# 等离激元蒸汽发生器

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| **答案纸** | 国家代码 (2 个字母) |   | 学生代码 (1-5) |   |

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| 2.1 | 体积 $V=$ 质量 $M=$ 数量 $N=$ 电荷密度 $ρ=$ 浓度 $n=$ 带电量 $Q=$ 电子云的质量 $m\_{0}=$ | 0.7 |

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| 2.2 | 推出$E=A (ρ/ε\_{0}) x\_{d}$和系数 $A=$  | 1.2 |

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| 2.3 | $F=$$W\_{el}=$  | 1.0 |

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| 2.4 | 位移 $x\_{p}=$ 总带电量 $-ΔQ=$  | 0.6 |

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| 2.5a | 表达式 $C=$  数值 $C=$  | 0.7 |
| 2.5b | 表达式$V\_{0}=$ | 0.4 |

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| 2.6a | 表达式 $W\_{kin}=$ 表达式$I=$  | 0.7 |
| 2.6b | 表达式$L=$ 数值 $L=$  | 0.5 |

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| 2.7a | 表达式$ω\_{p}=$  | 0.5 |
| 2.7b | 数值 $ω\_{p}=$ 数值$λ\_{p}=$  | 0.4 |

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| 2.8a | 表达式$P\_{heat}=$ 表达式 $\left〈I^{2}\right〉=$ | 1.0 |
| 2.8b | 表达式$R\_{heat}=$ 数值$R\_{heat}=$ | 1.0 |

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| 2.9 | 表达式$R\_{scat}=$ 数值 $R\_{scat}=$ | 1.0 |

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| 2.10a | 表达式 $P\_{heat }=$ 表达式 $P\_{scat}$=  | 1.2 |
| 2.10b | 数值: $E\_{0}=$ , $P\_{heat }=$ , $P\_{scat}$= | 0.3 |

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| 2.11a | 数值 $μ\_{st}=$ | 0.6 |
| 2.11b | 数值 $η=P\_{st}/P\_{tot }=$ | 0.2 |

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|  | **Total** | **12.0** |