CLAIMS

1. A method of wireless communication at a User Equipment (UE), comprising: receiving, from a base station, an indication of resources in time and frequency allocated for Non-Orthogonal Multiple Access (NOMA) communication with the base station, wherein the indication of resources comprises a set of NOMA resource units (NA-RUs), wherein the set of NA-RUs are mapped to a time frequency resource grid with respect to a synchronization signal block (SSB) based on at least one of a center frequency of an NA-RU or a number of physical resource blocks (PRBs) within each NA-RU in the set of NA-RUs, wherein the indication of resources is based on a mapping index for the set of NA-RUs mapped to a time frequency resource grid and indexed in a sequential order, wherein the mapping index maps at least one of the set of NA-RUs to the time frequency resource grid; and transmitting uplink NOMA communication to the base station based on the indication of resources received from the base station.

2. The method of claim 1, wherein the indication of resources is based on a NOMA raster of candidate locations for the NA-RUs.

3. The method of claim 1, wherein the indication comprises a starting location of the set of the NA-RUs and a number of the NA-RUs comprised in the set.

4. The method of claim 1, wherein the indication comprises a starting location of the set of the NA-RUs and an ending location of the set of the NA-RUs.

5. The method of claim 1, wherein the set of the NA-RUs comprise a number of NA-RUs that are contiguous in time or frequency.

6. The method of claim 1, wherein the set of the NA-RUs are interlaced in time or frequency within a resource grid spanning a system bandwidth in frequency and at least one slot in time.

7. The method of claim 1, wherein the uplink NOMA communication is transmitted to the base station, and multiple UEs share the set of the NA-RUs in a time and frequency domain.

8. A method of wireless communication at a base station, comprising: transmitting, to a User Equipment (UE), an indication of resources in time and frequency allocated for Non-Orthogonal Multiple Access (NOMA) communication with the UE, wherein the indication of resources comprises a set of NOMA resource units (NA-RUs), wherein the set of NA-RUs are mapped to a time frequency resource grid with respect to a synchronization signal block (SSB) based on at least one of a center frequency of an NA-RU or a number of physical resource blocks (PRBs) within each NA-RU in the set of NA-RUs, wherein the indication of resources is based on a mapping index for the set of NA-RUs mapped to a time frequency resource grid and indexed in a sequential order, wherein the mapping index maps at least one of the set of NA-RUs to the time frequency resource grid; and receiving uplink NOMA communication from the UE based on the indication of resources transmitted to the UE.

9. The method of claim 8, wherein the indication of resources is based on a NOMA raster of candidate locations for the NA-RUs.

10. The method of claim 8, wherein the indication comprises a starting location of the set of the NA-RUs and a number of the NA-RUs comprised in the set.

11. The method of claim 8, wherein the indication comprises a starting location of the set of the NA-RUs and an ending location of the set of the NA-RUs.

12. The method of claim 8, wherein the set of the NA-RUs comprise a number of NA-RUs that are contiguous in time or frequency.

13. The method of claim 8, wherein the set of the NA-RUs are interlaced in time or frequency within a resource grid spanning a system bandwidth in frequency and at least one slot in time.

14. The method of claim 8, wherein the uplink NOMA communication is received from the UE, and multiple UEs share the set of the NA-RUs in a time and frequency domain.

15. An apparatus for wireless communication, comprising: means for receiving, from a base station, an indication of resources in time and frequency allocated for Non-Orthogonal Multiple Access (NOMA) communication with the base station, wherein the indication of resources comprises a set of NOMA resource units (NA-RUs), wherein the set of NA-RUs are mapped to a time frequency resource grid with respect to a synchronization signal block (SSB) based on at least one of a center frequency of an NA-RU or a number of physical resource blocks (PRBs) within each NA-RU in the set of NA-RUs, wherein the indication of resources is based on a mapping index for the set of NA-RUs mapped to a time frequency resource grid and indexed in a sequential order, wherein the mapping index maps at least one of the set of NA-RUs to the time frequency resource grid; and means for transmitting uplink NOMA communication to the base station based on the indication of resources received from the base station.

16. The apparatus of claim 15, wherein the indication of resources is based on a NOMA raster of candidate locations for the NA-RUs.

17. The apparatus of claim 15, wherein the indication comprises a starting location of the set of the NA-RUs and a number of the NA-RUs comprised in the set.

18. The apparatus of claim 15, wherein the indication comprises a starting location of the set of the NA-RUs and an ending location of the set of the NA-RUs.

19. The apparatus of claim 15, wherein the set of the NA-RUs comprise a number of NA-RUs that are contiguous in time or frequency.

20. The apparatus of claim 15, wherein the set of the NA-RUs are interlaced in time or frequency within a resource grid spanning a system bandwidth in frequency and at least one slot in time.

21. The apparatus of claim 15, wherein the uplink NOMA communication is transmitted to the base station, and multiple UEs share the set of the NA-RUs in a time and frequency domain.

22. An apparatus for wireless communication, comprising: a memory; and at least one processor coupled to the memory and configured to: receive, from a base station, an indication of resources in time and frequency allocated for Non-Orthogonal Multiple Access (NOMA) communication with the base station, wherein the indication of resources comprises a set of NOMA resource units (NA-RUs), wherein the set of NA-RUs are mapped to a time frequency resource grid with respect to a synchronization signal block (SSB) based on at least one of a center frequency of an NA-RU or a number of physical resource blocks (PRBs) within each NA-RU in the set of NA-RUs, wherein the indication of resources is based on a mapping index for the set of NA-RUs mapped to a time frequency resource grid and indexed in a sequential order, wherein the mapping index maps at least one of the set of NA-RUs to the time frequency resource grid; and transmit uplink NOMA communication to the base station based on the indication of resources received from the base station.

23. The apparatus of claim 22, wherein the indication of resources is based on a NOMA raster of candidate locations for the NA-RUs.

24. The apparatus of claim 22, wherein the indication comprises a starting location of the set of the NA-RUs and a number of the NA-RUs comprised in the set.

25. The apparatus of claim 22, wherein the indication comprises a starting location of the set of the NA-RUs and an ending location of the set of the NA-RUs.

26. The apparatus of claim 22, wherein the set of the NA-RUs comprise a number of NA-RUs that are contiguous in time or frequency.

27. The apparatus of claim 22, wherein the set of the NA-RUs are interlaced in time or frequency within a resource grid spanning a system bandwidth in frequency and at least one slot in time.

28. The apparatus of claim 22, wherein the uplink NOMA communication is transmitted to the base station, and multiple UEs share the set of the NA-RUs in a time and frequency domain.

29. A non-transitory computer-readable medium storing computer executable code, comprising code to: receive, from a base station, an indication of resources in time and frequency allocated for Non-Orthogonal Multiple Access (NOMA) communication with the base station, wherein the indication of resources comprises a set of NOMA resource units (NA-RUs), wherein the set of NA-RUs are mapped to a time frequency resource grid with respect to a synchronization signal block (SSB) based on at least one of a center frequency of an NA-RU or a number of physical resource blocks (PRBs) within each NA-RU in the set of NA-RUs, wherein the indication of resources is based on a mapping index for the set of NA-RUs mapped to a time frequency resource grid and indexed in a sequential order, wherein the mapping index maps at least one of the set of NA-RUs to the time frequency resource grid; and transmit uplink NOMA

communication to the base station based on the indication of resources received from the base station.

30. An apparatus for wireless communication, comprising: means for transmitting, to a User Equipment (UE), an indication of resources in time and frequency allocated for Non-Orthogonal Multiple Access (NOMA) communication with the UE, wherein the indication of resources comprises a set of NOMA resource units (NA-RUs), wherein the set of NA-RUs are mapped to a time frequency resource grid with respect to a synchronization signal block (SSB) based on at least one of a center frequency of an NA-RU or a number of physical resource blocks (PRBs) within each NA-RU in the set of NA-RUs, wherein the indication of resources is based on a mapping index for the set of NA-RUs mapped to a time frequency resource grid and indexed in a sequential order, wherein the mapping index maps at least one of the set of NA-RUs to the time frequency resource grid; and means for receiving uplink NOMA communication from the UE based on the indication of resources transmitted to the UE.

31. The apparatus of claim 30, wherein the indication of resources is based on a NOMA raster of candidate locations for the NA-RUs.

32. The apparatus of claim 30, wherein the indication comprises a starting location of the set of the NA-RUs and a number of the NA-RUs comprised in the set.

33. The apparatus of claim 30, wherein the indication comprises a starting location of the set of the NA-RUs and an ending location of the set of the NA-RUs.

34. The apparatus of claim 30, wherein the set of the NA-RUs comprise a number of NA-RUs that are contiguous in time or frequency.

35. The apparatus of claim 30, wherein the set of the NA-RUs are interlaced in time or frequency within a resource grid spanning a system bandwidth in frequency and at least one slot in time.

36. The apparatus of claim 30, wherein the uplink NOMA communication is received from the UE, and multiple UEs share the set of the NA-RUs in a time and frequency domain.

37. An apparatus for wireless communication, comprising: a memory; and at least one processor coupled to the memory and configured to: transmit, to a User Equipment (UE), an indication of resources in time and frequency allocated for Non-Orthogonal Multiple Access (NOMA) communication with the UE, wherein the indication of resources comprises a set of NOMA resource units (NA-RUs), wherein the set of NA-RUs are mapped to a time frequency resource grid with respect to a synchronization signal block (SSB) based on at least one of a center frequency of an NA-RU or a number of physical resource blocks (PRBs) within each NA-RU in the set of NA-RUs, wherein the indication of resources is based on a mapping index for the set of NA-RUs mapped to a time frequency resource grid and indexed in a sequential order, wherein the mapping index maps at least one of the set of NA-RUs to the time frequency resource grid; and receive uplink NOMA communication from the UE based on the indication of resources transmitted to the UE.

38. The apparatus of claim 37, wherein the indication of resources is based on a NOMA raster of candidate locations for the NA-RUs.

39. The apparatus of claim 37, wherein the indication comprises a starting location of the set of the NA-RUs and a number of the NA-RUs comprised in the set.

40. The apparatus of claim 37, wherein the indication comprises a starting location of the set of the NA-RUs and an ending location of the set of the NA-RUs.

41. The apparatus of claim 37, wherein the set of the NA-RUs comprise a number of NA-RUs that are contiguous in time or frequency.

42. The apparatus of claim 37, wherein the set of the NA-RUs are interlaced in time or frequency within a resource grid spanning a system bandwidth in frequency and at least one slot in time.

43. The apparatus of claim 37, wherein the uplink NOMA communication is received from the UE, and multiple UEs share the same NR-RUs in time and frequency domain.

44. A non-transitory computer-readable medium storing computer executable code, comprising code to: transmit, to a User Equipment (UE), an indication of resources in time and frequency allocated for Non-Orthogonal Multiple Access (NOMA) communication with the UE, wherein the indication of resources comprises a set of NOMA resource units (NA-RUs), wherein the set of NA-RUs are mapped to a time frequency resource grid with respect to a synchronization signal block (SSB) based on at least one of a center frequency of an NA-RU or a number of physical resource blocks (PRBs) within each NA-RU in the set of NA-RUs, wherein the indication of resources is based on a mapping index for the set of NA-RUs mapped to a time frequency resource grid and indexed in a sequential order, wherein the mapping index maps at least one of the set of NA-RUs to the time frequency resource grid; and receive uplink NOMA communication from the UE based on the indication of resources transmitted to the UE.