ii.) have a particle size of less than about 50nm; and

iii.) are present in said suspension at a concentration of about 2-1000ppm.

17.) The composition of claim 16, wherein said suspension has a zeta potential of at least about -40 mV and a pH of between about 8 to about 12.

18.) The composition of claim 17, wherein said surfaces have no organic chemical constituents adhered or attached to said surfaces.

19.) The composition of claim 16, wherein said surfaces are substantially clean and do not have chemical constituents adhered or attached to surfaces, other than water or lysis products of water.

20.) The composition of claim 19, wherein said suspension does not contain any chlorides or chlorine-based materials used to form the gold-platinum bi-metallic nanocrystals.

21.) A method for treating a patient with a cancerous condition comprising administering to a patient in need thereof an effective amount of a composition of claim 1.

22.) The method of claim 21, wherein the cancerous condition comprises at least one of bladder, breast, cervix, CNS, colon H&N, lung, ovary, prostate, stomach, thyroid, uterus and vulva cancers.

23.) The method of claim 22, wherein the cancerous condition comprises colon cancer.

24.) A method for treating a patient with a condition receptive to platinum therapy comprising administering to a patient in need thereof an effective amount of a composition of claim 1.

25.) The method of claim 21, wherein the composition is administered orally.

26.) The method of claim 21, wherein the composition is administered interperitoneally.

27.) The method of claim 21, wherein the composition is administered intratumorally.

28.) A process for forming gold-platinum bi-metallic nanocrystals suspended in water comprising:

providing at least one processing enhancer in said water;

providing at least one first trough member;

creating a flow direction of said water and processing enhancer through said at least one first trough member;

providing at least one platinum-based plasma forming electrode spaced apart from a surface of said water, thereby forming a space between said at least one platinum-based plasma-forming electrode and said surface of said water;

forming at least one plasma in said space between said at least one platinum-based plasma forming electrode and said surface of said water;

providing at least one set of metallic electrodes contacting said water, a first set of electrodes contacting said water after said water has flowed past said at least one platinum-based plasma forming electrode;

causing said at least one set of metallic electrodes to form at least one platinum species in said water;

providing said at least one platinum species in said water to at least one second trough member;

creating a flow direction of said at least one platinum species in said water through said at least one second trough member;

providing at least one gold-based, plasma-forming electrode spaced apart from a surface of said at least one platinum species in said water, thereby forming a space between said at least one gold-based, plasma-forming electrode and said at least one platinum species in said water;

forming at least one plasma in said space between said at least one gold-based, plasma-forming electrode and said at least one platinum species in said water;

providing at least one set of gold electrodes contacting said water, said gold electrodes contacting said at least one platinum species in said water after said at least one platinum species in said water has flowed past said at least one gold-based, plasma-forming electrode; and

causing said at least one set of gold electrodes to form said gold-platinum bi-metallic nanocrystals.

29.) The product manufactured by the method of claim 28.

30.) A process for forming gold-platinum bi-metallic nanocrystals suspended in water comprising:

first forming electrochemically at least one platinum species in water and at least one lysis product of water, thereby creating a platinum species and water material; and

using said platinum species and water material in a second electrochemical reaction to form a bi-metallic gold-platinum nanocrystal suspension.

31.) The process of claim 30, wherein at least one platinum electrode is used to form said at least one platinum species in water and at least one gold electrode is used to form said gold-platinum bi-metallic nanocrystals.

32.) The process of claim 30, wherein no chlorides or chlorine-based materials are required in said process to form said gold-platinum bi-metallic nanocrystals.

33.) The process of claim 30, wherein said gold-platinum bi-metallic nanocrystals comprise an alloy of gold and platinum.

ii.) have a particle size of less than about 50nm; and

iii.) are present in said suspension at a concentration of about 2-1000ppm.

17.) The composition of claim 16, wherein said suspension has a zeta potential of at least about -40 mV and a pH of between about 8 to about 12.

18.) The composition of claim 17, wherein said surfaces have no organic chemical constituents adhered or attached to said surfaces.

19.) The composition of claim 16, wherein said surfaces are substantially clean and do not have chemical constituents adhered or attached to surfaces, other than water or lysis products of water.

20.) The composition of claim 19, wherein said suspension does not contain any chlorides or chlorine-based materials used to form the gold-platinum bi-metallic nanocrystals.

21.) A method for treating a patient with a cancerous condition comprising administering to a patient in need thereof an effective amount of a composition of claim 1.

22.) The method of claim 21, wherein the cancerous condition comprises at least one of bladder, breast, cervix, CNS, colon H&N, lung, ovary, prostate, stomach, thyroid, uterus and vulva cancers.

23.) The method of claim 22, wherein the cancerous condition comprises colon cancer.

24.) A method for treating a patient with a condition receptive to platinum therapy comprising administering to a patient in need thereof an effective amount of a composition of claim 1.

25.) The method of claim 21, wherein the composition is administered orally.

26.) The method of claim 21, wherein the composition is administered interperitoneally.

27.) The method of claim 21, wherein the composition is administered intratumorally.

28.) A process for forming gold-platinum bi-metallic nanocrystals suspended in water comprising:

providing at least one processing enhancer in said water;

providing at least one first trough member;

creating a flow direction of said water and processing enhancer through said at least one first trough member;

providing at least one platinum-based plasma forming electrode spaced apart from a surface of said water, thereby forming a space between said at least one platinum-based plasma-forming electrode and said surface of said water;

forming at least one plasma in said space between said at least one metallic-based plasma forming electrode and said surface of said water;

providing at least two sets of electrodes contacting said water, a first set of electrodes contacting said water after said water has flowed past said at least one platinum-based plasma

forming electrode and a second set of electrodes subsequently contacting said water after said water has passed said first set of electrodes;

causing said at least two sets of electrodes to form at least one platinum species in said water;

providing said at least one platinum species in said water to at least one second trough member;

creating a flow direction of said at least one platinum species in said water through said at least one second trough member;

providing at least one gold-based, plasma-forming electrode spaced apart from a surface of said at least one platinum species in said water, thereby forming a space between said at least one gold-based, plasma-forming electrode and said at least one platinum species in said water;

forming at least one plasma in said space between said at least one gold-based, plasma-forming electrode and said at least one platinum species in said water;

providing at least two sets of second electrodes contacting said water, a first set of said second electrodes contacting said at least one platinum species in said water after said at least one platinum species in said water has flowed past said at least one gold-based, plasma-forming electrode and a second set of said second electrodes subsequently contacting said at least one platinum species in said water after said at least one platinum species in said water has passed said first set of second electrodes; and

causing said at least two sets of second electrodes to form said gold-platinum bi-metallic nanocrystals.

29.) The product manufactured by the method of claim 28.

30.) A process for forming gold-platinum bi-metallic nanocrystals suspended in water comprising:

first forming electrochemically at least one platinum species in water and at least one lysis product of water, thereby creating a platinum species and water material; and

using said platinum species and water material in a second electrochemical reaction to form a bi-metallic gold-platinum nanocrystal suspension.

31.) The process of claim 30, wherein at least one platinum electrode is used to form said at least one platinum species in water and at least one gold electrode is used to form said gold-platinum bi-metallic nanocrystals.

32.) The process of claim 30, wherein no chlorides or chlorine-based materials are required in said process to form said gold-platinum bi-metallic nanocrystals.

33.) The process of claim 30, wherein said gold-platinum bi-metallic nanocrystals comprise an alloy of gold and platinum.