1870	μs pump–probe experiment (Toepler)					
	Quadratic electro-optic effect (Kerr)					
1880 🕇						
1890	Linear electro-optic effect (Pockels)					Chemical kinetics (Van't Hoff; Arrhenius; Ostwald)
	- ` '	X-rays (Röntgen)		Electrons (Thomson)	
1900	ns pump–probe synchronization (Abraham & Demoine)			Photoelectric effect (Lenard; Einstein)		
1910	X-ray diffraction (Friedrich, Knipping, von			Laue)		Bragg's law (Bragg & Bragg)
1000		Powder diffraction (Del	bye, Scherrer, Hull)			
1920				Electron diffraction (Davisson & Germer; Thomson)		
1930	Multiphoton physics (Göppert Mayer)	Structure of benzene ring (Lonsdale)		Kikuchi lines (Kikuchi) GED (Mark & Wierl) Electron microscope (Knoll & Ruska)		Transition state theory (Eyring; Evans & Polanyi)
1940 +						Patterson function (Patterson)
1940		Synchrotron radiation (Blewett)			
1950 +	Flash photolysis (Norrish & Porter)	~J (DIOTION)		Diamond-knife ultramicrotomy (Gettner & Hillier)		
1550	Maser (Townes; Basov & Prokhorov)	Structure of DNA (Wilkins, Franklin, Watson, Crick)				Direct methods (Karle & Hauptman)
1960 +		Structure of macromole (Kendrew, Perutz, Hod				Molecular replacement (Rossman & Blow)
1970	Molecular beams (Lee & Herschbach) CCD (Boyle & Smith) Reaction dynamics (Polanyi)	ch)		Electron crystallography (DeRosier & Klug) Structure of bacteriorhodopsin (Hender		Rietveld method (Rietveld) Establishment of PDB
1000	fs laser (Shank & Ippen)	ns XRD (Endert et al)		- `		,
1980	Chirped pulse amplification (Strickland Ti:Sapph laser (Moulton)	& Mourou) Structure of	/		100-ps UED (Mourou & W µs GED (Ischenko et al) 20-ps UED (Williamson &	,
1990 🕂	Femtochemistry (Zewail) Kerr-lens mode-locking (Sibbett et al)	Structure of ATPase (V	Walker)		few-ps GED (Williamson et	t al)
		ps XRD (Bourgeois et a	· · · · · · · · · · · · · · · · · · ·		1-ps UED (Aeschlimann et	'
2000 +	as laser (Hentschel et al)	fs XRD (Rischel et al) Structure of ribosome (Ramakrishnan, Steit Structure of RNA polymerase (Kornberg) Diffraction before destroy (Chapman et al)		z, Yonath)	3-ps GED (Dudek & Weber) fs UED (Siwick et al) fs UEM (Lobastov et al)	
2010		Structure of GPCR (Lefkowitz & Kobilka) 4 th -gen XFEL (Emma et al)			fs RF compression (van Ou fs streak camera (Kassier e	
2000		(2			fs THz compression (Huang et al; Kealhofer et al) as UED (Morimoto & Baum)	
2020 🕇					La CLE (Literinion & Bau)
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