

ANNUAL REVIEW
Graduate School of Engineering
University of Hyogo
Jan. - Dec. 2017

Contents

DEPARTMENT OF ELECTRICAL MATERIALS AND ENGINEERING	
Electric Power System Engineering	1
Electronics for Electricity	4
Electric Power Application Engineering	7
Energy Engineering	11
Physics of Electronics	16
Electrophysics	18
Nanostructure and Quantum Applications	21
Advanced Materials Science	23
DEPARTMENT OF ELECTRONICS AND COMPUTER SCIENCE	
Electronic Materials and Devices	24
Photonics and Microwave Engineering	27
MEMS & Electronic Circuits	29
Communication and EM Wave Application	33
Intelligent Cybernetics and Computer Science	36
Data Science	39
Wave Material Computational Science	42
Image Processing and Wireless Communication	45
Ion Beam Engineering	46
DEPARTMENT OF MECHANICAL ENGINEERING	
Major Field of Design	48
Major Field of Dynamics	58
DEPARTMENT OF MATERIALS AND SYNCHROTRON RADIATION ENGINEERING	
Metallography	66
Condensed Matter Theory	67
Mechanical Metallurgy	69
Semiconductor Materials and Nano-Devices Engineering	72
Materials Design	75
Applied Quantum Physics/Biomaterials Engineering	77
Photovoltaic Materials	80
DEPARTMENT OF APPLIED CHEMISTRY	
Functional Organic Chemistry	82
Bioorganic Chemistry	84
Polymer Chemistry	85
Bioscience and Biotechnology	95
Biochemistry	97
Inorganic Material Chemistry	98
Analytical Science	99
Applied Physical Chemistry	105
DEPARTMENT OF CHEMICAL ENGINEERING AND MATERIALS SCIENCE	
Inorganic Materials Science and Engineering	108
Surface Energy Chemistry	111
Thermochemistry	114
Polymeric Materials Science and Engineering	116
Powder Technology	120
Transport Phenomena	122
Environmental Chemistry Process	124
Thermal Energy Engineering	125
Experimental Fluid Mechanics	129
Industry-University Cooperation Group	131

※Research in the RESEARCH CENTER FOR NANO-MICRO STRUCTURE SCIENCE AND ENGINEERING is posted in each major.