Functional Structure


| Symbols and Definition |  |
| :---: | :---: |
| Symbole | Definition |
| Number | Sequence number of input structures |
| AUTO_ID | AUTO_ID of input structure |
| D001 | number of 6-membered aromatic rings (only carbon atoms) |
| D002 | Number of 03-membered rings |
| D003 | Number of 04-membered rings |
| D004 | Number of 05-membered rings |
| D005 | Number of 06-membered rings |
| D006 | Number of 07-membered rings |
| D007 | Number of 08-membered rings |
| D008 | Number of 09-membered rings |
| D009 | Number of 10-membered rings |
| D010 | Number of 11-membered rings |
| D011 | Number of 12-membered rings |
| D012 | number of multiple bonds |
| D013 | number of circuits structure |
| D014 | number of rotatable bonds |
| D015 | rotatable bond fraction |
| D016 | number of double bonds |
| D017 | number of aromatic bonds |
| D018 | sum of conventional bond orders (H-depleted) |
| D019 | number of Hydrogen |
| D020 | number of Helium |
| D021 | number of Lithium |
| D022 | number of Beryllium |
| D023 | number of Boron |
| D024 | number of Carbon |
| D025 | number of Nitrogen |
| D026 | number of Oxygen |
| D027 | number of Fluorine |
| D028 | number of Neon |
| D029 | number of Sodium |
| D030 | number of Magnesium |
| D031 | number of Aluminum |
| D032 | number of Silicon |
| D033 | number of Phosphorus |
| D034 | number of Sulfur |
| D035 | number of Chlorine |
| D036 | number of Argon |
| D037 | number of Potassium |
| D038 | number of Calcium |
| D039 | number of Scandium |
| D040 | number of Titanium |
| D041 | number of Vanadium |
| D042 | number of Chromium |
| D043 | number of Manganese |
| D044 | number of Iron |
| D045 | number of Cobalt |
| D046 | number of Nickel |

number of Copper
number of Zinc
number of Gallium
number of Germanium
number of Arsenic
number of Selenium
number of Bromine
number of Krypton
number of Rubidium
number of Strontium
number of Yttrium
number of Zirconium
number of Niobium
number of Molybdenum
number of Technetium
number of Ruthenium
number of Rhodium
number of Palladium
number of Silver
number of Cadmium
number of Indium
number of Tin
number of Antimony
number of Tellurium
number of Iodine
number of Xenon
number of Cesium
number of Barium
number of Lanthanum
number of Cerium
number of Praseodymium
number of Neodymium
number of Promethium
number of Samarium
number of Europium
number of Gadolinium
number of Terbium
number of Dysprosium
number of Holmium
number of Erbium
number of Thulium
number of Ytterbium
number of Lutetium
number of Hafnium
number of Tantalum
number of Tungsten
number of Rhenium
number of Osmium
number of Iridium
number of Platinum
number of Gold
number of Mercury
number of Thallium
number of Lead
number of Bismuth
number of Polonium
number of Astatine
number of Radon
number of Francium
number of Radium
number of Actinium
number of Thorium
number of Protactinium
number of Uranium
number of Neptunium
number of Plutonium
number of Americium
number of Curium
number of Berkelium
number of californium
number of Einsteinium
number of Fermium
number of Mendelevium
number of Nobelium
number of Lawrencium
Molecular weight
Average of molecular weight
number of atoms in each molecule
number of none-Hydrogen atoms in each molecule
number of bonds in each molecule
number of none-Hydrogen bonds in each molecule
number of rings in each molecule
number of triple bonds in each molecule
number of halogen atoms in each molecule
molecular size index
atomic composition index
mean value of atomic composition index
Branch index
Molecular structure connectivity index
Narumi-type topological index
Harmonic topological index
Geometric topological index
Topological distance count order-3
log of vertex distance path count
average of vertex distance path count
Balaban type of mean square vertex distance index
sum of atomic Van Der Waals Carbon-Scele
mean atoic van der Waals Carbon-scale
sum of atomic electronegativites Pauling-Scale on Carbon
mean atomic electronegativities Pauling-scaled on Carbon

| D147 | sum of atomic electrongativities Sanderson-scaled on Carbon |
| :---: | :---: |
| D148 | mean atomic electronegativity Sanderson-scaled on Carbon |
| D149 | sum of atomic electrongativities Allred-Rochow-scaled on Carbon |
| D150 | mean atomic electrongativity Allred-Rochow-scaled on Carbon |
| D151 | sum of atomic polarizabilities scaled on Carbon-SP3 |
| D152 | mean atomic polarizability scaled on Carbon-SP3 |
| D153 | Zagreb order-1 index |
| D154 | Zagreb order-1 index with value of valence vertex degrees |
| D155 | Zagreb order-2 index |
| D156 | Vertex degree topological index |
| D157 | second Zagreb order-2 index with value of valence vertex degrees |
| D158 | valence electrions of principal quantum index |
| D159 | Schultz type Molecular Topological index |
| D160 | Schultz type Molecular Topolgical Index of valence vertex degrees |
| D161 | Molecular Topological Distance Index |
| D162 | Molecular Topological Distance Index of valence vertex degrees |
| D163 | Morlecular size and branching index |
| D164 | index of terminal vertex matrix |
| D165 | Wiener index |
| D166 | Average Path length in Wiener Index |
| D167 | reciprocal index of Wiener distance matrix |
| D168 | Harary index |
| D169 | Index of Laplacian Matrix |
| D170 | First No-Zero eigenvalue of Laplacian matrix |
| D171 | Wiener-Path index |
| D172 | reciprocal Wiener-Path index |
| D173 | Mohar order-2 index |
| D174 | Maximum Path Index |
| D175 | Wiener Type Maximum Path Index |
| D176 | reciprocal Wiener Type Maximum Path Inde |
| D177 | Minimum-Path/Maximum-Path Index |
| D178 | All-Path Wiener - sum of the edges in the shortest paths between all pairs of non-hydrogen atoms |
| D179 | Heteroatoms and Multiple bonds weighted Distance Matrix |
| D180 | Mass Weighted Distance Matrix |
| D181 | Index of Van Der Waals Weighted Distance Matrix |
| D182 | Distance Matrix of Electronegativity Weighted with Electronegativities Pauling-Scale |
| D183 | Distance Matrix of Electronegativity Weighted with Sanderson Electronegativities |
| D184 | Distance Matrix of Electronegativity Weighted with Allred-Rochow Electronegativites |
| D185 | Polarizability weighted distance matrix |
| D186 | Average vertex distance connectivity index |
| D187 | Balaban heteroatoms bonds weighted index |
| D188 | Balaban mass weighted index |
| D189 | Balaban van der Waals weighted index |
| D190 | Balaban electronegativity weighted with Pauling-Scale index |
| D191 | Balaban electronegativity weighted with Sanderson-Scale index |
| D192 | Balaban electronegativity weighted with Allred-Rochow-Scale index |
| D193 | Balaban-type polarizability weighted index |
| D194 | maximal valence vertex electrotopological negative variation |
| D195 | maximal valence vertex electrotopological positive variation |
| D196 | Sum absolute electrotopological negtive variation |

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Electrotoplogical index
sum electrotopological states index
mean electrotopological states index
vertex connectivity order-0 index
vertex connectivity order-1 index
vertex connectivity order-2 index
vertex connectivity order-3 index
vertex connectivity order-4 index
vertex connectivity order-5 index
average vertex connectivity order-0 index
average vertex connectivity order- 1 index
average vertex connectivity order-2 index
average vertex connectivity order-3 index
average vertex connectivity order-4 index
average vertex connectivity order-5 index
valence vertex connectivity order-0 Index
valence vertex connectivity order-1 Index
valence vertex connectivity order-2 Index
valence vertex connectivity order-3 Index
valence vertex connectivity order-4 Index
valence vertex connectivity order-5 Index
average valence vertex connectivity order-0 Index
average valence vertex connectivity order-1 Index
average valence vertex connectivity order-2 Index
average valence vertex connectivity order-3 Index
average valence vertex connectivity order-4 Index
average valence vertex connectivity order-5 Index
principal quantum vertex connectivity order-0 Index
principal quantum vertex connectivity order-1 Index
principal quantum vertex connectivity order-2 Index
principal quantum vertex connectivity order-3 Index
principal quantum vertex connectivity order-4 Index
principal quantum vertex connectivity order-5 Index
aromaticity valence vertex connectivity order-1 index
sum of valence vertex connectivity order-1 index
reciprocal distance order-1 sum product index
squared reciprocal distance order- 1 sum product index
Kier atom's 0 -order path information index
Kier 1-path index
Kier 2-path index
Kier 3-path index
Molecular flexibility index
atom's connectivity index in longest path
sum of the longest path of the atom
average longest path of the molecule
average of deviation of average of longest path
average of deviation of distance degree
shortest path in the molecule
shortest path centralization index
maximum value of variation

| D247 | EXP2 of Path-distance / Walk-distance over all atoms |
| :---: | :---: |
| D248 | EXP3 of Path-distance / Walk-distance over all atoms |
| D249 | EXP4 of Path-distance / Walk-distance over all atoms |
| D250 | EXP5 of Path-distance / Walk-distance over all atoms |
| D251 | Petitjean index |
| D252 | sturcture centric index |
| D253 | structure lopping centric group index |
| D254 | radial centric index |
| D255 | vertex distance count equality index |
| D256 | vertex distance count magnitude index |
| D257 | total vertex distance count equality index |
| D258 | total vertex distance count magnitude index |
| D259 | mean of distance degree equality index |
| D260 | mean of distance degree magnitude index |
| D261 | information of vertex degree equality index |
| D262 | information of bonds index |
| D263 | vertex distance path count index |
| D264 | complexity vertex distance path count index |
| D265 | Vertex distance information index |
| D266 | relative of vertex distance information index |
| D267 | mean of vertex distance information index |
| D268 | extended of vertex distance information index |
| D269 | information content order-0 index |
| D270 | information content order-1 index |
| D271 | information content order-2 index |
| D272 | information content order-3 index |
| D273 | information content order-4 index |
| D274 | information content order-5 index |
| D275 | total information content order-0 index |
| D276 | total information content order-1 index |
| D277 | total information content order-2 index |
| D278 | total information content order-3 index |
| D279 | total information content order-4 index |
| D280 | total information content order-5 index |
| D281 | structural information content order-0 index |
| D282 | structural information content order-1 index |
| D283 | structural information content order-2 index |
| D284 | structural information content order3 index |
| D285 | structural information content order-4 index |
| D286 | structural information content order-5 index |
| D287 | Complementary information content order-0 index |
| D288 | Complementary information content order-1 index |
| D289 | Complementary information content order-2 index |
| D290 | Complementary information content order3 index |
| D291 | Complementary information content order-4 index |
| D292 | Complementary information content order-5 index |
| D293 | bond information content order-0 index |
| D294 | bond information content order-1 index |
| D295 | bond information content order-2 index |
| D296 | bond information content order3 index |


| D297 | bond information content order-4 index |
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| D298 | bond information content order-5 index |
| D299 | The largest eigenvalue |
| D300 | spanning tree with log value |
| D301 | Maximum eigenvalue weighted by Heteroatoms and Multiple bonds Matrix |
| D302 | Maximum eigenvalue weighted by mass distance matrix |
| D303 | Maximum eigenvalue weighted by van der Waals distance matrix |
| D304 | Maximum eigenvalue weighted by polarizability distance matrix |
| D305 | Maximum eigenvalue weighted by electronegativity Pauling-Scale distance matrix |
| D306 | Maximum eigenvalue weighted by electronegativity Sanderson-Scale weighted distance matrix |
| D307 | Maximum eigenvalue weighted by electronegativity Allred-Rochow-Scale distance matrix |
| D308 | Sum eigenvalue weighted by Heteroatoms and Multiple bonds Distance Matrix |
| D309 | Sum eigenvalue weighted by mass distance matrix |
| D310 | Sum eigenvalue weighted by van der Waals distance matrix |
| D311 | Sum eigenvalue weighted by polarizability distance matrix |
| D312 | Sum eigenvalue weighted by electronegativity Pauling-Scale distance matrix |
| D313 | Sum eigenvalue weighted by electronegativity Sanderson-Scale distance matrix |
| D314 | Sum eigenvalue weighted by electronegativity Allred-Rochow-Scale distance matrix |
| D315 | Sum absolute eigenvalue weighted by Heteroatoms and Multiple bonds Distance Matrix |
| D316 | Sum absolute eigenvalue weighted by mass distance matrix |
| D317 | Sum absolute eigenvalue weighted by van der Waals distance matrix |
| D318 | Sum absolute eigenvalue weighted by polarizability distance matrix |
| D319 | Sum absolute eigenvalue weighted by electronegativity Pauling-Scale distance matrix |
| D320 | Sum absolute eigenvalue weighted by electronegativity Sanderson-Scale distance matrix |
| D321 | Sum absolute eigenvalue weighted by electronegativity Allred-Rochow-Scale distance matrix |
| D322 | distance+detour path with ring index of order 3 |
| D323 | distance+detour path with ring index of order 4 |
| D324 | distance+detour path with ring index of order 5 |
| D325 | distance+detour path with ring index of order 6 |
| D326 | distance+detour path with ring index of order 7 |
| D327 | distance+detour path with ring index of order 8 |
| D328 | distance+detour path with ring index of order 9 |
| D329 | distance+detour path with ring index of order 10 |
| D330 | distance+detour path with ring index of order 11 |
| D331 | distance+detour path with ring index of order 12 |
| D332 | distance+detour path on ring index of order 3 (circuits) |
| D333 | distance+detour path on ring index of order 4 (circuits) |
| D334 | distance+detour path on ring index of order 5 (circuits) |
| D335 | distance+detour path on ring index of order 6 (circuits) |
| D336 | distance+detour path on ring index of order 7 (circuits) |
| D337 | distance+detour path on ring index of order 8 (circuits) |
| D338 | distance+detour path on ring index of order 9 (circuits) |
| D339 | distance+detour path on ring index of order 10 (circuits) |
| D340 | distance+detour path on ring index of order 11 (circuits) |
| D341 | distance+detour path on ring index of order 12 (circuits) |
| D342 | molecular topological path index of order 02 |
| D343 | molecular topological path index of order 03 |
| D344 | molecular topological path index of order 04 |
| D345 | molecular topological path index of order 05 |
| D346 | molecular topological path index of order 06 |

molecular topological path index of order 07
molecular topological path index of order 08
molecular topological path index of order 09
molecular topological path index of order 10
molecular topological multiple path index of order 03
molecular topological multiple path index of order 04
molecular topological multiple path index of order 05
molecular topological multiple path index of order 06
molecular topological multiple path index of order 07
molecular topological multiple path index of order 08
molecular topological multiple path index of order 09
molecular topological multiple path index of order 10
molecular topological all path index
conventional bond index
ratio of convention bonds with total path counts
ratio of difference of conventional bonds and total path counts
Randic index
Balaban All-Path index
Balaban Short-Path index
sum of topological distance between the vertices $N$ and $N$ sum of topological distance between the vertices $N$ and $P$ sum of topological distance between the vertices N and O sum of topological distance between the vertices N and S sum of topological distance between the vertices N and F sum of topological distance between the vertices N and Cl sum of topological distance between the vertices N and Br sum of topological distance between the vertices N and I sum of topological distance between the vertices O and O sum of topological distance between the vertices $O$ and $S$ sum of topological distance between the vertices O and P sum of topological distance between the vertices O and F sum of topological distance between the vertices O and Cl sum of topological distance between the vertices O and Br sum of topological distance between the vertices O and I sum of topological distance between the vertices $S$ and $S$ sum of topological distance between the vertices $S$ and $P$ sum of topological distance between the vertices $S$ and $F$ sum of topological distance between the vertices S and Cl sum of topological distance between the vertices S and Br sum of topological distance between the vertices $S$ and I sum of topological distance between the vertices $P$ and $P$ sum of topological distance between the vertices $P$ and $F$ sum of topological distance between the vertices P and Cl sum of topological distance between the vertices P and Br sum of topological distance between the vertices $P$ and $I$ sum of topological distance between the vertices F and F sum of topological distance between the vertices F and Cl sum of topological distance between the vertices F and Br sum of topological distance between the vertices F and I sum of topological distance between the vertices Cl and Cl

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sum of topological distance between the vertices Cl and Br sum of topological distance between the vertices Cl and I sum of topological distance between the vertices Br and Br sum of topological distance between the vertices Br and I sum of topological distance between the vertices I and I walk count order-01
walk count order-02
walk count order-03
walk count order-04
walk count order-05
walk count order-06
walk count max-10 steps
walk-returning count order-1
walk-returning count order-2
walk-returning count order-3
walk-returning count order-4
walk-returning count order-5
walk-returning count order-6
topological structure autocorrelation length-1 weighted by atomic masses topological structure autocorrelation length-2 weighted by atomic masses topological structure autocorrelation length-3 weighted by atomic masses topological structure autocorrelation length-4 weighted by atomic masses topological structure autocorrelation length-5 weighted by atomic masses topological structure autocorrelation length-6 weighted by atomic masses topological structure autocorrelation length-7 weighted by atomic masses topological structure autocorrelation length-8 weighted by atomic masses topological structure autocorrelation length- 1 weighted by atomic van der Waals volumes topological structure autocorrelation length-2 weighted by atomic van der Waals volumes topological structure autocorrelation length-3 weighted by atomic van der Waals volumes topological structure autocorrelation length-4 weighted by atomic van der Waals volumes topological structure autocorrelation length-5 weighted by atomic van der Waals volumes topological structure autocorrelation length-6 weighted by atomic van der Waals volumes topological structure autocorrelation length-7 weighted by atomic van der Waals volumes topological structure autocorrelation length-8 weighted by atomic van der Waals volumes topological structure autocorrelation length-1 weighted by atomic Sanderson electronegativities topological structure autocorrelation length-2 weighted by atomic Sanderson electronegativities topological structure autocorrelation length-3 weighted by atomic Sanderson electronegativities topological structure autocorrelation length-4 weighted by atomic Sanderson electronegativities topological structure autocorrelation length-5 weighted by atomic Sanderson electronegativities topological structure autocorrelation length-6 weighted by atomic Sanderson electronegativities topological structure autocorrelation length-7 weighted by atomic Sanderson electronegativities topological structure autocorrelation length-8 weighted by atomic Sanderson electronegativities topological structure autocorrelation length-1 weighted by atomic polarizabilities topological structure autocorrelation length-2 weighted by atomic polarizabilities topological structure autocorrelation length-3 weighted by atomic polarizabilities topological structure autocorrelation length-4 weighted by atomic polarizabilities topological structure autocorrelation length-5 weighted by atomic polarizabilities topological structure autocorrelation length-6 weighted by atomic polarizabilities topological structure autocorrelation length-7 weighted by atomic polarizabilities topological structure autocorrelation length-8 weighted by atomic polarizabilities
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Geary topological structure autocorrelation length-1 weighted by atomic masses
Geary topological structure autocorrelation length-2 weighted by atomic masses
Geary topological structure autocorrelation length-3 weighted by atomic masses
Geary topological structure autocorrelation length-4 weighted by atomic masses
Geary topological structure autocorrelation length-5 weighted by atomic masses
Geary topological structure autocorrelation length-6 weighted by atomic masses
Geary topological structure autocorrelation length-7 weighted by atomic masses
Geary topological structure autocorrelation length-8 weighted by atomic masses
Geary topological structure autocorrelation length-1 weighted by atomic van der Waals volumes
Geary topological structure autocorrelation length-2 weighted by atomic van der Waals volumes
Geary topological structure autocorrelation length-3 weighted by atomic van der Waals volumes
Geary topological structure autocorrelation length-4 weighted by atomic van der Waals volumes
Geary topological structure autocorrelation length-5 weighted by atomic van der Waals volumes
Geary topological structure autocorrelation length-6 weighted by atomic van der Waals volumes
Geary topological structure autocorrelation length-7 weighted by atomic van der Waals volumes
Geary topological structure autocorrelation length-8 weighted by atomic van der Waals volumes
Geary topological structure autocorrelation length-1 weighted by atomic Sanderson
electronegativities
Geary topological structure autocorrelation length-2 weighted by atomic Sanderson electronegativities
Geary topological structure autocorrelation length-3 weighted by atomic Sanderson
electronegativities
Geary topological structure autocorrelation length-4 weighted by atomic Sanderson electronegativities
Geary topological structure autocorrelation length-5 weighted by atomic Sanderson electronegativities
Geary topological structure autocorrelation length-6 weighted by atomic Sanderson
electronegativities
Geary topological structure autocorrelation length-7 weighted by atomic Sanderson electronegativities
Geary topological structure autocorrelation length-8 weighted by atomic Sanderson electronegativities
Geary topological structure autocorrelation length-1 weighted by atomic polarizabilities
Geary topological structure autocorrelation length-2 weighted by atomic polarizabilities
Geary topological structure autocorrelation length-3 weighted by atomic polarizabilities
Geary topological structure autocorrelation length-4 weighted by atomic polarizabilities
Geary topological structure autocorrelation length- 5 weighted by atomic polarizabilities
Geary topological structure autocorrelation length-6 weighted by atomic polarizabilities
Geary topological structure autocorrelation length-7 weighted by atomic polarizabilities
Geary topological structure autocorrelation length-8 weighted by atomic polarizabilities
Moran topological structure autocorrelation length-1 weighted by atomic masses
Moran topological structure autocorrelation length-2 weighted by atomic masses
Moran topological structure autocorrelation length-3 weighted by atomic masses
Moran topological structure autocorrelation length-4 weighted by atomic masses
Moran topological structure autocorrelation length-5 weighted by atomic masses
Moran topological structure autocorrelation length-6 weighted by atomic masses
Moran topological structure autocorrelation length-7 weighted by atomic masses
Moran topological structure autocorrelation length-8 weighted by atomic masses
Moran topological structure autocorrelation length-1 weighted by atomic van der Waals volumes
Moran topological structure autocorrelation length-2 weighted by atomic van der Waals volumes
Moran topological structure autocorrelation length-3 weighted by atomic van der Waals volumes
Moran topological structure autocorrelation length-4 weighted by atomic van der Waals volumes

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Moran topological structure autocorrelation length-5 weighted by atomic van der Waals volumes
Moran topological structure autocorrelation length-6 weighted by atomic van der Waals volumes
Moran topological structure autocorrelation length-7 weighted by atomic van der Waals volumes
Moran topological structure autocorrelation length-8 weighted by atomic van der Waals volumes
Moran topological structure autocorrelation length-1 weighted by atomic Sanderson
electronegativities
Moran topological structure autocorrelation length-2 weighted by atomic Sanderson electronegativities
Moran topological structure autocorrelation length-3 weighted by atomic Sanderson electronegativities
Moran topological structure autocorrelation length-4 weighted by atomic Sanderson electronegativities
Moran topological structure autocorrelation length-5 weighted by atomic Sanderson electronegativities
Moran topological structure autocorrelation length-6 weighted by atomic Sanderson electronegativities
Moran topological structure autocorrelation length-7 weighted by atomic Sanderson electronegativities
Moran topological structure autocorrelation length-8 weighted by atomic Sanderson electronegativities
Moran topological structure autocorrelation length-1 weighted by atomic polarizabilities
Moran topological structure autocorrelation length-2 weighted by atomic polarizabilities
Moran topological structure autocorrelation length-3 weighted by atomic polarizabilities
Moran topological structure autocorrelation length-4 weighted by atomic polarizabilities
Moran topological structure autocorrelation length-5 weighted by atomic polarizabilities
Moran topological structure autocorrelation length-6 weighted by atomic polarizabilities
Moran topological structure autocorrelation length-7 weighted by atomic polarizabilities
Moran topological structure autocorrelation length-8 weighted by atomic polarizabilities
Molecular topological order-1 charge index
Molecular topological order-2 charge index
Molecular topological order-3 charge index
Molecular topological order-4 charge index
Molecular topological order-5 charge index
Molecular topological order-6 charge index
Molecular topological order-7 charge index
Molecular topological order-8 charge index
Molecular topological order-9 charge index
Molecular topological order-10 charge index
Mean molecular topological order-1 charge index
Mean molecular topological order-2 charge index
Mean molecular topological order-3 charge index
Mean molecular topological order-4 charge index
Mean molecular topological order-5 charge index
Mean molecular topological order-6 charge index
Mean molecular topological order-7 charge index
Mean molecular topological order-8 charge index
Mean molecular topological order- 9 charge index
Mean molecular topological order-10 charge index
Sum of molecular topological mean charge index
Lowest eigenvalue from Burdex matrix weighteed by masses order-1
Lowest eigenvalue from Burdex matrix weighteed by masses order-2
Lowest eigenvalue from Burdex matrix weighteed by masses order-3

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Lowest eigenvalue from Burdex matrix weighteed by masses order-4
Lowest eigenvalue from Burdex matrix weighteed by masses order-5
Lowest eigenvalue from Burdex matrix weighteed by masses order-6
Lowest eigenvalue from Burdex matrix weighteed by masses order-7
Lowest eigenvalue from Burdex matrix weighteed by masses order-8
Lowest eigenvalue from Burdex matrix weighteed by van der Walls order-1
Lowest eigenvalue from Burdex matrix weighteed by van der Walls order-2
Lowest eigenvalue from Burdex matrix weighteed by van der Walls order-3
Lowest eigenvalue from Burdex matrix weighteed by van der Walls order-4
Lowest eigenvalue from Burdex matrix weighteed by van der Walls order-5
Lowest eigenvalue from Burdex matrix weighteed by van der Walls order-6
Lowest eigenvalue from Burdex matrix weighteed by van der Walls order-7
Lowest eigenvalue from Burdex matrix weighteed by van der Walls order-8
Lowest eigenvalue from Burdex matrix weighteed by electronegativities Sanderson-Scale order-1 Lowest eigenvalue from Burdex matrix weighteed by electronegativities Sanderson-Scale order-2 Lowest eigenvalue from Burdex matrix weighteed by electronegativities Sanderson-Scale order-3 Lowest eigenvalue from Burdex matrix weighteed by electronegativities Sanderson-Scale order-4 Lowest eigenvalue from Burdex matrix weighteed by electronegativities Sanderson-Scale order-5 Lowest eigenvalue from Burdex matrix weighteed by electronegativities Sanderson-Scale order-6 Lowest eigenvalue from Burdex matrix weighteed by electronegativities Sanderson-Scale order-7 Lowest eigenvalue from Burdex matrix weighteed by electronegativities Sanderson-Scale order-8 Lowest eigenvalue from Burdex matrix weighteed by polarizabilities order-1
Lowest eigenvalue from Burdex matrix weighteed by polarizabilities order-2
Lowest eigenvalue from Burdex matrix weighteed by polarizabilities order-3
Lowest eigenvalue from Burdex matrix weighteed by polarizabilities order-4
Lowest eigenvalue from Burdex matrix weighteed by polarizabilities order-5
Lowest eigenvalue from Burdex matrix weighteed by polarizabilities order-6
Lowest eigenvalue from Burdex matrix weighteed by polarizabilities order-7
Lowest eigenvalue from Burdex matrix weighteed by polarizabilities order-8
Hightest eignevalue from Burdex matrix weighteed by masses order-1
Hightest eignevalue from Burdex matrix weighteed by masses order-2
Hightest eignevalue from Burdex matrix weighteed by masses order-3
Hightest eignevalue from Burdex matrix weighteed by masses order-4
Hightest eignevalue from Burdex matrix weighteed by masses order-5
Hightest eignevalue from Burdex matrix weighteed by masses order-6
Hightest eignevalue from Burdex matrix weighteed by masses order-7
Hightest eignevalue from Burdex matrix weighteed by masses order-8
Hightest eignevalue from Burdex matrix weighteed by van der Walls order-1
Hightest eignevalue from Burdex matrix weighteed by van der Walls order-2
Hightest eignevalue from Burdex matrix weighteed by van der Walls order-3
Hightest eignevalue from Burdex matrix weighteed by van der Walls order-4
Hightest eignevalue from Burdex matrix weighteed by van der Walls order-5
Hightest eignevalue from Burdex matrix weighteed by van der Walls order-6
Hightest eignevalue from Burdex matrix weighteed by van der Walls order-7
Hightest eignevalue from Burdex matrix weighteed by van der Walls order-8
Hightest eignevalue from Burdex matrix weighteed by electronegativities Sanderson-Scale order-1
Hightest eignevalue from Burdex matrix weighteed by electronegativities Sanderson-Scale order-2
Hightest eignevalue from Burdex matrix weighteed by electronegativities Sanderson-Scale order-3
Hightest eignevalue from Burdex matrix weighteed by electronegativities Sanderson-Scale order-4
Hightest eignevalue from Burdex matrix weighteed by electronegativities Sanderson-Scale order-5

Hightest eignevalue from Burdex matrix weighteed by electronegativities Sanderson-Scale order-6 Hightest eignevalue from Burdex matrix weighteed by electronegativities Sanderson-Scale order-7 Hightest eignevalue from Burdex matrix weighteed by electronegativities Sanderson-Scale order-8 Hightest eignevalue from Burdex matrix weighteed by polarizabilities order-1 Hightest eignevalue from Burdex matrix weighteed by polarizabilities order-2 Hightest eignevalue from Burdex matrix weighteed by polarizabilities order-3 Hightest eignevalue from Burdex matrix weighteed by polarizabilities order-4 Hightest eignevalue from Burdex matrix weighteed by polarizabilities order-5 Hightest eignevalue from Burdex matrix weighteed by polarizabilities order-6 Hightest eignevalue from Burdex matrix weighteed by polarizabilities order-7 Hightest eignevalue from Burdex matrix weighteed by polarizabilities order-8 number of total primary C-sp3
number of total secondary C-sp3
number of total tertiary C-sp3
number of total quaternary C-sp3
number of ring secondary C-sp3
number of ring tertiary C-sp3
number of ring quaternary C-sp3
number of unsubstituted aromatic C-sp2
number of substituted aromatic C-sp2
number of primary C-sp2
number of secondary C-sp2
number of tertiary C-sp2
number of group allenes
number of terminal C-sp
number of non-terminal C-sp
number of group cianates (aliphatic)
number of group cianates (aromatic)
number of group isocianates (aliphatic)
number of group isocianates (aromatic)
number of group thiocianates (aliphatic)
number of group thiocianates (aromatic)
number of group isothiocianates (aliphatic)
number of group isothiocianates (aromatic)
number of group carboxylic acids (aliphatic)
number of group carboxylic acids (aromatic)
number of group esters (aliphatic)
number of group esters (aromatic)
number of group primary amides (aliphatic)
number of group primary amides (aromatic)
number of group secondary amides (aliphatic)
number of group secondary amides (aromatic)
number of group tertiary amides (aliphatic)
number of group tertiary amides (aromatic)
number of group carbamates (aliphatic)
number of group carbamates (aromatic)
number of group acyl halogenides (aliphatic)
number of group acyl halogenides (aromatic)
number of group thioacids (aliphatic)
number of group thioacids (aromatic)

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number of group ditioacids (aliphatic)
number of group ditioacids (aromatic)
number of group thioesters (aliphatic)
number of group thioesters (aromatic)
number of group dithioesters (aliphatic)
number of group dithioesters (aromatic)
number of group aldehydes (aliphatic)
number of group aldehydes (aromatic)
number of group ketones (aliphatic)
number of group ketones (aromatic)
number of group urea derivatives
number of group urea derivatives (aromatic)
number of group primary amines (aliphatic)
number of group primary amines (aromatic)
number of group secondary amines (aliphatic)
number of group secondary amines (aromatic)
number of group tertiary amines (aliphatic)
number of group tertiary amines (aromatic)
number of group N -hydrazines (aliphatic)
number of group N -hydrazines (aromatic)
number of group N -azo (aliphatic)
number of group N -azo (aromatic)
number of group nitriles (aliphatic)
number of group nitriles (aromatic)
number of group immines (aliphatic)
number of group immines (aromatic)
number of group ammonium groups (aliphatic)
number of group ammonium groups (aromatic)
number of group hydroxylamines (aliphatic)
number of group hydroxylamines (aromatic)
number of group oximes (aliphatic)
number of group oximes (aromatic)
number of group N -nitroso (aliphatic)
number of group N -nitroso (aromatic)
number of group nitroso (aliphatic)
number of group nitroso (aromatic)
number of group nitro (aliphatic)
number of group nitro (aromatic)
number of group imides
number of group total hydroxyl groups
number of group phenols
number of group primary alcohols (aliphatic)
number of group secondary alcohols (alinhatic)
number of group tertiary alcohols (aliphatic)
number of group ethers (aliphatic)
number of group ethers (aromatic)
number of group hypohalogenydes (aliphatic)
number of group hypohalogenydes (aromatic)
number of group water molecules
number of group sulfoxides

| D685 | number of group sulfones |
| :---: | :---: |
| D686 | number of group sulfates |
| D687 | number of group thioles |
| D688 | number of group thioketones |
| D689 | number of group solfures |
| D690 | number of group disolfures |
| D691 | number of group sulfonic acids |
| D692 | number of group sulfonamides |
| D693 | number of group phosphites |
| D694 | number of group phosphates |
| D695 | number of group phosphothionates |
| D696 | number of group phosphodithionates |
| D697 | number of group phosphothioates |
| D698 | number of group CH2X |
| D699 | number of group CR2HX |
| D700 | number of group CR3X |
| D701 | number of group $\mathrm{R}=\mathrm{CHX}$ |
| D702 | number of group R=CRX |
| D703 | number of group R\#CX |
| D704 | number of group CHRX2 |
| D705 | number of group CR2X2 |
| D706 | number of group R=CX2 |
| D707 | number of group RCX3 |
| D708 | number of group $\mathrm{X}-\mathrm{C}$ on aromatic ring |
| D709 | number of group $\mathrm{X}-\mathrm{C}-$ on ring |
| D710 | number of group $\mathrm{X}-\mathrm{C}=$ on ring |
| D711 | number of group X-C on conjugated C |
| D712 | number of group donor atoms for H -bonds (with N and O ) |
| D713 | number of group acceptor atoms for H-bonds (N O F) |
| D714 | number of group group CH3R and CH4 |
| D715 | number of group CH2R2 |
| D716 | number of group CHR3 |
| D717 | number of group CR4 |
| D718 | number of group CH3X |
| D719 | number of group CH2RX |
| D720 | number of group CH2X2 |
| D721 | number of group CHR2X |
| D722 | number of group CHRX2 |
| D723 | number of group CHX3 |
| D724 | number of group CR3X |
| D725 | number of group CR2X2 |
| D726 | number of group CRX3 |
| D727 | number of group CX4 |
| D728 | number of group =CH2 |
| D729 | number of group $=$ CHR |
| D730 | number of group =CR2 |
| D731 | number of group =CHX |
| D732 | number of group =CRX |
| D733 | number of group =CX2 |
| D734 | number of group \#CH |

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number of group \#CR or $\mathrm{R}=\mathrm{C}=\mathrm{R}$
number of group \#CX
number of group $\mathrm{R} \sim \mathrm{CH} \sim \mathrm{R}$
number of group $\mathrm{R} \sim \mathrm{CR} \sim \mathrm{R}$
number of group $\mathrm{R} \sim \mathrm{CX} \sim \mathrm{R}$
number of group $\mathrm{Al}-\mathrm{CH}=\mathrm{X}$
number of group $\mathrm{Ar}-\mathrm{CH}=\mathrm{X}$
number of group $\mathrm{Al}-\mathrm{C}(=\mathrm{X})-\mathrm{Al}$
number of group $\mathrm{Ar}-\mathrm{C}(=\mathrm{X})-\mathrm{R}$
number of group R-C(=X)-X / R-C\#X
number of group $\mathrm{X}-\mathrm{C}(=\mathrm{X})-\mathrm{X}$
number of group H attached to $\mathrm{C} 0(\mathrm{sp} 3)$ no X attached to next C
number of group H attached to heteroatom
number of group H attached to $\mathrm{C} 0(\mathrm{sp} 3)$ with 1 X attached to next C
number of group H attached to $\mathrm{C} 0(\mathrm{sp} 3)$ with 2 X attached to next C
number of group H attached to $\mathrm{C} 0(\mathrm{sp} 3)$ with 3 X attached to next C
number of group H attached to $\mathrm{C} 0(\mathrm{sp} 3)$ with 4 X attached to next C
number of group alcohol
number of group phenol or enol or carboxyl OH
number of group $\mathrm{O}=$
number of group Al-O-Al
number of group Al-O-Ar or Ar-O-Ar or R-O-C=X
number of group Al-NH2
number of group Al2-NH
number of group $\mathrm{Al} 3-\mathrm{N}$
number of group Ar-NH2 or X-NH2
number of group Ar-NH-Al
number of group Ar-NAl2
number of group RCO- $\mathrm{N}<$ or $>\mathrm{N}-\mathrm{X}=\mathrm{X}$
number of group Ar2NH or Ar3N or Ar2N-Al
number of group $\mathrm{R} \# \mathrm{~N}$ or $\mathrm{R}=\mathrm{N}$ -
number of group Ar-NO2 or RO-NO2
number of group Al-NO2
number of group $\mathrm{Ar}-\mathrm{N}=\mathrm{X}$ or $\mathrm{X}-\mathrm{N}=\mathrm{X}$
number of group R-SH
number of group R2S or RS-SR
number of group $\mathrm{R}=\mathrm{S}$
number of group R-SO-R
number of group R-SO2-R
unsaturation index weighted by conventional bonds order
hydrophilic factor index
aromatic bonds ratio
Molecular regresson confficients surface LogP index

