

WHAT IS CLAIMED IS:

1. A method, comprising
making copies of two or more populations of polynucleotides comprising identifier sequences, wherein the copies are attached to a substrate,
hybridizing oligonucleotides to the identifier sequences, and
comparing an amount of oligonucleotides hybridized to the copies of the two or more populations of polynucleotides, wherein
at least one feature differs between the two or more populations of polynucleotides or between the making of the copies of the two or more populations of polynucleotides attached to the substrate.
2. The method of claim 1, wherein the at least one feature is selected from a length, a guanine-cytosine content, and a preparation method.
3. The method of claim 1 or 2, wherein the at least one feature comprises a guanine-cytosine content.
4. The method of any one of claims 1 through 3, wherein the at least one feature comprises a length.
5. The method of any one of claims 1 through 4, wherein the at least one feature comprises a preparation method.
6. The method of any one of claims 1 through 5, wherein at least one feature differs between the making of the copies of the two or more populations of polynucleotides attached to the substrate.
7. The method of any one of claims 1 through 6 wherein the oligonucleotides comprise a fluorophore.
8. The method of any one of claims 2 through 7, further comprising detecting a difference between amounts of oligonucleotides hybridized to the copies of the two or more populations of polynucleotides attached to the substrate, wherein the difference is at least about 10%.
9. The method of claim 8, wherein the difference is at least about 20%.
10. The method of claim 8, wherein the difference is at least about 30%.
11. The method of claim 1, wherein:
the at least one feature comprises a combination and the combination comprises two or more of a guanine-cytosine content, a length, a preparation method, and the making of the copies of the two or more populations of polynucleotides attached to the substrate,

the two or more populations of polynucleotides comprise three or more populations of polynucleotides, and
the combination of each of the three or more populations of polynucleotides differs from the combination of another population of polynucleotides.

12. The method of claim 11, further comprising detecting a difference between amounts of oligonucleotides hybridized to the copies of two or more of the three or more populations of polynucleotides attached to the substrate, wherein the difference is at least about 10%.

13. The method of claim 12, wherein the difference is at least about 20%.

14. The method of claim 12, wherein the difference is at least about 30%.

15. A method, comprising
making copies of two or more populations of polynucleotides comprising identifier sequences, wherein the copies are attached to a substrate,
hybridizing oligonucleotides comprising a fluorophore to the identifier sequences, and
detecting an amount of oligonucleotides hybridized to the copies of the two or more populations of polynucleotides, wherein
at least one feature differs between the two or more populations of polynucleotides or between the making of the copies of the two or more populations of polynucleotides attached to the substrate, and
the at least one feature is selected from a length, a guanine-cytosine content, a preparation method, and the making of the copies of the two or more populations of polynucleotides attached to the substrate.

16. The method of claim 15, wherein the at least one feature comprises a guanine-cytosine content.

17. The method of any one of claim 15 or 16, wherein the at least one feature comprises a length.

18. The method of any one of claim 15 through 17, wherein the at least one feature comprises a preparation method.

19. The method of any one of claim 15 through 18, wherein at least one feature differs between the making of the copies of the two or more populations of polynucleotides attached to the substrate.

20. The method of any one of claims 15 through 19, further comprising detecting a difference between an amount of oligonucleotides hybridized to copies of the two or more populations of polynucleotides, wherein the difference is at least about 10%.

21. The method of claim 20, wherein the difference is at least about 20%.

22. The method of claim 20, wherein the difference is at least about 30%.