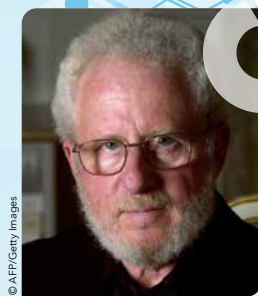


Alan J Heeger



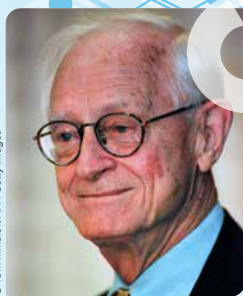
© AFP/Getty Images

2000

for the discovery and development of conductive polymers

Age at award	64
Award delay	23
Citations	2500
Global impact	85
Chemistry impact	77
Biology rating	2
Share of award	1/3

Alan G MacDiarmid



© Tom Mihalik/AFP/Getty Images

2000

for the discovery and development of conductive polymers

Age at award	73
Award delay	23
Citations	2500
Global impact	85
Chemistry impact	77
Biology rating	2
Share of award	1/3

Hideki Shirakawa



© Henrik Montgomery/AFP/Getty Images

2000

for the discovery and development of conductive polymers

Age at award	64
Award delay	23
Citations	2500
Global impact	85
Chemistry impact	77
Biology rating	2
Share of award	1/3

William S Knowles



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2001

for his work on chiral catalysed hydrogenation reactions

Age at award	84
Award delay	33
Citations	343
Global impact	74
Chemistry impact	86
Biology rating	8
Share of award	1/4

Ryoji Noyori



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2001

for his work on chiral catalysed hydrogenation reactions

Age at award	63
Award delay	33
Citations	268
Global impact	74
Chemistry impact	86
Biology rating	8
Share of award	1/4

K Barry Sharpless



© Reuters/Alamy Stock Photo

2001

for his work on chiral catalysed oxidation reactions

Age at award	60
Award delay	21
Citations	2417
Global impact	78
Chemistry impact	91
Biology rating	7
Share of award	1/2

John B Fenn



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2002

for the development of soft desorption ionisation methods for mass spectrometric analyses of biological macromolecules

Age at award	85
Award delay	13
Citations	5662
Global impact	65
Chemistry impact	82
Biology rating	13
Share of award	1/4

Koichi Tanaka



© Yamaguchi Haruyuki/Corbis/Getty Images

2002

for the development of soft desorption ionisation methods for mass spectrometric analyses of biological macromolecules

Age at award	43
Award delay	14
Citations	2409
Global impact	65
Chemistry impact	82
Biology rating	13
Share of award	1/4

Kurt Wuthrich



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2002

for his development of NMR spectroscopy for determining the 3D structure of biological macromolecules in solution

Age at award	63
Award delay	17
Citations	476
Global impact	68
Chemistry impact	89
Biology rating	12
Share of award	1/2

Peter Agre



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2003

for the discovery of water channels

Age at award	54
Award delay	11
Citations	1385
Global impact	62
Chemistry impact	58
Biology rating	19
Share of award	1/2

Roderick MacKinnon



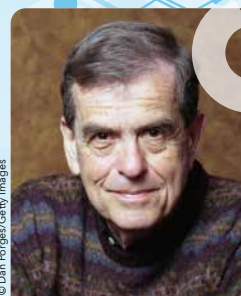
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2003

for structural and mechanistic studies of ion channels

Age at award	47
Award delay	5
Citations	5181
Global impact	62
Chemistry impact	58
Biology rating	19
Share of award	1/2

Aaron Ciechanover



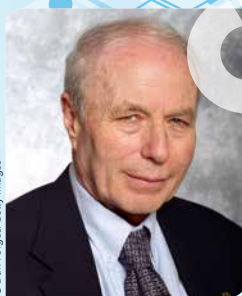
© Dan Pogres/Getty Images

2004

for the discovery of ubiquitin-mediated protein degradation

Age at award	57
Award delay	24
Citations	440
Global impact	65
Chemistry impact	53
Biology rating	19
Share of award	1/3

Avram Hershko



© Dan Pogres/Getty Images

2004

for the discovery of ubiquitin-mediated protein degradation

Age at award	66
Award delay	24
Citations	440
Global impact	65
Chemistry impact	53
Biology rating	19
Share of award	1/3

Irwin Rose



© Reuters/Alamy Stock Photo

2004

for the discovery of ubiquitin-mediated protein degradation

Age at award	78
Award delay	24
Citations	440
Global impact	65
Chemistry impact	53
Biology rating	19
Share of award	1/3

Yves Chauvin



© Sven Nackstrand/APPI/Getty Images

2005

for the development of the metathesis method in organic synthesis

Age at award	74
Award delay	34
Citations	851
Global impact	77
Chemistry impact	86
Biology rating	3
Share of award	1/3

Robert H Grubbs



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2005

for the development of the metathesis method in organic synthesis

Age at award	63
Award delay	13
Citations	847
Global impact	77
Chemistry impact	86
Biology rating	3
Share of award	1/3

Richard R Schrock



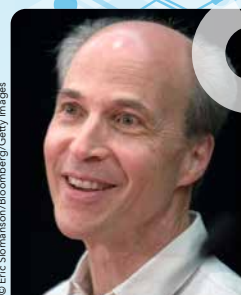
© Rick Friedman/Corbis/Getty Images

2005

for the development of the metathesis method in organic synthesis

Age at award	60
Award delay	15
Citations	810
Global impact	77
Chemistry impact	86
Biology rating	3
Share of award	1/3

Roger D Kornberg



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2006

for his studies of the molecular basis of eukaryotic transcription

Age at award	59
Award delay	32
Citations	1348
Global impact	69
Chemistry impact	64
Biology rating	20
Share of award	1

Gerhard Ertl



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2007

for his studies of chemical processes on solid surfaces

Age at award	70
Award delay	33
Citations	693
Global impact	75
Chemistry impact	83
Biology rating	4
Share of award	1

Osamu Shimomura



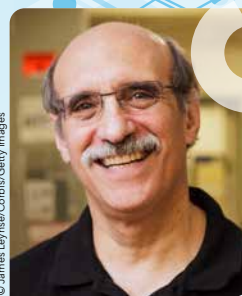
© Karl Schoeninger/Shutterstock

2008

for the discovery and development of the green fluorescent protein, GFP

Age at award	80
Award delay	46
Citations	1364
Global impact	73
Chemistry impact	70
Biology rating	17
Share of award	1/3

Martin Chalfie



© James Leynse/Corbis/Getty Images

2008

for the discovery and development of the green fluorescent protein, GFP

Age at award	61
Award delay	14
Citations	4996
Global impact	73
Chemistry impact	70
Biology rating	17
Share of award	1/3

Roger Y Tsien



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2008

for the discovery and development of the green fluorescent protein, GFP

Age at award	56
Award delay	14
Citations	2293
Global impact	73
Chemistry impact	70
Biology rating	17
Share of award	1/3

Venkatraman Ramakrishnan



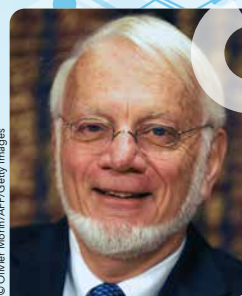
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2009

for studies of the structure and function of the ribosome

Age at award	57
Award delay	9
Citations	1572
Global impact	68
Chemistry impact	60
Biology rating	20
Share of award	1/3

Thomas A Steitz



© Olivier Morin/AFP/Getty Images

2009

for studies of the structure and function of the ribosome

Age at award	69
Award delay	9
Citations	2581
Global impact	68
Chemistry impact	60
Biology rating	20
Share of award	1/3

Ada E Yonath



© Dan Porges/Getty Images

2009

for studies of the structure and function of the ribosome

Age at award	70
Award delay	9
Citations	766
Global impact	68
Chemistry impact	60
Biology rating	20
Share of award	1/3

Richard F Heck



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2010

for palladium-catalyzed cross couplings in organic synthesis

Age at award	79
Award delay	42
Citations	1653
Global impact	80
Chemistry impact	94
Biology rating	8
Share of award	1/3

Ei-ichi Negishi



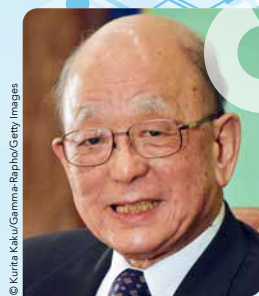
© Anders Wiklund/AFP/Getty Images

2010

for palladium-catalyzed cross couplings in organic synthesis

Age at award	75
Award delay	34
Citations	269
Global impact	80
Chemistry impact	94
Biology rating	8
Share of award	1/3

Akira Suzuki



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2010

for palladium-catalyzed cross couplings in organic synthesis

Age at award	80
Award delay	31
Citations	1307
Global impact	80
Chemistry impact	94
Biology rating	8
Share of award	1/3

Dan Shechtman



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2011

for the discovery of quasicrystals

Age at award	70
Award delay	27
Citations	5228
Global impact	56
Chemistry impact	71
Biology rating	1
Share of award	1

Robert J Lefkowitz



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2012

for studies of G-protein-coupled receptors

Age at award	69
Award delay	26
Citations	797
Global impact	63
Chemistry impact	60
Biology rating	18
Share of award	1/2

Brian K Kobilka



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2012

for studies of G-protein-coupled receptors

Age at award	57
Award delay	26
Citations	797
Global impact	63
Chemistry impact	60
Biology rating	18
Share of award	1/2

Martin Karplus



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2013

for the development of multiscale models for complex chemical systems

Age at award	83
Award delay	41
Citations	605
Global impact	76
Chemistry impact	90
Biology rating	9
Share of award	1/3

Michael Levitt



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2013

for the development of multiscale models for complex chemical systems

Age at award	66
Award delay	38
Citations	3083
Global impact	76
Chemistry impact	90
Biology rating	9
Share of award	1/3

Arieh Warshel



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2013

for the development of multiscale models for complex chemical systems

Age at award	72
Award delay	41
Citations	3083
Global impact	76
Chemistry impact	90
Biology rating	9
Share of award	1/3

Eric Betzig



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2014

for the development of super-resolved fluorescence microscopy

Age at award	54
Award delay	23
Citations	1534
Global impact	62
Chemistry impact	75
Biology rating	3
Share of award	1/3

Stefan W Hell



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2014

for the development of super-resolved fluorescence microscopy

Age at award	51
Award delay	20
Citations	2995
Global impact	62
Chemistry impact	75
Biology rating	3
Share of award	1/3

William E Moerner

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2014

for the development of super-resolved fluorescence microscopy

Age at award	61
Award delay	14
Citations	627
Global impact	62
Chemistry impact	75
Biology rating	3
Share of award	1/3

Tomas Lindahl

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2015

for mechanistic studies of DNA repair

Age at award	77
Award delay	41
Citations	404
Global impact	69
Chemistry impact	52
Biology rating	19
Share of award	1/3

Paul Modrich

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2015

for mechanistic studies of DNA repair

Age at award	69
Award delay	26
Citations	405
Global impact	69
Chemistry impact	52
Biology rating	19
Share of award	1/3

Aziz Sancar

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2015

for mechanistic studies of DNA repair

Age at award	69
Award delay	32
Citations	400
Global impact	69
Chemistry impact	52
Biology rating	19
Share of award	1/3

Jean-Pierre Sauvage

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2016

for the design and synthesis of molecular machines

Age at award	71
Award delay	33
Citations	459
Global impact	64
Chemistry impact	78
Biology rating	7
Share of award	1/3

J Fraser Stoddart

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2016

for the design and synthesis of molecular machines

Age at award	74
Award delay	25
Citations	509
Global impact	64
Chemistry impact	78
Biology rating	7
Share of award	1/3

Bernard L Feringa

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2016

for the design and synthesis of molecular machines

Age at award	65
Award delay	17
Citations	1142
Global impact	64
Chemistry impact	78
Biology rating	7
Share of award	1/3

Jacques Dubochet

© Fabrice Coffrini/AFP/Getty Images



2017

for developing cryo-electron microscopy for the high-resolution structure determination of biomolecules in solution

Age at award	75
Award delay	29
Citations	2442
Global impact	60
Chemistry impact	75
Biology rating	13
Share of award	1/3

Joachim Frank

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2017

for developing cryo-electron microscopy for the high-resolution structure determination of biomolecules in solution

Age at award	77
Award delay	42
Citations	166
Global impact	60
Chemistry impact	75
Biology rating	13
Share of award	1/3

Richard Henderson

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2017

for developing cryo-electron microscopy for the high-resolution structure determination of biomolecules in solution

Age at award	72
Award delay	27
Citations	3457
Global impact	60
Chemistry impact	75
Biology rating	13
Share of award	1/3

Frances H Arnold

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2018

for the directed evolution of enzymes

Age at award	62
Award delay	27
Citations	219
Global impact	78
Chemistry impact	78
Biology rating	18
Share of award	1/2

George P Smith

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2018

for the phage display of peptides and antibodies

Age at award	77
Award delay	33
Citations	5364
Global impact	75
Chemistry impact	72
Biology rating	18
Share of award	1/4

Gregory P Winter

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2018

for the phage display of peptides and antibodies

Age at award	67
Award delay	28
Citations	3482
Global impact	75
Chemistry impact	72
Biology rating	18
Share of award	1/4

John B Goodenough

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2019

for the development of lithium-ion batteries

Age at award	97
Award delay	39
Citations	2545
Global impact	98
Chemistry impact	84
Biology rating	1
Share of award	1/3

M Stanley Whittingham

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2019

for the development of lithium-ion batteries

Age at award	77
Award delay	42
Citations	1026
Global impact	98
Chemistry impact	84
Biology rating	1
Share of award	1/3

Akira Yoshino

© Kyodo News/Getty Images



2019

for the development of lithium-ion batteries

Age at award	71
Award delay	29
Citations	1786
Global impact	98
Chemistry impact	84
Biology rating	1
Share of award	1/3

Emmanuelle Charpentier

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2020

for the development of a method for genome editing

Age at award	51
Award delay	8
Citations	6840
Global impact	72
Chemistry impact	85
Biology rating	17
Share of award	1/2

Jennifer Doudna

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2020

for the development of a method for genome editing

Age at award	56
Award delay	8
Citations	6840
Global impact	72
Chemistry impact	85
Biology rating	17
Share of award	1/2