CLAIMS:

1. A cleaning composition comprising:

at least one first organic acid;

at least one second organic acid different from the at least one first organic acid, the at least one second organic acid comprising a dienoic acid;

at least one third organic acid different from the at least one first and second acids, the at least one third organic acid comprising an amino acid;

at least one anionic polymer; and

water;

wherein the composition has a pH of from about 0.1 to about 7.

2. The composition of claim 1, wherein the at least one first organic acid comprises a monocarboxylic acid or a polycarboxylic acid.

3. The composition of claim 1, wherein the at least one first organic acid is selected from the group consisting of formic acid, acetic acid, malonic acid, citric acid, propionic acid, malic acid, adipic acid, succinic acid, aspartic acid, ascorbic acid, lactic acid, oxalic acid, , hydroxyethylidene diphosphonic acid, 2-phosphono-1,2,4-butane tricarboxylic acid, aminotrimethylene phosphonic acid, hexamethylenediamine tetra(methylenephosphonic acid), bis(hexamethylene)triamine phosphonic acid, peracetic acid, potassium acetate, phenoxyacetic acid, benzoic acid, and mixtures thereof.

4. The cleaning composition of claim 1, wherein the at least one first organic acid is selected from the group consisting of acetic acid, malonic acid, citric acid, propionic acid, malic acid, succinic acid, ascorbic acid, lactic acid, oxalic acid, and mixtures thereof.

5. The composition of claim 1, wherein the at least one first organic acid is in an amount of from about 0.00001% to about 50% by weight of the composition.

6. The composition of claim 1, where the at least one second organic acid comprises a dienoic acid having from 5 to 22 carbons.

7. The composition of claim 6, wherein the at least one second organic acid comprises 2,4-pentadienoic acid, 5-phenylpenta-2,4-dienoic acid, 2-hydroxypenta-2,4-dienoic acid, 2,4-hexadienoic acid, 4,5-hexadienoic acid, 4,6-heptadienoic acid, 2,6-dimethylhepta-2,5-dienoic acid, (3E,5E)-hepta-3,5-dienoic acid, (2E,5Z)-Hepta-2,5-dienoic acid, octa-3,5-dienoic acid, (Z)-3,7-dimethyl-2,6-octadienoic acid, 5,7-nonadienoic acid, (E,Z)-2,4-decadienoic acid, 2,5-decadienoic acid, undecadienoic acid, dodecadienoic acid, tridecadienoic acid, tetradecadienoic acid, pentadecadienoic acid, hexadecadienoic acid, heptadecadienoic acid, (9Z,12E)-octadeca-9,12-dienoic acid, octadeca-10,12-dienoic acid, (10E,15Z)-9,12,13-trihydroxyoctadeca-10,15-dienoic acid, 13(S)-hydroxyoctadeca-9Z,11E-dienoic acid, nonadecadienoic acid, henicosadienoic acid, docosadienoic acid, eicosa-11,14-dienoic acid, or a mixture thereof.

8. The composition of claim 1, wherein the at least one second organic acid is in an amount of from about 0.0001% to about 0.5% by weight of the cleaning composition.

9. The composition of claim 1, wherein the at least one third organic acid comprises amino carboxylic acid, glycine, bicine, tricine, alanine, histidine, valine, phenylalanine, proline, glutamine, aspartic acid, glutamic acid, arginine, lysine, tyrosine, or a mixture thereof.

10. The composition of claim 1, wherein the at least one third organic acid comprises glycine, histidine, alanine, proline, arginine, lysine, aspartic acid, or a mixture thereof.

11. The composition of claim 1, wherein the at least one third organic acid is in an amount of from about 0.001% to about 20% by weight of the composition.

12. The composition of claim 1, wherein the at least one anionic polymer is formed from one or more monomers selected from the group consisting of (meth)acrylic acid, maleic acid, acrylic acid, acrylamide, malic acid, methacrylic acid, vinyl phosphonic acid, vinyl sulfonic acid, allyl sulfonic acid, styrene sulfonic acid, acrylamide, acrylamidopropyl sulfonic acid, phosphonic acid, phosphoric acid, vinyl phosphopric acid, butadiene/maleic acid, caprolactam, etherimide, 2-ethyl-2-oxazoline, N-iso-propylacrylamide, sodium phosphinite and co-formed products thereof, and sodium, potassium and ammonium salts thereof.

13. The composition of claim 1, wherein the at least one anionic polymer comprises poly(4-styrenylsulfonic) acid (PSSA), polyacrylic acid (PAA), poly(vinylphosphonic acid) (PVPA), poly(2-acrylamido-2-methyl-1-propanesulfonic acid), poly(N-vinylacetamide) (PNVA), anionic poly(methyl methacrylate) (PMMA), anionic polyacrylamide (PAM), polyaspartic acid (PASA), anionic poly(ethylene succinate) (PES), anionic polybutylene succinate (PBS), poly(vinyl alcohol) (PVA), 2-propenoic acid copolymer with 2-methyl-2-((1-oxo-2-propenyl)amino)-1-propanesulfonic acid monosodium salt and sodium phosphinite, 2-propenoic acid copolymer with 2-methyl-2-((1-oxo-2-propenyl)amino)-1-propanesulfonic acid monosodium salt and sodium hydrogen sulfite sodium salt, 2-acrylamido-2-methyl-1-propanesulfonic acid-acrylic acid copolymer, poly(4-styrenesulfonic acid-co-acrylic acid-co-vinylphosphonic acid) terpolymer, or a mixture thereof.

14. The composition of claim 1, wherein the at least one anionic polymer comprises poly(4-styrenylsulfonic) acid (PSSA), polyacrylic acid (PAA), poly(vinylphosphonic acid) (PVPA), poly(2-acrylamido-2-methyl-1-propanesulfonic acid), poly(N-vinylacetamide) (PNVA), anionic poly(methyl methacrylate) (PMMA), anionic polyacrylamide (PAM), 2-acrylamido-2-methyl-1-propanesulfonic acid-acrylic acid copolymer, poly(4-styrenesulfonic acid-co-acrylic acid-co-vinylphosphonic acid) terpolymer, or a mixture thereof.

15. The composition of claim 1, wherein the at least one anionic polymer is in an amount of from about 0.00001% to about 50% by weight of the cleaning composition.

16. The composition of claim 1, wherein the pH of the composition is from about 1 to about 6.5.

17. The composition of claim 1, wherein the pH of the composition is from about 2 to about 5.

18. A cleaning composition comprising:

at least one organic acid;

at least one anionic polymer comprising poly(vinylphosphonic acid) (PVPA), poly(2-acrylamido-2-methyl-1-propanesulfonic acid), poly(N-vinylacetamide) (PNVA), 2-acrylamido-2-methyl-1-propanesulfonic acid-acrylic acid copolymer, poly(4-styrenesulfonic acid-co-acrylic acid-co-vinylphosphonic acid) terpolymer, or a mixture thereof; and

water;

wherein the composition has a pH of from about 0.1 to about 7.

19. A method for cleaning a wafer surface, comprising contacting a wafer having a surface comprising SiN, SiC, TiN, W, Ru, Mo, TEOS, Cu, TaN, Co, or p-Si with the cleaning composition of claim 1.

20. A method for cleaning a substrate, comprising:

contacting a substrate with the cleaning composition of claim 1.