

## List of abbreviations

The following notations and abbreviations are used.

IF	Intuitionistic fuzzy
FG	Fuzzy graph
BFS	Bipolar fuzzy set
<i>BFG</i>	Bipolar fuzzy graph
<i>mPF</i>	<i>m</i> -polar fuzzy
<i>mPFG</i>	<i>m</i> -polar fuzzy graph
<i>mPFSG</i>	<i>m</i> -polar fuzzy subgraph
<i>mPFS</i>	<i>m</i> -polar fuzzy set
<i>mPFSS</i>	<i>m</i> -polar fuzzy subset
<i>mPFVS</i>	<i>m</i> -polar fuzzy vertex set
<i>mPFE</i>	<i>m</i> -polar fuzzy edge
<i>mPFES</i>	<i>m</i> -polar fuzzy edge set
<i>mPFP</i>	<i>m</i> -polar fuzzy path
<i>mPFC</i>	<i>m</i> -polar fuzzy Cycle
<i>mPFB</i>	<i>m</i> -polar fuzzy bridge
<i>mPFCN</i>	<i>m</i> -polar fuzzy cut node
<i>mPFEN</i>	<i>m</i> -polar fuzzy end node
<i>mPFF</i>	<i>m</i> -polar fuzzy forest
<i>mPFT</i>	<i>m</i> -polar fuzzy tree
<i>mPFGG</i>	<i>m</i> -polar fuzzy genus graph
<i>mPFSE</i>	<i>m</i> -polar fuzzy strong edge
<i>mPFCRN</i>	<i>m</i> -polar fuzzy connectivity reducing node
<i>mPFCEN</i>	<i>m</i> -polar fuzzy connectivity enhancing node

$m$ PFCNN	$m$ -polar fuzzy connectivity neutral node
CE $m$ PFG	Connectivity enhancing $m$ -polar fuzzy graph
CR $m$ PFG	Connectivity reducing $m$ -polar fuzzy graph
N $m$ PFG	Neutral $m$ -polar fuzzy graph
Dombi $m$ PFG	Dombi $m$ -polar fuzzy graph
Dombi $m$ PFEG	Dombi $m$ - polar fuzzy edge graph
s.t.	Such that
Iff	If and only if