

Commonly Used Abbreviations and Acronyms

Abbreviations defined here, do need not be defined in the text of the manuscript. No Abbreviations should be used in the article title or keywords

Abbreviation	Full definition
μ TAS	chip-technology
2-DE	two-dimensional gel electrophoresis
A	absorbance
AAS	atomic absorption spectrometry
AC	affinity chromatography
ACE	affinity capillary electrophoresis
AES	atomic emission spectrometry
APCI	atmospheric-pressure chemical ionization
APCI-IT-MS-MS	atmospheric-pressure chemical ionization ion trap tandem mass spectrometry

API atmospheric pressure ionization

CAF-IEF carrier ampholyte-free isoelectric focusing

CCC countercurrent chromatography

CD cyclodextrin

CE capillary electrophoresis

CEC capillary electrochromatography

CE-MS capillary electrophoresis mass spectrometry

CF chromatofocusing

CGE capillary gel electrophoresis

CGE-LIF capillary gel electrophoresis with laser-induced fluorescence

CID collision-induced dissociation

cIEF, CIEF capillary isoelectric focusing

CMC critical micelle concentration

CPC	centrifugal partition chromatography
CV	coefficient of variation
CVAAS	cold vapour atomic absorption spectrometry
CW	continuous wave
CZE	capillary zone electrophoresis
DAD	diode array detector
dc	direct current
DELFLIA	dissociation enhanced lanthanide fluorescence immunoassay
DMF	N,N-dimethylformamide
DMSO	dimethyl sulfoxide
DNA	deoxyribonucleic acid
DRIFT	diffuse reflectance infrared Fourier transform spectroscopy
ECD	electron capture detector

ECL enhanced chemiluminescence

ED electrochemical detection

EDTA ethylenediaminetetraacetic acid

EGTA ethylene glycol-bis(β -aminoethylether)-N,N,N',N'-tetraacetic acid

EKC electrokinetic chromatography

ELISA enzyme-linked immunosorbent assay

ELSD evaporative light scattering detection

emf electromotive force

EOF electroosmotic flow

ESI electrospray ionization

ETAAS electrothermal atomic absorption spectrometry

FAAS flame atomic absorption spectrometry

FAB fast atom bombardment

FFF	field flow fractionation
FIA	flow-injection analysis
FID	flame ionization detector
FIGE	field inversion gel electrophoresis
FIR	far infrared
FMASE	focused microwave-assisted solvent extraction
FPD	flame photometric detector
FPLC	fast protein liquid chromatography
FT-ICR	Fourier transform ion cyclotron resonance (mass spectrometry)
FTIR	Fourier-transform infrared spectrometry
GC	gas chromatography
GC-MS	gas chromatography mass spectrometry
GLC	gas-liquid chromatography

HDC	hydrodynamic chromatography
HGAAS	hydride generation atomic absorption spectrometry
HILIC	hydrophilic interaction chromatography
HPCE	high-performance capillary electrophoresis
HPTLC	high pressure thin layer chromatography
HRGC	high resolution gas chromatography
HSA	human serum albumin
HSCCC	high speed countercurrent chromatography
HS-GC	headspace gas chromatography
HS-SME	headspace-solvent microextraction
HS-SPMCE	headspace solidphase microcolumn extraction
HTLC	high temperature liquid chromatography
IA	immunoaffinity

IC	ion chromatography
ICP-MS	inductively coupled plasma mass spectrometry
ID (id, i.d.)	inside diameter
IEC	ion exchange chromatography
IEF	isoelectric focusing
im	intramuscular
IP	ion-pair
IPG	immobilized pH gradient
IR	infrared
IS (I.S., i.s.)	internal standard
ISE	ion selective electrode
IT	ion trap
IT-MS	ion trap mass spectrometry

ITP isotachopheresis

iv intravenous

LC (HPLC) high-performance liquid chromatography

LC-MS liquid chromatography mass spectrometry

LED light emitting diode

LIF laser-induced fluorescence

LLC liquid-liquid chromatography

LOD limit of detection

LOQ limit of quantitation (quantification)

mAb monoclonal antibody

MAC membrane affinity chromatography

MALDI matrix-assisted laser desorption ionization

MALDI-MS matrix-assisted laser desorption ionization-mass spectrometry

MBC	moving bed chromatography
MECC	microemulsion electrokinetic capillary chromatography
MEKC	micellar electrokinetic capillary chromatography
MES	2-(N-morpholino)ethanesulfonic acid
MIP	molecular imprinted polymers
MLC	micellar liquid chromatography
MOPS	3-(N-morpholino)propanesulfonic acid
MS	mass spectrometry
MS-MS	tandem mass spectrometry
MSn	multistage mass spectrometry
NACE	non-aqueous capillary electrophoresis
NC	nitrocellulose
NEPHGE	nonequilibrium pH gradient electrophoresis

NIR	near infrared
NMR	nuclear magnetic resonance
NP-LC	normal-phase liquid chromatography
OD	optical density
OD (o.d, od)	outside diameter
OES	optical emission spectrometry
OFAGE	orthogonal field alternation gel electrophoresis
OPCE	open tubular capillary electrophoresis
PAD	photodiode array detector
PAGE	polyacrylamide gel electrophoresis
PAH	polyaromatic hydrocarbon(s)
PC	personal computer
PDMS	polydimethylsiloxane

PEG	polyethylene glycol
PFGE	pulsed-field gel electrophoresis
pl	isoelectric point
PLOT	porous-layer open-tubular column (gc)
ppb	parts per billion (10 ⁹ , ng g ⁻¹)
ppm	parts per million (10 ⁶ , µg g ⁻¹)
ppt	parts per trillion (10 ¹² , pg g ⁻¹)
PTMs	post-translational modifications
PVC	poly(vinyl chloride)
PVP	polyvinylpyrrolidone
QA	quality assurance
QC	quality control
QSRR	quantitative structure-retention relationships

RIA radioimmunoassay

RIMS resonance ionization mass spectrometry

RNA ribonucleic acid

RP reversed phase

RP-LC reversed phase liquid chromatography

rpm revolutions per minute

RSD relative standard deviation

S/N signal-to-noise ratio

SD standard deviation

SDS sodium dodecyl sulfate

SDS PAGE sodium dodecyl sulphate polyacrylamide gel electrophoresis

SEC size exclusion chromatography

SEM standard error of the mean

SEM	scanning electron microscopy
SFC	supercritical fluid chromatography
SFE	supercritical fluid extraction
SIM	selected ion monitoring
SIMS	secondary-ion mass spectrometry
SPE	solid phase extraction
SPMCE	solidphase microcolumn extraction
SPME	solid-phase microextraction
TD	thermal desorption
TFA	trifluoroacetic acid
TGA	thermogravimetric analysis
TGGE	temperature gradient gel electrophoresis
THF	tetrahydrofuran

TIMS thermal ionization mass spectrometry

TLC thin layer chromatography

TMS trimethylsilane

TOF time-of-flight

Tris (TRIS) tris(hydroxymethyl)aminomethane

UPLC ultra performance liquid chromatography

UV ultraviolet

UV/VIS ultraviolet-visible

VOCs volatile organic compounds

VWD variable wavelength detection