

Subject index

activated carbons	105	DNA	47	high-resolution ARPES	48
adenine	132	dopant	91	high-resolution spectroscopy	134
alkali metal	66	DOS	138	HRXRD	90, 95, 112
amorphous materials	111	drug design	17	human cystatin C	150, 154
angiogenesis	22	DS	153	hydrides	130
angle resolved	81	E-beam	94	imaging	43
photoemission spectroscopy		electrochemical system	2	implantation	88, 96, 97, 126, 128
annealing	88	electron density	87	infrared	43
apatite	64	radial-distribution function	61, 116	inhibitor of TS	121
atherosclerosis	114	electron-density radial-distribution function	116	insertion device	75
atomic layer deposition	99	electronic structure	152	in-vivo study	2
atomic position modulation	85	electropolymerisation	139	ionic conductivity	122
avian magnetometer system of birds	2	emittance	51	ionomer	102
azomethine ligands	98	EO-sampling	24, 84	iron	103, 114
band structure	52	epilayer	90	irradiation	147
battery	22	equation of state	155	IV-VI crystal	93
beamline	50, 71, 74, 76, 133, 134	ERL	24, 84	IV-VI semiconductor	52, 92
beamline productivity	42	EXAFS	91, 111, 118, 126, 130, 135	laser ablation	142
beryllium	81	fast chemical reaction	58	laser alignment	24, 84
bicellar phase	153	Fe nanostructure	72	laser processing	142
biomolecular structure	87, 157	Fe(110)/W(110)	86	laser shaping	24, 84
blends	102	Fe4 complex	2	lattice misfit	90
boracite	125	ferroelectric	125	Laves phase	130
boron nitride	145	ferromagnetism	88	layered double hydroxide (LDH)	146
Brill transition	149	FLASH irradiation	73	lead apatite	110
bulk modulus	80, 137, 155	fluorescence	132	lipid bilayer	151
cadmium oxide	147	fluorescence lifetime	132	liquid state	61
calcium	114	focussing	158	low resolution structure	150, 154
CdSe	118	free electron laser	2	LPE	95
chemical composition	112	freezing criterion	68	lutetium	152
close-packed structure	66	FTIR	153	macromolecular model	17
cluster	82	FT-IR microspectroscopy	2	magnesium	141
collective diffusion	68	fuel cell	2	magnetic alloy	120
colloid crystal	68	gallium arsenide	45, 73, 91	magnetic molecule	2
colossal magnetoresistive perovskites	108	GaMnSb	101	magnetic moments	85
Compton profile	141	GaN	90	modulation	
copper	114	garnet	155	magnetic nanoparticle	156
crystal structure	78, 121	GaSb	96, 128	magnetic properties	101
crystal structure analysis	67	genetic algorithm	24, 82, 83, 84	magnetism	72, 86, 103
crystallographic unit cells	64	geometrical confinement	66	magnetoelastic coupling	85
crystallography	47	GEXRF	115	malaria	107
cyclohexane derivative	116	GGG	155	malarial pigment	107
DAFS	118	GGG films	95	manganese	88
defect structure	152	GISAXS	97	manganite	85
deformation field	73	glioma circulation	22	many-body interactions in solids	48
density functional theory	105	global optimization	82	material modification	142
diamond	2, 158	gold	113	matrix isolation	132
diffraction	87, 96, 125, 157	gold surface	2	maximum entropy method	141
dimeric surfactant	151	grazing incidence	58	metaheuristics	24, 84
disorder	125	hard X-ray optics	2	metal chelate	98
disulfiram	94	hBN	145	metal cluster	65
DLVO potential	68	heat load	158	metallic glass	111
		hemozoin	107	micro x-ray fluorescence	115
		heterostructure	112	micro-fluorescence	79, 133
		high pressure	80, 145	micropore	71
		high-pressure diffraction	155		

microscopy	43, 87,133	QCL quantum dots quaternary structure radiation damage radiation sterilization Raman microscopy rare earth rare earth alloys rare earth compounds rare-earth RBS reaction mechanism reactivity remote experiment resonance photoemission resonant photoemission spectroscopy ribosome structure Rietveld refinement RIXS RNA samarium SAXS scanning tunneling microscopy self-assembly semiconductor surface shape anisotropy Si:Mn silicon single cells single molecular magnet small angle scattering small angle x-ray scattering smectite solid electrolyte solid phase microextraction solid solution solid state solid state chemistry spectroscopy spectroscopy spinel spintronics SQUID stability standard sample storage ring structural biology structural genomics structure sulphur surface phase transition surface X-ray diffraction	synchrotron synchrotron design synchrotron diffraction table-top source tellurium thermal decomposition thin film thymidylate synthase (TS) time-resolved experiment transcription regulation twin structure TXRF ultrathin film valence band structure vicinal surface Waren-Averbach method wavelength-dispersive spectroscopy WAXD WAXS X ray diffraction XAFS XANES XFEL XMCD X-ray X-ray absorption spectroscopy (XAS) X-ray diffraction topography X-ray fluorescence x-ray imaging X-ray microfluorescence X-ray microscopy X-ray diffraction topography X-ray fluorescence x-ray imaging X-ray microfluorescence X-ray microscopy X-ray optics X-ray photoelectron spectroscopy x-ray resonant inelastic scattering x-ray scattering X-ray spectromicroscopy X-ray standing waves X-ray topography XSW imaging XUV free electron laser zinc zinc oxide	42, 50, 71, 75, 76, 97 74 66, 88 2 91 146 78, 120 121 2 47 122 115 103 54, 106 81 148 79, 117, 133 149 102 101 98, 125, 128 108,138 24 56, 126 88, 96 44, 62, 107, 113, 120, 140 45, 70, 73,105, 116, 142, 146 95 64 79, 133 77 69, 77 158 54 134 59, 97 77 54 158 54 142 114 46, 99, 135
MnSb inclusion	56			
MOCVD	90			
modulated crystal	67			
molecular dynamic	105, 121			
momentum density	141			
Monte-Carlo simulation	117			
mouse	114			
muscle	60, 70			
myosin	60			
myosin motor	70			
N(4)-OH-dCMP	121			
nano-chromium	148			
nanocomposite	144			
nanocrystal	135			
nanoparticle	113			
nanoporous glass	66			
nanoscale	82			
nanosensor	156			
nanowire	82, 45			
NEXAFS	147			
nickel	140			
nuclear inelastic scattering	86			
nuclear resonant scattering	72, 86, 103	scanning tunneling microscopy self-assembly	82 58	
nylon 6	149	semiconductor surface	82	
organic thin films	65	shape anisotropy	56	
orthovanadate	80, 137, 152	Si:Mn silicon	88 73, 88, 97, 126	
oxide materials	106			
p-doping	46	single cells	2	
PEO	102	single molecular magnet	2	
perovskite	85	small angle scattering	58	
PETRA III	2	small angle x-ray scattering	139	
phase transition	80, 125, 137	smectite	69	
phospholipids	153	solid electrolyte	122	
phosphorus	2, 114	solid phase	139	
photo-cathode	24, 84			
photoelectron spectroscopy	52	microextraction		
photoemission	108	solid solution	110	
photoemission	65, 92, 92	solid state	94	
plant cells	2	solid state chemistry	44	
Polish Light Source	1, 75	spectroscopy	46	
polycapillary	117	spectroscopy	62, 76	
polymorphism	149	spinel	140	
polyvinylpyrrolidone	144	spintronics	96	
powder diffraction	135, 148	SQUID	88	
pressure	137	stability	51	
pressure medium	145	standard sample	115	
prostate cancer	138	storage ring	51	
protein	87	structural biology	4, 42	
protein	42, 47, 157	structural genomics	17	
protein crystallography	4,17	structure	105, 125	
		sulphur	138	
		surface phase transition	83	
		surface X-ray diffraction	83	