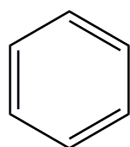


Electronic supplementary information:

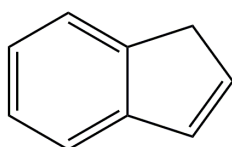
Absolute electron-impact total ionization cross-sections: molecular analogues of DNA and RNA nucleobase and sugar constituents

James N. Bull, Jason W. L. Lee, and Claire Vallance

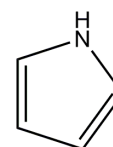
1. Molecular structures for the model species studied experimentally



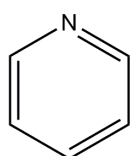
benzene



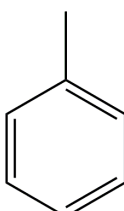
indene



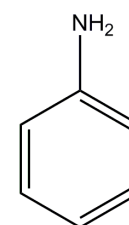
pyrrole



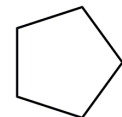
pyridine



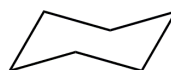
toluene



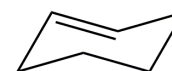
aniline



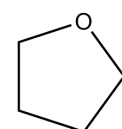
cyclopentane



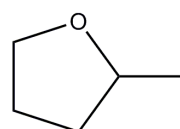
cyclohexane



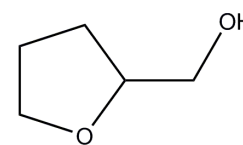
cyclohexene



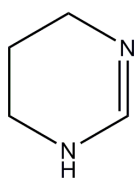
tetrahydrofuran



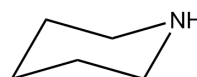
2-methyltetrahydrofuran



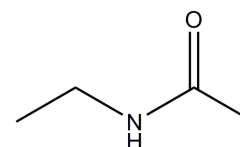
tetrahydrofurfuryl alcohol



1,4,5,6-tetrahydropyrimidine

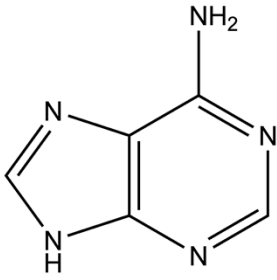


piperidine

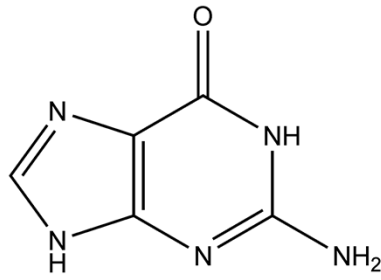


ethyl acetamide

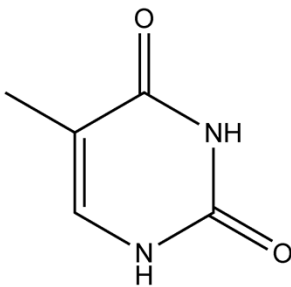
2. Structures for the DNA and RNA constituents



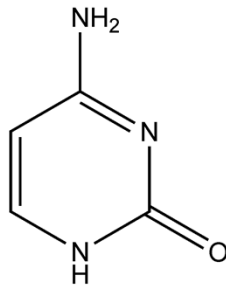
Adenine



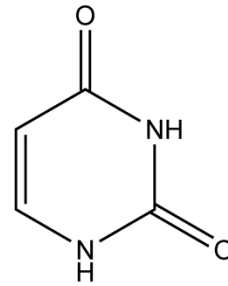
Guanine



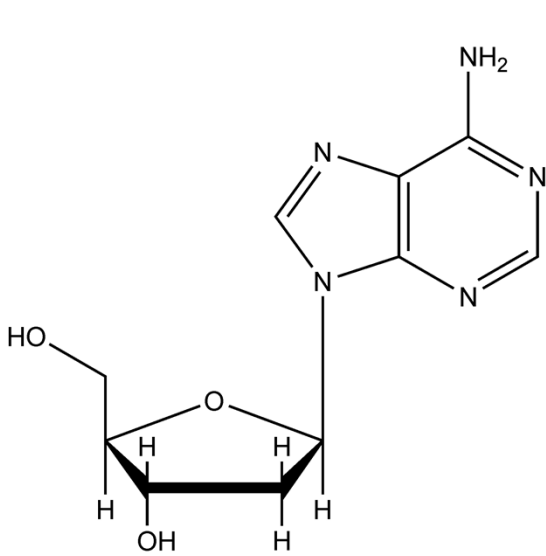
Thymine



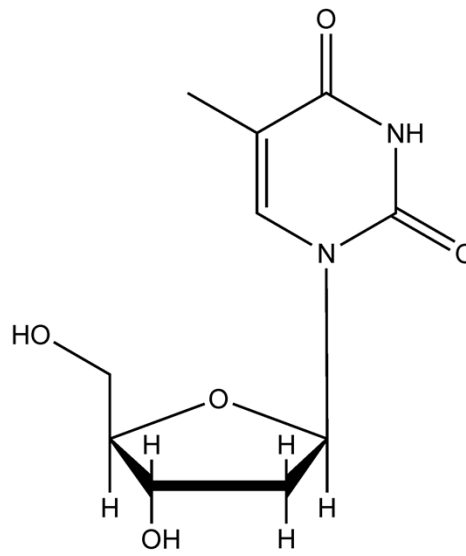
Cytosine



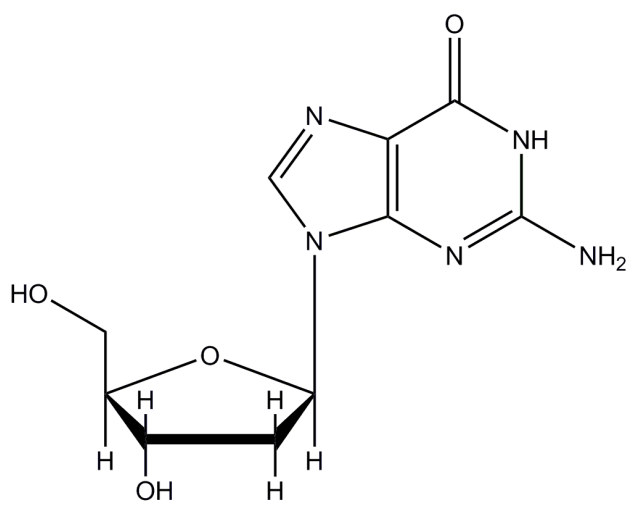
Uracil



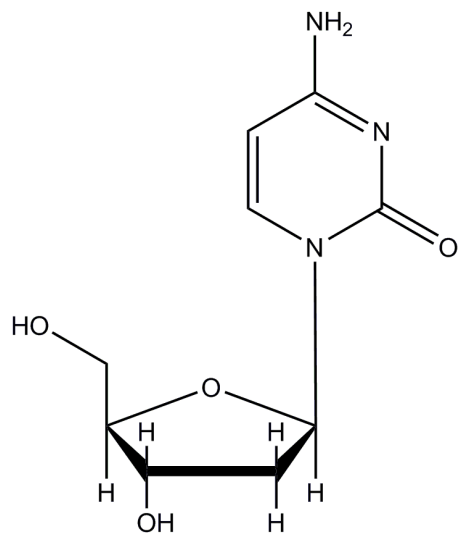
Adenosine



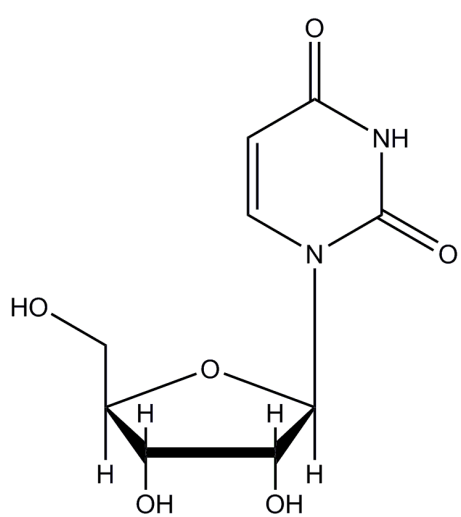
Thymidine



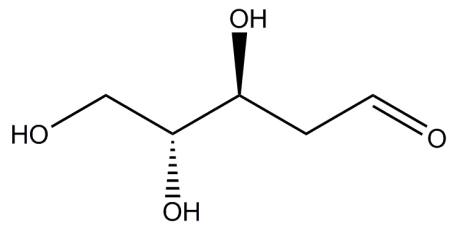
Deoxyguanosine



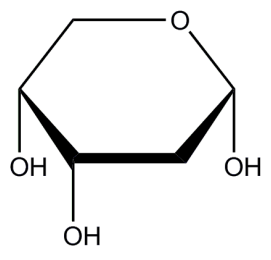
Deoxycytidine



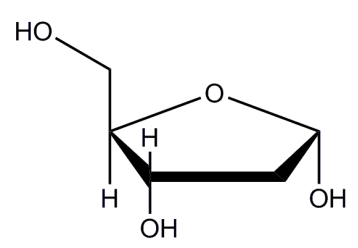
Uridine



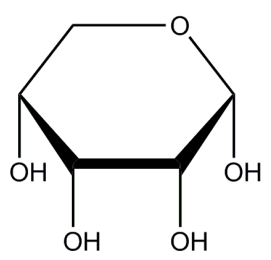
2-deoxy-D-ribose



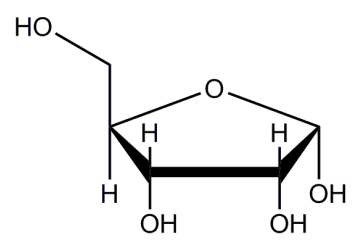
α -D-ribofuranose



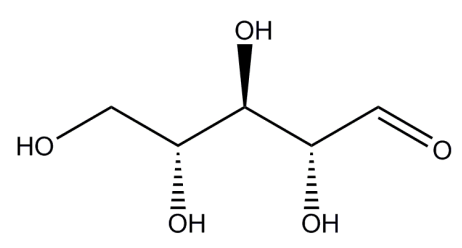
α -D-ribofuranose



α -D-ribofuranose

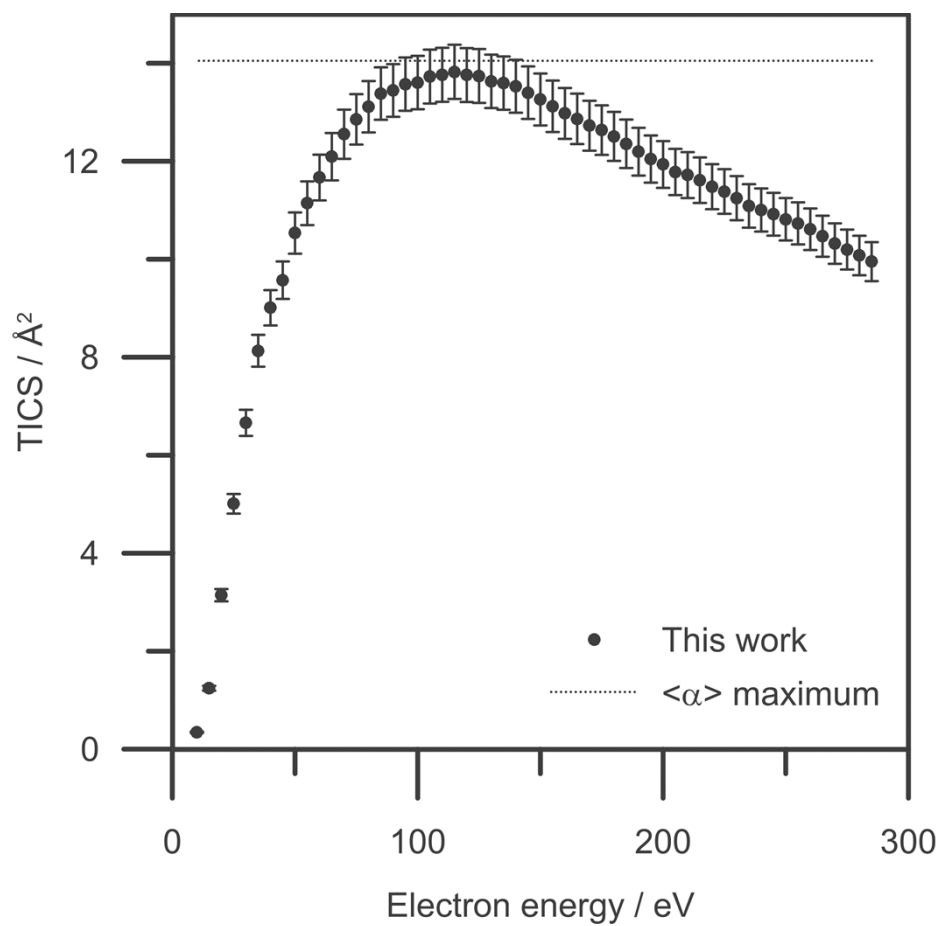


α -D-ribofuranose



D-ribose

3. Total ionization cross section for ethylacetamide



4. Experimentally determined total ionization cross-sections / Å²: Aromatic molecules

| EE / eV | indene | toluene | aniline | benzene | pyridine | pyrrole |
|---------|--------|---------|---------|---------|----------|---------|
| 285 | 15.62 | 11.51 | 11.83 | 9.68 | 8.85 | 7.72 |
| 280 | 15.89 | 11.76 | 12.04 | 9.86 | 8.95 | 7.82 |
| 275 | 16.05 | 11.95 | 12.18 | 9.97 | 9.01 | 7.91 |
| 270 | 16.20 | 12.10 | 12.26 | 10.06 | 9.16 | 8.00 |
| 265 | 16.32 | 12.19 | 12.41 | 10.20 | 9.30 | 8.10 |
| 260 | 16.47 | 12.48 | 12.68 | 10.35 | 9.48 | 8.21 |
| 255 | 16.61 | 12.57 | 12.82 | 10.44 | 9.56 | 8.29 |
| 250 | 16.77 | 12.87 | 12.94 | 10.56 | 9.68 | 8.35 |
| 245 | 17.01 | 12.93 | 13.16 | 10.72 | 9.88 | 8.43 |
| 240 | 17.34 | 13.06 | 13.35 | 10.83 | 9.99 | 8.51 |
| 235 | 17.60 | 13.23 | 13.54 | 11.00 | 10.18 | 8.62 |
| 230 | 17.77 | 13.38 | 13.65 | 11.23 | 10.34 | 8.74 |
| 225 | 18.07 | 13.57 | 13.86 | 11.37 | 10.45 | 8.85 |
| 220 | 18.13 | 13.72 | 14.01 | 11.41 | 10.53 | 8.93 |
| 215 | 18.34 | 13.98 | 14.26 | 11.57 | 10.70 | 9.03 |
| 210 | 18.47 | 14.10 | 14.37 | 11.67 | 10.74 | 9.10 |
| 205 | 18.62 | 14.23 | 14.50 | 11.79 | 10.86 | 9.16 |
| 200 | 19.03 | 14.43 | 14.69 | 11.93 | 11.04 | 9.24 |
| 195 | 19.35 | 14.68 | 14.98 | 12.12 | 11.18 | 9.37 |
| 190 | 19.60 | 14.87 | 15.11 | 12.43 | 11.31 | 9.52 |
| 185 | 19.68 | 15.15 | 15.43 | 12.56 | 11.50 | 9.65 |
| 180 | 19.87 | 15.20 | 15.51 | 12.58 | 11.67 | 9.75 |
| 175 | 20.09 | 15.47 | 15.74 | 12.82 | 11.84 | 9.84 |
| 170 | 20.32 | 15.68 | 15.90 | 13.15 | 11.89 | 9.91 |
| 165 | 20.51 | 16.05 | 16.09 | 13.26 | 12.16 | 10.02 |
| 160 | 20.58 | 16.18 | 16.17 | 13.56 | 12.40 | 10.17 |
| 155 | 20.62 | 16.42 | 16.42 | 13.62 | 12.50 | 10.34 |
| 150 | 20.84 | 16.54 | 16.64 | 13.69 | 12.70 | 10.43 |
| 145 | 21.10 | 16.77 | 16.91 | 13.98 | 13.00 | 10.54 |
| 140 | 21.33 | 16.95 | 16.93 | 14.15 | 13.17 | 10.68 |
| 135 | 21.47 | 17.15 | 17.03 | 14.14 | 13.26 | 10.89 |
| 130 | 21.72 | 17.25 | 17.20 | 14.23 | 13.44 | 10.98 |
| 125 | 21.98 | 17.53 | 17.18 | 14.39 | 13.63 | 11.13 |
| 120 | 22.10 | 17.57 | 17.31 | 14.63 | 13.78 | 11.22 |
| 115 | 22.23 | 17.76 | 17.36 | 14.81 | 13.88 | 11.39 |
| 110 | 22.41 | 17.89 | 17.33 | 14.85 | 14.04 | 11.50 |
| 105 | 22.42 | 17.96 | 17.42 | 14.92 | 14.11 | 11.67 |
| 100 | 22.39 | 17.97 | 17.24 | 14.97 | 14.14 | 11.75 |
| 95 | 22.54 | 18.05 | 17.03 | 15.01 | 14.20 | 11.84 |
| 90 | 22.60 | 18.13 | 16.95 | 14.98 | 14.16 | 11.96 |
| 85 | 22.65 | 18.00 | 16.68 | 15.05 | 14.04 | 11.98 |
| 80 | 22.69 | 18.03 | 16.42 | 14.91 | 14.00 | 12.00 |
| 75 | 22.67 | 17.76 | 15.90 | 14.94 | 13.78 | 11.95 |
| 70 | 22.54 | 17.50 | 15.34 | 14.60 | 13.59 | 11.92 |
| 65 | 22.10 | 17.31 | 14.99 | 14.39 | 13.31 | 11.77 |
| 60 | 21.77 | 16.91 | 14.54 | 13.98 | 13.10 | 11.55 |
| 55 | 21.47 | 16.44 | 13.54 | 13.80 | 12.60 | 11.39 |
| 50 | 20.74 | 15.80 | 13.03 | 13.07 | 12.13 | 10.95 |
| 45 | 20.02 | 15.11 | 12.18 | 12.82 | 11.85 | 10.63 |
| 40 | 19.23 | 14.55 | 11.13 | 12.01 | 11.13 | 10.12 |
| 35 | 18.27 | 12.79 | 10.27 | 10.88 | 10.02 | 9.29 |
| 30 | 16.78 | 11.32 | 9.03 | 9.65 | 8.50 | 8.43 |
| 25 | 14.57 | 8.94 | 7.30 | 7.04 | 6.30 | 6.74 |
| 20 | 11.57 | 5.14 | 4.74 | 3.95 | 3.36 | 5.53 |
| 15 | 6.74 | 1.58 | 1.80 | 1.12 | 1.21 | 2.54 |
| 10 | 1.38 | 0.42 | 0.60 | 0.18 | 0.56 | 0.80 |

5. Experimentally determined total ionization cross-sections / Å²: non-aromatic cyclic molecules

| EE / eV | tetrahydro- furfuryl alcohol | piperidine | 1,4,5,6- tetrahydro- pyrimidine | 2-methyl- tetrahydro- furan | tetrahydro- furan |
|---------|------------------------------------|------------|---------------------------------------|-----------------------------------|----------------------|
| 285 | 9.81 | 10.26 | 8.91 | 8.21 | 7.42 |
| 280 | 10.01 | 10.40 | 9.02 | 8.35 | 7.57 |
| 275 | 10.14 | 10.53 | 9.13 | 8.43 | 7.67 |
| 270 | 10.20 | 10.62 | 9.23 | 8.50 | 7.71 |
| 265 | 10.40 | 10.75 | 9.35 | 8.58 | 7.86 |
| 260 | 10.56 | 10.89 | 9.48 | 8.75 | 7.98 |
| 255 | 10.73 | 10.99 | 9.57 | 8.82 | 8.11 |
| 250 | 10.85 | 11.05 | 9.64 | 8.91 | 8.21 |
| 245 | 11.09 | 11.18 | 9.72 | 8.99 | 8.39 |
| 240 | 11.25 | 11.28 | 9.82 | 9.12 | 8.51 |
| 235 | 11.26 | 11.35 | 9.95 | 9.18 | 8.51 |
| 230 | 11.50 | 11.52 | 10.09 | 9.26 | 8.70 |
| 225 | 11.63 | 11.66 | 10.22 | 9.29 | 8.79 |
| 220 | 11.70 | 11.71 | 10.31 | 9.44 | 8.85 |
| 215 | 11.88 | 11.91 | 10.42 | 9.60 | 8.98 |
| 210 | 11.99 | 11.99 | 10.50 | 9.71 | 9.07 |
| 205 | 12.06 | 12.05 | 10.57 | 9.82 | 9.12 |
| 200 | 12.19 | 12.21 | 10.67 | 9.94 | 9.22 |
| 195 | 12.31 | 12.36 | 10.81 | 9.99 | 9.30 |
| 190 | 12.38 | 12.56 | 10.99 | 10.07 | 9.36 |
| 185 | 12.43 | 12.67 | 11.14 | 10.19 | 9.40 |
| 180 | 12.71 | 12.81 | 11.25 | 10.31 | 9.61 |
| 175 | 12.80 | 12.93 | 11.36 | 10.42 | 9.68 |
| 170 | 13.00 | 13.09 | 11.44 | 10.44 | 9.83 |
| 165 | 13.10 | 13.26 | 11.56 | 10.65 | 9.91 |
| 160 | 13.33 | 13.31 | 11.74 | 10.76 | 10.08 |
| 155 | 13.47 | 13.48 | 11.93 | 10.93 | 10.19 |
| 150 | 13.59 | 13.61 | 12.04 | 11.02 | 10.28 |
| 145 | 13.70 | 13.73 | 12.16 | 11.12 | 10.36 |
| 140 | 13.69 | 13.92 | 12.32 | 11.28 | 10.35 |
| 135 | 14.02 | 14.03 | 12.56 | 11.38 | 10.60 |
| 130 | 14.22 | 14.12 | 12.67 | 11.50 | 10.75 |
| 125 | 14.20 | 14.22 | 12.84 | 11.58 | 10.73 |
| 120 | 14.36 | 14.38 | 12.94 | 11.77 | 10.86 |
| 115 | 14.57 | 14.42 | 13.02 | 11.89 | 11.01 |
| 110 | 14.65 | 14.55 | 13.27 | 11.95 | 11.08 |
| 105 | 14.86 | 14.70 | 13.47 | 12.06 | 11.23 |
| 100 | 14.98 | 14.71 | 13.56 | 12.17 | 11.33 |
| 95 | 15.08 | 14.86 | 13.80 | 12.22 | 11.40 |
| 90 | 15.15 | 14.93 | 13.80 | 12.24 | 11.45 |
| 85 | 15.32 | 15.02 | 13.96 | 12.25 | 11.58 |
| 80 | 15.27 | 15.10 | 13.85 | 12.27 | 11.55 |
| 75 | 15.26 | 15.10 | 13.78 | 12.26 | 11.54 |
| 70 | 15.05 | 15.11 | 13.83 | 12.22 | 11.38 |
| 65 | 15.17 | 15.06 | 13.71 | 12.19 | 11.47 |
| 60 | 14.90 | 14.97 | 13.59 | 12.04 | 11.27 |
| 55 | 14.66 | 14.78 | 13.46 | 11.78 | 11.08 |
| 50 | 14.26 | 14.47 | 13.21 | 11.57 | 10.78 |
| 45 | 13.90 | 13.99 | 12.73 | 11.34 | 10.51 |
| 40 | 13.35 | 13.53 | 12.31 | 10.73 | 10.09 |
| 35 | 12.66 | 12.49 | 11.42 | 10.27 | 9.57 |
| 30 | 11.02 | 11.53 | 10.29 | 8.94 | 8.34 |
| 25 | 9.69 | 10.04 | 7.88 | 7.87 | 7.33 |
| 20 | 7.41 | 8.51 | 4.37 | 6.00 | 5.61 |
| 15 | 3.94 | 5.36 | 1.42 | 3.18 | 2.98 |
| 10 | 0.74 | 0.95 | 0.29 | 0.61 | 0.56 |

6. Experimentally determined total ionization cross-sections / Å²: hydrocarbons

| EE / eV | hexane | cyclohexane | cyclohexene | cyclopentane |
|---------|--------|-------------|-------------|--------------|
| 285 | 11.68 | 10.79 | 10.10 | 8.93 |
| 280 | 11.75 | 10.92 | 10.28 | 9.05 |
| 275 | 11.79 | 11.05 | 10.45 | 9.18 |
| 270 | 11.98 | 11.20 | 10.54 | 9.32 |
| 265 | 12.07 | 11.37 | 10.70 | 9.45 |
| 260 | 12.19 | 11.41 | 10.89 | 9.58 |
| 255 | 12.35 | 11.54 | 11.01 | 9.69 |
| 250 | 12.51 | 11.62 | 11.17 | 9.77 |
| 245 | 12.59 | 11.84 | 11.22 | 9.89 |
| 240 | 12.83 | 11.91 | 11.39 | 9.95 |
| 235 | 12.90 | 11.99 | 11.59 | 10.05 |
| 230 | 12.90 | 12.13 | 11.72 | 10.23 |
| 225 | 13.11 | 12.26 | 11.88 | 10.32 |
| 220 | 13.29 | 12.36 | 11.91 | 10.44 |
| 215 | 13.40 | 12.45 | 12.09 | 10.56 |
| 210 | 13.48 | 12.55 | 12.20 | 10.69 |
| 205 | 13.60 | 12.71 | 12.26 | 10.77 |
| 200 | 13.77 | 12.89 | 12.47 | 10.92 |
| 195 | 13.96 | 13.07 | 12.63 | 11.03 |
| 190 | 14.15 | 13.20 | 12.89 | 11.16 |
| 185 | 14.23 | 13.36 | 13.04 | 11.38 |
| 180 | 14.45 | 13.53 | 13.15 | 11.47 |
| 175 | 14.66 | 13.68 | 13.30 | 11.60 |
| 170 | 14.80 | 13.82 | 13.49 | 11.72 |
| 165 | 15.00 | 13.95 | 13.76 | 11.91 |
| 160 | 15.02 | 14.08 | 13.85 | 12.00 |
| 155 | 15.26 | 14.21 | 14.02 | 12.16 |
| 150 | 15.28 | 14.36 | 14.12 | 12.06 |
| 145 | 15.59 | 14.53 | 14.44 | 12.20 |
| 140 | 15.80 | 14.75 | 14.58 | 12.39 |
| 135 | 16.04 | 14.91 | 14.65 | 12.52 |
| 130 | 16.08 | 15.03 | 14.73 | 12.62 |
| 125 | 16.31 | 15.12 | 14.90 | 12.70 |
| 120 | 16.53 | 15.36 | 15.17 | 12.89 |
| 115 | 16.69 | 15.48 | 15.26 | 13.00 |
| 110 | 16.72 | 15.58 | 15.35 | 13.08 |
| 105 | 16.94 | 15.72 | 15.37 | 13.20 |
| 100 | 16.94 | 15.77 | 15.46 | 13.24 |
| 95 | 17.02 | 15.78 | 15.50 | 13.25 |
| 90 | 16.93 | 15.85 | 15.41 | 13.31 |
| 85 | 16.93 | 15.91 | 15.50 | 13.36 |
| 80 | 16.83 | 15.83 | 15.30 | 13.29 |
| 75 | 16.70 | 15.82 | 15.21 | 13.29 |
| 70 | 16.50 | 15.71 | 15.04 | 13.19 |
| 65 | 16.12 | 15.60 | 14.77 | 13.10 |
| 60 | 15.81 | 15.23 | 14.28 | 12.79 |
| 55 | 15.44 | 14.96 | 13.70 | 12.56 |
| 50 | 15.02 | 14.41 | 13.08 | 12.10 |
| 45 | 14.27 | 13.62 | 12.64 | 11.38 |
| 40 | 13.52 | 12.84 | 11.39 | 10.39 |
| 35 | 12.28 | 11.87 | 10.63 | 9.46 |
| 30 | 11.07 | 10.39 | 8.85 | 8.06 |
| 25 | 8.81 | 8.66 | 7.29 | 5.94 |
| 20 | 5.44 | 5.20 | 4.36 | 3.65 |
| 15 | 2.13 | 2.05 | 1.53 | 1.34 |
| 10 | 0.49 | 0.44 | 0.16 | 0.27 |

7. Experimentally determined total ionization cross-sections / Å²: water and ethylacetamide

| EE / eV | water | ethylacetamide |
|---------|-------|----------------|
| 285 | 1.61 | 9.95 |
| 280 | 1.63 | 10.08 |
| 275 | 1.65 | 10.20 |
| 270 | 1.69 | 10.32 |
| 265 | 1.70 | 10.47 |
| 260 | 1.72 | 10.61 |
| 255 | 1.73 | 10.73 |
| 250 | 1.74 | 10.82 |
| 245 | 1.74 | 10.92 |
| 240 | 1.76 | 11.00 |
| 235 | 1.77 | 11.09 |
| 230 | 1.79 | 11.25 |
| 225 | 1.80 | 11.38 |
| 220 | 1.82 | 11.48 |
| 215 | 1.86 | 11.61 |
| 210 | 1.85 | 11.72 |
| 205 | 1.88 | 11.78 |
| 200 | 1.90 | 11.93 |
| 195 | 1.90 | 12.04 |
| 190 | 1.91 | 12.19 |
| 185 | 1.95 | 12.36 |
| 180 | 1.96 | 12.51 |
| 175 | 1.99 | 12.63 |
| 170 | 1.98 | 12.72 |
| 165 | 2.00 | 12.86 |
| 160 | 2.01 | 12.98 |
| 155 | 2.02 | 13.12 |
| 150 | 2.06 | 13.26 |
| 145 | 2.07 | 13.40 |
| 140 | 2.07 | 13.53 |
| 135 | 2.10 | 13.59 |
| 130 | 2.10 | 13.63 |
| 125 | 2.12 | 13.74 |
| 120 | 2.13 | 13.76 |
| 115 | 2.13 | 13.82 |
| 110 | 2.13 | 13.76 |
| 105 | 2.15 | 13.73 |
| 100 | 2.15 | 13.61 |
| 95 | 2.13 | 13.57 |
| 90 | 2.12 | 13.44 |
| 85 | 2.09 | 13.38 |
| 80 | 2.09 | 13.11 |
| 75 | 2.08 | 12.85 |
| 70 | 2.01 | 12.55 |
| 65 | 1.97 | 12.09 |
| 60 | 1.87 | 11.67 |
| 55 | 1.83 | 11.14 |
| 50 | 1.73 | 10.53 |
| 45 | 1.67 | 9.57 |
| 40 | 1.54 | 9.01 |
| 35 | 1.37 | 8.13 |
| 30 | 1.16 | 6.66 |
| 25 | 0.94 | 5.01 |
| 20 | 0.66 | 3.14 |
| 15 | 0.27 | 1.24 |
| 10 | 0.07 | 0.34 |

8. **Total ionization cross sections calculated using the BEB model / Å²: DNA/RNA constituents**

| EE / eV | guanine | adenine | thymine | cytosine | uracil | α-D-ribo-furanose | α-D-ribo-pyranose | α-deoxy-D-ribo-furanose | α-deoxy-D-ribo-pyranose |
|---------|---------|---------|---------|----------|--------|-------------------|-------------------|-------------------------|-------------------------|
| 205 | 18.59 | 17.30 | 15.26 | 13.96 | 12.91 | 15.25 | 15.02 | 14.37 | 14.04 |
| 200 | 18.83 | 17.53 | 15.46 | 14.14 | 13.07 | 15.41 | 15.18 | 14.53 | 14.20 |
| 195 | 19.10 | 17.78 | 15.67 | 14.34 | 13.25 | 15.56 | 15.33 | 14.68 | 14.34 |
| 190 | 19.35 | 18.03 | 15.88 | 14.53 | 13.42 | 15.72 | 15.48 | 14.83 | 14.49 |
| 185 | 19.59 | 18.26 | 16.07 | 14.70 | 13.58 | 15.86 | 15.62 | 14.96 | 14.62 |
| 180 | 19.70 | 18.37 | 16.16 | 14.79 | 13.65 | 16.04 | 15.80 | 15.14 | 14.79 |
| 175 | 19.95 | 18.61 | 16.36 | 14.97 | 13.81 | 16.16 | 15.92 | 15.26 | 14.90 |
| 170 | 20.15 | 18.80 | 16.51 | 15.12 | 13.94 | 16.32 | 16.08 | 15.42 | 15.06 |
| 165 | 20.40 | 19.05 | 16.71 | 15.31 | 14.10 | 16.48 | 16.23 | 15.57 | 15.21 |
| 160 | 20.61 | 19.25 | 16.88 | 15.46 | 14.24 | 16.62 | 16.37 | 15.72 | 15.34 |
| 155 | 20.78 | 19.42 | 17.01 | 15.59 | 14.34 | 16.78 | 16.53 | 15.87 | 15.50 |
| 150 | 20.95 | 19.59 | 17.14 | 15.71 | 14.45 | 16.86 | 16.60 | 15.95 | 15.57 |
| 145 | 21.23 | 19.86 | 17.37 | 15.92 | 14.63 | 17.00 | 16.74 | 16.09 | 15.71 |
| 140 | 21.40 | 20.03 | 17.50 | 16.04 | 14.73 | 17.11 | 16.85 | 16.20 | 15.81 |
| 135 | 21.52 | 20.16 | 17.59 | 16.13 | 14.80 | 17.31 | 17.04 | 16.39 | 16.00 |
| 130 | 21.66 | 20.31 | 17.69 | 16.23 | 14.88 | 17.42 | 17.15 | 16.50 | 16.10 |
| 125 | 21.83 | 20.48 | 17.82 | 16.36 | 14.98 | 17.46 | 17.19 | 16.56 | 16.16 |
| 120 | 21.95 | 20.61 | 17.91 | 16.44 | 15.04 | 17.62 | 17.35 | 16.72 | 16.31 |
| 115 | 22.07 | 20.74 | 18.00 | 16.53 | 15.11 | 17.70 | 17.43 | 16.81 | 16.39 |
| 110 | 22.13 | 20.81 | 18.03 | 16.57 | 15.12 | 17.78 | 17.50 | 16.89 | 16.47 |
| 105 | 22.17 | 20.87 | 18.05 | 16.60 | 15.13 | 17.88 | 17.60 | 17.00 | 16.57 |
| 100 | 22.08 | 20.81 | 17.96 | 16.53 | 15.04 | 17.90 | 17.61 | 17.02 | 16.59 |
| 95 | 22.03 | 20.78 | 17.90 | 16.48 | 14.98 | 17.92 | 17.63 | 17.06 | 16.62 |
| 90 | 21.95 | 20.74 | 17.82 | 16.42 | 14.90 | 17.87 | 17.58 | 17.02 | 16.58 |
| 85 | 21.75 | 20.57 | 17.63 | 16.26 | 14.73 | 17.89 | 17.60 | 17.06 | 16.61 |
| 80 | 21.54 | 20.40 | 17.44 | 16.10 | 14.55 | 17.71 | 17.41 | 16.90 | 16.45 |
| 75 | 21.16 | 20.08 | 17.11 | 15.81 | 14.25 | 17.55 | 17.25 | 16.77 | 16.32 |
| 70 | 20.67 | 19.65 | 16.69 | 15.44 | 13.88 | 17.30 | 17.00 | 16.55 | 16.09 |
| 65 | 20.17 | 19.21 | 16.25 | 15.06 | 13.50 | 17.08 | 16.77 | 16.35 | 15.89 |
| 60 | 19.55 | 18.67 | 15.72 | 14.59 | 13.03 | 16.60 | 16.30 | 15.92 | 15.46 |
| 55 | 18.77 | 17.97 | 15.04 | 14.00 | 12.45 | 16.11 | 15.80 | 15.47 | 15.01 |
| 50 | 17.82 | 17.11 | 14.23 | 13.29 | 11.75 | 15.42 | 15.12 | 14.84 | 14.37 |
| 45 | 16.94 | 16.33 | 13.47 | 12.63 | 11.09 | 14.61 | 14.30 | 14.08 | 13.62 |
| 40 | 15.74 | 15.24 | 12.43 | 11.73 | 10.21 | 13.54 | 13.23 | 13.08 | 12.62 |
| 35 | 14.11 | 13.74 | 11.04 | 10.51 | 9.03 | 12.32 | 12.01 | 11.93 | 11.48 |
| 30 | 12.28 | 12.05 | 9.49 | 9.15 | 7.73 | 10.54 | 10.24 | 10.24 | 9.79 |
| 25 | 9.51 | 9.42 | 7.14 | 7.07 | 5.80 | 8.39 | 8.09 | 8.18 | 7.75 |
| 20 | 5.85 | 5.93 | 4.15 | 4.36 | 3.34 | 5.22 | 4.97 | 5.12 | 4.76 |
| 15 | 2.38 | 2.50 | 1.36 | 1.76 | 1.14 | 1.98 | 1.78 | 1.95 | 1.68 |
| 10 | 0.23 | 0.28 | 0.06 | 0.13 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 |