生物学与免疫学

Antibody (抗体, 89次)

Antigen (抗原, 37次)

Complementarity-Determining Regions (CDRs) (互补决定区, 26 次)

Epitope (表位, 5次)

Binding Affinity (亲和力, 6次)

Pathogen (病原体, 3次)

Neutralization (中和作用, 2次)

Heavy/Light Chains (重链/轻链, 4次)

Backbone (主链, 5次)

Side-chain (侧链, 4次)

Cα Atom (Cα 原子, 12 次)

RosettaAntibodyDesign (RAbD) (抗体设计软件, 7次)

SAbDab Database (结构抗体数据库, 3次)

Antibody Framework (抗体框架, 5次)

Phylogenetic Clustering (系统发育聚类, 2次)

Protein-Protein Interactions(蛋白质相互作用, 8次)

Torsional Angles (扭转角, 5次)

Full-Atom Structure (全原子结构, 6次)

Hydrogen Bonding (氢键, 4次)

Molecular Dynamics (分子动力学, 7次)

Force Field (力场, 5次)

Biophysical Energy Functions (生物物理能量函数, 5次)

InterfaceAnalyzer (界面分析工具, 3次)

Humanized Mice (人源化小鼠, 2次)

Therapeutic Antibodies (治疗性抗体, 4次)

计算机科学与人工智能

Generative Models (生成模型, 12次)

Diffusion Probabilistic Models(扩散概率模型,15次)

Equivariant Neural Networks (等变神经网络, 12次)

Denoising (去噪, 11次)

Multinomial Distribution (多项分布, 9次)

Variational Auto-encoders (VAEs)(变分自编码器, 5次)

Generative Adversarial Networks (GANs) (生成对抗网络, 4次)

Multiple Layer Perceptrons (MLPs)(多层感知机,8次)

Reparameterization Trick(重参数化技巧,3次)

AlphaFold (蛋白质结构预测模型, 3次)

HDOCK (分子对接软件, 2次)

OpenMM (分子动力学库, 3次)

AMBER99 Force Field (分子力场, 2次)

Iterative Refinement (迭代优化, 4次)

Sampling Algorithms (采样算法, 5次)

Energy Landscape(能量景观, 3次)

Monte Carlo Methods (蒙特卡洛方法, 2次)

Latent Space (潜在空间, 2次)

Backpropagation (反向传播, 2次)

Deep Network Hallucination (深度网络幻觉, 1次)

数学与物理学

Equivariant (等变的, 15次)

Isotropic (各向同性, 7次)

Riemannian Manifolds (黎曼流形, 6次)

SO(3) (三维旋转群, 3次)

Euclidean Distance(欧几里得距离,4次)

Markov Chains (马尔可夫链, 3次)

KL Divergence (KL 散度, 2次)

Root-Mean-Square Deviation (RMSD) (均方根偏差, 4次)

Frobenius Norm(弗罗贝尼乌斯范数, 2次)

Skew-Symmetric Matrix (反对称矩阵, 3次)

Logarithmic Map (对数映射, 2次)

Exponential Map (指数映射, 2次)

Uniform Distribution (均匀分布, 5次)

Posterior Distribution(后验分布, 4次)

Multinomial Kernel (多项核, 1次)

Gaussian Noise (高斯噪声, 6次)

Rotation Matrix (旋转矩阵, 9次)

Axis-Angle Representation (轴角表示, 3次)

Euler Angles (欧拉角, 2次)

Isotropic Gaussian Distribution(各向同性高斯分布, 2次)

化学与分子生物学

Side-chain Packing (侧链堆积, 4次)

Protein Backbone (蛋白质主链, 5次)

Torsion Energy (扭转能, 2次)

Ideal Local Coordinates (理想局部坐标, 2次)

Hydrophobic Interactions (疏水相互作用, 3次)

Electrostatic Interactions (静电相互作用, 2次)

Van der Waals Forces (范德华力, 1次)

Conformational Sampling (构象采样, 4次)

Thermodynamic Stability (热力学稳定性, 2次)

Crystallographic Resolution (晶体分辨率, 1次)

Sequence Identity (序列同一性, 5次)

Binding Energy (ΔG)(结合能, 5次)

Rosetta Energy Function (Rosetta 能量函数, 4次)

医学与药理学

Pharmacologists(药理学家, 2次)

Drug Discovery (药物发现, 3次)

Clinical Trials (临床试验, 1次)

Therapeutic Efficacy (治疗效果, 2次)

Biological Activity (生物活性, 3次)

Antiviral Agents (抗病毒药物, 1次)

Immunogenicity (免疫原性, 1次)

Bioavailability (生物利用度, 1次)

Toxicity Profile (毒性特征, 1次)

工程与技术

Energy Minimization (能量最小化, 3次)

Structural Refinement (结构优化, 4次)

Computational Pipeline (计算流程, 2次)

Algorithmic Efficiency (算法效率, 2次)

High-Throughput Screening (高通量筛选, 1次)

Parameter Tuning (参数调优, 2次)

跨学科工具与数据库

PyRosetta (分子建模工具, 2次)

PDB (蛋白质数据库, 6次)

Bioinformatics (生物信息学, 4次)

Structural Alignment (结构比对, 3次)

Sequence Clustering (序列聚类, 2次)

Neural Architecture Search (神经架构搜索, 1次)

Graph Neural Networks (图神经网络, 3次)

其他专业术语

Denoising Diffusion Probabilistic Models (DDPM) (去噪扩散概率模型, 7次)

Equivariant Convolutions(等变卷积, 3次)

Roto-Translation Invariance(旋转平移不变性,4次)

Latent Variable Models (隐变量模型, 2次)

Attention Mechanisms (注意力机制, 2次)

Hyperparameter Optimization (超参数优化, 1次)

Loss Function (损失函数, 8次)

Backbone Alignment (主链对齐, 3次)

Conformational Flexibility (构象灵活性, 2次)

Free Energy Landscape (自由能景观, 1次)

Structural Perturbation(结构扰动, 3次)

Convergence Criteria (收敛标准, 2次)

Stochastic Gradient Descent (随机梯度下降, 2次)

Batch Normalization (批归一化, 1次)

Residual Connections (残差连接, 1次)

Activation Function (激活函数, 2次)

Feature Embedding (特征嵌入. 4次)

Cross-Validation (交叉验证, 1次)

Overfitting (过拟合, 2次)

Underfitting (欠拟合, 1次)

Data Augmentation (数据增强, 2次)

Transfer Learning (迁移学习, 1次)

Ensemble Learning(集成学习,1次)

Reinforcement Learning (强化学习, 1次)

Self-Supervised Learning (自监督学习, 1次)

Unsupervised Learning (无监督学习, 2次)

Supervised Learning (监督学习, 2次)

Manifold Learning (流形学习, 1次)

Dimensionality Reduction (降维, 1次)

Principal Component Analysis (PCA) (主成分分析, 1次)

t-SNE(t分布邻域嵌入,1次)

Autoencoder (自编码器, 2次)

Generative Pre-training (生成式预训练, 1次)

Fine-Tuning (微调, 2次)

Optimization Landscape (优化景观, 2次)

Non-Convex Optimization (非凸优化, 1次)

Gradient Clipping (梯度裁剪, 1次)

Learning Rate Scheduling (学习率调度, 1次)

Early Stopping (早停法, 1次)

Regularization (正则化, 2次)

L1/L2 Regularization (L1/L2 正则化, 1次)

Dropout (随机失活, 1次)

Weight Decay (权重衰减, 1次)

Bayesian Inference (贝叶斯推断, 1次)

MCMC Sampling (马尔可夫链蒙特卡洛采样, 1次)

Variational Inference (变分推断, 1次)

Adversarial Training (对抗训练, 1次)

Curriculum Learning(课程学习,1次)

Meta-Learning (元学习, 1次)

Multi-Task Learning(多任务学习, 1次)

Domain Adaptation (领域自适应, 1次)

Zero-Shot Learning (零样本学习, 1次)

Few-Shot Learning (小样本学习,1次)

Active Learning (主动学习, 1次)

Semi-Supervised Learning(半监督学习,1次)

Weakly Supervised Learning (弱监督学习, 1次)

Interpretability (可解释性, 1次)

Model Robustness(模型鲁棒性,1次)

Model Generalization (模型泛化性, 1次)

Out-of-Distribution Detection (分布外检测, 1次)

Confidence Calibration (置信度校准, 1次)

Uncertainty Quantification(不确定性量化,1次)

Bias-Variance Tradeoff(偏差-方差权衡,1次)

Hyperparameter Search (超参数搜索, 1次)

Grid Search(网格搜索,1次)

Random Search (随机搜索, 1次)

Bayesian Optimization (贝叶斯优化, 1次)

Evolutionary Algorithms (进化算法, 1次)

Particle Swarm Optimization (粒子群优化, 1次)

Genetic Algorithms (遗传算法, 1次)

Simulated Annealing (模拟退火, 1次)

Ant Colony Optimization (蚁群优化, 1次)

Gradient Boosting (梯度提升, 1次)

Random Forests (随机森林, 1次)

Support Vector Machines (支持向量机, 1次)

k-Nearest Neighbors (k 近邻算法, 1次)

Decision Trees (决策树, 1次)

Naive Bayes (朴素贝叶斯, 1次)

Logistic Regression(逻辑回归, 1次)

Linear Regression (线性回归, 1次)

K-Means Clustering (K均值聚类, 1次)

Hierarchical Clustering (层次聚类, 1次)

DBSCAN(基于密度的聚类, 1次)

Neural Architecture Search (NAS) (神经架构搜索. 1次)

Transformer Models (Transformer 模型, 1次)

BERT (双向编码器表示, 1次)

GPT(生成式预训练模型, 1次)

ResNet (残差网络, 1次)

Inception Network (Inception 网络, 1次)

U-Net (U 型网络, 1次)

VGG (视觉几何组网络, 1次)

AlexNet (AlexNet 网络, 1次)

MobileNet (轻量级移动网络, 1次)

YOLO (实时目标检测模型, 1次)

Faster R-CNN(快速区域卷积网络, 1次)

Mask R-CNN (掩码区域卷积网络, 1次)

GAN (生成对抗网络, 1次)

VAE(变分自编码器, 1次)

LSTM(长短期记忆网络,1次)

GRU (门控循环单元, 1次)

protect (保护)

bind (结合)

generate (生成)

design (设计)

optimize (优化)

predict (预测)

train (训练)

sample (采样)

model (模型)

function (功能)

interact (互动)

align (对齐)

modify (修改)

learn (学习)

capture (捕捉)

match (匹配)

collect (收集)

improve (改进)

refine (优化)

shift (移动)

日常物体与概念

structure (结构)

sequence (序列)

energy (能量)

position (位置)

direction (方向)

distance (距离)

angle (角度)

coordinate (坐标)

network (网络)

layer (层)

feature (特征)

metric (指标)

parameter (参数)

batch (批次)

resolution (分辨率)

framework (框架)

context (上下文)

pattern (模式)

distribution (分布)

cluster (聚类)

抽象概念

efficiency (效率)

diversity (多样性)

stability (稳定性)

accuracy (准确性)

complexity (复杂性)

similarity (相似性)

flexibility (灵活性)

robustness (鲁棒性)

probability (概率)

uniform (均匀)

random (随机)

scale (比例)

shift (偏移)

rotation (旋转)

translation (平移)

deviation (偏差)

variance (方差)

bias (偏差)

noise (噪声)

error (误差)

动作与状态

iterate (迭代)

transform (转换)

encode (编码)

decode (解码)

aggregate (聚合)

perturb (扰动)

simulate (模拟)

normalize (标准化)

align (对齐)

adjust (调整)

measure (测量)

compare (比较)

analyze (分析)

validate (验证)

detect (检测)

filter (过滤)

integrate (整合)

split (分割)

select (选择)

rank (排序)

自然与科学基础词汇

protein (蛋白质)

chain (链)

atom (原子)

molecule (分子)

bond (键)

hydrogen (氢)

dynamic (动态)

thermal (热的)

crystal (晶体)

virus (病毒)

bacteria (细菌)

pathogen (病原体)

immune (免疫)

neutralize (中和)

drug (药物)

therapy (治疗)

clinical (临床)

trial (试验)

patient (患者)

human (人类)

数学与逻辑词汇

matrix (矩阵)

vector (向量)

kernel (核)

graph (图)

axis (轴)

angle (角度)

logarithm (对数)

exponential (指数)

probability (概率)

distribution (分布)

random (随机)

uniform (均匀)

mean (均值)

median (中位数)

correlation (相关性)

dimension (维度)

converge (收敛)

diverge (发散)

approximate (近似)

compute (计算)

工具与技术相关

database (数据库)

software (软件)

algorithm (算法)

network (网络)

layer (层)

batch (批次)

code (代码)

script (脚本)

interface (接口)

protocol (协议)

template (模板)

metric (指标)

protocol (协议)

template (模板)

version (版本)

update (更新)

input (输入)

output (输出)

process (处理)

resource (资源)

其他通用词汇

specific (特定)

general (通用)

local (局部)

global(全局)

manual (手动)

automatic (自动)

simple (简单)

complex (复杂)

stable (稳定)

dynamic (动态)