Lucian Mazza* (lmazza@mix.wvu.edu). Some Recent Advances in Group Coloring of Graphs. Preliminary report.

Group Coloring is a generalization of vertex coloring. The vertices of a graph are colored with the elements of a group in such a way that the colors of two adjacent vertices do not differ by a group value assigned to the edge between them. Some basic properties and definitions will be presented, followed by more recent results. These recent (not yet published) results will include advances in group coloring of multigraphs as well as a previously unknown relationship between subgroup structure and group coloring. (Received September 16, 2019)