

Comprehensive List of Mirkin Publications (1986 – December 2016)

1. Williams, G. D.; Lieszkovszky, M. C.; Mirkin, C. A.; Geoffroy, G. L. "Addition of the Os-CH₂ Bond in Os₃(CO)₁₁(□-CH₂)₂ to Pt(PPh₃)₂ to Give the Spiked Triangular Cluster Os₃Pt(□-CH₂)(CO)₁₁(PPh₃)₂. An NMR Investigation of the Fluxional Properties of Os₃(CO)₁₁(□-CH₂)," *Organometallics*, **1986**, *5*, 2228-2233, doi: 10.1021/om00142a010.
2. Davis, S. A.; Mirkin, C. A.; Terichel, M. "Lanthanide-Molecular Interactions in Solution Studied by FT-IR Spectroscopy," *J. of the Less-Common Metals*, **1986**, *126*, 402-402, doi: 10.1016/0022-5088(86)90343-7.
3. Macklin, P. D.; Mirkin, C. A.; Viswanathan, N.; Williams, G. D.; Geoffroy, G. L.; Rheingold, A. L. "Synthesis of Cp(CO)COPt(PPh₃)₂(□-CH₂) and Cp₂(Co)₂Pt(PPh₃)₂(□-CO)₂ from the reaction of Pt(PPh₃)₂(C₂H₄) with [CpCo(CO)]₂(□-CH₂)," *J. Organomet. Chem.*, **1987**, *334*, 117-128, doi: 10.1016/0022-328x(87)80043-8.
4. Mirkin, C. A.; Lu, K.-L.; Geoffroy, G. L.; Rheingold, A. L.; Staley, D. L. "Ferrapyrrolinone and Ferrazetine Complexes Formed from the Reaction of Fe₂(□-CH₂)(CO)₈ with Phosphinimines," *J. Am. Chem. Soc.*, **1989**, *111*, 7279-7281, doi: 10.1021/ja00200a068.
5. Mirkin, C. A.; Geoffroy, G. L.; Maklin, P. D.; Rheingold, A. L. "Synthesis and Characterization of the Heterobinuclear □-Methylene Complex (CO)₄FePt(PPh₃)₂(□-CH₂)," *Inorg. Chim. Acta*, **1990**, *170*, 11-15, doi: 10.1016-s0020-1693(00)80402-8.
6. Mirkin, C. A.; Lu, K.-L.; Snead, T. E.; Geoffroy, G. L.; Rheingold, A. L. "Synthesis of Substituted Pyridinones from the Combination of Fe₂(□-CH₂)(CO)₈ Phosphinimines, and Alkynes," *J. Am. Chem. Soc.*, **1990**, *112*, 2809-2810, doi: 10.1021/ja00163a058.
7. Mirkin, C. A.; Wrighton, M. S. "Carbon Monoxide Dependent Solid-State Electrochemistry of Ferrocenylferrazetine: En Route to a Molecule-based Carbon Monoxide Sensor," *J. Am. Chem. Soc.*, **1990**, *112*, 8596-8597, doi: 10.1021/ja00179a062.
8. Mirkin, C. A.; Lu, K.-L.; Geoffroy, G. L.; Snead, T. E.; Rheingold, A. L. "Fluorine-Substituted Ferracyclopentadiene Complexes with an Unprecedented Fluorine Bridge between Boron and Carbon," *J. Am. Chem. Soc.*, **1990**, *112*, 461-462, doi: 10.1021/ja00157a078.
9. Mirkin, C. A.; Lu, K.-L.; Snead, T. E.; Geoffroy, G. L.; Rheingold, A. L.; Haggerty, B. S. "Preparation and Interconversion of Binuclear 2-Ferrazetine and Isomeric Ferrapyrrolinone Complexes," *J. Am. Chem. Soc.*, **1991**, *113*, 3800-3810, doi: 10.1021/ja00010a024.
10. Mirkin, C. A.; Oyer, T. J.; Wrighton, M. S.; Snead, T. E.; Geoffroy, G. L. "The Photochemistry of Binuclear Ferrazetines: CO vs. Alkyne Insertion," *J. Am. Chem. Soc.*, **1992**, *114*, 1256-1263, doi: 10.1021/ja00030a022.
11. Snead, T. E.; Mirkin, C. A.; Lu, K.-L.; Beckman, H. L.; Geoffroy, G. L.; Rheingold, A. L.; Haggerty, B. S. "Synthesis of 2-Ferrapyridine Complexes and their Use as Precursors for Substituted Pyridinones and Pyrroles," *Organometallics*, **1992**, *11*, 942-958, doi: 10.1021/om00038a067.
12. Mirkin, C. A.; Valentine, J. R.; Ofer, D.; Hickman, J. J.; Wrighton, M. S. "Chemically Sensitive Microelectrochemical Devices: New Approaches to Sensors," *ACS Symposium Series on Biosensors*, **1992**, *487*, 218-236, doi: 10.1021/bk-1992-0487.ch017.
13. Snead, T. E.; Mirkin, C. A.; Lu, K.-L.; Nguyen, S. T.; Feng, W.-C.; Beckman, H. L.; Geoffroy, G. L.; Rheingold, A. L.; Haggerty, B. S. "Formation of Substituted Ferracyclopentadiene Complexes by the Reaction of Alkynes with Protonated Diferra-□-Azaallylidene Complexes," *Organometallics*, **1992**, *11*, 2613-2622, doi: 10.1021/om00043a052.

14. Mirkin, C. A.; Ratner, M. A. "Molecular Electronics," *Ann. Rev. Phys. Chem.*, **1992**, *43*, 719-754, doi: 10.1146/annurev.pc.43.100192.003443.
15. Chen, K.; Herr, B. R.; Singewald, E. T.; Mirkin, C. A. "Cobalt-Mediated Modification of Oxide Surfaces with Redox Active Molecules," *Langmuir*, **1992**, *8*, 2585-2587, doi: 10.1021/la00047a001.
16. Chen, K. M.; Caldwell, W. B.; Mirkin, C. A. "Fullerene Self-Assembly onto (MeO)₃Si(CH₂)₃NH₂-Modified Oxide Surfaces," *J. Am. Chem. Soc.*, **1993**, *115*, 1193-1194, doi: 10.1021/ja00056a080.
17. Mirkin, C. A.; Premecz, J. E.; Ford, M. E.; Johnson, T. A. "Formation and Catalytic Hydrogenation of the Dimer of 1,2,3,4,5,7 a-Hexahydroimidazol[1,2- \square]pyrazine," *J. Heterocyclic Chem.*, **1993**, *30*, 839-840, doi: 10.1002/jhet.5570300341.
18. Caldwell, W. B.; Chen, K.; Mirkin, C. A.; Babinec, S. J. "Self-assembled Monolayer Films of C₆₀ on Cysteamine-modified Gold," *Langmuir*, **1993**, *9*, 1945-1947, doi: 10.1021/la00032a002.
19. Herr, B. R.; Mirkin, C. A. "Self-Assembled Monolayers of Ferrocenylazobenzenes - Monolayer Structure vs Response," *J. Am. Chem. Soc.*, **1994**, *116*, 1157-1158, doi: 10.1021/ja00082a058.
20. Allgeier, A. M.; Singewald, E.T.; Mirkin, C. A.; Stern, C. L. "[Rh(\square^4 -(\square^5 C₅H₄)OCH₂CH₂P(C₆H₅)₂Fe)]BF₄: An Olefin Hydrogenation Catalyst and the First Rh(I) *Cis*-Phosphine-*Cis*-Ether Complex Characterized by Single-Crystal X-Ray-Diffraction Methods," *Organometallics*, **1994**, *13*, 2928-2930, doi: 10.1021/om00020a005.
21. Herr, B. R.; Mirkin, C. A. "Ion-Gated Electron Transfer in Self-assembled Monolayer Films of Two-Component Redox Systems," *Proceedings of the American Chemical Society Division of Polymeric Materials Science and Engineering*, **1994**, *71*, 775-776.
22. Caldwell, W. B.; Chen, K. M.; Herr, B. R.; Mirkin, C. A.; Hulteen, J. C.; Van Duyne, R. P. "Self-Assembled Monolayers of Ferrocenylazobenzenes on Au(111)/Mica Films - Surface-Enhanced Raman-Scattering Response vs Surface-Morphology," *Langmuir*, **1994**, *10*, 4109-4115, doi: 10.1021/la00023a034.
23. Shi, X. B.; Caldwell, W. B.; Chen, K. M.; Mirkin, C. A. "A Well-Defined Surface-Confinable Fullerene - Monolayer Self-assembly on Au(111)," *J. Am. Chem. Soc.*, **1994**, *116*, 11598-11599, doi: 10.1021/ja00104a062.
24. Singewald, E. T.; Mirkin, C. A., Levy, A. D.; Stern, C. L. "Novel Rh^I Piano-Stool Complexes with New Hemilabile Ligands Ligating through Phosphane and Arene Groups: Synthesis, Characterization, and Reactivity," *Angew. Chem. Int. Ed.*, **1995**, *33*, 2473-2475, doi: 10.1002/anie.199424731.
25. Singewald, E. T.; Mirkin, C. A.; Stern, C. L. "A Redox-Switchable Hemilabile Ligand: Electrochemical Control of the Coordination Environment of a Rh^I Complex," *Angew. Chem. Int. Ed.*, **1995**, *34*, 1624-1627, doi: 10.1002/anie.199516241.
26. Caldwell, W. B.; Campbell, D. J.; Chen, K. M.; Herr, B. R.; Mirkin, C. A.; Malik, A.; Durbin, M. K.; Huang, K. G.; Dutta, P. "A Highly Ordered Self-assembled Monolayer Film of an Azobenzenealkanethiol on Au(111) - Electrochemical Properties and Structural Characterization by Synchrotron In-Plane X-ray Diffraction, Atomic Force Microscopy, and Surface-Enhanced Raman Spectroscopy," *J. Am. Chem. Soc.*, **1995**, *117*, 6071-6082, doi: 10.1021/ja00127a021.
27. Chen, K. M.; Mirkin, C. A.; Lo, R.-K.; Zhao, J.; McDevitt, J. T. "Surveying the Surface Coordination Chemistry of a Superconductor: Spontaneous Adsorption of Monolayer Films

- of Redox-Active Ligands on $\text{YBa}_2\text{Cu}_3\text{O}_{7-x}$,” *J. Am. Chem. Soc.*, **1995**, *117*, 6374-6375, doi: 10.1021/ja00128a034.
28. Higgins, T. B.; Mirkin, C. A. “Model Compounds for Polymeric Redox-Switchable Hemilabile Ligands,” *Inorg. Chim. Acta, Basolo Honor Edition*, **1995**, *240*, 347-353, doi: 10.1016/0020-1693(95)04553-8.
29. Mirkin, C. A.; Caldwell, W. B.; Shi, X. “Self-Assembled Two- and Three-Dimensional Fullerene-Based Materials: Structure and Function,” *Proceedings of the Electrochemical Society*, **1995**, *95-10*, 1325-1341.
30. Sassano, C. A.; Mirkin, C. A. “Degenerate Exchange-Reactions: A Novel and General Way to Determine the Thermodynamic Perturbations on Transition-Metal Complexes that Result from Ligand Oxidation,” *J. Am. Chem. Soc.*, **1995**, *117*, 11379-11380, doi: 10.1021/ja00150a052.
31. McDevitt, J. T.; Lo, R.-K.; Ritchie, J. E.; Zhao, J.; Mirkin, C. A.; Xu, F.; Chen, K. “Molecular Level Control of the Surface Properties of High- T_c Superconductor Materials,” *TCSUH Symposium Proceedings*, Houston, Texas, March **1996**.
32. Mirkin, C. A.; Letsinger, R. L.; Mucic, R. C.; Storhoff, J. J. “A DNA-based method for rationally assembling nanoparticles into macroscopic materials,” *Nature*, **1996**, *382*, 607-609, doi: 10.1038/382607a0.
33. Covington, M.; Xu, F.; Mirkin, C. A.; Feldmann, W. L.; Greene, L. H. “Tunneling Spectroscopy of Superconducting $\text{Y}_{1-x}\text{Pr}_x\text{Ba}_2\text{Cu}_3\text{O}_7$ Thin Films,” *Czech. J. Phys.*, **1996**, *46*, 1341-1342, doi: 10.1007/bf02562785.
34. Mucic, R. C.; Herrlein, M. K.; Mirkin, C. A.; Letsinger, R. L. “Synthesis and Characterization of DNA with Ferrocenyl Groups Attached to Their 5'-Termini: Electrochemical Characterization of a Redox-active Nucleotide Monolayer,” *Chem. Comm.*, **1996**, 555-557, doi: 10.1039/cc9960000555.
35. McDevitt, J. T.; Mirkin, C. A.; Lo, R.-K.; Chen, K.; Zhao, J. P.; Xu, F.; Haupt, S. G.; Zhao, J.; Jurbergs, D. C. “Molecular Level Control over the Surface and Interfacial Properties of High- T_c Superconductors,” *Chem. Mater.*, **1996**, *8*, 811-813, doi: 10.1021/cm960141t.
36. Mirkin, C. A.; Caldwell, W. B. “Thin Film, Fullerene-Based Materials,” *Tetrahedron*, **1996**, *52*, 5113-5130, doi: 10.1016/0040-4020(96)00118-4.
37. Chen, K. M.; Xu, F.; Mirkin, C. A.; Lo, R. K.; Nanjundaswamy, K. S.; Zhou, J.-P.; McDevitt, J. T. “Do Alkanethiols Adsorb onto the Surfaces of Tl-Ba-Ca-Cu-O-Based High-Temperature Superconductors? The Critical Role of H_2O Content on the Adsorption Process,” *Langmuir*, **1996**, *12*, 2622-2624, doi: 10.1021/la950726m.
38. Lo, R.-K.; Ritchie, J. E.; Zhou, J.-P.; Zhao, J.; McDevitt, J. T.; Xu, F.; Mirkin, C. A. “Polypyrrole Growth on $\text{YBa}_2\text{Cu}_3\text{O}_7$ -Delta Modified with a Self-assembled Monolayer of N-(3-Aminopropyl) Pyrrole: Hardwiring the Electroactive Hot Spots on a Superconductor Electrode,” *J. Am. Chem. Soc.*, **1996**, *118*, 11295-11296, doi: 10.1021/ja9610343.
39. Caldwell, W. B.; Mirkin, C. A. “The Design And Synthesis of ‘Rotoball’: A New Strategy For Preparing Highly Ordered Fullerene-Based Monolayer Films,” *Proceedings of the Electrochemical Society*, **1996**, *96*, 842-853.
40. Singewald, E. T.; Shi, X. B.; Mirkin, C. A.; Schofer, S. J.; Stern, C. L. “Novel Hemilabile (Phosphinoalkyl)arene Ligands: Mechanistic Investigation of an Unusual Intramolecular, Arene-Arene Exchange Reaction,” *Organometallics*, **1996**, *15*, 3062-3069, doi: 10.1021/om960114c.

41. Xu, F.; Chen, K. M.; Zhu, J.; Campbell, D. J.; Mirkin, C. A.; Lo, R.; Zhao, J.; McDevitt, J. T. "Probing The Surface Coordination Chemistry of $\text{YBa}_2\text{Cu}_3\text{O}_7$ with Redox-Active Adsorbate Molecules" *Proceedings of the Electrochemical Society*, **1996**, *96*, 130-137.
42. Campbell, D. J.; Herr, B. R.; Hulteen, J. C.; Van Duyne, R. P.; Mirkin, C. A. "Ion-gated Electron Transfer in Self-assembled Monolayer Films," *J. Am. Chem. Soc.*, **1996**, *118*, 10211-10219, doi: 10.1021/ja961873p.
43. McDevitt, J. T.; Ritchie, J. E.; Jones, C. T.; Wells, A. D.; Mirkin, C. A.; Xu, F. "Preparation and Study of Conductive Polymer High-Tc Superconductor Assemblies," *Mater. Res. Soc. Symp. Proc.*, **1997**, *451*, 307-314.
44. Zhu, J.; Xu, F.; Schofer, S. J.; Mirkin, C. A. "The First Raman Spectrum of an Organic Monolayer on a High Temperature Superconductor: Direct Spectroscopic Evidence for a Chemical Interaction between an Amine and $\text{YBa}_2\text{Cu}_3\text{O}_{7-x}$," *J. Am. Chem. Soc.*, **1997**, *119*, 235-236, doi: 10.1021/ja962556l.
45. McDevitt, J. T.; Ritchie, J. E.; Clevenger, M. B.; Lo, R.-K.; Mirkin, C. A.; Xu, F. "Molecular Engineering of Organic Conductor High-Tc Superconductor Assemblies," *Synthetic Metals*, **1997**, *84*, 407-408, doi: 10.1016/s0379-6779(97)80805-3.
46. Allgeier, A. M.; Mirkin, C. A. "Synthesis and Charge Dependent Binding Affinity of a New Redox-Active Polymeric Ligand," *Organometallics*, **1997**, *16*, 3071-3073, doi: 10.1021/om970023v.
47. Singewald, E. T.; Slone, C. S.; Stern, C. L.; Mirkin, C.A.; Yap, G. P. A.; Liable-Sands, L. M.; Rheingold, A. L. "Probing the Factors That Stabilize Mononuclear Rhodium(II) Bis(phosphine), Beta(6)-arene Complexes with Piano-stool Geometries," *J. Am. Chem. Soc.*, **1997**, *119*, 3048-3056, doi: 10.1021/ja963384v.
48. Allgeier, A. M.; Slone, C. S.; Mirkin, C. A.; Liable-Sands, L. M.; Yap, G. P. A.; Rheingold, A. L. "Electrochemically Controlling Ligand Binding Affinity for Transition Metals via RHLs: The Importance of Electrostatic Effects," *J. Am. Chem. Soc.*, **1997**, *119*, 550-559, doi: 10.1021/ja963008a.
49. Mirkin, C. A.; Xu, F.; Zhu, J. "Controlling the Surface Properties of High Temperature Superconductors," *Adv. Mater.*, **1997**, *9*, 167-173, doi: 10.1002/adma.19970090218.
50. Storhoff, J. J.; Mucic, R. C.; Mirkin, C. A. "Strategies for Organizing Nanoparticles into Aggregate Structures and Functional Materials," *J. Clust. Sci.*, **1997**, *8*, 179-216, doi: 10.1023/a:1022632007869.
51. Caldwell, W. B.; Mirkin, C. A. "Rotoball: A Strategy for Preparing Defect-minimized Fullerene Monolayers," *Proceedings of the JRDC-NWU International Workshop on □-Electron Materials*, **1997**, doi: 10.1007/978-3-662-03569-6_14.
52. Elghanian, R.; Storhoff, J. J.; Mucic, R. C.; Letsinger, R. L.; Mirkin, C. A. "Selective Colorimetric Detection of Polynucleotides Based on the Distance-Dependent Optical Properties of Gold Nanoparticles," *Science*, **1997**, *277*, 1078-1081, doi: 10.1126/science.277.5329.1078.
53. Slone, C. S.; Mirkin, C. A.; Yap, G. P. A.; Guzei, I. A.; Rheingold, A. L. "Oxidation-State-Dependent Reactivity and Catalytic Properties of a Rh(I) Complex Formed From a Redox-Switchable Hemilabile Ligand," *J. Am. Chem. Soc.*, **1997**, *119*, 10743-10753, doi: 10.1021/ja9723601.
54. Piner, R. D.; Mirkin, C. A. "Effect of Water on Lateral Force Microscopy in Air," *Langmuir*, **1997**, *13*, 6864-6868, doi: 10.1021/la970921w.

55. Covington, M.; Aprili, M.; Paraoanu, E.; Greene, L. H.; Xu, F.; Zhu, J.; Mirkin, C. A. "Observation of Surface-induced Broken Time-reversal Symmetry in $\text{YBa}_2\text{Cu}_3\text{O}_7$ Tunnel Functions," *Phys. Rev. Lett.*, **1997**, *79*, 277-280, doi: 10.1103/physrevlett.79.277.
56. Xu, F.; Chen, K.; Piner, R. D.; Mirkin, C. A.; Ritchie, J. E.; McDevitt, J. T.; Cannon, M. O.; Kanis, D. "The Surface Coordination Chemistry of $\text{YBa}_2\text{Cu}_3\text{O}_{7-x}$," *Langmuir*, **1998**, *14*, 6505-6511, doi: 10.1021/la980143n.
57. Higgins, T. B.; Mirkin, C. A. "Model Coordination Complexes for Designing Poly(terthiophene)/Rh(I) Hybrid Materials with Electrochemically Tunable Reactivities," *Chem. Mater.*, **1998**, *10*, 1589-1595, doi: 10.1021/cm970765e.
58. Zhu, J.; Mirkin, C. A.; Braun, R. M.; Winograd, N. "Direct Oxidation of Alkylamines by $\text{YBa}_2\text{Cu}_3\text{O}_{7-x}$: A Key Step in the Formation of Self-Assembled Monolayers on Cuprate Superconductors," *J. Am. Chem. Soc.*, **1998**, *120*, 5126-5127, doi: 10.1021/ja974348e.
59. Farrell, J. R.; Mirkin, C. A.; Guzei, I. A.; Liable-Sands, L. M.; Rheingold, A. L. "The Weak-Link Approach to the Synthesis of Inorganic Macrocycles," *Angew. Chem. Int. Ed.*, **1998**, *37*, 465-467, doi: 10.1002/(sici)1521-3773(19980302)37:4<465::aid-anie465>3.0.co;2-a.
60. Storhoff, J. J.; Elghanian, R.; Mucic, R. C.; Mirkin, C. A.; Letsinger, R. L. "One-Pot Colorimetric Differentiation of Polynucleotides with Single Base Imperfections Using Gold Nanoparticle Probes," *J. Am. Chem. Soc.*, **1998**, *120*, 1959-1964, doi: 10.1021/ja972332i.
61. Allgeier, A. M.; Mirkin, C. A. "Ligand Design for Electrochemically Controlling Stoichiometric and Catalytic Reactivity of Transition Metals," *Angew. Chem. Int. Ed.*, **1998**, *37*, 894-908, doi: 10.1002/(sici)1521-3773(19980420)37:7<894::aid-anie894>3.0.co;2-l.
62. Mucic, R. C.; Storhoff, J. J.; Mirkin, C. A.; Letsinger, R. L. "DNA-Directed Synthesis of Binary Nanoparticle Network Materials," *J. Am. Chem. Soc.*, **1998**, *120*, 12674-12675, doi: 10.1021/ja982721s.
63. Farrell, J. R.; Mirkin, C. A.; Liable-Sands, L. M.; Rheingold, A. L. "A Strategy for Preparing Molecular Cylinders with Synthetically Programmable Structural Parameters," *J. Am. Chem. Soc.*, **1998**, *120*, 11834-11835, doi: 10.1021/ja982688+.
64. Kourkine, I. V.; Slone, C. S.; Mirkin, C. A.; Liable-Sands, L. M.; Guzei, I. A.; Rheingold, A. L. "Small Molecule-Induced Intramolecular Electron 'Pitch and Catch' in A Rhodium(I) Complex with Substitutionally Inert Redox-active Ligands," *Inorg. Chem.*, **1999**, *38*, 2758-2759, doi: 10.1021/ic990193v.
65. Letsinger, R. L.; Mirkin, C. A.; Elghanian, R.; Mucic, R.C.; Storhoff, J. J. "Chemistry of Oligonucleotide-Gold Nanoparticle Conjugates," *Phosphorus, Sulfur, Silicon*, **1999**, *144*, 359-362.
66. Piner, R. D.; Xu, F.; Zhu, J.; Hong, S.; Mirkin, C. A. "Dip Pen Nanolithography," *Science*, **1999**, *283*, 661-663, doi: 10.1126/science.283.5402.661.
67. Storhoff, J. J.; Mirkin, C. A. "Programmed Materials Synthesis with DNA," *Chem. Rev.*, **1999**, *99*, 1849-1862, doi: 10.1021/cr970071p.
68. Weinberger, D. A.; Higgins, T. B.; Mirkin, C. A.; Liable-Sands, L. M.; Rheingold, A. L. "Terthienyl-Based Redox-Switchable Hemilabile Ligands: Transition Metal Polymeric Complexes with Electrochemically Tunable or Switchable Coordination Environments?," *Angew. Chem. Int. Ed.*, **1999**, *38*, 2565-2568, doi: 10.1002/(sici)1521-3773(19990903)38:17<2565::aid-anie2565>3.0.co;2-u.
69. Storhoff, J.J.; Elghanian, R.; Mucic, R. C.; Mirkin, C.A.; Letsinger, R. L. "Facile Colorimetric Detection of Polynucleotides Based On Gold Nanoparticle Probes," *Proceedings of the 1998 ERDEC Scientific Conference on Chemical and Biological Defense Research* **1999**.

70. Walter, D. G.; Campbell, D. J.; Mirkin, C. A. "Photon-Gated Electron Transfer in Two-Component Self-Assembled Monolayers," *J. Phys. Chem. B*, **1999**, *103*, 402-405, doi: 10.1021/jp983460b.
71. Watson, K. J.; Zhu, J.; Nguyen, S. T.; Mirkin, C. A. "Hybrid Nanoparticles with Block Copolymer Shell Structures," *J. Am. Chem. Soc.*, **1999**, *121*, 462-463, doi: 10.1021/ja9831731.
72. Slone, C. S.; Weinberger, D. A.; Mirkin, C. A. "The Transition Metal Coordination Chemistry of Hemilabile Ligands," *Progress in Inorganic Chemistry*, **1999**, *48*, 233-350, doi: 10.1002/9780470166499.ch3.
73. Piner, R. D.; Hong, S.; Mirkin, C. A. "Improved Imaging of Soft Materials with Modified AFM Tips," *Langmuir*, **1999**, *15*, 5457-5460, doi: 10.1021/la990408d.
74. Farrell, J. R.; Eisenberg, A. H.; Mirkin, C. A.; Guzei, I. A.; Liable-Sands, L. M.; Incarvito, C. D.; Rheingold, A. L. "Templated Formation of Binuclear Macrocycles Via Hemilabile Ligands," *Organometallics*, **1999**, *18*, 4856-4868, doi: 10.1021/om990585+.
75. Mitchell, G. P.; Mirkin, C. A.; Letsinger, R. L. "The Programmed Assembly of DNA Functionalized Quantum Dots," *J. Am. Chem. Soc.*, **1999**, *121*, 8122-8123, doi: 10.1021/ja991662v.
76. Holliday, B. J.; Farrell, J. R.; Mirkin, C. A.; Lam, K. C.; Rheingold, A. L. "Metal-Directed Assembly of Triple-Layered Fluorescent Metallocyclophanes," *J. Am. Chem. Soc.*, **1999**, *121*, 6316-6317, doi: 10.1021/ja991140f.
77. Hong, S. H.; Zhu, J.; Mirkin, C. A. "A New Tool for Studying the In-Situ Growth Processes for Self-Assembled Monolayers Under Ambient Conditions," *Langmuir*, **1999**, *15*, 7897-7900, doi: 10.1021/la991095p.
78. Hong, S.; Zhu, J.; Mirkin, C. A. "Multiple Ink Nanolithography: Toward a Multiple-Pen Nanoplotter," *Science*, **1999**, *286*, 523-525, doi: 10.1126/science.286.5439.523.
79. Xu, F.; Zhu, J.; Mirkin, C. A. "Monolayer Growth and Exchange Kinetics for Alkylamines on the High Temperature Superconductor YBa₂Cu₃O_{7- δ} ," *Langmuir*, **2000**, *16*, 2169-2176, doi: 10.1021/la990910y.
80. Mirkin, C. A. "Tweezers for the Nanotool Kit," *Science*, **1999**, *286*, 2095- 2096, doi: 10.1126/science.286.5447.2095.
81. Mirkin, C. A. "Programming the Assembly of Two- and Three-Dimensional Architectures with DNA and Nanoscale Inorganic Building Blocks," *Inorg. Chem.*, **2000**, *39*, 2258-2272, doi: 10.1021/ic991123r.
82. Mirkin, C. A. "A DNA-Based Methodology for Preparing Nanocluster Circuits, Arrays, and Diagnostic Materials," *MRS Bull.*, **2000**, *25*, 43-54.
83. Kourkine, I. V.; Mirkin, C. A.; Lam, K. C.; Rheingold, A. L. "Rationally-Designed Redox-Active Materials for the Separation of Isomers," *J. Am. Chem. Soc.*, **2000**, *122*, 2659-2660, doi: 10.1021/ja994197a.
84. Letsinger, R. L.; Elghanian, R.; Viswanadham, G.; Mirkin, C. A. "Use of Steroid Cyclic Disulfide Anchor in Constructing Gold Nanoparticle-Oligonucleotide Conjugates," *Bioconjugate Chem.*, **2000**, *11*, 289-291, doi: 10.1021/bc990152n.
85. Storhoff, J. J.; Lazarides, A. A.; Mucic, R. C.; Mirkin, C. A.; Letsinger, R. L., Schatz, G. C. "What Controls the Optical Properties of DNA-linked Gold Nanoparticle Assemblies?," *J. Am. Chem. Soc.*, **2000**, *122*, 4640-4650, doi: 10.1021/ja9938251.
86. Watson, K. J.; Zhu, J.; Nguyen, S. T.; Mirkin, C. A. "Redox-Active Polymer-Nanoparticle Hybrid Materials," *Pure Appl. Chem.*, **2000**, *72*, 67-72, doi: 10.1351/pac200072010067.

87. Reynolds, R. A. III; Mirkin, C. A.; Letsinger, R. L. "Homogeneous, Nanoparticle-Based Quantitative Colorimetric Detection of Oligonucleotides," *J. Am. Chem. Soc.*, **2000**, *122*, 3795-3796, doi: 10.1021/ja000133k.
88. Mirkin, C. A. "Bioinspired Two- and Three-Dimensional Nanostructures," *J. Nanopart. Res.*, **2000**, *2*, 121-122, doi: 10.1023/A:1010001012337.
89. Reynolds, R. A.; Mirkin, C. A.; Letsinger, R. L. "A Gold Nanoparticle/latex Microsphere based Colorimetric Oligonucleotide Detection Method," *Pure Appl. Chem.*, **2000**, *72*, 229-235, doi: 10.1351/pac200072010229.
90. Hong, S. H.; Mirkin, C. A. "A Nanoplotter with Both Parallel and Serial Writing Capabilities," *Science*, **2000**, *288*, 1808-1811, doi: 10.1126/science.288.5472.1808.
91. Taton, T. A.; Mucic, R. C.; Mirkin, C. A.; Letsinger, R. L. "The DNA-Mediated Formation of Supramolecular Mono- and Multilayered Nanoparticle Structures," *J. Am. Chem. Soc.*, **2000**, *112*, 6305-6306, doi: 10.1021/ja0007962.
92. Weinberger, D. A.; Hong, S.; Mirkin, C. A.; Wessels, B. W.; Higgins, T. B. "Combinatorial Generation and Analysis of Nanometer- and Micrometer-Scale Silicon Features Via "Dip-Pen" Nanolithography and Wet Chemical Etching," *Adv. Mat.*, **2000**, *12*, 1600-1603, doi: 10.1002/1521-4095(200011)12:21<1600::aid-adma1600>3.0.co;2-6.
93. Taton, T. A.; Mirkin, C. A.; Letsinger, R. L. "Scanometric DNA Array Detection with Nanoparticle Probes," *Science*, **2000**, *289*, 1757-1760, doi: 10.1126/science.289.5485.1757.
94. Mirkin, C. A.; Taton, T.A. "Semiconductors Meet Biology," *Nature*, **2000**, *405*, 626-627, doi: 10.1038/35015190.
95. Demers, L. M.; Mirkin, C. A.; Mucic, R. C.; Reynolds, R. A.; Letsinger, R. L., Elghanian, R.; Viswanadham G. "A Fluorescence-Based Method for Determining the Surface Coverage and Hybridization Efficiency of Thiol-Capped Oligonucleotides Bound to Gold Thin Films and Nanoparticles," *Anal. Chem.*, **2000**, *72*, 5535-5541, doi: 10.1021/ac0006627.
96. Watson, K. J.; Wolfe, P. S.; Nguyen, S. T.; Zhu, J.; Mirkin, C. A. "Norborenyl-Substituted Thiophenes and Terthiophenes: Novel Doubly Polymerizable Monomers," *Macromolecules*, **2000**, *33*, 4628-4633, doi: 10.1021/ma992035t.
97. Dixon, F. M.; Eisenberg, A. H.; Farrell, J. R.; Mirkin, C. A.; Liable-Sands L. M.; Rheingold, A. L. "Neutral Macrocycles via Halide-Induced Ring Opening of Binuclear Condensed Intermediates," *Inorg. Chem.*, **2000**, *39*, 3432-3433, doi: 10.1021/ic000062q.
98. Taton, T. A.; Mirkin, C. A. "Haplotyping by Force," *Nature Biotechnology*, **2000**, *18*, 713, doi: 10.1038/77267.
99. Park, S. J.; Lazarides, A. A.; Mirkin, C. A.; Brazis, P.W.; Kannewurf, C. R.; Letsinger, R. L. "The Electrical Properties of Gold Nanoparticle Assemblies Linked by DNA," *Angew. Chem.*, **2000**, *39*, 3845-3848, doi :10.1002/1521-3773(20001103)39:21<3845::aid-anie3845>3.0.co;2-o.
100. Watson, K. J.; Nguyen, S. T.; Mirkin, C. A. "The Synthesis and Ring-Opening Metathesis Polymerization of an Amphiphilic Redox-Active Norbornene," *J. Org. Chem.*, **2000**, *606*, 79-83, doi: 10.1016/s0022-328x(00)00097-8.
101. Mirkin, C. A.; Rogers, J.A. "Emerging Methods for Micro- and Nanofabrication," *MRS Bull.*, **2001**, *26*, 506-508, doi: 10.1557/mrs2001.121.
102. Demers, L.M.; Park, S.-J.; Taton, A.T.; Mirkin, C. A.; Li, Z. "Orthogonal Assembly of Nanoparticle Building Blocks on Dip-Pen Nanolithographically Generated Templates of DNA," *Angew. Chem. Int. Ed.*, **2001**, *40*, 3071-3073, doi: 10.1002/1521-3773(20010817)40:16<3071::aid-anie3071>3.0.co;2-s.

103. Mirkin, C. A. "Dip-Pen Nanolithography: Automated Fabrication of Custom Multicomponent, Sub-100 Nanometer Surface Architectures," *MRS Bull.*, **2001**, 26, 535-538, doi: 10.1557/mrs2001.126.
104. Mirkin, C. A.; Hong, S.-J.; Demers, L. "Dip-Pen Nanolithography: Controlling Surface Architecture on the Sub-100 Nanometer Length Scale," *ChemPhysChem.*, **2001**, 2, 37-39, doi: 10.1002/1439-7641(20010119)2:1<37::aid-cphc37>3.0.co;2-k.
105. Watson, K. J.; Park, S. J.; Im, J. H.; Nguyen, S. T.; Mirkin, C. A. "DNA-Block Copolymer Conjugates," *J. Am. Chem. Soc.*, **2001**, 123, 5592-5593, doi: 10.1021/ja0156845.
106. Weinberger, D. A.; Higgins, T. B.; Mirkin, C. A.; Stern, C. "Terthienyl and Poly-terthienyl Ligands as Redox-Switchable Hemilabile Ligands for Oxidation-State Dependent Molecular Uptake and Release," *J. Am. Chem. Soc.*, **2001**, 123, 2503-2516, doi: 10.1021/ja0030008.
107. Holliday, B. J., Mirkin, C. A. "Strategies for the Construction of Supramolecular Compounds through Coordination Chemistry," *Angew. Chem., Int. Ed.*, **2001**, 40, 2022-2043, doi: 10.1002/1521-3773(20010601)40:11<2022::aid-anie2022>3.0.co;2-d.
108. Taton, T.A.; Lu, G.; Mirkin, C. A. "Two-Color Labeling of Oligonucleotide Arrays via Size-Selective Scattering of Nanoparticle Probes," *J. Am. Chem. Soc.*, **2001**, 123, 5164-5165, doi: 10.1021/ja0102639.
109. Park, S.-J.; Lazarides, A. A.; Mirkin, C. A. "Directed Assembly of Periodic Materials from Protein and Oligonucleotide-Modified Nanoparticle Building Blocks," *Angew. Chem. Int. Ed.*, **2001**, 40, 2909-2912, doi: 10.1002/1521-3757(20010803)113:15<2993::aid-ange2993>3.0.co;2-9.
110. Liu, X. G.; Eisenberg, A. H.; Stern, C. L.; Mirkin, C. A. "Flexible Redox-Active Binuclear Macrocycles Formed via the Weak-Link Approach and Novel Hemilabile Ligands with *N,N,N',N'*-Tetramethyl-1,4Phenylenediamine Units," *Inorg. Chem.*, **2001**, 40, 2940-2941, doi: 10.1021/ic010393i.
111. Demers, L. M.; Mirkin, C. A. "Combinatorial Templates Generated by Dip-Pen Nanolithography for the Formation of Two-Dimensional Particle Arrays," *Angew. Chem. Int. Ed.*, **2001**, 40, 3069-3071, doi: 10.1002/1521-3757(20010817)113:16<3159::aid-ange3159>3.0.co;2-d.
112. Mirkin, C. A.; Hong, S.; Demers, L. "Dip-Pen Nanolithography: a new tool for studying template driven particle assembly and crystallization," *Polymeric Materials Science and Engineering*, **2001**, 84, 18.
113. Zhang, M.; Bullen, D.; Ryu, K. S.; Liu, C.; Hong, S.; Chung, S. W.; Mirkin, C. A. "Passive and Active Probe Arrays for Dip-Pen Nanolithography," *Proc. IEEE*, **2001**, 27-31, doi: 10.1109/nano.2001.966387.
114. Ivanisevic, A.; Mirkin, C. A. "Dip-Pen Nanolithography on Semiconductor Surfaces," *J. Am. Chem. Soc.*, **2001**, 123, 7887-7889, doi: 10.1021/ja010671c.
115. Eisenberg, A. H.; Dixon, F. M.; Mirkin, C. A.; Stern, C. L.; Rheingold, A. L. "Binuclear Palladium Macrocycles Synthesized via the Weak-Link Approach," *Organometallics*, **2001**, 20, 2052-2058, doi: 10.1021/om001042z.
116. Cao, Y.-W.; Jin, R.; Mirkin, C. A. "DNA-Modified Core-Shell Ag/Au Nanoparticles," *J. Am. Chem. Soc.*, **2001**, 123, 7961-7962, doi: 10.1021/ja011342n.
117. Jin, R.; Cao, Y.-W.; Mirkin, C. A.; Kelly, K. L.; Schatz, G. C.; and Zheng, J. "Photoinduced Conversion of Silver Nanospheres to Nanoprisms," *Science*, **2001**, 294, 1901-1903, doi: 10.1126/science.1066541.
118. Mirkin, C. "Nanotechnology: Fact or Fiction," *Chem. Eng. News*, **2001**, 79, 185.

119. Wilson, D. L.; Martin R.; Hong, S.; Mirkin, C. A. "Surface Organization and Nanopatterning of Collagen by Dip-Pen Nanolithography," *Proc. Natl. Acad. Sci.*, **2001**, *98*, 13660-13664, doi: 10.1073/pnas.241323198, PMID: PMC61097.
120. Ivanisevic, A.; Im, J. H.; Lee, K. B.; Park, S.-J.; Demers, L. M.; Watson, K. J.; Mirkin, C. A. "Redox-Controlled Orthogonal Assembly of Charged Nanostructures," *J. Am. Chem. Soc.*, **2001**, *123*, 12424-12425, doi: 10.1021/ja011933d.
121. Guzman-Jimenez, I. Y.; Whitmire, K.H.; Umezama-Vizzini, K.; Colorado Jr., R.; Do, J.; Jacobson, A.; Lee, T. R.; Hong, S.; Mirkin, C. A. "Self-Assembly of Organometallic Clusters onto the Surface of Gold," *Thin Solid Films*, **2001**, *401*, 131-137, doi: 10.1016/s0040-6090(01)01616-9.
122. Letsinger, R.; Mirkin, C. A.; Park, S.-J.; Viswanadham, G.; Zhang, L. "Poly(oligonucleotides)conjugates: Applications in Assembling Nanoparticles and in Detecting DNA Sequences," *Nucleic Acids Res.*, **2001**, *1*, 1-2.
123. Park, S.-J.; Taton, T. A.; Mirkin, C. A. "Array-Based Electrical Detection of DNA with Nanoparticle Probes," *Science*, **2002**, *295*, 1503-1506, doi: 10.1126/science.1067003.
124. Zhang, M.; Bullen, D.; Chung, S.-W.; Hong, S.; Kee, R. S.; Fan, Z.; Mirkin, C. A.; Liu, C. "A MEMS Nanoplotter with High-Density Parallel Dip-Pen Nanolithography Probe Arrays," *Nanotechnology*, **2002**, *13*, 212-217, doi: 10.1088/0957-4484/13/2/315.
125. Lee, K. B.; Park, S.-J.; Mirkin, C. A.; Smith, J. C.; Mrksich, M. "Protein Nanoarrays Generated by Dip-Pen Nanolithography," *Science*, **2002**, *295*, 1702-1705, doi: 10.1126/science.1067172.
126. Liu, X. G.; Stern, C. L.; Mirkin, C. A. "Chemical Origami: Formation of Flexible 52-Membered Tetranuclear Metallacycles via a Molecular Square Formed from a Hemilabile Ligand," *Organometallics*, **2002**, *21*, 1017-1019, doi: 10.1021/om010964e.
127. Ovchinnikov, M. V; Holliday, B. J; Mirkin, C. A; Zakharov, L. N; Rheingold, A. L. "Threefold Symmetric Trimetallic Macrocycles Formed via the Weak-Link Approach," *Proc. Natl. Acad. Sci.*, **2002**, *99*, 4927-4931, doi: 10.1073/pnas.072690599, PMID: PMC122696.
128. Su, M.; Liu, X. G.; Li, S.-Y.; Dravid, V. P.; Mirkin, C. A. "Moving Beyond Molecules: Patterning Solid-State Features via Dip-Pen Nanolithography With Sol-based Inks," *J. Am. Chem. Soc.*, **2002**, *124*, 1560-1561, doi: 10.1021/ja012502y.
129. Liu, X. G.; Fu, L.; Hong, S. H.; Dravid, V. P.; Mirkin, C. A. "Arrays of Magnetic Nanoparticles Patterned via "Dip Pen" Nanolithography," *Adv. Mat.*, **2002**, *14*, 231-234, doi: 10.1002/1521-4095(20020205)14:3<231::aid-adma231>3.0.co;2-r.
130. Nam, J.-M.; Park, S.-J.; Mirkin, C. A. "Bio-Barcodes Based on Oligonucleotide-Modified Nanoparticles," *J. Am. Chem. Soc.*, **2002**, *124*, 3820-3821, doi: 10.1021/ja0178766.
131. Dixon, F. M.; Farrell, J. R.; Doan, P. E.; Williamson, A.; Weinberger, D. A.; Mirkin, C. A.; Stern, C.; Incarvito, C. D.; Zakharov, L. N.; Rheingold, A. L. "Rational Design of a Novel Mononuclear Rhodium(II) Complex," *Organometallics*, **2002**, *21*, 3091-3093, doi: 10.1021/om020248s.
132. Storhoff, J. J.; Elghanian, R.; Mirkin, C. A.; Letsinger, R. L. "Sequence-Dependent Stability of DNA-modified Gold Nanoparticles," *Langmuir*, **2002**, *18*, 6666-6670, doi: 10.1021/la0202428.
133. Demers, L. M.; Ginger, D. S.; Park, S.-J.; Li, Z.; Chung, S.-W.; Mirkin, C. "Direct Patterning of Modified Oligonucleotides on Metals and Insulators by Dip-Pen Nanolithography," *Science*, **2002**, *296*, 1836-1838, doi: 10.1126/science.1071480.
134. Li, Z.; Jin, R.C.; Mirkin, C. A.; Letsinger, R. L. "Multiple Thiol-Anchor Capped DNA-Gold Nanoparticle Conjugates," *Nucleic Acids Res.*, **2002**, *30*, 1558-1562, PMID: PMC101851.

135. Lim, J.-H.; Mirkin, C. A. "Electrostatically Driven Dip-Pen Nanolithography of Conducting Polymers," *Adv. Mat.*, **2002**, *14*, 1474-1477, doi: 10.1002/1521-4095(20021016)14:20<1474::aid-adma1474>3.0.co;2-2.
136. Zhang, H.; Li, Z.; Mirkin, C. A. "Dip-Pen Nanolithography-Based Methodology for Preparing Arrays of Nanostructures Functionalized with Oligonucleotides," *Adv. Mat.*, **2002**, *14*, 1472-1473, doi: 10.1002/1521-4095(20021016)14:20<1472::aid-adma1472>3.0.co;2-e.
137. Cao, Y. W. C.; Jin, R. C.; Mirkin, C. A. "Nanoparticles with Raman Spectroscopic Fingerprints for DNA and RNA Detection," *Science*, **2002**, *297*, 1536-1540, doi: 10.1126/science.297.5586.1536.
138. Demers, L. M.; Ostblom, M.; Zhang, H.; Jang, N. H.; Liedberg, B.; Mirkin, C. A. "Thermal Desorption Behavior and Binding Properties of DNA Bases and Nucleosides on Gold," *J. Am. Chem. Soc.*, **2002**, *124*, 11248-11249, doi: 10.1021/ja0265355.
139. Ivanisevic, A; McCumber, K. V.; Mirkin, C. A "Site-Directed Exchange Studies with Combinatorial Libraries of Nanostructures," *J. Am. Chem. Soc.*, **2002**, *124*, 11997-12001, doi: 10.1021/ja0203871.
140. Gianneschi, N. C.; Mirkin, C. A.; Zakharov, L. N.; Rheingold, A. L. "A Tetranuclear Heterobimetallic Square Formed From the Cooperative Ligand Binding Properties of Square Planar and Tetrahedral Metal Centers," *Inorg. Chem.*, **2002**, *41*, 5326-5328, doi: 10.1021/ic025875o.
141. Holliday, B. J.; Jeon, Y.-M. ; Mirkin, C. A.; Stern, C. L.; Incarvito, C. D.; Zakharov, L. N.; Sommer, R. D.; Rheingold, A. L. "Probing the Mechanistic and Energetic Basis for the Weak-Link Approach to Supramolecular Coordination Complexes," *Organometallics*, **2002**, *21*, 5713-5725, doi: 10.1021/om020739c.
142. Bullen, D.; Chung, S.-W.; Wang, X. F.; Zou, J.; Liu, C.; Mirkin, C. A. "Development of Parallel Dip-Pen Nanolithography Probe Arrays for High Throughput Nanolithography," *Proceedings of the MRS*, **2002**.
143. Zhang, M.; Bullen, D.; Chung, S.-W.; Hong, S. J.; Ryu, K.; Fan, Z.; Mirkin, C. A.; Liu, C. "A MEMS Nanoplotter with High-Density Parallel Dip-Pen Nanolithography Probe Arrays," *Nanotechnology*, **2002**, *13*, 212-217, doi: 10.1088/0957-4484/13/2/315.
144. Zhang, Y.; Salaita, K. S.; Lim, J.-H.; Mirkin, C. A. "Electrochemical Whittling of Organic Nanostructures," *Nano. Lett.* **2002**, *2*, 1389-1392, doi: 10.1021/nl0202298.
145. Li, Z.; Chung, S.-W.; Nam, J.-M.; Ginger, D. S.; Mirkin, C. A. "Living Templates for Hierarchical Assembly of Gold Nanoparticles," *Angew. Chem. Int. Ed.*, **2003**, *42*, 2306-2309, doi: 10.1002/anie.200351231.
146. Zhang, H.; Chung, S.-W.; Mirkin, C. A. "Fabrication of sub-50-nm Solid-State Nanostructures on the basis of Dip-Pen Nanolithography," *Nano Lett.*, **2003**, *3*, 43-45, doi: 10.1021/nl0258473.
147. Bullen, D.; Wang, X.; Zou, J.; Hong, S.; Chung, S.-W.; Ryu, K.; Fan, Z.; Mirkin, C.; Liu C. "Micromachined arrayed dip-pen nanolithography probes for sub-100 nm direct chemistry patterning," *Proc. IEEE*, **2003**, 4-7, doi: 10.1109/memsys.2003.1189673.
148. Rozhok, S.; Piner, R.; Mirkin, C. A. "Dip-Pen Nanolithography: What Controls Ink Transport?," *J. Phys. Chem. B*, **2003**, *107*, 751-757, doi: 10.1021/jp021550h.
149. Metraux, G. S.; Cao, Y. C.; Jin, R. C.; Mirkin, C. A. "Triangular Nanoframes Made of Gold and Silver," *Nano Lett.*, **2003**, *3*, 519-522, doi: 10.1021/nl034097.

150. Zhang, H.; Lee, K-B.; Li, Z.; Mirkin, C. A. "Biofunctionalized Nanoarrays of Inorganic Structures Prepared by Dip-Pen Nanolithography," *Nanotechnology*, **2003**, *14*, 1113-1117, doi: 10.1088/0957-4484/14/10/308.
151. Fu, L.; Liu, X. G.; Zhang, Y.; Dravid, V. P.; Mirkin, C. A. "Nanopatterning of "Hard" Magnetic Nanostructures via Dip-Pen Nanolithography and a Sol-Based Ink," *Nano Lett.*, **2003**, *3*, 757-760, doi: 10.1021/nl034172g.
152. Jin, R. C.; Cao, Y. C.; Hao, E. C.; Metraux, G. S.; Schatz, G. C.; Mirkin, C. A. "Controlling anisotropic nanoparticle growth through plasmon excitation," *Nature*, **2003**, *425*, 487-490, doi: 10.1038/nature02020.
153. Lee, K-B.; Lim, J-H.; Mirkin, C. A. "Protein Nanostructures Formed Via Direct-Write Dip-Pen Nanolithography," *J. Am. Chem. Soc.*, **2003**, *125*, 5588-5589, doi: 10.1021/ja034236p.
154. Lim, J-H.; Ginger, D. S.; Lee, K-B.; Heo, J.; Nam, J-M.; Mirkin, C. A. "Direct-Write Dip-Pen Nanolithography of Proteins on Modified Silicon Oxide Surfaces," *Angew. Chem. Int. Ed.*, **2003**, *42*, 2309 -2312, doi: 10.1002/anie.200351256
155. Smith, J. C.; Lee, K-B.; Wang, Q.; Finn, M. G.; Johnson, J. E.; Mrksich, M.; Mirkin, C. A.; "Nanopatterning the Chemospecific Immobilization of Cowpea Mosaic Virus Capsid," *Nano Lett.*, **2003**, *3*, 883-886, doi: 10.1021/nl025956h.
156. Gianneschi, N. C.; Bertin, P. A.; Nguyen, S. T.; Mirkin, C. A. "A Supramolecular Approach to an Allosteric Catalyst," *J. Am. Chem. Soc.*, **2003**, *125*, 10508-10509, doi: 10.1021/ja035621h.
157. Masar III, M. S.; Ovchinnikov, M. V.; Mirkin, C. A. "Fine-Tuning the "Weak-Link" Approach: Effect of Ligand Electron Density on the Formation of Rh^I and Ir^I Metallomacrocycles," *Inorg. Chem.*, **2003**, *42*, 6851-6858, doi: 10.1021/ic034393p.
158. Bailey, R. C.; Nam, J.-M.; Mirkin, C. A.; Hupp, J. T. "Real-Time Multicolor DNA Detection with Chemosensitive Diffraction Gratings and Nanoparticle Probes," *J. Am. Chem. Soc.*, **2003**, *125*, 13541-13547, doi: 10.1021/ja035479k.
159. Cao, Y. C.; Jin, R. C.; Nam, J.-M.; Thaxton, C. S.; Mirkin, C. A. "Raman Dye-Labeled Nanoparticle Probes For Proteins," *J. Am. Chem. Soc.*, **2003**, *125*, 14676-14677, doi: 10.1021/ja0366235.
160. Zou, J.; Bullen, D.; Wang, X. F.; Liu, C.; Mirkin, C. A., "Conductivity-based Contact Sensing for Probe Arrays in Dip-Pen Nanolithography," *Appl. Phys. Lett.*, **2003**, *83*, 581-583, doi: 10.1036/1.1592620.
161. Ginger, D. S.; Mirkin, C. A.; Cao, C. Y.; "Next-Generation Biosensing with Gold Nanoparticles," *Biophotonics International*, **2003**, *10*, 48-51.
162. Nam, J.-M.; Thaxton, C. S.; Mirkin, C. A. "Nanoparticle-Based Bio-Bar Codes for the Ultrasensitive Detection of Proteins," *Science*, **2003**, *301*, 1884-1886, doi: 10.1126/science.1088755.
163. Liu, X. G.; Guo, S. W.; Mirkin, C. A. "Surface and Site-Specific Ring-Opening Metathesis Polymerization Initiated by Dip-Pen Nanolithography," *Angew. Chem. Int. Ed.*, **2003**, *42*, 4785-4789, doi: 10.1002/ange.200352309.
164. Wang, X. F.; Ryu, K. S.; Bullen, D.; Zou, J.; Zhang, H.; Liu, C.; Mirkin, C. A. "Scanning Probe Contact Printing," *Langmuir*, **2003**, *19*, 8951-8955, doi: 10.1021/la034858o.
165. Wang, X. F.; Ryu, K. S.; Bullen, D.; Zou, J.; Liu, C.; Mirkin, C. A.; "Scanning Probe with Elastomeric (PDMS) Tip for Scanning Probe Microcontact Printing," *Boston Transducers '03: Digest of Technical Papers*, **2003**, v. 1-2, 1003-1006, doi: 10.1109/sensor.2003.1216937.

166. Nam, J.-M.; Ratner, M. A.; Liu, X. G.; Mirkin, C. A. "Single-Walled Carbon Nanotubes and C₆₀ Encapsulated by A Molecular Macrocycle," *J. Phys. Chem. B*, **2003**, *107*, 4705-4710, doi: 10.1021/jp021654s.
167. Eisenberg, A. H.; Ovchinnikov, M. V.; Mirkin, C. A. "Stepwise Formation of Heterobimetallic Macrocycles Synthesized Via the Weak-Link Approach," *J. Am. Chem. Soc.*, **2003**, *125*, 2836-2837, doi: 10.1021/ja027936n.
168. Holliday, B. J.; Arnold, F. P.; Mirkin, C. A. "The Weak-Link Approach: Quantum Chemical Studies of the Key Binuclear Synthetic Intermediates," *J. Phys. Chem. A*, **2003**, *107*, 2737-2742, doi: 10.1021/jp0220711.
169. Jin, R. C.; Wu, G. S.; Li, Z.; Mirkin, C. A.; Schatz, G. C. "What Controls the Melting Properties of DNA-Linked Gold Nanoparticle Assemblies?," *J. Am. Chem. Soc.*, **2003**, *125*, 1643-1654, doi: 10.1021/ja021096v.
170. Dixon, F. M.; Masar III, M. S.; Doan, P. E.; Farrell, J. R.; Arnold Jr., F.P.; Mirkin, C.A.; Incarvito, C. D.; Zakharov, L. N.; Rheingold, A.L. "Rh(II) and Rh(I) Two-Legged Piano-Stool Complexes: Structure, Reactivity, and Electronic Properties," *Inorg. Chem.*, **2003**, *42*, 3245-3255, doi: 10.1021/ic0204981.
171. Thaxton, C. S.; Nam, J.-M.; Mirkin, C. A. "PCR-like sensitivity for Proteins with Bio-Bar-Code Amplification," *Discovery Medicine*, **2003**, *3*, 58-60.
172. Ginger, D.S.; Zhang, H.; Mirkin, C.A. "The Evolution of Dip-Pen Nanolithography," *Angew. Chem. Int. Ed.*, **2004**, *43*, 30-45, doi: 10.1002/anie.200300608.
173. Zou, J.; Wang, X. F.; Bullen, D.; Ryu, K.; Liu, C.; Mirkin, C. A. "A Mould-and-Transfer Technology for Fabricating Scanning Probe Microscopy (SPM) Probes," *Journal of Micromechanics and Microengineering*, **2004**, *14*, 204-211, doi: 10.1088/0960-1317/14/2/006.
174. Zhang, Y.; Salaita, K.; Lim, J-H.; Lee, K-B.; Mirkin, C. A. "A Massively Parallel Electrochemical Approach to the Miniaturization of Organic Micro- and Nanostructures on Surfaces," *Langmuir*, **2004**, *20*, 962-968, doi: 10.1021/1a030392y.
175. Holliday, B. J.; Ulmann, P. A.; Mirkin, C. A.; Stern, C. L.; Zakharov, L. N.; Rheingold, A. L. "Systematic Study of the Role of Ligand Structure in the Formation of Homobinuclear Rhodium Macrocycles Formed via the Weak-Link Approach," *Organometallics*, **2004**, *23*, 1671-1679, doi: 10.1021/om030611a.
176. Nam, J.-M.; Han, S. W.; Lee, K.-B.; Liu, X.; Ratner, M. A.; Mirkin, C. A. "Bioactive Protein Nanoarrays on Nickel Oxide Surfaces Formed by Dip-Pen Nanolithography," *Angew. Chem. Int. Ed.*, **2004**, *43*, 1246-1249, doi: 10.1002/anie.20035203.
177. Zhang, H.; Mirkin, C. A. "DPN-Generated Nanostructures Made of Gold, Silver, and Palladium," *Chem. Mater.*, **2004**, *16*, 1480-1484, doi: 10.1021/cm0305507.
178. McFarland, A. D.; Haynes, C. L.; Mirkin, C. A.; Van Duyne, R. P.; Godwin, H. A. "Color My Nanoworld," *J. Chem. Ed.*, **2004**, *81*, 544A-B, doi: 10.1021/ed081p544a.
179. Park, S.; Lim, J.-H.; Chung, S.W.; Mirkin, C.A. "Self-Assembly of Mesoscopic Metal-Polymer Amphiphiles," *Science*, **2004**, *303*, 348-351, doi: 10.1126/science.1093276.
180. Nam, J.-M.; Stoeva, S. I.; Mirkin, C. A. "Bio-Bar-Code-Based DNA Detection with PCR-like Sensitivity," *J. Am. Chem. Soc.*, **2004**, *126*, 5932-5933, doi: 10.1021/ja049384+.
181. Rozhok, S.; Sun, P.; Piner, R.; Lieberman, M.; Mirkin, C. A. "AFM Study of Water Meniscus Formation between an AFM Tip and NaCl Substrate," *J. Phys. Chem. B*, **2004**, *108*, 7814-7819, doi: 10.1021/jp0401269.

182. Masar, M. S.; Mirkin, C. A.; Stern, C. L.; Zakharov, L. N.; Rheingold, A. L. "Binuclear Copper(I) Macrocycles Synthesized via the Weak-Link Approach," *Inorg. Chem.*, **2004**, *43*, 4693-4701, doi: 10.1021/ic049658u.
183. Park, S.-J.; Lazarides, A. A.; Storhoff, J. J.; Pesce, L.; Mirkin, C. A. "The Structural Characterization of Oligonucleotide-Modified Gold Nanoparticle Networks Formed by DNA Hybridization," *J. Phys. Chem. B.*, **2004**, *108*, 12375-12380, doi: 10.1021/jp040242b.
184. Zhang, H.; Jin, R. C.; Mirkin, C. A. "Synthesis of Open-Ended, Cylindrical Au-Ag Alloy Nanostructures on a Si/SiO_x Surface," *Nano Lett.*, **2004**, *4*, 1493-1495, doi: 10.1021/nl0492281.
185. Lee, K.-B.; Park, S.; Mirkin, C. A. "Multicomponent Magnetic Nanorods for Biomolecular Separations," *Angew. Chem. Int. Ed.*, **2004**, *43*, 3048-3050, doi: 10.1002/ange.200454088.
186. Li, Z.; Zhang, Y.; Fullhart, P.; Mirkin, C. A. "Reversible and Chemically Programmable Micelle Assembly with DNA Block-Copolymer Amphiphiles," *Nano Lett.*, **2004**, *4*, 1055-1058, doi: 10.1021/nl049628o.
187. Oh, M.; Stern, C. L.; Mirkin, C. A. "Coordination Polymers with Macrocyclic Cages and Pockets within Their Backbones," *Chem. Comm.* **2004**, 2684-2685, doi: 10.1039/b408084j.
188. Rosi, N. L.; Thaxton, C. S.; Mirkin, C. A. "Control of Nanoparticle Assembly by Using DNA-Modified Diatom Templates," *Angew. Chem. Int. Ed.*, **2004**, *43*, 5500-5503, doi: 10.1002/anie.200460905.
189. Gianneschi, N. C.; Cho, S.-H.; Nguyen, S. T.; Mirkin, C. A. "Reversibly Addressing an Allosteric Catalyst In Situ: Catalytic Molecular Tweezers," *Angew. Chem. Int. Ed.*, **2004**, *43*, 5503-5507, doi: 10.1002/ange.200460932.
190. Lee, K.-B.; Kim, E.-Y.; Mirkin, C. A.; Wolinsky, S. M.; "The Use of Nanoarrays for Highly Sensitive and Selective Detection of Human Immunodeficiency Virus Type 1 in Plasma," *Nano Lett.*, **2004**, *4*, 1869-1872, doi: 10.1021/nl049002y.
191. Park, S.; Chung, S.-W.; Mirkin, C. A. "Hybrid Organic-Inorganic, Rod-Shaped Nanoresistors and Diodes," *J. Am. Chem. Soc.*, **2004**, *126*, 11772-11773, doi: 10.1021/ja046077v.
192. Ovchinnikov, M. V.; Brown, A. M.; Liu, X. G.; Mirkin, C. A.; Zakharov, L. N.; Rheingold, A. L. "Heteroligated Metallomacrocycles Generated via the Weak-Link Approach," *Inorg. Chem.*, **2004**, *43*, 8233-8235, doi: 10.1021/ic048785n.
193. Brown, A. M.; Ovchinnikov, M. V.; Stern, C. L.; Mirkin, C. A. "Halide-induced supramolecular ligand rearrangement," *J. Am. Chem. Soc.*, **2004**, *126*, 14316-14317, doi: 10.1021/ja045316b.
194. Mirkin, C. A.; Thaxton, C. S.; Rosi, N. L. "Nanostructures in Biodefense and Molecular Diagnostics," *Expert Rev. Mol. Diagn.*, **2004**, *4*, 749-751, doi: 10.1586/14737159.4.6.749.
195. Vesper, B. J.; Salaita, K.; Zong, H.; Mirkin, C. A.; Barrett, A. G. M.; Hoffman, B. M. "Surface-Bound Porphyrazines: Controlling Reduction Potentials of Self-assembled Monolayers through Molecular Proximity/Orientation to a Metal Surface," *J. Am. Chem. Soc.*, **2004**, *126*, 16653-16658, doi: 10.1021/ja04527m.
196. Bullen, D.; Chung, S.-W.; Wang, X. F.; Zou, J.; Mirkin, C. A.; Liu, C. "Parallel Dip-Pen Nanolithography with Arrays of Individually Addressable Cantilevers," *Appl. Phys. Lett.*, **2004**, *84*, 789-791, doi: 10.1063/1.1644317.
197. Gianneschi, N. C.; Mirkin, C. A. "The Sliding Torus: Catalytic Molecular Rings as Mimics for Natural Processive Enzymes," *Chemtracts - Inorg. Chem.*, **2004**, *17*, 547-553.
198. Storhoff, J. J.; Marla, S. S.; Garimella, V.; Mirkin, C. A. "Labels and Detection Methods," *Microarray Technology and its Applications*, **2005**, 147-179, doi: 10.1007/3-540-26578-3_8.

199. Bullen, D.; Wang, X. F.; Zou, J.; Chung, S.W.; Mirkin, C. A.; Liu, C. "Design, Fabrication, and Characterization of Thermally Actuated Probe Arrays for Dip Pen Nanolithography," *J. of Microelectromechanical Systems*, **2004**, *13*, 594-602, doi: 10.1109/jmems.2004.828738.
200. Wang, X. F.; Bullen, D.; Zou, J.; Chung, S.W.; Liu, C.; Mirkin, C. A.; "Thermally Actuated Probe Array for Parallel Dip Pen Nanolithography," *J. of Vac. Sci. & Tech. B*, **2004**, *22*, 2563-2567, doi: 10.1116/1.1805544.
201. Thaxton, C. S.; Rosi, N. L.; Mirkin, C. A. "Optically and Chemically Encoded Nanoparticle Materials for DNA and Protein Detection," *MRS Bulletin*, **2005**, *30*, 376-380, doi: 10.1557/mrs2005.101.
202. Liu, X. G.; Zhang, Y.; Goswami, D. K.; Okasinski, J. S.; Salaita, K. S.; Sun, P.; Bedzyk, M. J.; Mirkin, C. A. "The Controlled Evolution of a Polymer Single Crystal," *Science*, **2005**, *307*, 1763-1766, doi: 10.1126/science.1109487.
203. Sanedrin, R. G.; Georganopoulou, D. G.; Park, S.; Mirkin, C.A. "Seed-Mediated Growth of Bimetallic Prisms," *Adv. Mater.*, **2005**, *17*, 1027-1031, doi: 10.1002/adma.200402022.
204. Ryu, K. S.; Wang, X. F.; Shaikh, K.; Bullen, D.; Goluch, E.; Zou, J.; Liu, C.; Mirkin, C. A. "Integrated Microfluidic Inking Chip for Scanning Probe Nanolithography," *Appl. Phys. Lett.*, **2004**, *85*, 136-138, doi: 10.1063/1.1771453.
205. Rozhok, S.; Shen, C. K. -F.; Littler, P. -L. H.; Fan, Z.; Liu, C.; Mirkin, C. A.; Holz, R. C. "Methods for Fabricating Microarrays of Motile Bacteria," *Small*, **2005**, *1*, 445-451, doi: 10.1002/smll.200400072.
206. Gibbs, J. M.; Park, S.-J.; Anderson, D. R.; Watson, K. J.; Mirkin, C. A.; Nguyen, S. T. "Polymer-DNA Hybrids as Electrochemical Probes for the Detection of DNA," *J. Am. Chem. Soc.*, **2005**, *127*, 1170-1178, doi: 10.1021/ja046931i.
207. Gianneschi, N. C.; Nguyen, S. T.; Mirkin, C. A. "Signal Amplification and Detection via a Supramolecular Allosteric Catalyst," *J. Am. Chem. Soc.*, **2005**, *127*, 1644-1645, doi: 10.1021/ja0437306.
208. Khoshbin, M. S.; Ovchinnikov, M. V.; Mirkin, C. A.; Zakharov, L. N.; Rheingold, A. L. "Binuclear Ruthenium Macrocycles Formed via the Weak-Link Approach," *Inorg. Chem*, **2005**, *44*, 496-501, doi: 10.1021/ic.048975y.
209. Xue, C.; Li, Z.; Mirkin, C. A. "Large-Scale Assembly of Single-Crystal Silver Nanoprism Monolayers," *Small*, **2005**, *1*, 513-516, doi: 10.1002/smll.200400150.
210. Millstone, J. E.; Park, S.; Shuford, K. L.; Qin, L.; Schatz, G. C.; Mirkin, C. A. "Observation of a Quadrupole Plasmon Mode for a Colloidal Solution of Gold Nanoprisms," *J. Am. Chem. Soc.*, **2005**, *127*, 5312-5313, doi: 10.1021/ja043245a.
211. Pokorski, J. K.; Nam, J.-M.; Vega, R. A.; Mirkin, C. A.; Appella, D. H. "Cyclopentane-Modified PNA Improves the Sensitivity of Nanoparticle-Based Scanometric DNA Detection," *Chem. Comm.* **2005**, 2101-2103, doi: 10.1039/b418383e.
212. Mirkin, C.A. "The Beginning of a *Small* Revolution," *Small*, **2005**, *1*, 14-16, doi: 10.1002/smll.200400092.
213. Georganopoulou, D. G.; Chang, L.; Nam, J.-M.; Thaxton, C. S.; Mufson, E. J.; Klein, W. L.; Mirkin, C. A. "Nanoparticle-Based Detection in Cerebral Spinal Fluid of a Soluble Pathogenic Biomarker for Alzheimer's Disease," *Proc. Natl. Acad. Sci.*, **2005**, *102*, 2273-2276, doi: 10.1073/pnas.0409336102, PMID: PMC548981.
214. Oh, M.; Stern, C. L.; Mirkin, C. A. "Coordination Polymers from Silver(I) and Bifunctional Pyridyl Ligands," *Inorg. Chem.*, **2005**, *44*, 2647-2653, doi: 10.1021/ic0482990.

215. Chung, S.-W.; Ginger, D. S.; Morales, M. W.; Zhang, Z.; Chandrasekhar, V.; Ratner, M. A.; Mirkin, C. A. "Top-Down Meets Bottom-Up: Dip-Pen Nanolithography and DNA-Directed Assembly of Nanoscale Electrical Circuits," *Small*, **2005**, *1*, 64-69, doi: 10.1002/sml.200400005.
216. Rosi, N. L.; Mirkin, C. A. "Nanostructures in Biodiagnostics," *Chem Rev.*, **2005**, *105*, 1547-1562, doi: 10.1021/cr030067f. (acknowledged as by the ACS as **Hot Paper** January in 2007)
217. Metraux, G. S.; Mirkin, C. A. "Rapid Thermal Synthesis of Silver Nanoprisms with Chemically Tailorable Thickness," *Adv. Mater.*, **2005**, *17*, 412-415, doi: 10.1002/adma.200401086.
218. Gianneschi, N. C.; Masar III, M. S.; Mirkin, C. A. "Development of a Coordination Chemistry-Based Approach for Functional Supramolecular Structures," *Acc. Chem. Res.*, **2005**, *38*, 825-837, doi: 10.1021/ar980101q.
219. Salaita, K. S.; Amarnath, A.; Maspoch, D. C.; Higgins, T. B.; Mirkin, C. A. "Spontaneous "Phase Separation" of Patterned Binary Alkanethiol Mixtures," *J. Am. Chem. Soc.*, **2005**, *127*, 11283-11287, doi: 10.1021/ja042393y.
220. Brown, A. M.; Ovchinnikov, M. V.; Mirkin, C. A. "Heteroligated Rh-I Tweezer Complexes," *Angew. Chem. Int. Ed.*, **2005**, *44*, 4207-4209, doi: 10.1002/anie.200500689.
221. Payne, E. K.; Rosi, N. L.; Xue, C.; Mirkin, C. A. "Sacrificial Biological Templates for the Formation of Nanostructured Metallic Microshells," *Angew. Chem. Int. Ed.*, **2005**, *44*, 5064-5067, doi: 10.1002/anie.200500988.
222. Lytton-Jean, A. K. R.; Mirkin, C. A. "A Thermodynamic Investigation into the Binding Properties of DNA Functionalized Gold Nanoparticle Probes and Molecular Fluorophore Probes," *J. Am. Chem. Soc.*, **2005**, *127*, 12754-12755, doi: 1.1021/ja052255o.
223. Qin, L. D.; Park, S.; Huang, L.; Mirkin, C. A. "On-Wire Lithography (OWL)," *Science*, **2005**, *309*, 113-115, doi: 10.1126/science.1112666.
224. Lee, S. W.; Sanedrin, R. G.; Oh, B.-K.; Mirkin, C. A. "Nanostructured Polyelectrolyte Multilayer Organic Thin Films Generated via Parallel Dip-Pen Nanolithography," *Adv. Mater.*, **2005**, *17*, 2749-2753, doi: 10.1002/adma.200501120.
225. Li, Z.; Mirkin, C. A. "G-Quartet-Induced Nanoparticle Assembly," *J. Am. Chem. Soc.*, **2005**, *127*, 11568-11569, doi: 10.1021/ja053547s.
226. Cao, Y. C.; Jin, R. C.; Thaxton, C. S.; Mirkin, C.A. "A Two-color-Change, Nanoparticle-Based Method for DNA Detection," *Talanta*, **2005**, *67*, 449-455, doi: 10.1016/j.talanta.2005.06.063.
227. Shaikh, K. A.; Ryu, K. S.; Goluch, E. D.; Nam, J.-M.; Liu, J.; Thaxton, C. S.; Chiesl, T. N.; Barron, A. E.; Lu, Y.; Mirkin, C. A.; Liu, C. "A Modular Microfluidic Architecture for Integrated Biochemical Analysis," *Proc. Natl. Acad. Sci.*, **2005**, *102*, 9745-9750, doi: 10.1073/pnas.0504082102, PMID: PMC1161008.
228. Oh, M.; Mirkin, C. A. "Chemically Tailorable Colloidal Particles From Infinite Coordination Polymers," *Nature*, **2005**, *438*, 651-654, doi: 10.1038/nature04191.
229. Salaita, K. S.; Lee, S. W.; Wang, X. F.; Huang, L.; Dellinger, T. M.; Liu, C.; Mirkin, C.A. "Sub-100nm, Centimeter-Scale, Parallel Dip-Pen Nanolithography," *Small*, **2005**, *1*, 940-945, doi: 10.1002/sml.200500202.
230. Östblom, M.; Liedberg, B.; Demers, L. M.; Mirkin, C. A. "On the Structure and Desorption Dynamics of DNA Bases Adsorbed on Gold: A Temperature-Programmed Study," *J. Phys. Chem. B.*, **2005**, *109*, 15150-15160, doi: 10.1021/jp051617b.
231. Vega, R. A.; Maspoch, D.; Salaita, K.; Mirkin, C. A. "Nanoarrays of Single Virus Particles," *Angew. Chem. Int. Ed.*, **2005**, *44*, 6013-6015, doi: 10.1002/anie.200501978.

232. Thaxton, C. S.; Hill, H. D.; Georganopoulou, D. G.; Stoeva, S. I.; Mirkin, C. A. "A Bio-Bar-Code Assay Based Upon Dithiothreitol-Induced Oligonucleotide Release," *Anal. Chem.*, **2005**, *77*, 8174-8178, doi: 10.1021/ac0514265.
233. Stoeva, S. I.; Huo, F. W.; Lee, J.-S.; Mirkin, C. A. "Three-Layer Composite Magnetic Nanoparticle Probes for DNA," *J. Am. Chem. Soc.*, **2005**, *127*, 15362-15363, doi: 10.1021/ja055056d.
234. Thaxton, C. S.; Mirkin, C. A. "Plasmon Coupling Measures Up," *Nature Biotech*, **2005**, *23*, 681-682, doi: 10.1038/nbt0605-681.
235. Cheng, M. M.-C.; Cuda, G.; Bunimovich, Y. L.; Gaspari, M.; Heath, J. R.; Hill, H. D.; Mirkin, C. A.; Nijdam, A. J.; Terracciano, R.; Thundat, T.; Ferrari, M. "Nanotechnologies for Biomolecular Detection and Medical Diagnostics," *Curr. Opin. Chem Bio.*, **2006**, *10*, 11-19, doi: 10.1016/j.cbpa.2006.01.006.
236. Zou, J.; Wang, X.; Bullen, D.; Liu, C.; Mirkin, C. "Development of two-dimensional scanning probe arrays for dip-pen nanolithography (DPN)," *Proc. SPIE*, **2006**, *6223*, N2230, doi: 10.1117/12.666389.
237. Oh, B.-K.; Nam, J. M.; Lee, S. W.; Mirkin, C. A. "A Fluorophore-Based Bio-Barcode Amplification Assay for Proteins," *Small*, **2006**, *2*, 103-108, doi: [10.1002/sml.200500260](https://doi.org/10.1002/sml.200500260).
238. Thaxton, C. S.; Georganopoulou, D. G.; Mirkin, C. A. "Gold Nanoparticle Probes for the Detection of Nucleic Acid Targets," *Clin. Chimica Acta (CCA)*, **2006**, *363*, 120-126, doi: 10.1016/j.cccn.2005.05.042.
239. Bertin, P. A.; Gibbs, J. M.; Shen, C. K.-F.; Thaxton, C. S.; Russin, W. A.; Mirkin, C. A.; Nguyen, S. T. "Multifunctional Polymeric Nanoparticles From Diverse Bioactive Agents," *J. Am. Chem. Soc.*, **2006**, *128*, 4168-4169, doi: 10.1021/ja056378k.
240. Wang, Y.; Maspoch, D.; Zou, S. L.; Schatz, G. C.; Smalley, R. E.; Mirkin, C. A. "Controlling the Shape, Orientation, and Linkage of Carbon Nanotube Features with Nano Affinity Templates," *Proc. Natl. Acad. Sci.*, **2006**, *103*, 2026-2031, doi: 10.1073/pnas.0511022103, PMID: PMC1413750.
241. Heo, J.; Mirkin, C. A. "Pseudo-Allosteric Recognition of Mandelic Acid with an Enantioselective Coordination Complex," *Angew. Chem. Int. Ed.*, **2006**, *45*, 941-944, doi: 10.1002/ange.200503343.
242. Lee, S. W.; Oh, B.-K.; Sanedrin, R. G.; Salaita, K.; Fujigaya, T.; Mirkin, C. A. "Biologically Active Protein Nanoarrays Generated using Parallel Dip-Pen Nanolithography," *Adv. Mat.*, **2006**, *18*, 1133-1136, doi: 10.1002/adma.200600070.
243. Jin, R. C.; Cao, Y. C.; Thaxton, C. S.; Mirkin, C. A. "Glass-Bead-Based Parallel Detection of DNA Using Composite Raman Labels," *Small*, **2006**, *2*, 375-380, doi: 10.1002/sml.200500322.
244. Oh, B.-K.; Park, S.; Millstone, J. E.; Lee, S. W.; Lee, K.-B.; Mirkin, C. A. "Separation of Tri-Component Protein Mixtures with Triblock Nanorods," *J. Am. Chem. Soc.*, **2006**, *128*, 11825-11829, doi: 10.1021/ja057525h, PMID: PMC3200549.
245. Kim, E. Y.; Stanton, J.; Vega, R. A.; Kunstman, K. J.; Mirkin, C. A.; Wolinsky, S. M. "A Real-Time PCR-Based Method for Determining the Surface Coverage of Thiol-Capped Oligonucleotides Bound onto Gold Nanoparticles," *Nucl. Acids Res.*, **2006**, *34*, 54-61, doi: 10.1093/nar/gkl147, PMID: PMC1440878.

246. Hurst, S. J.; Payne, E. K.; Qin, L.; Mirkin, C. A. "Multisegmented One-Dimensional Nanorods Prepared by Hard-Template Synthetic Methods," *Angew. Chem. Int. Ed.*, **2006**, *45*, 2672-2692, doi: 10.1002/anie.200504025.
247. Khoshbin, M. S.; Ovchinnikov, M. V.; Mirkin, C. A.; Golen, J. A.; Rheingold, A. L. "Metallomacrocycles Incorporating a Hemilabile Tröger's Base Derived Ligand," *Inorg. Chem.*, **2006**, *45*, 2603-2609, doi: 10.1021/ic052000b.
248. Stoeva, S. I.; Lee, J.-S.; Thaxton, C. S.; Mirkin, C. A. "Multiplexed DNA Detection with Biobarcode Nanoparticle Probes," *Angew. Chem. Int. Ed.* **2006**, *45*, 3303-3306, doi: 10.1002/anie.200600124.
249. Han, M. S.; Lytton-Jean, A. K. R.; Mirkin, C. A. "A Gold Nanoparticle Based Approach for Screening Triplex DNA Binders," *J. Am. Chem. Soc.*, **2006**, *128*, 4954-4955, doi: 10.1021/ja0606475, PMCID: PMC3200552, (acknowledged by the ACS as **Hot Paper** in January 2007).
250. Han, M. S.; Lytton-Jean, A. K. R.; Oh, B.-K.; Heo, J.; Mirkin, C. A. "Colorimetric Screening of DNA-Binding Molecules with Gold Nanoparticle Probes," *Angew. Chem. Int. Ed.*, **2006**, *45*, 1807-1810, doi: 10.1002/anie.200504277.
251. Payne, E. K.; Shuford, K. L.; Park, S.; Schatz, G. C.; Mirkin, C. A. "Multipole Plasmon Resonances in Gold Nanorods," *Journal of Physical Chemistry B*, **2006**, *110*, 2150-2154, doi: 10.1021/jp056606x, PMCID: PMC3241533.
252. Vega, R. A.; Maspoch, D.; Shen, C. K.-F.; Kakkassery, J. J.; Chen, B. J.; Fujigaya, T.; Lamb, R. A.; Mirkin, C. A. "Functional Antibody Arrays through Metal Ion-Affinity Templates," *ChemBioChem*, **2006**, *7*, 1653-1657, doi: 10.1002/cbic.200600271.
253. Metraux, G. S.; Jin, R. C.; Mirkin, C. A. "Photoinduced Phase Separation of Gold in Two-Component Nanoparticles," *Small*, **2006**, *2*, 1335-1339, doi: 10.1002/smll.200600013.
254. Millstone, J. E.; Metraux, G. S.; Mirkin, C. A. "Controlling the Edge Length of Gold Nanoprisms via a Seed-Mediated Approach," *Adv. Funct. Mat.*, **2006**, *16*, 1209-1214, doi: 10.1002/adfm.200600066.
255. Oh, M.; Mirkin, C. A. "Ion Exchange as a Way of Controlling the Chemical Compositions of Nano- and Microparticles Made from Infinite Coordination Polymers," *Angew. Chem. Int. Ed.*, **2006**, *45*, 5492-5494, doi: 10.1002/anie.200601918.
256. Stoeva, S. I.; Lee, J.-S.; Smith, J. E.; Rosen, S. T.; Mirkin, C. A. "Multiplexed Detection of Protein Cancer Markers with Biobarcode Nanoparticle Probes," *J. Am. Chem. Soc.*, **2006**, *128*, 8378-8379, doi: 10.1021/ja0613106.
257. Lee, J.-S.; Stoeva, S. I.; Mirkin, C. A. "DNA-Induced Size-Selective Separation of Mixtures of Gold Nanoparticles," *J. Am. Chem. Soc.*, **2006**, *128*, 8899-8903, doi: 10.1021/ja061651j.
258. Hill, H. D.; Mirkin, C. A. "The Bio-Barcode Assay for the Detection of Protein and Nucleic Acid Targets Utilizing Dithiothreitol Induced Ligand Exchange," *Nature Protocols*, **2006**, *1*, 324-336, doi: 10.1038/nprot.2006.51.
259. Jeon, Y.-M.; Heo, J.; Brown, A. M.; Mirkin, C. A. "Triple-Decker Complexes Formed via the Weak Link Approach," *Organometallics*, **2006**, *25*, 2729-2732, doi: 10.1021/om0602310, PMCID: PMC2593806.
260. Salaita, K.; Wang, Y. H.; Fragala, J.; Liu, C.; Mirkin, C. A. "Massively Parallel Dip-Pen Nanolithography With 55,000-Pen Two-Dimensional Arrays," *Angew. Chem. Int. Ed.*, **2006**, *45*, 7220-7223, doi: 10.1002/anie.200603142.

261. Xu, X. Y.; Rosi, N. L.; Wang, Y. H.; Huo, F.; Mirkin, C. A. "Asymmetric Functionalization of Gold Nanoparticles with Oligonucleotides," *J. Am. Chem. Soc.*, **2006**, *128*, 9286-9287, doi: 10.1021/ja061980b, PMID: PMC2525618.
262. Sun, P.; Zong, H.; Salaita, K. S.; Ketter, J. B.; Barrett, A. G. M.; Hoffman, B. M.; Mirkin, C. A. "Probing Surface-Porphyrine Reduction Potentials by Molecular Design," *J. Phys. Chem. B*, **2006**, *110*, 18151-18153, doi: 10.1021/jp065089v.
263. Qin, L. D.; Zou, S. L.; Xue, C.; Atkinson, A.; Schatz, G. C.; Mirkin, C. A. "Designing, Fabricating, and Imaging Raman Hot Spots," *Proceedings of the National Academy of Sciences*, **2006**, *103*, 13300-13303, doi: 10.1073/pnas.0605889103.
264. Rosi, N. L.; Giljohann, D. A.; Thaxton, C. S.; Lytton-Jean, A. K. R.; Han, M. S.; Mirkin, C. A. "Oligonucleotide-Modified Gold Nanoparticles for Intracellular Gene Regulation," *Science*, **2006**, *312*, 1027-1030, doi: 10.1126/science.1125559.
265. Huo, F. W.; Lytton-Jean, A. K. R.; Mirkin, C. A. "Asymmetric Functionalization of Nanoparticles Based on Thermally Addressable DNA Interconnects," *Adv. Mater.*, **2006**, *18*, 2304-2306, doi: 10.1002/adma.200601178.
266. Khoshbin, M. S.; Ovchinnikov, M. V.; Salaita, K. S.; Mirkin, C. A.; Stern, C. L.; Zakharov, L. N.; Rheingold, A. L. "Metallomacrocycles that Incorporate Cofacially Aligned Diimide Units," *Chemistry – An Asian Journal*, **2006**, *1*, 686-692, doi: 10.1002/asia.200600205. (Featured on the cover)
267. Brown, A. M.; Ovchinnikov, M. V.; Stern, C. L.; Mirkin, C. A. "Tetrametallic Rectangular Box Complexes Assembled from Heteroligated Macrocycles," *Chem. Comm.* **2006**, 4386-4388, doi: 10.1039/b609931a.
268. Huang, L.; Chang, Y.-H.; Kakkassery, J. J.; Mirkin, C. A. "Dip-Pen Nanolithography of High Melting-Temperature Molecules," *J. Phys. Chem. B*, **2006**, *110*, 20756-20758, doi: 10.1021/jp065404d, PMID: PMC2525613.
269. Oliveri, C. G.; Gianneschi, N. C.; Nguyen, S. T.; Mirkin, C. A.; Stern, C. L.; Wawrzak, Z.; Pink, M. "Supramolecular Allosteric Cofacial Porphyrin Complexes," *J. Am. Chem. Soc.*, **2006**, *128*, 16286-16296, doi: 10.1021/ja0661010, PMID: PMC2525615.
270. Dipp, M.; Westphal, C.; Mirkin, C. A.; Baker, J.; Harper, T.; Harris, C. "Keeping It Real with Investors," *Nature Biotechnology*, **2006**, *24*, 133-135, doi: 10.1038/bioent899.
271. Salaita, K. S.; Lee, S. W.; Ginger, D. S.; Mirkin, C. A. "DPN-Generated Nanostructures as Positive Resists for Preparing Lithographic Masters or Hole Arrays," *Nano Letters*, **2006**, *6*, 2493-2498, doi: 10.1021/nl061719t.
272. Hurst, S. J.; Lytton-Jean, A. K. R.; Mirkin, C. A. "Maximizing DNA Loading on a Range of Gold Nanoparticle Sizes," *Anal. Chem.*, **2006**, *78*, 8313-8318, doi: 10.1021/ac0613582, PMID: PMC2525614.
273. Rozhok, S.; Fan, Z. F.; Nyamjav, D.; Liu, C.; Mirkin, C. A.; Holz, C. R. "Attachment of Motile Bacterial Cells to Prealigned Holed Microarrays," *Langmuir*, **2006**, *22*, 11251-11254, doi: 10.1021/la0609726.
274. Goluch, E. D.; Nam, J.-M.; Georganopoulou, D. G.; Chiesl, T. N.; Shaikh, K. A.; Ryu, K. S.; Barron, A. E.; Mirkin, C. A.; Liu, C. "A Bio-Barcode Assay for On-Chip Attomolar-Sensitivity Protein Detection," *Lab on a Chip*, **2006**, *6*, 1293-1299, doi: 10.1039/b606294f.
275. Sherry, L. J.; Jin, R. C.; Mirkin, C. A.; Schatz, G. C.; Van Duyne, R. P. "Localized Surface Plasmon Resonance Spectroscopy of Single Silver Triangular Nanoprisms," *Nano Lett.*, **2006**, *6*, 2060-2065, doi: 10.1021/nl061286u.

276. Park, S. Y.; Lee, J.-S.; Georganopoulou, D.; Mirkin, C. A.; Schatz, G. C. "Structures of DNA-Linked Nanoparticle Aggregates," *J. Phys. Chem. B*, **2006**, *110*, 12673-2681, doi: 10.1021/jp062212+.
277. Lenhart, S.; Sun, P.; Wang, Y. H.; Fuchs, H.; Mirkin, C. A. "Massively Parallel Dip-Pen Nanolithography of Heterogeneous Supported Phospholipid Multilayer Patterns," *Small*, **2007**, *3*, 71-75, doi: 10.1002/sml.200600431.
278. Xue, C.; Mirkin, C. A. "pH-Switchable Silver Nanoprism Growth Pathways," *Angew. Chem. Int. Ed.*, **2007**, *46*, 2036-2038, doi: 10.1002/anie.200604637.
279. Zou, S. L.; MasPOCH, D.; Wang, Y. H.; Mirkin, C. A.; Schatz, G. C. "Rings of Single-Walled Carbon Nanotubes: Molecular-Template Directed Assembly and Monte Carlo Modeling," *Nano Letters*, **2007**, *7*, 276-280, doi: 10.1021/nl062258e.
280. Qin, L. D.; Jang, J. W.; Huang, L.; Mirkin, C. A. "Sub-5-nm Gaps Prepared by On-Wire Lithography: Correlating Gap Size with Electrical Transport," *Small*, **2007**, *3*, 86-90, doi: 10.1002/sml.200600386.
281. Jeon, Y.-M.; Heo, J.; Mirkin, C. A. "Acid-Functionalized Dissymmetric Salen Ligands and Their Manganese (III) Complexes," *Tetrahedron Lett.*, **2007**, *48*, 2591-2595, doi: 10.1016/j.tetlet.2007.01.023.
282. Salaita, K.; Wang, Y. H.; Mirkin, C. A. "Applications of Dip-Pen Nanolithography," *Nature Nanotech.*, **2007**, *2*, 145-155, doi: 10.1038/nnano.2007.39.
283. Jang, J.-W., MasPOCH, D.; Fujigaya, T.; Mirkin, C. A. "A "Molecular Eraser" for Dip-Pen Nanolithography," *Small*, **2007**, *3*, 600-605, doi: 10.1002/sml.200600679.
284. Ulmann, P. A.; Brown, A. M.; Ovchinnikov, M. V.; Mirkin, C. A.; DiPasquale, A. G.; Rheingold, A. L. "Spontaneous Formation of Heteroligated Pt-II Complexes with Chelating Hemilabile Ligands," *Chem. Eur. J.*, **2007**, *13*, 4529-4534, doi: 10.1002.chem.200601837.
285. Xu, X.Y.; Han, M. S.; Mirkin, C. A. "A Gold Nanoparticle-Based Real-Time Colorimetric Screening Method for Endonuclease Activity and Inhibition," *Angew. Chem. Int. Ed.*, **2007**, *46*, 3468-3470, doi: 10.1002/anie.200605249.
286. Lee, J.-S.; Han, M. S.; Mirkin, C. A. "Colorimetric Detection of Mercuric Ion (Hg²⁺) in Aqueous Media Using DNA-Functionalized Gold Nanoparticles," *Angew. Chem. Int. Ed.*, **2007**, *46*, 4093-4096, doi: 10.1002/anie.200700269.
287. Jeon, Y.-M.; Heo, J.; Mirkin, C. A. "Dynamic Interconversion of Amorphous Microparticles and Crystalline Rods in Salen-based Homochiral Infinite Coordination Polymers," *J. Am. Chem. Soc.*, **2007**, *129*, 7480-7481, doi: 10.1021/ja071046w, PMID: PMC2532983.
288. Masar, M. S. III; Gianneschi, N. C.; Oliveri, C. G.; Stern, C. L.; Nguyen, S. T.; Mirkin, C. A. "Allosterically Regulated Supramolecular Catalysis of Acyl Transfer Reactions for Signal Amplification and Detection of Small Molecules," *J. Am. Chem. Soc.*, **2007**, *129*, 10149-10158, doi: 10.1021/ja0711516.
289. Keerthivasan, G.; Kang J. A.; Seferos, D. S.; Mirkin, C. A.; Wickrema, A.; Crispino, J. D. "A Role for Survivin in Eucleation of Erythroid Progenitors," *Blood*, **2007**, *110*, 1704.
290. Heo, J.; Jeon, Y.-M.; Mirkin, C. A. "Reversible Interconversion of Homochiral Triangular Macrocycles and Helical Coordination Polymers," *J. Am. Chem. Soc.*, **2007**, *129*, 7712-7713, doi: 10.1021/ja0716812.
291. Lytton-Jean, A. K. R.; Han, M. S.; Mirkin, C. A. "Microarray Detection of Duplex and Triplex DNA Binders with DNA-Modified Gold Nanoparticles," *Analytical Chem.*, **2007**, *79*, 6037-6041, doi: 10.1021/ac070635h, PMID: PMC2525617.

292. Vega, R. A.; Shen, C. K.-F.; Maspoch, D.; Robach, J. G.; Lamb, R. A.; Mirkin, C. A. "Monitoring Single-Cell Infectivity from Virus-Particle Nanoarrays Fabricated by Parallel Dip-Pen Nanolithography," *Small*, **2007**, *3*, 1482-1485, doi: 10.1002/sml.200700244.
293. Hurst, S. J.; Han, M. S.; Lytton-Jean, A. K. R.; Mirkin, C. A. "Screening the Sequence Selectivity of DNA-Binding Molecules Using a Gold Nanoparticle-Based Colorimetric Approach," *Anal. Chem.*, **2007**, *79*, 7201-7205, doi: 10.1021/ac071253e.
294. Seferos, D. S.; Giljohann, D. A.; Rosi, N. L.; Mirkin, C. A. "Locked Nucleic Acid-Nanoparticle Conjugates," *ChemBioChem*, **2007**, *8*, 1230-1232, doi: 10.1002/cbic.200700262.
295. Xu, X. Y.; Georganopoulou, D. G.; Hill, H. D.; Mirkin, C. A. "Homogeneous Detection of Nucleic Acids Based upon the Light Scattering Properties of Silver-Coated Nanoparticle Probes," *Anal. Chem.* **2007**, *79*, 6650-6654, doi: 10.1021/ac070867g.
296. Tang, S. X.; Zhao, J. Q.; Storhoff, J. J.; Norris, P. I.; Little, R. F.; Yarchoan, R.; Stramer, S. L.; Patno, T.; Domanus, M.; Bernal, Y.; Dhar, A.; Mirkin, C. A.; Hewlett, I. "Nanoparticle-Based Biobarcode Amplification Assay (BCA) for Sensitive and Early Detection of Human Immunodeficiency Type 1 Capsid (p24) Antigen," *J. Aids*, **2007**, *46*, 231-237, doi: 10.1097/qai.0b013e31814a554b.
297. Lee, J.-S.; Lytton-Jean, A. K. R.; Hurst, S. J.; Mirkin, C. A. "Silver Nanoparticle-Oligonucleotide Conjugates Based on DNA with Triple Cyclic Disulfide Moieties," *Nano Lett.* **2007**, *7*, 2112-2115, doi: 10.1021/nl071108g, PMID: PMC3200546.
298. Kuwabara, J.; Stern, C. L.; Mirkin, C. A. "A Coordination Chemistry Approach to a Multieffector Enzyme Mimic," *J. Am. Chem. Soc.*, **2007**, *129*, 10074-10075, doi: 10.1021/ja073447h.
299. Qin, L.; Banholzer, M. J.; Millstone, J. E.; Mirkin, C. A. "Nanodisk Codes," *Nano Lett.*, **2007**, *7*, 3849-3853, doi: 10.121/nl072606s, PMID: PMC3200538.
300. Oliveri, C. G.; Heo, J.; Nguyen, S. T.; Mirkin, C. A.; Wawrzak, Z. "A Convergent Coordination Chemistry-Based Approach to Dissymmetric Macrocyclic Cofacial Porphyrin Complexes," *Inorg. Chem.*, **2007**, *46*, 7716-7718, doi: 10.1021/ic701424j.
301. Xue, C.; Chen, X.; Hurst, S. J.; Mirkin, C. A. "Self-Assembled Monolayer Mediated Silica Coating of Silver Triangular Nanoprisms," *Adv. Mater.*, **2007**, *19*, 4071-4074, doi: 10.1002/adma.200701506.
302. Hill, H. D.; Vega, R. A.; Mirkin, C. A. "Nonenzymatic Detection of Bacterial Genomic DNA Using the Bio Bar Code Assay," *Anal. Chem.*, **2007**, *79*, 9218-9223, doi: 10.1021/ac701626y, PMID: PMC3241528.
303. Xue, C.; Millstone, J. E.; Li, S. Y.; Mirkin, C. A. "Plasmon-Driven Synthesis of Triangular Core-Shell Nanoprisms from Gold Seeds," *Angew. Chem. Int. Ed.* **2007**, *46*, 8436-8439, doi: 10.1002/anie.200703185.
304. Giljohann, D. A.; Seferos, D. S.; Patel, P. C.; Millstone, J. E.; Rosi, N. L.; Mirkin, C. A. "Oligonucleotide Loading Determines Cellular Uptake of DNA-Modified Gold Nanoparticles," *Nano Lett.*, **2007**, *7*, 3818-3821, doi: 10.1021/nl072471q.
305. Seferos, D. S.; Giljohann, D. A.; Hill, H. D.; Prigodich, A. E.; Mirkin, C. A. "Nano-flares: Probes for Transfection and mRNA Detection in Living Cells," *J. Am. Chem. Soc.*, **2007**, *129*, 15477-15479, doi: 10.1021/ja0776529, PMID: PMC3200543.
306. Farha, O. K.; Spokoyny, A. M.; Mulfort, K. L.; Hawthorne, M. F.; Mirkin, C. A.; Hupp, J. T. "Synthesis and Hydrogen Sorption Properties of Carborane Based Metal-Organic Framework Materials," *J. Am. Chem. Soc.*, **2007**, *129*, 12680-12681, doi: 10.1021/ja076167a.

307. Mirkin, C. A. "The Power of the Pen: Development of Massively Parallel Dip-Pen Nanolithography," *ACS Nano*, **2007**, *1*, 79-83, doi: 10.1021/nn700228m.
308. Qin, L. D.; Banholzer, M. J.; Xu, X. Y.; Huang, L.; Mirkin, C. A. "Rational Design and Synthesis of Catalytically Driven Nanorotors," *J. Am. Chem. Soc.*, **2007**, *129*, 14870-14871, doi: 10.1021/ja0772391.
309. Yoon, H. J.; Heo, J.; Mirkin, C. A. "Allosteric Regulation of Phosphate Diester Transesterification Based Upon a Dinuclear Zinc Catalyst Assembled via the Weak-Link Approach," *J. Am. Chem. Soc.*, **2007**, *129*, 14182-14183, doi: 10.1021/ja077467v.
310. Kuwabara, J.; Ovchinnikov, M. V.; Stern, C. L.; Mirkin, C. A. "The Reactivity of Dinuclear Rhodium(I) Macrocycles Formed via the Weak-Link Approach," *Organometallics*, **2008**, *27*, 789-792, doi: 10.1021/om70096d.
311. Kim, K.-H.; Sanedrin, R. G.; Ho, A. M.; Lee, S.-W.; Moldovan, N.; Mirkin, C. A.; Espinosa, H. D. "Direct Delivery and Submicrometer Patterning of DNA by a Nanofountain Probe," *Adv. Mater.*, **2008**, *20*, 330-334, doi: 10.1002/adma.200701254.
312. Lee, J.-S.; Ulmann, P. A.; Han, M. S.; Mirkin, C. A. "A DNA-Gold Nanoparticle-Based Colorimetric Competition Assay for the Detection of Cysteine," *Nano Lett.* **2008**, *8*, 529-533, doi: 10.1021/nl0727563.
313. Ciszek, J. W.; Huang, L.; Wang, Y.; Mirkin, C. A. "Kinetically Controlled, Shape-Directed Assembly of Nanorods," *Small*, **2008**, *4*, 206-210, doi: 10.1002/smll.200700840.
314. Park, S. Y.; Lytton-Jean, A. K. R.; Lee, B.; Weigand, S.; Schatz, G. C.; Mirkin, C. A. "DNA-Programmable Nanoparticle Crystallization," *Nature*, **2008**, *451*, 553-556, doi: 10.1038/nature06508.
315. Oliveri, C. G.; Nguyen, S. T.; Mirkin, C. A. "A Highly Modular and Convergent Approach for the Synthesis of Stimulant-Responsive Heteroligated Cofacial Porphyrin Tweezer Complexes," *Inorg. Chem.*, **2008**, *47*, 2755-2763, doi: 10.1021/ic702150y.
316. Sanedrin, R. G.; Huang, L.; Jang, J.-W.; Kakkassery, J.; Mirkin, C. A. "Polyethylene Glycol as a Novel Resist and Sacrificial Material for Generating Positive and Negative Nanostructures," *Small*, **2008**, *4*, 920-924, doi: 10.1002/smll.200701089.
317. Zheng, G. F.; Qin, L. D.; Mirkin, C. A. "Spectroscopically Enhancing Electrical Nanotraps," *Angew. Chem. Int. Ed.*, **2008**, *47*, 1938-1941, doi: 10.1002/ange.200705312.
318. Chen, X.; Jeon, Y.-M.; Jang, J.-W.; Qin, L.; Huo, F.; Wei, W.; Mirkin, C. A. "On-Wire Lithography-Generated Molecular-Based Transport Junctions: A New Testbed for Molecular Electronics," *J. Am. Chem. Soc.*, **2008**, *130*, 8166-8168, doi: 10.1021/ja800998w.
319. Xue, C.; Metraux, G. S.; Millstone, J. E.; Mirkin, C. A. "Mechanistic Study of Photomediated Triangular Silver Nanoprism Growth," *J. Am. Chem. Soc.*, **2008**, *130*, 8337-8344, doi: 10.1021/ja8005258.
320. Banholzer, M. J.; Millstone, J. E.; Qin, L. D.; Mirkin, C. A. "Rationally Designed Nanostructures for Surface Enhanced Raman Spectroscopy," *Chem. Soc. Rev.*, **2008**, *37*, 885-897, doi: 10.1039/b710915f.
321. Banholzer, M. J.; Millstone, J. E.; Mirkin, C. A. "On-Wire Lithography: Designing Nanostructures with Optimal SERS Behavior," *SPIE Newsroom (Online)* **2008**, April 25, 2008. <http://spie.org/x24237.xml> (accessed May 5, 2008), doi: 10.1117/2.1200804.1092.
322. Xu, X. Y.; Zhao, Z.; Qin, L. D.; Wei, W.; Levine, J. E.; Mirkin, C. A. "A Fluorescence Recovery Assay for the Detection of Protein-DNA Binding," *Anal. Chem.*, **2008**, *80*, 5616-5621, doi: 10.1021/ac8007016.

323. Oliveri, C. G.; Ulmann, P. A.; Wiester, M. J.; Mirkin, C. A. "Heteroligated Supramolecular Coordination Complexes Formed via the Halide-Induced Ligand Rearrangement Reaction," *Acc. Chem. Res.*, **2008**, *41*, 1618-1629, doi: 10.1021/ar800025w.
324. Lee, J.-S.; Seferos, D. S.; Giljohann, D. A.; Mirkin, C. A. "Thermodynamically Controlled Separation of Polyvalent 2-nm Gold Nanoparticle-Oligonucleotide Conjugates," *J. Am. Chem. Soc.*, **2008**, *130*, 5430-5431, doi: 10.1021/ja800797h.
325. Jeon, Y.-M.; Armatas, G. S.; Heo, J.; Mirkin, C. A. "Amorphous Infinite Coordination Polymer Microparticles: A New Class of Selective Hydrogen Storage Materials," *Adv. Mater.*, **2008**, *20*, 2105-2110, doi: 10.1002/adma.200702605.
326. Jang, J.-W.; Sanedrin, R. G.; Maspoch, D.; Hwang, S.; Fujigaya, T.; Jeon, Y.-M.; Vega, R.; Chen, X.; Mirkin, C. A. "Electrically Biased Nanolithography with KOH-Coated AFM Tips," *Nano Lett.*, **2008**, *8*, 1451-1455, doi: 10.1021/nl80418b.
327. Patel, P. C.; Giljohann, D. A.; Seferos, D. S.; Mirkin, C. A. "Peptide Antisense Nanoparticles," *Proc. Natl. Acad. Sci. USA*, **2008**, *105*, 17222-17226, doi: 10.1073/pnas.0801609105, PMCID: PMC2582275.
328. Jeon, Y.-M.; Kim, D.; Mirkin, C. A.; Golen, J. A.; Rheingold, A. L. "Pyrene-Appended Fluorescent Tweezers Generated via the Weak-Link Approach and Their Halide Recognition Properties," *Tetrahedron* **2008**, *64*, 8428-8434, doi: 10.1016/j.tet.2008.05.047, PMCID: PMC3241529.
329. Bae, Y.-S.; Farha, O. K.; Spokoyny, A. M.; Mirkin, C. A.; Hupp, J. T.; Snurr, R. Q. "Carborane-Based Metal-Organic Frameworks as Highly Selective Sorbents for CO₂ over Methane," *Chem. Comm.*, **2008**, *34*, 4135-4137, doi: 10.1039/b805785k.
330. Giljohann, D. A.; Mirkin, C. A. "Tiny Tiles, Tiny Targets," *Nature Biotechnol.*, **2008**, *26*, 299-300, doi: 10.1038/nbt0308-299.
331. Zheng, G. F.; Daniel, W. L.; Mirkin, C. A. "A New Approach to Amplified Telomerase Detection with Polyvalent Oligonucleotide Nanoparticle Conjugates," *J. Am. Chem. Soc.*, **2008**, *130*, 9644-9645, doi: 10.1021/ja803035p.
332. Hill, H. D.; Macfarlane, R. J.; Senesi, A. J.; Lee, B.; Park, S. Y.; Mirkin, C. A. "Controlling the Lattice Parameters of Gold Nanoparticle FCC Crystals with Duplex DNA Linkers," *Nano Lett.*, **2008**, *8*, 2341-2344, doi: 10.1021/nl8011787.
333. Millstone, J. E.; Wei, W.; Jones, M. R.; Yoo, H.; Mirkin, C. A. "Iodide Ions Control Seed-Mediated Growth of Anisotropic Gold Nanoparticles," *Nano Lett.*, **2008**, *8*, 2526-2529, doi: 10.1021/nl8016253.
334. Yoo, H. J.; Mirkin, C. A.; DiPasquale, A. G.; Rheingold, A. L.; Stern, C. L. "Reversible CO-Induced Chloride Shuttling in Rh(I) Tweezer Complexes Containing Urea-Functionalized Hemilabile Ligands," *Inorg. Chem.* **2008**, *47*, 9727-9729, doi: 10.1021/ic8008909.
335. Lee, J.-S.; Mirkin, C. A. "Chip-Based Scanometric Detection of Mercuric Ion (Hg²⁺) Using DNA-Functionalized Gold Nanoparticles," *Anal. Chem.*, **2008**, *80*, 6805-6808, doi: 10.1021/ac801046a.
336. Yoon, H. J.; Mirkin, C. A. "PCR-Like Cascade Reactions in the Context of an Allosteric Enzyme Mimic," *J. Am. Chem. Soc.*, **2008**, *130*, 11590-11591, doi: 10.1021/ja804076q.
337. Wang, Y. H.; Giam, L. R.; Park, M.; Lenhart, S.; Fuchs, H.; Mirkin, C. A. "A Self-Correcting Inking Strategy for Cantilever Arrays Addressed by an Inkjet printer and Used for Dip-Pen Nanolithography," *Small*, **2008**, *4*, 1666-1670, doi: 10.1002/smll.200800770.

338. Hurst, S. J.; Hill, H. D.; Mirkin, C. A. ““Three-Dimensional Hybridization” with Polyvalent DNA-Gold Nanoparticle Conjugates,” *J. Am. Chem. Soc.*, **2008**, *130*, 12192-12200, doi: 10.1021/ja804266j.
339. Banholzer, M. J.; Li, S. Z.; Ketter, J. B.; Rozkiewicz, D.; Schatz, G. C.; Mirkin, C. A. “Electrochemical Approach to and the Physical Consequences of Preparing Nanostructures from Gold Nanorods with Smooth Ends,” *J. Phys. Chem. C*, **2008**, *112*, 15729-15734, doi: 10.1021/jp805215j, PMID: PMC3241530.
340. Huo, F. W.; Zheng, Z. J.; Zheng, G. F.; Giam, L. R.; Zhang, H.; Mirkin, C. A. “Polymer Pen Lithography,” *Science*, **2008**, *321*, 1658-1660, doi: 10.1126/science.1162193.
341. Millstone, J. E.; Georganopoulou, D. G.; Xu, X. Y.; Wei, W.; Li, S.; Mirkin, C. A. “DNA-Gold Triangular Nanoprism Conjugates,” *Small*, **2008**, *4*, 2176-2180, doi: 10.1002/smll.200800931, PMID: PMC3930330.
342. Wang, Y. H.; Wei, W.; Maspoch, D.; Wu, J.; Dravid, V.; Mirkin, C.A. “Superparamagnetic Sub-5 nm Fe@C Nanoparticles: Isolation, Structure, Magnetic Properties, and Directed Assembly,” *Nano Lett.*, **2008**, *8*, 3761-3765, doi: 10.1021/nl8020768.
343. Wei, W.; Li, S. Z.; Qin, L. D.; Xue, C.; Millstone, J. E.; Xu, X.; Schatz, G. C.; Mirkin, C. A. “Surface Plasmon-Mediated Energy Transfer in Hetero-Gap Au-Ag Nanowires,” *Nano Lett.*, **2008**, *8*, 3446-3449, doi: 10.1021/nl8023164, PMID: PMC3200542.
344. Sekula, S.; Fuchs, J.; Weg-Remers, S.; Nagel, P.; Schnuppler, S.; Fragala, J.; Theilacker, N.; Franzreb, M.; Wingren, C.; Ellmark, P.; Borrebaeck, C. A. K.; Mirkin, C. A.; Fuchs, H.; Lenhart, S. “Multiplexed Lipid Dip-Pen Nanolithography on Subcellular Scales for the Templating of Functional Proteins and Cell Culture,” *Small*, **2008**, *4*, 1785-1793, doi: 10.1002/smll.200800949.
345. Zheng, Z.; Jang, J.-W.; Zheng, G.; Mirkin, C. A. “Topographically Flat, Chemically Patterned PDMS Stamps Made by Dip-Pen Nanolithography,” *Angew. Chem. Int. Ed.*, **2008**, *47*, 9951-9954, doi: 10.1002/anie.200803834, PMID: PMC3065202.
346. Lim, J.-K.; Ciszek, J. W.; Huo, F. W.; Jang, J.-W.; Hwang, S.; Mirkin, C. A. “Actuation of Self-Assembled Two-Component Rodlike Nanostructures,” *Nano Lett.*, **2008**, *8*, 4441-4445, doi: 10.1021/nl802381h.
347. Jeon, Y.-M.; Armatos, G. S.; Kim, D.; Kanatzidis, M. G.; Mirkin, C. A. “Troeger’s-Base-Derived Infinite Coordination Polymer Microparticles,” *Small*, **2009**, *5*, 46-50, doi: 10.1002/smll.200801160, PMID: PMC3930338.
348. Wei, W.; Li, S. Z.; Millstone, J. E.; Banholzer, M. J.; Chen, X.; Xu, X.; Schatz, G. C.; Mirkin, C. A. “Surprisingly Long-Range Surface-Enhanced Raman Scattering (SERS) on Au-Ni Multisegmented Nanowires,” *Angew. Chem. Int. Ed.*, **2009**, *48*, 4210-4212, doi: 10.1002/anie.200806116, PMID: PMC3241531.
349. Seferos, D. S.; Prigodich, A. E.; Giljohann, D. A.; Patel, P. C.; Mirkin, C. A. “Polyvalent DNA Nanoparticle Conjugates Stabilize Nucleic Acids,” *Nano Lett.*, **2008**, *9*, 308-311, doi: 10.1021/nl802958f, PMID: PMC3918421.
350. Giam, L. R.; Wang, Y. H.; Mirkin, C. A. “Nanoscale Molecular Transport: The Case of Dip-Pen Nanolithography,” *J. Phys. Chem A*, **2009**, *113*, 3779-3782, doi: 10.1021/jp809061e.
351. Olson, M. A.; Braunschweig, A. B.; Fang, L.; Ikeda, T.; Klajn, R.; Trabolsi, A.; Mirkin, C. A.; Grzybowski, B. A.; Stoddart, J. F. “A Bistable Poly[2]catenane Forms Nanosuperstructures,” *Angew. Chem. Int. Ed.*, **2009**, *48*, 1792-1797, doi: 10.1002/anie.200804558, PMID: PMC3930346.

352. Millstone, J. E.; Hurst, S. J.; Metraux, G. S.; Cutler, J. I.; Mirkin, C. A. "Colloidal Gold and Silver Triangular Nanoprisms," *Small*, **2009**, *5*, 646-664, doi: 10.1002/sml.200801480.
353. Hill, H. D.; Hurst, S. J.; Mirkin, C. A. "Curvature-Induced Base Pair "Slipping" Effects in DNA-Nanoparticle Hybridization," *Nano Lett.*, **2009**, *9*, 317-321, doi: 10.1021/nl8030482, PMID: PMC2698813.
354. Chen, X. D.; Li, S. Z.; Xue, C.; Banholzer, M. J.; Schatz, G. C.; Mirkin, C. A. "Plasmonic Focusing in Rod-Sheath Heteronanostructures," *ACS Nano* **2009**, *3*, 87-92, doi: 10.1021/nn800695u, PMID: PMC3918423.
355. Banholzer, M. J.; Qin, L. D.; Millstone, J. E.; Osberg, K. D.; Mirkin, C. A. "On-Wire Lithography: Synthesis, Encoding, and Biological Applications," *Nature Protocols*, **2009**, *4*, 838-848, doi: 10.1038/nprot.2009.52, PMID: PMC3918426.
356. Weiss, P. S.; Mirkin, C. "A Conversation with Prof. Chad Mirkin: Nanomaterials Architect," *ACS Nano*, **2009**, *3*, 1310-1317, doi: 10.1021/nn900583s.
357. Lytton-Jean, A. K. R.; Gibbs-Davis, J. M.; Long, H.; Schatz, G. C.; Mirkin, C. A.; Nguyen, S. T.; "Highly Cooperative Behavior of Peptide Nucleic Acid-Linked DNA-Modified Gold-Nanoparticle and Comb-Polymer Aggregates," *Adv. Mater.*, **2009**, *21*, 706-709, doi: 10.1002/adma.200801724.
358. Hill, H. D.; Millstone, J. E.; Banholzer, M. J.; Mirkin, C. A. "The Role Radius of Curvature Plays in Thiolated Oligonucleotide Loading on Gold Nanoparticles," *ACS Nano*, **2009**, *3*, 418-424, doi: 10.1021/nn800726e, PMID: PMC3241534.
359. Ulmann, P. A.; Mirkin, C. A.; DiPasquale, A. G.; Liable-Sands, L. M.; Rheingold, A. L. "Reversible Ligand Pairing and Sorting Processes Leading to Heteroligated Palladium(II) Complexes with Hemilabile Ligands," *Organometallics*, **2009**, *28*, 1068-1074, doi: 10.1021/om801060m.
360. Giljohann, D. A.; Seferos, D. S.; Prigodich, A. E.; Patel, P. C.; Mirkin, C. A. "Gene Regulation with Polyvalent siRNA-Nanoparticle Conjugates," *J. Am. Chem. Soc.*, **2009**, *131*, 2072-2073, doi: 10.1021/ja808719p, PMID: PMC2843496.
361. Thaxton, C. S.; Daniel, W. L.; Giljohann, D. A.; Thomas, A.; Mirkin, C. A. "Templated Spherical High Density Lipoprotein Nanoparticles," *J. Am. Chem. Soc.*, **2009**, *131*, 1384-1385, doi: 10.1021/ja808856z, PMID: PMC2843502.
362. Braunschweig, A. B.; Senesi, A. J.; Mirkin, C. A. "Redox-Activating Dip-Pen Nanolithography (RA-DPN) ," *J. Am. Chem. Soc.*, **2009**, *131*, 922-923, doi: 10.1021/ja809107n, PMID: PMC2650847.
363. Spokoyny, A. M.; Kim, D.; Sumrein, A.; Mirkin, C. A. "Infinite Coordination Polymer Nano- and Microparticle Structures," *Chem. Soc. Rev.*, **2009**, *38*, 1218-1227, doi: 10.1039/b807085g.
364. Jang, J.-W.; Sanedrin, R. G.; Senesi, A. J.; Zheng, Z.; Chen, X.; Hwang, S.; Huang, L.; Mirkin, C. A. "Generation of Metal Photomasks by Dip-Pen Nanolithography," *Small*, **2009**, *5*, 1850-1853, doi: 10.1002/sml.200801837.
365. Chen, X. D.; Braunschweig, A. B.; Wiester, M. J.; Yeganeh, S.; Ratner, M. A.; Mirkin, C. A. "Spectroscopic Tracking of Molecular Transport Junctions Generated by Using Click Chemistry," *Angew. Chem. Int. Ed.*, **2009**, *48*, 5178-5181, doi: 10.1002/anie.200806028, PMID: PMC4507743.
366. Chen, X. D.; Zheng, G. F.; Cutler, J. I.; Jang, J.-W.; Mirkin, C. A. "In-Wire Conversion of a Metal Nanorod Segment into an Organic Semiconductor," *Small*, **2009**, *5*, 1527-1530, doi: 10.1002/sml.200801857, PMID: PMC3930343.

367. Goluch, E. D.; Stoeva, S. I.; Lee, J.-S.; Shaikh, K. A.; Mirkin, C. A.; Liu, C. "A Microfluidic Detection System Based Upon a Surface Immobilized Biobarcode Assay," *Biosensors and Bioelectronics*, **2009**, *24*, 2397-2403, doi: 10.1016/j.bios.2008.12.017, PMID: PMC2749686.
368. Farha, O. K.; Spokoyny, A. M.; Mulfort, K. L.; Galli, S.; Hupp, J. T.; Mirkin, C. A. "Gas-Sorption Properties of Cobalt(II)-Carborane-Based Coordination Polymers As A Function of Morphology," *Small*, **2009**, *5*, 1727-1731, doi: 10.1002/smll.200900085.
369. Jones, M. R.; Millstone, J. E.; Giljohann, D. A.; Seferos, D. S.; Young, K. L.; Mirkin, C. A. "Plasmonically Controlled Nucleic Acid Dehybridization with Gold Nanoprisms," *ChemPhysChem*, **2009**, *10*, 1461-1465, doi: 10.1002/cphc.200900269, PMID: PMC3930334.
370. Macfarlane, R. J.; Lee, B.; Hill, H. D.; Senesi, A. J.; Seifert, S.; Mirkin, C. A. "Assembly and Organization Processes in DNA-Directed Colloidal Crystallization," *Proc. Natl. Acad. Sci. USA*, **2009**, *106*, 10493-10498, doi: 10.1073/pnas.0900630106, PMID: PMC2705589.
371. Yoo, H. J.; Millstone, J. E.; Li, S. Z.; Jang, J.-W.; Wei, W.; Wu, J.; Schatz, G. C.; Mirkin, C. A. "Core-Shell Triangular Bifrustums," *Nano Lett.*, **2009**, *9*, 3038-3041, doi: 10.1021/nl901513g, PMID: PMC3930336.
372. Massich, M. D.; Giljohann, D. A.; Seferos, D. S.; Ludlow, L. E.; Horvath, C. M.; Mirkin, C. A. "Regulating Immune Response Using Polyvalent Nucleic Acid – Gold Nanoparticle Conjugates," *Mol. Pharmaceutics*, **2009**, *6*, 1934-1940, doi: 10.1021/mp900172m, PMID: PMC3241524.
373. Prigodich, A. E.; Seferos, D. S.; Massich, M. D.; Giljohann, D. A.; Lane, B.C.; Mirkin, C. A. "Nano-Flares for mRNA Regulation and Detection," *ACS Nano*, **2009**, *3*, 2147-2152, doi: 10.1021/nn9003814, PMID: PMC2742376.
374. Daniel, W. L.; Han, M. S.; Lee, J.-S.; Mirkin, C. A. "Colorimetric Nitrite and Nitrate Detection with Gold Nanoparticle Probes and Kinetic End Points," *J. Am. Chem. Soc.*, **2009**, *131*, 6362-6363, doi: 10.1021/ja901609k.
375. Ulmann, P. A.; Braunschweig, A. B.; Lee, O.-S.; Wiester, M.; Schatz, G. C.; Mirkin, C. A. "Inversion of Product Selectivity in an Enzyme-Inspired Metallosupramolecular Tweezer Catalyzed Epoxidation Reaction," *Chem. Comm.*, **2009**, 5121-5123, doi: 10.1039/b908852k, PMID: PMC3930335.
376. Braunschweig, A. B.; Huo, F. W.; Mirkin, C. A. "Molecular Printing," *Nature Chem.*, **2009**, *1*, 353-358, doi: 10.1038/nchem.258, PMID: PMC3936963.
377. Kuwabara, J.; Yoon, H. J.; Mirkin, C. A.; DiPasquale, A. G.; Rheingold, A. L. "Pseudo-Allosteric Regulation of the Anion Binding Affinity of a Macrocyclic Coordination Complex," *Chem. Comm.*, **2009**, 4557-4559, doi: 10.1039/b905150c.
378. Spokoyny, A. M.; Reuter, M. G.; Stern, C. L.; Ratner, M. A.; Seideman, T.; Mirkin, C. A. "Carborane-Based Pincers: Synthesis and Structure of SeBSe and SBS Pd(II) Complexes," *J. Am. Chem. Soc.*, **2009**, *131*, 9482-9483, doi: 10.1021/ja902526k, PMID: PMC2842188.
379. Hurst, S. J.; Hill, H. D.; Macfarlane, R. J.; Wu, J.; Dravid, V. P.; Mirkin, C. A. "Synthetically Programmable DNA Binding Domains in Aggregates of DNA-Functionalized Gold Nanoparticles," *Small*, **2009**, *5*, 2156-2161, doi: 10.1002/smll.200900568, PMID: PMC3918427.
380. Thaxton, C. S.; Elghanian, R.; Thomas, A. D.; Stoeva, S. I.; Lee, J.-S.; Smith, N. D.; Schaeffer, A. J.; Klocker, H.; Horninger, W.; Bartsch, G.; Mirkin, C. A. "Nanoparticle-Based Bio-Barcode Assay Redefines "Undetectable" PSA and Biochemical Recurrence Following

- Radical Prostatectomy,” *Proc. Natl. Acad. Sci. USA*, **2009**, *106*, 18437-18442, doi: 10.1073/pnas.0904719106, PMCID: PMC2773980.
381. Zheng, D.; Seferos, D. S.; Giljohann, D. A.; Patel, P. C.; Mirkin, C. A., “Aptamer Nano-Flares for Molecular Detection in Living Cells,” *Nano Lett.*, **2009**, *9*, 3258-3261, doi: 10.1021/nl901517b, PMCID: PMC3200529.
382. Zheng, Z. J.; Daniel, W. L.; Giam, L. R.; Huo, F.; Senesi, A. J.; Zheng, G.; Mirkin, C. A. “Multiplexed Protein Arrays Enabled by Polymer Pen Lithography: Addressing the Inking Challenge,” *Angew. Chem Int. Ed.*, **2009**, *48*, 7626-7629, doi: 10.1002/anie.200902649, PMCID: PMC3523346.
383. Wiester, M. J.; Mirkin, C. A. “Water-Soluble Macrocycles Synthesized via the Weak-Link Approach,” *Inorg. Chem.*, **2009**, *48*, 8054-8056, doi: 10.1021/ic9000983v, PMCID: PMC2742207.
384. Senesi, A. J.; Rozkiewicz, D. I.; Reinhoudt, D. N.; Mirkin, C. A. “Agarose-Assisted Dip-Pen Nanolithography of Oligonucleotides and Proteins,” *ACS Nano*, **2009**, *3*, 2394-2402, doi: 10.1021/nn9005945.
385. Farha, O. K.; Spokoyny, A. M.; Hauser, B. G.; Bae, Y.-S.; Brown, S.; Snurr, R.; Mirkin, C. A.; Hupp, J. “Synthesis, Properties, and Gas Separation Studies of a Robust Diimide-Based Microporous Organic Polymer,” *Chem. Mater.*, **2009**, *21*, 3033-3035, doi: 10.1021/cm901280w.
386. Zheng, G. F.; Chen, X. D.; Mirkin, C. A. “Complementary Electrical and Spectroscopic Detection Assays with On-Wire-Lithography-Based Nanostructures,” *Small*, **2009**, *5*, 2537-2540, doi: 10.1002/sml.200901000, PMCID: PMC3918425.
387. Chen, X. D.; Yeganeh, S.; Qin, L. D.; Li, S.; Xue, C.; Braunschweig, A. B.; Schatz, G. C.; Ratner, M. A.; Mirkin, C. A. “Chemical Fabrication of Heterometallic Nanogaps for Molecular Transport Junctions,” *Nano Lett.*, **2009**, *9*, 3974-3979, doi: 10.1021/nl9018726, PMCID: PMC3241532.
388. Zong, H.; Sun, P.; Mirkin, C. A.; Barrett, A. G. M.; Hoffman, B. M. “Varying the Electrochemical Potential and Thickness of Porphyrazine SAMs by Molecular Design,” *J. Phys. Chem. B*, **2009**, *113*, 14892-14903, doi: 10.1021/jp905762p.
389. Kim, D.; Daniel, W. L.; Mirkin, C. A. “A Microarray-based Multiplexed Scanometric Immunoassay for Protein Cancer Markers Using Gold Nanoparticle Probes,” *Anal. Chem.*, **2009**, *81*, 9183-9187, doi: 10.1021/ac9018389, PMCID: PMC3200545.
390. Zhang, J.; Li, S. Z.; Wu, J. S.; Schatz, G. C.; Mirkin, C. A. “Plasmon-Mediated Synthesis of Silver Triangular Bipyramids,” *Angew. Chem. Int. Ed.*, **2009**, *48*, 7787-7791, doi: 10.1002/anie.200903380, PMCID: PMC3547632.
391. Giljohann, D. A. and Mirkin, C. A. “Drivers of Biodiagnostic Development,” *Nature*, **2009**, *462*, 461-464, doi: 10.1038/nature08605, PMCID: PMC3936986.
392. Wang, Y. H.; Mirkin, C. A.; Park, S.-J. “Nanofabrication beyond Electronics,” *ACS Nano*, **2009**, *3*, 1049-1056, doi: 10.1021/nn900448g.
393. Song, Y.; Xu, X. Y.; MacRenaris, K. W.; Zhang, X.-Q.; Mirkin, C. A.; Meade, T. J. “Multimodal Gadolinium-Enriched DNA-Gold Nanoparticle Conjugates for Cellular Imaging,” *Angew. Chem. Int. Ed.*, **2009**, *48*, 9143-9147, doi: 10.1002/anie.200904666, PMCID: PMC2917899.
394. Cizek, J. W.; Huang, L.; Tsonchev, S.; Wang, Y.; Shull, K. R.; Ratner, M. A.; Schatz, G. C.; and Mirkin, C. A. “Assembly of Nanorods into Designer Superstructures: the Role of

- Templating, Capillary Forces, Adhesion, and Polymer Hydration,” *ACS Nano*, **2010**, *4*, 259-266, doi: 10.1021/nn901383d.
395. Dhar, S.; Daniel, W. L.; Giljohann, D. A.; Mirkin, C. A.; Lippard, S. J. “Polyvalent Oligonucleotide Gold Nanoparticle Conjugates as Delivery Vehicles for Platinum(IV) Warheads,” *J. Am. Chem. Soc.*, **2009**, *131*, 14652–14653, doi: 10.1021/ja9071282, PMCID: PMC2761975.
396. Liao, X.; Braunschweig A. B.; Mirkin, C. A. ““Force-feedback” leveling of massively parallel arrays in polymer pen lithography,” *Nano Lett.*, **2010**, *10*, 1335-1340, doi: 10.1021/nl904200t.
397. Spokoyny, A.; Rosen, M. S.; Ulmann, P. A.; Stern, C.; Mirkin, C. A. “Selective Formation of Heteroligated Pt(II) Complexes with Bidentate Phosphine-Thioether (P, S) and Phosphine-Selenoether (P, Se) Ligands via the Halide-Induced Ligand Rearrangement Reaction,” *Inorg. Chem.*, **2010**, *49*, 1577-1586, doi: 10.1021/ic901991w.
398. Giljohann, D. A.; Seferos, D. S.; Massich, M. D.; Daniel, W. L.; Patel, P. C.; Mirkin, C. A. “Gold Nanoparticles for Biology and Medicine,” *Angew. Chem. Int. Ed.*, **2010**, *49*, 3280-3294, doi: 10.1002/anie.200904359, PMCID: PMC3930332.
399. Liao, X.; Braunschweig, A. B.; Zheng, Z.; Mirkin, C. A. “Force- and Time-Dependent Feature Size and Shape Control in Molecular Printing via Polymer Pen Lithography (PPL),” *Small*, **2010**, *6*, 1082-1086, doi: 10.1002/smll.200901538, PMCID: PMC3930342.
400. Kim, E.-Y.; Stanton, J.; Korber, B. T. M.; Krebs, K.; Bogdan, D.; Kunstman, K.; Wu, S.; Phair, J. P.; Mirkin, C.; Wolinsky, S. M. “Detection of HIV-1 p24 Gag in plasma by a nanoparticle-based bio-barcode-amplification method,” *Nanomedicine*, **2008**, *3*, 293-303, doi: 10.2217/17435889.3.3.293, PMCID: PMC2821699.
401. Huang, L.; Braunschweig, A. B.; Shim, W.; Qin, L.; Lim, J.-L.; Hurst, S. J.; Huo, F.; Xue, C.; Jang, J.-W.; Mirkin, C. A. “Matrix-Assisted Dip-Pen Nanolithography (MA-DPN) and Polymer Pen Lithography (MA-PPL),” *Small*, **2010**, *6*, 1077-1081, doi: 10.1002/smll.200901198, PMCID: PMC3517014.
402. Pedano, M. L.; Li, S.; Schatz, G. C.; Mirkin, C. A. “Periodic Electric Field Enhancement Along Gold Rods with Nanogaps,” *Angew. Chem. Int. Ed.*, **2010**, *49*, 78-82, doi: 10.1002/anie.200904646.
403. Xu, X.; Daniel, W. L.; Wei, W.; Mirkin, C. A. “Colorimetric Cu²⁺ Detection Using DNA Modified Gold Nanoparticle Aggregates as Probes and Click Chemistry,” *Small*, **2010**, *6*, 623-626, doi: 10.1002/smll.200901691, PMCID: PMC3517019.
404. Lenhert, S.; Mirkin, C. A.; Fuchs, H. “In Situ Lipid Dip-Pen Nanolithography Under Water,” *Scanning*, **2010**, *31*, 1-9, doi: 10.1002/sca.20166.
405. Banholzer, M.; Millstone, J.; Schatz, G. C.; Mirkin, C. A.; Harris, N. “Abnormally Large Plasmonic Shifts in Silica-Protected Gold Triangular Nanoprisms,” *J. Phys. Chem.*, **2010**, *114*, 7521-7526, doi: 10.1021/jp911889a.
406. Bae, Y.-S.; Spokoyny, A.; Farha, O. K.; Snurr, R. Q.; Hupp, J. T.; Mirkin, C. A. “Separation of Gas Mixtures Using Co(II)-Carborane-Based Porous Coordination Polymers,” *Chem. Comm.*, **2010**, *46*, 3478 – 3480, doi: 10.1039/b927499e.
407. Braunschweig, A. B.; Schmucker, A. L.; Wei, W. D.; Mirkin, C. A. “Nanostructures Enabled by On-Wire Lithography (OWL),” *Chem. Phys. Lett.*, **2010**, *486*, 89-98, doi: 10.1016/j.cplett.2010.01.009, PMCID: PMC2853594.
408. Macfarlane, R. J.; Jones, M. R.; Senesi, A. J.; Young, K. L.; Lee, B.; Wu, J.; Mirkin, C. A. “Establishing the Design Rules for DNA-Mediated Programmable Colloidal Crystallization,”

- Angew. Chem. Int. Ed.*, **2010**, *49*, 4589-4592, doi: 10.1002/anie.201000633, PMCID: PMC3039301.
409. Cutler, J. I.; Zheng, D.; Xu, X.; Giljohann, D. A.; Mirkin, C. A. "Polyvalent Oligonucleotide Iron Oxide Nanoparticle "Click" Conjugates," *Nano Lett.*, **2010**, *10*, 1477-1480, doi: 10.1021/nl100477m, PMCID: PMC2874426.
410. Li, T.; Spokoyny, A.; She, C.; Farha, O. K.; Mirkin, C. A.; Marks, T. J.; Hupp, J.T. "Ni(III)/(IV) Bis(dicarbollide) as a Fast, Noncorrosive Redox Shuttle for Dye-Sensitized Solar Cells," *J. Am. Chem. Soc.*, **2010**, *132*, 4580-4582, doi: 10.1021/ja100396n.
411. Li, S.; Pedano, M.; Chang, S.-H.; Mirkin, C. A.; Schatz, G. C. "Gap structure effects on SERS Intensities for Gold Gapped-Rods," *Nano Lett.*, **2010**, *10*, 1722-1727, doi: 10.1021/nl100099g.
412. Spokoyny, A. M.; Li, T.; Farha, O. K.; Machan, C. W.; She, C.; Stern, C. L.; Marks, T. J.; Hupp, J. T.; and Mirkin, C. A. "Electronic Tuning of Ni-based Bis(dicarbollide) Redox Shuttles In Dye-Sensitized Solar Cells," *Angew. Chem. Int. Ed.*, **2010**, *49*, 5339-5343, doi: 10.1002/anie.201002181.
413. Ringe, E.; Zhang, J.; Langille, M. R.; Sohn, K.; Cobley, C.; Au, L.; Xia, Y.; Mirkin, C. A.; Huang, J.; Marks, L. D.; Van Duyne, R. P. "Effect of Size, Shape, Composition, and Support Film on Localized Surface Plasmon Resonance Frequency: A Single Particle Approach Applied to Silver Bipyramids and Gold and Silver Nanocubes," *MRS Bulletin*, **2010**, 1208, doi: 10.1557/proc-1208-o10-02.
414. Lim, J. K.; Lee, B. Y.; Pedano, M. L.; Senesi, A. J.; Jang, J.-W.; Shim, W.; Hong, S.; Mirkin, C. A. "Alignment Strategies for the Assembly of Nanowires with Submicron Diameters," *Small*, **2010**, *6*, 1736-1740, doi: 10.1002/sml.201000815.
415. Spokoyny, A. M.; Farha, O. K.; Mulfort, K. L.; Hupp, J. T.; Mirkin, C. A. "Porosity Tuning of Carborane-Based Metal Organic Frameworks (MOFs) via Coordination Chemistry and Ligand Design," *Inorg. Chim. Acta*, **2010**, *364*, 266-271, doi: 10.1016/j.ica.2010.08.007.
416. Huo, F.; Zheng, G.; Liao, X.; Giam, L. R.; Chai, J.; Chen, X.; Shim, W.; Mirkin, C. A. "Beam Pen Lithography," *Nature Nanotechnol.*, **2010**, *5*, 637-640, doi: 10.1038/nnano.2010.161.
417. Jones, M. R.; Macfarlane, R. J.; Lee, B.; Zhang, J.; Young, K. L.; Senesi, A. J.; Mirkin, C. A. "DNA-Nanoparticle Superlattices Formed From Anisotropic Building Blocks," *Nature Mater.*, **2010**, *9*, 913-917, doi: 10.1038/nmat2870.
418. Wiester, M.; Braunschweig, A. B.; Mirkin, C. A. "Solvent and Temperature Induced Switching Between Structural Isomers of RhI Phosphinoalkyl Thioether (PS) Complexes," *Inorg. Chem.*, **2010**, *49*, 7188-7196, doi: 10.1021/ic101021t, PMCID: PMC2989680.
419. Salaita, K.; Amarnath, A.; Higgins, T. B.; Mirkin, C. A. "The Effects of Organic Vapor on Alkanethiol Deposition via Dip-Pen Nanolithography," *Scanning*, **2010**, *32*, 9-14, doi: 10.1002/sca.20179.
420. Patel, P. C.; Giljohann, D. A.; Daniel, W. L.; Zheng, D.; Prigodich, A. E.; Mirkin, C. A. "Scavenger Receptors Mediate Cellular Uptake of Polyvalent Oligonucleotide-Functionalized Gold Nanoparticles," *Bioconjug. Chem.*, **2010**, *21*, 2250-2256, doi: 10.1021/bc1002423, PMCID: PMC3241523.
421. Banholzer, M. J.; Osberg, K. D.; Li, S.; Mangelson, B. F.; Schatz, G. C.; and Mirkin, C. A. "Silver-based Nanodisk Codes," *ACS Nano*, **2010**, *9*, 5446-5452, doi: 10.1021/nn101231u.
422. Jang, J. W.; Zheng, Z.; Lee, O.-S.; Shim, W.; Zheng, G.; Schatz, G. C.; and Mirkin, C. A. "Arrays of Nanoscale Lenses for Subwavelength Optical Lithography," *Nano Lett.*, **2010**, *10*, 4399-4404, doi: 10.1021/nl101942s.

423. Prigodich, A. E.; Lee, O.-S.; Daniel, W. L.; Seferos, D. S.; Schatz, G. C.; Mirkin, C. A. "Tailoring DNA Structure to Increase Target Hybridization Kinetics on Surfaces," *J. Am. Chem. Soc.*, **2010**, *132*, 10638-10641, doi: 10.1021/ja104859j, PMID: PMC3918422.
424. Macfarlane, R. J.; Mirkin, C. A. "Colloidal Assembly via Shape Complementarity," *ChemPhysChem*, **2010**, *11*, 3215-3217, doi: 10.1002/cphc.201000389.
425. Yoon, H. J.; Kuwabara, J.; Kim, J.-H.; Mirkin, C. A. "Allosteric Supramolecular Triple-Layer Catalysts," *Science*, **2010**, *330*, 66-69, doi: 10.1126/science.1193928.
426. Rink, J. S.; McMahon, K. M.; Chen, X.; Mirkin, C. A.; Thaxton, C. S.; Kaufman, D. B. "Transfection of Pancreatic Islets Using Polyvalent DNA-Functionalized Gold Nanoparticles," *Surgery*, **2010**, *148*, 335-345, doi: 10.1016/j.surg.2010.05.013, PMID: PMC3150467.
427. Zhang, J.; Langille, M. R.; Mirkin, C. A. "Photomediated Synthesis of Silver Triangular Bipyramids and Prisms: The Effect of pH and BSPP," *J. Am. Chem. Soc.*, **2010**, *132*, 12502-12510, doi: 10.1021/ja106008b.
428. Zhang, J.; Langille, M. R.; Personick, M. L.; Zhang, K.; Li, S.; Mirkin, C. A. "Concave Cubic Gold Nanocrystals with High-Index Facets," *J. Am. Chem. Soc.*, **2010**, *132*, 14012-14014, doi: 10.1021/ja106394k.
429. Schmucker, A. L.; Harris, N.; Banholzer, M. J.; Blaber, M. G.; Osberg, K. D.; Schatz, G. C.; Mirkin, C. A. "Correlating Nanorod Structure With Experimentally Measured and Theoretically Predicted Surface Plasmon Resonance," *ACS Nano*, **2010**, *9*, 5453-5463, doi: 10.1021/nn101493t.
430. Mirkin, C. A. "The Polyvalent Gold Nanoparticle Conjugate-Materials Synthesis, Biodiagnostics, and Intracellular Gene Regulation," *MRS Bulletin*, **2010**, *35*, 532-539, doi: 10.1557/mrs2010.602.
431. Zhang, K.; Cutler, J. I.; Zhang, J.; Zheng, D.; Auyeung, E.; Mirkin, C. A. "Nanopod Formation Through Gold Nanoparticle Templated and Catalyzed Cross-linking of Polymers Bearing Pendant Propargyl Ethers," *J. Am. Chem. Soc.*, **2010**, *132*, 15151-15153, doi: 10.1021/ja107224s, PMID: PMC3241526.
432. Massich, M. D.; Giljohann, D. A.; Schmucker, A. L.; Patel, P. C.; Mirkin, C. A. "Cellular Response of Polyvalent Oligonucleotide-Gold Nanoparticle Conjugates," *ACS Nano*, **2010**, *4*, 5641-5646, doi: 10.1021/nn102228s, PMID: PMC3025450.
433. Kim, Y.-P.; Daniel, W. L.; Xia, Z.; Xie, H.; Mirkin, C. A.; Rao, J. "Bioluminescent Nanosensors for Protease Detection Based Upon Gold Nanoparticle-Luciferase Conjugates," *Chem. Comm.*, **2010**, *46*, 76-78, doi: 10.1039/b915612g, PMID: PMC3930333.
434. Farha, O. K.; Bae, Y.-S.; Hauser, B. G.; Spokoyny, A. M.; Snurr, R. Q.; Mirkin, C. A.; Hupp, J. T. "Chemical Reduction of a Diimide Based Porous Polymer for Selective Uptake of Carbon Dioxide Versus Methane," *Chem. Comm.*, **2010**, *46*, 1056-1058, doi: 10.1039/b922554d.
435. Liusman, C.; Li, S.; Chen, X.; Wei, W. D.; Zhang, H.; Schatz, G.; Boey, F.; Mirkin, C. A. "Free-Standing Bimetallic Nanorings and Nanoring Arrays Made by On-Wire Lithography," *ACS Nano*, **2010**, *4*, 7676-7682, doi: 10.1021/nn102495f.
436. Chai, J.; Huo, F.; Zheng, Z.; Giam, L. R.; Shim, W.; Mirkin, C. A. "Scanning Probe Block Copolymer Lithography," *Proc. Natl. Aca. Sci. USA*, **2010**, *107*, 20202-20206, doi: 10.1073/pnas.1014892107, PMID: PMC2996692.
437. Luthi, A. J.; Patel, P. C.; Ko, C. H.; Mutharasan, R. K.; Mirkin, C. A.; Thaxton, C. S. "Nanotechnology for Synthetic High-Density Lipoproteins," *Trends in Molecular Medicine*, **2010**, *16*, 553-560, doi: 10.1016/j.molmed.2010.10.006, PMID: PMC4076051.

438. Shim, W.; Braunschweig, A. B.; Liao, X.; Chai, J.; Lim, J. K.; Zheng, G.; Mirkin, C. A. "Hard-Tip, Soft-Spring Lithography," *Nature*, **2011**, *469*, 516-520, doi: 10.1038/nature09697.
439. Pandey, P.; Farha, O. K.; Spokoyny, A. M.; Mirkin, C. A.; Kanatzidis, M. G.; Hupp, J. T.; Nguyen, S. T. "A "Click-Based" Porous Organic Polymer from Tetrahedral Building Blocks," *J. Mater. Chem.*, **2011**, *21*, 1700-1703, doi: 10.1039/c0jm03483e.
440. Wiester, M. J.; Ulmann, P. A.; Mirkin, C. A. "Enzyme Mimics Based Upon Supramolecular Coordination Chemistry," *Angew. Chem. Int. Ed.*, **2011**, *50*, 114-137, doi: 10.1002/anie.201000380.
441. Langille, M. R.; Zhang, J.; Mirkin, C. A. "Plasmon-Mediated Synthesis of Heterometallic Nanorods and Icosahedra," *Angew. Chem. Intl. Ed.*, **2011**, *50*, 3543-3547, doi: 10.1002/anie.201007755.
442. Li, T. C.; Fabregat-Santiago, F.; Farha, O. K.; Spokoyny, A. M.; Ruiz, S.; Bisquert, J.; Mirkin, C. A.; Marks, T. J.; Hupp, J. T. "SiO₂ Aerogel-templated, Porous TiO₂ Photoanodes for Enhanced Performance in Dye-Sensitized Solar Cells Containing a Ni(III)/(IV) Bis(discarbollide) Shuttle," *J. Phys. Chem. C.*, **2011**, *115*, 11257-11264, doi: 10.1021/jp112139h.
443. Machan, C. W.; Spokoyny, A. M.; Jones, M. R.; Sarjeant, A. A.; Stern, C. L.; Mirkin, C. A. "The Plasticity of the Nickel(II) Coordination Environment in Complexes with Hemilabile Phosphino-Thioether Ligands," *J. Am. Chem. Soc.*, **2011**, *133*, 3023-3033, doi: 10.1021/ja109624m
444. Rosen, M. S.; Spokoyny, A. M.; Machan, C. W.; Stern, C. L.; Sarjeant, A. A.; Mirkin, C. A. "Chelating Effect as a Driving Force for the Selective Formation of Heteroligated Pt(II) Complexes with Bidentate Phosphino-Chalcoether Ligands," *Inorg. Chem.*, **2011**, *50*, 1411-1419, doi: 10.1021/ic101973s, PMCID: PMC3241525.
445. Osberg, K. D.; Schmucker, A. L.; Senesi, A. J.; Mirkin, C. A. "One-Dimensional Nanorod Arrays: Independent Control of Composition, Length, and Interparticle Spacing with Nanometer Precision," *Nano Lett.*, **2011**, *11*, 820-824, doi: 10.1021/nl1041534.
446. Prigodich, A. E.; Alhasan, A. H.; Mirkin, C. A. "Selective Enhancement of Nucleases by Polyvalent DNA-Functionalized Gold Nanoparticles," *J. Am. Chem. Soc.*, **2011**, *133*, 2120-2123, doi: 10.1021/ja110833r, PMCID: PMC3081637.
447. Jones, M. R.; Osberg, K. D.; Macfarlane, R. J.; Langille, M. R.; Mirkin, C. A. "Templated Techniques for the Synthesis and Assembly of Plasmonic Nanostructures," *Chem. Rev.*, **2011**, *111*, 3736-3827, doi: 10.1021/cr1004452.
448. Patel, P.; Hao, L.; AuYeung, W. S.; Mirkin, C. A. "Duplex End Breathing Determines Serum Stability and Intracellular Potency of siRNA-Au NPs," *Molecular Pharmaceutics*, **2011**, *8*, 1285-1291, doi: 10.1021/mp200084y, PMCID: PMC3200553.
449. Giam, L. R.; Mirkin, C. A. "Cantilever-free Scanning Probe Molecular Printing," *Angew. Chem. Intl. Ed.*, **2011**, *33*, 7482-7485, doi: 10.1002/anie.201100839.
450. Personick, M. L.; Langille, M. R.; Zhang, J.; Harris, N.; Schatz, G. C.; Mirkin, C. A. "Synthesis and Isolation of {110}-Faceted Gold Bipyramids and Rhombic Dodecahedra," *J. Am. Chem. Soc.*, **2011**, *133*, 1-4, doi: 10.1021/ja201826r.
451. Spokoyny, A. M.; Machan, C. W.; Clingerman, D. J.; Rosen, M. S.; Wiester, M. J.; Kennedy, R. D.; Stern, C. L.; Sarjeant, A. A.; Mirkin, C. A. "A Coordination Chemistry Dichotomy for Icosahedral Carborane-Based Ligands," *Nature Chem.*, **2011**, *3*, 590-596, doi: 10.1038/nchem.1088.

452. Cutler, J. I.; Zhang, K.; Zheng, D.; Auyeung, E.; Prigodich, A. E.; Mirkin, C. A. "Polyvalent Nucleic Acid Nanostructures," *J. Am. Chem. Soc.*, **2011**, *133*, 9254–9257, doi: 10.1021/ja203375n, PMID: PMC3154250.
453. Personick, M. L.; Langille, M. R.; Zhang, J.; Mirkin, C. A. "Shape Control of Gold Nanoparticles by Silver Underpotential Deposition," *Nano Lett.*, **2011**, *11*, 3394–3398, doi: 10.1021/nl201796s.
454. Roco, M. C.; Mirkin, C. A.; Hersam, M. C., "Nanotechnology Research Directions for Societal Needs in 2020: Summary of International Study," *J. Nanoparticle Res.*, **2011**, *13*, 897–919, doi: 10.1007/s11051-011-0275-5.
455. McMahon, K. M.; Mutharasan, R. K.; Tripathy, S.; Veliceasa, D.; Bobeica, M.; Shumaker, D. K.; Luthi, A. J.; Helfand, B. T.; Ardehali, H.; Mirkin, C. A.; Volpert, O.; Thaxton, C. S. "Biomimetic High Density Lipoprotein Nanoparticles for Nucleic Acid Delivery," *Nano Lett.*, **2011**, *11*, 1208–1214, doi: 10.1021/nl1041947, PMID: PMC407779.
456. Zhang, J.; Langille, M.; Mirkin, C. "Synthesis of Silver Nanorods by Low Energy Excitation of Spherical Plasmonic Seeds," *Nano Lett.*, **2011**, *11*, 2495–2498.
457. Zhang, X. Q.; Xu, X.; Lam, R.; Giljohann, D.; Ho, D.; Mirkin, C. A. "Strategy for Increasing Drug Solubility and Efficacy through Covalent Attachment to Polyvalent DNA-Nanoparticle Conjugates," *ACS Nano*, **2011**, *5*, 6962–6970, 10.1021/nn201446c, PMID: PMC3200554.
458. Huang, X.; Li, S. Z.; Huang, Y. Z.; Wu, S. X.; Zhou, X. Z.; Li, S. Z.; Gan, C. L.; Boey, F.; Mirkin, C. A.; Zhang, H. "Synthesis of Hexagonal Close-Packed Gold Nanostructures," *Nature Commun.*, **2011**, *2*, 292, doi: 10.1038/ncomms1291.
459. Zwanikken, J.; Guo, P.; Mirkin, C. A.; Olvera de la Cruz, M. "The Local Ionic Environment Around Polyvalent Nucleic Acid-Functionalized Nanoparticles," *J. Phys. Chem. C*, **2011**, *115*, 16368–16373, doi: 10.1021/jp205583j.
460. Langille, M.; Personick, M.; Zhang, J.; Mirkin, C. "Bottom-up synthesis of Gold Octahedra with Tailorable Hollow Features," *J. Am. Chem. Soc.*, **2011**, *133*, 10414–10417, doi: 10.1021/ja204375d.
461. Hao, L.; Patel, P.; Alhasan, A.; Giljohann, D. A.; Mirkin, C. A. "Nucleic Acid-Gold Nanoparticle Conjugates as Mimics of microRNA," *Small*, **2011**, *7*, 3158–3162, doi: 10.1002/sml.201101018, PMID: PMC3681955.
462. Macfarlane, R.; Lee, B.; Jones, M.; Harris, N.; Schatz, G.; Mirkin, C. A. "Nanoparticle Superlattice Engineering with DNA," *Science*, **2011**, *334*, 204–208, doi: 10.1126/science.1210493.
463. Kieger, A.; Wiester, M. J.; Procissi, D.; Parrish, T. B.; Mirkin, C. A.; Thaxton, C. S. "Hybridization-Induced "Off-On" ¹⁹F-NMR Signal Probe Release from DNA-Functionalized Gold Nanoparticles," *Small*, **2011**, *7*, 1977–1981, doi: 10.1002/sml.201100566.
464. Auyeung, E.; Cutler, J. I.; Macfarlane, R. J.; Jones, M. R.; Wu, J.; Liu, G.; Zhang, K.; Osberg, K. D.; Mirkin, C. A. "Synthetically Programmable Nanoparticle Superlattices Using a Hollow Three-Dimensional Spacer Approach," *Nature Nanotech.*, **2012**, *7*, 24–28, doi: 10.1038/nnano.2011.222.
465. Mirkin, C. "Miniaturizing Medicine," *The Scientist*, **2011**, *25*, 54–55.
466. Jones, M. R.; Macfarlane, R. J.; Prigodich, A. E.; Patel, P. C.; Mirkin, C. A. "Nanoparticle Shape Anisotropy Dictates the Collective Behavior of Surface-Bound Ligands," *J. Am. Chem. Soc.*, **2011**, *133*, 18865–18869, doi: 10.1021/ja206777k.

467. Zhang, K.; Zheng, D.; Hao, L.; Cutler, J. I.; Auyeung, E.; Mirkin, C. A. "ImmunoPods: Polymer Shells with Native Antibody Cross-Links," *Angew. Chem. Int. Ed.*, **2012**, *51*, 1169-1172, doi: 10.1002/anie.201106313, PMCID: PMC3930230.
468. Chai, J.; Wong, L.-S.; Giam, L. R.; Mirkin, C. A. "Single-Molecule Protein Arrays Enabled by Scanning Probe Block Copolymer Lithography," *Proc. Natl. Aca. Sci. USA*, **2011**, *108*, 19521-19525, doi: 10.1073/pnas.1116099108, PMCID: PMC3241798.
469. Machan, C. W.; Lifschitz, A. M.; Stern, C. L.; Sarjeant, A. A.; Mirkin, C. A. "Crystallographic Snapshots of the Bond-breaking Isomerization Reactions Involving Ni(II) Complexes with Hemilabile Ligands," *Angew. Chem. Int. Ed.*, **2012**, *51*, 1469-1472, doi: 10.1002/anie.201107620.
470. Wong, L.-S.; Karthikeyan, C. V.; Eichelsdoerfer, D. J.; Micklefield, J.; Mirkin, C. A. "A Methodology for Preparing Nanostructured Biomolecular Interfaces with High Enzymatic Activity," *Nanoscale*, **2012**, *4*, 659-666, doi: 10.1039/c1nr11443c.
471. Luthi, A. J.; Zhang, H.; Kim, D.; Giljohann, D. A.; Mirkin, C. A.; Thaxton, C. S. "Tailoring Of Biomimetic High-Density Lipoprotein (HDL) Nanostructures Changes Cholesterol Binding and Efflux," *ACS Nano*, **2012**, *6*, 276-285, doi: 10.1021/nn2035457, PMCID: PMC4053472.
472. Chai, J.; Liao, X.; Giam, L. R.; Mirkin, C. A. "Nanoreactors for Studying Single Nanoparticle Coarsening," *J. Am. Chem. Soc.*, **2012**, *134*, 158-161, doi: 10.1021/ja2097964.
473. Cutler, J. I.; Auyeung, E.; Mirkin, C. A. "Spherical Nucleic Acids," *J. Am. Chem. Soc.*, **2012**, *134*, 1376-1391, doi: 10.1021/ja209351u.
474. Young, K. L.; Jones, M. R.; Zhang, J.; Macfarlane, R. J.; Esquivel-Sirvent, R.; Nape, R. J.; Wu, J.; Schatz, G. C.; Lee, B.; Mirkin, C. A. "Assembly of Reconfigurable One-Dimensional Colloidal Superlattices due to a Synergy of Fundamental Nanoscale Forces," *Proc. Natl. Aca. Sci. USA*, **2012**, *109*, 2240-2245, doi: 10.1073/pnas.1119301109, PMCID: PMC3289355.
475. Giam, L. R.; Massich, M. D.; Hao, L.; Wong, L. S.; Mader, C. C.; Mirkin, C. A. "Scanning probe-enabled nanocombinatorics define the relationship between fibronectin feature size and stem cell fate," *Proc. Natl. Acad. Sci.*, **2012**, *109*, 4377-4382, doi: 10.1073/pnas.1201086109, PMCID: PMC3311369.
476. Giam, L. R.; He, S.; Horwitz, N. E.; Eichelsdoerfer, D. J.; Chai, J.; Zheng, Z.; Kim, D.; Shim, W.; Mirkin, C. A. "Positionally Defined, Binary Semiconductor Nanoparticles Synthesized by Scanning Probe Block Copolymer Lithography," *Nano Lett.*, **2012**, *12*, 1022-1025, doi: 10.1021/nl204233r.
477. Prigodich, A. E.; Randeria, P. S.; Briley, W.; Kim, N.; Daniel, W. L.; Giljohann, D. A.; Mirkin, C. A. "Multiplexed Nanoflares: mRNA Detection in Live Cells," *Anal. Chem.*, **2012**, *84*, 2062-2066, doi: 10.1021/ac202648w, PMCID: PMC3357311.
478. Zheng, D.; Giljohann, D. A.; Chen, D. L.; Massich, M. D.; Wang, X.-Q.; Iordanov, H.; Mirkin, C. A.; Paller, A. S. "Topical Delivery of siRNA-based Spherical Nucleic Acid Nanoparticle Conjugates for Gene Regulation," *Proc. Natl. Aca. Sci. USA*, **2012**, *109*, 11975-11980, doi: 10.1073/pnas.1118425109, PMCID: PMC3409786.
479. Alhasan, A. H.; Kim, D. Y.; Daniel, W. L.; Watson, E.; Meeks, J. J.; Thaxton, C. S.; Mirkin, C. A. "Scanometric microRNA (Scano-miR) Array Profiling of Prostate Cancer Markers Using Spherical Nucleic Acid (SNA)-Gold Nanoparticle Conjugates," *Anal. Chem.*, **2012**, *84*, 4153-4160, doi: 10.1021/ac3004055, PMCID: PMC3357313.
480. Imahori, H.; Kitaura, S.; Kira, A.; Hayashi, H.; Nishi, M.; Hirao, K.; Zhe, Z.; Miyato, Y.; Noda, K.; Matsushige, K.; Tkachenko, N. V.; Lemmetyinen, H.; Zwanikken, L.; Hurst, S. J.;

- Mirkin, C. A. "A Photoconductive, Thiophene–Fullerene Double-Cable Polymer, Nanorod Device," *J. Phys. Chem. Lett.*, **2012**, *3*, 478–481, doi: 10.1021/jz300015e.
481. Ringe, E.; Zhang, J.; Langille, M. R.; Mirkin, C. A.; Marks, L. D.; Van Duyne, R. P. "Correlating the Structure and Localized Surface Plasmon Resonance of Single Silver Right Bipyramids," *Nanotechnology*, **2012**, *23*, 444005, doi: 10.1088/0957-4484/23/444005.
482. Li, T.; Sknepnek, R.; Macfarlane, R. J.; Mirkin, C. A.; Olvera de la Cruz, M. "Modeling the Crystallization of Spherical Nucleic Acid Nanoparticle Conjugates with Molecular Dynamics Simulations," *Nano Lett.*, **2012**, *12*, 2509–2514, doi: 10.1021/nl300679e.
483. Lee, B. Y.; Heo, K.; Schmucker, A. L.; Jin, H. J.; Lim, J. K.; Kim, T.; Lee, H.; Jeon, K.-S.; Suh, Y.; Mirkin, C. A.; Hong, S. "Nanotube-Bridged Wires with Sub-10 nm Gaps," *Nano Lett.*, **2012**, *12*, 1879–1884, doi: 10.1021/nl204259t.
484. Langille, M. R.; Zheng, J.; Personick, M. L.; Mirkin, C. A. "Stepwise Evolution of Spherical Seeds into 20-Fold Twinned Icosahedra," *Science*, **2012**, *337*, 954–957, doi: 10.1126/science.1225653.
485. Gates, Jr., S. J.; Mirkin, C. A. "Engage to Excel," *Science*, **2012**, *335*, 1545, doi: 10.1126/science.1222058.
486. Mirkin, C. A. "An Interview with Chad Mirkin: Nanomedicine Expert," *Nanomedicine*, **2012**, *7*, 635–638, doi: 10.2217/nnm.12.44, PMID: PMC4629713.
487. Ringe, E.; Langille, M. R.; Sohn, K.; Zhang, J.; Huang, J.; Mirkin, C. A.; Van Duyne, R. P.; Marks, L. D. "Plasmon Length: A Universal Parameter to Describe Size Effects in Gold Nanoparticles," *J. Phys. Chem. Lett.* **2012**, *3*, 1479–1483, doi: 10.1021/jz300426p.
488. Machan, C. W.; Adelhardt, M.; Sarjeant, A. A.; Stern, C. L.; Sutter, J.; Meyer, K.; Mirkin, C. A. "'One-Pot' Synthesis of an Fe(II) Bis-Terpyridine Complex with Allosterically Regulated Electronic Properties," *J. Am. Chem. Soc.*, **2012**, *134*, 16921–16924, doi: 10.1021/ja3045019.
489. Osberg, K.; Rycenga, M.; Harris, N.; Schmucker, A. L.; Langille, M.; Schatz, G. C.; Mirkin, C. A. "Dispersible Gold Nanorod Dimers with Sub-5 nm Gaps as Local Amplifiers for Surface-Enhanced Raman Scattering," *Nano Lett.*, **2012**, *12*, 3828–3832, doi: 10.1021/nl301793k.
490. Auyeung, E.; Macfarlane, R. J.; Choi, C. H. J.; Cutler, J. I.; Mirkin, C. A. "Transitioning DNA-Engineered Nanoparticle Superlattices from Solution to the Solid State," *Adv. Mater.* **2012**, *24*, 5181–5186, doi: 10.1002/adma.201202069.
491. Langille, M. R.; Personick, M. L.; Zhang, J.; Mirkin, C. A. "Defining Rules for the Shape Evolution of Gold Nanoparticles," *J. Am. Chem. Soc.*, **2012**, *134*, 14542–14554, doi: 10.1021/ja305245g.
492. Young, K. L.; Scott, A. W.; Hao, L.; Mirkin, S. E.; Liu, G.; Mirkin, C. A. "Hollow Spherical Nucleic Acids for Intracellular Gene Regulation Based Upon Biocompatible Silica Shells," *Nano Lett.*, **2012**, *12*, 3867–3871, doi: 10.1021/nl3020846, PMID: PMC3397824.
493. Zhou, X.; Shade, C. M.; Schmucker, A. L.; Brown, K. A.; He, S.; Boey, F. Y. C.; Ma, J.; Zhang, H.; Mirkin, C. A. "OWL-Based Nanomasks for Preparing Graphene Ribbons with Sub-10 nm Gaps," *Nano Lett.*, **2012**, *12*, 4734–4737 doi: 10.1021/nl302171z.
494. Yoo, H.; Rosen, M. S.; Brown, A. M.; Wiester, M. J.; Stern, C. L.; Mirkin, C. A. "Elucidating the Mechanism of the Halide-Induced Ligand Rearrangement Reaction," *Inorg. Chem.*, **2012**, *51*, 11986–11995, doi: 10.1021/ic3018776.
495. Shim, W.; Brown, K. A.; Rasin, B.; Liao, X.; Zhou, X.; Mirkin, C. A. "Multifunctional cantilever-free scanning probe arrays coated with multilayer graphene," *Proc. Natl. Aca. Sci. USA*, **2012**, *109*, 18312–18317, doi: 10.1073/pnas.1216183109, PMID: PMC3494923.

496. Zhang, K.; Hao, L.; Hurst, S. J.; Mirkin, C. A. "Antibody-linked Spherical Nucleic Acids for Cellular Targeting," *J. Am. Chem. Soc.*, **2012**, *134*, 16488–16491, doi: 10.1021/ja306854d, PMID: PMC3501255.
497. Osberg, K. D.; Rycenga, M. J.; Bourret, G. R.; Brown, K. A.; Mirkin, C. A. "Dispersible Surface-Enhanced Raman Scattering Nanosheets," *Adv. Mater.*, **2012**, *24*, 6065–6070, doi: 10.1002/adma.201202845.
498. Rycenga, M.; Langille, M. R.; Personick, M. L.; Ozel, T.; Mirkin, C. A. "Chemically Isolating Hot Spots on Concave Nanocubes," *Nano Lett.*, **2012**, *12*, 6218–6222, doi: 10.1021/nl3032235.
499. Jones, M. R.; Mirkin, C. A. "Self-Assembly Gets New Direction," *Nature*, **2012**, *491*, 42–43, doi: 10.1038/491042a.
500. Liu, G.; Eichelsdoerfer, D. J.; Rasin, B.; Zhou, Y.; Brown, K. A.; Liao, X.; Mirkin, C. A. "Delineating the pathways for the site-directed synthesis of individual nanoparticles on surfaces," *Proc. Natl. Aca. Sci.*, **2013**, *110*, 887–891, doi: 10.1073/pnas.1220689110, PMID: PMC3549072.
501. Eichelsdoerfer, D. J.; Brown, K. A.; Boya, R.; Shim, W.; Mirkin, C. A. "Tuning the Spring Constant of Cantilever-Free Tip Arrays," *Nano Lett.*, **2013**, *13*, 664–667, doi: 10.1021/nl304268u.
502. Personick, M. L.; Langille, M. R.; Wu, J.; Mirkin, C. A. "Synthesis of Gold Hexagonal Bipyramids Directed by Planar-Twinned Silver Triangular Nanoprisms," *J. Am. Chem. Soc.*, **2013**, *135*, 3800–3803, doi: 10.1021/ja400794q.
503. Jones, M. R.; Mirkin, C. A. "Bypassing the Limitations of Classical Chemical Purification with DNA-Programmable Nanoparticle Recrystallization," *Angew. Chem.*, **2013**, *52*, 2886–2891, doi: 10.1002/anie.201209504.
504. Choi, C. H. J.; Hao, L.; Narayan, S. P.; Auyeung, E.; Mirkin, C. A. "Mechanism for the Endocytosis of Spherical Nucleic Acid Nanoparticle Conjugates," *Proc. Natl. Aca. Sci.*, **2013**, *110*, 7625–7630, doi: 10.1073/pnas.1305804110, PMID: PMC3651452.
505. Schmucker, A. L.; Barin, G.; Brown, K. A.; Rycenga, M. J.; Coskun, A.; Buyukcakir, O.; Osberg, K. D.; Stoddart, J. F.; Mirkin, C. A. "Electronic and Optical Vibrational Spectroscopy of Molecular Transport Junctions Created by On-Wire Lithography," *Small*, **2013**, *9*, 1900–1903, doi: 10.1002/smll.201201993.
506. Personick, M. L.; Langille, M. R.; Zhang, J.; Wu, J.; Li, S.; Mirkin, C. A. "Plasmon-Mediated Synthesis of Silver Cubes with Unusual Twinning Structures Using Short Wavelength Excitation," *Small*, **2013**, *9*, 1947–1953, doi: 10.1002/smll.201202451.
507. Shim, W.; Brown, K. A.; Zhou, X.; Rasin, B.; Liao, X.; Schmucker, A. L.; Mirkin, C. A. "Pit and Ridge Nanofabrication," *Small*, **2013**, *9*, 3058–3062, doi: 10.1002/smll.201203014, PMID: PMC3773253.
508. Mangelson, B. F.; Park, D. J.; Ku, J. C.; Osberg, K. D.; Schatz, G. C.; Mirkin, C. A. "Tunable and Broadband Plasmonic Absorption via Dispersible Nanoantennas with Sub-10 nm Gaps," *Small*, **2013**, *9*, 2250–2254, doi: 10.1002/smll.201202787.
509. Zhang, C.; Macfarlane, R. J.; Young, K. L.; Choi, C. H. J.; Hao, L.; Auyeung, E.; Liu, G. Zhou, X.; Mirkin, C. A. "A General Approach to DNA-Programmable Atom Equivalents," *Nature Materials*, **2013**, *12*, 741–746, doi: 10.1038/nmat3647.
510. Macfarlane, R. J.; O'Brien, M. N.; Petrosko, S. H.; Mirkin, C. A. "Nucleic Acid-Modified Nanostructures as Programmable Atom Equivalents: Forging a New 'Table of Elements'," *Angew. Chem.*, **2013**, *52*, 5688–5698, doi: 10.1002/anie.201209336.

511. Liao, X.; Brown, K. A.; Schmucker, A. L.; Liu, G.; He, S.; Shim, W.; Mirkin, C. A. "Desktop Nanofabrication with Massively Multiplexed Beam Pen Lithography," *Nature Comm.*, **2013**, *4*, 2103, doi: 10.1038/ncomms3103, PMID: PMC3807695.
512. Radha, B.; Liu, G.; Eichelsdoerfer, D. J.; Kulkarni, G. U.; Mirkin, C. A. "Layer-by-Layer Assembly of a Metallomesogen by Dip-Pen Nanolithography," *ACS Nano*, **2013**, *7*, 2602-2609, doi: 10.1021/nn306013e.
513. Kennedy, R. D.; Machan, C. W.; McGuirk, C. M.; Rosen, M. S.; Stern, C. L.; Sarjeant, A. A.; Mirkin, C. A. "General Strategy for the Synthesis of Rigid Weak-Link Approach Platinum(II) Complexes: Tweezers, Triple-Layer Complexes, and Macrocycles," *Inorg. Chem.*, **2013**, *52*, 5876-5888, doi: 10.1021/ic302855f.
514. Zhou, X.; He, S.; Brown, K. A.; Mendez-Arroyo, J.; Boey, F.; Mirkin, C. A. "Locally Altering the Electronic Properties of Graphene By Nanoscopically Doping It With Rhodamine 6G," *Nano Lett.*, **2013**, *13*, 1616-1621, doi: 10.1021/nl400043q.
515. Senesi, A. J.; Eichelsdoerfer, D. J.; Macfarlane, R. J.; Jones, M. R.; Auyeung, E.; Lee, B.; Mirkin, C. A. "Stepwise evolution of DNA-programmable nanoparticle superlattices," *Angew. Chem.*, **2013**, *52*, 6624-6628, doi: 10.1002/anie.201301936.
516. Liu, G.; Zhou, Y.; Banga, R. S.; Boya, R.; Brown, K. A.; Chipre, A. J.; Nguyen, S. T.; Mirkin, C. A. "The role of viscosity on polymer ink transport in dip-pen nanolithography," *Chem. Sci.*, **2013**, *4*, 2093-2099, doi: 10.1039/c3sc50423a, PMID: PMC3638971, PMID: PMC3638971.
517. Lifschitz, A. M.; Shade, Chad M.; Spokoyny, A. M.; Mendez, J. E.; Stern, C. L.; Sarjeant, A. A.; Mirkin, C. A. "Boron-Dipyromethene-Functionalized Hemilabile Ligands as "Turn-On" Fluorescent Probes for Coordination Changes in Weak-Link Approach Complexes," *Inorg. Chem.*, **2013**, *52*, 5484-5492, doi: 10.1021/ic400383t.
518. Jensen, S. A.; Day, E. S.; Ko, C. H.; Hurley, L. A.; Luciano, J. P.; Kouri, F. M.; Merkel, T. J.; Luthi, A. J.; Patel, P. C.; Cutler, J. I.; Daniel, W. L.; Scott, A. W.; Rotz, M. W.; Meade, T. J.; Giljohann, D. A.; Mirkin, C. A.; Stegh, A. H. "Spherical Nucleic Acid Nanoparticle Conjugates as an RNAi-Based Therapy for Glioblastoma," *Science Trans. Med.*, **2013**, *5*, 209ra152, doi: 10.1126/scitranslmed.3006839, PMID: PMC4017940.
519. Shin, Y. J.; Ringe, E.; Personick, M. L.; Cardinal, M. F.; Mirkin, C. A.; Marks, L. D.; Van Duyne, R. P.; Hersam, M. C. "Centrifugal Shape Sorting and Optical Response of Polyhedral Gold Nanoparticles," *Adv. Mater.*, **2013**, *25*, 4023-4027, doi: 10.1002/adma.201301278.
520. Brown, K. A.; Eichelsdoerfer, D. J.; Shim, W.; Rasin, B.; Boya, R.; Liao, X.; Schmucker, A. L.; Liu, G.; Mirkin, C. A. "A Cantilever-Free Approach to Dot-Matrix Nanoprinting," *Proc. Natl. Aca. Sci.*, **2013**, *110*, 12853-12854, doi: 10.1073/pnas.1311994110, PMID: PMC3740911.
521. Langille, M. R.; Personick, M. L.; Mirkin, C. A. "Plasmon-Mediated Syntheses of Metallic Nanostructures," *Angew. Chem.*, **2013**, *52*, 13910-13940, doi: 10.1002/anie.201301875.
522. Bourret, G. R.; Ozel, T.; Blaber, M.; Shade, C. M.; Schatz, G. C.; Mirkin, C. A. "Long-Range Plasmophore Rulers," *Nano Lett.*, **2013**, *13*, 2270-2275, doi: 10.1021/nl400887j.
523. Rink, J. S.; McMahan, K. M.; Zhang, X.; Chen, X.; Mirkin, C. A.; Thaxton, C. S.; Kaufman; D. B. "Knockdown of Intra-Islet IKK β by Spherical Nucleic Acid Conjugates Prevents Cytokine-Induced Injury and Enhances Graft Survival," *Transplantation*, **2013**, *96*, 877-884, doi: 10.1097/TR.0b013e3182a4190e, PMID: PMC3839058.

524. Ozel, T.; Bourret, G. R.; Schmucker, A. L.; Brown, K. A.; Mirkin, C. A. "Hybrid Semiconductor Core-Shell Nanowires with Tunable Plasmonic Nanoantennas," *Adv. Mater.*, **2013**, *25*, 4515-4520, doi: 10.1002/adma.201301367.
525. Liu, Z.; Frascioni, M.; Lei, J.; Brown, Z. J.; Zhu, Z.; Cao, D.; Iehl, J.; Liu, G.; Fahrenbach, A.; Botros, Y. Y.; Farha, O.; Hupp, J.; Mirkin, C. A.; Stoddart, J. F. "Selective isolation of gold facilitated by second-sphere coordination with α -cyclodextrin," *Nature Comm.*, **2013**, *4*, 1855, doi: 10.1038/ncomms2891, PMCID: PMC3674257.
526. Thaner, R. V.; Eryazici, I.; Farha, O. K.; Mirkin, C. A.; Nguyen, S. T. "Facile one-step solid-phase synthesis of multitopic organic-DNA hybrids via "click" chemistry," *Chemical Science*, **2014**, *5*, 1091-1096, doi: 10.1039/c3sc53206bs.
527. Brown, K. A.; Eichelsdoerfer, D. J.; Liao, X.; He, S.; Mirkin, C. A. "Material Transport in Dip-Pen Nanolithography," *Frontiers of Phys.*, **2013**, *9*, 385-397, doi: 10.1007/s11467-013-0381-1.
528. Macfarlane, R. J.; Jones, M. R.; Lee, B.; Auyeung, E.; Mirkin, C. A. "Topotactic Interconversion of Nanoparticle Superlattices," *Science*, **2013**, *341*, 1222-1225, doi: 10.1126/science.1241402.
529. Rosen, M. S.; Stern, C. L.; Mirkin, C. A. "Heteroligated Pt^{II} Weak-Link Approach Complexes Using Hemilabile N-Heterocyclic Carbene-Thioether and Phosphino-Thioether Ligands," *Chemical Science*, **2013**, *4*, 4193-4198, doi: 10.1039/c3sc51557e.
530. Clingerman, D. J.; Kennedy, R. D.; Mondloch, J. E.; Sarjeant, A. A.; Hupp, J. T.; Farha, O. K.; Mirkin, C. A. "An Exceptionally High Boron Content Supramolecular Cuboctahedron," *Chem. Comm.*, **2013**, *49*, 11485-11487, doi: 10.1039/c3cc44173c.
531. Kim, Y.; Macfarlane, R. J.; Mirkin, C. A. "Dynamically Interchangeable Nanoparticle Superlattices Through the Use of Nucleic Acid-Based Allosteric Effectors," *J. Am. Chem. Soc.*, **2013**, *135*, 10342-10345, doi: 10.1021/ja405988r.
532. Kennedy, R.D.; Krungleviciute, V.; Clingerman, D.J.; Mondloch, J.E.; Peng, Y.; Wilmer, C.E.; Sarjeant, A.A.; Snurr, R.Q.; Hupp, J.T.; Yildirim, T.; Farha, O.K.; Mirkin, C.A. "Carborane-Based Metal–Organic Framework with High Methane and Hydrogen Storage Capacities," *Chem. Mater.*, **2013**, *25*, 3539-3543, doi: 10.1021/cm4020942.
533. Liu, G.; Young, K.L.; Liao, X.; Personick, M.L.; Mirkin, C.A. "Anisotropic Nanoparticles as Shape-Directing Catalysts for the Chemical Etching of Silicon," *J. Am. Chem. Soc.*, **2013**, *135*, 12196-12199, doi: 10.1021/ja4061867.
534. Brown, K. A.; Eichelsdoerfer, D. J.; Mirkin, C. A. "Cantilever-Free Thermal Actuation," *J. Vac. Sci. Technol., B*, **2013**, *31*, 06F201, doi: 10.1116/1.4818259.
535. Walter, S. R.; Young, K. L.; Holland, J. G.; Gieseck, R. L.; Mirkin, C. A.; Geiger, F. M. "Counting the Number of Magnesium Ions Bound to The Surface-immobilized Thymine Oligonucleotides That Comprise Spherical Nucleic Acids," *J. Am. Chem. Soc.*, **2013**, *135*, 17339-17348, doi: 10.1021/ja406551k.
536. Eichelsdoerfer, D.J.; Liao, X.; Cabezas, M.D.; Morris, W.; Radha, B.; Brown, K.A.; Giam, L.R.; Braunschweig, A.B.; Mirkin, C.A. "Large-Area Molecular Patterning with Polymer Pen Lithography," *Nature Protocols*, **2013**, *8*, 2548-2560, doi: 10.1038/nprot.2013.159.
537. Young, K.L.; Ross, M.B.; Blaber, M.G.; Rycenga, M.; Jones, M.R.; Zhang, C.; Senesi, A.J.; Lee, B.; Schatz, G.C.; Mirkin, C.A. "Using DNA to Design Plasmonic Metamaterials with Tunable Optical Properties," *Adv. Mater.*, **2014**, *26*, 653-659, doi: 10.1002/adma.201302938.

538. Auyeung, E.; Li, T.I.N.G.; Senesi, A.J.; Schmucker, A.L.; Pals, B.C.; Olvera de la Cruz, M.; Mirkin, C.A. "DNA-mediated nanoparticle crystallization into Wulff polyhedra," *Nature*, **2014**, *505*, 73-77, doi: 10.1038/nature12739.
539. Park, J.S.; Lifschitz, A.M.; Young, R.M.; Wasielewski, M.R.; Stern, C.L.; Mirkin, C.A. "Modulation of Electronics and Thermal Stabilities of Photochromic Phosphino-Aminoazobenzene Derivatives in Weak-Link Approach Coordination Complexes," *J. Am. Chem. Soc.*, **2013**, *135*, 16988-16996, doi: 10.1021/ja407148n.
540. Alhasan, A. H.; Patel, P.C.; Choi, C. H. J.; Mirkin, C.A. "Exosome Encased Spherical Nucleic Acid Gold Nanoparticle Conjugates as Potent MicroRNA Regulation Agents," *Small*, **2014**, *10*, 186-192, doi: 10.1002/sml.201302143, PMID: PMC3947239.
541. Kennedy, R.D.; Stern, C.L.; Mirkin, C.A. "Zwitterionic Weak-Link Approach Complexes Based on Anionic Icosahedral Monocarbaboranes," *Inorg. Chem.*, **2013**, *52*, 14064-14071, doi: 10.1021/ic401851z.
542. Kewalramani, S; Zwanikken, J.W.; Macfarlane, R.J.; Leung, C.Y.; Olvera de la Cruz, M; Mirkin, C.A.; Bedzyk, M.J. "Counterion Distribution Surrounding Spherical Nucleic Acid-Au Nanoparticle Conjugates (SNA-AuNPs) Probed by Small-Angle X-Ray Scattering," *ACS Nano*, **2013**, *7*, 11301-11309, doi: 10.1021/nn405109z.
543. Zhang, K.; Zhu, X.; Jia, F.; Auyeung, E.; Mirkin, C. A. "Temperature-Activated Nucleic Acid Nanostructures," *J. Am. Chem. Soc.*, **2013**, *135*, 14102-14105, doi: 10.1021/ja408465t, PMID: PMC3865851.
544. Personick, M.; Mirkin, C. A. "Making Sense of the Mayhem Behind Shape Control in the Synthesis of Gold Nanoparticles," *J. Am. Chem. Soc.*, **2013**, *135*, 18238-18247, doi: 10.1021/ja408645b.
545. Young, K. L.; Personick, M. L.; Engel, M.; Damasceno, P.F.; Barnaby, S. N.; Bleher, R.; Li, T.; Glotzer, S. C.; Lee, B.; Mirkin, C. A. "A Directional Entropic Force Approach to Assemble Anisotropic Nanoparticles into Superlattices," *Angew. Chem.*, **2013**, *52*, 13980-13984, doi: 10.1002/anie.201306009.
546. Dhakal, S.; Kohlstedt, K.; Schatz, G. C.; Mirkin, C. A.; Olvera de la Cruz, M., "Growth Dynamics for DNA Guided Nanoparticle Crystallization," *ACS Nano*, **2013**, *7*, 10948-10959, doi: 10.1021/nn404476f.
547. Schmucker, A. L.; Dickerson, M. B.; Rycenga, M.; Mangelson, B. F.; Brown, K. A.; Naik, R. R.; Mirkin, C. A. "Combined Chemical and Physical Encoding with Silk Fibroin-Embedded Nanostructures," *Small*, **2014**, *10*, 1485-1489, doi: 10.1002/sml.201302923.
548. Hellstrom, S.; Kim, Y.; Fakonas, J.; Macfarlane, R.; Senesi, A.; Mirkin, C.; Atwater, H. "Epitaxial Growth of DNA-Assembled Nanoparticle Superlattices on Patterned Substrates," *Nano Lett.* **2013**, *13*, 6084, doi: 10.1021/nl4033654.
549. Petrosko, S. H.; Fromen, C. A.; Auyeung, E.; DeSimone, J. M.; Mirkin, C. A. "Nanotechnology: An Enduring Bridge Between Engineering and Medicine," *The Bridge*, **2013**, *43*, 7-15.
550. Eichelsdoerfer, D. J.; Brown, K. A.; Wang, M. X.; Mirkin, C. A. "The Role of Absorbed Solvent in Polymer Pen Lithography," *J. Phys. Chem. B*, **2013**, *117*, 16363-16368, doi: 10.1021/jp410494g.
551. Zhou, X.; Zhou, Y.; Ku, J.; Zhang, C.; Mirkin, C. A. "Capillary Force-driven, Large-area Alignment of Multi-segmented Nanowires," *ACS Nano*, **2014**, *8*, 1511-1516, doi: 10.1021/nn405627s.

552. Mirkin, C. A.; Stegh, A. H. "Spherical Nucleic Acids for Precision Medicine," *Oncotarget*, **2014**, *5*, 9-10, PMID: PMC3960185
553. Bian, S.; Zieba, S. B.; Morris, W.; Han, X.; Richter, D. C.; Brown, K. A.; Mirkin, C. A.; Braunschweig, A. B. "Beam Pen Lithography as a New Tool for Spatially Controlled Photochemistry, and its Utilization in the Synthesis of Multivalent Glycan Arrays," *Chemical Science*, **2014**, *5*, 2023-2030, doi: 10.1039/c3sc53315h.
554. Kennedy, R.; Clingerman, D.; Morris, W.; Wilmer, C.; Sarjeant, A.; Stern, C.; O'Keeffe, M.; Snurr, R.; Hupp, J.; Farha, O.; Mirkin, C. A. "Metallacarborane-Based Metal-Organic Framework (MOF) with a Complex Topology," *Crystal Growth and Design*, **2014**, *14*, 1324-1330, doi: 10.1021/cg401817g.
555. Wu, X. A.; Choi, C. H. J.; Zhang, C.; Hao, L.; Mirkin, C. A. "Intracellular Fate of Spherical Nucleic Acid Nanoparticle Conjugates," *J. Am. Chem. Soc.*, **2014**, *136*, 7726-7733, doi: 10.1021/ja503010a, PMID: PMC4046773.
556. McGuirk, M. C.; Stern, C.; Mirkin, C. A. "Small Molecule Regulation of Self-Association and Catalytic Activity in a Supramolecular Coordination Complex," *J. Am. Chem. Soc.*, **2014**, *136*, 4689-4696, doi: 10.1021/ja500214r.
557. O'Brien, M. N.; Jones, M. R.; Brown, K. A.; Mirkin, C. A. "Universal Noble Metal Nanoparticle Seeds Realized Through Iterative Reductive Growth and Oxidative Dissolution Reactions," *J. Am. Chem. Soc.*, **2014**, *136*, 7603-7606, doi: 10.1021/ja503509k.
558. Zhou, Y.; Zhou, X.; Park, D.; Torabi, K.; Brown, K.; Jones, M. R.; Zhang, C.; Schatz, G. C.; Mirkin, C. A. "Shape-Selective Deposition and Assembly of Anisotropic Nanoparticles," *Nano Letters*, **2014**, *14*, 2157-2161, doi: 10.1021/nl500471g.
559. Radha, B.; Senesi, A.J.; O'Brien, M. N.; Wang, M.; Auyeung, E.; Lee, B.; Mirkin, C. A.; "Reconstitutable Nanoparticle Superlattices," *Nano Letters*, **2014**, *14*, 2162-2167, doi:10.1021/nl500473t.
560. Kim, D.; Campos, A. R.; Datt, A.; Gao, Z.; Rycenga, M.; Burrows, N.; Greeneltch, N. G.; Mirkin, C. A.; Murphy, C. J.; Van Duyne, R. P.; Haynes, C. L. "Microfluidic-SERS Devices for One Shot Limit-of-Detection," *Analyst*, **2014**, *139*, 3227-3234, doi: 10.1039/c4an00357h, PMID: PMC4067008.
561. Lifschitz, A. M.; Young, R. M.; Mendez-Arroyo, J.; Roznyatovskiy, V. V.; McGuirk, C. M.; Wasielewski, M. R.; Mirkin, C. A. "Chemically Regulating Rh(I)-Bodipy Photoredox Switches," *Chem. Comm.*, **2014**, *50*, 6850-6852, doi:10.1039/c4cc01345j.
562. Kouri, F. M.; Hurley, L. A.; Day, E. S.; Hua, Y.; Merkel, T.; Queisser, M. A.; Peng, C. Y.; Ritner, C.; Hao, L.; Daniel, W. L.; Zhang, H.; Sznajder, J. I.; Chin, L.; Giljohann, D. A.; Kessler, J. A.; Peter, M. E.; Mirkin, C. A.; Stegh, A. H. "miR-182 integrates apoptosis, growth and differentiation programs in Glioblastoma," *Genes and Development*, **2015**, *29*, 732-745, doi: 10.1101/gad.257394.114, PMID: PMC4387715.
563. Morris, W.; Briley, W.E.; Auyeung, E.; Cabezas, M.D.; Mirkin, C.A.; "Nucleic Acid-Metal Organic Framework (MOF) Nanoparticle Conjugates," *J. Am. Chem. Soc.*, **2014**, *136*, 7261-7264, doi: 10.1021/ja503215w.
564. Mendez-Arroyo, J.; Barroso-Flores, J.; Lifschitz, A. M.; Sarjeant, A. A.; Stern, C. L.; Mirkin, C. A.; "A Multi-State, Allosterically-Regulated Molecular Receptor With Switchable Selectivity," *J. Am. Chem. Soc.*, **2014**, *136*, 10340-10348, doi: 10.1021/ja503506a.
565. Eichelsdoerfer, D. J.; Brown, K. A.; Mirkin, C. A. "Capillary Bridge Rupture in Dip-Pen Nanolithography," *Soft Matter*, **2014**, *10*, 5603-5608, doi: 10.1039/c4sm00997e.

566. Banga, R. J.; Chernyak, N.; Narayan, S. P.; Nguyen, S. T.; Mirkin, C. A. "Liposomal Spherical Nucleic Acids," *J. Am. Chem. Soc.*, **2014**, *136*, 9866-9869, doi: 10.1021/ja504845f, PMID: PMC4280063, PMID: PMC4280063.
567. Senesi, A. J.; Eichelsdoerfer, D. J.; Brown, K. A.; Lee, B.; Auyeung, E.; Choi, C. H. J.; Macfarlane, R. J.; Young, K. L.; Mirkin, C. A. "Oligonucleotide Flexibility Dictates Crystal Quality in DNA-Programmable Nanoparticle Superlattices," *Adv. Mater.*, **2014**, *26*, 7235-7240, doi: 10.1002/adma.201402548.
568. Mangelson, B. F.; Jones, M. R.; Park, D. J.; Shade, C. M.; Schatz, G. C.; Mirkin, C. A. "Synthesis and Characterization of a Plasmonic-Semiconductor Composite Containing Rationally Designed, Optically Tunable Gold Nanorod Dimers and Anatase TiO₂," *Chem. Mater.*, **2014**, *26*, 3818-3824, doi: 10.1021/cm5014625.
569. O'Brien, M. N.; Boya, R.; Brown, K. A.; Jones, M. R.; Mirkin, C. A. "Langmuir Analysis of Nanoparticle Polyvalency in DNA-Mediated Adsorption," *Angew. Chem.*, **2014**, *53*, 1-8, doi: 10.1002/anie.201405317.
570. Barnaby, S. N.; Lee, A.; Mirkin, C. A. "Probing the Inherent Stability of siRNA Immobilized on Nanoparticle Constructs," *Proc. Natl. Aca. Sci.*, **2014**, *111*, 9739-9744, doi: 10.1073/pnas.1409431111, PMID: PMC4103361.
571. Halo, T. L.; McMahon, K. M.; Angeloni, N. L.; Xu, Y.; Wang, W.; Chinen, A. B.; Malin, D.; Strelakova, E.; Cryns, V. L.; Cheng, C.; Mirkin, C. A.; Thaxton, C. S. "NanoFlares for the Detection, Isolation, and Culture of Live Tumor Cells from Human Blood," *Proc. Natl. Aca. Sci.*, **2014**, *111*, 17104-17109, doi: 10.1073/pnas.1418637111, PMID: PMC4260589.
572. Schelhas, L. T.; Banholzer, M. J.; Mirkin, C. A.; Tolbert, S. H.; "Magnetic Confinement and Coupling in Narrow-Diameter Au-Ni Nanowires," *Journal of Magnetism and Magnetic Materials*, **2014**, *379*, 239-243, doi: 10.1016/j.jmmm.2014.12.049.
573. Ozel, T.; Bourret, G. R.; Mirkin, C. A. "Coaxial Lithography," *Nature Nanotechnology*, **2015**, *10*, 319-324, doi: 10.1038/nnano.2015.33.
574. Rouge, J. L.; Hao, L.; Wu, X. A.; Briley, W. E.; Mirkin, C. A. "Spherical Nucleic Acids as a Divergent Platform for Synthesizing RNA-Nanoparticle Conjugates Through Enzymatic Ligation," *ACS Nano*, **2014**, *8*, 8837-8843, doi: 10.1021/nn503601s, PMID: PMC4174098.
575. Zhou, Y.; Xie, Z.; Brown, K. A.; Park, D. J.; Zhou, X.; Chen, P. C.; Hirtz, M.; Lin, Q. -Y.; Dravid, V. P.; Schatz, G. C.; Zheng, Z.; Mirkin, C. A. "Apertureless Cantilever-Free Pen Arrays for Scanning Photochemical Printing," *Small*, **2014**, *11*, 913-918, doi: 10.1002/sml.201402195.
576. Zhang, C.; Hao, L.; Calabrese, C. M.; Zhou, Y.; Choi, C. H. J.; Xing, H.; Mirkin, C. A. "Biodegradable DNA-brush Block Copolymer Spherical Nucleic Acids Enable Transfection Agent-Free Intracellular Gene Regulation," *Small*, **2015**, doi 10.1002/sml.201501573.
577. Calabrese, C. M.; Merkel, T. J.; Briley, W. E.; Randeria, P. S.; Narayan, S. P.; Rouge, J. L.; Walker, D. A.; Scott, A. W.; Mirkin, C. A. "Biocompatible Infinite-Coordination-Polymer Nanoparticle-Nucleic Acid Conjugates for Antisense Gene Regulation," *Angew Chem.*, **2014**, *54*, 476-480, doi: 10.1002/anie.201407946, PMID: PMC4314394.
578. Liu, Z.; Liu, G.; Wu, Y.; Cao, D.; Sun, J.; Schneebeli, S. T.; Nassar, M. S.; Mirkin, C. A.; Stoddart, J. F. "Assembly of Supramolecular Nanotubes from Molecular Triangles and 1,2-Dihalohydrocarbons," *JACS*, **2014**, *136*, 16651-16660, doi: 10.1021/ja509480u.
579. Lifschitz, A. M.; Young, R. M.; Mendez-Arroyo, J.; Stern, C. L.; McGuirk, C. M.; Wasielewski, M. R.; Mirkin, C. A. "An Allosteric Photoredox Catalyst Inspired by

- Photosynthetic Machinery,” *Nature Communications*, **2015**, *6*, 6541, doi:10.1038/ncomms7541, PMCID: PMC4389231.
580. Kelley, S. O.; Mirkin, C. A.; Walt, D. R.; Ismagilov, R. F.; Toner, M.; Sargent, E. H. “Advancing the Speed, Sensitivity and Accuracy of Biomolecular Detection using Multi-Length-Scale Engineering,” *Nature Nanotechnology*, **2014**, *9*, 969-980, doi: 10.1038/nnano.2014.261, PMCID: PMC4472305.
581. Chinen, A. B.; Guan, C. M.; Mirkin, C. A. “Spherical Nucleic Acid Nanoparticle Conjugates Enhance G-Quadruplex Formation and Increase Serum Protein Interactions,” *Angew Chem.*, **2014**, *54*, 527-531, doi: 10.1002/anie.201409211, PMCID: PMC4314381.
582. McGuirk, C. M.; Mendez-Arroyo, J.; Lifschitz, A. M.; Mirkin, C. A. “Allosteric Regulation of Supramolecular Oligomerization and Catalytic Activity via Coordination-Based Control of Competitive Hydrogen Bonding Events,” *J. Am. Chem. Soc.*, **2014**, *136*, 16594-16601, doi: 10.1021/ja508804n.
583. O’Brien, M. N.; Jones, M. R.; Mirkin, C. A. “Uniform Circular Disks with Synthetically Tailorable Diameters: Two-Dimensional Nanoparticles for Plasmonics,” *Nano Lett.*, **2015**, *136*, 7603-7606, doi: 10.1021/nl5038566.
584. Park, D. J.; Zhang, C.; Ku, J. C.; Zhou, Y.; Schatz, G. C.; Mirkin, C. A. “Plasmonic Photonic Crystals Realized through DNA Programmable Assembly,” *Proc. Natl. Aca. Sci.*, **2014**, *112*, 977-981, doi: 10.1073/pnas.1422649112, PMCID: PMC4313827.
585. Macfarlane, R. J.; Thaner, R. V.; Brown, K. A.; Zhang, J.; Lee, B.; Nguyen, S. T.; Mirkin, C. A. “Importance of the DNA “Bond” in Nanoparticle Crystallization,” *Proc. Natl. Aca. Sci.*, **2014**, *111*, 14995-15000, doi: 10.1073/pnas.1416489111, PMCID: PMC4210335.
586. Osberg, K. D.; Harris, N.; Ozel, T.; Ku, J. C.; Schatz, G. C.; Mirkin, C. A. “A Systematic Study of Antibonding Modes in Gold Nanorod Dimers and Trimers,” *Nano Lett.*, **2014**, *14*, 6949-6954, doi: 10.1021/nl503207j.
587. Brodin, J. D.; Auyeung, E.; Mirkin, C. A. “DNA-mediated Engineering of Multicomponent Enzyme Crystals,” *PNAS*, **2015**, *112*, 4564-4569, doi: 10.1073/pnas.1503533112, PMCID: PMC4403210.
588. Luthi, A. J.; Lyssenko, N. N.; Vickers, K. C.; Rader, D. J.; Phillips, M. C.; Mirkin, C. A.; Thaxton, C. S.; “Robust Diffusional and Active Efflux of Cellular Cholesterol to Gold Nanoparticle-based Biomeimetic High-Density Lipoprotein,” *J. of Lipid Research*, **2015**, *56*, 972-985, doi: 10.1194/jlr.M054635.
589. Auyeung, E.; Morris, W.; Mondloch, J. E.; Hupp, J. T.; Farha, O. K.; Mirkin, C. A. “Controlling Structure and Porosity in Catalytic Nanoparticle Superlattices with DNA,” *J. Am. Chem. Soc.*, **2015**, *137*, 1658-1662, doi: 10.1021/ja512116p.
590. Jones, M. R.; Seeman, N. C.; Mirkin, C. A. “Programmable Materials and the Nature of the DNA Bond,” *Science*, **2015**, *347*, 1260901, doi: 10.1126/science.1260901.
591. Radovic-Moreno, A. F.; Chernyak, N.; Mader, C. C.; Nallagatla, S.; Kang, R.; Hao, L.; Walker, D. A.; Halo, T. L.; Merkel, T. J.; Rische, C.; Ananatmula, S.; Burkhart, M.; Mirkin, C. A.; Gryaznov, S. M. “Immunomodulatory Spherical Nucleic Acids,” *Proc. Natl. Aca. Sci.*, **2015**, *112*, 3892-3897, doi: 10.1073/pnas.1502850112, PMCID: PMC4386353.
592. Narayan, S. P.; Choi, C. H. J.; Hao, L.; Calabrese, C. M.; Auyeung, E.; Zhang, C. Goor, O. J. G. M.; Mirkin, C. A. “The Sequence-Specific Cellular Uptake of Spherical Nucleic Acid Nanoparticle Conjugates,” *Small*, **2015**, *11*, 4173-4182, doi: 10.1002/sml.2015100027, PMCID: PMC4560454.

593. McGuirk, C. M.; Katz, M. J.; Stern, C. L.; Sarjeant, A. A.; Hupp, J. T.; Farha, O. K.; Mirkin, C. A. "Turning on Catalysis: Incorporation of a Hydrogen Bond Donating Squaramide Moiety into a Zr-Metal-Organic Framework," *J. Am. Chem. Soc.*, **2015**, *137*, 919-925, doi: 10.1021/ja511403t.
594. O'Brien, M. N.; Jones, M. R.; Lee, B.; Mirkin, C. A. "Anisotropic Nanoparticle Complementarity in DNA-Mediated Cocrystallization," *Nature Materials*, **2015**, *14*, 833-839 doi: 10.1038/nmat4293.
595. Clingerman, D. J.; Morris, W.; Mondloch, J. E.; Kennedy, R. D.; Sarjeant, A. A.; Stern, C.; Hupp, J. T.; Farha, O. K.; Mirkin, C. A. "Stabilization of a Highly Porous Metal-Organic Framework Utilizing a Carborane-Based Linker," *Chem. Comm.*, **2015**, *51*, 6521-6523, doi: 10.1039/c4cc09212k.
596. Ross, M. B.; Ku, J. C.; Vaccarezza, V. M.; Schatz, G. C.; Mirkin, C. A. "Nanoscale Form Dictates Mesoscale Function in Plasmonic DNA-nanoparticle Superlattices," *Nature Nanotechnology*, **2015**, *10*, 453-458, doi: 10.1038/nnano.2015.68.
597. Randeria, P. S.; Jones, M. R.; Kohlstedt, K. L.; Banga, R. J.; Olvera de la Cruz, M.; Schatz, G. C.; Mirkin, C. A. "What Controls the Hybridization Thermodynamics of Spherical Nucleic Acids?" *JACS*, **2015**, *137*, 3486-3489, doi: 10.1021/jacs.5b00670.
598. Lifschitz, A. M.; Rosen, M. S.; McGuirk, C. M.; Mirkin, C.A., "Allosteric Supramolecular Coordination Constructs," *JACS*, **2015**, *137*, 7252-7261, doi: 10.1021/jacs.5b01054.
599. Ku, J. C.; Ross, M. B.; Schatz, G. C.; Mirkin, C. A., "Conformal, Macroscopic Crystalline Nanoparticle Sheets Assembled with DNA," *Adv. Materials*, **2015**, *27*, 3159-3163, doi: 10.1002/adma.201500858.
600. Randeria, P. S.; Seeger, M. A.; Wang, X. Q.; Wilson, H.; Shipp, D.; Mirkin, C. A.; Paller, A. S. "siRNA-based Spherical Nucleic Acids Reverse Impaired Wound Healing in Diabetic Mice by GM3 Synthase Knockdown," *PNAS*, **2015**, *112*, 5573-5578, doi: 10.1073/pnas.1505951112, PMID: PMC4426446.
601. Wang, Y.; Reyes, K. G.; Brown, K. A.; Mirkin, C. A.; Powell, W. B. "Nested-Batch-Mode Learning and Stochastic Optimization with An Application to Sequential MultiStage Testing in Materials Science," *SIAM Journal on Scientific Computing*, **2015**, *37*, B361-B381, doi: 10.1137/140971117.
602. Shade, C. M.; Kennedy, R. D.; Rouge, J. L.; Rosen, M. S.; Wang, M. X.; Seo, S. E.; Clingerman, D. J.; Mirkin, C. A. "Duplex-Selective Ruthenium-based DNA Intercalators," *Chemistry – A European Journal*, **2015**, *21*, 10983-10987, doi: 10.1002/chem.201502095.
603. Hong, B. J.; Eryazici, I.; Bleher, R.; Thaner, R. V.; Mirkin, C.A.; Nguyen, S. T. "Directed Assembly of Nucleic Acid-Based Polymeric Nano-particles from Molecular Tetravalent Cores," *JACS*, **2015**, *137*, 8184-8191, doi: 10.1021/jacs.5b03485.
604. Lin, Q.-Y.; Li, Z.; Brown, K. A.; O'Brien, M. N.; Ross, M. B.; Zhou, Y.; Butun, S.; Chen, P.-C.; Schatz, G. C.; Dravid, V. P.; Aydin, K.; Mirkin, C. A. "Strong Coupling between Plasmonic Gap Modes and Photonic Lattice Modes in DNA-Assembled Gold Nanocube Arrays," *Nano Letters*, **2015**, *15*, 4699-4703, doi: 10.1021/acs.nanolett.5b01548.
605. Ozel, T.; Ashley, M. J.; Bourret, G. R.; Ross, M. B.; Schatz, G. C.; Mirkin, C. A. "Solution-Dispersible Metal Nanorings with Deliberately Controllable Compositions and Architectural Parameters for Tunable Plasmonic Response," *Nano Letters*, **2015**, *15*, 5273-5278, doi: 10.1021/acs.nanolett.5b01594.

606. O'Brien, M. N.; Brown, K. A.; Mirkin, C. A. "Critical Undercooling in DNA-Mediated Nanoparticle Crystallization," *ACS Nano*, **2016**, *10*, 1363-1368, doi: 10.1021/acsnano.5b06770.
607. Chen, P.-C.; Liu, G.; Zhou, Y.; Brown, K. A.; Chernyak, N.; Hedrick, J. L.; He, S.; Xie, Z.; Lin, Q.-Y.; Dravid, V. P.; O'Neill-Slawecki, S. A.; Mirkin, C. A. "Tip-Directed Synthesis of Multi-Metallic Nanoparticles," *JACS*, **2015**, *137*, 9167-9173, doi: 10.1021/jacs.5b05139.
608. Padmos, J. D.; Personick, M.; Tang, Q.; Duchesne, P.; Jiang, D.; Mirkin, C. A.; Zhang, P. "The Surface Structure of Silver-coated Gold Nanocrystals and Its Influence on Shape Control," *Nature Comm.*, **2015**, *6*, 7664, doi: 10.1038/ncomms8664, PMID: PMC4510708.
609. Briley, W. E.; Bondy, M. H.; Randeria, P. S.; Dupper, T. J.; Mirkin, C. A. "Quantification and Real-Time Tracking of RNA in Live Cells Using Sticky-Flares," *PNAS*, **2015**, *112*, 9591-9595, doi: 10.1073/pnas.1510581112, PMID: PMC4534211.
610. Chinen, A. B.; Guan, C. M.; Ferrer, J. R.; Barnaby, S. N.; Merkel, T. J.; Mirkin, C. A. "Nanoparticle Probes for the Detection of Cancer Biomarkers, Cells and Tissues by Fluorescence," *Chem. Rev.*, **2015**, *115*, 10530-10574, doi: 10.1021/acs.chemrev.5b00321.
611. Thaner, R. V.; Kim, Y.; Li, T. I. N. G.; Macfarlane, R. J.; Nguyen, S. T.; Olvera de la Cruz, M.; Mirkin, C. A. "Entropy-driven crystallization behavior in DNA-mediated nanoparticle assembly," *Nano Letters*, **2015**, *15*, 5545-5551, doi: 10.1021/acs.nanolett.5b02129.
612. Xie, Z.; Zhou, Y.; Hedrick, J. L.; Chen, P.-C.; He, S.; Shahjamali, M. M.; Wang, S.; Zheng, Z.; Mirkin, C. A. "On-Tip Photo-Modulated Molecular Printing," *Angew. Chem.*, **2015**, *54*, 12894-12899, doi: 10.1002/anie.201505150.
613. Mitragotri, S.; Anderson, D. G.; Chen, S. X.; Chow, E. K.; Ho, D.; Kabanov, A. V.; Karp, J. M.; Kataoka, K.; Mirkin, C. A.; Petrosko, S. H.; Shi, J.; Stevens, M. M.; Sun, S.; Teoh, S.; Venkatraman, S. S.; Xia, Y.; Wang, S.; Gu, Z.; Xu, C. "Accelerating the Translation of Nanomaterials in Biomedicine," *ACS Nano*, **2015**, *9*, 6644-6654, doi: 10.1021/acsnano.5b03569.
614. Barnaby, S. N.; Thaner, R. V.; Ross, M. B.; Brown, K. A.; Schatz, G. C.; Mirkin, C. A., "Modular and Chemically Responsive Oligonucleotide "Bonds" in Nanoparticle Superlattices," *JACS*, **2015**, *137*, 13566-13571, doi: 10.1021/jacs.5b07908.
615. Ross, M. B.; Ku, J. C.; Blaber, M. G.; Mirkin, C. A.; Schatz, G. C. "Defect Tolerance and the Effect of Structural Inhomogeneity in Plasmonic DNA-nanoparticle Superlattices," *PNAS*, **2015**, *112*, 10292-10297, doi: 10.1073/pnas.1513058112, PMID: PMC4547218.
616. Rouge, J. L.; Sita, T. L.; Hao, L.; Kouri, F. M.; Briley, W. E.; Stegh, A. H.; Mirkin, C. A. "Ribozyme-Spherical Nucleic Acids," *JACS*, **2015**, *137*, 10528-10531, doi:10.1021/jacs.5b07104.
617. Wang, S.; Morris, W.; Liu, Y.; McGuirk, C. M.; Zhou, Y.; Hupp, J. T.; Farha, O. K.; Mirkin, C. A. "Surface-Specific Functionalization of Nanoscale Metal-Organic Frameworks," *Angew. Chem.*, **2015**, *54*, 14738-14742, doi: 10.1002/anie.201506888.
618. Brown, K. A.; He, S.; Eichelsdoerfer, D. J.; Huang, M.; Levy, I.; Lee, H.; Ryu, S.; Irvin, P.; Mendez-Arroyo, J.; Eom, C.-B.; Mirkin, C. A.; Levy, J. "Giant Conductivity Switching of LaAlO₃/SrTiO₃ Heterointerfaces Governed By Surface Protonation," *Nature Communications*, **2016**, *7*, 10681, doi: 10.1038/ncomms10681.
619. Thomas, J. C.; Schwartz, J. J.; Hohmna, J. N.; Claridge, S. A.; Auluck, H. S.; Serino, A. C.; Spokoyny, A. M.; Tran, G.; Kelly, K. F.; Mirkin, C. A.; Gilles, J.; Osher, S. J.; Weiss, P. S. "Defect-Tolerant Aligned Dipoles within Two-Dimensional Plastic Lattices," *ACS Nano*, **2015**, *9*, 4734-4742, doi: 10.1021/acsnano.5b01329.

620. Kim, Y.; Macfarlane, R. J.; Jones, M. R.; Mirkin, C. A. "Transmutable nanoparticles with reconfigurable surface ligands," *Science*, **2016**, *351*, 579-582, doi: 10.1126/science.aad2212.
621. Liu, G.; Zhang, C.; Wu, J.; Mirkin, C. A. "Using Scanning-Probe Block Copolymer Lithography and Electron Microscopy to Track Shape Evolution in Multimetallic Nanoclusters," *ACS Nano*, **2015**, *9*, 12137-12145, doi: 10.1021/acsnano.5b5191.
622. Lifschitz, A. M.; Young, R. M.; Mendez-Arroyo, J.; McGuirk, C. M.; Wasielewski, M. R.; Mirkin, C. A. "Cooperative Electronic and Structural Regulation in a Bioinspired Allosteric Photoredox Catalyst," *Inorganic Chem*, **2016**, *55*, 8301-8308, doi: 10.1021/acs.inorgchem.6b00095.
623. Liu, Z.; Sun, J.; Zhou, Y.; Zhang, Y.; Wu, Y.; Nalluri, S. K. M.; Wang, Y.; Samanta, A.; Mirkin, C. A.; Schatz, G. C.; Stoddart, J. F. "Supramolecular Gelation of Rigid Triangular Macrocycles Through Rings of Multiple C-O...O Interactions Acting Cooperatively," *The Journal of Organic Chemistry*, **2016**, *81*, 2581-2588, doi: 10.1021/acs.joc.6b00281.
624. He, S.; Xie, Z.; Park, D. J.; Liao, X.; Brown, K. A.; Chen, P.C.; Zhou, Y.; Schatz, G. C.; Mirkin, C. A. "Liquid Phase Beam Pen Lithography," *Small*, **2016**, *12*, 988-993, doi:10.1002/smll.201502666.
625. Brodin, J. D.; Sprangers, A. J.; McMillan, J.; Mirkin, C. A. "DNA-Mediated Cellular Delivery of Functional Enzymes," *JACS*, **2015**, *137*, 14838-14841, doi: 10.1021/jacs.5b09711.
626. Laramy, C. L.; Brown, K. A.; O'Brien, M. N.; Mirkin, C. A. "High-Throughput, Algorithmic Determination of Nanoparticle Structure from Electron Microscopy Images," *ACS Nano*, **2015**, *9*, 12488-12495, doi: 10.1021/acsnano.5b05968.
627. Martinsson, E.; Shahjamali, M.; Large, N.; Zaraee, N.; Zhou, Y.; Schatz, G.; Mirkin C. A.; Aili, D, "Influence of Surfactant Bilayers on the Refractive Index Sensitivity and Catalytic Properties of Anisotropic Gold Nanoparticles," *Small*, **2016**, *12*, 330-342, doi: 10.1002/smll.201502449.
628. Seo, S. E.; Wang, M. X.; Shade, C. M.; Rouge, J. L.; Brown, K. A.; Mirkin, C. A. "Modulating the Bond Strength of DNA-Nanoparticle Superlattices," *ACS Nano*, **2016**, *10*, 1171-1779, doi: 10.1021/acsnano.5b07103.
629. Alhasan, A. H.; Scott, A. W.; Wu, J. J.; Feng, G.; Meeks, J. J.; Thaxton, C. S.; Mirkin, C. A. "Circulating MicroRNA Signature for the Diagnosis of Very High-Risk Prostate Cancer," *PNAS*, **2016**, *113*, 10655-10660, doi: 10.1073/pnas.1611596113.
630. Hou, X.; Ke, Ch.; Zhou, Y.; Xie, Z.; Alngadh, A.; Keane, D.; Nassar, M.; Botros, Y.; Mirkin C. A.; Stoddart, J. F. "Assembly of Two-Dimensional Organic Monolayers by Cooperative Polymerization," *JACS*, **2015**, submitted.
631. Sita, T. L.; Kouri, F. M.; Merkel, T. J.; Hurley, L. A.; Chalastanis, A.; May, J. L.; Cayton, T. C.; Barnaby, S. N.; Savalia, N.; James, C. D.; Lee, A.; Mirkin, C. A.; Stegh, A. H. "Dual bioluminescence and near-infrared fluorescence monitoring to evaluate gene regulatory activity of Spherical Nucleic Acid nanoconjugates *in vivo*," *PNAS*, **2016**, submitted.
632. Hedrick, J. L.; Brown, K. A.; Kluender, E. J.; Cabezas, M. D.; Chen, P. C.; Mirkin, C. A. "Hard Transparent Arrays for Polymer Pen Lithography," *ACS Nano*, **2016**, *10*, 3144-3148, doi: 10.1021/acsnano.6b00528.
633. Chen, P. C.; Liu, X.; Hedrick, J. L.; Xie, Z.; Wang, S.; Lin, Q. Y.; Hersam, M. C.; Dravid, V. P.; Mirkin, C. A. "Polyelemental nanoparticle libraries," *Science*, **2016**, *352*, 1565-1569, doi: 10.1126/science.aaf8402.

634. Chen, L.; Xie, Z.; Gan, T.; Wang, Y.; Zhang, G.; Mirkin, C. A.; Zheng, Z. "Biomimicking Nano-Micro Binary Polymer Brushes for Smart Cell Orientation and Adhesion Control," *Small*, **2016**, *12*, 3400-3406, doi:10.1002/sml.201600634.
635. Ross, M. B.; Ku, J. C.; Lee, B.; Mirkin, C. A.; Schatz, G. C. "Plasmonic Metallurgy Enabled by DNA," *Advanced Materials*, **2016**, *28*, 2790-2794, doi: 10.1002/adma.201505806.
636. Ross, M. B.; Ashley, M. J.; Schmucker, A. L.; Singamaneni, S.; Naik, R. R.; Schatz, G. C.; Mirkin, C. A. "Structure-Function Relationships For Surface-Enhanced Raman Spectroscopy-Active Plasmonic Paper," *Journal of Physical Chemistry*, **2016**, *120*, 20789-20797, doi: 10.1021/acs.jpcc.6b02019.
637. O'Brien, M. N.; Girard, M.; Lin, H.-L.; Millan, J. A.; Olvera de la Cruz, M.; Lee, B.; Mirkin, C. A. "Exploring the Zone of Anisotropy and Broken Symmetries in DNA-Mediated Nanoparticle Crystallization," *PNAS*, **2016**, *113*, 10485-10490, doi: 10.1073/pnas.1611808113.
638. Lim, J.-K.; Lee, O.-S.; Jang, J. W.; Petrosko, S. H.; Schatz, G. C.; Mirkin, C. A. "Molecular Transport Junctions Created By Self-Contacting Gapped Nanowires," *Small*, **2016**, *12*, 4349-4356, doi: 10.1002/sml.201601214.
639. Shahjamali, M. M.; Zhou, Y.; Zaraee, N.; Xue, C.; Wu, J.; Large, N.; McGuirk, C. M.; Boey, F.; Dravid, V.; Cui, Z.; Schatz, G. C.; Mirkin, C. A. "Ag-Ag₂S Hybrid Nanoprisms: Structural versus Plasmonic Evolution," *ACS Nano*, **2016**, *10*, 5362-5373, doi: 10.1021/acs.nano.6b01532.
640. Thaner, R. V.; Eryazici, I.; Macfarlane, R. J.; Brown, K. A.; Lee, B.; Nguyen, S. T.; Mirkin, C. A. "The Significance of Multivalent Bonding Motifs and "Bond Order" in DNA-Directed Nanoparticle Crystallization," *JACS*, **2016**, *138*, 6119-6122, doi: 10.1021/jacs.6b02479.
641. McGuirk, C. M.; Mendez-Arroyo, J.; d'Aquino, A. I.; Stern, C.; Mirkin, C. A. "A Concerted Two-Prong Approach to the in Situ Allosteric Regulation of Bifunctional Catalysis," *Chemical Science*, **2016**, *7*, 6674-6683, doi: 10.1039/c6sc01454b.
642. Kewalramani, S.; Guerrero-Garcia, G. I.; Moreau, L. M.; Zwanikken, J. W.; Mirkin, C. A.; Olvera de la Cruz, M.; Bedzyk, M. J. "Electrolyte-Mediated Assembly of Charged Nanoparticles," *ACS Central Science*, **2016**, *2*, 219-224, doi: 10.1021/acscentsci.6b00023.
643. Kelty, M. L.; Morris, W.; Gallagher, A. T.; Anderson, J. S.; Brown, K. A.; Mirkin, C. A.; Harris, T. D. "High-Throughput Synthesis and Characterization of Nanocrystalline Porphyrinic Zirconium Metal-Organic Frameworks," *ChemComm*, **2016**, *52*, 7854-7857, doi: 10.1039/c6cc03264h.
644. Schwartz, J.; Mendoza, A.; Wattanatorn, N.; Zhao, Y.; Nguyen, V.; Spokoyny, A.; Mirkin, C. A.; Base, T.; Weiss, P. "Surface Dipole Control of Liquid Crystal Alignment," *JACS*, **2016**, *138*, 5957-5967, doi: 10.1021/jacs.6b02026.
645. Park, D. J.; Ku, J. C.; Schatz, G. C.; Mirkin, C. A. "DNA nanoparticle assembly enables unprecedented control over photonic crystal fabrication," *SPIE*, **2015**, doi: 10.1117/2.1201503.005823.
646. O'Brien, M. N.; Jones, M. R.; Mirkin, C. A. "The Nature and Implications of Uniformity in the Hierarchical Organization of Nanomaterials," *PNAS*, **2016**, *113*, 11717-11725, doi: 10.1073/pnas.1605289113.
647. Ross, M. B.; Mirkin, C. A.; Schatz, G. S. "Optical Properties of One-, Two-, and Three-Dimensional Arrays of Plasmonic Nanostructures," *Journal of Physical Chemistry C*, **2016**, *120*, 816-830, doi: 10.1021/acs.jpcc.5b10800.

648. Jones, M. R.; Kohlstedt, K. L.; O'Brien, M. N.; Wu, J.; Schatz, G. C.; Mirkin, C. A. "Deterministic Symmetry Breaking of Plasmonic Nanostructures Enabled by DNA-Programmable Assembly," *Nature Nanotechnology*, **2016**, submitted.
649. Barnaby, S. N.; Ross, M. B.; Thaner, R. V.; Lee, B.; Schatz, G. C.; Mirkin, C. A. "Enzymatically Controlled Vacancies in Nanoparticle Crystals," *Nano Letters*, **2016**, *16*, 5114-5119, doi: 10.1021/acs.nanolett.6b02042.
650. Petrosko, S. H.; Johnson, R. P.; White, H. S.; Mirkin, C. A. "Nanoreactors: Small Spaces, Big Implications in Chemistry," *J. Am. Chem. Soc.*, **2016**, *138*, 7443-7745, doi: 10.1021/jacs.6b05393.
651. Mason, J. A.; Laramy, C. R.; Lai, C.-T.; O'Brien, M. N.; Lin, Q.-Y.; Dravid, V. P.; Schatz, G. C.; Mirkin, C. A. "Contraction and Expansion of Stimuli-Responsive DNA Bonds in Flexible Colloidal Crystals," *JACS*, **2016**, *138*, 8722-8725, doi: 10.1021/jacs.6b05430.
652. Myers, B. D.; Lin, Q.-L.; Wu, H.; Luijten, E.; Mirkin, C. A.; Dravid, V. P. "Size-Selective Nanoparticle Assembly on Substrates by DNA Density Patterning," *ACS Nano*, **2016**, *10*, 5679-5686, doi: 10.1021/acsnano.6b02246.
653. Ashley, M. J.; O'Brien, M. N.; Hedderick, K. R.; Mason, J. A.; Ross, M. B.; Mirkin, C. A. "Templated Synthesis of Uniform Pervskite Nanowire Arrays," *JACS*, **2016**, *138*, 10096-10099, doi: 10.1021/jacs.6b05901.
654. Barnaby, S. N.; Perelman, G. A.; Kohlstedt, K. L.; Chinen, A. B.; Schatz, G. C.; Mirkin, C. A. "Design Considerations for RNA Spherical Nucleic Acids (SNAs)" *Bioconjugate Chemistry*, **2016**, *27*, 2124-2131, doi: 10.1021/acs.bioconjchem.6b00350, PMID: PMC5034328.
655. Wang, X.; Hao, L.; Bu, H.-F.; Scott A. W.; Tian K.; Liu, F.; DePlaen, I. G.; Liu, Y.; Mirkin, C. A.; Tan, X.-D. "Spherical Nucleic Acid Targeting MicroRNA-99b Enhances Intestinal MFG-E8 Gene Expression and Restores Enterocyte Migration in Lipopolysaccharide-induced Septic Mice," *Scientific Reports*, **2016**, *6*, 31687 doi: 10.1038/srep31687.
656. Hou, X.; Ke, C.; Zhou, Y.; Xie, Z.; Alngadh, A.; Keane, D. T.; Nassar, M. S.; Botros, Y. Y.; Mirkin, C. A.; Stoddart, J. F. "Concurrent Covalent and Supramolecular Polymerization," *Chem A European Journal*, **2016**, *22*, 12301-12306, doi: 10.1002/chem.201602954.
657. Sprangers, A. J.; Hao, L.; Banga, R. J.; Mirkin, C. A. "Liposomal Spherical Nucleic Acids for Regulating Long Noncoding RNAs in the Nucleus," *Small*, **2017**, doi: 10.1002/sml.201602753.
658. Guan, C. M.; Chernyak, N.; Dominguez, D.; Zhang, B.; Mirkin, C. A. "RNA-based Immunostimulatory Liposomal Spherical Nucleic Acids as Potent TLR7/8 Receptor Modulators," *ACS Nano*, **2016**, submitted.
659. Wang, M. X.; Seo, S. E.; Gabrys, P. A.; Fleischman, D.; Lee, B.; Kim, Y.; Atwater, A. A.; Macfarlane, R. J.; Mirkin, C. A. "Epitaxy: Programmable Atom Equivalents *Versus* Atoms," *ACS Nano*, **2016**, doi: 10.1021/acsnano.6b06584.
660. Chinen, A. B.; Ferrer, J. R.; Merkel, T. J.; Mirkin, C. A. "Relationships Between Poly(ethylene glycol) Modifications on RNA-Spherical Nucleic Acid Conjugates and Cellular Uptake and Circulation Time," *Bioconjugate Chemistry*, **2016**, *27*, 2715-2721, doi: 10.1021/acs.bioconjchem.6b00483.
661. Chinen, A. B.; Guan, C. M.; Ko, C. H.; Mirkin, C. A. "The Impact of Protein Corona Formation on the Macrophage Cellular Uptake and Biodistribution of Spherical Nucleic Acids," *Small*, **2016**, submitted.

662. O'Brien, M. N.; Lin, H.-X.; Girard, M.; Olvera de la Cruz, M.; Mirkin, C. A. "Programming Colloidal Crystal Habit with Anisotropic Nanoparticle Building Blocks and DNA Bonds," *JACS*, **2016**, *138*, 14562-14565, doi: 10.1021/jacs.6b09704.
663. Scott, A. W.; Garimella, V.; Calabrese, C. M.; Mirkin, C. A. "Universal Biotin-PEG-Linked Gold Nanoparticle Probes for the Simultaneous Detection of Nucleic Acids and Proteins," *Bioconjugate Chem*, **2016**, doi: 10.1021/acs.bioconjchem.6b00529.
664. Mendez-Arroyo, J.; d'Aquino, A. I.; Chinen, A. B.; Manraj, Y.; Mirkin, C. A. "Reversible and Selective Encapsulation of Dextromethorphan and β -Estradiol Using an Asymmetric Molecular Capsule Assembled via the Weak-Link Approach" *JACS*, **2016**, submitted.
665. Ross, M. B.; Bourgeois, M. R.; Mirkin, C. A.; Schatz, G. C. "Magneto-Optical Response of Cobalt Interacting with Plasmonic Nanoparticle Superlattices," *Journal of Physical Chemistry Letters*, **2016**, *7*, 4732-4738, doi: 10.1021/acs.jpcclett.6b02259.
666. Hedrick, J. L.; Brown, K. A.; Meckes, B.; Moreau, L. M.; Kluender, E. J.; Cabezas, M. D.; Chen, P.-C.; O'Neill-Slawecki, S. A.; Mans, D. M.; Mirkin, C. A. "Synthesis of Multimillion Feature Combinatorial Libraries of Nanomaterials," *Nature Nanotechnology*, **2016**, submitted.
667. Cabezas, M.; Mirkin, C. A.; Mrksich, M. "Nanopatterned Extracellular Matrices Enable Cell-Based Assays with a Mass Spectrometric Readout," *Nano Letters*, **2016**, submitted.
668. Lin, H.; Lee, S.; Sun, L.; Spellings, M.; Engel, M.; Glotzer, S. C.; Mirkin, C. A. "Clathrate Colloidal Crystals," *Science*, **2016**, submitted.
669. McMillan, J. R.; Brodin, J. D.; Millan, J. A.; Lee, B.; Olvera de la Cruz, M.; Mirkin, C. A. "Investigating the Assembly of Proteins with Turnable Bond Distributions in Nanoparticle Superlattices," *JACS*, **2016**, submitted.
670. Laramy, C. R.; Fong, L.-K.; Jones, M. R.; O'Brien, M. N.; Schatz, G. C.; Mirkin, C. A. "Understanding Nanoparticle-Mediated Nucleation Pathways of Anisotropic Nanoparticles," *Chemical Physics Letters*, **2016**, submitted.
671. Sun, L.; Lin, H.; Park, D. J.; Bourgeois, M. R.; Ross, M. B.; Ku, J. C.; Schatz, G. C.; Mirkin, C. A. "Polarization-Dependent Optical Response in Anisotropic Nanoparticles – DNA Superlattices," *Nano Letters*, **2016**, submitted.
672. Huang, Y.-K.; Liao, X.; Mirkin, C. A.; Dravid, V. "High Throughput Synthesis of Multifunctional Oxide Nanostructures within Nanoreactors Defined by Beam Pen Lithography," *Nature Materials*, **2016**, submitted.
673. Banga, R. J.; Meckes, B. Narayan, S. P.; Sprangers, A. J.; Nguyen, S. T.; Mirkin, C. A. "Cross-linked micellar spherical nucleic acids from thermoresponsive templates," *JACS*, **2017**, submitted.