Define and/or characterize

1. Blackbody radiation
2. Photoelectric effect
3. Work function
4. Emission spectrum of Hydrogen atom
5. Rydberg formula
6. de Broglie wavelength
7. Bohr theory
8. Heisenberg Uncertainty Principle
9. De Moirvre's theorem
11. Separation of variables
12. Schrodinger equation for a particle on a line
13. Linear operator
14. Eigenvalue problem
15. Operator representing the linear momentum
16. Free electron model
17. Degeneracy of the first three energy levels in a cubic box
18. Time dependent Schrodinger equation
19. Energy levels of a rotating diatomic
20. Orthogonal eigenfunctions
21. Kroenecker delta
22. Commutators
23. Harmonic Oscillator
24. Energy levels of a Harmonic Oscillator
25. Force constant of a diatomic molecule
26. Reduced mass
27. Morse Potential
28. Selection rules for Harmonic Oscillator
29. Classically forbidden region
31. Moment of inertia of a diatomic molecule
32. Hamiltonian for the Hydrogen atom
33. Orbital angular momentum
34. Radial distribution function for the 1s orbital in H
35. Bohr radius
36. Quantum numbers for the H atom wavefunction
37. Schrodinger equation for He atom
38. Variational Method
39. Secular equation
40. Perturbation theory
41. Atomic unit of energy, length, and mass
42. Hamiltonian for the He atom in atomic units
43. Hartree-Fock equations
44. Spin angular momentum
45. Antisymmetric wavefunction
46. Slater determinant
47. Term Symbol

48. Electron configuration
49. Spin multiplicity
50. Hund's thtree rules
51. Spin-orbit splitting
52. Born-Oppenheimer approximation
53. Hamiltonian for H_2^+ in atomic units
54. Photoelectron Spectroscopy
55. Bond order
56. sp^2 hybrid orbital
57. sp^3 hybrid orbital
58. Delocalization energy
59. Conditions for forming a group
60. The five symmetry elements and their associated operators
61. Orthogonality relationship for group characters
62. Overtones
63. Vibration-rotation spectrum
64. Anharmonicity
65. Vibronic transition
66. Franck-Condon principle
67. Normal coordinates
68. Vibrational degrees of freedom
69. Normal modes of H_2O and CO_2
70. Electronic potential energy curves
71. Electronic transitions
72. Group theory and normal modes
73. Infrared active