

AP Physics C: Electricity and Magnetism

Glossary · 词汇表 · every term in the course, A–Z

English	中文	Pinyin
always perpendicular	垂直	chuí zhí
 ammeter	电流表	diàn liú biǎo
 amperes	安培	ān péi
 Amperian loop	安培环路	ān péi huán lù
 Ampère's law	安培定律	ān péi dìng lǜ
angular frequency	角频率	jiǎo pín lǜ
 area vector	面积矢量	miàn jī shǐ liàng
atomic magnetic dipoles	原子磁偶极子	yuán zǐ cí ǒu jí zǐ
attract	吸引	xī yǐn
back emf	反电动势	fǎn diàn dòng shì
Biot-Savart law	毕奥-萨伐尔定律	bì ào - sà fá ěr dìng lǜ
 Biot-Savart law	毕奥-萨伐尔定律	bì ào - sà fá ěr dìng lǜ
branch current	支路电流	zhī lù diàn liú
 capacitance	电容	diàn róng
 capacitor	电容器	diàn róng qì
 centripetal force	向心力	xiàng xīn lì
charge density	电荷密度	diàn hè mì dù
charge distribution	电荷分布	diàn hè fēn bù
 charging by conduction	传导起电	chuán dǎo qǐ diàn
 charging by friction	摩擦起电	mó cā qǐ diàn
 charging by induction	感应起电	gǎn yìng qǐ diàn

English	中文	Pinyin
 circuit diagram	电路图	diàn lù tú
closed circuit	闭合电路	bì hé diàn lù
closed surface	闭合曲面	bì hé qū miàn
 compass	指南针	zhǐ nán zhēn
 concentric circles	同心圆	tóng xīn yuán
 conductor	导体	dǎo tǐ
 conservation of charge	电荷守恒	diàn hè shǒu héng
 conservation of energy	能量守恒	néng liàng shǒu héng
 conservative force	保守力	bǎo shǒu lì
conserved	守恒	shǒu héng
 continuous charge distribution	连续电荷分布	lián xù diàn hè fēn bù
 conventional current	常规电流	cháng guī diàn liú
coulomb	库仑	kù lún
 Coulomb's law	库仑定律	kù lún dìng lǜ
 cross-sectional area	横截面积	héng jié miàn jī
 current density	电流密度	diàn liú mì dù
 cylindrical symmetry	柱对称	zhù duì chèn
 diamagnetic	抗磁性	kàng cí xìng
 dielectric	电介质	diàn jiè zhì
 dielectric constant	介电常数	jiè diàn cháng shù
 differential equation	微分方程	wēi fēn fāng chéng
direction	方向	fāng xiàng
 drift velocity	漂移速度	piāo yí sù dù
 eddy currents	涡电流	wō diàn liú

English	中文	Pinyin
 electric charge	电荷	diàn hè
 electric current	电流	diàn liú
 electric field	电场	diàn chǎng
electric field is zero	电场为零	diàn chǎng wèi líng
 electric flux	电通量	diàn tōng liàng
 electric potential	电势	diàn shì
 electric potential energy	电势能	diàn shì néng
electric power	电功率	diàn gōng lǜ
 electromagnetic waves	电磁波	diàn cí bō
electromagnetism	电磁学	diàn cí xué
electron volt	电子伏特	diàn zǐ fú tè
 electrons	电子	diàn zǐ
 electroscope	验电器	yàn diàn qì
 electrostatic equilibrium	静电平衡	jìng diàn píng héng
 electrostatic shielding	静电屏蔽	jìng diàn píng bì
 elementary charge	基本电荷	jī běn diàn hè
 emf	电动势	diàn dòng shì
enclosed	封闭	fēng bì
energy	能量	néng liàng
energy density	能量密度	néng liàng mì dù
energy stored	储存的能量	chǔ cún de néng liàng
energy transfer	能量转移	néng liàng zhuǎn yí
= equipotential	等势面	děng shì miàn

English	中文	Pinyin
 equipotential surface	等势面	děng shì miàn
 equivalent capacitance	等效电容	děng xiào diàn róng
 equivalent resistance	等效电阻	děng xiào diàn zǔ
every distinct pair	每一对	měi yī duì
external agent	外力	wài lì
 Faraday cage	法拉第笼	fǎ lā dì lóng
 Faraday's law	法拉第定律	fǎ lā dì dìng lǜ
 ferromagnetic	铁磁性	tiě cí xìng
 field	场	chǎng
 field lines	电场线	diàn chǎng xiàn
fundamental property	基本属性	jī běn shǔ xìng
 Gauss's law	高斯定律	gāo sī dìng lǜ
 Gaussian surface	高斯面	gāo sī miàn
 generator	发电机	fā diàn jī
 gradient	梯度	tī dù
gravitational	重力	zhòng lì
 ground	接地	jiē dì
 Hall effect	霍尔效应	huò ěr xiào yìng
 henries	亨利	hēng lì
 ideal battery	理想电池	lǐ xiǎng diàn chí
ideal emf	理想电动势	lǐ xiǎng diàn dòng shì
 induced charge	感应电荷	gǎn yìng diàn hè
induced charges	感应电荷	gǎn yìng diàn hè
 induced current	感应电流	gǎn yìng diàn liú

English	中文	Pinyin
induced emf	感应电动势	gǎn yìng diàn dòng shì
 inductance	电感	diàn gǎn
induction	感应	gǎn yìng
 inductor	电感器	diàn gǎn qì
 insulator	绝缘体	jué yuán tǐ
 integrate	积分	jī fēn
integrating	积分	jī fēn
 internal resistance	内阻	nèi zǔ
 inverse-square	平方反比	píng fāng fǎn bǐ
 isoline	等值线	děng zhí xiàn
Joule heating	焦耳热	jiāo ěr rè
 junction	节点	jié diǎn
 kinetic energy	动能	dòng néng
 Kirchhoff's junction rule	基尔霍夫节点定则	jī ěr huò fū jié diǎn dìng zé
 Kirchhoff's loop rule	基尔霍夫回路定则	jī ěr huò fū huí lù dìng zé
 LC circuit	LC 电路	LC diàn lù
 Lenz's law	楞次定律	léng cì dìng lǜ
 linear charge density	线电荷密度	xiàn diàn hè mì dù
long straight wire	长直导线	zhǎng zhí dǎo xiàn
 magnetic dipole	磁偶极子	cí ǒu jí zǐ
 magnetic domains	磁畴	cí chóu
 magnetic field	磁场	cí chǎng
 magnetic field lines	磁感线	cí gǎn xiàn

English	中文	Pinyin
 magnetic flux	磁通量	cí tōng liàng
magnetic force	磁力	cí lì
 magnetic monopoles	磁单极子	cí dān jí zǐ
 magnetic permeability	磁导率	cí dǎo lǜ
 Maxwell's equations	麦克斯韦方程组	mài kè sī wéi fāng chéng zǔ
 motional emf	动生电动势	dòng shēng diàn dòng shì
negative	负	fù
neutral	中性	zhōng xìng
no work	不做功	bù zuò gōng
 normal	法线	fǎ xiàn
 Ohm's law	欧姆定律	ōu mǔ dìng lǜ
 ohmic	欧姆性	ōu mǔ xìng
one energy-conservation equation	能量守恒方程	néng liàng shǒu héng fāng chéng
open circuit	断路	duàn lù
 oscillates	振荡	zhèn dòng
outer surface	外表面	wài biǎo miàn
outward normal	法线	fǎ xiàn
 parallel	并联	bìng lián
 parallel-plate capacitor	平行板电容器	píng xíng bǎn diàn róng qì
 paramagnetic	顺磁性	shùn cí xìng
per unit charge	每单位电荷	měi dān wèi diàn hè
 permittivity of free space	真空介电常数	zhēn kōng jiè diàn cháng shù
 perpendicular	垂直	chuí zhí

English	中文	Pinyin
 planar symmetry	平面对称	píng miàn duì chèn
• point charges	点电荷	diǎn diàn hè
 polarization	极化	jí huà
 polarized	极化	jí huà
positive	正	zhèng
 potential difference	电势差	diàn shì chà
principle of superposition	叠加原理	dié jiā yuán lǐ
 projectile motion	抛体运动	pāo tǐ yùn dòng
 quantized	量子化	liàng zǐ huà
 RC circuit	RC 电路	RC diàn lù
redistributes	重新分布	chóng xīn fēn bù
repel	排斥	pái chì
 resistance	电阻	diàn zǔ
 resistivity	电阻率	diàn zǔ lǜ
resistors	电阻器	diàn zǔ qì
retarding force	阻碍力	zǔ ài lì
 right-hand rule	右手定则	yòu shǒu dìng zé
 RL circuit	RL 电路	RL diàn lù
# scalar	标量	biāo liàng
 series	串联	chuàn lián
short circuit	短路	duǎn lù
sign	符号	fú hào
sign conventions	符号约定	fú hào yuē dìng

English	中文	Pinyin
 simple harmonic motion	简谐运动	jiǎn xié yùn dòng
 solenoid	螺线管	luó xiàn guǎn
source of emf	电动势源	diàn dòng shì yuán
speed	速率	sù lǜ
 spherical symmetry	球对称	qiú duì chèn
 steady state	稳态	wěn tài
 superposition	叠加	dié jiā
 surface charge density	面电荷密度	miàn diàn hè mì dù
 surface integral	面积分	miàn jī fēn
 symmetry	对称性	duì chèn xìng
 system	系统	xì tǒng
 tangent	相切	xiāng qiè
temperature	温度	wēn dù
 terminal voltage	端电压	duān diàn yā
 test charge	检验电荷	jiǎn yàn diàn hè
 time constant	时间常数	shí jiān cháng shù
= uniform	均匀	jūn yún
vector	矢量	shǐ liàng
 vector field	矢量场	shǐ liàng chǎng
 velocity selector	速度选择器	sù dù xuǎn zé qì
 volt	伏特	fú tè
voltage	电压	diàn yā
 voltmeter	电压表	diàn yā biǎo
 volume charge density	体电荷密度	tǐ diàn hè mì dù

English	中文	Pinyin
well	势阱	shì jǐng
 work	功	gōng
work-energy theorem	功能定理	gōng néng dìng lǐ