Sabine Bottin-Rousseau

List of Publications by Year in descending order

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39 papers 1,106 citations

430874 18 h-index 395702 33 g-index

39 all docs 39 docs citations

39 times ranked

490 citing authors

#	Article	IF	Citations
1	Statistical analysis of the transition to turbulence in plane Couette flow. European Physical Journal B, 1998, 6, 143-155.	1.5	118
2	Discontinuous transition to spatiotemporal intermittency in plane Couette flow. Europhysics Letters, 1998, 43, 171-176.	2.0	112
3	Experimental evidence of streamwise vortices as finite amplitude solutions in transitional plane Couette flow. Physics of Fluids, 1998, 10, 2597-2607.	4.0	97
4	Experimental Evidence for a Zigzag Bifurcation in Bulk Lamellar Eutectic Growth. Physical Review Letters, 2004, 93, 175701.	7.8	69
5	Real-time study of thin and bulk eutectic growth in succinonitrile–(d)camphor alloys. Journal of Crystal Growth, 2007, 299, 418-428.	1.5	57
6	Lamellar eutectic growth with anisotropic interphase boundaries: Experimental study using the rotating directional solidification method. Acta Materialia, 2012, 60, 3206-3214.	7.9	57
7	Interphase anisotropy effects on lamellar eutectics: A numerical study. Physical Review E, 2015, 91, 022407.	2.1	52
8	A theory of thin lamellar eutectic growth with anisotropic interphase boundaries. Acta Materialia, 2012, 60, 3199-3205.	7.9	48
9	Intermittency in a Locally Forced Plane Couette Flow. Physical Review Letters, 1997, 79, 4377-4380.	7.8	47
10	Spiral Two-Phase Dendrites. Physical Review Letters, 2010, 104, 056101.	7.8	38
11	Role of transverse temperature gradients in the generation of lamellar eutectic solidification patterns. Acta Materialia, 2010, 58, 1761-1769.	7.9	35
12	Determination of the Jacksonâ€"Hunt constants of the Inâ€"In2Bi eutectic alloy based on in situ observation of its solidification dynamics. Acta Materialia, 2011, 59, 7586-7591.	7.9	34
13	An experimental method for the in situ observation of eutectic growth patterns in bulk samples of transparent alloys. Journal of Crystal Growth, 2007, 306, 465-472.	1.5	29
14	Long-time dynamics of the directional solidification of rodlike eutectics. Physical Review E, 2009, 79, 032602.	2.1	25
15	Advanced Solidification Studies on Transparent Alloy Systems: A New European Solidification Insert for Material Science Glovebox on Board the International Space Station. Jom, 2012, 64, 1097-1101.	1.9	22
16	Influence of morphological instability on grain boundary trajectory during directional solidification. Acta Materialia, 2019, 175, 214-221.	7.9	22
17	Dynamic instabilities of rod-like eutectic growth patterns: A real-time study. Acta Materialia, 2013, 61, 6802-6808.	7.9	20
18	Scaling Theory of Two-Phase Dendritic Growth in Undercooled Ternary Melts. Physical Review Letters, 2014, 112, 105502.	7.8	20

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19	Stability of three-phase ternary-eutectic growth patterns in thin sample. Acta Materialia, 2016, 109, 259-266.	7.9	20
20	Self-Organized Dynamics on a Curved Growth Interface. Physical Review Letters, 2001, 87, 076101.	7.8	17
21	Phase boundary anisotropy and its effects on the maze-to-lamellar transition in a directionally solidified Al Al2Cu eutectic. Acta Materialia, 2019, 170, 268-277.	7.9	17
22	Special interphase orientation relationships and locked lamellar growth in thin In-In2Bi eutectics. Acta Materialia, 2018, 150, 16-24.	7.9	16
23	Propagative selection of tilted array patterns in directional solidification. Physical Review Materials, 2018, 2, .	2.4	15
24	Stability of lamellar eutectic growth in thick samples. Philosophical Magazine, 2006, 86, 3703-3715.	1.6	14
25	Dynamical polygonization below the cellular-bifurcation threshold in thin-sample directional solidification. Physical Review B, 2002, 66, .	3.2	13
26	Eutectic solidification patterns: Interest of microgravity environment. Comptes Rendus - Mecanique, 2017, 345, 56-65.	2.1	11
27	Coexistence of rod-like and lamellar eutectic growth patterns. Scripta Materialia, 2022, 207, 114314.	5.2	11
28	Dynamics of rod eutectic growth patterns in confined geometry. IOP Conference Series: Materials Science and Engineering, 2012, 27, 012030.	0.6	9
29	Effects of interphase boundary anisotropy on the three-phase growth dynamics in the $\hat{I}^2(In)$ \hat{a} \in In2Bi \hat{a} \in	0.6	9
30	Pulses of tunable size near a subcritical bifurcation. European Physical Journal B, 1998, 5, 299-308.	1.5	8
31	The surface tension force of anisotropic interphase boundaries is perpendicular to the solidification front during eutectic growth. IOP Conference Series: Materials Science and Engineering, 2012, 27, 012088.	0.6	8
32	Locked-lamellar eutectic growth in thin Al-Al2Cu samples: In situ directional solidification and crystal orientation analysis. Journal of Crystal Growth, 2021, 570, 126203.	1.5	7
33	Lamellar eutectic growth with anisotropic interphase boundaries. IOP Conference Series: Materials Science and Engineering, 2015, 84, 012083.	0.6	6
34	Decoupled versus coupled growth dynamics of an irregular eutectic alloy. Scripta Materialia, 2020, 189, 11-15.	5. 2	6
35	Curvature induced periodic attractor on growth interface. Chaos, 2004, 14, 882-902.	2.5	5
36	The trajectory of subboundary grooves during directional solidification of dilute alloys. Comptes Rendus Physique, 2013, 14, 149-155.	0.9	5

#	Article	IF	CITATIONS
37	Numerical Simulations of Locked Lamellar Eutectic Growth Patterns. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2021, 52, 4533-4545.	2.2	4
38	Details on the intermittent transition to turbulence of a locally forced plane Couette flow. Experiments in Fluids, 2003, 34, 324-331.	2.4	2
39	La dynamique de solidification des eutectiques lamellaires : des échantillons minces aux systà mes massifs. European Physical Journal Special Topics, 2001, 11, Pr6-127-Pr6-134.	0.2	1