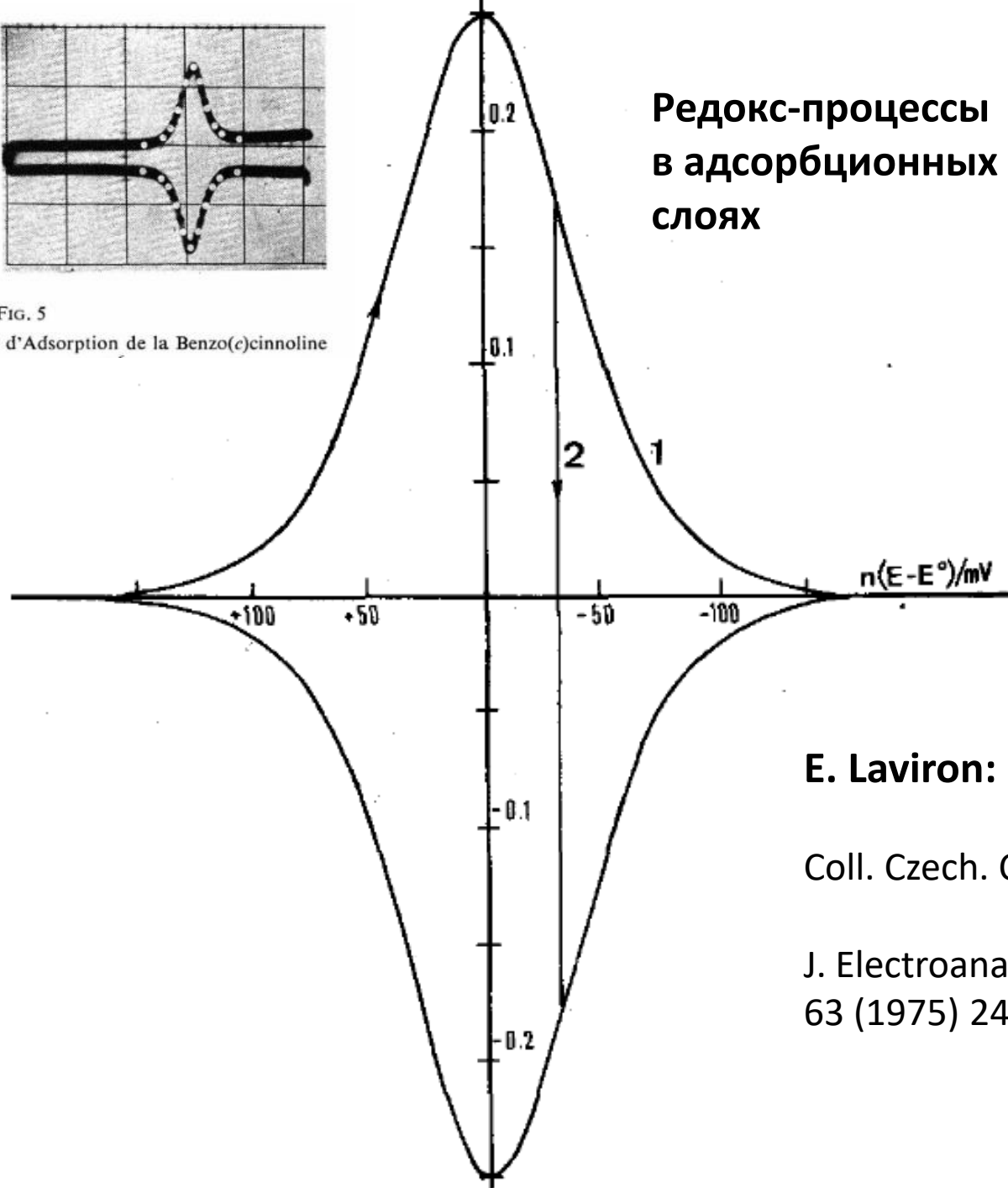
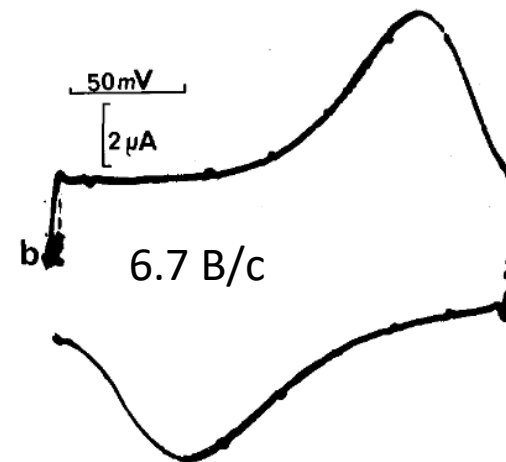
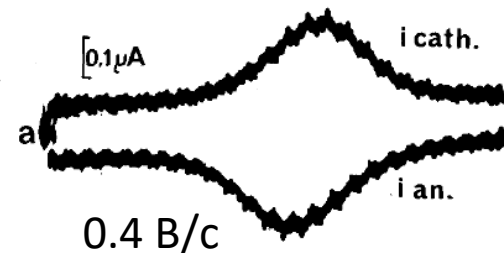


FIG. 5  
Pic d'Adsorption de la Benzo(c)cinnoline



## Редокс-процессы в адсорбционных слоях

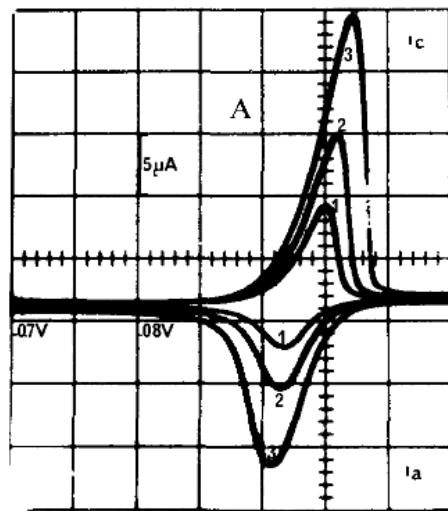
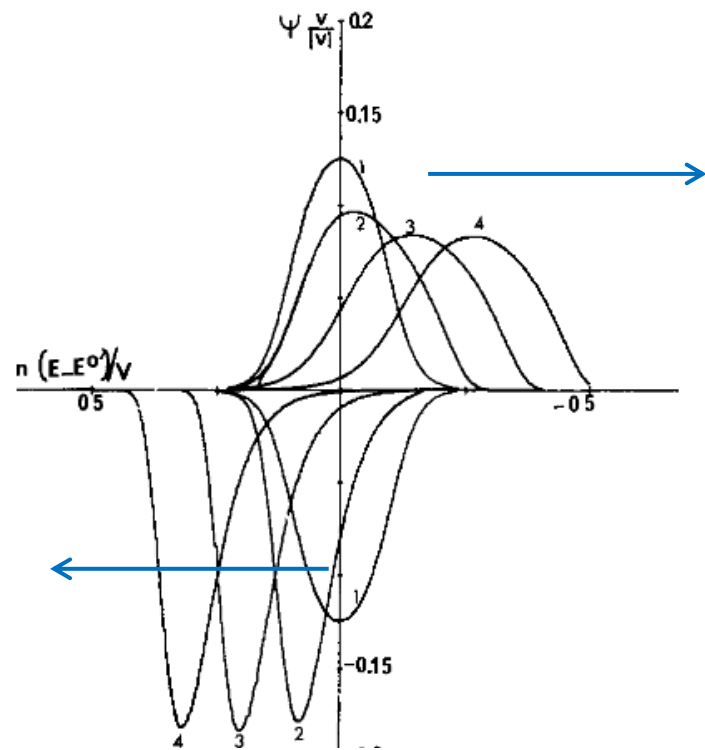
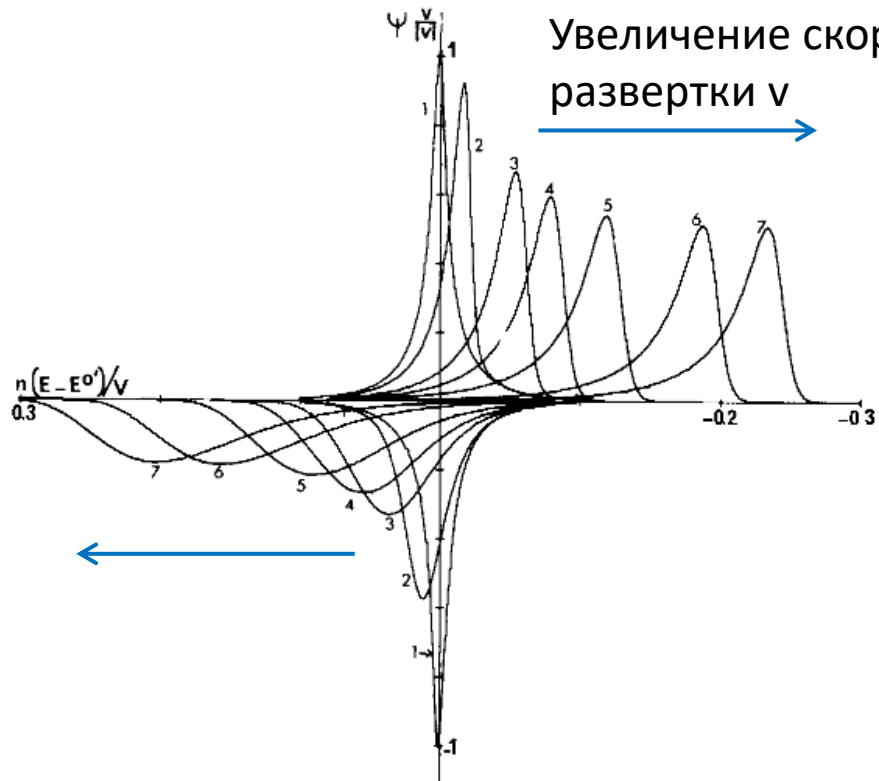


### E. Laviron:

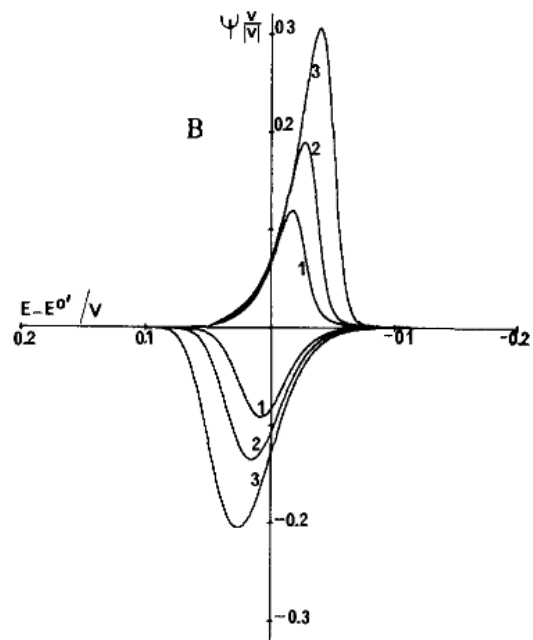
Coll. Czech. Chem. Comm. 36 (1971) 363

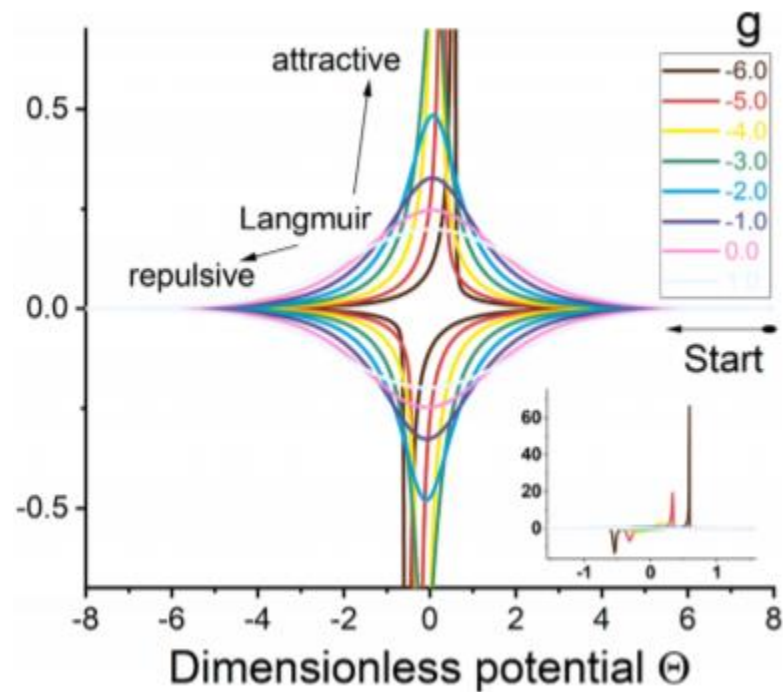
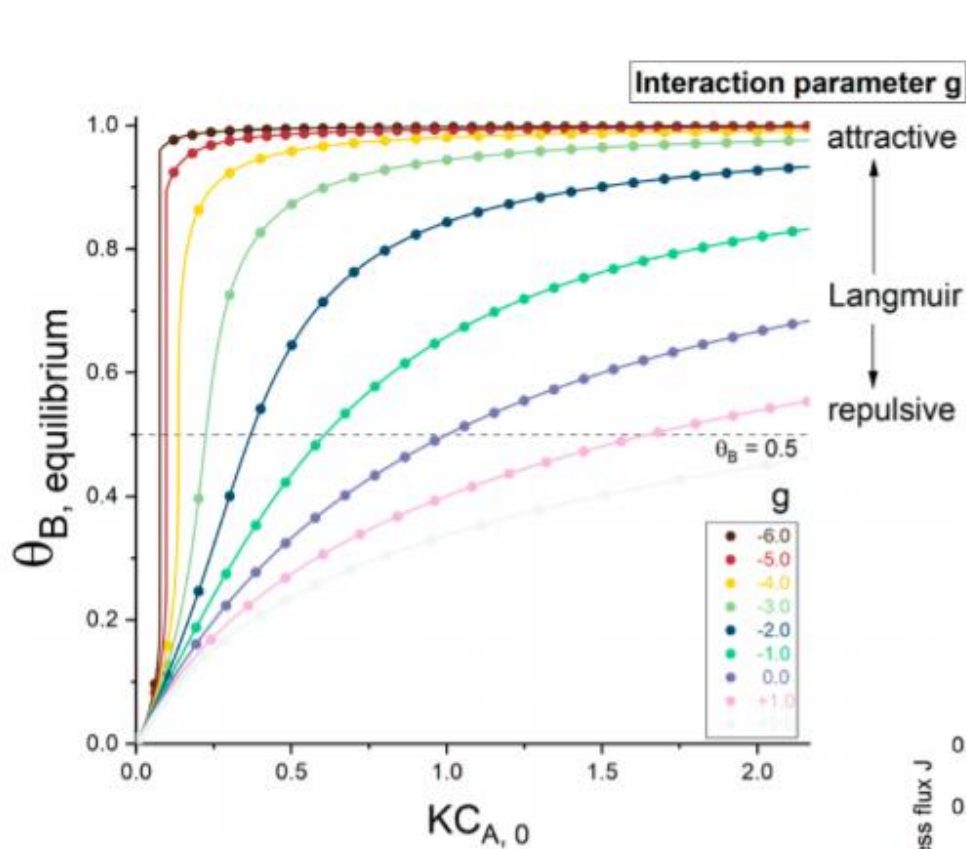
J. Electroanal. Chem. 52 (1974) 355;  
63 (1975) 245; 101 (1979) 19; 115 (1980) 65

Увеличение скорости  
развертки  $v$

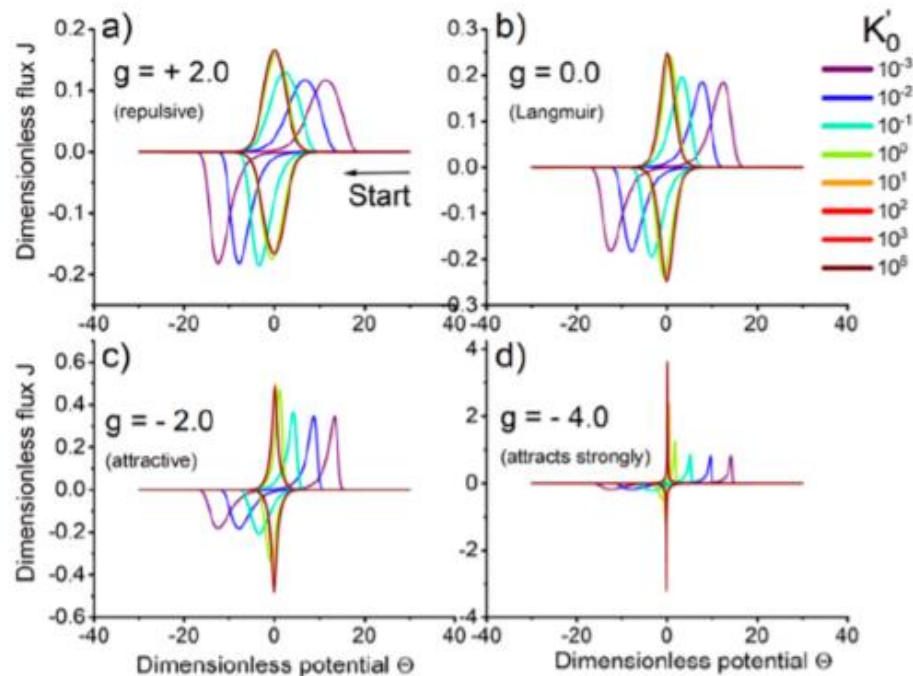


benzo(c)cinnoline





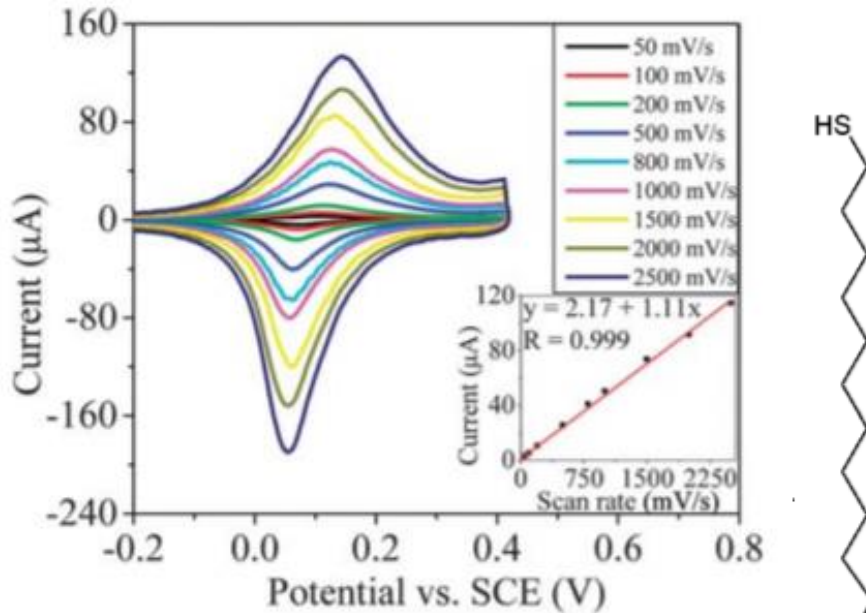
$g = -2a$  (аттракционная постоянная в изотерме Фрумкина)



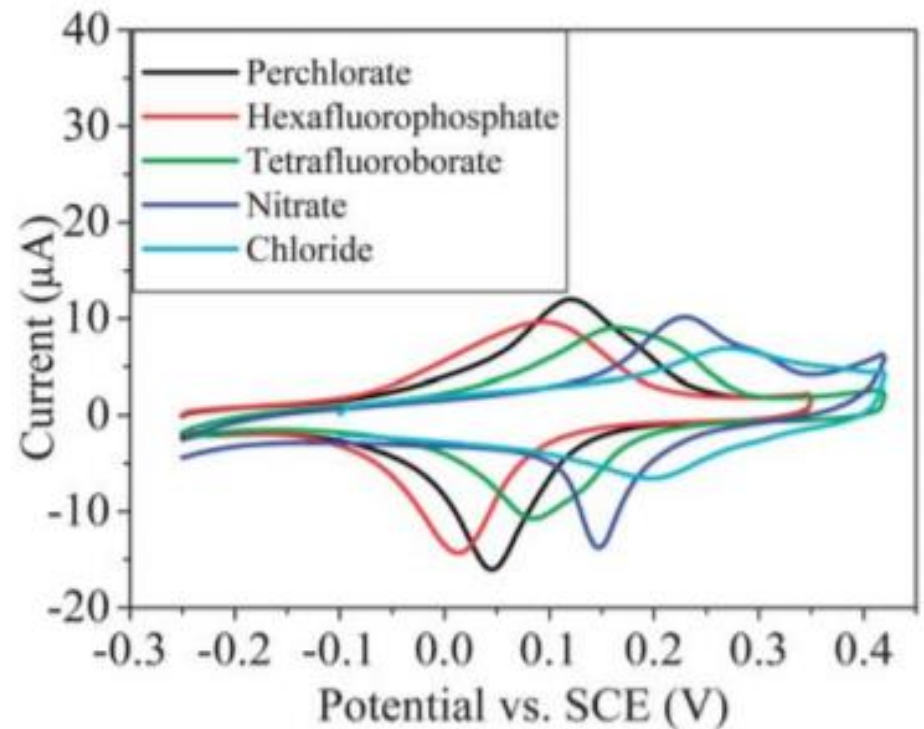
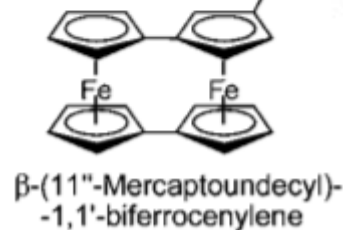
J. Phys. Chem. 124 (2020) 18031

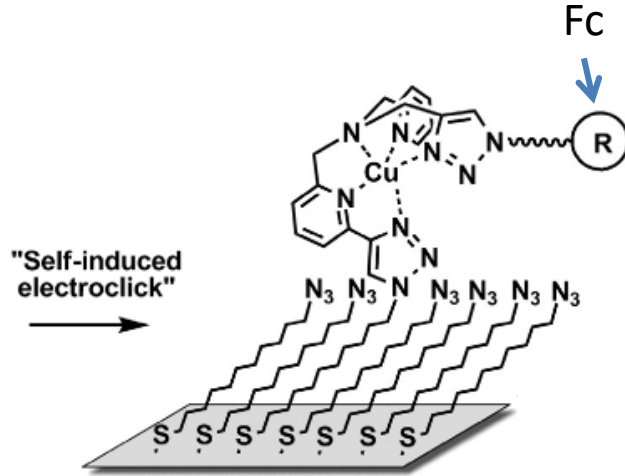
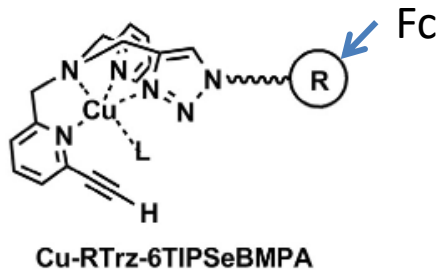
**Взаимодействие с ионами электролита фона – образование ионных пар на поверхности**

**Смещается формальный потенциал:**



перхлорат





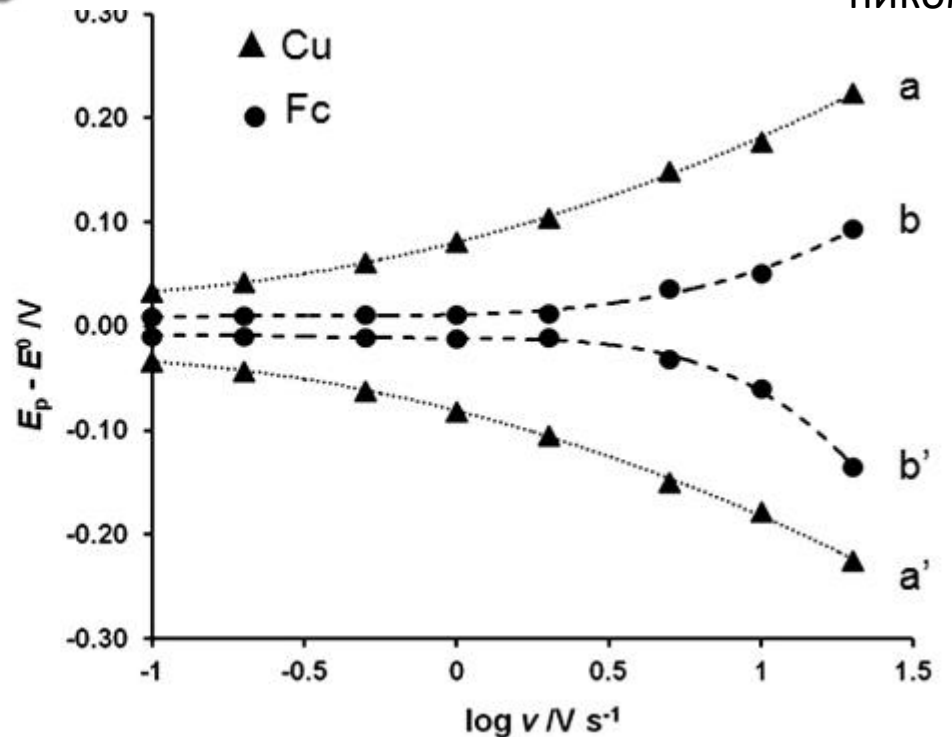
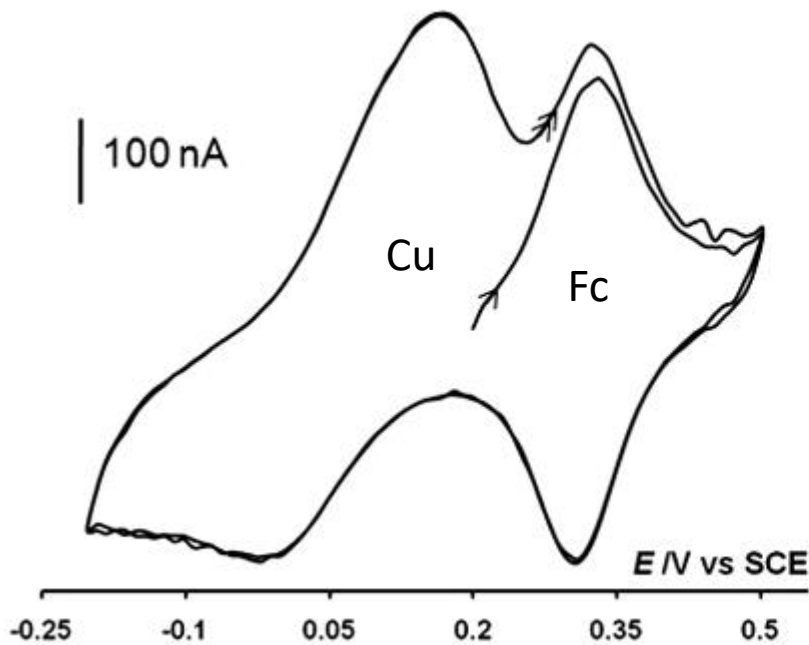
Ток в пике

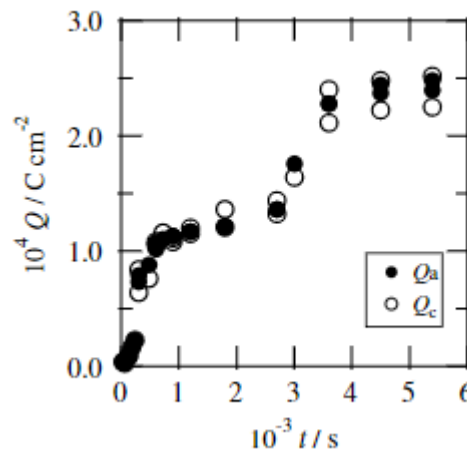
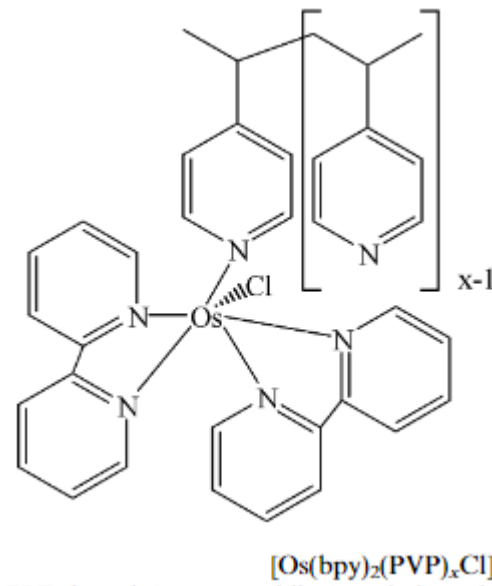
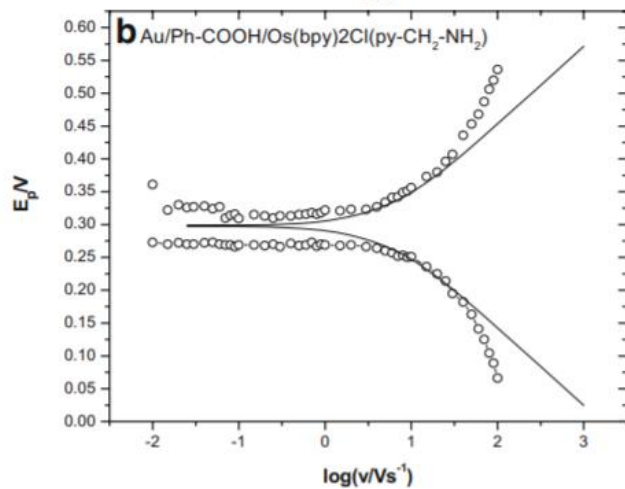
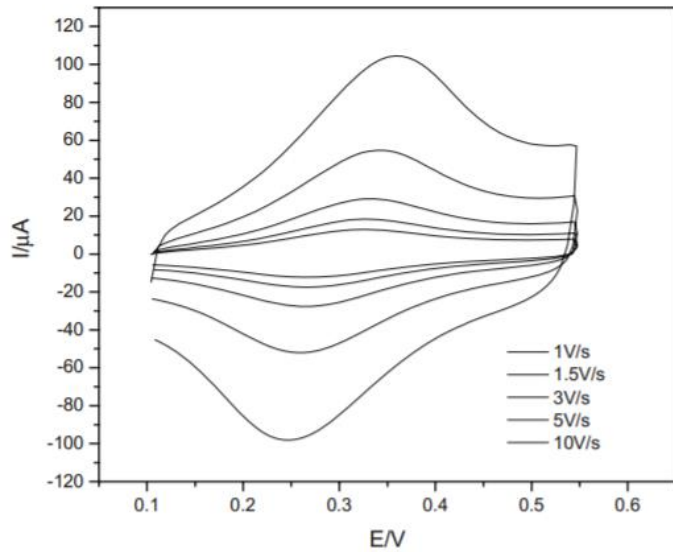
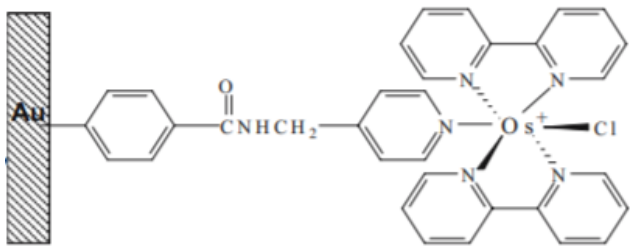
$$i_p = \frac{n^2 F^2}{4RT} \nu A \Gamma_s$$

Заполнение поверхности

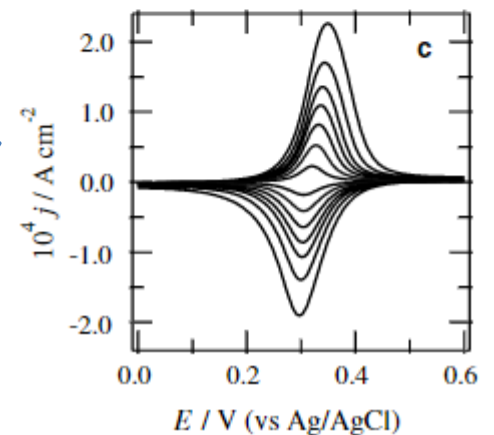
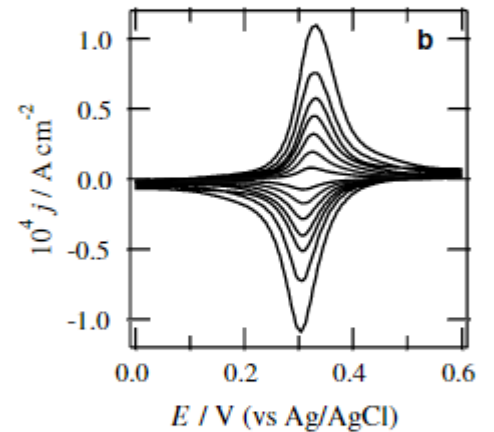
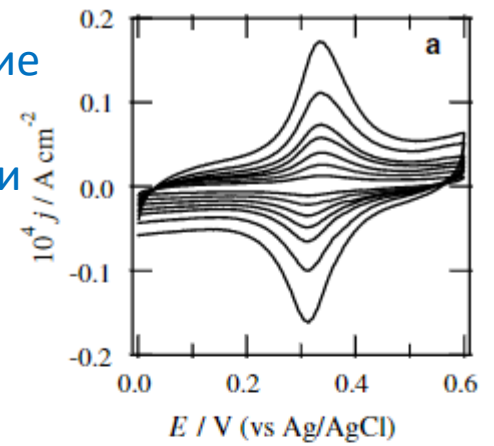
Поверхность

Если пика форма искажена из-за взаимодействий в слое – то нужно считать заполнение из заряда под ПИКОМ.

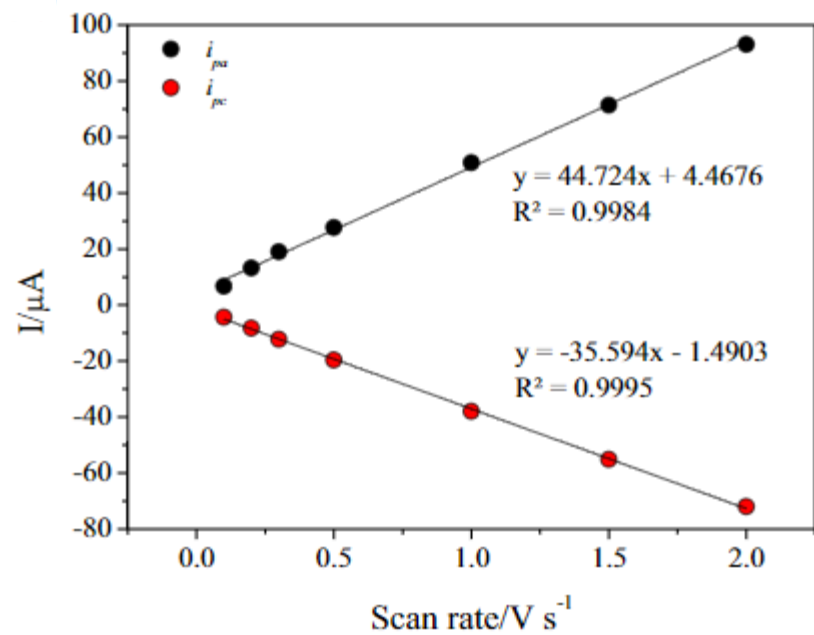
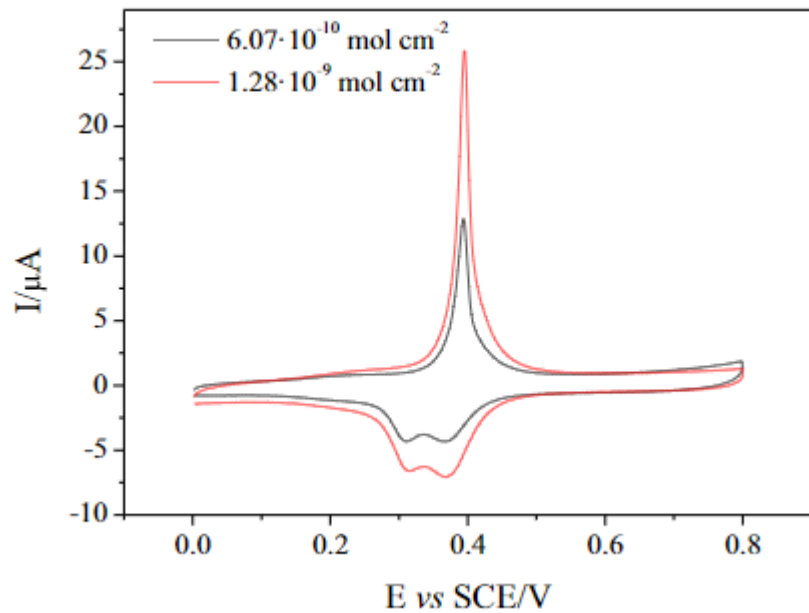
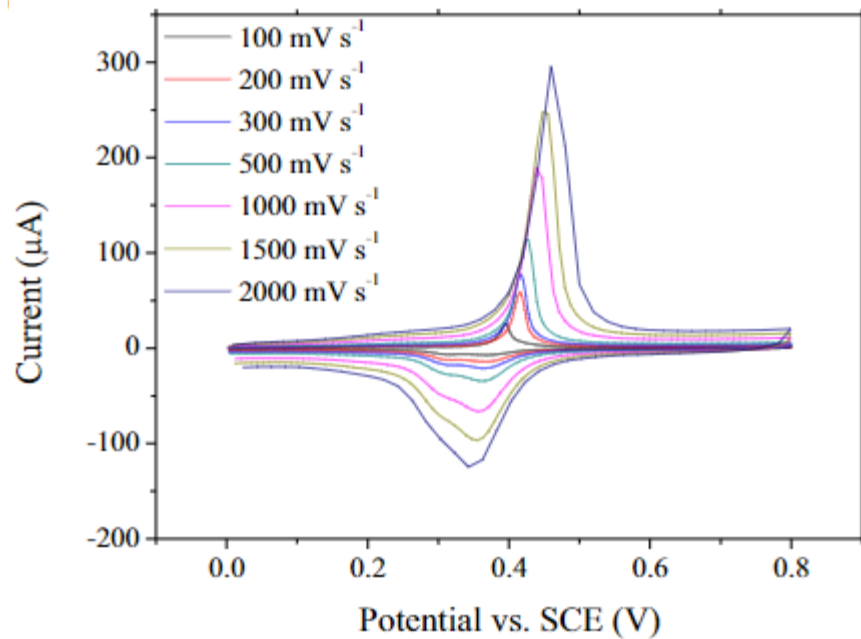
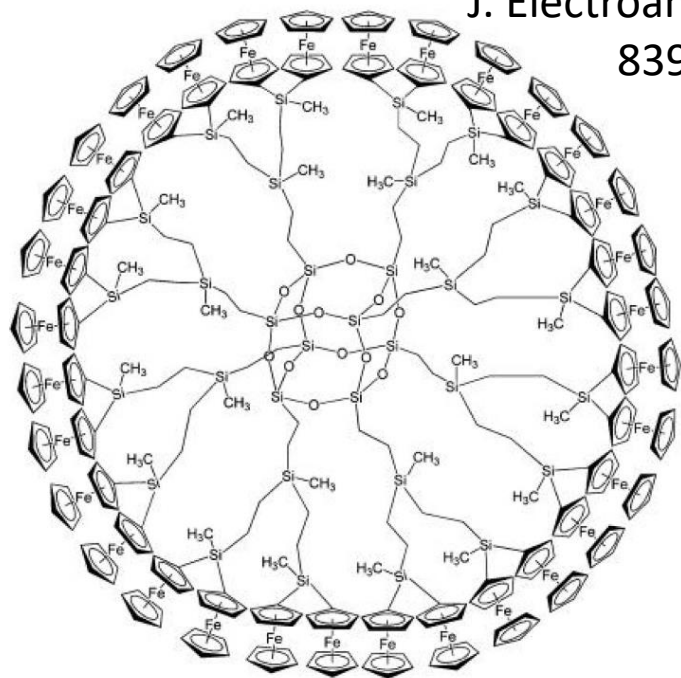




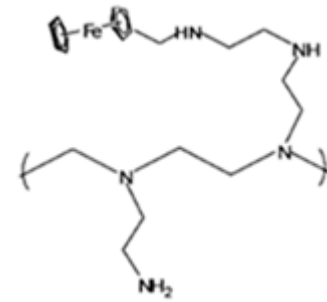
Увеличение  
времени  
адсорбции



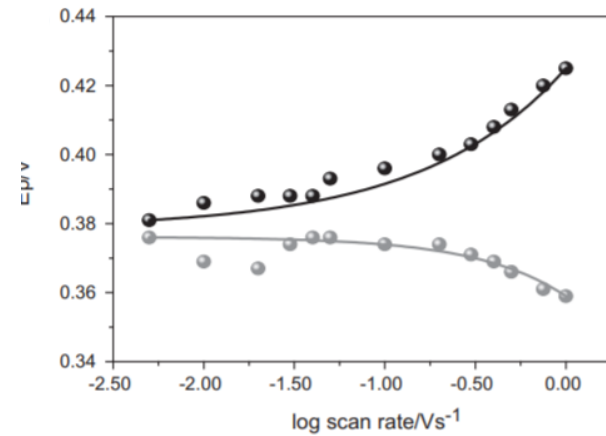
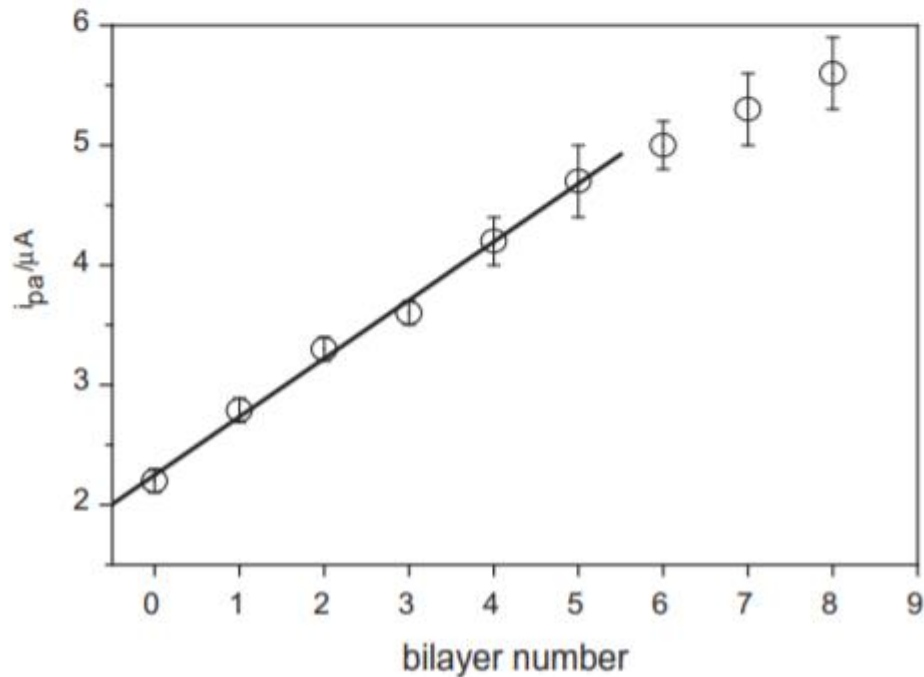
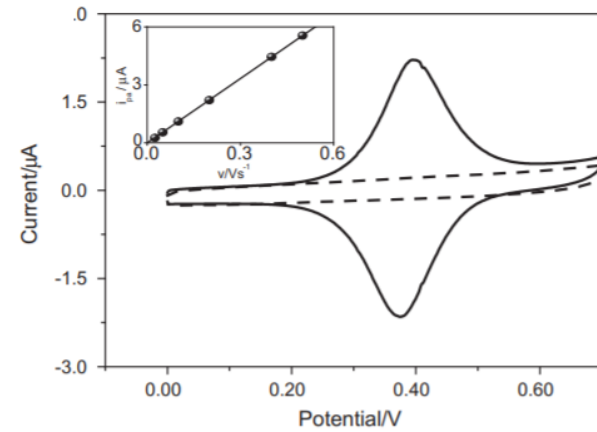
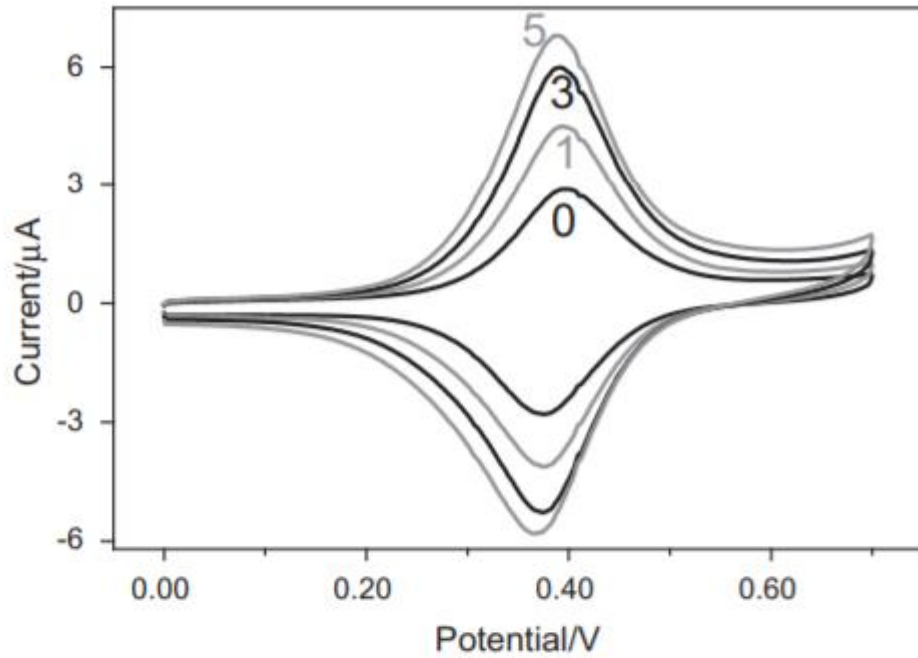




На Au-подложку  
послойно наносятся  
такие молекулы

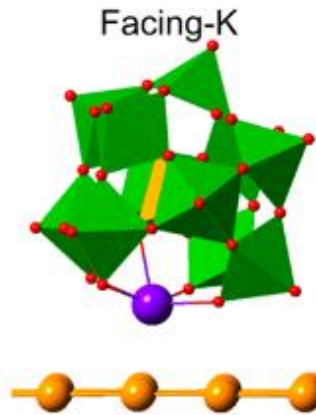
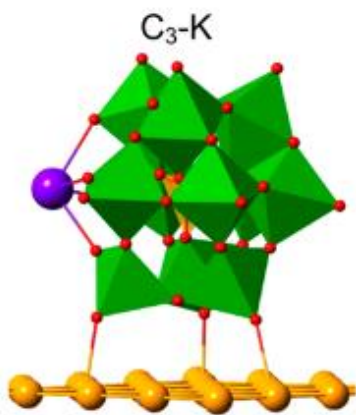
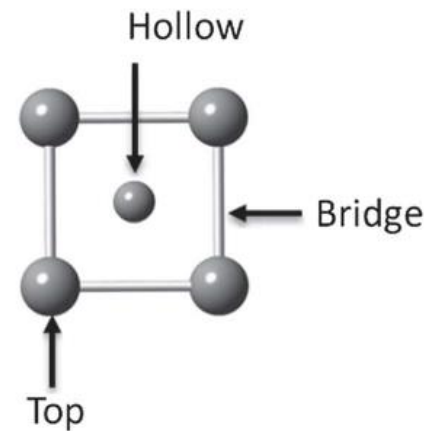
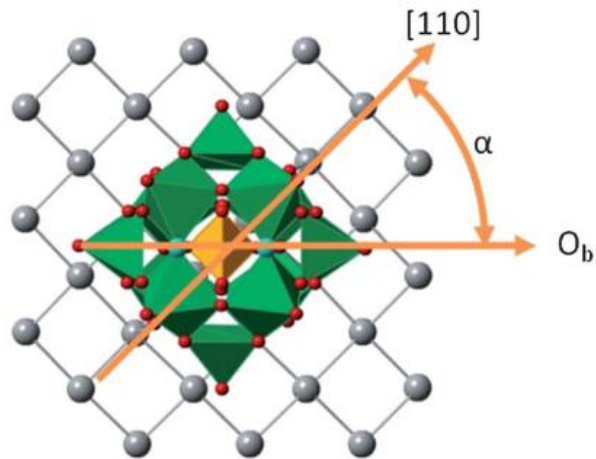
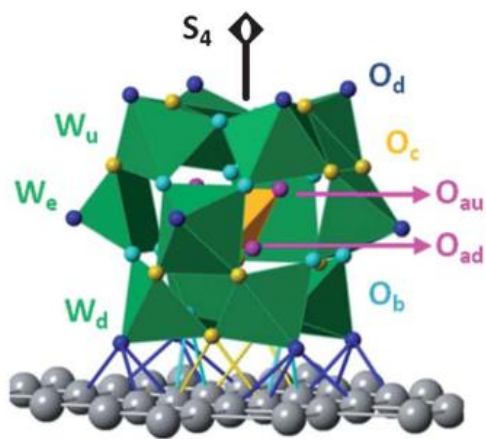


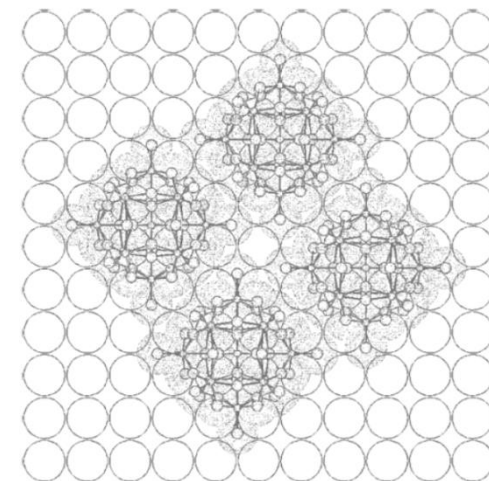
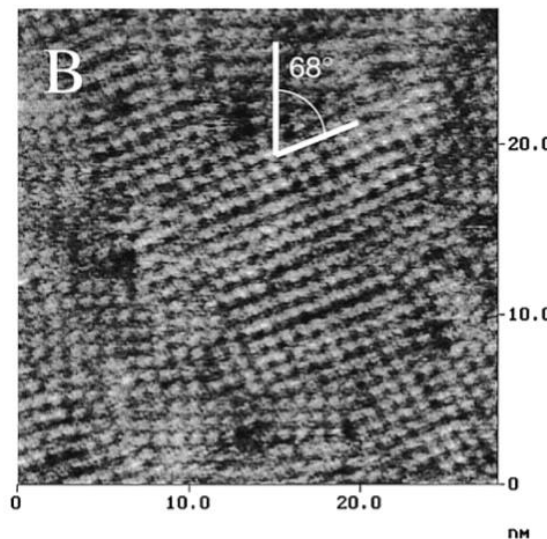
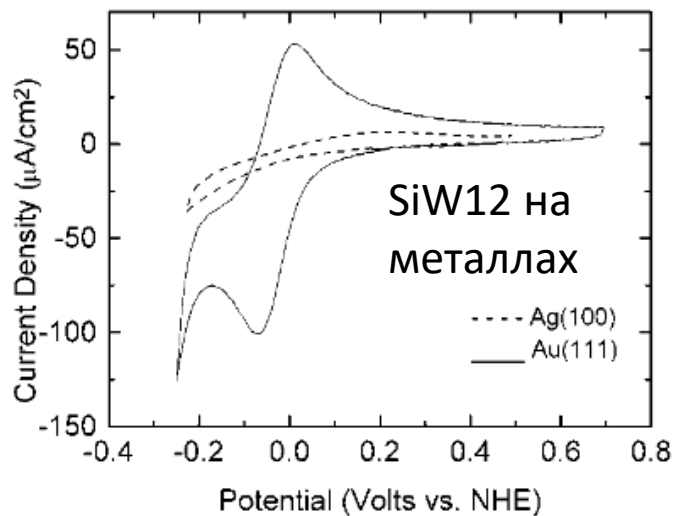
и частицы золота  
(0 бислоев = молекулы  
без частиц)



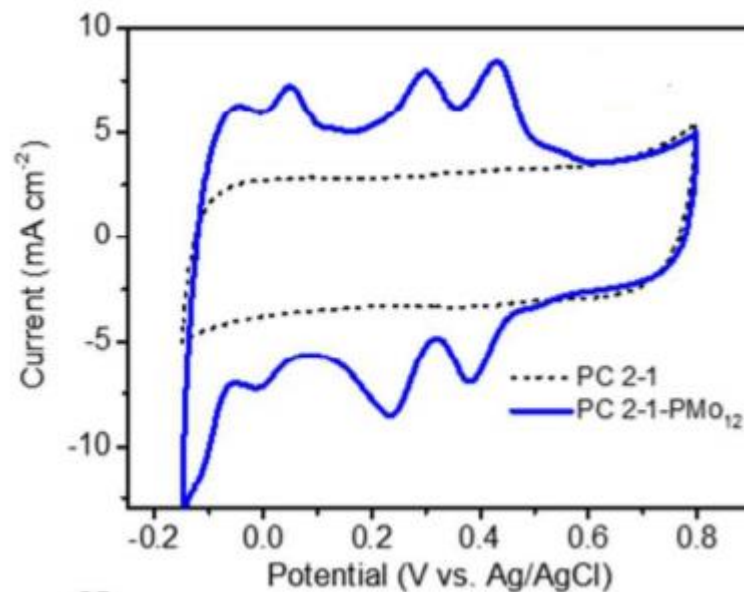
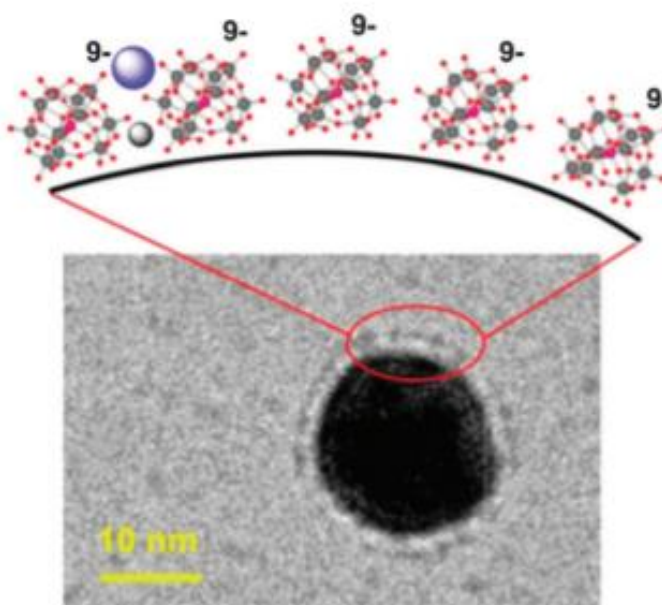


# Адсорбция полиоксометаллатов





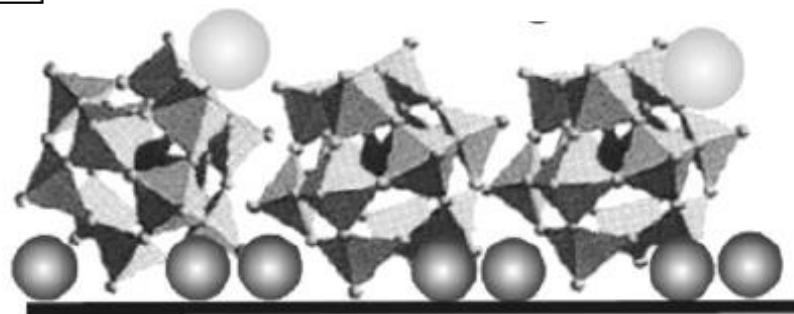
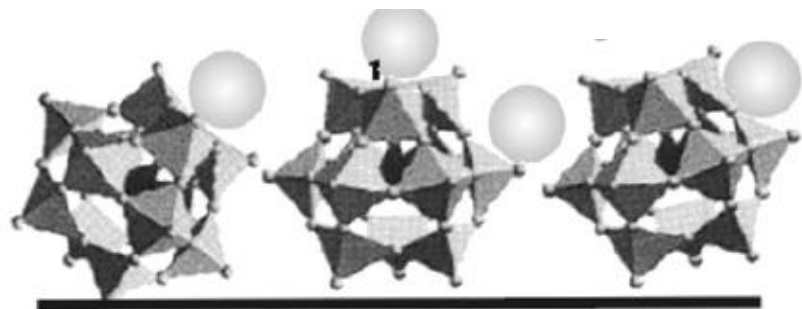
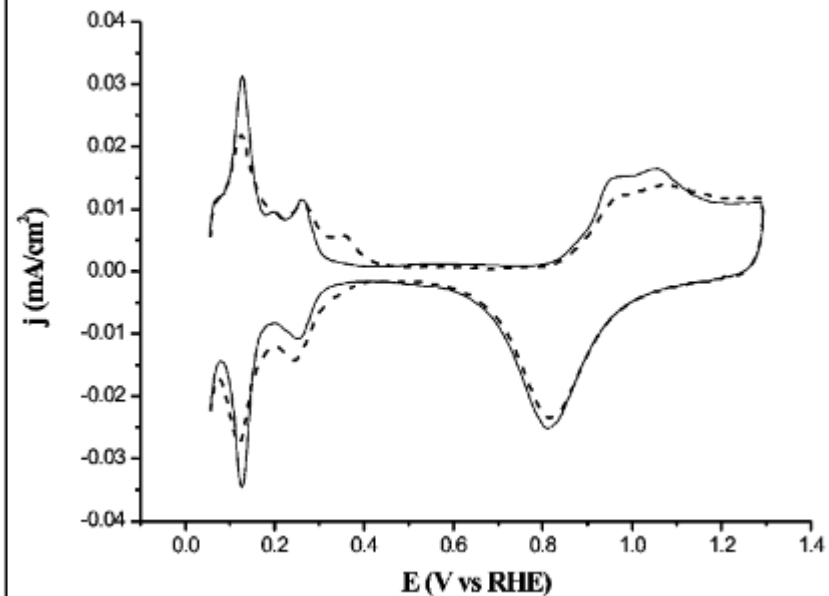
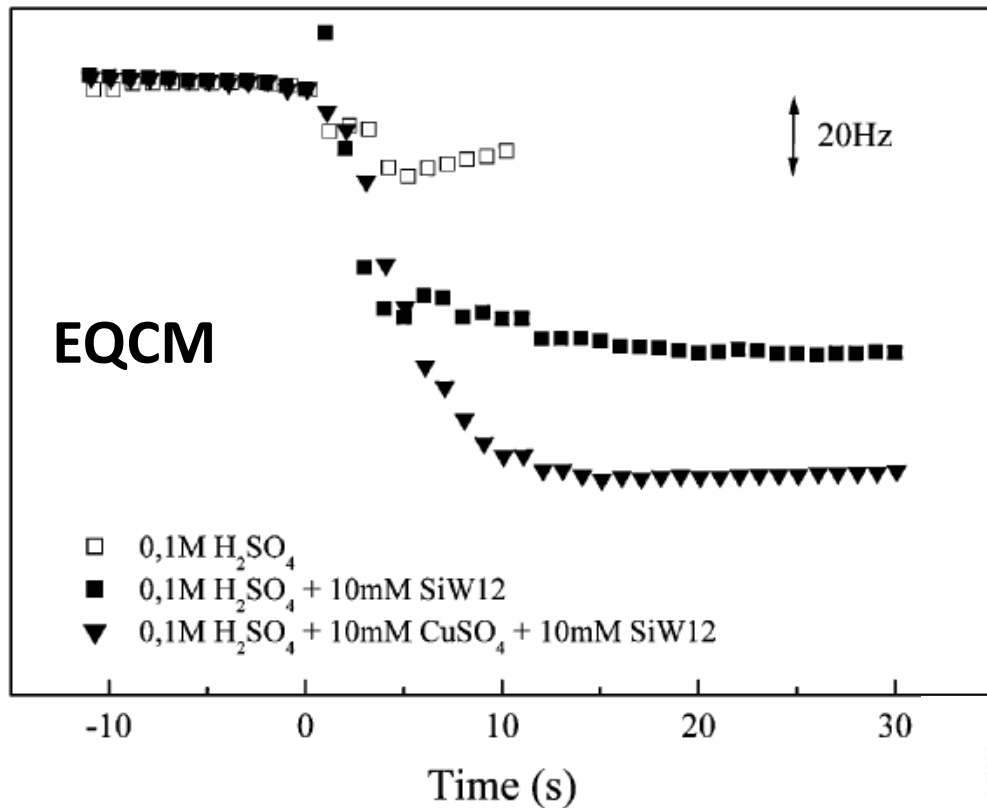
ion	diameter
	2.7 Å
$\text{K}^+$	
	4.6 Å
hydrated	
	11.2 Å



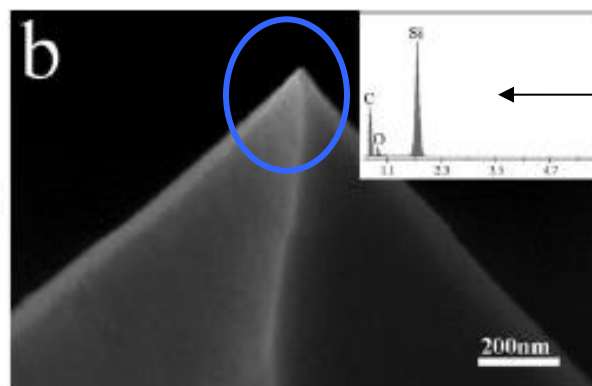
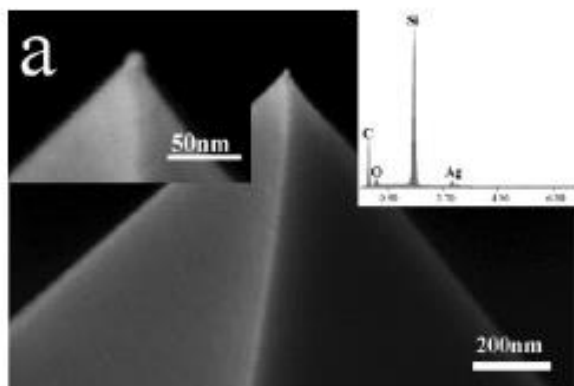
PMo12 на углероде

Обзор по адсорбции полиоксометаллатов на малых металлических частицах: Chem. Soc. Rev. 41 (2012) 7479

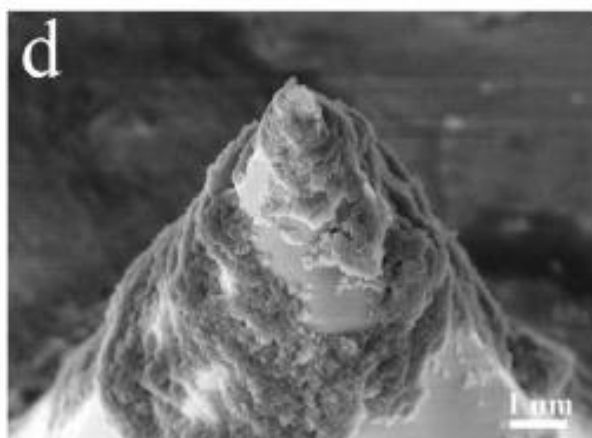
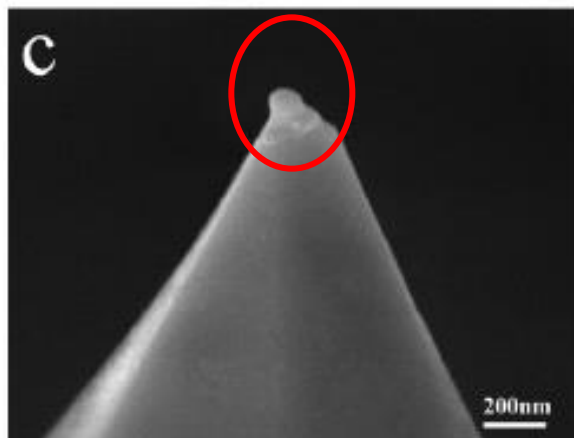
# Проницаемые адслои



# Модифицирование зондов. Предварительное связывание реагента.

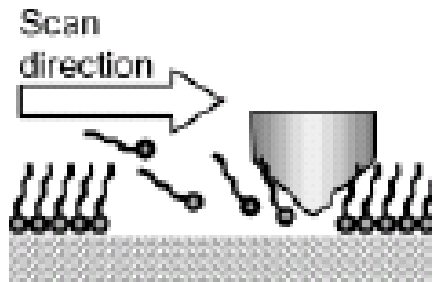


Energy-dispersive X-ray analysis (EDX, или EDXA)

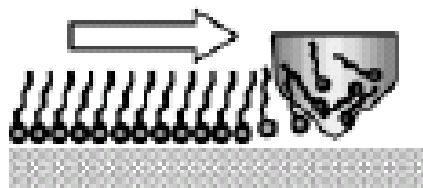


сравнительный эксперимент:  
прямое осаждение серебра

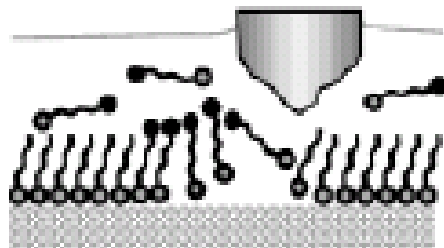
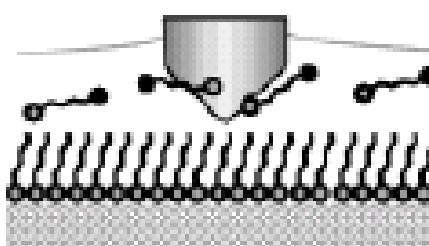
## A. Elimination



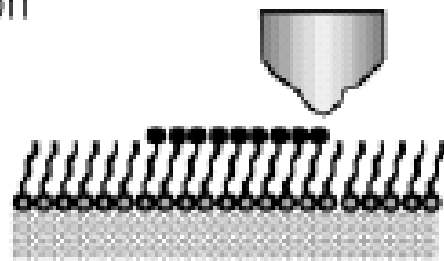
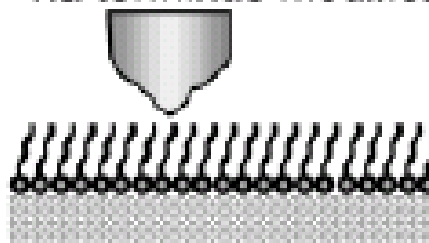
## B. Addition



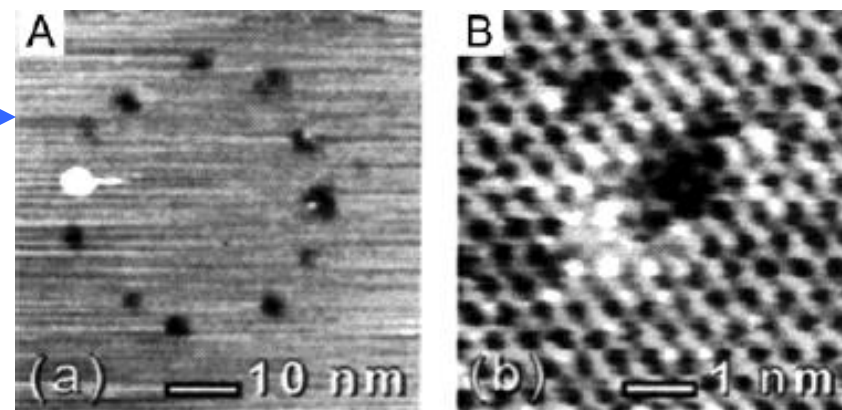
## C. Substitution via *in-situ* addition



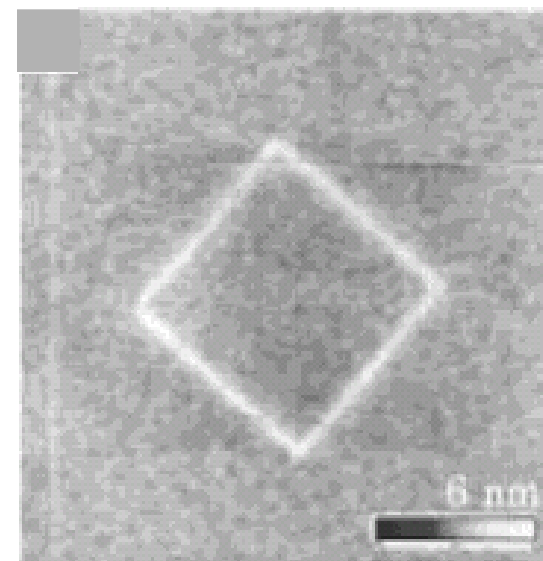
## D. Substitution via terminus modification



Литография в конфигурации зондовых микроскопов – тиолы или силаны вместо резиста

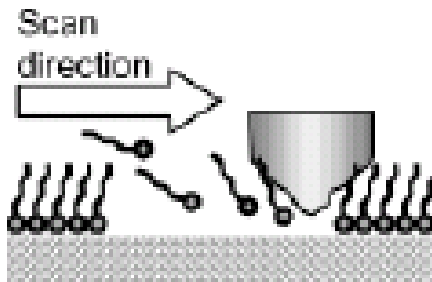


СТМ в вакууме, импульсами – разрешение около 1 нм

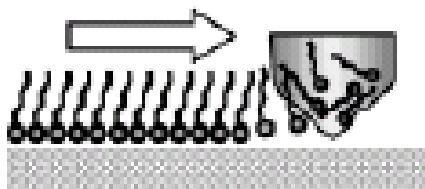




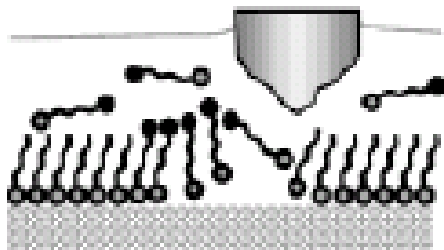
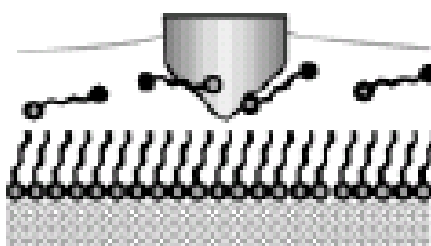
## A. Elimination



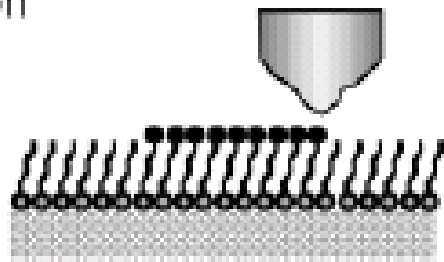
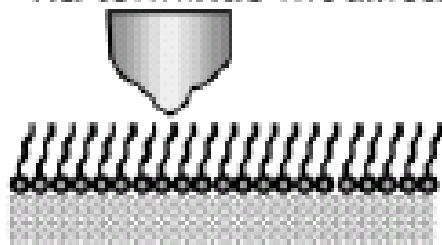
## B. Addition



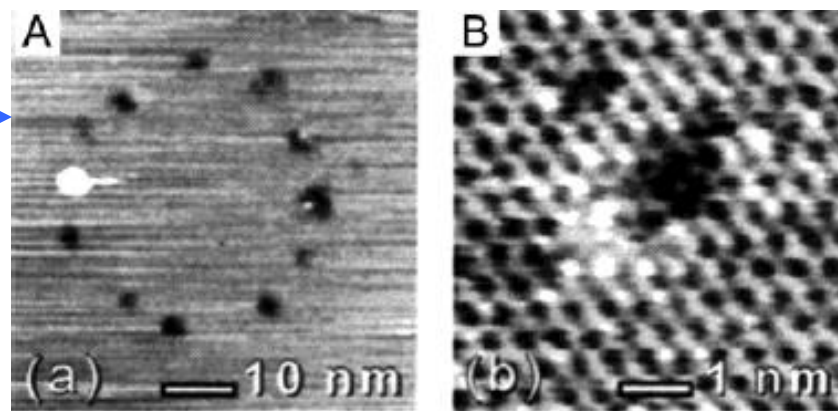
## C. Substitution via *in-situ* addition



## D. Substitution via terminus modification



Литография в конфигурации зондовых микроскопов – тиолы или силаны вместо резиста



СТМ в вакууме, импульсами – разрешение около 1 нм

