contrast which is obtained by utilizing the refraction generated when an electromagnetic wave passes through an object of different transmittance NOTE: The image with near edge emphasized is obtained due to the difference in refractive index at the near edge of object. It is used as compared with absorption contrast.	phase contrast
8	位相差顕微鏡	ISÔSA KENBIKYÔ	the microscope in which the diaphragm of condenser and the phase plate are arranged at the conjugated position for observing the micro phase difference produced due to the object by changing it to the brightness difference	phase contrast microscope
9	色ガラスフィルター	IRO GARASU HIRUTÂ	the optical filter which is made to be capable of taking out the light in the region of specific wavelength by colored glass	optical colored filter
10	InGaAs (いんじょうむがりうむひそ) フォトダイオードアレイ検出器	INZIUMU GARIUMU HISO HOTODAIÔDO AREI KENSYUTU KI	the photodiode array detector capable of displaying the absorption spectrum at the infrared part by using InGaAs	InGaAs photodiode array detector

No.	Japanese term	Reading	Definition	English equivalent (informative)
11	インターフェログラム	INTÂHEROGURAMU	a diagram which indicates the signal from an interferometer and the like so that the optical path difference of light is plotted on the abscissa and the intensity of light is plotted on the ordinate NOTE: It is also called KANSYÔ ZUKEL.	interferogram
12	H-D 曲線	EITI-DÊ KYOKUSEN	a type of calibration curve for photographic photosensitive agents The blackness of the photosensitive position generated on photosensitive material expressed as a function of the logarithm of exposure.	H and D curve, Hurter and Driffeld curve
13	ATR 対物レンズ	Ê TÎ ÂRU TAIBUTU RENZU	the objective lens which evaluate the micro part by taking inside the mechanism of attenuated total reflection method	attenuated total reflection objective
14	エシエル格子	ESYERU KÔSI	the diffraction grating which is made such that indented straight grooves are cut, and light is allowed to enter the steep slope sides of the grooves so that the higher-order diffraction lines can be obtained	echelette grating
15	SN 比, SB 比	ESU ENU HI, ESU BÎ HI	a) the ratio of intensity of the signal (response value) S originated from the analytical purpose to the signal (usually, noise) N based on other factor In the case of using background B, it is called SB ratio. b) a measure to indicate the detectivity of measurement In the repeated measurement, it is indicated by η as given in the following formula. $\eta = \frac{\sigma_S^2}{\sigma_E^2}$ where, σ_S : standard deviation between samples σ_E : standard deviation of measurement errors	signal-to-noise ratio, SN ratio, signal-to-background ratio, SB ratio
16	X 線	EKKUSU SEN	the electromagnetic wave from approximately 0.001 nm to 10 nm in wavelength NOTE: There are the characteristic X-ray discharged due to the transition of inner-shell electron, the continuous X-ray discharged when a moving electron loses energy and synchrotron radiation.	X-ray

No.	Japanese term	Reading	Definition	English equivalent (informative)
17	X線吸収端構造, XANES	EKKUSU SEN KYŪSYŪ TAN KŌZŌ, EKKUSU Ê ENU Î ESU	the change of shape based on the difference of chemical state appearing in absorption spectrum in the neighborhood of X-ray absorption near edge	X-ray absorption near edge structure, XANES
18	X線吸収分析法	EKKUSU SEN KYŪSYŪ BUNSEKI HŌ	the analytical method in which the X-ray absorption in a substance is utilized	X-ray absorption spectrometry
19	X線フィルター	EKKUSU SEN HIRUTĀ	the thin film to take out the x-ray in the region of energy to be required mainly by utilizing absorption near edge	X-ray filter
20	X線マイクロアナリ シス, XMA	EKKUSU SEN MAIKURO ANARISISU, EKKUSU EMU Ê	the method of analyzing the composition in micro region by the X-ray dispersion generated by irradiating of electron beam to the surface of sample	X-ray micro analysis, XMA
21	エネルギー分散方式	ENERUGĪ BUNSAN HOSIKI	a method to make a spectrum (energy selection) by selecting electric signal proportional to the X-ray energy without using an optical dispersion method	energy dispersive method
22	エバネッセント光	EBANESSENTO KŌ	the light wave of which the energy is damped exponentially with the distance from the boundary surface, such as the light wave in the case of total reflection	evanescent light
23	FTIR	EHU TĪ AI ÂRU	the infrared spectrophotometer to measure spectral spectrum by FT (Fourier transform) infrared analysis method It is the same as the Fourier transform infrared spectrometer.	Fourier transform infrared spectrometer, FTIR
24	エバネッセント波	EBANESSENTO HA	a) the light wave which oozes to the lower refractive index of medium at the approximate distance of wavelength in total reflection b) the light wave which oozes at the approximate distance of wavelength from the smaller opening than wavelength	evanescent wave
25	エリブソメトリー	ERIPUSOMETORĪ	the method in which the film thickness, refractive index and the like are measured based on the polarization state generated by the interference of the light reflected on the surface of thin film and the light reflected on the back surface of film by irradiating polarized radiation to sample	ellipsometry

No.	Japanese term	Reading	Definition	English equivalent (informative)
26	L 系列 X 線	ERU KEIRETU EKKUSU SEN	of the X-rays inherent to atoms, a group of X-rays generated by transition of electrons belonging to the atom to the vacant orbit of the L shell	L-series X-ray
27	炎光光度計	ENKÔ KÔDO KEI	an instrument to measure the intensity of emission spectrum of analyte by using flame as excitation source	flame photometer
28	炎光光度検出器, FPD (ガスクロマトグラフ ファイアーの)	ENKÔ KÔDO KENSYUTU KI, EHU PÎ DÎ (GASU KUROMATOGURAHÎ NO)	the detector for gas chromatograph which detects the organic compound containing sulfur, phosphor and tin in high sensitivity and selectively by decomposing the component eluted from column in continuous basic hydrogen flame or in intermittent hydrogen flame to produce chemiluminescence	flame photometric detector, FPD (of gas chromatography)
29	炎光光度分析法, フレイム分析法	ENKÔ KÔDO BUNSEKI HÔ, HURÊMU BUNSEKI HÔ	the method for measuring the intensity of emission spectrum of analyte by flame photometer by using flame as the excitation source and analyzing it	flame photometry
30	炎色反応	ENSYOKU HANNÔ	the reaction in which flame emits the characteristic color due to the component contained when sample is put in flame	flame reaction
31	遠赤外線	EN SEKIGAI SEN	the infrared ray which is longer than approximately 25 µm in wavelength	far infrared radiation
32	円二色性, 円偏光二色性, CD	EN NISYOKU SEI, EN HENKÔ NISYOKU SEI, SÎ DÎ	the phenomena in which substance indicates different absorptions to the left and right circularly polarized radiations that are equal in wavelength NOTE: It is utilized for deciding the stereostructure or conformation of asymmetric molecule.	circular dichroism, CD
33	円二色性検出器 (液体 クロマトグラフ ファイアーの)	EN NISYOKU SEI KENSYUTU KI (EKITAI KUROMATOGURAHÎ NO)	the detector for liquid chromatography to detect the optically active component by utilizing circular dichroism	circular dichroism detector (of liquid chromatography)

No.	Japanese term	Reading	Definition	English equivalent (informative)
34	円二色性分光光度計	EN NISYOKU SEI BUNKÔ KÔDO KEI	an instrument to measure the circular dichroism spectrum of sample in the region from ultraviolet ray to infrared ray	circular dichroism spectrometer
35	オパールガラス法	OPÂRU GARASU HÔ	the method for measuring in which opal glass (a milky white glass which diffuses and transmits light) plate with high scattering property is placed in front of the sample for obtaining the spectrum of sample in good precision	opal glass method
36	回折	KAISETU	a) the phenomenon in which light does not travel straight but goes around to the shade part of substance b) the phenomenon in which light does not travel straight but spreads to travel at the luminous flux of which the intensity is not uniform in section	diffraction
37	回折角	KAISETU KAKU	an angle where the diffraction light is made to the normal line of the surface of diffraction grating (acute angle)	angle of diffraction
38	回折格子	KAISETU KÔSI	a dispersive device utilizing the diffraction effect of light	diffraction grating
39	回折効率	KAISETU KÔRITU	the rate of taking out as diffraction light among the light entering the diffraction grating	diffraction efficiency
40	化学発光検出器 (液体クロマトグラフイ ーの)	KAGAKU HAKKÔ KENSYUTU KI (EKITAI KUROMATOGURAHÎ NO)	the detector for liquid chromatography to detect the component by utilizing the luminescence due to chemical reaction or biological reaction	chemiluminescence detector (of liquid chromatography)
41	化学発光法	KAGAKU HAKKÔ HÔ	a method to utilize the secondary light discharged when the chemical species excited by the energy discharged by chemical reaction is transited to a low energy sublevel	chemiluminescence method
42	拡散反射法	KAKUSAN HANSYA HÔ	the method for obtaining the reflectance from the reflected light diffused	diffused reflection method

No.	Japanese term	Reading	Definition	English equivalent (informative)
43	可視光, 可視光線	KASI KÔ, KASIKÔ SEN	the radiation which is capable of causing the visible sense by entering the eye NOTE: When it is used in the concept of light source, it is called visible light. Generally, the limit of short wavelength in the range of wavelength for visible radiation exists from 360 nm to 400 nm and the limit of long wavelength exists from 760 nm to 830 nm.	visible radiation, light
44	可視スペクトル	KASI SUPEKUTORU	of the radiation of electromagnetic waves, the spectrum in the wavelength zone of approximately 400 nm to 830 nm	visible spectrum
45	ガスセル	GASU SERU	a vessel for containing gas samples for measuring optical absorption	gas absorption cell, gas cell
46	加分散形トリプルモノクロメーター	KABUNSAANGATA TORIPURU MONOKUROMÊTÂ	a high-resolution, three-stage constructional spectroscope with the wavelength dispersion function at the rear stage of additive monochromator	additive triple monochromator
47	加分散形分光器	KABUNSAANGATA BUNKÔ KI	the high-resolution spectroscope having the wavelength dispersion both in the first and the second stages	additive monochromator
48	還元炎	KANGEN EN	chemical flames which produce a reducing atmosphere due to excessive combustible gas	reducing flame
49	還元気化法	KANGEN KIKÂ HÔ	a method to make the analyte component in a sample solution a gas state by reduction	vapor generation by reduction
50	干渉	KANSYÔ	a) a phenomenon in which errors are generated in analyzed values due to the influence of coexisting substances and the like in analytical atomic spectrometry NOTE: There are spectral interference, physical interference, chemical interference, ionization interference, etc. b) phenomenon in which two or more light waves, crossing each other at the same point, strengthen or weaken each other	interference

No.	Japanese term	Reading	Definition	English equivalent (informative)
51	干渉計	KANSYÔ KEI	an instrument to measure the optical path difference and the like by utilizing the interference of light NOTE: There are Michelson interferometer, Mach-Zehnder interferometer, Fizeau interferometer and the like.	interferometer
52	干渉顕微鏡	KANSYÔ KENBIKYÔ	the microscope to observe the micro irregularities on the surface of substance, the phase difference of inside and the like by utilizing interference	interference microscope
53	干渉図形	KANSYÔ ZUKEI	the diagram in which the signals from interferometer and the like are indicated such that the optical path difference of light is plotted on the abscissa and the intensity of light is plotted on the ordinate NOTE: It is also called INTÂ HEROGURAMU.	interferogram
54	干渉性 (光の)	KANSYÔ SEI (HIKARI NO)	the property of light wave capable of interfering mutually	coherence (of light)
55	干渉フィルター	KANSYÔ HIRUTÂ	the optical filter to take out the light of the required wavelength by utilizing the interference function of light of thin film or its multiple layer of membrane	interference filter
56	干渉分光法	KANSYÔ BUNKÔ HÔ	a method to obtain a spectrum by applying Fourier reverse transforms to the signal obtained by an interferometer	interferometry
57	キセノンランプ	KISENON RANPU	a discharge tube utilizing arc discharge in xenon gas sealed at high pressure NOTE: It gives strong continuous spectra from ultraviolet to the near infrared.	xenon lamp
58	輝線	KI SEN	a) the spectrum of energy irradiated, being a bright line appearing in radiated spectra, when the excited atoms or ions transit to the ground state b) a line emitted from atom	emission line, bright line

No.	Japanese term	Reading	Definition	English equivalent (informative)
59	逆線分散	GYAKUSEN BUNSAN	one method of expression of the degree of dispersion of spectroscopes When the light of the wavelength difference $d\lambda$ opens a distance of dx on the focal plane of the spectroscope, it is indicated as $d\lambda/dx$.	reciprocal linear dispersion
60	キャリアーガス	KYARIYÁ GASU	gas to introduce a sample solution or its spray or vapor component of the analyte to the atomizing part, plasma, etc.	carrier gas
61	吸光光度検出器	KYŪKŌ KŌDO KENSYUTU KI	The detector to measure the absorbance change of light in wavelength from approximately 200 μm to 2 500 μm passed through a measuring cell	molecular absorption detector
62	吸光光度分析法	KYŪKŌ KŌDO BUNSEKI HŌ	a method to perform qualitative and quantitative determinations by measuring the absorption of light at a specific wavelength of approximately 200 nm to 2 500 nm	molecular absorption spectrometry
63	吸光度	KYŪKŌ DO	a numerical value in which the degree of light absorbed from substance is expressed in the logarithm of the ratio of the intensity of light after absorbed to the intensity of light before absorbing	absorbance
64	吸収 (光の)	KYŪSYŪ (HIKARI NO)	a phenomenon wherein the radiation of electromagnetic waves passing through a sample substance reduces the intensity of part of the electromagnetic waves or over the whole wavelength zone of the sample substance	absorption (of light)
65	吸収曲線	KYŪSYŪ KYOKUSEN	a graphical indication of the absorption size, as a function of energy, wavelength, etc.	absorption curve
66	吸収曲線の肩	KYŪSYŪ KYOKUSEN NO KATA	the short inflection part near the horizon not indicating the maximum or the minimum on the absorption curve	shoulder of absorption curve
67	吸収極大	KYŪSYŪ KYOKUDAI	the part indicating the maximum absorption in the wavelength zone of the absorption band	absorption maximum
68	吸収コントラスト	KYŪSYŪ KONTORASUTO	the contrast of the intensity of transmitted light which is changed corresponding to the amount of absorbed light of sample NOTE: It is used as compared with phase contrast.	absorption contrast

No.	Japanese term	Reading	Definition	English equivalent (informative)
69	吸収スペクトル	KYŪSYŪ SUPEKUTORU	the spectrum obtained by absorption of a part of radiation at a given wavelength range of electromagnetic waves by a sample substance	absorption spectrum
70	吸収セル	KYŪSYŪ SERU	the container for containing the sample, reference component and the like for measuring the absorption of light	absorption cell
71	吸収バンド	KYŪSYŪ BANDO	a wavelength band indicating the absorption with a broadening in the absorption spectra	absorption band
72	共鳴線	KYŌMEI SEN	the line spectrum radiated when an atom is excited by absorbing light from outside and again returns to the original state	resonance line
73	キラリティー, 掌性, 対掌性	KIRARITĪ, SYŌ SEI, TAISYŌ SEI	the property of a certain molecular structure in which its mirror image can not be superimposed on its original object	chirality
74	近赤外線	KIN SEKIGAI SEN	the infrared radiation which is shorter than approximately 2 500 nm in wavelength	near infrared radiation
75	近赤外分光光度計	KIN SEKIGAI BUNKŌ KŌDO KEI	the spectrometer of which the measurement object is generally the wavelength in near-infrared region from approximately 700 nm to 2 500 nm	near-infrared spectrometer
76	近赤外分光分析法	KIN SEKIGAI BUNKŌ BUNSEKI HŌ	the method in which the spectra in the region of near-infrared are measured and the qualitative and quantitative determination of substance is carried out	near-infrared spectrometry
77	近接線	KINSETU SEN	the line spectrum adjacent to the analytical line	neighboring line
78	近接場光学顕微鏡, NSOM, SNOM	KIN SETUZYŌ KŌGAKU KENBIKYŌ, ENU ESU Ō EMU, ESU ENU Ō EMU	the optical microscope which realizes the resolution exceeding the wavelength of light by utilizing the non-radiative evanescent field localized in the neighborhood of the surface of substance	near-field scanning optical microscopy, NSOM, scanning near-field optical microscope, SNOM

No.	Japanese term	Reading	Definition	English equivalent (informative)
79	近接場分光分析法	KIN SETUZYÔ BUNKÔ BUNSEKI HÔ	the method in which the qualitative and quantitative determination of the substance in the neighborhood of surface or in micro region is carried out by utilizing the evanescent wave	near-field spectrometry
80	屈折	KUSSETU	the phenomenon in which the propagation direction is changed corresponding to the change of phase velocity when light travels in the optically unbalanced medium or enters in the boundary between the different mediums without changing the frequency of monochromatic light component	refraction
81	屈折計	KUSSETU KEI	the instrument to measure the refractive index of substance	refractometer
82	屈折率	KUSSETU RITU	the ratio of the phase velocity of light in vacuum to the phase velocity of light in medium NOTE: The symbol of quantity is expressed in <i>n</i> .	refractive index
83	グロー放電発光分光分析法	GURÔ HÔDEN HAKKÔ BUNKÔ BUNSEKI HÔ	the emission spectrochemical analysis by using glow discharge plasma as the light source	glow discharge atomic emission spectrometry
84	K 系列 X 線	KÊ KEIRETU EKKUSU SEN	of the X-rays inherent to an atom, a group of X-rays generated by transition of electrons in a vacant orbit of the K shell	K-series X-ray
85	蛍光	KEIKÔ	the light generated when a molecule is excited to the excitation singlet state by light and returns to the ground state	fluorescence
86	蛍光インサインダイゼーション, FISH	KEIKÔ INSAITYÛ HAIBURIDAIZËSYON, EHU AI ESU EITI	the observation of the position of presence or distribution condition of target gene or its transcript under fluorescent microscope by hybridizing the fluorescence labelled DNA probe with the sample keeping the form of cell or chromosome	fluorescence in situ hybridization, FISH
87	蛍光 X 線	KEIKÔ EKKUSU SEN	of the secondary X-rays excited by X-ray, γ -ray, etc. those X-rays reflecting the internal energy of atoms and not scattered X-ray	fluorescent X-ray
88	蛍光 X 線分析法, XRF	KEIKÔ EKKUSU SEN BUNSEKI HÔ, EKKUSU ARU EHU	a method to perform qualitative and quantitative determination of a substance by measuring fluorescent X-rays	X-ray fluorescence analysis, XRF

No.	Japanese term	Reading	Definition	English equivalent (informative)
89	蛍光共鳴エネルギー移動, FRET	KEIKÔ KYÔMEI ENERUGÎ IDÔ, EHU ÂRU Î TÎ	the phenomenon in which one of the two kinds of fluorophores, in close proximity to each other, absorbs the fluorescence of the other, and the absorbing fluorophore emits fluorescence	fluorescence resonance energy transfer, FRET
90	蛍光顕微鏡	KEIKÔ KENBIKYÔ	the microscope to observe the sample by the fluorescence generated from sample (e.g. a fluorescence dyed sample) when the light of short wavelength is irradiated	fluorescence microscope
91	蛍光抗体法	KEIKÔ KÔTAI HÔ	the analytical method or dyeing method in which the antibody labelled by fluorescent substance is used	fluorescent antibody method
92	蛍光光度計	KEIKÔ KÔDO KEI	the instrument to measure the intensity of fluorescence by applying the optical filter on both sides of the wavelength selection part, i.e. at the excitation side and the emission side	fluorometer
93	蛍光スベクトル	KEIKÔ SUPEKUTORU	spectrum obtained by fixing the wavelength of the excitation side and plotting the observed intensity of fluorescence against the wavelength of the emission side	fluorescence spectrum
94	蛍光相関分光法, FCS	KEIKÔ SÔKAN BUNKÔ HÔ, EHU SÎ ESU	the method in which the number, size, shape, etc. of molecules are measured by utilizing the Brownian movement of fluorescent molecules in solution NOTE: It is used as a simple and convenient method for analyzing and detecting the minute amount of biopolymer with high sensitivity.	fluorescence correlation spectroscopy, FCS
95	蛍光標識法	KEIKÔ HYÔSIKI HÔ	the method for combining the fluorescent substance with the molecule under analysis for raising the sensitivity of detection	fluorescence labeling method
96	蛍光分光光度計	KEIKÔ BUNKÔ KÔDO KEI	the instrument to measure the intensity of fluorescence by using a monochromator at either the wavelength selection part of excited light side or fluorescence side and an optical filter is used at the other side	fluorescence spectro (photo) meter
97	蛍光分光分析法	KEIKÔ BUNKÔ BUNSEKI HÔ	a method to perform qualitative and quantitative determination of a substance by measuring fluorescent spectra or excited spectra	fluorescence spectrometry

No.	Japanese term	Reading	Definition	English equivalent (informative)
98	蛍量子収率	KEIKÔ RYÔSI SYÛRITU	the ratio of the number of photons which a molecule absorbs to the number of photons which it emits as fluorescence The amount being one at maximum.	fluorescence quantum yield
99	傾斜比法 (吸光光度分析法の)	KEISYAHU HÔ (KYÛKÔ KÔDO BUNSEKI HÔ NO)	a method to obtain the composition ratio ($m:n$), from the slope ratio of the slope of a relation line of absorbance obtained by changing the concentration of A under the presence of excessive M when generating the compound M_mA_n by M and A and the concentration of A, to the slope of relation line of absorbance obtained by changing the concentration of M under the presence of excessive A and the concentration of M	slope ratio method (of molecular absorption spectrometry)
100	原子吸光分光分析法, 原子吸光分析法	GENSI KYÛKÔ BUNKÔ BUNSEKI HÔ, GENSI KYÛKÔ BUNSEKI HÔ	a method to obtain the concentration of the analyte element by atomizing the analyte element contained in the sample by flame, electric heating or chemical reaction, and by measuring the absorbance of the atomic vapor layer NOTE: There are the flame atomic absorption spectrometry, electrothermal type atomic absorption spectrometry and cold vapor type atomic absorption spectrometry.	atomic absorption spectrometry
101	原子吸光光度計	GENSI KYÛKÔ KÔDO KEI	the instrument by which the analyte element is atomized and the absorption of light by its atom vapor is measured	atomic absorption spectrometer
102	原子吸光分光光度計	GENSI KYÛKÔ BUNKÔ KÔDO KEI	the atomic absorption spectrometer in which a monochromator is used at the wavelength selection part	atomic absorption spectrophotometer
103	原子蛍光分光法	GENSI KEIKÔ BUNKÔ HÔ	spectrometry to detect the secondary light (atomic fluorescence) to be discharged when excited atoms transit to a low energy sub-level	atomic fluorescence spectrometry
104	原子スペクトル	GENSI SUPEKUTORU	the spectrum of electromagnetic wave radiated or absorbed by atoms or ions	atomic spectrum
105	原子スペクトル分析法	GENSI SUPEKUTORU BUNSEKI HÔ	a method to perform qualitative and quantitative determination of elements by measuring the atomic spectrum	analytical atomic spectrometry

No.	Japanese term	Reading	Definition	English equivalent (informative)
106	顕微蛍光法	KENBI KEIKÔ HÔ	a fluorescence observation and analysis method performed in a microscopic visual field	microscopic fluorometry
107	顕微赤外分光法	KENBI SEKIGAI BUNKÔ HÔ	a method to perform spectrometry of micro zone in infrared zone using a microscope constituted by a reflection optical elements in a total system NOTE: This is capable of measuring the micro zone to the degree of 10 µm in both reflection and transmission measurements in combination with a Fourier transform infrared spectrophotometer.	infrared microspectrometry
108	光学異性	KÔGAKU ISEI	the characteristics in which two substances are the same in general physical or chemical properties but opposite in the optical rotation	optical isomerism
109	光学活性	KÔGAKU KASSEI	the property of the molecule having chirality to turn the plane of polarization of incident light	optical activity
110	光学純度	KÔGAKU ZYUNDO	the ratio of excess of one of the two optical isomers with respect to the other, in a mixture composed of a pair of enantiomers, which is expressed as the purity NOTE: It is normally expressed by the mirror image excess rate, i.e. a percentage obtained by dividing the excess amount of one optical isomer by the whole amount.	optical purity
111	光学対掌体, キラル化合物	KÔGAKU TAISYÔ TAI, KIRARU KAGÔBUTU	respective stereo-isomers in a pair, where the chemical structure of one is a mirror image of the other NOTE: The respective stereo-isomers are optically active.	enantiomer, chiral compound
112	光学的零位法	KÔGAKUTEKI RÊI HÔ	a method to obtain the transmittance from the displacement resulting when the optical attenuator set at the contrast side is moved so that the light quantity of sample photometry intensity and that of contrast side photometry intensity are equal in a spectrochemical analysis appliance of plural light beam system	optical null method