

ふりがな 氏 名	いしい じゅん 石井 純	職名	教授
部局 講座 教育研究分野名	科学技術イノベーション研究科 バイオ・環境講座 バイオプロダクション分野	学位称号	博士（工学）
略歴（学歴，職歴，教育歴，所属機関，学会及び社会における活動，受賞）			
年 月	（学 歴）		
1998 年 3 月	私立西大和学園高等学校 卒業		
2002 年 3 月	神戸大学工学部応用化学科 卒業		
2004 年 3 月	神戸大学大学院自然科学研究科応用化学専攻 博士前期課程 修了		
2008 年 3 月	神戸大学大学院自然科学研究科分子物質科学専攻 博士後期課程 修了		
年 月	（職 歴）		
2008 年 4 月	神戸大学自然科学系先端融合研究環重点研究部 学術推進研究員		
2008 年 8 月	神戸大学自然科学系先端融合研究環重点研究部 特命助教		
2012 年 4 月	神戸大学自然科学系先端融合研究環重点研究部 特命准教授		
2013 年 4 月	神戸大学自然科学系先端融合研究環重点研究部 准教授		
2016 年 4 月	神戸大学大学院科学技術イノベーション研究科 准教授		
2018 年 7 月	神戸大学先端バイオ工学研究センター 准教授		
2018 年 7 月	（神戸大学大学院科学技術イノベーション研究科 兼任）		
2024 年 10 月	（神戸大学工学部応用化学科 兼任）		
年 月	（受 賞）		
2021 年 10 月	第 73 回日本生物工学会大会トピックス賞（日本生物工学会）		
2022 年 10 月	令和 4 年度学長表彰・財務貢献者（神戸大学）		
2023 年 6 月	令和 5 年度研究科優秀教育賞（神戸大学大学院科学技術イノベーション研究科）		
2023 年 10 月	令和 5 年度学長表彰・財務貢献者（神戸大学）		
2024 年 9 月	第 47 回生物工学奨励賞・照井賞（日本生物工学会）		
2024 年 10 月	令和 6 年度学長表彰・財務貢献者（神戸大学）		

教 育 研 究 上 の 業 績	
(著 書)	
1. 戸谷吉博, 松田史生, <u>石井純</u>, 原清敬, 微生物を活用した有用物質の製造技術, 第1章 バイオものづくりに資する微生物と育種技術, 第4節 「光をエネルギー源として利用する有用物質生産大腸菌の開発」シーエムシー出版, 2023年5月31日 2. 柘植謙爾, <u>石井純</u>, 近藤昭彦, ゲノム編集技術を応用した製品開発とその実用化 ～研究開発動向・課題解決策・技術予測と市場展望～, 第4章 ゲノム編集によるスマートセルインダストリーの技術開発とその課題解決, 第7節 「長鎖DNA合成技術による有用物質生産微生物の構築とその課題解決」技術情報協会, 2021年2月26日 3. <u>石井純</u>, 西晶子, 他6名, スマートセルインダストリー -微生物細胞を用いた物質生産の展望- 第1編 ハイスループット合成・分析・評価技術, 第2章 ハイスループット微生物構築・評価技術, 第1節 「微生物を用いた物質生産とハイスループット微生物構築技術」シーエムシー出版, 2018年6月 4. Nakamura Y, Kondo A, <u>Ishii J</u>*. (2018) 「Peripheral Membrane Proteins (担当: Chapter 3 “Biosensing techniques in yeast: G-protein signaling and protein-protein interaction assays for monitoring ligand stimulation and oligomer formation of heterologous GPCRs”)」 InTechOpen Book Chapter 5. <u>石井純</u>, 近藤昭彦, 化学便覧 応用化学編 第7版 第Ⅶ編 バイオ科学技術, 第26章 バイオマテリアル, 第3節 「ヒドロキシ化合物」丸善出版, 2014年1月 6. <u>石井純</u>, 荻野千秋, 近藤昭彦, 次世代医薬開発に向けた抗体工学の最前線, 第Ⅱ編 抗体の改変技術, 第4章 親和性の向上, 第4節 「酵母による抗体フラグメントおよび抗体様結合性タンパク質の改変技術」シーエムシー出版, 2012年12月 7. <u>石井純</u>, 田中勉, 他2名, シングルセル解析の最前線 第3章 細胞内生体分子群の実測定量解析, 第4節 「フローサイトメトリーとGFPレポーターによるG蛋白質シグナルのシングルセル解析」シーエムシー出版, 2010年3月 8. <u>石井純</u>, 近藤昭彦, 一細胞定量解析の最前線 -ライフサーベイヤ構築に向けて- 第3章 細胞内生体分子群の動態シグナルの解析, 第6節 「酵母細胞内シグナル定量解析の創薬への応用」シーエムシー出版, 2006年12月	
(学 術 論 文)	
(a. 学会誌, 専門誌等に掲載された論文) 1. Tominaga M, Shima Y, Nozaki K, Ito Y, Someda M, Shoya Y, Hashii N, Obata C, Matsumoto-Kitano M, Suematsu K, Matsukawa T, Hosoya K, Hashiba N, Kondo A, <u>Ishii J</u>*. (2024) Designing strong inducible synthetic promoters in yeasts. <i>Nat. Commun.</i> 15(1): 10653 2. Asama R, Tominaga M, Ito S, Ito Y, Takemura K, Sakuraba S, Katsurada K, Fukuda N, Kondo A, <u>Ishii J</u>*. (2024) Screening of protein-based inhibitors for the intracellular domain of epidermal growth factor receptor by directed evolution using the yeast Gry recruitment system. <i>J. Biosci. Bioeng.</i> 138(5): 375-381 3. Asama R, Liu CJS, Tominaga M, Cheng YR, Nakamura Y, Kondo A, Wang HY*, <u>Ishii J</u>*. (2024) Droplet-based microfluidic platform for detecting agonistic peptides that are self-secreted by yeast expressing a G-protein-coupled receptor. <i>Microb. Cell Fact.</i> 23(1): 104 4. Matsuyama C, Seike T, Okahashi N, Niide T, Hara KY, Hirono-Hara Y, <u>Ishii J</u>, 他3名. (2023) Metabolome analysis of metabolic burden in <i>Escherichia coli</i> caused by overexpression of green fluorescent protein and delta-rhodopsin. <i>J. Biosci. Bioeng.</i> 137(3): 187-194 5. Morita K, Takenaka M, Tomita K, <u>Ishii J</u>, 他8名. (2023) Nanoscopic lignin mapping on cellulose nanofibers via scanning transmission electron microscopy and atomic force microscopy. <i>Cellulose</i> 30: 11357-11367	

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11. Morita K, Nishimura Y, **Ishii J**, Maruyama T. (2022) Micelle-like nanoassemblies of short peptides create antimicrobial selectivity in a conventional antifungal drug. *ACS Appl. Nano Mater.* 6(2): 1432-1440
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* : 責任著者

(学 術 報 告 等)

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(学 術 講 演)

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2. **石井純** 「微生物代謝の理解と最適化に向けたバイオ DX 基盤の構築」 第 75 回日本生物工学会大会 シンポジウム (生命科学研究の革新に向けたバイオ DX の挑戦), 2023 年 9 月 3-5 日, 名古屋大学東山キャンパス 【招待講演】
3. **石井純** 「酵母における合成生物学基盤の開発と物質生産への展開」 日本農芸化学会 2023 年度大会 シンポジウム (微生物によるものづくり研究の最前線 ~宿主機能開発から社会実装に向けた取り組みまで), 2023 年 3 月 14-17 日, オンライン開催 【招待講演】
4. **石井純** 「バイオエコノミー社会実現に向けた合成生物学の基盤開発と微生物での物質生産への展開」 SONY “Life Science Spring Webinar 2022”, 2022 年 3 月 23 日, オンライン開催 【招待講演】
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