Glossary

\( \nu_A \) Characteristic function of a crisp set A

\( \mu_A \) Membership function of a fuzzy set A

\( A_\alpha \) \( \alpha \)-cut of fuzzy set A

\( A_\alpha(x_1, \ldots, x_n) \) Aggregation of \( x_1, \ldots, x_n \)

\( t\)-norm Triangular norm

\( t\)-conorm Triangular conorm

\( T(X, Y) \) \( t\)-norm of \( X \) and \( Y \)

\( S(X, Y) \) \( t\)-conorm of \( X \) and \( Y \)

\( A \rightarrow B \) If \( A \) then \( B \)

\( \mu_{A \rightarrow B} \) Degree of truth of the implication \( A \rightarrow B \)

\( m_{A(x)} \) Medium curve of fuzzy number \( A \)

\( \inf A_\alpha \) Infimum of \( A_\alpha \)

\( \sup A_\alpha \) Supremum of \( A_\alpha \)

\((x^*, y^*)\) Center of gravity of fuzzy number

\( S(A, B) \) Similarity measure of fuzzy numbers \( A \) and \( B \)

\( I_x \) Moment of inertia of an area with respect to \( x \) axis

\( r_x \) Radius of gyration of an area with respect to \( x \) axis

\( \psi(a_1, \ldots, a_p) \) Aggregation operator for antecedent connector model of fuzzy rule-based system.

\( P^k \) Fuzzy preference relation of the \( k \)-th expert

\( p^k_{ij} \) Preference degree of alternative \( x_i \) with respect to \( x_j \) of the \( k \)-th expert

\( P^c \) Collective preference relation

\( p^c_{ij} \) Collective preference value of alternative \( x_i \) with respect to \( x_j \)

\( p^k_{ij} \) Strict preference value of alternative \( x_i \) with respect to \( x_j \)

\( A^k \) Multiplicative preference relation of the \( k \)-th expert

\( a^k_{ij} \) Ratio of intensity for alternative \( x_i \) over \( x_j \) of the \( k \)-th expert