Arik S Dahan

List of Publications by Year in descending order

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120 papers 6,070 citations

45 h-index 76900 74 g-index

127 all docs

127 docs citations

times ranked

127

4731 citing authors

#	Article	IF	CITATIONS
1	Prediction of Solubility and Permeability Class Membership: Provisional BCS Classification of the World's Top Oral Drugs. AAPS Journal, 2009, 11, 740-746.	4.4	337
2	Rationalizing the selection of oral lipid based drug delivery systems by an in vitro dynamic lipolysis model for improved oral bioavailability of poorly water soluble drugs. Journal of Controlled Release, 2008, 129, 1-10.	9.9	282
3	The Solubility–Permeability Interplay and Its Implications in Formulation Design and Development for Poorly Soluble Drugs. AAPS Journal, 2012, 14, 244-251.	4.4	217
4	A Win–Win Solution in Oral Delivery of Lipophilic Drugs: Supersaturation via Amorphous Solid Dispersions Increases Apparent Solubility without Sacrifice of Intestinal Membrane Permeability. Molecular Pharmaceutics, 2012, 9, 2009-2016.	4.6	213
5	Antiviral effect of phytochemicals from medicinal plants: Applications and drug delivery strategies. Drug Delivery and Translational Research, 2020, 10, 354-367.	5.8	208
6	The effect of different lipid based formulations on the oral absorption of lipophilic drugs: The ability of in vitro lipolysis and consecutive ex vivo intestinal permeability data to predict in vivo bioavailability in rats. European Journal of Pharmaceutics and Biopharmaceutics, 2007, 67, 96-105.	4.3	196
7	The Solubility–Permeability Interplay in Using Cyclodextrins as Pharmaceutical Solubilizers: Mechanistic Modeling and Application to Progesterone. Journal of Pharmaceutical Sciences, 2010, 99, 2739-2749.	3.3	184
8	Use of a Dynamic in Vitro Lipolysis Model to Rationalize Oral Formulation Development for Poor Water Soluble Drugs: Correlation with in Vivo Data and the Relationship to Intra-Enterocyte Processes in Rats. Pharmaceutical Research, 2006, 23, 2165-2174.	3.5	172
9	The Solubility–Permeability Interplay: Mechanistic Modeling and Predictive Application of the Impact of Micellar Solubilization on Intestinal Permeation. Molecular Pharmaceutics, 2011, 8, 1848-1856.	4.6	171
10	Evaluation of a chylomicron flow blocking approach to investigate the intestinal lymphatic transport of lipophilic drugs. European Journal of Pharmaceutical Sciences, 2005, 24, 381-388.	4.0	155
11	Segmental Dependent Transport of Low Permeability Compounds along the Small Intestine Due to P-Glycoprotein: The Role of Efflux Transport in the Oral Absorption of BCS Class III Drugs. Molecular Pharmaceutics, 2009, 6, 19-28.	4.6	140
12	The solubility–permeability interplay and oral drug formulation design: Two heads are better than one. Advanced Drug Delivery Reviews, 2016, 101, 99-107.	13.7	138
13	The Solubility–Permeability Interplay When Using Cosolvents for Solubilization: Revising the Way We Use Solubility-Enabling Formulations. Molecular Pharmaceutics, 2012, 9, 581-590.	4.6	116
14	High-Permeability Criterion for BCS Classification: Segmental/pH Dependent Permeability Considerations. Molecular Pharmaceutics, 2010, 7, 1827-1834.	4.6	94
15	Multiple Efflux Pumps Are Involved in the Transepithelial Transport of Colchicine: Combined Effect of P-Glycoprotein and Multidrug Resistance-Associated Protein 2 Leads to Decreased Intestinal Absorption Throughout the Entire Small Intestine. Drug Metabolism and Disposition, 2009, 37, 2028-2036.	3.3	93
16	Small intestinal efflux mediated by MRP2 and BCRP shifts sulfasalazine intestinal permeability from high to low, enabling its colonic targeting. American Journal of Physiology - Renal Physiology, 2009, 297, G371-G377.	3.4	93
17	Oral Delivery of Lipophilic Drugs: The Tradeoff between Solubility Increase and Permeability Decrease When Using Cyclodextrin-Based Formulations. PLoS ONE, 2013, 8, e68237.	2.5	93
18	Accounting for the solubility–permeability interplay in oral formulation development for poor water solubility drugs: The effect of PEG-400 on carbamazepine absorption. European Journal of Pharmaceutics and Biopharmaceutics, 2012, 81, 386-391.	4.3	88

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19	Segmental-dependent membrane permeability along the intestine following oral drug administration: Evaluation of a triple single-pass intestinal perfusion (TSPIP) approach in the rat. European Journal of Pharmaceutical Sciences, 2009, 36, 320-329.	4.0	84
20	Enabling the Intestinal Absorption of Highly Polar Antiviral Agents: Ion-Pair Facilitated Membrane Permeation of Zanamivir Heptyl Ester and Guanidino Oseltamivir. Molecular Pharmaceutics, 2010, 7, 1223-1234.	4.6	82
21	Applications of Polymers as Pharmaceutical Excipients in Solid Oral Dosage Forms. Medicinal Research Reviews, 2017, 37, 52-97.	10.5	80
22	Grapefruit Juice and its Constituents Augment Colchicine Intestinal Absorption: Potential Hazardous Interaction and the Role of P-Glycoprotein. Pharmaceutical Research, 2009, 26, 883-892.	3. 5	79
23	The Fraction Dose Absorbed, in Humans, and High Jejunal Human Permeability Relationship. Molecular Pharmaceutics, 2012, 9, 1847-1851.	4.6	74
24	The oral absorption of phospholipid prodrugs: In vivo and in vitro mechanistic investigation of trafficking of a lecithin-valproic acid conjugate following oral administration. Journal of Controlled Release, 2008, 126, 1-9.	9.9	70
25	The Twofold Advantage of the Amorphous Form as an Oral Drug Delivery Practice for Lipophilic Compounds: Increased Apparent Solubility and Drug Flux Through the Intestinal Membrane. AAPS Journal, 2013, 15, 347-353.	4.4	68
26	Oral drug therapy following bariatric surgery: an overview of fundamentals, literature and clinical recommendations. Obesity Reviews, 2016, 17, 1050-1066.	6.5	67
27	Enhancing the Intestinal Membrane Permeability of Zanamivir: A Carrier Mediated Prodrug Approach. Molecular Pharmaceutics, 2011, 8, 2358-2367.	4.6	66
28	Purely in Silico BCS Classification: Science Based Quality Standards for the World's Drugs. Molecular Pharmaceutics, 2013, 10, 4378-4390.	4.6	66
29	Head-To-Head Comparison of Different Solubility-Enabling Formulations of Etoposide and Their Consequent Solubility–Permeability Interplay. Journal of Pharmaceutical Sciences, 2015, 104, 2941-2947.	3.3	65
30	Increasing Oral Absorption of Polar Neuraminidase Inhibitors: A Prodrug Transporter Approach Applied to Oseltamivir Analogue. Molecular Pharmaceutics, 2013, 10, 512-522.	4.6	64
31	Predicting the solubility–permeability interplay when using cyclodextrins in solubility-enabling formulations: Model validation. International Journal of Pharmaceutics, 2012, 430, 388-391.	5.2	63
32	In-situ intestinal rat perfusions for human Fabs prediction and BCS permeability class determination: Investigation of the single-pass vs. the Doluisio experimental approaches. International Journal of Pharmaceutics, 2015, 480, 1-7.	5,2	63
33	The Low/High BCS Permeability Class Boundary: Physicochemical Comparison of Metoprolol and Labetalol. Molecular Pharmaceutics, 2014, 11, 1707-1714.	4.6	59
34	Targeted prodrugs in oral drug delivery: the modern molecular biopharmaceutical approach. Expert Opinion on Drug Delivery, 2012, 9, 1001-1013.	5.0	55
35	Quasi-equilibrium analysis of the ion-pair mediated membrane transport of low-permeability drugs. Journal of Controlled Release, 2009, 137, 31-37.	9.9	54
36	Lipidic prodrug approach for improved oral drug delivery and therapy. Medicinal Research Reviews, 2019, 39, 579-607.	10.5	54

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37	MRP2 mediated drug–drug interaction: Indomethacin increases sulfasalazine absorption in the small intestine, potentially decreasing its colonic targeting. International Journal of Pharmaceutics, 2010, 386, 216-220.	5.2	53
38	A novel mechanism for oral controlled release of drugs by continuous degradation of a phospholipid prodrug along the intestine: In-vivo and in-vitro evaluation of an indomethacin–lecithin conjugate. Journal of Controlled Release, 2007, 119, 86-93.	9.9	51
39	Active intestinal drug absorption and the solubility-permeability interplay. International Journal of Pharmaceutics, 2018, 537, 84-93.	5.2	51
40	The interaction of nifedipine with selected cyclodextrins and the subsequent solubility–permeability trade-off. European Journal of Pharmaceutics and Biopharmaceutics, 2013, 85, 1293-1299.	4.3	50
41	The use of captisol (SBE7-β-CD) in oral solubility-enabling formulations: Comparison to HPβCD and the solubility–permeability interplay. European Journal of Pharmaceutical Sciences, 2015, 77, 73-78.	4.0	50
42	Modern Prodrug Design for Targeted Oral Drug Delivery. Molecules, 2014, 19, 16489-16505.	3.8	48
43	Regional-Dependent Intestinal Permeability and BCS Classification: Elucidation of pH-Related Complexity in Rats Using Pseudoephedrine. AAPS Journal, 2013, 15, 589-597.	4.4	46
44	Segmental-dependent permeability throughout the small intestine following oral drug administration: Single-pass vs. Doluisio approach to in-situ rat perfusion. International Journal of Pharmaceutics, 2016, 515, 201-208.	5.2	46
45	Advantageous Solubility-Permeability Interplay When Using Amorphous Solid Dispersion (ASD) Formulation for the BCS Class IV P-gp Substrate Rifaximin: Simultaneous Increase of Both the Solubility and the Permeability. AAPS Journal, 2017, 19, 806-813.	4.4	46
46	Concomitant solubility-permeability increase: Vitamin E TPGS vs. amorphous solid dispersion as oral delivery systems for etoposide. European Journal of Pharmaceutics and Biopharmaceutics, 2017, 121, 97-103.	4.3	44
47	Toward Successful Cyclodextrin Based Solubility-Enabling Formulations for Oral Delivery of Lipophilic Drugs: Solubility–Permeability Trade-Off, Biorelevant Dissolution, and the Unstirred Water Layer. Molecular Pharmaceutics, 2017, 14, 2138-2146.	4.6	42
48	Drug targeting strategies for the treatment of inflammatory bowel disease: a mechanistic update. Expert Review of Clinical Immunology, 2010, 6, 543-550.	3.0	41
49	Hydrotropic Solubilization of Lipophilic Drugs for Oral Delivery: The Effects of Urea and Nicotinamide on Carbamazepine Solubilityà€"Permeability Interplay. Frontiers in Pharmacology, 2016, 7, 379.	3.5	41
50	Lipids and Lipid-Processing Pathways in Drug Delivery and Therapeutics. International Journal of Molecular Sciences, 2020, 21, 3248.	4.1	41
51	The complexity of intestinal permeability: Assigning the correct BCS classification through careful data interpretation. European Journal of Pharmaceutical Sciences, 2014, 61, 11-17.	4.0	40
52	Enhancing the Intestinal Absorption of Molecules Containing the Polar Guanidino Functionality: A Double-Targeted Prodrug Approach. Journal of Medicinal Chemistry, 2010, 53, 624-632.	6.4	39
53	Pharmacological effects of vitamin D and its analogs: recent developments. Drug Discovery Today, 2014, 19, 1769-1774.	6.4	39
54	Prodrugs for Improved Drug Delivery: Lessons Learned from Recently Developed and Marketed Products. Pharmaceutics, 2020, 12, 1031.	4.5	36

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55	The biopharmaceutics of successful controlled release drug product: Segmental-dependent permeability of glipizide vs. metoprolol throughout the intestinal tract. International Journal of Pharmaceutics, 2015, 489, 304-310.	5.2	33
56	Striking the Optimal Solubility–Permeability Balance in Oral Formulation Development for Lipophilic Drugs: Maximizing Carbamazepine Blood Levels. Molecular Pharmaceutics, 2017, 14, 319-327.	4.6	32
57	Anticancer activity of Nigella sativa (black seed) and its relationship with the thermal processing and quinone composition of the seed. Drug Design, Development and Therapy, 2015, 9, 3119.	4.3	30
58	Lithium Toxicity with Severe Bradycardia Post Sleeve Gastrectomy: a Case Report and Review of the Literature. Obesity Surgery, 2019, 29, 735-738.	2.1	30
59	DPâ€155, a Lecithin Derivative of Indomethacin, is a Novel Nonsteroidal Antiinflammatory Drug for Analgesia and Alzheimer's Disease Therapy. CNS Neuroscience & Therapeutics, 2007, 13, 260-277.	4.0	29
60	The effect of general anesthesia on the intestinal lymphatic transport of lipophilic drugs: Comparison between anesthetized and freely moving conscious rat models. European Journal of Pharmaceutical Sciences, 2007, 32, 367-374.	4.0	29
61	Investigating drug absorption from the colon: Single-pass vs. Doluisio approaches to in-situ rat large-intestinal perfusion. International Journal of Pharmaceutics, 2017, 527, 135-141.	5.2	28
62	Phospholipid-drug conjugates as a novel oral drug targeting approach for the treatment of inflammatory bowel disease. European Journal of Pharmaceutical Sciences, 2017, 108, 78-85.	4.0	28
63	The H2 Receptor Antagonist Nizatidine is a P-Glycoprotein Substrate: Characterization of its Intestinal Epithelial Cell Efflux Transport. AAPS Journal, 2009, 11, 205-213.	4.4	27
64	Provisional in-silico biopharmaceutics classification (BCS) to guide oral drug product development. Drug Design, Development and Therapy, 2014, 8, 1563.	4.3	27
65	Oral levothyroxine therapy postbariatric surgery: Biopharmaceutical aspects and clinical effects. Surgery for Obesity and Related Diseases, 2019, 15, 333-341.	1.2	27
66	BCS Class IV Oral Drugs and Absorption Windows: Regional-Dependent Intestinal Permeability of Furosemide. Pharmaceutics, 2020, 12, 1175.	4.5	27
67	Stomach pH before vs. after different bariatric surgery procedures: Clinical implications for drug delivery. European Journal of Pharmaceutics and Biopharmaceutics, 2021, 160, 152-157.	4.3	26
68	Prospects and Challenges of Phospholipid-Based Prodrugs. Pharmaceutics, 2018, 10, 210.	4.5	24
69	Methacrylate-Copolymer Eudragit EPO as a Solubility-Enabling Excipient for Anionic Drugs: Investigation of Drug Solubility, Intestinal Permeability, and Their Interplay. Molecular Pharmaceutics, 2019, 16, 2884-2891.	4.6	24
70	Closed-Loop Doluisio (Colon, Small Intestine) and Single-Pass Intestinal Perfusion (Colon, Jejunum) in Rat—Biophysical Model and Predictions Based on Caco-2. Pharmaceutical Research, 2018, 35, 2.	3.5	23
71	Transcriptomic analyses reveal the molecular mechanisms of schisandrin B alleviates CCl4-induced liver fibrosis in rats by RNA-sequencing. Chemico-Biological Interactions, 2019, 309, 108675.	4.0	23
72	New targeting strategies in drug therapy of inflammatory bowel disease: mechanistic approaches and opportunities. Expert Opinion on Drug Delivery, 2013, 10, 1275-1286.	5.0	22

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73	Biowaiver Monographs for Immediate-Release Solid Oral Dosage Forms: Codeine Phosphate. Journal of Pharmaceutical Sciences, 2014, 103, 1592-1600.	3.3	22
74	Mastitis While Breastfeeding: Prevention, the Importance of Proper Treatment, and Potential Complications. Journal of Clinical Medicine, 2020, 9, 2328.	2.4	22
75	Impaired oral absorption of methylphenidate after Roux-en-Y gastric bypass. Surgery for Obesity and Related Diseases, 2017, 13, 1245-1247.	1.2	21
76	Increased Paracetamol Bioavailability after Sleeve Gastrectomy: A Crossover Pre- vs. Post-Operative Clinical Trial. Journal of Clinical Medicine, 2019, 8, 1949.	2.4	21
77	Transformation of dolutegravir into an ultra-long-acting parenteral prodrug formulation. Nature Communications, 2022, 13, .	12.8	21
78	Phospholipid-Based Prodrugs for Drug Targeting in Inflammatory Bowel Disease: Computational Optimization and In-Vitro Correlation. Current Topics in Medicinal Chemistry, 2016, 16, 2543-2548.	2.1	18
79	Intestinal Permeability Study of Minoxidil: Assessment of Minoxidil as a High Permeability Reference Drug for Biopharmaceutics Classification. Molecular Pharmaceutics, 2015, 12, 204-211.	4.6	17
80	Medication Management after Bariatric Surgery: Providing Optimal Patient Care. Journal of Clinical Medicine, 2020, 9, 1511.	2.4	17
81	Candesartan Cilexetil In Vitro–In Vivo Correlation: Predictive Dissolution as a Development Tool. Pharmaceutics, 2020, 12, 633.	4.5	17
82	Quantification of carbamazepine and its 10,11â€epoxide metabolite in rat plasma by UPLCâ€UV and application to pharmacokinetic study. Biomedical Chromatography, 2014, 28, 934-938.	1.7	16
83	Molecular Modeling-Guided Design of Phospholipid-Based Prodrugs. International Journal of Molecular Sciences, 2019, 20, 2210.	4.1	16
84	Phospholipid-Based Prodrugs for Colon-Targeted Drug Delivery: Experimental Study and In-Silico Simulations. Pharmaceutics, 2019, 11, 186.	4.5	16
85	Segmental-Dependent Intestinal Drug Permeability: Development and Model Validation of In Silico Predictions Guided by InÂVivo Permeability Values. Journal of Pharmaceutical Sciences, 2019, 108, 316-325.	3.3	16
86	Biopharmaceutical characterization of rebamipide: The role of mucus binding in regional-dependent intestinal permeability. European Journal of Pharmaceutical Sciences, 2020, 152, 105440.	4.0	16
87	Segmental-Dependent Solubility and Permeability as Key Factors Guiding Controlled Release Drug Product Development. Pharmaceutics, 2020, 12, 295.	4.5	15
88	Hypothyroidism and levothyroxine therapy following bariatric surgery: a systematic review, meta-analysis, network meta-analysis, and meta-regression. Surgery for Obesity and Related Diseases, 2021, 17, 1206-1217.	1.2	15
89	Cytomegalovirus Protease Targeted Prodrug Development. Molecular Pharmaceutics, 2013, 10, 1417-1424.	4.6	14
90	Computational modeling and in-vitro/in-silico correlation of phospholipid-based prodrugs for targeted drug delivery in inflammatory bowel disease. Journal of Computer-Aided Molecular Design, 2017, 31, 1021-1028.	2.9	14

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91	Medicinal Properties of Lilium candidum L. and Its Phytochemicals. Plants, 2020, 9, 959.	3.5	14
92	Mechanistic enhancement of the intestinal absorption of drugs containing the polar guanidino functionality. Expert Opinion on Drug Metabolism and Toxicology, 2011, 7, 313-323.	3.3	13
93	A mechanistic approach to understanding oral drug absorption in pediatrics: an overview of fundamentals. Drug Discovery Today, 2014, 19, 1322-1336.	6.4	13
94	The solubility, permeability and the dose as key factors in formulation development for oral lipophilic drugs: Maximizing the bioavailability of carbamazepine with a cosolvent-based formulation. International Journal of Pharmaceutics, 2020, 582, 119307.	5.2	13
95	Case Report of Increased Exposure to Antiretrovirals following Sleeve Gastrectomy. Antimicrobial Agents and Chemotherapy, 2020, 64, .	3.2	13
96	Computational Simulations to Guide Enzyme-Mediated Prodrug Activation. International Journal of Molecular Sciences, 2020, 21, 3621.	4.1	13
97	Mode of Administration-Dependent Brain Uptake of Indomethacin: Sustained Systemic Input Increases Brain Influx. Drug Metabolism and Disposition, 2007, 35, 321-324.	3.3	12
98	Specificity of a Prodrug-Activating Enzyme hVACVase: The Leaving Group Effect. Molecular Pharmaceutics, 2010, 7, 2362-2368.	4.6	12
99	The prospects of lipidic prodrugs: an old approach with an emerging future. Future Medicinal Chemistry, 2019, 11, 2563-2571.	2.3	12
100	Adequate formulation approach for oral chemotherapy: Etoposide solubility, permeability, and overall bioavailability from cosolvent- vs. vitamin E TPGS-based delivery systems. International Journal of Pharmaceutics, 2021, 597, 120295.	5.2	11
101	Revealing Synergistic Mechanism of Multiple Components in Gandi Capsule for Diabetic Nephropathy Therapeutics by Network Pharmacology. Evidence-based Complementary and Alternative Medicine, 2018, 2018, 1-11.	1.2	10
102	Analysis of PEG 400 in perfusate samples by aqueous normal phase (ANP) chromatography with evaporative light scattering detection. Analytical Methods, 2011, 3, 742.	2.7	9
103	Dipeptidyl Peptidase IV as a Potential Target for Selective Prodrug Activation and Chemotherapeutic Action in Cancers. Molecular Pharmaceutics, 2014, 11, 4385-4394.	4.6	8
104	Severe hypertriglyceridemia and colchicine intoxication following suicide attempt. Drug Design, Development and Therapy, 2017, Volume 11, 3321-3324.	4.3	8
105	Optimized In Silico Modeling of Drug Absorption after Gastric Bypass: The Case of Metformin. Pharmaceutics, 2021, 13, 1873.	4.5	7
106	Managing the Unpredictable: Mechanistic Analysis and Clinical Recommendations for Lamotrigine Treatment after Bariatric Surgery. Journal of Clinical Medicine, 2021, 10, 5627.	2.4	6
107	Antiallergic Treatment of Bariatric Patients: Potentially Hampered Solubility/Dissolution and Bioavailability of Loratadine, but Not Desloratadine, Post-Bariatric Surgery. Molecular Pharmaceutics, 2022, 19, 2922-2936.	4.6	6
108	Treatment of COVID-19 Patients Post-Bariatric Surgery: Issues for Consideration. Journal of Clinical Medicine, 2020, 9, 2827.	2.4	5

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109	Phospholipid Cyclosporine Prodrugs Targeted at Inflammatory Bowel Disease (IBD) Treatment: Design, Synthesis, and in Vitro Validation. ChemMedChem, 2020, 15, 1639-1644.	3.2	5
110	Regional Intestinal Drug Absorption: Biopharmaceutics and Drug Formulation. Pharmaceutics, 2021, 13, 272.	4.5	5
111	Lamotrigine therapy in patients after bariatric surgery: Potentially hampered solubility and dissolution. International Journal of Pharmaceutics, 2021, 612, 121298.	5.2	5
112	Prodrug-Based Targeting Approach for Inflammatory Bowel Diseases Therapy: Mechanistic Study of Phospholipid-Linker-Cyclosporine PLA2-Mediated Activation. International Journal of Molecular Sciences, 2022, 23, 2673.	4.1	5
113	PLA2-Triggered Activation of Cyclosporine-Phospholipid Prodrug as a Drug Targeting Approach in Inflammatory Bowel Disease Therapy. Pharmaceutics, 2022, 14, 675.	4.5	5
114	The Role of Paracellular Transport in the Intestinal Absorption and Biopharmaceutical Characterization of Minoxidil. Pharmaceutics, 2022, 14, 1360.	4.5	4
115	Enhanced Gastrointestinal Absorption of Lipophilic Drugs. , 2006, , .		3
116	The role of various transporters in the placental uptake of ofloxacin in an in vitro model of human villous trophoblasts. Drug Design, Development and Therapy, 2018, Volume 12, 4129-4138.	4.3	3
117	Influence of Bariatric Surgery on Levetiracetam Clinical Effectiveness: Case Series. Obesity Surgery, 2022, 32, 2795-2796.	2.1	3
118	Lipidic Prodrugs for Drug Delivery: Opportunities and Challenges. , 2020, , 113-132.		2
119	Segmental-Dependent Drug Absorption and Delivery: The Stomach. Advances in Delivery Science and Technology, 2014, , 329-341.	0.4	O
120	Segmental-Dependent Drug Absorption and Delivery: The Intestinal Tract. Advances in Delivery Science and Technology, 2014, , 343-357.	0.4	0