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List of Abbreviations and Symbols

DNA	Deoxyribonucleic acid
A	Adenine
G	Guanines
C	Cytosine
T	Thymine
NP	Nondeterministic polynomial time
PCR	Polymerase Chain Reaction
dsDNA	Double stranded DNA
ssDNA	Single stranded DNA
HPP	Hamiltonian Path Problem
ND	Naphthyridine Dimer
MB	Molecular Beacon
EDTA	Ethylenediaminetetraacetic acid
AFM	Atomic force microscope
SOI	Silicon-On-Insulator
BPE	Base Paring Energy
kJ / mol	Kilo Joule per Mole