Single Molecule Detection

Research Group	Substrate	Molecule detected
Kneipp[1]	Silver colloids	1,1'-diethyl-2,2'-cyanine
Vlckova[2]	Ag nanoparticles	5,10,15,20-tetrakis(4-aminophenyl)porphin
Kneipp[3]	Silver colloids	Adenine
McGuinness[4]	Silver colloids	allophycocyanin
Aroca[5]	Silver island film +(LB)	Bis (benzimidazo) thioperylene
Aroca[6]	Silver island film +(LB)	bis(benzimidazo)perylene
Aroca[7]	Silver island film +(LB)	Bisbenzylimido perylene
Zhang[8]	TERRS – Au tip	Brilliant cresyl blue
Mandal[9]	Ag/Au bimetallic	Crystal violet
Sharaabi[10]	Silver colloids	Crystal violet
Kneipp[11]	Silver colloids	Crystal violet
Bizzarri[12]	Silver colloids	Cytochrome c
Dickson[13]	Ag clusters	Dendrimer, peptide
Berlin[14]	Silver colloids	Deoxyguanosine monophosphate and Deoxyadenosine monophosphate
Kneipp[15]	Silver & gold colloids	DNA sequence
Kneipp[16]	Silver colloids	Enkephalin (peptide)
Bizzarri[17]	Silver colloids	Fe-protoporphyrin
Bizzarri[18]	Silver colloids	Fe-protoporphyrin
Kalkan[19]	Silver nanoparticles	Fluorescein
Hofkens[20]	Silver colloids	Green fluorescent protein
Bizzarri[21]	Silver colloids	Heme myoglobin
Kall[22]	Silver colloids	Hemoglobin
Bjerneld[23]	Silver colloids	Horseradish peroxidase
Bizzarri[24]	Silver colloids	iron-protoporphyrin
Pettinger[25]	STM gold tip	Malachite green isothiocyanate
Futamata[26]	Silver nanoparticles	Malachite green, crystal violet, adenine, R6G
Aroca[27]	Silver colloids	n-(n-butyl)-n'-(4-aminobutyl) perylene
Aroca[28]	Ag & Ag/Au films	N,N'-Bis(neopentyl)-3,4,9,10-perylenebis(dicarboximide)
Aroca[29]	Silver island film +(LB)	N,N'-bis(phenethyl)perylenedicarboximide
Aroca[30]	Silver colloids	n-butylimidoethylenamineperylene
Aroca[31]	Silver island film +(LB)	n-pentyl-5-salicylimidoperylene and octadecylrhodamine B
Natelson[32]	Au nanostructures	*para*-mercaptoaniline
Van Duyne [33]	Ag clusters	Rhodamine 6G and Rhodamine 6G -d_4
Nie[34]	Silver colloids	Rhodamine 6G
Eggeling[35]	Silver colloids	Rhodamine 6G
Brus[36]	Silver colloids	Rhodamine 6G
Nie[37]	Silver colloids	Rhodamine 6G
Hu[38]	Silver colloids	Rhodamine 6G
Futamata[39]	Silver colloids	Rhodamine 6G
Etchegoin[40]	Silver colloids	Rhodamine 6G

Rowlen[41]	Silver colloids	Rhodamine 6G
Ozaki[42]	Silver colloids	Rhodamine 6G
Futamata[43]	2D array of trigonal Ag prisms	Rhodamine 6G
Zhou[44]	Silver colloids	Rhodamine 6G
Ozaki[45]	Silver colloids	Rhodamine 6G
Zhou[46]	Silver colloids	Rhodamine 6G
Futamata[47]	Silver colloids	Rhodamine 6G & DNA
Etchegoin[48]	Silver colloids	Rhodamine 6G and benzotriazole
Vosgroene[49]	Silver colloids	Rhodamine dyes, pyronine G and thiopyronine
Ruan[50]	Au colloids	Thionine

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