

# Pil Seok Chae

## List of Publications by Year in descending order

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78  
papers

8,325  
citations

212478

28  
h-index

78623

77  
g-index

79  
all docs

79  
docs citations

79  
times ranked

7693  
citing authors

#	ARTICLE	IF	CITATIONS
1	Chromofluorogenic naphthoquinolinedione-based probes for sensitive detection and removal of Hg <sup>2+</sup> in aqueous solutions. <i>Dyes and Pigments</i> , 2022, 198, 110025.	2.0	21
2	A Chromo-Fluorogenic Naphthoquinolinedione-Based Probe for Dual Detection of Cu <sup>2+</sup> and Its Use for Various Water Samples. <i>Molecules</i> , 2022, 27, 785.	1.7	7
3	Glyco-steroidal Amphiphiles (GSAs) for Membrane Protein Structural Study. <i>ChemBioChem</i> , 2022, 23, .	1.3	4
4	Impact of novel detergents on membrane protein studies. <i>CheM</i> , 2022, 8, 980-1013.	5.8	31
5	Foldable Detergents for Membrane Protein Study: Importance of Detergent Core Flexibility in Protein Stabilization. <i>Chemistry - A European Journal</i> , 2022, 28, .	1.7	13
6	Development of 1,3-acetonedicarboxylate-derived glucoside amphiphiles (ACAs) for membrane protein study. <i>Chemical Science</i> , 2022, 13, 5750-5759.	3.7	5
7	A bis(fluorenyl-triazole)-conjugated naphthoquinoline-dione probe for a cascade detection of Cu <sup>2+</sup> and F <sup>-</sup> and its logic circuit with a memory unit. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , 2022, 431, 114048.	2.0	6
8	Foldable Detergents for Membrane Protein Stability. <i>ChemBioChem</i> , 2022, 23, .	1.3	8
9	Sensitive detection of DMSO/DMF in water, human urine and blood plasma using novel 1,8-naphthalimide-based amphiphilic spectroscopic probes. <i>Dyes and Pigments</i> , 2021, 189, 109240.	2.0	15
10	Conformationally flexible core-bearing detergents with a hydrophobic or hydrophilic pendant: Effect of pendant polarity on detergent conformation and membrane protein stability. <i>Acta Biomaterialia</i> , 2021, 128, 393-407.	4.1	15
11	Maltose-bis(hydroxymethyl)phenol (MBPs) and Maltose-tris(hydroxymethyl)phenol (MTPs) Amphiphiles for Membrane Protein Stability. <i>ACS Chemical Biology</i> , 2021, 16, 1779-1790.	1.6	6
12	Pyridoanthrone-based chromo-fluorogenic amphiphiles for selective CN <sup>-</sup> detection and their bioimaging application. <i>Sensors and Actuators B: Chemical</i> , 2020, 304, 127396.	4.0	25
13	A dual-responsive anthrapyridone-triazole-based probe for selective detection of Ni <sup>2+</sup> and Cu <sup>2+</sup> : A mimetic system for molecular logic gates based on color change. <i>Dyes and Pigments</i> , 2020, 174, 108092.	2.0	30
14	Diastereomeric Cyclopentane-Based Maltosides (CPMs) as Tools for Membrane Protein Study. <i>Journal of the American Chemical Society</i> , 2020, 142, 21382-21392.	6.6	10
15	A novel anthrapyridone diamine-based probe for selective and distinctive Cu <sup>2+</sup> and Hg <sup>2+</sup> sensing in aqueous solution; utility as molecular logic gates. <i>Dyes and Pigments</i> , 2020, 181, 108522.	2.0	30
16	New Malonate-Derived Tetraglucoside Detergents for Membrane Protein Stability. <i>ACS Chemical Biology</i> , 2020, 15, 1697-1707.	1.6	12
17	Pendant-bearing glucose-neopentyl glycol (P-GNG) amphiphiles for membrane protein manipulation: Importance of detergent pendant chain for protein stabilization. <i>Acta Biomaterialia</i> , 2020, 112, 250-261.	4.1	14
18	Conformationally Restricted Monosaccharide-Cored Glycoside Amphiphiles: The Effect of Detergent Headgroup Variation on Membrane Protein Stability. <i>ACS Chemical Biology</i> , 2019, 14, 1717-1726.	1.6	13

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19	Self-Assembly Behavior and Application of Terphenyl-Cored Trimaltosides for Membrane-Protein Studies: Impact of Detergent Hydrophobic Group Geometry on Protein Stability. <i>Chemistry - A European Journal</i> , 2019, 25, 11545-11554.	1.7	12
20	Asymmetric maltose neopentyl glycol amphiphiles for a membrane protein study: effect of detergent asymmetry on protein stability. <i>Chemical Science</i> , 2019, 10, 1107-1116.	3.7	28
21	Trehalose-cored amphiphiles for membrane protein stabilization: importance of the detergent micelle size in GPCR stability. <i>Organic and Biomolecular Chemistry</i> , 2019, 17, 3249-3257.	1.5	11
22	Self-Assembly Behaviors of a Penta-Phenylene Maltoside and Its Application for Membrane Protein Study. <i>Chemistry - an Asian Journal</i> , 2019, 14, 1926-1931.	1.7	11
23	1,3,5-Triazine-Cored Maltoside Amphiphiles for Membrane Protein Extraction and Stabilization. <i>Journal of the American Chemical Society</i> , 2019, 141, 19677-19687.	6.6	15
24	Fluorescence tunable thiophene-bis(benzimidazole)-based probes for a cascade trace detection of Hg <sup>2+</sup> and lysine: A molecular switch mimic. <i>Sensors and Actuators B: Chemical</i> , 2019, 281, 933-944.	4.0	36
25	TURN-ON fluorescence detection of cyanide using an ensemble system consisting of a dansyl-based cationic probe and dicyanovinyl derivative. <i>Dyes and Pigments</i> , 2019, 162, 348-357.	2.0	23
26	Steroid-Based Amphiphiles for Membrane Protein Study: The Importance of Alkyl Spacers for Protein Stability. <i>ChemBioChem</i> , 2018, 19, 1433-1443.	1.3	5
27	Aggregation induced emission enhancement behavior of conformationally rigid pyreneamide-based probe for ultra-trace detection of picric acid (PA). <i>Dyes and Pigments</i> , 2018, 156, 307-317.	2.0	27
28	Vitamin E-based glycoside amphiphiles for membrane protein structural studies. <i>Organic and Biomolecular Chemistry</i> , 2018, 16, 2489-2498.	1.5	8
29	A comparative study of branched and linear mannitol-based amphiphiles on membrane protein stability. <i>Analyst</i> , 2018, 143, 5702-5710.	1.7	5
30	Rationally Engineered Tandem Facial Amphiphiles for Improved Membrane Protein Stabilization Efficacy. <i>ChemBioChem</i> , 2018, 19, 2225-2232.	1.3	6
31	An Engineered Lithocholate-Based Facial Amphiphile Stabilizes Membrane Proteins: Assessing the Impact of Detergent Customizability on Protein Stability. <i>Chemistry - A European Journal</i> , 2018, 24, 9860-9868.	1.7	16
32	Electronically tuned sulfonamide-based probes with ultra-sensitivity for Ga <sup>3+</sup> or Al <sup>3+</sup> detection in aqueous solution. <i>Analytica Chimica Acta</i> , 2017, 958, 38-50.	2.6	40
33	Conformationally Preorganized Diastereomeric Norbornane-Based Maltosides for Membrane Protein Study: Implications of Detergent Kink for Micellar Properties. <i>Journal of the American Chemical Society</i> , 2017, 139, 3072-3081.	6.6	46
34	A simple and dual responsive ultrasensitive thioether-functionalized pyrenesulfonamide for the cascade detection of mercury ion and dithiouracil, a mimetic system for molecular logic gates. <i>Sensors and Actuators B: Chemical</i> , 2017, 251, 416-426.	4.0	18
35	Resorcinarene-Based Facial Glycosides: Implication of Detergent Flexibility on Membrane-Protein Stability. <i>Chemistry - A European Journal</i> , 2017, 23, 6724-6729.	1.7	23
36	Dendronic trimaltoside amphiphiles (DTMs) for membrane protein study. <i>Chemical Science</i> , 2017, 8, 8315-8324.	3.7	21

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37	Pyreneamide-based dipodal probes for ultra-sensitive and selective detection of 3,5-dinitrosalicylic acid in an aqueous solution. <i>Dyes and Pigments</i> , 2017, 147, 400-412.	2.0	12
38	New penta-saccharide-bearing tripod amphiphiles for membrane protein structure studies. <i>Analyst, The</i> , 2017, 142, 3889-3898.	1.7	11
39	Tandem malonate-based glucosides (TMGs) for membrane protein structural studies. <i>Scientific Reports</i> , 2017, 7, 3963.	1.6	11
40	New 1,8-naphthalimide-conjugated sulfonamide probes for TNP sensing in water. <i>Sensors and Actuators B: Chemical</i> , 2017, 240, 1-9.	4.0	61
41	Butane-1,2,3,4-tetraol-based amphiphilic stereoisomers for membrane protein study: importance of chirality in the linker region. <i>Chemical Science</i> , 2017, 8, 1169-1177.	3.7	16
42	Accessible Mannitol-Based Amphiphiles (MNAs) for Membrane Protein Solubilisation and Stabilisation. <i>Chemistry - A European Journal</i> , 2016, 22, 7068-7073.	1.7	43
43	Isomeric Detergent Comparison for Membrane Protein Stability: Importance of Inter-Alkyl Chain Distance and Alkyl Chain Length. <i>ChemBioChem</i> , 2016, 17, 2334-2339.	1.3	17
44	Tandem neopentyl glycol maltosides (TNMs) for membrane protein stabilisation. <i>Chemical Communications</i> , 2016, 52, 12104-12107.	2.2	12
45	Mesitylene-Cored Glucoside Amphiphiles (MGAs) for Membrane Protein Studies: Importance of Alkyl Chain Density in Detergent Efficacy. <i>Chemistry - A European Journal</i> , 2016, 22, 18833-18839.	1.7	17
46	A class of rigid linker-bearing glucosides for membrane protein structural study. <i>Chemical Science</i> , 2016, 7, 1933-1939.	3.7	39
47	Highly Branched Pentasaccharide-Bearing Amphiphiles for Membrane Protein Studies. <i>Journal of the American Chemical Society</i> , 2016, 138, 3789-3796.	6.6	56
48	Effect of Detergents on Galactoside Binding by Melibiose Permeases. <i>Biochemistry</i> , 2015, 54, 5849-5855.	1.2	29
49	Novel Xylene-Linked Maltoside Amphiphiles (XMAs) for Membrane Protein Stabilisation. <i>Chemistry - A European Journal</i> , 2015, 21, 10008-10013.	1.7	17
50	Deoxycholate-Based Glycosides (DCGs) for Membrane Protein Stabilisation. <i>ChemBioChem</i> , 2015, 16, 1454-1459.	1.3	5
51	Accessible glyco-tripod amphiphiles for membrane protein analysis. <i>Analytical Methods</i> , 2015, 7, 5808-5813.	1.3	2
52	Maltose neopentyl glycol-3 (MNG-3) analogues for membrane protein study. <i>Analyst, The</i> , 2015, 140, 3157-3163.	1.7	47
53	Amphipathic Agents for Membrane Protein Study. <i>Methods in Enzymology</i> , 2015, 557, 57-94.	0.4	30
54	Hydrophobic Variations of N-Oxide Amphiphiles for Membrane Protein Manipulation: Importance of Non-Hydrocarbon Groups in the Hydrophobic Portion. <i>Chemistry - an Asian Journal</i> , 2014, 9, 110-116.	1.7	8

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55	Heavy atom-bearing tripod amphiphiles for the membrane protein study. <i>New Journal of Chemistry</i> , 2014, 38, 2354.	1.4	3
56	New ganglio-tripod amphiphiles (TPAs) for membrane protein solubilization and stabilization: implications for detergent structure-property relationships. <i>Organic and Biomolecular Chemistry</i> , 2014, 12, 8480-8487.	1.5	12
57	Adamantane-based amphiphiles (ADAs) for membrane protein study: importance of a detergent hydrophobic group in membrane protein solubilisation. <i>Chemical Communications</i> , 2014, 50, 12300-12303.	2.2	9
58	Hydrophobic variants of ganglio-tripod amphiphiles for membrane protein manipulation. <i>Biochimica Et Biophysica Acta - Biomembranes</i> , 2014, 1838, 278-286.	1.4	29
59	Improved Glucose-Neopentyl Glycol (GNG) Amphiphiles for Membrane Protein Solubilization and Stabilization. <i>Chemistry - an Asian Journal</i> , 2014, 9, 632-638.	1.7	32
60	Novel Tripod Amphiphiles for Membrane Protein Analysis. <i>Chemistry - A European Journal</i> , 2013, 19, 15645-15651.	1.7	49
61	Glucose-Neopentyl Glycol (GNG) amphiphiles for membrane protein study. <i>Chemical Communications</i> , 2013, 49, 2287-2289.	2.2	79
62	Carbohydrate-containing Triton X-100 analogues for membrane protein solubilization and stabilization. <i>Molecular BioSystems</i> , 2013, 9, 626.	2.9	20
63	Hemifluorinated Maltose-Neopentyl Glycol (HF-MNG) Amphiphiles for Membrane Protein Stabilisation. <i>ChemBioChem</i> , 2013, 14, 452-455.	1.3	32
64	Structure and dynamics of the M3 muscarinic acetylcholine receptor. <i>Nature</i> , 2012, 482, 552-556.	13.7	714
65	A New Class of Amphiphiles Bearing Rigid Hydrophobic Groups for Solubilization and Stabilization of Membrane Proteins. <i>Chemistry - A European Journal</i> , 2012, 18, 9485-9490.	1.7	120
66	Inside Cover: A New Class of Amphiphiles Bearing Rigid Hydrophobic Groups for Solubilization and Stabilization of Membrane Proteins (Chem. Eur. J. 31/2012). <i>Chemistry - A European Journal</i> , 2012, 18, 9434-9434.	1.7	0
67	Identification of Chromatophore Membrane Protein Complexes Formed under Different Nitrogen Availability Conditions in <i>Rhodospirillum rubrum</i> . <i>Journal of Proteome Research</i> , 2011, 10, 2703-2714.	1.8	12
68	Crystal structure of the $\beta_2$ adrenergic receptor-Gs protein complex. <i>Nature</i> , 2011, 477, 549-555.	13.7	2,712
69	Structure of a nanobody-stabilized active state of the $\beta_2$ adrenoceptor. <i>Nature</i> , 2011, 469, 175-180.	13.7	1,523
70	Structure and function of an irreversible agonist- $\beta_2$ adrenoceptor complex. <i>Nature</i> , 2011, 469, 236-240.	13.7	741
71	Conformational changes in the G protein Gs induced by the $\beta_2$ adrenergic receptor. <i>Nature</i> , 2011, 477, 611-615.	13.7	339
72	Structural flexibility of the G $\alpha$ s $\alpha$ -helical domain in the $\beta_2$ -adrenoceptor Gs complex. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2011, 108, 16086-16091.	3.3	204

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73	Maltose- $\alpha$ -neopentyl glycol (MNG) amphiphiles for solubilization, stabilization and crystallization of membrane proteins. <i>Nature Methods</i> , 2010, 7, 1003-1008.	9.0	397
74	Crystallographic Characterization of <i>N</i> -Oxide Tripod Amphiphiles. <i>Journal of the American Chemical Society</i> , 2010, 132, 1953-1959.	6.6	10
75	Tandem Facial Amphiphiles for Membrane Protein Stabilization. <i>Journal of the American Chemical Society</i> , 2010, 132, 16750-16752.	6.6	85
76	Tripod amphiphiles for membrane protein manipulation. <i>Molecular BioSystems</i> , 2010, 6, 89-94.	2.9	44
77	Peptide-Cleaving Catalyst Selective for Peptide Deformylase. <i>Journal of the American Chemical Society</i> , 2005, 127, 2396-2397.	6.6	64
78	Degradation of Myoglobin by Polymeric Artificial Metalloproteases Containing Catalytic Modules with Various Catalytic Group Densities: Site Selectivity in Peptide Bond Cleavage. <i>Journal of the American Chemical Society</i> , 2003, 125, 14580-14589.	6.6	46